Project Initiation

Report To

Request Programming in the 2020 SHOPP

On Route	101
Between	73.300
And	76.100

APPROVAL RECOMMENDED:

Jaime Matteoli, *PROJECT MANAGER*

APPROVAL RECOMMENDED:

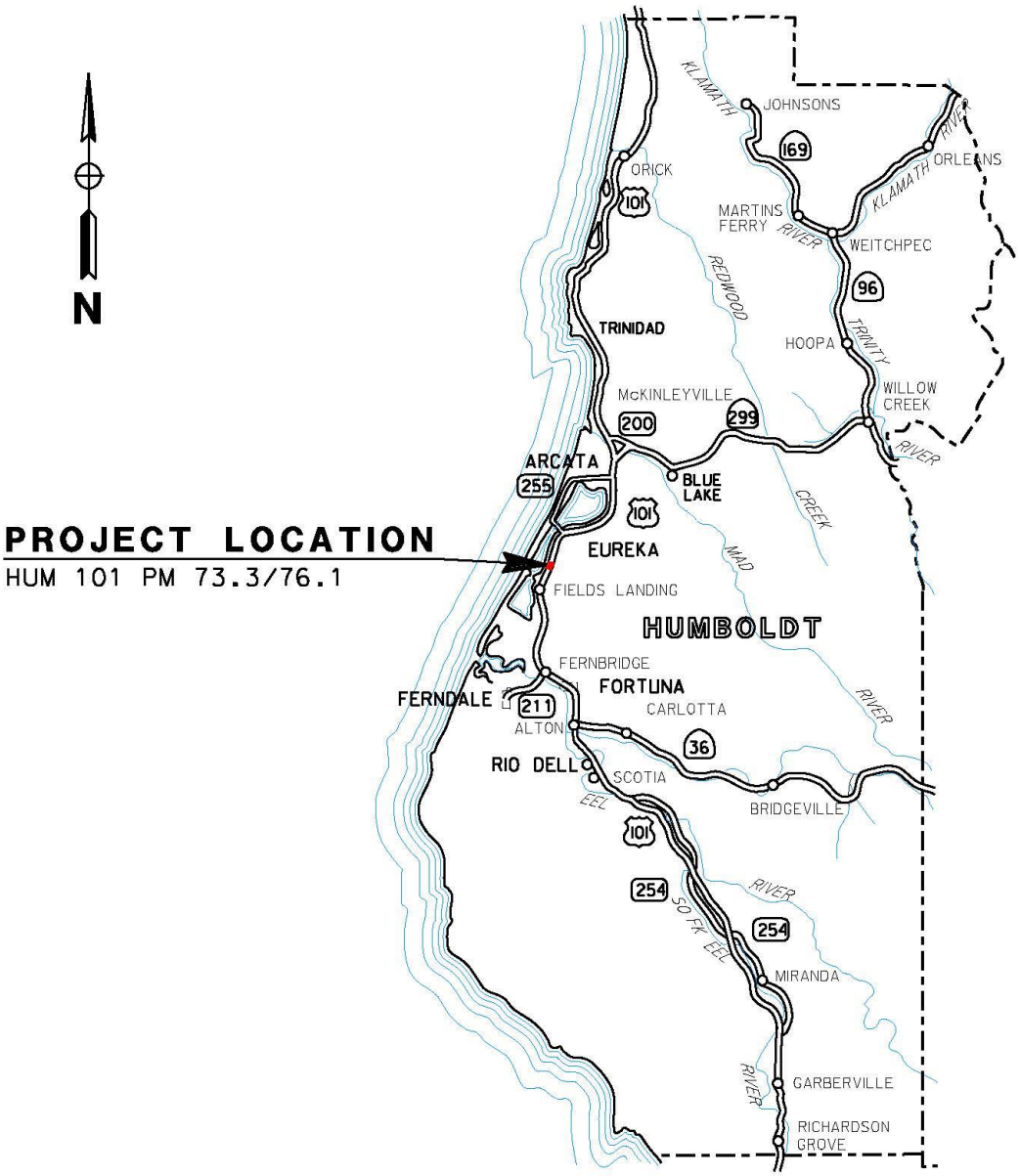
Brad Mettam, *DEPUTY DISTRICT DIRECTOR, PLANNING AND LOCAL ASSISTANCE*

APPROVED:

for Matthew K. Brady, *DISTRICT 1 DIRECTOR*

7/23/2021
DATE

VICINITY MAP



PROJECT LOCATION
HUM 101 PM 73.3/76.1

SOUTH BROADWAY COMPLETE STREETS
01-HUM-101 (PM 73.3 TO 76.1)
EA 01-0K940K (01 2100 0033)

No Scale

This report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

7/23/2021

REGISTERED CIVIL ENGINEER *DATE*

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Contents

1 INTRODUCTION, WORK DESCRIPTION AND SUMMARY TABLE

Project Description:
This project is nicknamed South Broadway Complete Streets. It is in Humboldt County on part of US 101 known as Broadway, which is a main street through the City of Eureka. This project was initiated as a stand-alone Complete Streets project to improve the safety, connectivity, and livability for non-motorized and transit users. The project limits are from postmile (PM) 73.3 to PM 76.1. The beginning of the project from PM 73.3 to PM 74.8 is included for potential onsite environmental restoration. The project proposes three build alternatives to consider a Class I path from PM 74.8 to PM 75.2. These alternatives have been deemed infeasible for completion in the 2020 State Highway Operation and Protection Program (SHOPP) due to programming constraints for Complete Streets reservation funds but have been left in this Project Initiation Document as reference. The fourth build alternative is the programmable project alternative and includes a Class II or Class III bicycle facility, rather than a Class I path. A Class IV separated bikeway is proposed for the remainder of the project limits from PM 75.2 to PM 76.1 for all four alternatives.

Project Limits	01-HUM-101-PM 73.3/76.1
Number of Alternatives	5 (Including No Build Alternative)
Programmable Project Alternative	Alternative 4
Funding Source	20.XX.201.999
Funding Year	2024
Type of Facility	4-Lane Conventional Highway 4-Lane Freeway
Number of Structures	Alternative 1: 2 Alternative 2: 2 Alternative 3: 3 Alternative 4: 2
Anchor Asset SHOPP Project Output	See Attachment R
Anticipated Environmental Determination or Document	California Environmental Quality Act (CEQA): Initial Study (Negative Declaration/Mitigated Negative Declaration) National Environmental Policy Act (NEPA): Categorical Exclusion (23 USC 327)

Legal Description	In Humboldt County in and near Eureka from 0.3 mi south of Spruce PT NB Off Ramp to 0.1 MI north of Truesdale Street	
Project Development Category	4A	
PIR Level	2	
Capital Outlay Project Cost	**Current Cost Estimate including Risk: ($1000)**	**Escalated Cost Estimate: ($1000)**
Support		
PA&ED	1,334	1,380
PS&E	1,229	1,340
R/W (Right-of-Way)	552	601
CONS (Construction)	1,290	1,461
Capital		
R/W	555	634
CONS	6,245	7,084

2 PURPOSE AND NEED

Purpose:
The purpose of this project is to increase pedestrian and bicyclist safety, connectivity, and level of comfort and to improve accessibility and on-time performance of the transit facility.

Need:
Broadway serves as a main street through the City of Eureka and is one of the busiest corridors in District 1. Volumes (33,000 AADT), speed limits (40-55 MPH), and the number of lanes (two in each direction plus a two-way left turn lane), make Broadway a barrier for pedestrians and cyclists. There are no bicycle facilities on the corridor. Marked pedestrian crossings are widely spaced and only at signalized intersections, and there are no sidewalks south of PM 75.138. Three transit routes operate in the project area. Transit generally runs behind schedule due to the inability to merge back into traffic after stops. Because of these conditions, surrounding residential communities are discouraged from using active transportation to access destinations on Broadway, local and regional transit on Broadway, and the regional trail network.

3 RECOMMENDATION

It is recommended that this report be approved, and the project programmed using the estimate and schedule for Alternative 4, the Programmable Project Alternative. This report was prepared to documentation Level 2.

4 RISK SUMMARY

Five risks were identified for the Programmable Project Alternative. Risks are related to environmental, construction, right of way, and design. One of the most significant risks is that the environmental and right of way timelines will not fit into the 2020 SHOPP. The team will work to meet the deadlines in the 2020 SHOPP. Another risk is unearthing cultural resources during construction because there are some culturally sensitive areas within the project limits. Construction would be halted until cultural resources were assessed if any were discovered. A complete list of risks can be found in the risk register (Attachment E).

5 BACKGROUND

The Broadway corridor is marked by a significant number of vehicle/pedestrian collisions. Congestion contributes to higher collision rates, and vehicle volumes are projected to increase into the future. This project is identified in the Broadway Corridor Plan for the City of Eureka. Plans for future improvements along the rest of Broadway are still under development and will require more complex environmental and right-of-way processes. More background information can be obtained from the Project Initiation Proposal (Attachment I).

The project limits for the originally proposed project included PM 74.8 to 76.1 but have been extended to include potential on-site environmental restoration areas for Alternatives 1 through 3 that were identified from PM 73.3 to 74.8. No other work is proposed from PM 73.3 to 74.8. The complete streets elements are within the original project limits.

6 ASSET MANAGEMENT

This project's performance objectives are consistent with the Transportation Asset Management Plan, 10-year SHOPP Plan, 10-year Project Book, and Five-Year Maintenance Plan. The tables below outline the key performance metrics. Note that the "Good" column for post condition includes "New" assets. The performance measures (Attachment R) have a complete list of these metrics.

Primary Asset Classes

		Unit	Good	Fair	Poor	Quantity
Pavement (121)	Existing Condition	Lane Miles	1.294	2.426		3.72
	Post Condition	Lane Miles	3.72			3.72
Culverts (151)	Existing Condition	LF				
	Post Condition	LF	1,566.99			1,566.99

Supplementary Asset Classes

		Unit	Good	Fair	Poor	Quantity
ADA – Repair Existing Sidewalk (361)	Existing Condition	LF			1,156	1,156
	Post Condition	LF	1,156			1,156
ADA – New Curb Ramp Installed (361)	Existing Condition	EA				
	Post Condition	EA	4			4
ADA – Repair/Upgrade Curb Ramp (361)	Existing Condition	EA	7			7
	Post Condition	EA	7			7
ADA – Modify Driveway (361)	Existing Condition	LF	435			435
	Post Condition	LF	435			435
ADA – New Crosswalk (361)	Existing Condition	LF				
	Post Condition	LF	532			532
ADA – Modify Crosswalk (361)	Existing Condition	LF			635	635
	Post Condition	LF	635			635
ADA – Deficient Elements	Existing Condition	Deficient Elements	22		39	61
	Post Condition	Deficient Elements	65			65

Other Assets

		Unit	Good	Fair	Poor	Quantity
Complete Streets Build New (999)	Existing Condition	Linear Feet			7,520	7,520
	Post Condition	Linear Feet	7,520			7,520

7 CORRIDOR AND SYSTEM COORDINATION

Transportation Concept Report (TCR)
The project limits fall within two TCR segments for US 101: Segment 13 (PM R5.63/74.78) and Segment 14 (PM 74.78/79.574). Segment 13 is four-lane freeway/expressway, and the Ultimate Facility Concept is to maintain only. Segment 14 is four- to six-lane conventional highway, and the Ultimate Facility Concept is to construct multi-modal operational improvements. Both Segments 13 and 14 have the federal functional classification of Principal Arterial.

This project is consistent with the US 101 TCR.

Transportation Planning Scoping Information Sheet (TPSIS)
A TPSIS was received from System Planning on June 04, 2021 and can be found in Attachment J. The applicable local plans and studies that have already been conducted are:

- Eureka Broadway Multimodal Corridor Plan (2021)
- Koster Couplet Feasibility Study (2017) and Koster Couplet Project Study Report (2020)
- Eureka Transit Service Line Feasibility Study (2018)
- Project Study Report-Project Development Support for the US 101 Eureka South Entry Project (2015)
- Broadway Engineered Feasibility Study (2014)
- US 101 (Broadway) K-Mart to 4th St Pedestrian and Bicycle Road Safety Audit (2008)

The project design is aligned with the goals in these documents.

Similar and Adjacent Projects
The following table outlines neighboring projects.

EA	County	Route	PM Limits	Project Type	Construction Year
01-0C570	HUM	101	69.9/75.2	Roadway Rehab	2021
01-0B620	HUM	101	75.1/77.4	Americans with Disabilities Act (ADA) Upgrades	2021
01-0K240	HUM	101	79.024/79.773	PG&E Utilities	2021
01-0E680	HUM	101	78.1/79.6	ADA Upgrades	2021
01-0E040	HUM	101	78.0/79.8	Pavement Overlay	2021
01-0K920	HUM	101	76.6/77.7	Midblock Pedestrian Crossing	2021
Local Project	HUM	101	73.65/74.87	Waterfront Trail Extension to Humboldt Hill	2022
01-0L240	HUM	101	75.0/78.0	Replace Pavement Markers	2022
01-0G420	HUM	101	75.9/78.1	ADA Upgrades	2022
01-0H740	HUM	101	76.077/76.65	Shoulder Widening for Bicyclist Concerns	2022
01-0H200	HUM	101	77.9/79.5	ADA Upgrades	2022
01-0H650	HUM	101	56.6/137.1	Drainage and Electrical	2025
01-0H830	HUM	101	77.2/78.113	Create Couplet and Complete Streets Upgrades	TBD

EA	County	Route	PM Limits	Project Type	Construction Year
01-0L090	HUM	101	76.03/77.14	Create Couplet and Complete Streets Upgrades	TBD

Coordination will be required with some of the projects listed above. Special consideration will be required for coordination with project 01-0H650 since this project proposes to replace the traffic signal at the Papa & Barkley Co. intersection, which is included in this project scope as well.

Native American Liaison

Tribes in Humboldt County were invited to provide input and to participate in project development by a letter from District Director Matthew K. Brady dated May 3, 2021. Outreach should continue during project development and delivery. Tribal Employment Rights Ordinance (TERO) does not apply to the proposed work location. Representatives from Blue Lake Rancheria and the Wiyot Tribe recommended continued tribal consultation throughout the project development process due to the potential for buried cultural resources and a Post-Review Discovery Plan be created.

8 EXISTING FACILITY CONDITION

Corridor Geometric Information and Condition

Traffic Collisions

A collision analysis was completed by District 1, Office of Traffic Safety on March 15, 2021 and is included in the project files. The analysis was conducted for the limits of the main Complete Streets project from PM 74.8 to PM 76.0 for the three-year period between January 1, 2017 and December 31, 2019. There were 38 reported collisions within this mainline segment, 3 fatal, 20 injury, and 15 property damage only. These collisions include 27 multi-vehicle, 5 wet road surface, and 13 dark. This highway segment has an actual Total collision rate less than the statewide average for similar facilities. The actual Fatal + Injury collision rate is 1.3 times greater than the statewide average for similar facilities. The actual Fatal collision rate is 4.8 times greater than the statewide average for similar facilities. There were two auto-pedestrian collisions and two bicycle collisions with automobiles. Of these, one pedestrian and one bicycle collision occurred just south of the Pierson Building Center intersection.

County-Route (post mile range)	Number of Accidents			Actual Rate (Acc/Million Vehicle Miles)			Average Rate (Acc/Million Vehicle Miles)		
	F[1]	F+I[2]	Total[3]	F[1]	F+I[2]	Total[3]	F[1]	F+I[2]	Total[3]
HUM-101-74.8/76.0	3	23	38	0.076	0.59	0.97	0.016	0.44	1.11

Notes:
1. Fatal accidents
2. Fatal accidents plus injury accidents
3. All reported accidents

Right-of-Way

The existing right-of-way varies in width from roughly 40 to 480-feet left and right of the roadway centerline. There is access control south of PM 75.1.

Fences

There are several privately owned fences of varying heights and types within the project limits.

Noise Barriers

There are no existing noise barriers within the project limits.

Earth Retaining Systems

There is a soil nail retaining wall on the east side of the highway from PM 75.7 to PM 75.9 built under contract 01-294704. There is another soil nail retaining wall on the east side of the highway from PM 76.0 to 76.1 built under contract 01-332304.

Utilities

The project area has many overhead and underground utilities. Special care should be given to avoiding utility conflicts when feasible. Certain work, such as drainage placement, can greatly affect the impact to utilities. Utility coordination will be especially significant at the two transit stop locations at the 76 Gas Station and Pacific Motorsports. Utility involvement will be detailed early in the next phase to ensure proposed work is feasible.

Utility coordination will be required from the following entities:

- AT&T (telecommunications)
- Suddenlink (telecommunications)
- City of Eureka (water, sewer, stormwater)
- PG&E (electricity and gas)

Landscape and Landscape Irrigation Facilities

There are landscaping features including plantings and irrigation facilities at the following locations:

PM	Location Description
73.6/74.0	Spruce Point Overcrossing
74.6/75.0	Herrick Avenue Overcrossing
75.7/75.9	Soil Nail Retaining Wall
76.0/76.1	Soil Nail Retaining Wall

There are also several privately owned landscape and landscape irrigation facilities within Broadway right of way.

Hydraulic facilities
There are numerous drainage inlets and culverts throughout the project limits. A list of the existing hydraulic facilities and their conditions within the project limits can be found in Attachment L.

Traffic Management Systems
Below are the existing traffic management systems:

- PM 73.47: census station
- PM 74.70: two extinguishable message signs
- PM 75.02: census station

Traffic Signals
There are four traffic signals within the project limits:

- PM 75.24: Papa & Barkley Co. driveway
- PM 75.54: Pierson Building Center and Tetrault Tire Center driveways
- PM 75.91: McCullens Avenue
- PM 76.08: South Bayshore Mall entrance

Lights
There are several lights within the project limits of varying heights, type, and condition. A list of existing lights can be found in Attachment Q.

Signs
A list of existing signs within the project work limits can be found in Attachment Q.

Guardrail
A list of existing guardrail can be found in Attachment Q.

Traffic Volumes
The information in the table below was provided in a memo from District 1 System Planning dated February 24, 2021, which is included in the project files. The Traffic

Index (TI) design periods are 10- and 20-year projections from the date of completion. See Section 10 Complete Streets for transit and park-and-ride information.

County Highway Post Mile		**HUM-101-PM 74.8/76.0**
Annual Average Daily Traffic (AADT)	2018	33,000
	2025	36,000
	2035	40,300
	2045	44,600
Peak Hour Volume (PHV)	2018	3,800
	2025	4,140
	2035	4,630
	2045	5,130
Directional %		57
DH Truck %		4.0
10-year TI		10.0
20-year TI		11.0

There was a traffic count study done along the Waterfront Trail in 2019. One of these locations was the south entrance to the Hikshari' Trail. Below is a summary of the pedestrian and bicyclist data collected:

Day	**Date**	**Peds Bi-directional**	**Peds NB**	**Peds SB**	**Bikes Bi-directional**	**Bikes NB**	**Bikes SB**
Thursday	**06-06-2019**	117	60	57	45	23	22
Friday	**06-07-2019**	141	76	65	49	23	26
Saturday	**06-08-2019**	212	116	96	76	35	41
Sunday	**06-09-2019**	270	152	118	152	76	76
	Total	740	404	336	322	157	165
	Average	185	101	84	81	40	42

Additionally, there were traffic count studies done as part of this Project Initiation Document at several intersections throughout the project limits. Below is a summary table of the average daily pedestrian and bicyclist intersection volumes:

Intersection	Daily Average Pedestrian Intersection Volume	Daily Average Bicycles on Road Intersection Volume	Daily Average Bicycles on Crosswalk Intersection Volume
Herrick Avenue	34	41	2
Papa & Barkley Co.	9	9	4
Pierson's	135	6	20
Hilfiker Lane	41	20	11
McCullens Avenue	206	19	45
Truesdale/Highland[1]	121	28	20

Notes:
1. Due to the offset intersection, volumes were difficult to calculate. For this reason, the reported values are only from Truesdale Street, to avoid double-counting.

Based on the project scope and location, installation of a permanent non-motorized counter is recommended. See Section 9 Alternatives for details on the counter.

Land Uses, Destinations, and Services Surrounding the Project Vicinity

Land use surrounding the project vicinity are Rural Lands/Settlements, Suburban Community, and Compact Community. Destinations and services surrounding the project vicinity include the Bayshore Mall, Fort Humboldt State Historic Park, hotels, motels, various types of stores, restaurants, fuel stations, and other commercial businesses.

Median Barrier

There is no existing median barrier within the project limits.

Railroads

There are no existing railroads within the project limits. There is an out of service railroad that parallels Broadway closer to Humboldt Bay.

Other – Sight Distances

There are locations in the project limits with non-standard sight distances. See Section 9 for Deviations from Boldface and Underlined Design Standards.

Other – Cross Slopes

Cross slopes vary within the project limits. The roadway is typically crowned with greater slopes present along some of the shoulder and around drainage inlets.

Other – Vertical Clearances

There are two overhead structures within the project limits:

- Spruce Point Overcrossing (PM 73.72): Vertical clearance of 15'1"
- Herrick Avenue Overcrossing (PM 74.77): Vertical clearance of 17'8"

Roadway Geometric Information and Condition

Traveled Way, Shoulders, and Median Geometric Information

		Existing	Alternatives 1-4[3]	Minimum RRR Standards
Facility Location	**Post mile range**	73.3/76.1	73.3/76.1	---
Minimum Curve Radius	**Radius (ft)**	Mainline: 2000	Mainline: 2000 Path (Alt 1): 110 Path (Alt 2): 55 Path (Alt 3): 75	Mainline: ~2500 Path: 260
Through Traffic Lanes	**Number of Lanes**	Mainline: 4	Mainline: 4 Path (Alts 1-3): 2	---
	Lane Width (ft)	Mainline (#1): 12 Mainline (#2): 12	Mainline (#1): 11 Mainline (#2): 12 Path (Alts 1-3): 5	Mainline: 12 Path: 4
	Type (Flexible, Rigid, or Composite)	Mainline: Flex.	Mainline: Flex. Path (Alts 1-3): Flex.	---
Paved Shoulder Width	**Left (ft)**	Freeway: 2-5 Conv. Hwy.: 0	Freeway: 2-5 Conv. Hwy.: 0 Path (Alts 1-3): 0	Freeway: 5 Conv. Hwy.: 0 Path: 0
	Right (ft)	Freeway: 8-10 Conv. Hwy.: 4-8	Freeway: 8-10 Conv. Hwy.: 2-8 Path (Alts 1-3): 0	Freeway: 10 Conv. Hwy.: 8 Path: 0
Median Width	**(ft)**	Freeway: 22-46 Conv. Hwy.: 12-14	Freeway: 22-46 Conv. Hwy.: 12 Path (Alts 1-3): 0	Freeway: 62 Conv. Hwy.: 12 Path: 0
Shoulder is a Bicycle Lane	**(Y/N)-Width (ft)**	Y	Y	---
Other Bicycle Lane Width[1]	**Width (ft)**	---	---	---
Bicycle Route	**(Y/N)**	Y	Y	---
Facilities Adjacent to the Roadbed[2]	**Code-Width (ft)**	P: 5-8	B: 5 P: 5-8 B/P (Alts 1-3): 10	---

Notes:

1. "Other Bicycle Lane Width" is the width of a bicycle lane that is not within the shoulder and is part of the traveled way.
2. Codes for row "Facilities Adjacent to the Roadbed":
   - B – Bicycle path
   - P – Pedestrian walkway
   - B/P – shared bicycle and pedestrian path
   - L – Landscaped area between the curb and sidewalk
3. If an alternative is different from the others it is specified in the appropriate box.

Mainline Pavement Condition

General Information

Existing pavement condition and information can be viewed in the Pavement Condition Reports (Attachment H) and the Preliminary Materials Recommendation (Attachment K).

The existing pavement condition information is only shown for PM 75.11 to PM 76.04, where paving is proposed as part of this project.

Topic	Value
Mainline existing asphalt pavement to be resurfaced (lane-mile):	3.72
Project limits Pedestrian/Bike accessible (Y/N):	Y
Roadway Classification	I
Current Automated Pavement Condition Survey (APCS)	2019
Ten-Year Plan (TYP)	2019
PIR Completed and signed (Current)	2021
Planned Delivery (RTL)	2024

Distress Types and Extents

Flexible Pavement Distress:
01-HUM-101-PM 75.11/76.04, L-Lane Miles: 1.860, R-Lane Miles: 1.860

Type	Extent	
	Current APCS Year: 2019	**RTL Delivery Year: 2024**
Alligator B Cracking (%)	0.00	3.90
Rutting (inches)	0.11	0.11
International Roughness Index (IRI, inches/mile)	72	95

Pavement Performance Measures

Year	Pavement Type	Caltrans Performance Measures (lane-miles)					MAP-21 Condition (lane-miles)			Total Lane Miles	Effectiveness (%)	
		Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/ Total Lane Miles) %
Current APCS Year: 2019	Flexible	3.720	0.000	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.00	0.00
RTL Delivery Year: 2024	Flexible	0.000	3.720	0.000	0.000	0.000	1.593	2.127	0.000	3.720	0.00	0.00

Median, Shoulder, and Ramp Pavement Condition

The median and shoulder condition matches the mainline condition. There are no ramps within the paving limits.

Other – Existing Pavement Structural Section

A review of the as-built files indicates lanes with an existing structural section consisting of 0.65-foot asphalt concrete (AC) over 0.67-foot cement treated base (CTB) over 0.25-foot of gravel, and shoulders with an existing structural section consisting of 0.45-foot AC over 0.67-foot aggregate base (AB). The upper layer of the existing wearing course in this project consists of 0.08-foot of open grade friction course (OGFC) placed in 2003 under project 01-402334. The 0.08-foot of OGFC within the project limits was cold planed and replaced with 0.10-foot of rubberized hot mix asphalt gap-graded (RHMA-G) from post mile 73.3 to PM 75.13 in the year 2015 under project 01-0C4804. Also, the OGFC within the project limits was removed by 0.25-foot cold planing and replaced with 0.25-foot hot mix asphalt type-a (HMA-A) in 2011 on Contract 01-478804 between PM 75.20 & 76.1.

Structure Geometric Information and Condition

Structures	Width Between Curbs			Vertical Clearance			Work Identified in Project EA Report	Replace Bridge Approach Rail	Replace Bridge Approach Slab	
Name Number	Exist (ft)	RRR Std (ft)	Prop (ft)	Exist (ft)	RRR Std (ft)	Prop (ft)	(Y/N)	(Y/N)	(Y/N)	Number
Spruce Point OC #04-0071	32	40	32	15'1"	16'6"	15'1"	N	N	N	---
Elk River #04-0021R	48-70	48-70	48-70	---	---	---	N	N	N	---
Elk River #04-0021L	54-66	54-66	54-66	---	---	---	N	N	N	---
Herrick Avenue OC #04-0280	40	40	40	17'8"	16'6"	17'8"	Y	N	N	---

9 ALTERNATIVES

There are five project alternatives, including a No-Build Alternative. Alternatives 1-3 feature different alignments for a Class I path that connects Pound Road to the Papa & Barkley Co. intersection. Alternative 4 does not include a Class I path. All four alternatives share the same design for the rest of the project limits, which consists of the Class IV bikeway from PM 75.2 to 76.1.

Although Alternative 3 is the preferred Class I path alignment due to fewer environmental and right-of-way impacts, Alternative 4 is the Programmable Project Alternative due to programming constraints. Alternatives 1-3 were deemed infeasible for completion in the 2020 SHOPP due to programming constraints associated with Complete Streets reservation funds, but were kept in this Project Initiation Document to record that these Alternatives were considered, and to provide a starting point for any future project that may look to construct the Class I path. Caltrans District 1 is investigating what options are available to add the Class I path as a stand-alone project in the State Highway Operation and Protection Program. Caltrans District 1 is also investigating other options to construct the Class I path because it is part of the vision for this segment of Broadway (from Herrick Avenue to Truesdale Street), as shown in the Eureka Broadway Multimodal Corridor Plan for the preferred concept.

Alternative 4 – Programmable Project Alternative

Proposed Engineering Features
This alternative has several key components. They have been broken out for discussion below. See Attachment A for Layouts and Typical Sections.

Striping/Marking Improvements (Station "A" 77+50 to "A" ~101+00)

Investigation will be conducted in the next project phase to determine if there are any possibilities for including striping and/or marking improvements to the shoulders on and near the Herrick Avenue Overcrossing for non-motorized users.

Since Alternative 4 doesn't include a Class I path, striping and marking options for non-motorized users will also be investigated between the Herrick Avenue Overcrossing and the Papa & Barkley Co. intersection.

Class IV Separated Bikeways (Station "A" ~101+00 to "A" ~141+00)

The existing shoulders will be converted to Class IV separated bikeways from the Papa & Barkley Co. intersection to Truesdale Street. The bikeways will be five-feet wide at minimum and will be wider when there is extra width available. These bikeways are separated from the traveled way with a physical separation. The details of the physical separation remain to be decided and will require future investigation in the next project phase. There are several options for the physical separation, each with their own pros and cons. These options are detailed in the table below. For preliminary project cost estimating, it is assumed that the physical separation will be a continuous raised curb with some locations of raised bikeway.

Separation Type	Pro	Con
Continuous Raised Concrete Curb (widened to island where applicable)	• More comfortable • Durable	• Expensive • Limited bikeway delineation • Fewer opportunities to exit the bikeway
Planting Strip (where roadway width allows)	• More comfortable • Durable • Potential to be a bioswale	• Expensive • Limited bikeway delineation • Fewer opportunities to exit the bikeway • Increased maintenance of plants and plant debris

Separation Type	Pro	Con
Raised Bikeway (roadway, bikeway, and sidewalk at different elevations)	• Durable	• Expensive • Requires drainage modifications • Limited bikeway delineation • Entering and exiting the bikeway can be dangerous due to curb
Flexible (Durable) Posts (Like K-71, Rubber Posts, or Posts used at Sunset Blvd Overpass in Arcata)	• Increased bikeway delineation • Inexpensive • Removable for operations and maintenance if needed	• Less durable • Worker safety issue to maintain or replace posts • Lack of public/stakeholder support • May be a sight obstruction for children
Armadillos (lower version of posts)	• Inexpensive • Removable for operations and maintenance if needed	• Less durable • Limited bikeway delineation • Worker safety issue to maintain or replace armadillos
Parking Stops (Concrete or Rubber)	• Inexpensive • Removable for operations if needed	• Less durable • Limited bikeway delineation • Worker safety issue to maintain or replace parking stops
Planting Boxes	• Increased bikeway delineation • Inexpensive • Removable for operations if needed	• Less durable • Worker safety issue to maintain or replace planting boxes • Increased maintenance of plants and plant debris • May be a sight obstruction for children

For this phase of project development, the bikeway is presented as one-way on each side of Broadway. An alternative to this design is a two-way bikeway on one side of Broadway. Further studies and public surveys will be required to determine the optimal design. Below is a table of pros and cons for the two designs:

	Pro	Con
Two-Way (SB side of Broadway)	• Some NB cyclists currently use SB side. This design accommodates existing use with greater safety. • A two-way facility is essentially one bicycle facility, rather than being two facilities (one on each side). This may potentially require less space since there would only be one buffer versus two.	• Minimal separation of NB cyclists from SB cyclists and vehicles • Bikeway termination requires NB cyclists to cross Broadway. • Cyclist merging into motorized traffic for turning movements is more difficult • Would require bicycle signalization • Bicyclist access to destinations would be limited to one side of Broadway
Two-Way (NB side of Broadway)	• A two-way facility is essentially one bicycle facility, rather than being two facilities (one on each side). This may potentially require less space since there would only be one buffer versus two.	• Minimal separation of SB cyclists from NB cyclists and vehicles • Bikeway termination requires SB cyclists to cross Broadway. • Cyclist merging into motorized traffic for turning movements is more difficult • Wrong-way riding could perpetuate (some NB cyclists on SB side) • Would require bicycle signalization • Bicyclist access to destinations would be limited to one side of Broadway
One-Way	• Cyclists riding with traffic • Cyclist merging into motorized traffic for turning movements is simple • Bicyclists have access to destinations on both sides of Broadway	• Wrong-way riding could perpetuate (some NB cyclists on SB side)

Protected Intersection at Papa & Barkley Co. and Broadway (Station "A" ~101+00 to "A" ~104+50)

The Papa & Barkley Co. and Broadway intersection requires a redesign because:

- It is the junction of the future Class I path and the Class IV separated bikeways.
- Widening is required along the eastern side of Broadway near the intersection to accommodate the Class IV separated bikeways (see next Section)
- The intersection is the first signal on the south end of Eureka, so there are high speeds in the transition to/from freeway and urban main street. These high speeds mean that special consideration needs to be made for intersection design, including non-motorized movements.

Protected intersections provide the greatest amount of comfort for non-motorized users. In general, key design elements include:

- Setback pedestrian and bicyclist crossings: these allow turning drivers to better see crossing pedestrians and bicyclists
- Corner islands: raised islands on the corners of the intersection slow turning vehicle speeds. For this project, the corner islands are placed where there is already sidewalk, so there is no increased benefit over existing conditions.
- Pedestrian refuge islands and bicycle queuing areas: these spaces allow pedestrians and bicyclists to wait comfortably and reduce the crossing distances

Constructing the protected intersection will require replacing the existing traffic signal and streetlights.

One discussion topic to be carried into the next project phase is what the scope of the southern crossing is. There is no existing pedestrian crosswalk here. When bicycle crossings were scoped with the protected intersection, one was added to the southern crossing without adding a pedestrian crosswalk. There are concerns that pedestrians will use this southern bicycle crossing, so it may be desirable to either add a pedestrian crosswalk or remove the bicycle crossing. If the bicycle crossing is removed, then the northern and potentially eastern bicycle crossings should be two-way to accommodate both directions of bicycle flow.

Associated with the above discussion is if there is only one Broadway pedestrian crosswalk, is it safer to place it on the northern (existing) or southern side of the intersection. For the purposes of this Project Initiation Document, it is assumed there is a bicycle crossing on the northern and southern sides of the intersection, and a pedestrian crosswalk only on the northern side to match existing conditions. The reason for an existing pedestrian crosswalk only on the northern side of the

intersection is likely because there is sidewalk only on the northern side of the Papa & Barkley Co. driveway.

Consideration should be given to modifying or removing the right turn lanes coming into (not an official lane, but is wider here) and out of Papa & Barkley Co. The intersection could be tightened and/or these could be converted to maintenance pullouts.

Broadway Widening from Papa & Barkley Co. Intersection to Lithia (Station "A" ~104+50 to "A" ~109+00)

Project 01-0B6204 Broadway ADA will construct sidewalk along SB Broadway from the Lithia car dealership to the Papa & Barkley Co. intersection. Shoulder width will be reduced to avoid impacts to wetlands on 01-0B6204. Widening will be required on this project on the NB side of Broadway to accommodate the Class IV separated bikeways.

Upgrades to the Intersection of Pierson Building Center and Broadway (Station "A" ~117+00 to "A" ~118+50)

The existing intersection of Pierson Building Center and Broadway is difficult to navigate for pedestrians along SB Broadway. Pedestrians must cross the free right-turn lane into Pierson's (with no crosswalk marking) to a small island refuge and then cross Pierson's SB and NB exit lanes on a bent crosswalk. The entire movement requires changing direction twice and is difficult for visually impaired pedestrians.

Another issue for pedestrians is there is no marked crosswalk across Broadway on the southern side of the intersection, so a pedestrian on the SW corner of the intersection could have to wait through three stoplight cycles to get to the SE corner, and vice versa. This may lead to some people crossing Broadway south of the intersection where there is no marked crosswalk.

Another issue was raised in the US 101 (Broadway) K-Mart to 4th Street Pedestrian and Bicycle Road Safety Audit. There are four vehicle access points on the NB side of Broadway near the intersection at Pierson's that all connect to one large paved area. If project funding allows and businesses consent, these access points should be reduced to leave only the one at the traffic signal. This would allow the Class IV bikeway separation to be continuous though most of this area and would limit conflict points between vehicles and non-motorized users.

Due to limited funding, the intersection cannot be altered like the Papa & Barkley Co. intersection. Also, due to limited time and resources in this phase of project development, options have not been fully investigated for the intersection. Concepts to be investigated in the next project phase include:

- Adding a crosswalk to the southern side of the intersection
- Adding a raised passageway in the SW corner of the intersection. This will have to be weighed against the proper design vehicle turning radii for this intersection
- Modifying the existing raised passageway in the NW corner of the intersection to be more robust.
- Consideration of modifying or removing the free right turn lanes coming into and out of Pierson Building Center. Morgan Randall (store Manager at Pierson Building Center) has indicated that removing the acceleration lane out of Pierson Building Center would cause queuing issues into their parking lot. There are also often queuing issues on Broadway even with the existing free right turn lane into Pierson Building Center, so removing either lane could cause operational issues. Some modifications to these two lanes might be preferred if budget allows. The US 101 (Broadway) K-Mart to 4th Street Pedestrian and Bicycle Road Safety Audit stated: "Consider eliminating acceleration lanes and creating bicycle lanes where possible."
- If the right turn lane into Pierson Building Center is maintained, then an R4-4 sign will be needed where the right turn lane begins
- Modifying the NB sidewalk to accommodate any of the above changes.

Funding has been programed with this project for intersection study and design work in the next phase.

New Transit stops at the 76 Gas Station and Pacific Motorsports (Station "A" ~121+00 to "A" ~123+50)

Two new transit stops are proposed: SB at the 76 Gas Station and NB at Pacific Motorsports. These locations were decided based upon discussions with Greg Pratt, General Manager at Humboldt Transit Authority. Widening will be required to accommodate the bus width. The transit stops will be designed as follows:

- Bus pad that is somewhere between 50-feet to 70-feet long and ten-feet wide
- Sidewalk that is between six-feet and eight-feet wide
- A Class III mixing zone between buses and bicyclists to minimize widening at these locations. This is especially important for avoiding operational impacts at the 76 Gas Station because the roadway is already close to some fuel pumps, which are used by large trucks.

Further investigation in the next phase is necessary to determine if widening these transit stops to eliminate Class III mixing zones is feasible. It is likely feasible at Pacific Motorsports but may not be at the 76 Gas Station due to the conflicts with large trucks and fuel pumps. Funding may also be limited.

Broadway Pedestrian Crossing Near Hilfiker Lane (Station "A" ~126+50 to "A" ~127+00)

One goal of this project was to provide better non-motorized connections across Broadway. One of these key connections is at Hilfiker Lane because this provides a connection to the Hikshari' Trail. There is no signalized intersection at this location. Implementing a standard crosswalk with no other modifications would provide little benefit over existing conditions. Therefore, a crosswalk with a pedestrian refuge island in the median and a two-stage beacon will be implemented. Two-stage beacons alert opposing vehicular traffic of a crossing pedestrian in two parts separated by a pedestrian island. There is an existing streetlight at the crossing that will be used to illuminate the crossing at night.

The median is often used by emergency responders to bypass heavy traffic in emergency situations. The median can also be used for construction staging and evacuation routes. Thus, median island design will be low and mountable. Pedestrian detector loops will be implemented to eliminate fixed pedestrian push button poles.

An alternative to raised median islands is removable flexible posts that delineate pavement in the shape of the islands, but the islands would be flush with the roadway. These posts would be removed during construction staging or an evacuation. They would also be flexible so they could be run over by first responders. However, maintenance of these posts would create a maintenance worker safety issue.

Another consideration is the type of pedestrian activated beacon to use. There are two types commonly used:

- Rectangular Rapid Flashing Beacon (RRFB): this beacon does not require vehicles to stop and will require that the pedestrians wait for vehicles to yield.
- Pedestrian Hybrid Beacon (PHB): this beacon requires drivers to stop, like a traffic signal. Unlike a traffic signal however, this beacon is only activated by pedestrians. The PHB would require coordination with the two nearest traffic signals.

The selection of beacon type is deferred to the next project phase for detailed modeling of the traffic impacts. Funding for the PHB was conservatively programmed since this is the more expensive option of the two. This funding includes cost for advance warning beacons. However, implementation of advance warning beacons also needs to be investigated in the next project phase.

The crossing location was chosen to minimize the conflicts with left turn movements. Hilfiker Lane serves large trucks which need the two way left turn lane, and there are several driveways to the north of the intersection. Thus, a location to the south was chosen; it should not interfere with operations at adjacent businesses since there are

two large driveways serving these businesses. This location was also chosen since it places the crossing equidistant between the nearby traffic signals, balancing the effects on traffic operations.

Upgraded Transit stops at McCullens Avenue and Broadway Intersection (Station "A" ~136+50 to "A" ~139+50)

There is a NB and SB transit stop located at the McCullens Avenue and Broadway intersection. The NB transit stop currently functions well; however, the SB stop requires buses to take up a small portion of the traveled way due to narrow shoulders. Both transit stops will be upgraded. The transit stops will be designed as follows:

- Bus pad approximately 50-feet long and 12-feet wide.
- Unlike the transit stops at the 76 Gas Station and Pacific Motorsports, these transit stops will incorporate raised Class IV separated bikeways that become part of the ADA landing area for the buses. This removes conflicts between buses and bicyclists. The raised bikeways will be five-feet wide.
- Sidewalk that is between six-feet and 12-feet wide.
- The SB transit stop will require removal of one driveway and the NB transit stop will require removal of two driveways. Both affected properties have another access point along McCullens Avenue.

Another topic for the McCullens Avenue intersection is the curve radius for the SE corner of the intersection. It is larger than the other three corners and reducing this radius would help slow vehicles and increase safety. For now, reducing this curve radius is not included in the scope, but it is added as a future investigation item. It would require balancing the needs of all users, including the design vehicle.

Pedestrian and Bicycle Crossing Between Highland Avenue and Truesdale Street (Station "A" ~141+50 to "A" ~143+50)

The City of Eureka plans on making Highland Avenue a Class III bike route. Truesdale Street provides a connection to the Hikshari' Trail. This indicates that there will be pedestrian and bicyclist traffic between the two streets. The two streets intersect with Broadway offset from each other which creates challenges in moving non-motorized users between the two streets. A two-part treatment was designed for the intersection: treatment for pedestrians and treatment for bicyclists. The treatment for pedestrians is like the one at Hilfiker Lane, using a RRFB or a PHB (see discussion above). There is an existing streetlight at the crossing that will be used to illuminate the crossing at night.

A possible solution for bicyclists is to implement a median protected bicycle center turn lane. This uses a raised barrier in the center of the median to both prevent vehicles from using the median and to separate the two directions of bicycle travel. It

offers a protected area free from vehicles for bicyclists to cross one direction of traffic at a time. However, it blocks vehicle travel between the two streets, and prevents left turns to and from the two streets. This means that there will be impacts to traffic operations on the local network. Vehicles would be redirected to the two nearest traffic signals at McCullens Avenue and the southern Bayshore Mall entrance, and then would have to use local streets to get to their destination.

Another solution is to have bicyclists cross Broadway directly from the separated bikeway. The design could include small median islands for bicyclist refuge.

The following table lists the pros and cons of the two options:

	Pro	Con
Median Protected Bicycle Center Turn Lane	• Best solution for bicyclists • Would eliminate an existing collision concentration by preventing the vehicle movement • This area was identified as a place for median islands in the US 101 (Broadway) K-Mart to 4th Street Pedestrian and Bicycle Road Safety Audit: "Consider installing median islands along Broadway, especially between Truesdale St. and McCullens Ave."	• Out of direction travel for vehicles • More volume at two nearest traffic signals may necessitate intersection modifications • Impacts the businesses in the vicinity • Drivers may use driveways instead of using the nearby traffic signals • Creates impacts to first responders and a pinch point in available pavement width for evacuations (could be mitigated by using removable flexible posts, as mentioned in the Hilfiker Lane crossing discussion above)
Crossing Straight Across Broadway	• Little impact to vehicle traffic.	• Provides little benefit to bicyclists if no median island built • This is an "unnatural" crossing movement. Bicyclists are supposed to cross like vehicles.

The current layouts (Attachment A) show the crossing straight across Broadway with no median islands. Median islands can be added for little cost. The switch can also be made to the median protected bicycle center turn lane at little cost. The final design

for this intersection will be deferred to the next phase where operational impact studies can be performed.

Roadway Narrowing and Pavement Overlay (Station "A" ~99+50 to "A" ~144+50)

The roadway will be narrowed to make room for non-motorized improvements. The following are the typical widths:

- Median reduced from 13-feet/14-feet to 12-feet
- Inside lane reduced from 12-feet to 11-feet
- Outside lane will remain at 12-feet
- Shoulder reduced from four-feet/eight-feet to two-feet

When the existing striping is removed, there will be slight grooves in the pavement. A pavement overlay (micro-surfacing) has been included in the scope to remove this effect and to provide a smooth finish over the roadway since there will be several locations where the pavement is excavated and replaced. The southern end of the pavement overlay should logically tie into the limits of paving from project 01-0C5704 King Salmon Rehab 2R which is currently in construction.

Previous pavement overlays have reduced the curb heights along Broadway and have made some areas of nonstandard cross slopes. Cold planing prior to this pavement overlay has been included in spot locations to mitigate these issues.

Structural Sections

There are many different project components all requiring different materials and material thicknesses. Below is a table summarizing that information. The acronyms are as follows:

- SEG: subgrade enhancement geotextile
- AB: Class II aggregate base
- HMA-A: hot mix asphalt type-A
- JPCP: jointed plain concrete pavement
- LCB: lean concrete base

Project Component	Material and Thickness
Class I Shared Use Path	• 0.25' HMA-A • 0.60' AB • SEG
Class IV Separated Bikeways (Where Reconstructing Shoulder)	• 0.35' HMA-A • 0.50' AB
Class IV Separated Bikeways (Where Overlaid)	• 0.25' HMA-A

Project Component	Material and Thickness
Broadway Mainline Pavement Overlay	• Micro-surfacing (type II or III TBD)
Broadway Mainline Pavement Reconstruction	• 0.55' HMA-A • 0.85' AB
Bus Pads	• 0.85' JPCP • 0.50' LCB
Sidewalks and Curb Ramps	• 0.33' minor concrete • 0.35' AB
Sidewalks and Curb Ramps (at Commercial Driveways)	• 0.50' reinforced minor concrete • 0.50' AB
Raised Median	• 0.50' reinforced minor concrete • 0.50' AB
Hardscaping	• 0.50' reinforced minor concrete • 0.50' AB

See Section 17 Additional Considerations – Recycled Materials for discussion on alternative types of material that could be used pending further investigation.

Necessary Drainage Upgrades (Station "A" ~101+50 to "A" ~141+50)

Water currently drains off Broadway into either drainage inlets along the sidewalk or onto local roads and driveways. The required drainage scope will depend heavily on the type of Class IV separation selected. If the separation is continuous and raised, then the water will be captured and a new drainage pattern will be created. Several drainage features would be required due to the shoulder reduction.

If the type of Class IV separation is non-continuous such as flexible posts, then the existing drainage patterns can be largely perpetuated, and drainage improvements will be minimal.

The separation conservatively selected for the purpose of project cost estimating is the continuous raised curb with some locations of raised bikeway. Drainage is scoped appropriately to capture adequate funding for this type of separation. Cuts in the raised separation were scoped to minimize the number of additional drainage features required. The drainage worksheet can be found as Attachment M.

Street Trees and Landscaping Opportunities (Station "A" ~107+50 to "A" ~143+00)

Broadway has an industrial aesthetic which creates an uncomfortable environment for non-motorized users. Street trees and landscaping opportunities have been identified to mitigate this aesthetic and create a more welcoming appearance for all roadway users, similar to the street trees along US 101 on 4th and 5th Streets in Eureka.

These features will also help with traffic calming. The scope for these areas is still preliminary, but funding has been set aside for this work. Coordination with the City of Eureka and groups such as Keep Eureka Beautiful is vital to ensure that the appropriate features are selected and that they can be maintained in the future.

Curb Ramps and Driveways (Station "A" ~102+00 to "A" ~141+50)

There is little sidewalk, curb ramp, or driveway work included in this project since much of it is being completed with project 01-0B6204 Broadway ADA. Where curb ramp work is required, they will be designed as directional curb ramps to the extent feasible to help guide people with visual impairments. Where driveway work is required, the driveways should be narrowed to the extent feasible based on the design vehicle to help slow turns into and out of the driveways and to shorten driveway conflict areas for non-motorized users.

Potential Developments

There are several areas along Broadway that may be repurposed and could change the scope of this project, either directly or indirectly through required driveways and increased traffic. Coordination with developers is necessary moving forward.

Traffic Signal Upgrades for Non-Motorized Users

There are several small upgrades that can be made to the signalized intersections that can have large safety benefits. A small lump sum of money has been allocated to funding these upgrades, but the exact selection and design of upgrades has been left for the next phase to determine. Here are some possibilities:

- Right-turn yield to pedestrian signage
- Bicycle signals (Papa & Barkley Co. intersection)
- Blank-out signs that indicate when pedestrians are crossing to alert right turning vehicles to the conflict
- Leading pedestrian intervals which will give pedestrians a head-start to cross the roadway

Maintenance of New Facilities

The proposed facilities will require special maintenance efforts. The Class I path will require shoulder mowing and occasional sweeping. Depending on the alternative chosen for this path, maintenance will fall either with Caltrans, the City of Eureka, or a combination of Caltrans and the City of Eureka (Alternatives 1-3 only).

The Class IV separated bikeways will require sweeping as well. Normal street sweepers will not fit on these facilities. The equipment needs for maintenance of these facilities will need to be communicated to Maintenance.

Electrical Systems

This project requires replacing several existing electrical systems as well as constructing several new ones. Below is a summary of the electrical system work, some of which has been mentioned previously:

- Relocate and replace three lights
- Two PHBs
- Coordinate nearby signals with the Hilfiker Lane and the Highland Avenue PHBs
- Replace Papa & Barkley Co. traffic signal at PM 75.24
- Pedestrian/bicycle count station on the Class I path (Alternatives 1-3 only)
- Modify census station at PM 75.02 to also count pedestrians and bicyclists (Alternative 1 will potentially require moving this entire census station location due to the Class I path alignment)
- Class I path lighting (Alternatives 1-3 only)
- Traffic signal upgrades for non-motorized users

Design Vehicles

Detailed investigation of design vehicles is deferred until the next project phase when there is more time to investigate the turning movements at the driveways and roads throughout the project limits. The design vehicle for the mainline is a Terminal Access (Surface Transportation Assistance Act (STAA)) semi-truck. This truck passed through the mainline with the proposed lane width reductions.

Future Investigation for This Project

As noted throughout this discussion, there are several design features that will need to be investigated in more detail in the next project phase. Those items are summarized below:

- Marking and striping options on and near the Herrick Avenue Overcrossing for non-motorized users
- Marking and striping options from the Herrick Avenue Overcrossing to the Papa & Barkley Co. intersection for non-motorized users (Alternative 4 only)
- Class IV separated bikeway separation type
- One-way vs two-way Class IV separated bikeway design
- Pedestrian crosswalk and bicycle crossing locations, as well as the need for right turn lanes at the Papa & Barkley Co. intersection
- Pierson Building Center intersection design

- Removing the mixing zones for bicyclists and buses at the two new transit stops at the 76 Gas Station and Pacific Motorsports
- Use of RRFB or PHB at the Hilfiker Lane and Truesdale Street/Highland Avenue pedestrian crossings, along with the use of advance warning beacons
- Reducing the curve radius of the SE corner of the McCullens Avenue intersection
- Bicyclist crossing improvements at the Truesdale Street/Highland Avenue intersection
- Coordination with developers along Broadway
- Traffic signal upgrades for non-motorized users
- Design vehicle movements
- Recycled material usage

Ideas for Future Projects

There were some concepts that could not be incorporated into this project. These concepts would enhance mobility and livability for non-motorized users. Therefore, it is recommended that these concepts be pursued as future projects or as add-ons to this project. The concepts have been divided into the following three projects:

The first project is to upgrade pedestrian and bicycle facilities along Herrick Avenue and Pound Road. There are many residences on Herrick Avenue, but there are no non-motorized facilities on or near the Herrick Avenue Overcrossing. This lack of facilities presents a barrier for non-motorized users who want to access the trails west of Broadway. Project features could include any combination of the following:

- Sidewalk
- Class II bike lanes or Class IV separated bikeways
- Class I path
- Pedestrian/bicycle overcrossing over the freeway
- Pedestrian and bicyclist crossings
- Transit stops. Possible ideas for transit stops include at the freeway off ramps, in the park-and-ride, and/or in the gravel pullout to the east of the overcrossing on Herrick Avenue.

The second project is to implement features to the south of the Papa & Barkley Co. intersection that create a sense of arrival to Eureka. This has been preliminarily studied for the Eureka South Entry Project in 2015. A project study report-project development support was written and can be found at this link. Project features could include:

- A gateway monument
- Median islands
- Streetlights
- Street trees

- Textured pavement

The third project is to implement a Class I path from Pound Road to the Papa & Barkley Co. intersection. Alternatives 1-3 include this but were deemed infeasible for completion in the 2020 State Highway Operation and Protection Program (SHOPP) due to programming constraints for Complete Streets reservation funds .

California Highway Patrol (CHP) Enforcement Activities

This project will use the Construction Zone Enhanced Enforcement Program (COZEEP) to provide additional officers on the job site during the work. COZEEP monies were included in the cost estimate. Any median islands implemented will affect CHP activities and other emergency responders since the median is currently used to bypass heavy traffic. Therefore, median islands will be mountable. CHP activities and other emergency responders will also be temporarily impacted during construction.

Context Sensitive Solutions

This project requires close coordination with local entities such as the City of Eureka. The project has been designed with consideration of local needs. For example, the plan to make Highland Avenue a Class III bike route with Truesdale Street being a connection to the Hikshari' Trail and the existing offset intersection at Highland/Truesdale necessitates special design of the improvements proposed at this location. Another example is the scoping of landscape features/street trees to give a less industrial aesthetic to Broadway.

Another context sensitive solution is that this project is the southern portion of the Broadway Corridor Plan. The rest of Broadway still requires upgrades to increase safety and livability for non-motorized users.

Current Construction and Right-Of-Way Cost Estimates

The current non-escalated construction and right-of-way capital costs are $6,245,000 and $555,000 respectively for Alternative 4.

Earth Retaining Systems

There are two small retaining walls required for this project: one at the 76 Gas Station transit stop and one at the SB McCullens Avenue transit stop. Both will be standard plan retaining walls and will be approximately two-feet tall (above ground).

Erosion Control

This project will use soil stabilization and sediment control in locations within project limits where the soil is disturbed due to earthwork.

High-Occupancy Vehicle Lanes

There are no proposed high-occupancy vehicle lanes for this project.

Highway Planting and Irrigation
This project does involve highway planting and irrigation; see the Landscape Architecture Assessment Study (Attachment N).

Interim Features
There may be an opportunity to do a pilot for this project at the Truesdale Street/Highland Avenue intersection with some temporary features to study how the intersection operates before final design. This pilot may also include demonstration of the Class IV separated bikeway with temporary features.

Noise Barriers
There are no proposed noise barriers for this project.

Operational Improvement Features
This project will improve operations for non-motorized users by providing dedicated facilities and crossing opportunities for pedestrians and bicyclists. Transit operations will be improved by constructing transit stops with enough space for the bus to pull off Broadway.

Ramp Metering
There is no proposed ramp metering for this project.

Reversible Lanes:
This project does not qualify as a capacity increasing or a major street or highway realignment project and reversible lanes have not been considered for this project.

Roadside Design and Management
All traffic islands are hardscaped in this project to minimize maintenance needs and maintenance worker safety concerns while still providing an aesthetic treatment. Landscape features off the roadway can be vegetated, but the design of these features needs to consider sight distance and maintenance efforts. Maintenance agreements will be required with the City of Eureka for any landscaping and lighting features incorporated in the project.

Traffic Analysis
Detailed traffic analyses will need to occur in the next phase to determine the effects of this project on traffic operations.

Deviations from Boldface and Underlined Design Standards
The July 1, 2020 version of the Highway Design Manual was used to evaluate highway features within this project.

Non-standard geometric features that are either outside of the construction areas or beyond the purpose and scope of this proposed project will be perpetuated. There

are non-standard geometric features that were determined to be applicable to the purpose and scope of the project, are being modified by the project, and are being evaluated for the following exceptions to design standard:

- Pavement reductions
- Shoulder width
- Lane width
- Horizontal minimum clearance
- Clear recovery zone
- Corner sight distance
- Curb types
- Turning traffic
- Design speed (Class I shared use path)
- Shoulder width (Class I shared use path)
- Stopping sight distance (Class I shared use path)

Evaluation of all exceptions to design standards and the preparation and approval of the Design Standard Decision Document will be deferred until the PA & ED phase when more accurate topographic, environmental, and right of way information is known. The decision to defer was concurred by the approval authority, Steven Hughes, Chief, Office of Design and Engineering Services, on April 23, 2021.

Design Standards Risk Assessment Matrix			
Alt	**Standard (HDM index, DIB, TOPD, etc.)**	**Nonstandard feature and its risk of not being approved (low, medium, high)**	**Justification for the approval risk rating and additional data/studies needed for approval**
1-4	**Pavement Reductions:** HDM 206.3(1) Through Lane Drops: When a lane is to be dropped, it should be done by tapering over a distance equal to WV, where W = Width of lane to be dropped and V = Design Speed.	**Nonstandard Feature:** The Pierson's acceleration lane is not being modified, but the one at the Papa & Barkley Co. intersection is. There will be a nonstandard lane drop length here. **Risk Rating of Not Being Approved:** **LOW**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • Less R/W impact • Not changing from existing much **Additional Data/Studies needed for Approval:** Surveys and field measurements quantifying existing width and length. Proposed width and length Collision evaluation at location of proposed nonstandard pavement reduction Quantification of impacts to make standard

Design Standards Risk Assessment Matrix			
Alt	**Standard (HDM index, DIB, TOPD, etc.)**	**Nonstandard feature and its risk of not being approved (low, medium, high)**	**Justification for the approval risk rating and additional data/studies needed for approval**
1-4	**Shoulder Width:** HDM 302.1 Width: **The shoulder widths given in Table 302.1 shall be the minimum continuous usable width of paved shoulder on highways.** **The minimum outside shoulder width is 8' and the minimum inside is 2'.** HDM 405.3(2)(a): Lane and Shoulder Width: **Shoulder width shall be a minimum of 4 feet.**	**Nonstandard Feature:** Nonstandard outside shoulder width will be provided adjacent to the physical buffer separating the bicycle traffic from the traveled way, and adjacent to right turn only lanes. Shoulder width will be 2'. **Risk Rating of Not Being Approved:** **MED**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • If vertical separation is low, then the vehicle won't end up stranded in the lane and traffic won't be backed up on 101. • Less R/W impact and no businesses will need to be removed. • Protected, buffered area for bicyclists will be provided. There are currently no facilities for bicyclists. • There are many local streets and driveways for vehicles that break down to pull off the highway • Within the locations of reduced shoulder width there were only 6 collisions crossing 2.5' and beyond in the right shoulder area within the three-year period of 2017 through 2019. **Additional Data/Studies needed for Approval:** Proposed locations and extents of nonstandard shoulder width Collision evaluation at locations of proposed nonstandard shoulder widths Quantification of impacts to meet standard
1-4	**Lane Width:** HDM 301.1 - Lane Width: **The minimum lane width on two-lane and multilane highways, ramps, collector-distributor roads, and other appurtenant roadways shall be 12 feet, except as follows:**	**Nonstandard Feature:** Nonstandard lane width of 11' will be provided in the inside lane. **Risk Rating of Not Being Approved:** **MED**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • The existing inside lane may already be 11' in some locations • Protected, buffered area for bicyclists will be provided. There are currently no facilities for bicyclists. **Additional Data/Studies needed for Approval:** Proposed locations and extents of nonstandard lane width Collision evaluation at locations of proposed nonstandard lane widths Quantification of impacts to meet standard

Design Standards Risk Assessment Matrix			
Alt	**Standard (HDM index, DIB, TOPD, etc.)**	**Nonstandard feature and its risk of not being approved (low, medium, high)**	**Justification for the approval risk rating and additional data/studies needed for approval**
1-4	**Horizontal Minimum Clearance:** **HDM 309.1(3)(c) Minimum Clearances: On conventional highways, frontage roads, city streets and county roads within the State right of way (all without curbs), the minimum horizontal clearance shall be the standard shoulder width as listed in Tables 302.1 and 307.2, except that a minimum clearance of 4 feet shall be provided where the standard shoulder width is less than 4 feet.**	**Nonstandard Feature:** There will be nonstandard clearances to the vertical separation for the Class IV bikeways **Risk Rating of Not Being Approved:** **LOW**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • Protected, buffered area for bicyclists will be provided. There are currently no facilities for bicyclists. • Vertical separation provides better delineation of the bicycle facility than a Class II bike lane • This is a lower speed facility **Additional Data/Studies needed for Approval:** Proposed locations of nonstandard horizontal minimum clearance Collision evaluation at locations of proposed nonstandard minimum clearance Quantification of impacts to meet standard
1-4	**Clear Recovery Zone (CRZ):** HDM 309.1(2)(a) Necessary Features: Fixed objects, when they are necessary highway features, including, but not limited to, bridge piers, abutments, retaining walls, and noise barriers closer to the edge of traveled way than the distances listed above should be eliminated, moved, redesigned to be made yielding, or shielded in accordance with the following guidelines:	**Nonstandard Feature:** Nonstandard CRZ will be created when the fixed base RRFBs or PHBs are placed. Also, if the vertical separation is tall and fixed, then there will be nonstandard CRZ. **Risk Rating of Not Being Approved:** **LOW**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • The RRFBs are required at these crossings to make the pedestrian crossing safer. They are required close to the roadway to draw drivers' attention to the crossing. • Traffic Safety doesn't support breakaway objects when pedestrians are expected in the vicinity. • The fixed base RRFBs or PHBs will be placed as far back from the roadway as possible. • For the vertical separation portion of this, protected, buffered area for bicyclists will be provided. There are currently no facilities for bicyclists. **Additional Data needed for Approval:** Proposed locations of nonstandard clear recovery zone Collision evaluation at locations of proposed nonstandard clear recovery zone Quantification of impacts to meet standard

Design Standards Risk Assessment Matrix			
Alt	**Standard (HDM index, DIB, TOPD, etc.)**	**Nonstandard feature and its risk of not being approved (low, medium, high)**	**Justification for the approval risk rating and additional data/studies needed for approval**
1-4	**Corner Sight Distance:** HDM 405.1(2)(a) General: There should be no sight obstruction within the clear sight triangle.	**Nonstandard Feature:** Nonstandard corner sight distances will be provided if a raised separation, such as flexible posts or planters, is chosen. Also, there will be areas of nonstandard corner sight distances if plantings or streetlights are implemented (median or otherwise) A guaranteed instance of nonstandard corner sight distance is that the stop bars for the local streets/intersections will be pulled back from their current location due to crosswalks, creating worse sight distance than existing. **Risk Rating of Not Being Approved:** **LOW**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • Raised separation increases awareness of the bicycle facility. • Plantings and lighting help the aesthetic of the facility and are desired by members of the public. They also help give a sense of arrival and can help calm traffic. • Locations of point restrictions to corner sight distance, such as poles, are less of a concern than continuous impediments. • Drivers at the new crosswalks can pull forward into the crosswalks for better sight distance. **Additional Data/Studies needed for Approval:** Proposed nonstandard corner sight distances and extents Collision evaluation at locations of nonstandard corner sight distance Quantification of impacts to meet standard
1-4	**Curb Types:** HDM 303.1 General Policy: The use of curb should be avoided on facilities with posted speeds greater than or equal to 40 miles per hour, except as noted in Table 303.1. For projects where the use of curb is appropriate, it should be the type shown in Table 303.1.	**Nonstandard Feature:** Nonstandard curb type may end up being chosen. It appears that nonstandard curb type was used in 0B620. **Risk Rating of Not Being Approved:** **LOW (will need to be reviewed in future, usually build to standard)**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • Using more aggressive curbing than standard will help delineate non-vehicle areas. **Additional Data/Studies needed for Approval:** Proposed nonstandard curb types and extents Quantification of impacts to meet standard

Design Standards Risk Assessment Matrix			
Alt	**Standard (HDM index, DIB, TOPD, etc.)**	**Nonstandard feature and its risk of not being approved (low, medium, high)**	**Justification for the approval risk rating and additional data/studies needed for approval**
1-4	**Turning Traffic:** HDM 403.6(1) Treatment of Intersections with Right-Turn-Only Lanes: Locations with right-turn-only lanes should provide a minimum 4-foot width for bicycle use between the right-turn and through lane when bikes are permitted, except where posted speed is greater than 40 miles per hour, the minimum width should be 6 feet.	**Nonstandard Feature:** There are two right-turn-only lanes within the project limits and neither one will have this treatment: Papa & Barkley Co. intersection and Pierson's intersection. **Risk Rating of Not Being Approved:** **LOW**	**Justification for the Approval Risk Rating:** • The Papa & Barkley Co. intersection is becoming a protected intersection, so the bicycle facility is more protected than the standard. • Pierson's intersection does not have enough width to do this, so a mixing zone is provided. There is currently no bicycle facility at all, so this is an improvement over existing conditions. • The right-turn-only lanes at Pierson's are required for vehicle queuing. **Additional Data/Studies needed for Approval:** Quantification of impacts to meet standard
1-3	**Design Speed (Class I Shared Use Path):** 1003.1(9) Bicycle Path Design Speed: **The design speed given in Table 1003.1 shall be the minimum.** (The minimum design speed is 30 MPH.)	**Nonstandard Feature:** There will be nonstandard curvature on all three alternative alignments. **Risk Rating of Not Being Approved:** **LOW (in the future, need to weigh the safety and environmental impacts to determine the final design and what design exceptions are required)**	**Justification for the Approval Risk Rating:** • For the Alternative 1 alignment, the nonstandard curves will be required only at the ends of the path at intersections. Bicyclists will be expected to slow down in these areas. • Pedestrians and bicyclists will be given a new path that they did not already have (improved conditions over existing). **Additional Data/Studies needed for Approval:** Proposed nonstandard design speeds and extents Analysis weighing safety versus environmental impacts to achieve standard design speed. Quantification of other impacts to meet standard

Design Standards Risk Assessment Matrix			
Alt	**Standard (HDM index, DIB, TOPD, etc.)**	**Nonstandard feature and its risk of not being approved (low, medium, high)**	**Justification for the approval risk rating and additional data/studies needed for approval**
2,3	**Shoulder Width (Class I Shared Use Path)** HDM 1003.1(1)(b) Shoulder: **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;**	**Nonstandard Feature:** Nonstandard shoulder width may be provided on Alternative 2 and Alternative 3 alignments for the Class I path because these are converting maintenance roads with unknown widths, and not widening them. **Risk Rating of Not Being Approved:** **LOW (in the future, need to weigh the safety and environmental impacts to determine the final design and what design exceptions are required)**	**Justification for the Approval Risk Rating:** • A reduction or elimination of shoulder width may be necessary along Alternative 2 and Alternative 3 alignments for the Class I paths to avoid environmental issues. • Pedestrians and bicyclists will be given a new path that they did not already have, so having some width is preferred over no width. **Additional Data/Studies needed for Approval:** Existing maintenance path widths. The standards may be able to be met, but it is unknown at this time. Proposed locations of nonstandard shoulder width Proposed nonstandard shoulder widths and extent Quantification of impacts to meet standard
2,3	**Stopping Sight Distance (Class I Shared Use Path):** 1003.1(11) Stopping Sight Distance: **The minimum stopping sight distance based on design speed shall be 125 feet for 20 miles per hour, 175 feet for 25 miles per hour and 230 feet for 30 miles per hour.**	**Nonstandard Feature:** Nonstandard stopping sight distance will be provided for the Alternative 2 and Alternative 3 Class I path alignments. The sight distance is blocked by trees. **Risk Rating of Not Being Approved:** **LOW (in the future, need to weigh the safety and environmental impacts to determine the final design and what design exceptions are required)**	**Justification for the Approval Risk Rating:** • There is local support for these types of improvements on Broadway/101. • Removal of trees to provide standard stopping sight distance is beyond the purpose of this project. • Pedestrians and bicyclists will be given a new path that they did not already have (improved conditions over existing). **Additional Data/Studies needed for Approval:** Proposed nonstandard stopping sight distances and extents Quantification of impacts to meet standard

Other – Life Cycle Cost Analysis
A life cycle cost analysis is not required for this project.

Other - Culvert Material Considerations (hazardous material and compatibility concerns)
The final culvert material for this project will be decided at a later phase, but reinforced concrete pipe is recommended as the preferred material due to tidal influence. If concrete is not selected, it is recommended that non-plastic culvert materials are used for fire resiliency. The following are the culvert material recommendations for a 50-year service life:

- 0.168" (8 gage) galvanized, corrugated steel pipe conforming to Section 66 of the 2018 Standard Specifications
- 0.079" (14 gage) galvanized, polymeric sheet coated, corrugated steel pipe conforming to Section 66 of the 2018 Standard Specifications
- 0.060" (16 equivalent standard gage) corrugated aluminum pipe conforming to Section 66 of the Standard Specifications. Please review Highway Design Manual, Section 852.4(2)(e) if planned use is pipe extension
- Reinforced concrete pipe conforming to Section 65 of the 2018 Standard Specifications. Concrete for RCP at this location shall comply with Section 90-1.02H Concrete in Corrosive Environments.
- Corrugated PVC conforming to Section 64 of the 2018 Standard specifications.
- Corrugated HDPE plastic pipe type-s conforming to Section 64 of the 2018 Standard specifications.

Infeasible Alternatives for Completion in the 2020 State Highway Operation and Protection Program (SHOPP)

Due to programming constraints associated with Complete Streets reservation funds, Alternatives 1-3 were deemed infeasible for this 2020 SHOPP project. Since Alternatives 1-3 propose different alignments for the Class I path, below is a pro-con table for comparison of Alternatives 1-3.

Alternative	Pro	Con
1	• Greater sense of security based on proximity to vehicle traffic • Stormwater runoff captured in bioswale • More direct path of travel for those coming from Herrick Avenue or Broadway	• More traffic noise • More out of direction travel for those coming from Humboldt Hill on the future Waterfront Trail extension • Comfort may be reduced due to proximity to vehicles
2	• Less traffic noise when away from highway • Provides comfort when away from traffic • Greater sense of security when next to the vehicle traffic • Balance of out of direction travel for users coming from Humboldt Hill on the future Waterfront Trail extension and those from Herrick Avenue or Broadway	• More traffic noise when along the highway • Provides less comfort when next to traffic • Sense of security is reduced when away from the vehicle traffic
3	• Least amount of traffic noise • Provides most comfort due to distance from vehicles • Less out of direction travel for those coming from Humboldt Hill on the future Waterfront Trail extension	• Sense of security is reduced due to the trail being away from the vehicle traffic • Greatest amount of out of direction travel for those coming from Herrick Avenue or Broadway

A couple of items that apply to all the Class I path alternatives are:

- R5-3 or R44A(CA) signs are required at the beginning and end of the Class I path to exclude motor vehicles
- Wayfinding (Guide) signs will be needed along the Class I path to help guide bicyclists to/from the City of Eureka's Waterfront Trail extension to Humboldt Hill, the Hikshari' Trail, and US 101

Below are descriptions for each of the three infeasible alternatives.

Alternative 1

Proposed Engineering Features
See Attachment A for Layouts and Typical Sections.

Class I Shared Use Path (Station "B" 200+00 to "B" 220+50)

This Class I path alignment follows the Broadway alignment. This path will be new construction and will require placing fill in wetland area. The path will be constructed with five-foot paved lanes and two-foot shoulders made from an all-weather surface.

See Alternative 4 for the rest of the proposed engineering features. The striping and/or marking improvements between Herrick Avenue and Papa & Barkley Co. would not be included for this alternative because the Class I path would be a dedicated separate facility from Broadway. However, striping and marking improvements could still be considered along Herrick Avenue within Caltrans right of way to connect residents on Herrick Avenue to the Class I path.

Current Construction and Right-Of-Way Cost Estimates
The current non-escalated construction and right-of-way capital costs are $8,157,000 and $3,996,000 respectively for Alternative 1.

See Alternative 4 for the remainder of the topics.

Alternative 2

Proposed Engineering Features
See Attachment A for Layouts and Typical Sections.

Class I Shared Use Path (Station "C" 300+00 to "C" 320+98)

Alternative 2 follows a City of Eureka maintenance road for part of the path and then follows Broadway for the rest of the path. The portion of the path that follows the maintenance road will convert the gravel/dirt road into a paved path. Five-foot paved lanes and two-foot shoulders made from an all-weather surface will be constructed where maintenance road width allows. The City will continue to use the path for maintenance activities. The portion of the path that follows Broadway will be the same as Alternative 1.

See Alternative 4 for the rest of the proposed engineering features. The striping and/or marking improvements between Herrick Avenue and Papa & Barkley Co. would not be included for this alternative because the Class I path would be a dedicated separate facility from Broadway. However, striping and marking improvements could

still be considered along Herrick Avenue within Caltrans right of way to connect residents on Herrick Avenue to the Class I path.

Current Construction and Right-Of-Way Cost Estimates
The current non-escalated construction and right-of-way capital costs are $7,694,000 and $2,167,000 respectively for Alternative 2.

See Alternative 4 for the remainder of the topics.

Alternative 3

Proposed Engineering Features
See Attachment A for Layouts and Typical Sections.

Class I Shared Use Path (Station "D" 400+00 to "D" 421+10)

Alternative 3 Class I path follows a City of Eureka maintenance road that diverges from Broadway. The gravel/dirt road will be converted into a paved path. Five-foot paved lanes and two-foot shoulders made from an all-weather surface will be constructed where maintenance road width allows. The City will continue to use the path for maintenance activities. This alternative will use a 145-foot pedestrian bridge to connect the path to the Papa & Barkley Co. intersection to minimize environmental impact to wetlands. See Attachment O for the preliminary geotechnical assessment and Attachment B for the structures PIR estimate.

See Alternative 4 for the rest of the proposed engineering features. The striping and/or marking improvements between Herrick Avenue and Papa & Barkley Co. would not be included for this alternative because the Class I path would be a dedicated separate facility from Broadway. However, striping and marking improvements could still be considered along Herrick Avenue within Caltrans right of way to connect residents on Herrick Avenue to the Class I path.

Current Construction and Right-Of-Way Cost Estimates
The current non-escalated construction and right-of-way capital costs are $8,364,000 and $609,000 respectively for Alternative 3.

See Alternative 4 for the remainder of the topics.

No Build Alternative

The No Build Alternative is not recommended because it does not satisfy the purpose and need of the project. This stretch of Broadway lacks safe and efficient facilities for all modes of transportation and is a barrier for non-motorized users. Not constructing

this project would perpetuate the high collision rates, poor perception of the facility, and poor performance of the facility.

10 COMPLETE STREETS

Caltrans' Complete Streets Directive promotes a transportation system that accommodates bicyclists, pedestrians, and transit users. The complete streets decision document for this project can be found in Attachment P.

Pedestrian Facilities
Project 01-0B6204 Broadway ADA will be filling sidewalk gaps and bringing most driveways and curb ramps to ADA standards. Project 01-0G4201 Eureka Sidewalks and Curbs will upgrade two additional driveways within the project limits to ADA standards. These two projects will be completed before this project; therefore, minimal sidewalk work is included.

Two pedestrian crossings will be added to the project to provide connections between Eureka's waterfront and the rest of the city. Crosswalks will also be added across the local road intersections.

Other Pedestrian Concerns
There are no other existing or proposed pedestrian concerns.

Bicycle Facilities
There are no existing bicycle facilities. Bicycles currently ride in the shoulder where vehicles park. The Class IV separated bikeways will provide a more comfortable experience for bicyclists and will help delineate the bikeway so that all roadway users know where the bicyclists are expected. Bicycle crossings will be added across the local road intersections, at the Papa & Barkley Co. intersection and at the intersection of Truesdale Street/Highland Avenue. This will connect bicyclists from the Class III bike route on Highland Avenue that is proposed by the City of Eureka to the Hikshari' trail at the end of Truesdale Street.

Transit Facilities
Both Southern Humboldt Intercity and Redwood Transit System have buses that pass through the project limits, see table below for the number of buses.

Day of Week	Northbound	Southbound
Southern Humboldt Intercity		
Monday-Friday	3	2
Saturday (no Sunday service)	3	2
Redwood Transit System		
Monday-Friday	26	25
Saturday (no Sunday service)	7	7

There are two existing transit stops within the proposed work location of PM 74.8 to PM 76.1 at the McCullens Avenue intersection, one NB and one SB. These two transit stops will be upgraded. Two new transit stops will be added: NB at Pacific Motorsports and SB at the 76 Gas Station. For more details, see Section 9 Alternatives.

Park-and-Ride Facilities

There is one park-and-ride facility within the proposed work location of PM 74.8 to PM 76.1: the Herrick Avenue park-and-ride. There are no proposed changes to the park-and-ride.

11 CLIMATE CHANGE CONSIDERATION

Greenhouse Gas Reduction Measures

GHG Emissions Analysis is deferred to the future Environmental Phase (PA&ED) since an in-depth GHG Analysis will be performed with the Environmental Document.

Adaptation Measures

This segment of Broadway is susceptible to changes in precipitation, flooding, sea level rise, and increased risks of wildfires due to climate change. Non-plastic culvert materials are recommended for use to provide resiliency from wildfires. It is recommended to use reinforced concrete pipe if feasible due to impacts from tidal influence and sea level rise.

12 ENVIRONMENTAL COMPLIANCE

A revised mini-Preliminary Environmental Assessment Report (mini-PEAR) was received from North Region Environmental on June 16, 2021, included as Attachment C.

Based on the scope of this project, studies may be needed for noise, air, energy, hazardous waste, water quality, floodplains, biological, Section 4(f), visual, and cultural resources. Task Orders will be required to complete cultural resource and hazardous waste studies.

Alternative 4 is within the coastal zone (within both the State's and City of Eureka's jurisdiction) and is anticipated to require either two Coastal Development Permits or one consolidated State Coastal Permit. Other permits are not anticipated. In addition, impacts to wetlands and other Environmentally Sensitive Habitat Areas (ESHAs) are not anticipated, and therefore permit-driven mitigation is not anticipated.

This project would visually result in more development; it is recommended that softscape and decorative hardscape features be included in the project. Coordination with local community stakeholders and the City of Eureka would be required for these features.

Because the project is located within culturally sensitive areas, the project archaeologist should be consulted prior to any ground-disturbing activities (e.g., culvert construction).

This project is anticipated to impact sites on the Cortese List. Hazardous waste investigations will be conducted to determine any issues and provide information on handling and disposal requirements of materials, if needed.

The environmental document is scoped as a California Environmental Quality Act (CEQA) Initial Study (IS) and National Environmental Policy Act (NEPA) Categorical Exclusion (CE) due to hazardous waste issues.

The following table outlines the requested time and the time allotted due to schedule constraints. This schedule discrepancy is recognized and has been documented as a risk.

	Requested Time (Months)	**Allotted Time (Months)**
Begin Environmental to Draft Environmental Document (DED)	16	15
DED to Project Approval & Environmental Document (PA&ED)	6	5
PA&ED to Ready to List	12	9

13 RIGHT-OF-WAY

A Right of Way Data Sheet was received on June 21, 2021 and is included as Attachment D. The right-of-way required for Alternative 4 (programmable alternative) is:

- 6 fee parcels

- 21 temporary construction easements
- 2 permanent easements
- 12 encroachment permits

Parcels required are zoned mostly commercial or public lands along with some industrial parcels. Anticipated right-of-way cost for Alternative 4 is $634,000 (escalated). Right of Way Lead time will require a minimum of 17 months after receipt of appraisal maps, utility conflict maps, environmental clearances (HMDD) and Certificate of Sufficiency (COS). A minimum of 12 months prior to certification will be required from receipt of the last map revision. Shorter lead times may require additional support resources and may adversely affect delivery of Right of Way Certification.

Due to schedule constraints, only 10 months were allotted for right-of-way instead of the requested 17. This schedule discrepancy is recognized and has been documented as a risk.

14 STORMWATER

Stormwater Data Reports (SWDR) were prepared on May 14, 2021 (for Alts 1 through 3) and on June 18, 2021 (for Alt 4). SWDRs can be found in Attachment F.

New impervious surfaces associated with the construction of bikeways and pedestrian facilities are exempt from post construction stormwater treatment requirements. Temporary construction best management practices (BMPs) will be required and are included in the cost estimate.

15 TRANSPORTATION MANAGEMENT PLAN

A Transportation Management Plan Datasheet (TMPDS) dated May 10, 2021 was received from District 1 Traffic Management & Systems Operations and can be found in Attachment G. Anticipated traffic control on Broadway consists of:

- Lane reduction
- Sidewalk closure
- Partial shoulder closure

A work zone speed reduction is required.

Minimal delays are expected.

Pedestrian and bicyclist accommodation is required. Pedestrian detours of no more than two city blocks will be required. Five feet will be provided adjacent to the open

traffic lane for bicyclists, which will involve using the two-way left turn lane for one direction of traffic and then providing five feet for bicyclists in the number one lane. Another option to provide the five feet for bicyclists is to stage construction so that the existing shoulder is modified before the class IV bikeway separation is constructed. Then, bicyclists can be directed onto the new shoulder while the class IV separation is constructed.

See Section 10 Complete Streets for transit routes that will be affected. Emergency services that may be impacted include fire, law enforcement and medical. Impacts to emergency services are possible given the urban setting, so care should be taken to accommodate these services.

Special traffic handling plans and a 60% constructability review will be required for this project due to its complexity.

16 ADVANCE TECHNOLOGIES & COMMUNICATION SYSTEMS

There are no projects that propose to install fiber optic conduit within the existing right-of-way. The Transportation Planning Scoping Information Sheet identified that the project should install broadband conduit throughout the project limits. This is outside of the purpose and scope of this project but can be included if an outside funding source is secured.

Fueling opportunities for zero-emission vehicles are outside of the purpose and scope of this project as well. When new striping is placed, it will be the six-inch standard, which will help the transition for infrastructure-to-vehicle communications for autonomous vehicles.

17 ADDITIONAL CONSIDERATIONS

Accommodation of Oversize Loads
This segment of US 101 has a truck network designation of Terminal Access (Surface Transportation Assistance Act (STAA). The design vehicle will be accommodated through the project limits.

Airports or Emergency Related Helipads
There are no airports or emergency related helipads within the project limits. The nearest airport is Murray Field, approximately 5.2 miles north of the project.

Air Quality Conformity
This project is in an area that is designated as attainment or is unclassified for all current National Ambient Air Quality Standards. Therefore, conformity requirements do not apply.

Contaminated Material Including Regulated, Designated and Hazardous Waste
An Initial Site Assessment (ISA) was received from North Region Environmental on April 14, 2021 and can be found in the project files. The ISA found that the project may have minor hazardous waste issues. In addition, the ISA found project work will impact sites listed on the Hazardous Waste and Substances Site List (Cortese List).

Where soil disturbance is proposed, a 0-phase Preliminary Site Investigation (PSI) will be necessary to determine if this project will be impacting areas previously contaminated with Aerial Deposited Lead (ADL). In the proposed areas for transit stop development and new drainage systems, an investigation will be required to determine if this project will be impacting areas that may contain residual petroleum hydrocarbons associated with historical leaking underground storage tanks (LUSTs) within the project limits. If contamination is present, these investigations will inform the PDT and provide the Department information regarding handling and disposal of these materials such as: determining potential handling, disposal, and workers' protection requirements. Information gathered from these studies will inform the SSP/NSSP development.

Constructability Issues
Drainage diversion may be necessary for the proposed culvert work if flow is expected during construction. Also, construction of drainage features may need to be timed with tidal influence.

Construction Staging
Potential staging areas have been identified at the Herrick Avenue park-and-ride and at parking lots adjacent to the facility, as shown on the Layouts (Attachment A).

Environmental-Justice (Title VI Considerations)
This project is not anticipated to adversely affect any low-income or minority populations.

Floodplain Issues
A floodplain evaluation report summary was received on May 6, 2021. Much of US 101/Broadway is designated as a special flood hazard area from PM 73.3 to PM 75.0. The Floodplain Analysis and Preliminary Hydraulics Recommendation can be found in Attachment L.

Graffiti Control

Project 01-0B6204 Broadway ADA will paint geese and water on the soil nail retaining wall from PM 75.7 to PM 75.9. The traffic signal utility boxes have also been painted at PM 75.24, PM 75.54, and PM 75.91 by local artists.

Maintenance and Cooperative Agreements

Maintenance agreements will be required with the City of Eureka for any landscaping and lighting features incorporated in the project.

Maintenance and Worker Safety

Maintenance requirements will increase after construction of this project. The Class IV separated bikeway will require regular sweeping. Normal street sweepers will not fit on these facilities. The equipment needs for maintenance of these facilities will need to be communicated to Maintenance. Increased maintenance can lead to increased worker safety issues, but these will be mitigated with standard procedures.

Material Borrow and/or Disposal Site

No material borrow or disposal site is necessary.

Recycled Materials

Several opportunities for utilizing recycled materials were investigated. The first was the use of plastic bottles as part of the asphalt mix for the roadway. Caltrans has a pilot project (Butte 162 Pilot Project) for this in which a 1000-foot highway segment was repaved with 100% recycled materials. This type of technology is still being investigated but will not be available for widespread use until Caltrans has developed specifications for the material; it remains an option for investigation in the future.

Rubberized hot-mix asphalt gap-graded (RHMA-G) is not recommended for use in this project based on the quantity of pavement required (only doing a micro-surface). RHMA-G is asphalt mixed with recycled tires to create a pavement material that is typically used on larger pavement jobs.

Also, Caltrans Standard Specification Section 39 allows contractors to substitute Reclaimed Asphalt Pavement (RAP) for a part of the virgin aggregate in a quantity up to 25% of the aggregate blend. Almost all asphalt plants in Caltrans District 1 (Mercer Fraser, Kernen at Blue lake, Granite Construction) all use recycled asphalt from other projects. Commonly used RAP percentage in hot-mix asphalt (HMA) is 15%-25%. There is an effort from Pavement & Materials Partnering Committee to increase the use of RAP up to 40% in HMA.

Processed RAP, portland cement concrete, lean concrete base, cement treated base, etc. in combination with other materials such as; broken stone, crushed gravel, sand, etc. can be used as subbase or base complying with Section 25 and Section 26 respectively of the Standard Specifications.

Cold-in-place recycling can be another method for recycling materials. This method could be used for the mainline overlay process in which a portion of the roadway is removed, mixed with additives, and then placed back as part of the overlay process. However, this was deemed out of the project scope because this method is more for treating pavement distresses and it requires an overlay over the recycled materials. The existing pavement will be in good to fair condition (see Section 8) and the micro-surfacing is only needed to provide a smooth, clean finish over the roadway after construction.

Noise Abatement Decision Report
A noise abatement decision report is not required for this project.

Reversible Lanes
This project does not qualify as a capacity increasing or a major street or highway realignment project and reversible lanes have not been considered.

Resource Conservation
Resources will be conserved to the maximum extent feasible.

Report on Feasibility of Providing Access to Navigable Rivers
This project is not in a location that will have impacts on access to navigable rivers.

Route Adoptions, Freeway Agreements, Relinquishments and Modification of Access Control
There are no route adoptions, freeway agreements, or modification of access control required.

Salvaging and Recycling of Hardware and Other Non-Renewable Resources
Grindings from cold planning can be captured and reused in the future as reclaimed asphalt pavement. Concrete removed from sidewalk and other features can be reused as subbase or base. See Section Recycled Materials above for more information.

Sea Level Rise
The project area may be susceptible to increased flooding due to sea level rise and precipitation. However, it is beyond the scope of this project to address sea level rise specifically.

Value Analysis
A value analysis is not required for this project.

Other – Road Safety Audit

The US 101 (Broadway) K-Mart to 4th Street Pedestrian and Bicycle Road Safety Audit was completed in 2008. This project and project 01-0B6204 Broadway ADA make significant improvements to the top safety issues identified in the audit.

18 ESTIMATE, FUNDING AND PROGRAMMING

Estimate

The cost estimate can be found in Attachment B.

Estimated Capital & Support Cost ($1,000s)- Programmable Alternative									
Phase	**(A) Total Optimistic**	**(B) Total Pessimistic**	**(C) Total Most Likely**	**(D) Risk Amount**	**(E) Total including Risk (C+D)**	**(F) # Years to Mid Yr of Phase**	**(G) Escalation Rate**	**(H) Escalation Amount**	**(I) Total Escalated Cost (E + H)**
Support									
PA&ED	N/A	N/A	1,334	-	1,334	1.0	3.0%	46	1,380
PS&E	N/A	N/A	1,229	-	1,229	2.6	3.0%	111	1,340
Right of Way	N/A	N/A	552	-	552	3.9	3.0%	49	601
Const.	N/A	N/A	1,290	-	1,290	4.7	3.0%	171	1,461
Capital									
Right of Way	N/A	N/A	555	-	555	2.3	5.0%	79	634
Const.	N/A	N/A	6,245	-	6,245	3.8	3.2%	839	7,084
Totals	N/A	N/A	11,205	-	11,205	-	-	1,295	12,500

Funding

It has been determined that this project is eligible for Federal-aid funding. Funding for this project was acquired by competing statewide for State Highway Operation and Protection Program (SHOPP) complete streets reservation funds.

Programming

The programming sheet can be found in Attachment S.

Fund Source	Fiscal Year Estimate for the Programmable Alternative				
20.XX.201.999	21/22	22/23	23/24	Total	Sup/Cap %
Component	In thousands of dollars ($1,000)				
PA&ED Support	1,380			1,380	17.88
PS&E Support		1,340		1,340	17.36
Right-of-Way Support		601		601	7.79
Construction Support			1,461	1,461	18.93
Right-of-Way			634	634	
Construction			7,084	7,084	
Total	1,380	1,941	9,179	12,500	61.96

The support to capital cost ratio is 61.96%. The following table displays the escalation rates used.

19 DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	08/18/2021	Target
BEGIN ENVIRONMENTAL	M020	10/21/2021	Target
CIRCULATE DED EXTERNALLY	M120	01/23/2023	Target
PA & ED	M200	06/21/2023	Target
PS&E TO DOE	M377	04/08/2024	Target
RIGHT OF WAY CERTIFICATION	M410	04/22/2024	Target
READY TO LIST	M460	06/03/2024	Target
FUND ALLOCATION	M470	08/21/2024	Target
HEADQUARTERS ADVERTISE	M480	09/04/2024	Target
AWARD	M495	11/15/2024	Target
APPROVE CONTRACT	M500	12/03/2024	Target
CONTRACT ACCEPTANCE	M600	12/01/2025	Target
END PROJECT	M800	12/01/2027	Target

20 EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)

This project is a delegated project in accordance with the most current version of the Stewardship and Oversight Agreement between the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans).

The project requires the following coordination:

California Coastal Commission
- State Coastal Development Permit

City of Eureka
- Local Coastal Development Permit

21 PROJECT REVIEWS

	Name	Date
Scoping Team Field Review	Joseph Caminiti Harrison Rankin Nicole Farrell Alexis Kelso Jaime Matteoli Brett Gronemeyer Fariar Kohzad	02/24/2021 03/03/2021 03/25/2021 05/04/2021
Safety Field Review	N/A	N/A
District Program Advisor	Alexis Kelso Rex Jackman Suzi Theiss (Local Assistance)	6/23/2021
Headquarters SHOPP Program Advisor	Abdel Beshair Ray Estakhri Ross Foon (Local Assistance)	6/23/2021
District Maintenance	Chris Ghidinelli	6/23/2021
Headquarters Project Delivery Coordinator	Zebunnesa Tareque	6/23/2021
Project Manager	Jaime Matteoli	6/23/2021
FHWA	N/A	N/A
District Safety Review	Brian Simon	6/23/2021
Constructability Review	Juan Reyes	6/23/2021
District Maintenance Electrical	Andrew Gray	6/23/2021

22 PROJECT PERSONNEL

Internal Stakeholders:

Name	Title	Division/Office	Phone Number
Dawn Yang	Project Engineer	Advance Planning	(707) 296-6752
Joseph Caminiti	Designer	Advance Planning	(707) 684-6921
Kirsten Thuresson	Acting Advance Planning Chief	Advance Planning	(707) 572-0865
Jaime Matteoli	PM	Project Management	(707) 498-0961
Rebecca Law	PM Assistant	PMSU	(707) 684-1004
Alexis Kelso	Project Planning Liaison	Planning	(707) 498-0536
Rex Jackman	Senior Transportation Planner	Planning	(707) 834-2413
Valency Fitzgerald	District 1 Asset Manager	Maintenance	(707) 834-1484
Kellie Eldridge	Associate Environmental Planner	NR Environmental	(707) 815-6995
Steve Croteau	Senior Environmental Planner	NR Environmental	(707) 572-7149
Timothy Keefe	Senior Environmental Planner	NR Environmental	(707) 382-1508
Robert Wall	Senior Environmental Planner	Environmental	(707) 834-2471
Kevin Church	Senior Transportation Engineer	NR Environmental	(707) 496-0433
Laura Lazzarotto	Landscape Associate	Landscape Architecture	(707) 492-9983
Phlora Barbash	Landscape Associate	Landscape Architecture	(707) 492 9984
Timothy Boese	Senior Transportation Engineer	Landscape Architecture	(707) 502-5710
Lena Ashley	Senior Transportation Engineer	Design	(707) 497-4524
Sara Atchley-Thomas	D1 Native American Liaison	Planning	(707) 834 1486
Kathleen Sartorius	D1 Native American Liaison	Planning	(707) 441-5815
Abnish Rajbanshi	Materials Engineer	D1 Materials Engineering	(707)-496-7070
Sheri Rodriguez	D1 Traffic Manager	Traffic Operations	(707) 498-5252
David Morgan	D1 Chief of Traffic Safety	Traffic Safety	(707) 498-0122
Ryan Stiltz	Technical Liaison Engineer	Structure Design	(562) 665-2414
Eskinder Taddesse	Senior Transportation Engineer	Structure Design	(916) 639-5620
Charlie Narwold	Senior Engineering Geologist	Geotechnical Services	(707) 498-1631
Sheila Sadkowski	Engineering Serv. E2 Branch Chief	Engineering Services	(707) 666-5969
Brittany Wattle	CIP/Drainage Coordinator	Maintenance Hydraulics	(707) 498-1397
Mark Gorona	Maint./Const. Liaison Engineer	Maintenance Engineering	(707) 496-4359
Jeremiah Joyner	Senior Right-of-Way Agent	Right of Way	(707) 666-5870
Chris Johnston	Senior Transportation Surveyor	Right of Way Engineering	(707) 497-7802
Sebastian Cohen	Supvg Transportation Engineer	Construction	(707) 496-4096
Jeffrey Zimmerer	Area Construction Engineer	Construction	(707) 498-3207
Parvin Sebti	Senior Bridge Engineer	Structures Construction	(707) 834-1149
Brian Georgeson	Maintenance Supervisor	Maintenance	(707) 498-3130
Jason Hayes	Maintenance Area Superintendent	Maintenance	(707) 498-0680

External Stakeholders:

Name	Organization
Amy Conlin	Humboldt Bay Fire
Beth Burks	Humboldt County Association of Governments
Brian Gerving	City of Eureka
Jesse Willor	City of Eureka
Colin Fiske	Coalition for Responsible Transportation Priorities
Morguine Sefcik	Natural Resources Services Division of Redwood Community Action Agency
Greg Pratt	Humboldt Transit Authority
Jennifer Kalt	Humboldt Baykeeper
Karen Underwood	Humboldt Trails Council
Peggy Martinez	Creative Inclusion
Rick Knapp	Humboldt Bay Bicycle Commuters Association
Paul Gullick	California Highway Patrol
Stacy Barr	California Highway Patrol
Shawn Morris	California Highway Patrol
Gary Whitmer	Eureka Police Department
Brittany Powell	Eureka Police Department
Ryan Derby	Humboldt County Sheriff's Office
Samantha Karges	Humboldt County Sheriff's Office
Justin Braud	Humboldt County Sheriff's Office
Tom Wheeler	Environmental Protection Information Center
Julian Berg	Keep Eureka Beautiful
Julie Fulkerson	Keep Eureka Beautiful
Michele McKeegan	Keep Eureka Beautiful
Larry Glass	Northcoast Environmental Center
Bob Merrill	California Coastal Commission

23 ATTACHMENTS (Number of Pages)

A. Layouts and Typical Sections (23)
B. Cost Estimates and PIR Structures Estimate (43)
C. Mini-Preliminary Environmental Assessment Report (17)
D. Right-of-Way Datasheet (24)
E. PIR Risk Register (5)
F. PIR Stormwater Data Reports (12)
G. Transportation Management Plan Data Sheet (2)
H. Pavement Condition Reports (3)
I. Project Initiation Proposal (11)
J. Transportation Planning Scoping Information Sheet (9)
K. Preliminary Materials Recommendation (9)
L. Floodplain Analysis and Preliminary Hydraulics Recommendation (8)
M. Drainage Worksheet (1)
N. Landscape Architecture Assessment Study (8)
O. Preliminary Geotechnical Assessment (5)
P. Complete Streets Decision Document (6)
Q. Signs, Lights, and Guardrail Logs (4)
R. Performance Output (2)
S. Programming Sheet (2)

ATTACHMENT A

Layouts & Typical Sections

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	1	19

PM 73.30
STA "A" 3+00
BEGIN PROJECT

MATCHLINE
SHEET 2

TOOBY ROAD

PM 73.72
STA "A" 22+25
BRIDGE #04-0071

HUMBOLDT HILL ROAD

HUMBOLDT HILL ROAD

DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

LEGEND

EXIST R/W

EXIST R/W (ACCESS CONTROL)

ESL

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. ESL ENCOMPASSES THE POTENTIAL AREAS FOR ONSITE RESTORATION FOR ENVIRONMENTAL IMPACTS FROM THE CLASS I PATH. NO OTHER WORK IS PROPOSED IN THIS LOCATION.

L-1 POTENTIAL ONSITE RESTORATION (ALTS 1-3) SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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LAST REVISION DATE PLOTTED => $DATE
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BORDER LAST REVISED 7/2/2010

USERNAME => $USER
DGN FILE => $REQUEST

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	2	19

TOOBY ROAD

TO HUMBOLDT HILL ROAD

MATCHLINE SHEET 3

MATCHLINE SHEET 1

LEGEND

EXIST R/W

EXIST R/W (ACCESS CONTROL)

ESL

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. ESL ENCOMPASSES THE POTENTIAL AREAS FOR ONSITE RESTORATION FOR ENVIRONMENTAL IMPACTS FROM THE CLASS I PATH. NO OTHER WORK IS PROPOSED IN THIS LOCATION.

DESIGN STUDY ONLY

NO SCALE

PRINTED ON 07/06/2021

L-2 POTENTIAL ONSITE RESTORATION (ALTS 1-3) SOUTH BROADWAY COMPLETE STREETS EA 01-0K940K/EFIS - 0121000033 01-HUM-101-PM 73.3/76.1

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USERNAME => $USER

DGN FILE => $REQUEST

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	3	19

MATCHLINE
SHEET 4

STA "A" 81+00
SEE ALTERNATIVE 1
SHARED USE PATH
FOR ESL HERE

POUND ROAD

PM 74.60
STA "A" 69+50
BRIDGE #04-0021L

PM 74.77
STA "A" 77+90
BRIDGE #04-0280

HERRICK AVE
PARK AND RIDE

POUND ROAD

PM 74.60
STA "A" 69+50
BRIDGE #04-0021R

MATCHLINE
SHEET 2

HERRICK AVE

ELK RIVER ROAD

LEGEND

EXIST R/W

EXIST R/W (ACCESS CONTROL)

ESL

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. ESL ENCOMPASSES THE POTENTIAL AREAS FOR ONSITE RESTORATION FOR ENVIRONMENTAL IMPACTS FROM THE CLASS I PATH. NO OTHER WORK IS PROPOSED IN THIS LOCATION.

DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

L-3 POTENTIAL ONSITE RESTORATION (ALTS 1-3) SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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BORDER LAST REVISED 7/2/2010
USERNAME => $USER
DGN FILE => $REQUEST
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	4	19

MATCHLINE SHEET 3

LEGEND

EXIST R/W

EXIST R/W (ACCESS CONTROL)

ESL

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. ESL ENCOMPASSES THE POTENTIAL AREAS FOR ONSITE RESTORATION FOR ENVIRONMENTAL IMPACTS FROM THE CLASS I PATH. NO OTHER WORK IS PROPOSED IN THIS LOCATION.

DESIGN STUDY ONLY

NO SCALE

PRINTED ON 07/06/2021

L-4 POTENTIAL ONSITE RESTORATION (ALTS 1-3) SOUTH BROADWAY COMPLETE STREETS EA 01-0K940K/EFIS - 0121000033 01-HUM-101-PM 73.3/76.1

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TIME PLOTTED => $TIME
LAST REVISION 00-00-00

BORDER LAST REVISED 7/2/2010 | USERNAME => $USER | DGN FILE => $REQUEST | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	5	19

HIKSHARI' TRAIL

POUND ROAD

POUND ROAD

POUND ROAD

B 200+00.00 BEGIN

B 220+50.28 END

SEE SHEET L-17

STA "B" 200+00
BEGINING OF
CLASS I PATH

STA "B" 208+25
ROUGHLY 45'
FROM CURRENT EP
TO OUTER FILL LINE

STA "B" 209+75
ROUGHLY 50'
FROM CURRENT EP
TO OUTER FILL LINE

STA "B" 214+50
ROUGHLY 55'
FROM CURRENT EP
TO OUTER FILL LINE

PM 75.18
STA "B" 99+50
BEGIN MICRO-SURFACING

STA "B" 220+50
END OF
CLASS I PATH

HERRICK
AVE
PARK
AND
RIDE

STA "A" 77+50
INVESTIGATE STRIPING
AND MARKING OPTIONS
ON HERRICK AVE

GREAT
WESTERN
CLOTHING

CARPET
DEPOT

PAPA &
BARKLEY CO.
(SEE
NOTE 4)

BUTLER VALLEY
CAROLE SUND CENTER

HENSELL
MATERIALS

LEGEND

- EXIST R/W
- EXIST R/W (ACCESS CONTROL)
- EXIST CULVERTS/DI'S
- HIGH TENSION CABLE BARRIER
- CLASS I PATH W/SHOULDERS
- ESL
- EXIST R/W FENCE
- NEW R/W FENCE
- PROPOSED STAGING AREA
- PROPOSED CULVERTS
- FILL LINES

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. EXISTING SIDEWALK ONLY ON EAST SIDE OF 101 FROM CARPET DEPOT TO PAPA & BARKLEY CO. EXISTING SIDEWALK ALONG BOTH SIDES OF THE ROADWAY FROM PAPA & BARKLEY CO. TO PROJECT END.
4. SEE L-9 FOR INTERSECTION DETAILS AT PAPA & BARKLEY CO.
5. CLASS I PATH WILL INCLUDE PEDESTRIAN LEVEL LIGHTING

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NO SCALE
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L-5 CLASS I PATH ALT 1
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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00-00-00 TIME PLOTTED => $TIME

BORDER LAST REVISED 7/2/2010
USERNAME => $USER
DGN FILE => $REQUEST
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	6	19

HIKSHARI' TRAIL

POUND ROAD

C 300+00.00 BEGIN POUND ROAD

STA "C" 300+00
BEGINING OF SHARED
USE PATH

PM 75.18
STA "B" 99+50
BEGIN MICRO-SURFACING

STA "C" 320+98
END OF SHARED
USE PATH

C 320+97.92 END

SEE SHEET L-17

HERRICK AVE PARK AND RIDE

POUND ROAD

STA "A" 77+50
INVESTIGATE STRIPING
AND MARKING OPTIONS
ON HERRICK AVE

GREAT WESTERN CLOTHING

CARPET DEPOT

PAPA & BARKLEY CO. (SEE NOTE 4)

BUTLER VALLEY CAROLE SUND CENTER

HENSELL MATERIALS

LEGEND

- EXIST R/W
- EXIST R/W (ACCESS CONTROL)
- EXIST CULVERTS/DI'S
- HIGH TENSION CABLE BARRIER
- CLASS I PATH W/SHOULDERS
- ESL
- EXIST R/W FENCE
- PROPOSED STAGING AREA
- PROPOSED CULVERTS
- FILL LINES

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. EXISTING SIDEWALK ONLY ON EAST SIDE OF 101 FROM CARPET DEPOT TO PAPA & BARKLEY CO. EXISTING SIDEWALK ALONG BOTH SIDES OF THE ROADWAY FROM PAPA & BARKLEY CO. TO PROJECT END.
4. SEE L-9 FOR INTERSECTION DETAILS AT PAPA & BARKLEY CO.
5. CLASS I PATH WILL INCLUDE PEDESTRIAN LEVEL LIGHTING

DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

L-6 CLASS I PATH ALT 2
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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BORDER LAST REVISED 7/2/2010 | USERNAME => $USER | DGN FILE => $REQUEST | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	7	19

HIKSHARI' TRAIL

POUND ROAD

D 400+00.00 BEG

STA "D" 400+00
BEGINING OF SHARED
USE PATH

STA "D" 418+18 TO STA "D" 419+63
ALT 3
BRIDGE

PM 75.18
STA "B" 99+50
BEGIN MICRO-SURFACING

STA "D" 421+10
END OF SHARED
USE PATH

D 421+10.48 END

SEE SHEET L-17

HERRICK AVE PARK AND RIDE

POUND ROAD

STA "A" 77+50
INVESTIGATE STRIPING
AND MARKING OPTIONS
ON HERRICK AVE

GREAT WESTERN CLOTHING

CARPET DEPOT

PAPA & BARKLEY CO. (SEE NOTE 4)

BUTLER VALLEY CAROLE SUND CENTER

HENSELL MATERIALS

LEGEND

- EXIST R/W
- EXIST R/W (ACCESS CONTROL)
- EXIST CULVERTS/DI'S
- CLASS I PATH W/SHOULDERS
- FILL LINES
- ESL
- BRIDGE AREA
- EXIST R/W FENCE
- PROPOSED STAGING AREA

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. EXISTING SIDEWALK ONLY ON EAST SIDE OF 101 FROM CARPET DEPOT TO PAPA & BARKLEY CO. EXISTING SIDEWALK ALONG BOTH SIDES OF THE ROADWAY FROM PAPA & BARKLEY CO. TO PROJECT END.
4. SEE L-9 FOR INTERSECTION DETAILS AT PAPA & BARKLEY CO.
5. CLASS I PATH WILL INCLUDE PEDESTRIAN LEVEL LIGHTING

DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

L-7 CLASS I PATH ALT 3
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => $DATE | TIME PLOTTED => $TIME

BORDER LAST REVISED 7/2/2010 | USERNAME => $USER | DGN FILE => $REQUEST | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	8	19

HIKSHARI' TRAIL

POUND ROAD

POUND ROAD

POUND ROAD

SEE SHEET L-17

HERRICK AVE PARK AND RIDE

PM 75.18
STA "B" 99+50
BEGIN MICRO-SURFACING

GREAT WESTERN CLOTHING

CARPET DEPOT

PAPA & BARKLEY CO. (SEE NOTE 4)

BUTLER VALLEY CAROLE SUND CENTER

HENSELL MATERIALS

STA "A" 77+50 TO STA "A" 101+00
INVESTIGATE STRIPING
AND MARKING OPTIONS
ON BROADWAY

STA "A" 77+50
INVESTIGATE STRIPING
AND MARKING OPTIONS
ON HERRICK AVE

LEGEND

- EXIST R/W
- EXIST R/W (ACCESS CONTROL)
- EXIST CULVERTS/DI'S
- ESL
- EXIST R/W FENCE
- PROPOSED STAGING AREA

NOTES

1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.
3. EXISTING SIDEWALK ONLY ON EAST SIDE OF 101 FROM CARPET DEPOT TO PAPA & BARKLEY CO. EXISTING SIDEWALK ALONG BOTH SIDES OF THE ROADWAY FROM PAPA & BARKLEY CO. TO PROJECT END.
4. SEE L-9 FOR INTERSECTION DETAILS AT PAPA & BARKLEY CO.

DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

L-8 ALT 4
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
FUNCTIONAL SUPERVISOR
CALCULATED-DESIGNED BY
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REVISED BY
DATE REVISED
LAST REVISION 00-00-00
DATE PLOTTED => $DATE
TIME PLOTTED => $TIME

BORDER LAST REVISED 7/2/2010
USERNAME => $USER
DGN FILE => $REQUEST
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	9	19

STA "A" 102+50
SEE SHEETS 5-7
FOR CLASS I PATH DETAILS,
INCLUDING ESL.

STA "A" 102+00 TO STA "A" 103+00
SEE PID SECTION 9
FOR DISCUSSION ON
THESE CROSSINGS

PM 75.18
STA "A" 99+50
BEGIN MICRO-SURFACING
CONFORM TO EXISTING

"A" LINE

MATCHLINE
SHEET 10

STA "A" 101+75
MAINTAIN DECEL LANE

PM 75.24: PAPA & BARKLEY CO. SIGNALIZED INTERSECTION
STA "A" 102+50
CONSTRUCT PROTECTED INTERSECTION.
REMOVE AND REPLACE TRAFFIC SIGNAL AND STREETLIGHTS.
(LOCATION OF POLES TBD, SO NOT SHOWN AS RELOCATED).
INSTALL BICYCLE SIGNALS WITH
NON MOTORIZED PHASE.

STA "A" 102+50
REMOVE TWO TREES

PAPA & BARKLEY CO.

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
- MODIFY DI
- ESL
- DRIVEWAY WORK
- RELOCATE STREETLIGHT
- BUS PADS
- SIDEWALK AND CURB RAMPS
- CURB AND GUTTER
- HARDSCAPE
- HMA CONFORMS AT DRIVEWAYS
- RAISED CLASS IV BIKEWAY
- SMALL STD. PLAN RETAINING WALL
- BUFFER MARKING
- PEDESTRIAN REFUGE ISLAND
- NEW TREES/OTHER LANDSCAPING
- GRADING (AND LANDSCAPE TO RW)

NOTES

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4. THERE WILL BE BREAKS IN THE PROPOSED CLASS IV SEPARATION FOR DRAINAGE.
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DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

L-9 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

REVISED BY | DATE REVISED
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FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION DATE PLOTTED => $DATE
TIME PLOTTED => $TIME
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BORDER LAST REVISED 7/2/2010 | USERNAME => $USER | DGN FILE => $REQUEST | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	10	19

LITHIA CHRYSLER
DODGE JEEP RAM
FIAT OF EUREKA

SEE SHEET L-18 FOR FULL
PROPSOED STAGING AREA

MATCHLINE
SHEET 9

"A" LINE

PM 75.41

SUNSET

MATCHLINE
SHEET 11

SUNSET
MEMORIAL
PARK

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
- MODIFY DI
- ESL
- DRIVEWAY WORK
- RELOCATE STREETLIGHT
- BUS PADS
- SIDEWALK AND CURB RAMPS
- CURB AND GUTTER
- HARDSCAPE
- HMA CONFORMS AT DRIVEWAYS
- RAISED CLASS IV BIKEWAY
- SMALL STD. PLAN RETAINING WALL
- BUFFER MARKING
- PEDESTRIAN REFUGE ISLAND
- NEW TREES/OTHER LANDSCAPING
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DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/20

L-10 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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BORDER LAST REVISED 7/2/2010
USERNAME => $USER
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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	11	19

REVISED BY | DATE REVISED

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Caltrans

COMFORT INN
HUMBOLDT BAY

CHIN'S
CAFE

PIERSON
BUILDING
CENTER

TETRAULT
TIRE
CENTER

MATCHLINE
SHEET 10

STA "A" 117+25
MAINTAIN PIERSON'S
ACCEL LANE.
CREATE A MIXING ZONE
WITH A BIKE LANE.

STA "A" 117+90
MAINTAIN EXIST ISLAND

STA "A" 118+00
REMOVE SMALL EXIST ISLAND

STA "A" 116+00 TO 117+00
CONSIDER ELIMINATING ACCESS
POINTS AND ONLY LEAVING THE
ONE AT THE SIGNAL (SEE PID
SECTION 9)

STA "A" 117+75
UPDATE SIGNAL:
MOVE PEDESTRIAN SIGNAL HEADS AND
BUTTONS FOR NEW CROSSING

PM 75.54: PIERSON BUILDING CENTER/
TETRAULT TIRE CENTER
SIGNALIZED INTERSECTION
STA "A" 117+75
FINAL INTERSECTION DESIGN TBD
PENDING FURTHER STUDIES
OF TRUCK TURNING AND
NON MOTORIZED MOVEMENTS

MATCHLINE
SHEET 12

"A" LINE

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
- MODIFY DI
- ESL
- DRIVEWAY WORK
- RELOCATE STREETLIGHT
- BUS PADS
- SIDEWALK AND CURB RAMPS
- CURB AND GUTTER
- HARDSCAPE
- HMA CONFORMS AT DRIVEWAYS
- RAISED CLASS IV BIKEWAY
- SMALL STD. PLAN RETAINING WALL
- BUFFER MARKING
- PEDESTRIAN REFUGE ISLAND
- NEW TREES/OTHER LANDSCAPING
- GRADING (AND LANDSCAPE TO RW)

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DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

L-11 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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01	HUM	101	73.3/76.1	12	19

SIX RIVERS COMMUNICATIONS, INC.

LENDE'S AUTO DETAILING

76 GAS STATION
BROADWAY
GAS AND DELI

STA "A" 118+50
MAINTAIN PIERSON'S DECEL LANE.
CREATE A MIXING ZONE
WITH A BIKE LANE.

STA "A" 121+00 TO STA "A" 122+25
CREATE TRANSIT STOP
AT 76 GAS STATION.
WILL REQUIRE REPLACING
PART OF A SMALL
RETAINING WALL (~2' HEIGHT).
ADD PEDESTRIAN RAILING
ON RETAINING WALL/CURB.

STA "A" 122+50
ALTERNATE PLACEMENT
FOR TRANSIT STOP
TO BE INVESTIGATED IN
NEXT PHASE

"A" LINE

STA "A" 122+25 TO STA "A" 123+25
CREATE TRANSIT STOP
AT PACIFIC MOTORSPORTS.
WILL REQUIRE SOME
GRADING ON THE LAWN THERE.

STA "A" 119+00
CONSIDER ELIMINATING ACCESS
POINT AND ONLY LEAVING THE
ONE AT THE SIGNAL (SEE PID
SECTION 9)

MATCHLINE
SHEET 11

RAINBOW
SELF
STORAGE

LAMPLIGHTER
INN

PACIFIC
MOTORSPORTS

MATCHLINE
SHEET 13

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
- MODIFY DI
- ESL
- DRIVEWAY WORK
- RELOCATE STREETLIGHT
- BUS PADS
- SIDEWALK AND CURB RAMPS
- CURB AND GUTTER
- HARDSCAPE
- HMA CONFORMS AT DRIVEWAYS
- RAISED CLASS IV BIKEWAY
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PRINTED ON 07/06/2021

L-12 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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01	HUM	101	73.3/76.1	13	19

NEIL'S SPECIALTY SOUND

HUMBOLDT MOTORSPORTS

HILFIKER PIPE

HILFIKER LANE

TO HIKSHARI' TRAIL

PM 75.74

125 6 7 8 9 130 1

"A" LINE

STA "A" 126+75
BUILD PED CROSSING.
TBD ON USE OF
RECTANGULAR RAPID
FLASHING BEACONS
OR A PEDESTRIAN
HYBRID BEACON.
NOTE: THIS CROSSING
MAY BE REMOVED. PENDING
FUNDING INVESTIGATION.

MATCHLINE SHEET 12

OCEANVIEW CEMETERY

MATCHLINE SHEET 14

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
- MODIFY DI
- ESL
- DRIVEWAY WORK
- RELOCATE STREETLIGHT
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- SIDEWALK AND CURB RAMPS
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DESIGN STUDY ONLY

NO SCALE

PRINTED ON 07/06/2021

L-13 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	14	19

STA "A" 136+60 TO STA "A" 137+80
CREATE BUS STOP
AT BURNED DOWN BUILDING.
RAISE BIKEWAY TO SIDEWALK
LEVEL AS PART
OF ADA LANDING.

STA "A" 136+60 TO STA "A" 137+10
ADD PEDESTRIAN
RAILING ON
RETAINING WALL/CURB

PURE WATER SPAS

BROADWAY ANIMAL HOSPITAL

GOLDEN HARVEST CAFE

ALLARD AVENUE

PM 75.86

BUCKSPORT SPORTING GOODS

ONLY

BUS

2 3 "A" LINE 4 135 6 7

OCEANVIEW CEMETERY

MATCHLINE SHEET 13

ALLARD AVENUE

MATCHLINE SHEET 15

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
- MODIFY DI
- ESL
- DRIVEWAY WORK
- RELOCATE STREETLIGHT
- BUS PADS
- SIDEWALK AND CURB RAMPS
- CURB AND GUTTER
- HARDSCAPE
- HMA CONFORMS AT DRIVEWAYS
- RAISED CLASS IV BIKEWAY
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NO SCALE
PRINTED ON 07/06/2021

L-14 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	15	19

MCCULLEN AVENUE

SEE PID SECTION 9 FOR DISCUSSION ON REDUCING CURVE RADIUS

STA "A" 137+50 REMOVE DRIVEWAY

PM 75.91: MCCULLENS AVENUE STA "A" 138+00 SIGNALIZED INTERSECTION

HUMBOLDT CROSSFIT

STA "A" 141+75 BUILD PED CROSSING. TBD ON USE OF RECTANGULAR RAPID FLASHING BEACONS OR A PEDESTRIAN HYBRID BEACON.

PM 75.97

TOMLINSON STREET

TRES CHILES PICOSOS

BEST WESTERN PLUS BAYSHORE INN

SEE SHEET L-19 FOR FULL PROPSOED STAGING AREA

TO HIKSHARI' TRAIL

TRUESDALE STREET

PM 76.03

8 9 140 "A" LINE 1 2 3

STA "A" 138+50 TO STA "A" 139+50 REMOVE DRIVEWAYS.

BUS ONLY

STA "A" 138+25 TO STA "A" 139+50 CREATE BUS STOP. RAISE BIKEWAY TO SIDEWALK LEVEL AS PART OF ADA LANDING.

STA "A" 138+25 TO STA "A" 139+50 RETAINING CURB AND PEDESTRIAN RAILING TO PROTECT BUS STOP. THIS IS A KNOWN ISSUE AREA FOR BACKING VEHICLES IN PARKING LOT

PACIFIC PRIDE GAS STATION

SHELL GAS STATION

PM 75.99

MATCHLINE SHEET 16

O'REILLY AUTO PARTS

MCCULLEN AVENUE

AT&T STORE

MATCHLINE SHEET 14

STA "A" 142+00 TO STA "A" 143+50 BIKE CROSSING DESIGN TBD. COULD INCLUDE SMALL MEDIAN ISLANDS FOR CROSSINGS. OR INSTEAD COULD DO A MEDIAN PROTECTED BICYCLE CENTER TURN LANE. (SEE LEFT IMAGE) THIS WOULD BLOCK LEFT TURNS INTO AND OUT OF TRUESDALE STREET AND HIGHLAND AVENUE.

HIGHLAND AVE

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
- MODIFY DI
- ESL
- DRIVEWAY WORK
- RELOCATE STREETLIGHT
- BUS PADS
- SIDEWALK AND CURB RAMPS
- CURB AND GUTTER
- HARDSCAPE
- HMA CONFORMS AT DRIVEWAYS
- RAISED CLASS IV BIKEWAY
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- BUFFER MARKING
- PEDESTRIAN REFUGE ISLAND
- NEW TREES/OTHER LANDSCAPING
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IMAGE FROM: https://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/offset-intersections/

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L-15 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

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01	HUM	101	73.3/76.1	16	19

MCDONALD'S

TO HOWELL STREET

ELECTRIFY AMERICA CHARGING STATION

BAYSHORE MALL

SEE SHEET L-19 FOR FULL PROPSOED STAGING AREA

PM 76.08: SOUTH BAYSHORE MALL ENTRANCE SIGNALIZED INTERSECTION STA "A" 146+50

4

145

"A" LINE

6

8

9

150

STA "A" 144+80
PM 76.04
END MICRO-SURFACING

MATCHLINE SHEET 15

FORT HUMBOLDT STATE HISTORIC PARK

PM 76.10
STA "A" 148+00
END PROJECT

LEGEND

- EXIST R/W
- EXIST CULVERTS/DI'S
- EXIST RETAINING WALL
- EXIST SIDEWALK (NOT SHOWN WHERE BEING MODIFIED)
- EXIST STREETLIGHT
- PROPOSED STAGING AREA
- BIKE CONFLICT MARKING
- CROSSWALK
- PROPOSED CULVERT/DI
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- ESL
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- RELOCATE STREETLIGHT
- BUS PADS
- SIDEWALK AND CURB RAMPS
- CURB AND GUTTER
- HARDSCAPE
- HMA CONFORMS AT DRIVEWAYS
- RAISED CLASS IV BIKEWAY
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L-16 CLASS IV BIKEWAYS
SOUTH BROADWAY COMPLETE STREETS
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01-HUM-101-PM 73.3/76.1

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	73.3/76.1	17	19

STA "A" 78+00
PROPOSED STAGING AREA

HERRICK AVE
PARK AND RIDE

POUND ROAD

STOP

HERRICK AVE

LEGEND

EXIST R/W

EXIST R/W (ACCESS CONTROL)

ESL

PROPOSED STAGING AREA

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L-17 PROPOSED STAGING AREAS
SOUTH BROADWAY COMPLETE STREETS
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01-HUM-101-PM 73.3/76.1

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01	HUM	101	73.3/76.1	18	19

LITHIA CHRYSLER
DODGE JEEP RAM
FIAT OF EUREKA

STA "A" 111+00
PROPOSED STAGING AREA

COMFORT INN
HUMBOLDT BAY

1
2
3
4

SUNSET

LEGEND
- EXIST R/W
- ESL
- PROPOSED STAGING AREA

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L-18 PROPOSED STAGING AREAS
SOUTH BROADWAY COMPLETE STREETS
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01-HUM-101-PM 73.3/76.1

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01	HUM	101	73.3/76.1	19	19

TRUESDALE STREET

SPORTSMAN'S WAREHOUSE

STA "A" 144+00
PROPOSED STAGING AREA

BAYSHORE MALL

BEST WESTERN PLUS
BAYSHORE INN

TRES CHILES
PICOSOS

TOMLINSON STREET

MCDONALD'S

LEGEND
- EXIST R/W
- ESL
- PROPOSED STAGING AREA

NOTES
1. R/W IS APPROXIMATE.
2. THE IMAGERY IS OFFSET AND/OR DISTORTED FROM LINEWORK SLIGHTLY.

DESIGN STUDY ONLY
NO SCALE
PRINTED ON 07/06/2021

L-19 PROPOSED STAGING AREAS
SOUTH BROADWAY COMPLETE STREETS
EA 01-0K940K/EFIS - 0121000033
01-HUM-101-PM 73.3/76.1

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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BORDER LAST REVISED 7/2/2010 | USERNAME => $USER | DGN FILE => $REQUEST | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 00000000001

US 101 / BROADWAY
CORRIDOR CONCEPT
EUREKA, CA

ALTERNATIVE 1 AND PART OF ALTERNATIVE 2
CLASS 1 SHARED USE PATH
STATION "B" 200+00 TO 220+50
STATION "C" 314+96 TO 320+98

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	74.8/76.0	01	04

REGISTERED CIVIL ENGINEER — DATE

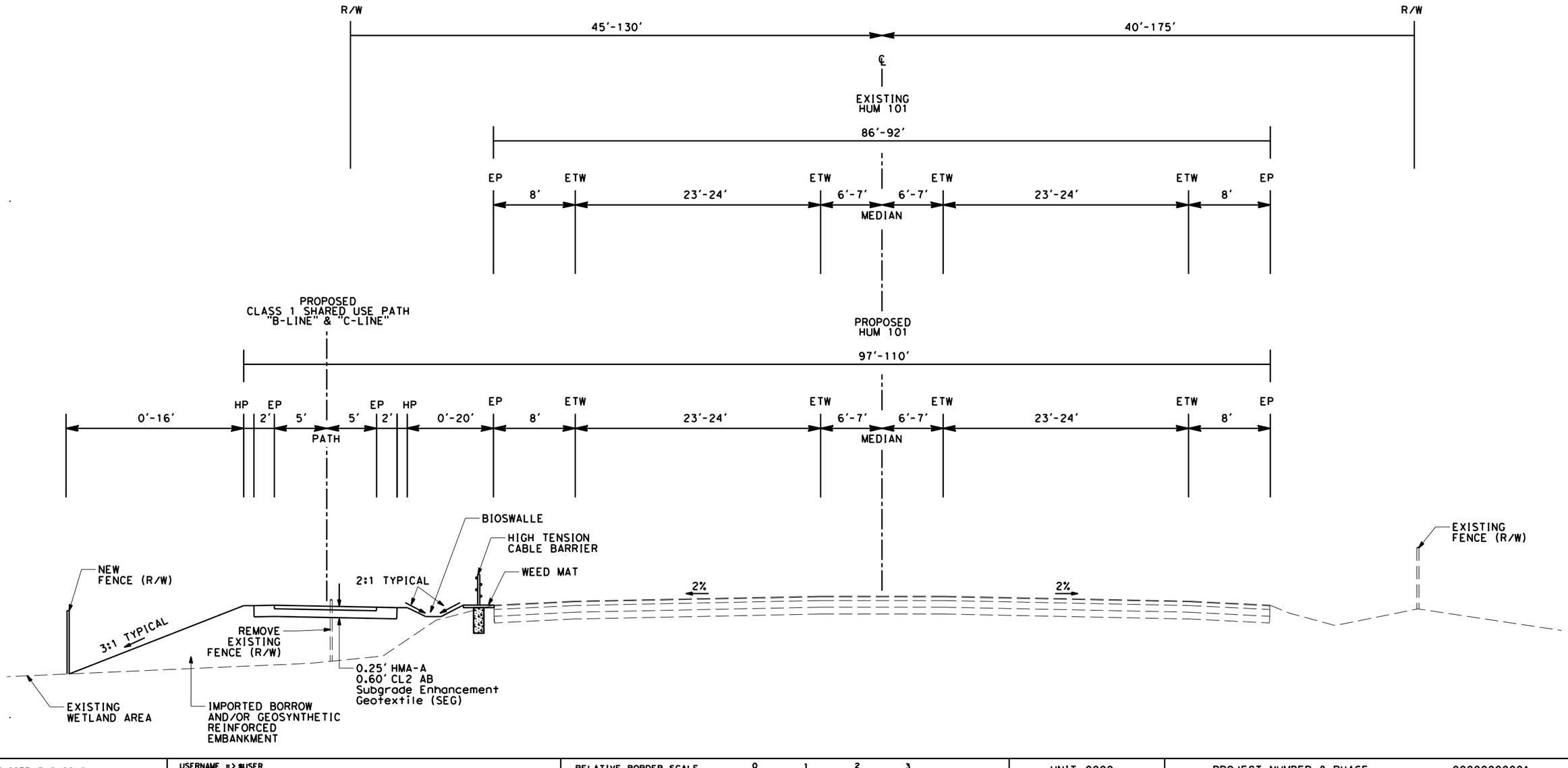
PLANS APPROVAL DATE

PRELIMINARY DESIGN FOR REVIEW ONLY

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:
1. EXISTING DIMENSIONS AND R/W APPROXIMATE



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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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DATE PLOTTED => $DATE

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BORDER LAST REVISED 7/2/2010

USERNAME => $USER

DGN FILE => $REQUEST

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	74.8/76.0	02	04

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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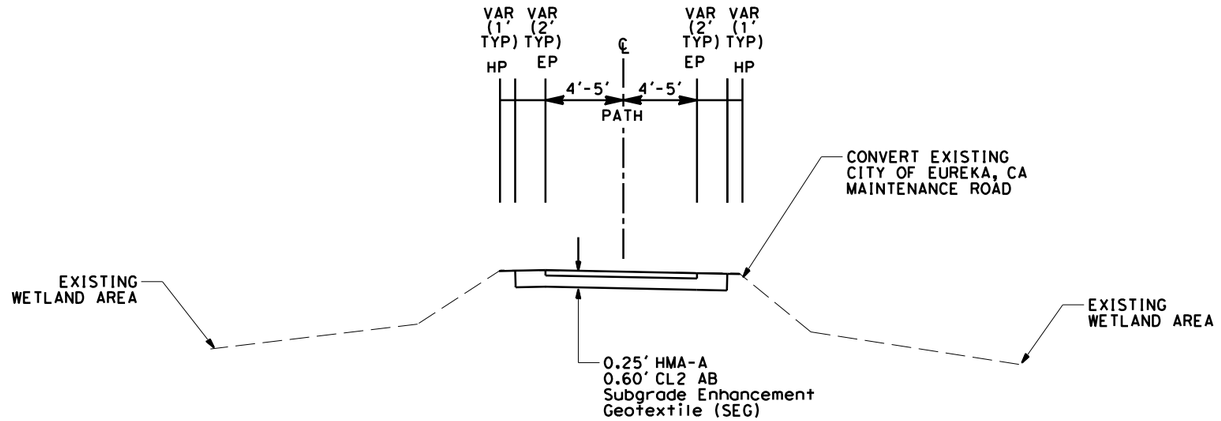
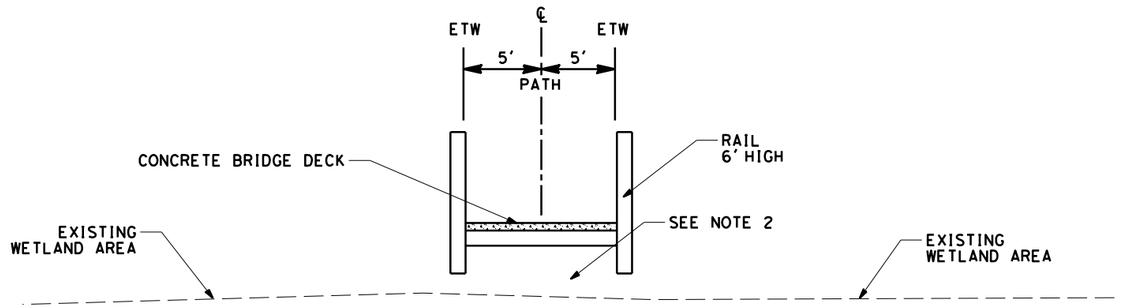
US 101 / BROADWAY
CORRIDOR CONCEPT
EUREKA, CA

PART OF ALTERNATIVE 2 AND ALTERNATIVE 3
CLASS 1 SHARED USE PATH
STATION "C" 300+00 TO 314+96
STATION "D" 400+00 TO 418+18

NOTES:
1. EXISTING DIMENSIONS APPROXIMATE
2. FOUNDATIONS ASSUMED TO BE DRIVEN H-PILE FOUNDATIONS



PART OF ALTERNATIVE 3
STATION "D" 418+18 TO 419+63
SINGLE SPAN STEEL TRUSS ARCHED PEDESTRIAN BRIDGE



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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	74.8/76.0	03	04

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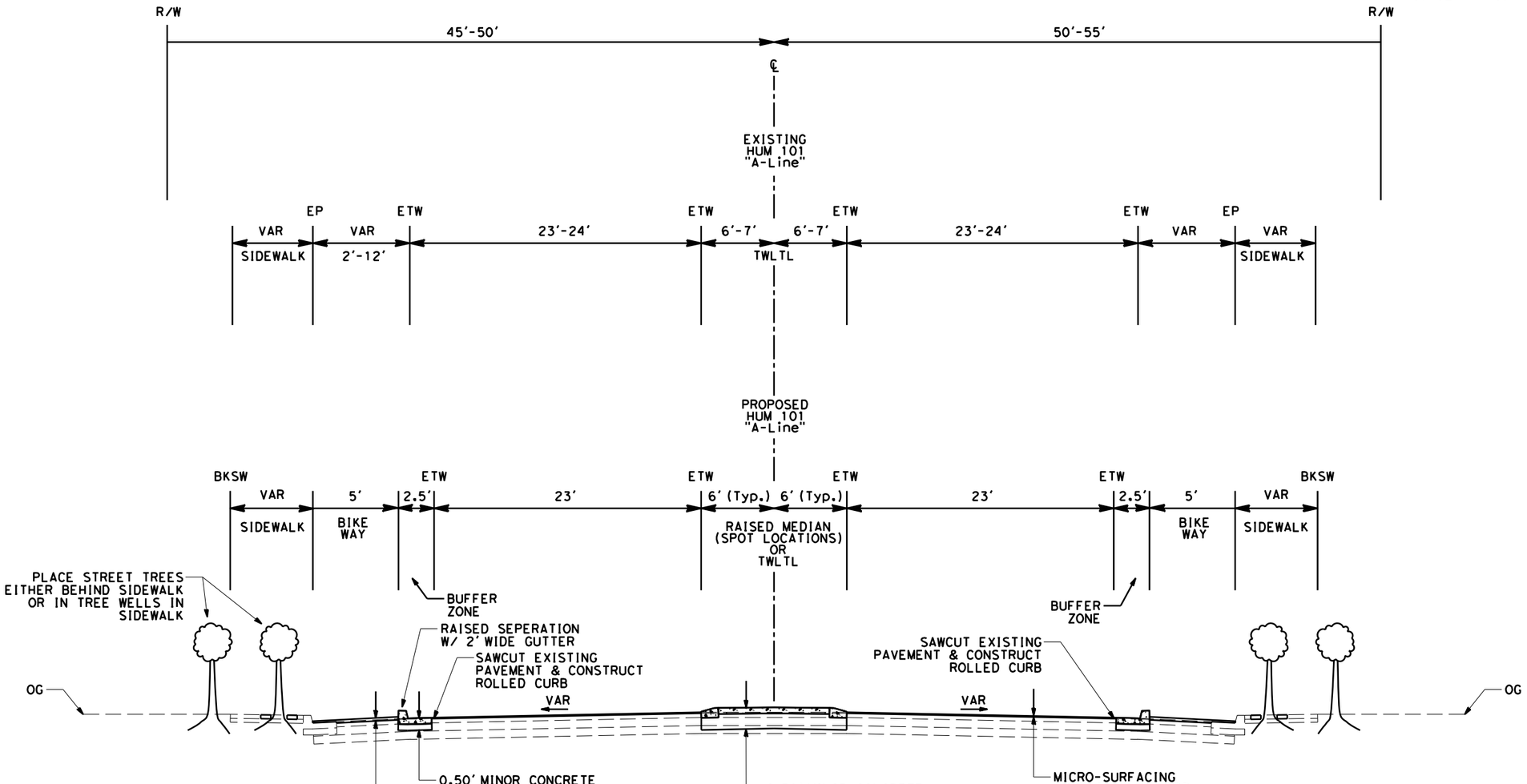
US 101 / BROADWAY CORRIDOR CONCEPT EUREKA, CA

ALTERNATIVES 1-4
CLASS 4 SEPERATED BIKEWAY ON STREET
STATION "A" 100+00 TO 136+20
STATION "A" 140+92 TO 143+69

NOTES:
1. EXISTING DIMENSIONS AND R/W APPROXIMATE
2. COLD PLANE DEPTH WILL BE DECIDED IN THE NEXT PHASE. IT WILL DEPEND ON WHETHER THE EXISTING GUTTERS CAN BE FILLED AND WHAT TYPE OF CLASS IV SEPARATION WILL BE USED.



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CHECKED BY

REVISED BY

DATE REVISED

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	74.8/76.0	04	04

REGISTERED CIVIL ENGINEER — DATE

PLANS APPROVAL DATE

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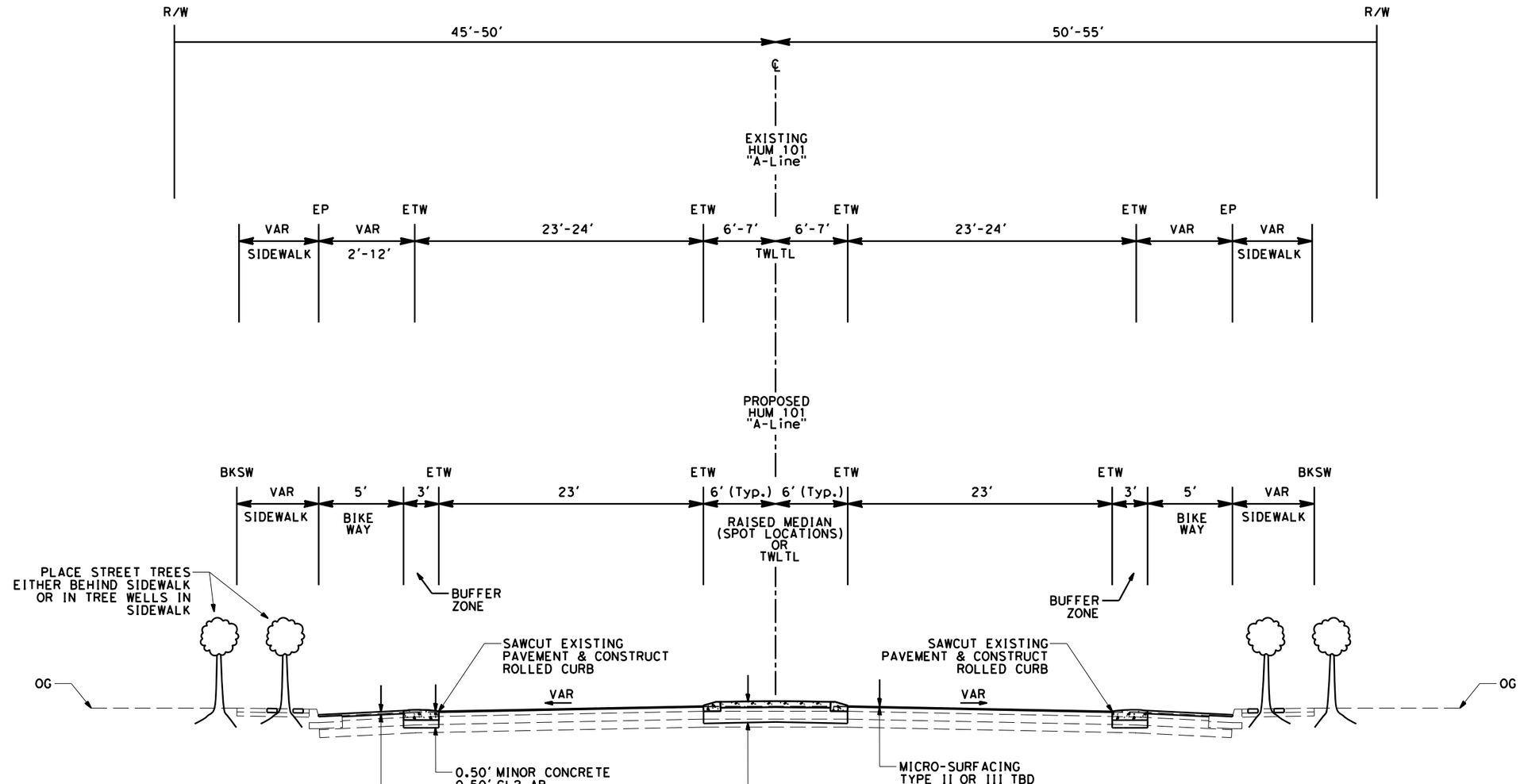
US 101 / BROADWAY CORRIDOR CONCEPT EUREKA, CA

ALTERNATIVES 1-4
RAISED CLASS 4 SEPERATED BIKEWAY ON STREET
STATION "A" 136+20 TO 140+92

NOTES:
1. EXISTING DIMENSIONS AND R/W APPROXIMATE
2. COLD PLANE DEPTH WILL BE DECIDED IN THE NEXT PHASE. IT WILL DEPEND ON WHETHER THE EXISTING GUTTERS CAN BE FILLED AND WHAT TYPE OF CLASS IV SEPARATION WILL BE USED.



REVISED BY	DATE REVISED

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BORDER LAST REVISED 7/2/2010

USERNAME => $USER

DGN FILE => $REQUEST

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 00000000001

ATTACHMENT B

Cost Estimates and PIR Structures Estimate

PROJECT

PLANNING COST ESTIMATE ©

EA: 01-0K940K PID: 0121000033

EA: 01-0K940K

PID: 0121000033

District-County-Route: 01-HUM-101

PM: 73.3/76.1

Type of Estimate : PID

Program Code : 201.999

Project Limits : IN HUMBOLDT COUNTY IN AND NEAR EUREKA FROM 0.3 MI SOUTH OF SPRUCE PT NB OFF RAMP TO 0.1 MI NORTH OF TRUESDALE STREET

Project Description: Mobility Improvements

Scope : Class I shared use path from Herrick Ave to Papa & Barkley Co., widening from Papa & Barkley Co. to Lithia, Class IV separated bikeways from Papa & Barkley Co. to Truesdale St, bus pads/stops at 76 gast station/Pacific Motorsports and at McCullens Ave, pedestrian crossings near Hilfiker Lane and Highland Avenue, and a bicycle crossing treatment between Highland Ave and Truesdale St

Alternative : 1

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 8,157,000	$ 9,694,000
TOTAL STRUCTURES COST	$ -	$ -
SUBTOTAL CONSTRUCTION COST	$ 8,157,000	$ 9,694,000
TOTAL RIGHT OF WAY COST	$ 3,996,000	$ 5,184,000
TOTAL CAPITAL OUTLAY COSTS	$ 12,153,000	$ 14,878,000
PA/ED SUPPORT	$ 2,803,000	$ 2,902,000
PS&E SUPPORT	$ 2,401,000	$ 2,617,000
RIGHT OF WAY SUPPORT	$ 591,000	$ 643,000
CONSTRUCTION SUPPORT	$ 2,781,000	$ 3,147,000
TOTAL SUPPORT COST	$ 8,576,000	$ 9,309,000
TOTAL PROJECT COST	$ 20,729,000	$ 24,187,000 *

Programmed Amount

	Month	Year
Date of Estimate (Month/Year)	7	2021
Estimated Construction Start (Month/Year)	3	2026
Number of Working Days =		250
Estimated Mid-Point of Construction (Month/Year)	1	2027
Estimated Construction End (Month/Year)	12	2027
Number of Plant Establishment Days		250

Estimated Project Schedule

PID Approval	7/23/2021
PA/ED Approval	2/21/2024
PS&E	9/18/2025
RTL	10/7/2025
Begin Construction	3/17/2026

Reviewed by District O.E. or Cost Estimate Certifier	Ali Salehi	6/21/2021	530-821-3956
	Office Engineer / Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager		7/22/21	707-498-0961
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	667,500
2	**Pavement Structural Section**	$	1,621,500
3	**Drainage**	$	756,700
4	**Specialty Items**	$	475,000
5	**Environmental**	$	400,500
6	**Traffic Items**	$	2,042,000
7	**Detours**	$	-
8	**Minor Items**	$	59,700
9	**Roadway Mobilization**	$	301,200
10	**Supplemental Work**	$	105,200
11	**State Furnished**	$	332,300
12	**Time-Related Overhead**	$	180,700
13	**Total Roadway Contingency**	$	1,214,600
	TOTAL ROADWAY ITEMS	**$**	**8,156,900**

Estimate Prepared By : Joseph Caminiti, Designer, (707) 684-6921 and Harrison Rankin, Designer, (707) 684-6985 — 7/2/2021
Name and Title — Date

Estimate Reviewed By : Dawn Yang, Project Engineer, (707) 296-6752 — 7/2/2021
Name and Title — Date

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	2,970	x	85.00	=	$	252,450
160102	Clearing & Grubbing	LS	1	x	15,000.00	=	$	15,000
198010	Imported Borrow (CY) (May Include GRE)	CY	4,000	x	100.00	=	$	400,000

TOTAL EARTHWORK SECTION ITEMS $ 667,500

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
153123	Remove Concrete	SQYD	1,390	x	50.00	=	$	69,500
731700	Remove Curb	LF	1,980	x	20.00	=	$	39,600
393004	Geosynthetic Pavement Interlayer (Paving Fabric)	SQYD	230	x	25.00	=	$	5,750
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON	1	x	1,500.00	=	$	1,500
198209	Subgrade Enahncement Geotextile, Class B2	SQYD	3,200	x	3.50	=	$	11,200
260203	Class 2 Aggregate Base (Cy)	CY	1,540	x	105.00	=	$	161,700
280000	Lean Concrete Base	CY	40	x	500.00	=	$	20,000
390100	Prime Coat	TON	6	x	1,500.00	=	$	9,000
390132	Hot Mix Asphalt (Type A)	TON	1,230	x	200.00	=	$	246,000
397005	Tack Coat	TON	18	x	1,500.00	=	$	27,000
378000	Micro-surfacing (type II)	TON	400	x	350.00	=	$	140,000
401050	Jointed Plain Concrete Pavement (Bus Pads)	CY	70	x	1,000.00	=	$	70,000
731504	Minor Concrete (Curb and Gutter)	CY	370	x	1,000.00	=	$	370,000
731521	Minor Concrete (Sidewalk)	CY	90	x	1,000.00	=	$	90,000
731511	Minor Concrete (Island Paving)	CY	10	x	1,400.00	=	$	14,000
731516	Minor Concrete (Driveway)	CY	70	x	1,800.00	=	$	126,000
731530	Minor Concrete (Textured Paving)	CY	34	x	1,400.00	=	$	47,600
731623	Minor Concrete (Curb Ramp)	CY	10	x	2,500.00	=	$	25,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	5,800	x	12.00	=	$	69,600
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	260	x	50.00	=	$	13,000
XXXXXX	Wire Mesh Reinforcement	LS	1	x	15,000.00	=	$	15,000
XXXXXX	Digouts	LS	1	x	50,000.00	=	$	50,000

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS $ 1,621,500

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Remove Drainage Inlet	EA	13	x	1,350.00	=	$	17,550
510094	Structural Concrete, Drainage Inlet	CY	51	x	3,200.00	=	$	163,200
750001	Miscellaneous Iron and Steel	LB	17,460	x	4.00	=	$	69,840
XXXXXX	24" Alternative Pipe Culvert	LF	1,687	x	300.00	=	$	506,100

TOTAL DRAINAGE ITEMS $ 756,700

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
832070	Vegetation Control (Minor Concrete)	SQYD	330	x	70.00	=	$	23,100
839522A	High Tension Cable Barrier Terminal	EA	2	x	10,000.00	=	$	20,000
839528A	High Tension Cable Barrier	LF	1,470	x	100.00	=	$	147,000
839521	Cable Railing	LF	300	x	75.00	=	$	22,500
803020	Remove Fence	LF	1,470	x	6.00	=	$	8,820
XXXXXX	New 6' Fence	LF	2,060	x	50.00	=	$	103,000
XXXXXX	Two Small Standard Plan Retaining Walls	LS	1	x	90,000.00	=	$	90,000
XXXXXX	Construction Contract Work from RWDS	LS	1	x	60,500.00	=	$	60,500

TOTAL SPECIALTY ITEMS $ 475,000

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	LS		x		= $	-

Subtotal Environmental Mitigation $ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Highway Planting - Maintenance Agreement Required (see LAAS)	LS	1	x	115,200.00	= $	115,200
XXXXXX	Bioswale Between Class I Path and Highway	LS	1	x	48,800.00	= $	48,800

Subtotal Landscape and Irrigation $ *164,000*

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Erosion Control Items (see LAAS)	LS	1	x	116,420.00	= $	116,420

Subtotal Erosion Control $ *116,420*

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Construction BMPs	LS	1	x	120,000.00	= $	120,000

Subtotal NPDES $ *120,000*

TOTAL ENVIRONMENTAL **$ 400,500**

Supplemental Work for NPDES

XXXXXX	Some Item	LS		x		= $	-

Subtotal Supplemental Work for NDPS $ -

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Relocate and Replace 3 Lights	LS	1	x	105,000.00	=	$	105,000
XXXXXX	Pierson/McCullens Coordination with Hilfiker PHB	LS	1	x	100,000.00	=	$	100,000
XXXXXX	McCullens/South Bayshore Mall entrance coordination with Highland PHB	LS	1	x	30,000.00	=	$	30,000
XXXXXX	Replace Papa & Barkley Co. signal	LS	1	x	350,000.00	=	$	350,000
XXXXXX	Two PHBs (includes cost of advance warning beacons)	LS	1	x	540,000.00	=	$	540,000
XXXXXX	Pedestrian/Bicycle Count Station on Class I Path	LS	1	x	80,000.00	=	$	80,000
XXXXXX	Modify Census Station at PM 75.02 to Include Non-Motorized Counts	LS	1	x	50,000.00	=	$	50,000
XXXXXX	Class I Path Lighting	LS	1	x	100,000.00	=	$	100,000
XXXXXX	Miscellaneous Traffic Signal Upgrades	LS	1	x	50,000.00	=	$	50,000
860090	Maintain Existing Traffic Management System Elements During Construction	LS	1	x	10,000.00	=	$	10,000

Subtotal Traffic Electrical $ *1,415,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Signing and Striping Items (detail will come in 0-phase)	LS	1	x	250,000.00	=	$	250,000

Subtotal Traffic Signing and Striping $ *250,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
128652	Portable Changeable Message Sign	LS	1	x	$ 20,000	=	$	20,000
120210A	Portable Radar Feedback Sign Systems	LS	1	x	$ 20,000	=	$	20,000

Subtotal Traffic Management Plan $ *40,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
124000	Temporary Pedestrian Access Route	LS	1	x	20,000.00	=	$	20,000
120100	Traffic Control System	LS	1	x	250,000.00	=	$	250,000
120090	Construction Area Signs	LS	1	x	20,000.00	=	$	20,000
129000	Temporary Railing Type K	LF	700	x	60.00	=	$	42,000
010404	Alternative Temporary Crash Cushion	EA	1	x	5,000.00	=	$	5,000

Subtotal Stage Construction and Traffic Handling $ *337,000*

TOTAL TRAFFIC ITEMS **$ 2,042,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	Unit		x		=	$ -

TOTAL DETOURS **$ -**

SUBTOTAL SECTIONS 1 through 7 $ 5,963,200

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items					
ADA Items			1.0%	$	59,632
8B - Bike Path Items					
Bike Path Items			0.0%	$	-
8C - Other Minor Items					
Other Minor Items			0.0%	$	-

Total of Section 1-7 $ 5,963,200 x 1.0% = $ 59,632

TOTAL MINOR ITEMS **$ 59,700**

SECTIONS 9: ROADWAY MOBILIZATION *

Item code							
999990	Total Section 1-8	$	6,022,900	x	5%	= $	301,145

TOTAL ROADWAY MOBILIZATION **$ 301,200**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066070	Maintain Traffic	LS	1	x	4,000.00	= $	4,000
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	11,100.00	= $	11,100
066921	Dispute Resolution Advisor	LS	1	x	5,000.00	= $	5,000
066015	Federal Trainee Program	LS	1	x	4,800.00	= $	4,800
066610	Partnering	LS	1	x	20,000.00	= $	20,000

*Cost of **NPDES** Supplemental Work specified in Section 5D* = $ -

Total Section 1-8 $ 6,022,900 1% = $ 60,300

TOTAL SUPPLEMENTAL WORK **$ 105,200**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066105	Resident Engineers Office	LS	1	x	202,050.00	=	$202,050
066063	Traffic Management Plan - Public Information	LS	1	x	2,000.00	=	$2,000
066062	COZEEP Contract	LS	1	x	50,000.00	=	$50,000
XXXXXX	401 Annual Fees	LS	1	x	18,000.00	=	$18,000
XXXXXX	General Construction Permit	LS	1	x	30,000.00	=	$30,000
	Total Section 1-8		$ 6,022,900		0.5%	=	$ 30,200

TOTAL STATE FURNISHED	**$332,300**

SECTION 12: TIME-RELATED OVERHEAD

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **3%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	250	X	$723	=	$180,700

TOTAL TIME-RELATED OVERHEAD	**$180,700**

SECTION 13: ROADWAY CONTINGENCY

Total Section 1-12	$	6,942,300	x	**17%**	=	$1,214,556

TOTAL CONTINGENCY*	**$1,214,600**

II. STRUCTURE ITEMS

Bridge 1

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Bridge Name	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Number of Transitions	0 LF	0 LF	0 LF
Length Per Transition	0 LF	0 LF	0 LF
Total Length of Transitions	0 SQFT	0 SQFT	0 SQFT
Cost Per Linear Foot	$0	$0	$0
COST OF EACH	**$0**	**$0**	**$0**

Building 1

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Building Name	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total Building Length (Feet)	0 LF	0 LF	0 LF
Total Area (Square Feet)	0 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	0 LF	0 LF	0 LF
Footing Type (pile or spread	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0	$0	$0
COST OF EACH	**$0**	**$0**	**$0**

TOTAL COST OF BRIDGES		**$0**
TOTAL COST OF BUILDINGS		**$0**
Time-Related Overhead	10%	**$0**
STRUCTURES MOBILIZATION	10%	**$0**
STRUCTURES CONTINGENCY*	25%	**$0**
TOTAL COST OF STRUCTURES		**$0**

Estimate Prepared By: _____ _____

XXXXXXXXXXXXXXXX ------ Division of Structures — Date

EA: 01-0K940K PID: 0121000033

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

				Current Value Future Use		*Escalated Value*
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	$	1,522,375	$	1,969,374
	A2)	Acquisition of Offsite Mitigation	$	2,362,500	$	3,070,121
	A3)	Railroad Acquisition	$	0	$	0
B)	B1)	Utility Relocation (State Share)	$	90,000	$	116,957
	B2)	Potholing (Design Phase)	$	0	$	0
C)		Utility - Advance Engineering Estimate (Encumber with State Only Funds)	$	0	$	0
D)		RAP and/or Last Resort Housing	$	0	$	0
E)		Clearance & Demolition	$	0	$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs	$	0	$	0
G)		Title and Escrow	$	21,500	$	27,940
H)		Environmental Review	$	0	$	0
I)		Condemnation Settlements 0%	$	0	$	0
J)		Design Appreciation Factor 0%	$	0	$	0
K)		Utility Relocation (Construction Cost)	$	0	$	0

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$3,996,000**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$5,184,000**
N)	**RIGHT OF WAY SUPPORT**	**$643,000**

Support Cost Estimate Prepared By _____ Project Coordinator[1] _____ Phone

Utility Estimate Prepared By _____ Utility Coordinator[2] _____ Phone

R/W Acquisition Estimate Prepared By _____ Right of Way Estimator[3] _____ Phone

PROJECT

PLANNING COST ESTIMATE ©

EA: 01-0K940K PID: 0121000033

EA: 01-0K940K

PID: 0121000033

District-County-Route: 01-HUM-101

PM: 73.3/76.1

Type of Estimate : PID

Program Code : 201.999

Project Limits : IN HUMBOLDT COUNTY IN AND NEAR EUREKA FROM 0.3 MI SOUTH OF SPRUCE PT NB OFF RAMP TO 0.1 MI NORTH OF TRUESDALE STREET

Project Description: Mobility Improvements

Scope : Class I shared use path from Herrick Ave to Papa & Barkley Co., widening from Papa & Barkley Co. to Lithia, Class IV separated bikeways from Papa & Barkley Co. to Truesdale St, bus pads/stops at 76 gast station/Pacific Motorsports and at McCullens Ave, pedestrian crossings near Hilfiker Lane and Highland Avenue, and a bicycle crossing treatment between Highland Ave and Truesdale St

Alternative : 2

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 7,694,000	$ 9,144,000
TOTAL STRUCTURES COST	$ -	$ -
SUBTOTAL CONSTRUCTION COST	$ 7,694,000	$ 9,144,000
TOTAL RIGHT OF WAY COST	$ 2,167,000	$ 2,808,000
TOTAL CAPITAL OUTLAY COSTS	$ 9,861,000	$ 11,952,000
PA/ED SUPPORT	$ 2,803,000	$ 2,902,000
PS&E SUPPORT	$ 2,401,000	$ 2,617,000
RIGHT OF WAY SUPPORT	$ 591,000	$ 643,000
CONSTRUCTION SUPPORT	$ 2,781,000	$ 3,147,000
TOTAL SUPPORT COST	$ 8,576,000	$ 9,309,000
TOTAL PROJECT COST	$ 18,437,000	$ 21,261,000 *

Programmed Amount

	Month	Year
Date of Estimate (Month/Year)	7	2021
Estimated Construction Start (Month/Year)	3	2026
Number of Working Days =		250
Estimated Mid-Point of Construction (Month/Year)	1	2027
Estimated Construction End (Month/Year)	12	2027
Number of Plant Establishment Days		250

Estimated Project Schedule

PID Approval	7/23/2021
PA/ED Approval	2/21/2024
PS&E	9/18/2025
RTL	10/7/2025
Begin Construction	3/17/2026

Reviewed by District O.E. or Cost Estimate Certifier	Ali Salehi	6/21/2021	530-821-3956
	Office Engineer / Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager		7/22/21	707-498-0961
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	596,000
2	**Pavement Structural Section**	$	1,685,800
3	**Drainage**	$	738,700
4	**Specialty Items**	$	254,400
5	**Environmental**	$	338,400
6	**Traffic Items**	$	2,042,000
7	**Detours**	$	-
8	**Minor Items**	$	56,600
9	**Roadway Mobilization**	$	285,600
10	**Supplemental Work**	$	102,100
11	**State Furnished**	$	269,000
12	**Time-Related Overhead**	$	171,400
13	**Total Roadway Contingency**	$	1,153,700
	TOTAL ROADWAY ITEMS	**$**	**7,693,700**

Estimate Prepared By : Joseph Caminiti, Designer, (707) 684-6921 and Harrison Rankin, Designer, (707) 684-6985 — 7/2/2021
Name and Title — Date

Estimate Reviewed By : Dawn Yang, Project Engineer, (707) 296-6752 — 7/2/2021
Name and Title — Date

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	3,070	x	85.00	=	$	260,950
160102	Clearing & Grubbing	LS	1	x	15,000.00	=	$	15,000
198010	Imported Borrow (CY) (May Include GRE)	CY	3,200	x	100.00	=	$	320,000

TOTAL EARTHWORK SECTION ITEMS $ 596,000

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
153123	Remove Concrete	SQYD	1,390	x	50.00	=	$	69,500
731700	Remove Curb	LF	1,980	x	20.00	=	$	39,600
393004	Geosynthetic Pavement Interlayer (Paving Fabric)	SQYD	230	x	25.00	=	$	5,750
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON	1	x	1,500.00	=	$	1,500
198209	Subgrade Enahncement Geotextile, Class B2	SQYD	3,270	x	3.50	=	$	11,445
260203	Class 2 Aggregate Base (Cy)	CY	1,560	x	105.00	=	$	163,800
280000	Lean Concrete Base	CY	40	x	500.00	=	$	20,000
390100	Prime Coat	TON	6	x	1,500.00	=	$	9,000
390132	Hot Mix Asphalt (Type A)	TON	1,240	x	200.00	=	$	248,000
397005	Tack Coat	TON	18	x	1,500.00	=	$	27,000
378000	Micro-surfacing (type II)	TON	400	x	350.00	=	$	140,000
401050	Jointed Plain Concrete Pavement (Bus Pads)	CY	70	x	1,000.00	=	$	70,000
731504	Minor Concrete (Curb and Gutter)	CY	370	x	1,000.00	=	$	370,000
731521	Minor Concrete (Sidewalk)	CY	90	x	1,000.00	=	$	90,000
731511	Minor Concrete (Island Paving)	CY	10	x	1,400.00	=	$	14,000
731516	Minor Concrete (Driveway)	CY	70	x	1,800.00	=	$	126,000
731530	Minor Concrete (Textured Paving)	CY	34	x	1,400.00	=	$	47,600
731623	Minor Concrete (Curb Ramp)	CY	10	x	2,500.00	=	$	25,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	5,800	x	12.00	=	$	69,600
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	260	x	50.00	=	$	13,000
XXXXXX	Wire Mesh Reinforcement	LS	1	x	15,000.00	=	$	15,000
XXXXXX	Digouts	LS	1	x	50,000.00	=	$	50,000
XXXXXX	Widening Along Pound Road	LS	1	x	60,000.00	=	$	60,000

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS $ 1,685,800

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Remove Drainage Inlet	EA	13	x	1,350.00	=	$	17,550
510094	Structural Concrete, Drainage Inlet	CY	51	x	3,200.00	=	$	163,200
750001	Miscellaneous Iron and Steel	LB	17,460	x	4.00	=	$	69,840
XXXXXX	24" Alternative Pipe Culvert	LF	1,627	x	300.00	=	$	488,100

TOTAL DRAINAGE ITEMS $ 738,700

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
832070	Vegetation Control (Minor Concrete)	SQYD	120	x	95.00	=	$	11,400
839522A	High Tension Cable Barrier Terminal	EA	2	x	10,000.00	=	$	20,000
839528A	High Tension Cable Barrier	LF	500	x	100.00	=	$	50,000
839521	Cable Railing	LF	300	x	75.00	=	$	22,500
XXXXXX	Two Small Standard Plan Retaining Walls	LS	1	x	90,000.00	=	$	90,000
XXXXXX	Construction Contract Work from RWDS	LS	1	x	60,500.00	=	$	60,500

TOTAL SPECIALTY ITEMS $ 254,400

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	LS		x		= $	-

Subtotal Environmental Mitigation $ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Highway Planting - Maintenance Agreement Required (see LAAS)	LS	1	x	115,200.00	= $	115,200
XXXXXX	Bioswale Between Class I Path and Highway	LS	1	x	22,300.00	= $	22,300

Subtotal Landscape and Irrigation $ *137,500*

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Erosion Control Items (see LAAS)	LS	1	x	88,370.00	= $	88,370

Subtotal Erosion Control $ *88,370*

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Construction BMPs	LS	1	x	112,500.00	= $	112,500

Subtotal NPDES $ *112,500*

TOTAL ENVIRONMENTAL **$ 338,400**

Supplemental Work for NPDES

XXXXXX	Some Item	LS		x		= $	-

Subtotal Supplemental Work for NDPS $ -

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Relocate and Replace 3 Lights	LS	1	x	105,000.00	=	$	105,000
XXXXXX	Pierson/McCullens Coordination with Hilfiker PHB	LS	1	x	100,000.00	=	$	100,000
XXXXXX	McCullens/South Bayshore Mall entrance coordination with Highland PHB	LS	1	x	30,000.00	=	$	30,000
XXXXXX	Replace Papa & Barkley Co. signal	LS	1	x	350,000.00	=	$	350,000
XXXXXX	Two PHBs (includes cost of advance warning beacons)	LS	1	x	540,000.00	=	$	540,000
XXXXXX	Pedestrian/Bicycle Count Station on Class I Path	LS	1	x	80,000.00	=	$	80,000
XXXXXX	Modify Census Station at PM 75.02 to Include Non-Motorized Counts	LS	1	x	50,000.00	=	$	50,000
XXXXXX	Class I Path Lighting	LS	1	x	100,000.00	=	$	100,000
XXXXXX	Miscellaneous Traffic Signal Upgrades	LS	1	x	50,000.00	=	$	50,000
860090	Maintain Existing Traffic Management System Elements During Construction	LS	1	x	10,000.00	=	$	10,000

Subtotal Traffic Electrical $ *1,415,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Signing and Striping Items (detail will come in 0-phase)	LS	1	x	250,000.00	=	$	250,000

Subtotal Traffic Signing and Striping $ *250,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
128652	Portable Changeable Message Sign	LS	1	x	$ 20,000	=	$	20,000
120210A	Portable Radar Feedback Sign Systems	LS	1	x	$ 20,000	=	$	20,000

Subtotal Traffic Management Plan $ *40,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
124000	Temporary Pedestrian Access Route	LS	1	x	20,000.00	=	$	20,000
120100	Traffic Control System	LS	1	x	250,000.00	=	$	250,000
120090	Construction Area Signs	LS	1	x	20,000.00	=	$	20,000
129000	Temporary Railing Type K	LF	700	x	60.00	=	$	42,000
010404	Alternative Temporary Crash Cushion	EA	1	x	5,000.00	=	$	5,000

Subtotal Stage Construction and Traffic Handling $ *337,000*

TOTAL TRAFFIC ITEMS **$ 2,042,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	Unit		x		=	$ -

TOTAL DETOURS **$ -**

SUBTOTAL SECTIONS 1 through 7 $ 5,655,300

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items					
ADA Items			1.0%	$	56,553
8B - Bike Path Items					
Bike Path Items			0.0%	$	-
8C - Other Minor Items					
Other Minor Items			0.0%	$	-
Total of Section 1-7	$ 5,655,300	x	1.0%	= $	56,553

TOTAL MINOR ITEMS **$ 56,600**

SECTIONS 9: ROADWAY MOBILIZATION *

Item code							
999990	Total Section 1-8	$ 5,711,900	x	5%	=	$	285,595

TOTAL ROADWAY MOBILIZATION **$ 285,600**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066070	Maintain Traffic	LS	1	x	4,000.00	= $	4,000
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	11,100.00	= $	11,100
066921	Dispute Resolution Advisor	LS	1	x	5,000.00	= $	5,000
066015	Federal Trainee Program	LS	1	x	4,800.00	= $	4,800
066610	Partnering	LS	1	x	20,000.00	= $	20,000
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					= $	-
	Total Section 1-8	$ 5,711,900			1%	= $	57,200

TOTAL SUPPLEMENTAL WORK **$ 102,100**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066105	Resident Engineers Office	LS	1	x	140,350.00	=	$140,350
066063	Traffic Management Plan - Public Information	LS	1	x	2,000.00	=	$2,000
066062	COZEEP Contract	LS	1	x	50,000.00	=	$50,000
XXXXXX	401 Annual Fees	LS	1	x	18,000.00	=	$18,000
XXXXXX	General Construction Permit	LS	1	x	30,000.00	=	$30,000
	Total Section 1-8	$	5,711,900		0.5%	= $	28,600

TOTAL STATE FURNISHED	**$269,000**

SECTION 12: TIME-RELATED OVERHEAD

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **3%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	250	X	$686	=	$171,400

TOTAL TIME-RELATED OVERHEAD	**$171,400**

SECTION 13: ROADWAY CONTINGENCY

Total Section 1-12	$	6,540,000	x	**18%**	=	$1,153,656	

TOTAL CONTINGENCY*	**$1,153,700**

II. STRUCTURE ITEMS

Bridge 1

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Bridge Name	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Number of Transitions	0 LF	0 LF	0 LF
Length Per Transition	0 LF	0 LF	0 LF
Total Length of Transitions	0 SQFT	0 SQFT	0 SQFT
Cost Per Linear Foot	$0	$0	$0
COST OF EACH	**$0**	**$0**	**$0**

Building 1

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Building Name	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total Building Length (Feet)	0 LF	0 LF	0 LF
Total Area (Square Feet)	0 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	0 LF	0 LF	0 LF
Footing Type (pile or spread	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0	$0	$0
COST OF EACH	**$0**	**$0**	**$0**

TOTAL COST OF BRIDGES		**$0**
TOTAL COST OF BUILDINGS		**$0**
Time-Related Overhead	10%	**$0**
STRUCTURES MOBILIZATION	10%	**$0**
STRUCTURES CONTINGENCY*	25%	**$0**
TOTAL COST OF STRUCTURES		**$0**

Estimate Prepared By: _____ _____

XXXXXXXXXXXXXXXX ------ Division of Structures Date

EA: 01-0K940K PID: 0121000033

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

				Current Value Future Use		*Escalated Value*
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	$	487,500	$	626,109
	A2)	Acquisition of Offsite Mitigation	$	1,575,000	$	2,047,021
	A3)	Railroad Acquisition	$	0	$	0
B)	B1)	Utility Relocation (State Share)	$	90,000	$	116,973
	B2)	Potholing (Design Phase)	$	0	$	0
C)		Utility - Advance Engineering Estimate (Encumber with State Only Funds)	$	0	$	0
D)		RAP and/or Last Resort Housing	$	0	$	0
E)		Clearance & Demolition	$	0	$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs	$	0	$	0
G)		Title and Escrow	$	14,000	$	18,196
H)		Environmental Review	$	0	$	0
I)		Condemnation Settlements 0%	$	0	$	0
J)		Design Appreciation Factor 0%	$	0	$	0
K)		Utility Relocation (Construction Cost)	$	0	$	0

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$2,167,000**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$2,808,000**
N)	**RIGHT OF WAY SUPPORT**	**$643,000**

Support Cost Estimate Prepared By _____ Project Coordinator[1] _____ Phone

Utility Estimate Prepared By _____ Utility Coordinator[2] _____ Phone

R/W Acquisition Estimate Prepared By _____ Right of Way Estimator[3] _____ Phone

PROJECT

PLANNING COST ESTIMATE ©

EA: 01-0K940K PID: 0121000033

EA: 01-0K940K

PID: 0121000033

District-County-Route: 01-HUM-101

PM: 73.3/76.1

Type of Estimate : PID

Program Code : 201.999

Project Limits : IN HUMBOLDT COUNTY IN AND NEAR EUREKA FROM 0.3 MI SOUTH OF SPRUCE PT NB OFF RAMP TO 0.1 MI NORTH OF TRUESDALE STREET

Project Description: Mobility Improvements

Scope : Class I shared use path from Herrick Ave to Papa & Barkley Co., widening from Papa & Barkley Co. to Lithia, Class IV separated bikeways from Papa & Barkley Co. to Truesdale St, bus pads/stops at 76 gast station/Pacific Motorsports and at McCullens Ave, pedestrian crossings near Hilfiker Lane and Highland Avenue, and a bicycle crossing treatment between Highland Ave and Truesdale St

Alternative : 3

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 7,564,000	$ 8,989,000
TOTAL STRUCTURES COST	$ 800,000	$ 951,000
SUBTOTAL CONSTRUCTION COST	$ 8,364,000	$ 9,940,000
TOTAL RIGHT OF WAY COST	$ 609,000	$ 784,000
TOTAL CAPITAL OUTLAY COSTS	$ 8,973,000	$ 10,724,000
PA/ED SUPPORT	$ 2,803,000	$ 2,902,000
PS&E SUPPORT	$ 2,401,000	$ 2,617,000
RIGHT OF WAY SUPPORT	$ 591,000	$ 643,000
CONSTRUCTION SUPPORT	$ 2,781,000	$ 3,147,000
TOTAL SUPPORT COST	$ 8,576,000	$ 9,309,000
TOTAL PROJECT COST	$ 17,549,000	$ 20,033,000 *

Programmed Amount

	Month	/ Year
Date of Estimate (Month/Year)	7	/ 2021
Estimated Construction Start (Month/Year)	3	/ 2026
Number of Working Days =	250	
Estimated Mid-Point of Construction (Month/Year)	1	/ 2027
Estimated Construction End (Month/Year)	12	/ 2027
Number of Plant Establishment Days	250	

Estimated Project Schedule

PID Approval	7/23/2021
PA/ED Approval	2/21/2024
PS&E	9/18/2025
RTL	10/7/2025
Begin Construction	3/17/2026

Reviewed by District O.E. or Cost Estimate Certifier	Ali Salehi	6/21/2021	530-821-3956
	Office Engineer / Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager		7/22/21	707-498-0961
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	384,900
2	**Pavement Structural Section**	$	1,714,500
3	**Drainage**	$	720,700
4	**Specialty Items**	$	173,000
5	**Environmental**	$	465,000
6	**Traffic Items**	$	2,042,000
7	**Detours**	$	-
8	**Minor Items**	$	55,100
9	**Roadway Mobilization**	$	277,800
10	**Supplemental Work**	$	100,400
11	**State Furnished**	$	327,200
12	**Time-Related Overhead**	$	166,700
13	**Total Roadway Contingency**	$	1,135,800
	TOTAL ROADWAY ITEMS	**$**	**7,563,100**

Estimate Prepared By : Joseph Caminiti, Designer, (707) 684-6921 and Harrison Rankin, Designer, (707) 684-6985 — 7/2/2021
Name and Title — Date

Estimate Reviewed By : Dawn Yang, Project Engineer, (707) 296-6752 — 7/2/2021
Name and Title — Date

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	3,210	x	85.00	=	$	272,850
160102	Clearing & Grubbing	LS	1	x	15,000.00	=	$	15,000
198010	Imported Borrow (CY) (May Include GRE)	CY	970	x	100.00	=	$	97,000

TOTAL EARTHWORK SECTION ITEMS $ 384,900

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
153123	Remove Concrete	SQYD	1,390	x	50.00	=	$	69,500
731700	Remove Curb	LF	1,980	x	20.00	=	$	39,600
393004	Geosynthetic Pavement Interlayer (Paving Fabric)	SQYD	230	x	25.00	=	$	5,750
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON	1	x	1,500.00	=	$	1,500
198209	Subgrade Enahncement Geotextile, Class B2	SQYD	3,110	x	3.50	=	$	10,885
260203	Class 2 Aggregate Base (Cy)	CY	1,510	x	105.00	=	$	158,550
280000	Lean Concrete Base	CY	40	x	500.00	=	$	20,000
390100	Prime Coat	TON	5	x	1,500.00	=	$	7,500
390132	Hot Mix Asphalt (Type A)	TON	1,220	x	200.00	=	$	244,000
397005	Tack Coat	TON	18	x	1,500.00	=	$	27,000
378000	Micro-surfacing (type II)	TON	400	x	350.00	=	$	140,000
401050	Jointed Plain Concrete Pavement (Bus Pads)	CY	70	x	1,000.00	=	$	70,000
731504	Minor Concrete (Curb and Gutter)	CY	370	x	1,000.00	=	$	370,000
731521	Minor Concrete (Sidewalk)	CY	90	x	1,000.00	=	$	90,000
731511	Minor Concrete (Island Paving)	CY	10	x	1,400.00	=	$	14,000
731516	Minor Concrete (Driveway)	CY	70	x	1,800.00	=	$	126,000
731530	Minor Concrete (Textured Paving)	CY	34	x	1,400.00	=	$	47,600
731623	Minor Concrete (Curb Ramp)	CY	10	x	2,500.00	=	$	25,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	5,800	x	12.00	=	$	69,600
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	260	x	50.00	=	$	13,000
XXXXXX	Wire Mesh Reinforcement	LS	1	x	15,000.00	=	$	15,000
XXXXXX	Digouts	LS	1	x	50,000.00	=	$	50,000
XXXXXX	Widening Along Pound Road	LS	1	x	100,000.00	=	$	100,000

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS $ 1,714,500

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Remove Drainage Inlet	EA	13	x	1,350.00	=	$	17,550
510094	Structural Concrete, Drainage Inlet	CY	51	x	3,200.00	=	$	163,200
750001	Miscellaneous Iron and Steel	LB	17,460	x	4.00	=	$	69,840
XXXXXX	24" Alternative Pipe Culvert	LF	1,567	x	300.00	=	$	470,100
						TOTAL DRAINAGE ITEMS	**$**	**720,700**

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
839521	Cable Railing	LF	300	x	75.00	=	$	22,500
XXXXXX	Two Small Standard Plan Retaining Walls	LS	1	x	90,000.00	=	$	90,000
XXXXXX	Construction Contract Work from RWDS	LS	1	x	60,500.00	=	$	60,500
						TOTAL SPECIALTY ITEMS	**$**	**173,000**

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	LS		x		= $	-

Subtotal Environmental Mitigation $ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Highway Planting - Maintenance Agreement Required (see LAAS)	LS	1	x	115,200.00	= $	115,200
XXXXXX	Onsite Biological Planting Child EA	LS	1	x	193,300.00	= $	193,300

Subtotal Landscape and Irrigation $ *308,500*

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Erosion Control Items (see LAAS)	LS	1	x	33,410.00	= $	33,410

Subtotal Erosion Control $ *33,410*

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Construction BMPs	LS	1	x	123,000.00	= $	123,000

Subtotal NPDES $ *123,000*

TOTAL ENVIRONMENTAL $ **465,000**

Supplemental Work for NPDES

XXXXXX	Some Item	LS		x		= $	-

Subtotal Supplemental Work for NDPS $ -

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Relocate and Replace 3 Lights	LS	1	x	105,000.00	=	$	105,000
XXXXXX	Pierson/McCullens Coordination with Hilfiker PHB	LS	1	x	100,000.00	=	$	100,000
XXXXXX	McCullens/South Bayshore Mall entrance coordination with Highland PHB	LS	1	x	30,000.00	=	$	30,000
XXXXXX	Replace Papa & Barkley Co. signal	LS	1	x	350,000.00	=	$	350,000
XXXXXX	Two PHBs (includes cost of advance warning beacons)	LS	1	x	540,000.00	=	$	540,000
XXXXXX	Pedestrian/Bicycle Count Station on Class I Path	LS	1	x	80,000.00	=	$	80,000
XXXXXX	Modify Census Station at PM 75.02 to Include Non-Motorized Counts	LS	1	x	50,000.00	=	$	50,000
XXXXXX	Class I Path Lighting	LS	1	x	100,000.00	=	$	100,000
XXXXXX	Miscellaneous Traffic Signal Upgrades	LS	1	x	50,000.00	=	$	50,000
860090	Maintain Existing Traffic Management System Elements During Construction	LS	1	x	10,000.00	=	$	10,000

Subtotal Traffic Electrical $ *1,415,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Signing and Striping Items (detail will come in 0-phase)	LS	1	x	250,000.00	=	$	250,000

Subtotal Traffic Signing and Striping $ *250,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
128652	Portable Changeable Message Sign	LS	1	x	$ 20,000	=	$	20,000
120210A	Portable Radar Feedback Sign Systems	LS	1	x	$ 20,000	=	$	20,000

Subtotal Traffic Management Plan $ *40,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
124000	Temporary Pedestrian Access Route	LS	1	x	20,000.00	=	$	20,000
120100	Traffic Control System	LS	1	x	250,000.00	=	$	250,000
120090	Construction Area Signs	LS	1	x	20,000.00	=	$	20,000
129000	Temporary Railing Type K	LF	700	x	60.00	=	$	42,000
010404	Alternative Temporary Crash Cushion	EA	1	x	5,000.00	=	$	5,000

Subtotal Stage Construction and Traffic Handling $ *337,000*

TOTAL TRAFFIC ITEMS **$ 2,042,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	Unit		x		= $	-

TOTAL DETOURS **$ -**

SUBTOTAL SECTIONS 1 through 7 $ 5,500,100

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items					
ADA Items			1.0%	$	55,001
8B - Bike Path Items					
Bike Path Items			0.0%	$	-
8C - Other Minor Items					
Other Minor Items			0.0%	$	-
Total of Section 1-7	$ 5,500,100	x	1.0%	= $	55,001

TOTAL MINOR ITEMS **$ 55,100**

SECTIONS 9: ROADWAY MOBILIZATION *

Item code							
999990	Total Section 1-8	$ 5,555,200	x	5%	= $	277,760	

TOTAL ROADWAY MOBILIZATION **$ 277,800**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066070	Maintain Traffic	LS	1	x	4,000.00	= $	4,000
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	11,000.00	= $	11,000
066921	Dispute Resolution Advisor	LS	1	x	5,000.00	= $	5,000
066015	Federal Trainee Program	LS	1	x	4,800.00	= $	4,800
066610	Partnering	LS	1	x	20,000.00	= $	20,000
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					= $	-
	Total Section 1-8	$ 5,555,200			1%	= $	55,600

TOTAL SUPPLEMENTAL WORK **$ 100,400**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066105	Resident Engineers Office	LS	1	x	140,350.00	=	$140,350
066063	Traffic Management Plan - Public Information	LS	1	x	2,000.00	=	$2,000
066062	COZEEP Contract	LS	1	x	50,000.00	=	$50,000
XXXXXX	401 Annual Fees and Revegetation	LS	1	x	77,000.00	=	$77,000
XXXXXX	General Construction Permit	LS	1	x	30,000.00	=	$30,000
	Total Section 1-8	$	5,555,200		0.5%	= $	27,800

TOTAL STATE FURNISHED **$327,200**

SECTION 12: TIME-RELATED OVERHEAD

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **3%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	250	X	$667	=	$166,700

TOTAL TIME-RELATED OVERHEAD **$166,700**

SECTION 13: ROADWAY CONTINGENCY

Total Section 1-12	$	6,427,300	x	**18%**	=	$1,135,704	

TOTAL CONTINGENCY* **$1,135,800**

EA: 01-0K940K PID: 0121000033

II. STRUCTURE ITEMS

DATE OF ESTIMATE	04/30/21		00/00/00		00/00/00
Bridge Name	Alternative 3 Class I Path Ped Bridge		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	-		57-XXX		57-XXX
Structure Type	Single Span Pedestrian Bridge		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Total Area	1450 SQFT		0 LF		0 LF
Cost Per Square Foot	$552		$0		$0
COST OF EACH	**$800,000**		**$0**		**$0**

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Building Name	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Building Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0		$0		$0
COST OF EACH	**$0**		**$0**		**$0**

TOTAL COST OF BRIDGES	**$800,000**
TOTAL COST OF BUILDINGS	**$0**
TIME-RELATED OVERHEAD (INCLUDED IN TOTALS)	**$0**
STRUCTURES MOBILIZATION (INCLUDED IN TOTALS)	**$0**
STRUCTURES CONTINGENCY (INCLUDED IN TOTALS)	**$0**
TOTAL COST OF STRUCTURES	**$800,000**

Estimate Prepared By: Ryan Stiltz — 4/30/2021

Technical Liaison Engineer, North Region — Date

EA: 01-0K940K PID: 0121000033

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

				Current Value Future Use		*Escalated Value*
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	$	504,625	$	648,366
	A2)	Acquisition of Offsite Mitigation	$	0	$	0
	A3)	Railroad Acquisition	$	0	$	0
B)	B1)	Utility Relocation (State Share)	$	90,000	$	116,973
	B2)	Potholing (Design Phase)	$	0	$	0
C)		Utility - Advance Engineering Estimate (Encumber with State Only Funds)	$	0	$	0
D)		RAP and/or Last Resort Housing	$	0	$	0
E)		Clearance & Demolition	$	0	$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs	$	0	$	0
G)		Title and Escrow	$	14,000	$	18,196
H)		Environmental Review	$	0	$	0
I)		Condemnation Settlements 0%	$	0	$	0
J)		Design Appreciation Factor 0%	$	0	$	0
K)		Utility Relocation (Construction Cost)	$	0	$	0

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$609,000**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$784,000**
N)	**RIGHT OF WAY SUPPORT**	**$643,000**

Support Cost Estimate Prepared By _____ Project Coordinator[1] _____ Phone

Utility Estimate Prepared By _____ Utility Coordinator[2] _____ Phone

R/W Acquisition Estimate Prepared By _____ Right of Way Estimator[3] _____ Phone

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

M e m o r a n d u m

Making Conservation a California Way of Life.

To: JOSEPH CAMINITI
PROJECT ENGINEER
DISTRICT 1

Date: April 30, 2021

File: EA: 01-0K940
0121000033
01-Hum-101

From: RYAN STILTZ
Technical Liaison Engineer, North Region

Subject: **PIR ESTIMATE**

The Division of Engineering Services – Structure Design has prepared a Structure PIR Cost Estimate for the above referenced project for a 145' Pedestrian Bridge adjacent to Hwy 101 over a wetland area, in response to the PIR request dated March 30, 2021, from Joseph Caminiti, District 01-Advance Planning.

The estimated construction cost, including 10% time-related overhead, 10% mobilization and 25% contingencies, are as follows:

Single Span Pedestrian Bridge accommodating a 10' bike path, spanning 145' environmentally sensitive area

Structure	Br. No.	Estimated Structure Cost Range		Recommended Structure Cost for Programming
		Low	High	
145' Single Span Pedestrian Bridge	TBD	$700,000	$900,000	$800,000

The following design parameters apply to the Pedestrian Bridge:

1. Pedestrian Bridge will be a single span steel truss arched pedestrian bridge with bridge length of 145'.
2. Bridge design shall accommodate pedestrian loads or utility vehicle load.
3. Pedestrian bridge assumed as a premanufactured structural steel bridge
4. Steel pedestrian bridge shall be painted after erection.
5. 6" thick structure concrete (polymer fiber) deck on corrugated aluminum prefabricated deck panels assumed.
6. Foundations assumed to be driven H-pile foundations.
7. Lighting for bridge to be supplied by District.

The following assumptions and corresponding RISKS and OPPORTUNITIES are associated with the PIR estimate; these risks and opportunities are also identified on the attached Structure Risk Identification Spreadsheet:

1. A detailed Advance Planning Study was not developed as part of this estimate. As a result of an Advance Planning Study being developed during the PA&ED phase, a change in the PIR structure scope may be found necessary, which could result in an increase in the construction and support costs.
2. Driven H-pile foundations are assumed for abutments. If drilling in the zero phase indicates shallow spread footings are suitable at abutments, there is an opportunity to decrease the structures cost.
3. Steel Bridge design assumes that the steel pedestrian bridge is classified as a “minor bridge” structure per Structure Technical Policy 6.2. Approval of “minor bridge” designation will be required at structures Type Selection. If bridge is not classified as a “minor bridge” and requires “major bridge” designation, additional cost for bridge may be anticipated.

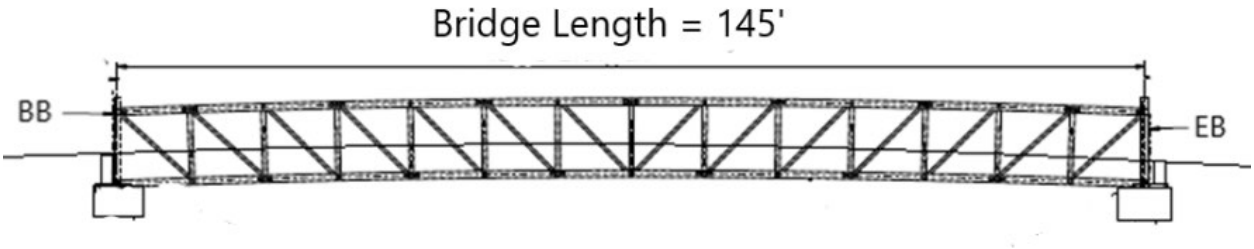
The above estimate should be considered preliminary pending a more comprehensive PA&ED phase Advance Planning Study effort with DES functional unit recommendations.

No working day estimate is provided with a Structure PIR Cost Estimate.

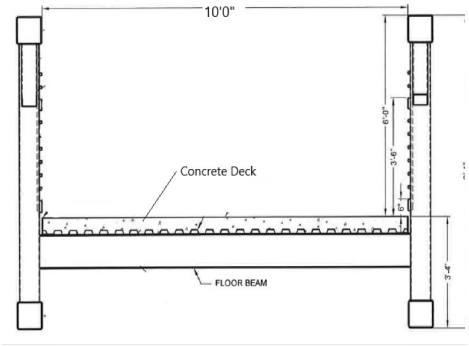
If you have any questions or if you need additional information regarding this cost estimate, please contact Ryan Stiltz at (916) 743-0211.

Attachments
(1) District Vicinity Map, Layout, and Typical Section
(2) Risk Identification Spreadsheet

c: JAIME MATTEOLI, Project Manager, District 1
DAN ADAMS, Office Chief, Bridge Design North
RICH MELKO, Structure Design, Task Management Support Unit
KADAMBARI TOKE, Project Liaison Engineer
THOMAS SONG, Office Chief, Geotechnical Design North
STEVE HARVEY, Office Chief, Structure Construction
EROL KASLAN, Deputy Chief, Structure Maintenance and Investigation
RONNIE LE, Program Advisor, Structure Maintenance & Investigatio



Concept Pedestrian Bridge Elevation View



Typical Section

PROJECT

PLANNING COST ESTIMATE ©

EA: 01-0K940K PID: 0121000033

EA: 01-0K940K

PID: 0121000033

District-County-Route: 01-HUM-101

PM: 73.3/76.1

Type of Estimate : PID

Program Code : 201.999

Project Limits : IN HUMBOLDT COUNTY IN AND NEAR EUREKA FROM 0.3 MI SOUTH OF SPRUCE PT NB OFF RAMP TO 0.1 MI NORTH OF TRUESDALE STREET

Project Description: Mobility Improvements

Scope : Widening from Papa & Barkley Co. to Lithia, Class IV separated bikeways from Papa & Barkley Co. to Truesdale St, bus pads/stops at 76 gast station/Pacific Motorsports and at McCullens Ave, pedestrian crossings near Hilfiker Lane and Highland Avenue, and a bicycle crossing treatment between Highland Ave and Truesdale St

Alternative : 4 (Programmable Alternative)

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 6,245,000	$ 7,084,000
TOTAL STRUCTURES COST	$ -	$ -
SUBTOTAL CONSTRUCTION COST	$ 6,245,000	$ 7,084,000
TOTAL RIGHT OF WAY COST	$ 555,000	$ 634,000
TOTAL CAPITAL OUTLAY COSTS	$ 6,800,000	$ 7,718,000
PA/ED SUPPORT	$ 1,334,000	$ 1,380,000
PS&E SUPPORT	$ 1,229,000	$ 1,340,000
RIGHT OF WAY SUPPORT	$ 552,000	$ 601,000
CONSTRUCTION SUPPORT	$ 1,290,000	$ 1,461,000
TOTAL SUPPORT COST	$ 4,405,000	$ 4,782,000
TOTAL PROJECT COST	$ 11,205,000	$ 12,500,000 *

Programmed Amount

	Month	/	Year
Date of Estimate (Month/Year)	7	/	2021
Estimated Construction Start (Month/Year)	12	/	2024
Number of Working Days =	200		
Estimated Mid-Point of Construction (Month/Year)	6	/	2025
Estimated Construction End (Month/Year)	12	/	2025
Number of Plant Establishment Days	250		

Estimated Project Schedule

PID Approval	7/23/2021
PA/ED Approval	6/21/2023
PS&E	4/8/2024
RTL	6/3/2024
Begin Construction	12/3/2024

Reviewed by District O.E. or Cost Estimate Certifier	Ali Salehi	6/21/2021	530-821-3956
	Office Engineer / Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager		7/22/21	707-498-0961
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	207,400
2	**Pavement Structural Section**	$	1,432,800
3	**Drainage**	$	720,700
4	**Specialty Items**	$	173,000
5	**Environmental**	$	217,700
6	**Traffic Items**	$	1,787,000
7	**Detours**	$	-
8	**Minor Items**	$	45,400
9	**Roadway Mobilization**	$	229,200
10	**Supplemental Work**	$	85,100
11	**State Furnished**	$	243,900
12	**Time-Related Overhead**	$	137,600
13	**Total Roadway Contingency**	$	964,700
	TOTAL ROADWAY ITEMS	**$**	**6,244,500**

Estimate Prepared By : Joseph Caminiti, Designer, (707) 684-6921 and Harrison Rankin, Designer, (707) 684-6985 — 7/2/2021
Name and Title — Date

Estimate Reviewed By : Dawn Yang, Project Engineer, (707) 296-6752 — 7/2/2021
Name and Title — Date

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	2,410	x	85.00	=	$	204,850
160102	Clearing & Grubbing	LS	1	x	2,500.00	=	$	2,500

TOTAL EARTHWORK SECTION ITEMS $ 207,400

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
153123	Remove Concrete	SQYD	1,390	x	50.00	=	$	69,500
731700	Remove Curb	LF	1,980	x	20.00	=	$	39,600
393004	Geosynthetic Pavement Interlayer (Paving Fabric)	SQYD	230	x	25.00	=	$	5,750
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON	1	x	1,500.00	=	$	1,500
260203	Class 2 Aggregate Base (Cy)	CY	820	x	105.00	=	$	86,100
280000	Lean Concrete Base	CY	40	x	500.00	=	$	20,000
390100	Prime Coat	TON	3	x	1,500.00	=	$	4,500
390132	Hot Mix Asphalt (Type A)	TON	820	x	200.00	=	$	164,000
397005	Tack Coat	TON	18	x	1,500.00	=	$	27,000
378000	Micro-surfacing (type II)	TON	400	x	350.00	=	$	140,000
401050	Jointed Plain Concrete Pavement (Bus Pads)	CY	70	x	1,000.00	=	$	70,000
731504	Minor Concrete (Curb and Gutter)	CY	370	x	1,000.00	=	$	370,000
731521	Minor Concrete (Sidewalk)	CY	90	x	1,000.00	=	$	90,000
731511	Minor Concrete (Island Paving)	CY	10	x	1,400.00	=	$	14,000
731516	Minor Concrete (Driveway)	CY	70	x	1,800.00	=	$	126,000
731530	Minor Concrete (Textured Paving)	CY	23	x	1,400.00	=	$	32,200
731623	Minor Concrete (Curb Ramp)	CY	10	x	2,500.00	=	$	25,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	5,800	x	12.00	=	$	69,600
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	260	x	50.00	=	$	13,000
XXXXXX	Wire Mesh Reinforcement	LS	1	x	15,000.00	=	$	15,000
XXXXXX	Digouts	LS	1	x	50,000.00	=	$	50,000

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS $ 1,432,800

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Remove Drainage Inlet	EA	13	x	1,350.00	=	$	17,550
510094	Structural Concrete, Drainage Inlet	CY	51	x	3,200.00	=	$	163,200
750001	Miscellaneous Iron and Steel	LB	17,460	x	4.00	=	$	69,840
XXXXXX	24" Alternative Pipe Culvert	LF	1,567	x	300.00	=	$	470,100
						TOTAL DRAINAGE ITEMS	**$**	**720,700**

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
839521	Cable Railing	LF	300	x	75.00	=	$	22,500
XXXXXX	Two Small Standard Plan Retaining Walls	LS	1	x	90,000.00	=	$	90,000
XXXXXX	Construction Contract Work from RWDS	LS	1	x	60,500.00	=	$	60,500
						TOTAL SPECIALTY ITEMS	**$**	**173,000**

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	LS		x		= $	-

Subtotal Environmental Mitigation $ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Highway Planting - Maintenance Agreement Required (see LAAS)	LS	1	x	123,200.00	= $	123,200

Subtotal Landscape and Irrigation $ *123,200*

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	LS		x		= $	-

Subtotal Erosion Control $ -

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Construction BMPs	LS	1	x	94,500.00	= $	94,500

Subtotal NPDES $ *94,500*

TOTAL ENVIRONMENTAL **$ 217,700**

Supplemental Work for NPDES

XXXXXX	Some Item	LS		x		= $	-

Subtotal Supplemental Work for NDPS $ -

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Relocate and Replace 3 Lights	LS	1	x	105,000.00	=	$	105,000
XXXXXX	Pierson/McCullens Coordination with Hilfiker PHB	LS	1	x	100,000.00	=	$	100,000
XXXXXX	McCullens/South Bayshore Mall entrance coordination with Highland PHB	LS	1	x	30,000.00	=	$	30,000
XXXXXX	Replace Papa & Barkley Co. signal	LS	1	x	350,000.00	=	$	350,000
XXXXXX	Two PHBs (includes cost of advance warning beacons)	LS	1	x	540,000.00	=	$	540,000
XXXXXX	Modify Census Station at PM 75.02 to Include Non-Motorized Counts	LS	1	x	50,000.00	=	$	50,000
XXXXXX	Miscellaneous Traffic Signal Upgrades	LS	1	x	50,000.00	=	$	50,000
860090	Maintain Existing Traffic Management System Elements During Construction	LS	1	x	10,000.00	=	$	10,000

Subtotal Traffic Electrical $ *1,235,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXXX	Signing and Striping Items (detail will come in 0-phase)	LS	1	x	225,000.00	=	$	225,000

Subtotal Traffic Signing and Striping $ *225,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
128652	Portable Changeable Message Sign	LS	1	x	$ 20,000	=	$	20,000
120210A	Portable Radar Feedback Sign Systems	LS	1	x	$ 20,000	=	$	20,000

Subtotal Traffic Management Plan $ *40,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
124000	Temporary Pedestrian Access Route	LS	1	x	20,000.00	=	$	20,000
120100	Traffic Control System	LS	1	x	200,000.00	=	$	200,000
120090	Construction Area Signs	LS	1	x	20,000.00	=	$	20,000
129000	Temporary Railing Type K	LF	700	x	60.00	=	$	42,000
010404	Alternative Temporary Crash Cushion	EA	1	x	5,000.00	=	$	5,000

Subtotal Stage Construction and Traffic Handling $ *287,000*

TOTAL TRAFFIC ITEMS **$ 1,787,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
XXXXXX	Some Item	Unit		x		=	$ -

TOTAL DETOURS **$ -**

SUBTOTAL SECTIONS 1 through 7 $ 4,538,600

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items						
ADA Items			1.0%	$	45,386	
8B - Bike Path Items						
Bike Path Items			0.0%	$	-	
8C - Other Minor Items						
Other Minor Items			0.0%	$	-	
Total of Section 1-7	$ 4,538,600	x	1.0%	=	$ 45,386	

TOTAL MINOR ITEMS **$ 45,400**

SECTIONS 9: ROADWAY MOBILIZATION *

Item code							
999990	Total Section 1-8	$ 4,584,000	x	5%	=	$	229,200

TOTAL ROADWAY MOBILIZATION **$ 229,200**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066070	Maintain Traffic	LS	1	x	4,000.00	=	$ 4,000
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	5,400.00	=	$ 5,400
066921	Dispute Resolution Advisor	LS	1	x	5,000.00	=	$ 5,000
066015	Federal Trainee Program	LS	1	x	4,800.00	=	$ 4,800
066610	Partnering	LS	1	x	20,000.00	=	$ 20,000
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					=	$ -
	Total Section 1-8	$ 4,584,000			1%	=	$ 45,900

TOTAL SUPPLEMENTAL WORK **$ 85,100**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066105	Resident Engineers Office	LS	1	x	123,850.00	=	$123,850
066063	Traffic Management Plan - Public Information	LS	1	x	2,000.00	=	$2,000
066062	COZEEP Contract	LS	1	x	50,000.00	=	$50,000
XXXXXX	Tribal Monitoring During Construction	LS	1	x	15,000.00	=	$15,000
XXXXXX	General Construction Permit	LS	1	x	30,000.00	=	$30,000
	Total Section 1-8		$ 4,584,000		0.5%	=	$ 23,000

TOTAL STATE FURNISHED	$243,900

SECTION 12: TIME-RELATED OVERHEAD

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **3%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	200	X	$688	=	$137,600

TOTAL TIME-RELATED OVERHEAD	$137,600

SECTION 13: ROADWAY CONTINGENCY

	Total Section 1-12	$	5,279,800	x	**18%**	=	$964,620

TOTAL CONTINGENCY*	$964,700

II. STRUCTURE ITEMS

DATE OF ESTIMATE	04/30/21		00/00/00		00/00/00
Bridge Name	Alternative 3 Class I Path Ped Bridge		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	-		57-XXX		57-XXX
Structure Type	Single Span Pedestrian Bridge		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Total Area	1450 SQFT		0 LF		0 LF
Cost Per Square Foot	$552		$0		$0
COST OF EACH	**$0**		**$0**		**$0**

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Building Name	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Building Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0		$0		$0
COST OF EACH	**$0**		**$0**		**$0**

TOTAL COST OF BRIDGES	**$0**
TOTAL COST OF BUILDINGS	**$0**
TIME-RELATED OVERHEAD (INCLUDED IN TOTALS)	**$0**
STRUCTURES MOBILIZATION (INCLUDED IN TOTALS)	**$0**
STRUCTURES CONTINGENCY (INCLUDED IN TOTALS)	**$0**
TOTAL COST OF STRUCTURES	**$0**

Estimate Prepared By: _____ _____

Technical Liaison Engineer, North Region — Date

EA: 01-0K940K PID: 0121000033

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

				Current Value Future Use		*Escalated Value*
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	$	453,375	$	517,002
	A2)	Acquisition of Offsite Mitigation	$	0	$	0
	A3)	Railroad Acquisition	$	0	$	0
B)	B1)	Utility Relocation (State Share)	$	90,000	$	103,368
	B2)	Potholing (Design Phase)	$	0	$	0
C)	Utility - Advance Engineering Estimate (Encumber with State Only Funds)		$	0	$	0
D)	RAP and/or Last Resort Housing		$	0	$	0
E)	Clearance & Demolition		$	0	$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)		$	0	$	0
G)	Title and Escrow		$	11,500	$	13,208
H)	Environmental Review		$	0	$	0
I)	Condemnation Settlements 0%		$	0	$	0
J)	Design Appreciation Factor 0%		$	0	$	0
K)	Utility Relocation (Construction Cost)		$	0	$	0

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$555,000**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$634,000**
N)	**RIGHT OF WAY SUPPORT**	**$601,000**

Support Cost Estimate Prepared By _____ Project Coordinator[1] Phone

Utility Estimate Prepared By _____ Utility Coordinator[2] Phone

R/W Acquisition Estimate Prepared By _____ Right of Way Estimator[3] Phone

ATTACHMENT C

Mini-Preliminary Environmental Assessment Report

NORTH REGION ENVIRONMENTAL
PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT (PEAR)

DATE: 6/16/2021

TO: Dawn Yang
Project Engineer

707-296-6752
Phone Number

FROM: Kellie Eldridge
Environmental Planner

707-815-6995
Phone Number

CO-RTE-PM: HUM-101-PM 74.8/76.0
EFIS Number: 0121000033
EA: 01-0K940
Project Nickname: Broadway Complete Streets

FUNDING SOURCE(S): (check all that apply)

☒ State ☒ Federal
☐ Local ☐ Measure Funded
☐ Safety Project (010 Programming Code)
☐ Other:

ANTICIPATED ENVIRONMENTAL APPROVAL

CEQA: **Initial Study (ND/MND)**
NEPA: **Categorical Exclusion (23 USC 327)**

HQ DEA Environmental Concurrence with NEPA Class of Action date:
☒ N/A

SCHEDULE

Task	**Time Needed** This is the time needed from the date the ESR has been received and has been determined complete.**
Begin Env to DED:	16 Months
DED to PA&ED:	6 Months
Begin Env to PA&ED (CE/CE only):	—
PA&ED to RTL:*	12 Months

***Time for permits (This project is located in both Local and State Coastal jurisdictions) + 3 months between Draft PS&E (M300) and RTL (M460).**
****Suggest adding 3 months to schedule prior to DED (or PA&ED if no DED) to provide Design enough time to prepare an ESR that is considered "complete" per the ESR Submittal Guidance Checklist.**

PRELIMINARY DESIGN INFORMATION

Does the project involve any of the following?

☒ New alignment **(Alt 1, 2, & 3)**
☐ Road realignment
☒ Road widening
☒ Bridge work **(Alt 3)**
☒ Road cut/fill
☐ Detours
☒ Grinding
☐ Construct access roads
☒ Disposal/borrow site(s) **(Alt 1, 2, & 3)**
☒ Equipment staging area
☒ Drainage/culverts
☒ 100-year floodplain
☐ Establish CRZ
☐ Railroad
☐ NPS, USFS, BLM, DPR, or other State/Federal lands
☐ Ramp closure
☒ R/W acquisition
☒ Temporary easements
☒ Utility relocation
☒ Ground disturbance: Est. max. depth: TBD
☒ Vegetation removal
☒ Tree removal
☒ Retaining/Sound walls
☒ Pile driving
☐ Seasonal constr. window
☒ Night work
☐ Blasting
☐ Stream bed, bank, and channel work
☐ Other:

SUMMARY STATEMENT

The Environmental Division has prepared this Mini-PEAR to identify environmental issues, constraints, costs, and resource needs associated with the project. Staff did not conduct field reviews or complete technical studies; therefore, these efforts will be required in the PA&ED Phase.

This project was originally scoped with three alternatives, with Alternative 3 proposed as the Programmed Alternative. On June 14, 2021, a revised ESR was provided with an additional alternative, with Alternative 4 being the proposed Programmed Alternative. This PEAR has been updated to include information on Alternative 4.

Based on the scope of this project, studies may be needed for noise, air, energy, hazardous waste, water quality, floodplains, and biological, Section 4(f), visual, and cultural resources. Task Orders will be required to complete cultural resource and hazardous waste studies.

Alternative 4 is within the coastal zone (within both the State's and Eureka City's jurisdiction), and is anticipated to require either two Coastal Development Permits or one consolidated State Coastal Permit. Other permits are not anticipated. In addition, impacts to wetlands and other Environmentally Sensitive Habitat Areas (ESHAs) are not anticipated, and therefore permit-driven mitigationis not anticipated.

This project would visually result in more development; it is recommended that softscape and decorative hardscape features be included in the project. Coordination with local community stakeholders and the City of Eureka would be required for these features.

Because the project is located within culturally sensitive areas, the project archaeologist should be consulted prior to any ground-disturbing activities (e.g., wetland delineations).

This project is anticipated to impact sites on the Cortese List. Hazardous waste investigations will be conducted to determine any issues and provide information on handling and disposal requirements of materials, if needed.

The environmental document is scoped as a California Environmental Quality Act (CEQA) Initial Study (IS) and National Environmental Policy Act (NEPA) Categorical Exclusion (CE) due to hazardous waste issues.

Note: This project is a segment of the Broadway Corridor Plan for the City of Eureka. Additional information about this plan can be found online at https://www.eurekabroadwaycorridorplan.com/.

Note 2: In addition to a CDP, Alternatives 1, 2, and 3 are anticipated to impact wetlands and other ESHAs, and would likely require a Lake and Streambed Alteration Agreement (LSAA), Section 401 Certification, and Section 404 Permit. In addition, a separate environmental document/clearence, CDP, and other permits may be required for geotechnical activities.

For Alternative 1, 2, and 3, permit-driven mitigation is anticipated at a 4:1 ratio. Alternatives 1 and 2 would have the greatest amount of impacts and mitigation costs, and Alternative 3 would have the least. It is anticipated that Alternatives 1 and 2 would require offsite mitigation, while Alternative 3 could potentially be offset onsite.

Additional time and resources would be needed if Alternatives 1, 2, or 3 were programmed.

Environmental Assumptions and Risks are presented at the end of this document.

ANTICIPATED ENVIRONMENTAL EFFICIENCIES IN THE ENVIRONMENTAL STUDY PHASE

☐ None ☐ Field review not required ☐ Use Water Quality Assessment Checklist ☒ PEAR Mitigation Checklist

PURPOSE AND NEED STATEMENT (Purpose: project goal; Need: identified transportation deficiency)

Purpose: The purpose of this project is to increase pedestrian and bicyclist safety, connectivity, and level of comfort, and to improve accessibility and on-time performance of the transit facility.

Need: Broadway serves as a main street through the City of Eureka and is one of the busiest corridors in District 1. Volumes (33,000 AADT), speed limits (40-55 MPH), and the number of lanes (two in each direction plus a two-way left turn lane), make Broadway a barrier for pedestrians and cyclists. There are no bicycle facilities on the corridor. Marked pedestrian crossings are widely spaced and there are no sidewalks south of 75.138. Three transit routes operate in the project area. Transit generally runs behind schedule due to the inability to merge back into traffic after stops. Because of these conditions, surrounding residential communities are discouraged from using active transportation to access destinations on Broadway, local and regional transit on Broadway, and the regional trail network.

PROJECT DESCRIPTION

This project, located between post miles (PM) 74.8 and 76.0 along U.S. Highway 101 (U.S. 101) in Eureka, California, is intended to enhance connectivity and safety for bicyclists and pedestrians. The project proposes to add Class 1 and Class 4 bike facilities. Class 1 bike facilities would connect the existing park and ride facility near the Herrick and U.S. interchange with a Class 4 bike facility along U.S. 101/Broadway.

The Class 1 facility, from the Herrick and U.S. 101 interchange to the signalized intersection just to the north (PM 74.8 to PM 75.2) has been proposed for three of the four different alternatives:

- *Alternative 1:* This alternative follows the existing U.S. 101 highway alignment. High tension cable barrier and a narrow bioswale have been proposed between U.S. 101 and the Class 1 facility.
- *Alternative 2:* This alternative proposes the Class 1 facility to be constructed along an existing City of Eureka maintenance road. This road would be repaved with a new structural section. This alternative includes a portion of the first alternative's alignment.
- *Alternative 3:* This alternative proposes the Class 1 facility to be constructed along an existing City of Eureka maintenance road. This road would be repaved with a new structural section. An approximately 14-foot wide, 145-foot long bridge is proposed to span an existing wetland area to connect U.S. 101 and the maintenance road.

Alternative 4 (Programmed Alternative) will not include the Class 1 facility, but instead replaces the Class 1 with Class 2 bike lanes within Caltrans right of way within this segment of highway.

The Class 4 facility is proposed from the signalized intersection, where the Class 1 facility ends, to the intersection of Truesdale Street and Broadway (PM 75.2 to PM 76.0). Within the Class 4 segment, two new bus stops are proposed; these bus stops would require sidewalk modification and widening. Where there is limited width available, Class 2 bike facilities will be implemented. Vertical separation for the Class 4 bike facility is still being investigated and remains to be determined.

Other relevant work for the project include highway cold planning and overlay from the signalized intersection at PM 75.2 to just north of Truesdale Street at PM 76.0, drainage work at various locations, two midblock pedestrian crossings with either a rectangular rapid flashing beacon or pedestrian hybrid beacon (TBD), one median bikeway crossing, sidewalk/curb ramp work as needed, bus pads and bus stop upgrades, two new bus stops, construction of a protected intersection at the signalized intersection at PM 75.2 (which includes replacing the signal), and upgrading signals to have bicycle signals and non-motorized phases.

ENVIRONMENTAL CONSIDERATIONS

General

1.	Does the project have independent utility and logical termini?	Yes
2.	Is the project anticipated to generate public controversy?	No
3.	Is Public Outreach during the K-Phase recommended?	Yes - Public Meeting

Noise

4.	Is the project a Type 1 project as defined in 23 CFR 772.5(h) (construction on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes)?	No
5.	Does the project have the potential for adverse construction-related noise impacts (such as related to pile driving)?	TBD

Explain "Yes" and "TBD" responses:

A traffic noise analysis is not required for this project; a memo will be prepared. Potential noise impacts during construction is to be determined; pile driving may be required for the Alternative 3 bridge location.

Required Technical Studies and Analyses: Technical Memorandum

Air Quality

6.	Is the project in a NAAQS non-attainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide, PM2.5, or PM10 per U.S. EPA's Green Book listing of nonattainment areas? [If "No," stop here. Transportation conformity does not apply to the project.]	No
7.	Is the project exempt from project-level conformity? [If "Yes," stop here. The project is exempt from project-level conformity requirements.] ☐ 40 CFR 93.126 Table 2 category: ☐ 40 CFR 93.128 Traffic signal synchronization	--
8.	Is the project exempt from regional conformity? If "Yes," state which conformity exemption in 40 CFR 93.127 Table 3 applies:	--
9.	Is the project:	

• In a metropolitan non-attainment/maintenance area?	--
• In an isolated rural non-attainment area?	--
• In a CO, PM10, and/or PM2.5 non-attainment/maintenance area?	--

Explain "Yes" and "TBD" responses:

The project is located in an area designated as in attainment or unclassified for all National Ambient Air Quality Standards (NAAQS). Therefore, transportation conformity requirements do not apply. However, the proposed project location is designated as a nonattainment area for State PM_{10} Standards. An air quality study with short and long-term impacts analysis would be needed due to construction of two new bus stops and intersection signalization. An energy analysis with diesel and gasoline consumption for both construction and operation is needed.

Required Technical Studies and Analyses: Technical Memorandum

Hazardous Materials/Hazardous Waste

10.	Is there potential for hazardous materials (including underground or above-ground tanks, etc.) or hazardous waste (including oil/water separators, waste oil, asbestos-containing materials, lead-based paint, ADL, etc.) within or immediately adjacent to the construction area?	Yes

Explain "Yes" and "TBD" responses:

This project may have minor hazardous waste issues. A Preliminary Site Investigation will be required to determine if the project will be impacting areas previously contaminated with Aerial Deposited Lead (ADL) where soil disturbance is proposed. In addition, an investigation will be required to determine if this project will be impacting areas that may contain residual petroleum hydrocarbons associated with historical leaking underground storage tanks (LUSTs) within the project limits where soil disturbance is proposed for bus stop development and new drainage systems.

This project will impact sites on the Cortese List.

A Task Order would be required to complete the hazardous waste studies.

Required Technical Studies and Analyses: ISA and PSI

Water Quality/Resources and Stormwater

11.	Does the project have the potential to impact water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area?	Yes
12.	Does the project trigger the need for stormwater compliance (>1 acre additional impervious surface)?	TBD
13.	If yes to #12, can Caltrans achieve compliance on-site, or would off-site alternative compliance credits be required?	TBD

Explain "Yes" and "TBD" responses:

There is marshland/wetland and slough within and adjacent to the project area that connects Elk River with Humboldt Bay. The bay is approximately a quarter mile from the project limits. There is a potential for the disturbance of more than one acre of soil; a water quality assessment will be required.

Required Technical Studies and Analyses: Water Quality Assessment Report

Coastal Zone

14.	Is the project within the Coastal Zone?	Yes
15.	Is this project anticipated to need coastal mitigation? (if yes, please complete and submit the PEAR Mitigation Checklist)	Yes

Explain "Yes" and "TBD" responses:

The project is located within the coastal zone (within both the City of Eureka's and the State's jurisdiction). A coastal development permit (CDP) would be required; a consolidated CDP could potentially be pursued. In addition, geotechnical work is anticipated at the pedestrian bridge support location for Alternative 3; a CDP may be required for drilling activities.

Required Technical Studies and Analyses/Permit: Coastal Development Permit

Floodplain

16.	Is the construction area within a regulatory floodway or within the base floodplain (100-year) elevation of a watercourse or lake?	Yes

Explain response:

Portions of this project are located in areas subject to inundation by a 1-percent-annual-chance flood event.

Required Technical Studies and Analyses: Floodplain Evaluation Report Summary

Wild and Scenic Rivers

17.	Is the project within or immediately adjacent to a Wild and Scenic River System?	No

Explain "Yes" and "TBD" responses:

Required Technical Studies and Analyses: TBD

Biological Resources

(If "Yes" to any question (18-23) complete and submit the PEAR Mitigation Checklist to Stewardship (Unit 0288).

18.	Is there a potential for state or federally listed threatened or endangered species, or their critical habitat or essential fish habitat, to occur within or adjacent to the construction area?	Yes
19.	Does the project have the potential to directly or indirectly affect migratory birds, or their nests or eggs (such as vegetation removal, box culvert replacement/repair, bridge work, etc.)?	Yes
20.	Is there a potential for aquatic resources (wetlands and/or waters) to occur within or adjacent to the construction area?	Yes
21.	Does the project have the potential to interfere with the movement of fish or wildlife, or with established migratory corridors?	No
22.	Is there opportunity or known "Areas of Interest" for improving wildlife connectivity or fish passage?	No
23.	Is there a potential for the introduction or spread of invasive plant species?	TBD

Explain "Yes" and "TBD" responses:

The Environmental Study Limits (ESL) contain habitat that may support sensitive plant and animal species. If any special status species are identified, they would either be avoided or consultation with the appropriate agency initiated. Potential environmental resources include:

- ***Plants and Natural Communities:*** Special status plant species and sensitive natural communities have the potential to be in the project area; seasonally appropriate botanical surveys and sensitive natural community mapping would be conducted.
- ***Wetlands:*** Wetlands are present within the project area. Alternatives 1, 2, and 3 are anticipated to have temporary and permanent impacts to waters; Alternative 4 is not anticipated to have impacts to waters. A wetland delineation would be required to verify impacts.
- ***ESHA:*** This project is located within the coastal zone; an Environmentally Sensitive Habitat Area (ESHA) Assessment may be needed as part of the Coastal Development Permit, to determine which areas of the project may be considered jurisdictional, such as sensitive natural communities and wetlands. Alternatives 1, 2, and 3 are anticipated to impact natural communities and wetlands. ESHA impacts are anticipated to be as follows:
  - *Alternative 1:* Approximately 0.75 acre
  - *Alternative 2:* Approximately 0.25 acre
  - *Alternative 3:* Approximately 0.15 acre
  - *Alternative 4:* No impacts anticipated

  A 4:1 mitigation ratio is anticipated for impacts to ESHA.
- ***Animals:*** Special status animal species have the potential to occur in the project area. The project area may have potential suitable habitat for the following:
  - *Amphibians:* Northern red-legged frog is a California species of special concern (SSC) and may occur within project limits, along with other amphibians. Standard protective measures would be implemented to avoid adverse effects.
  - *Fish:* Various special status fish that are federally and/or state-listed or SSC are known to occur in the project vicinity. The City of Eureka has proposed the Elk River Estuary/Inter-Tidal Wetlands Enhancement and Coastal Access Project which would restore and enhance the estuary and intertidal habitats on Elk River. As part of this project, a fish-friendly tide gate may be installed which would allow fish access to improved habitat adjacent to the southern project boundaries. Threatened and endangered fish may therefore be adjacent to the project at the time of construction, including the following federally listed species: SONCC coho, CC Chinook, and NC steelhead. Alternatives 1, 2, and 3 may affect these species, their critical habitat, and essential fish habitat (EFH), and technical assistance would be required with NFMS, resulting in a letter of concurrence. However, Alternative 4 is not anticipated to affect listed fish species or their habitats and would not require technical assistance. No state take of any state-listed fish is anticipated as a result of this project.

Overall, it is anticipated that Alternative 1, 2, and 3 would impact wetlands and other ESHA, while Alternative 4 would have no impacts. Alternative 1, 2, and 3 would require a Lake and Streambed Alteration Agreement (LSAA), Section 401 Certification, and Section 404 Permit, with additional permits for geotechnical work on Alternative 3 if work is required within wetlands or other ESHA. Alternative 4 is not anticipated to require permits for biological or water quality reasons.

For Alternatives 1, 2, and 3, it is anticipated that mitigation will be required as part of permit conditions. Because the project is within the coastal zone, permit-driven mitigation ratios are anticipated to be 4:1. Impacts and restoration amounts are as follows:

- *Alternative 1:* Anticipated to have 0.75 acre of permanent impacts to ESHA and require 3.0 acres of restoration.
- *Alternative 2:* Anticipated to have 0.50 acre of permanent impacts to ESHA and require 2.0 acres of restoration.
- *Alternative 3:* Anticipated to have 0.15 acre of permanent impacts to ESHA and require 0.5 acres of restoration.

It is anticipated that Alternatives 1 and 2 would require offsite mitigation, while Alternative 3 could potentially be restored onsite. Alternative 4 is not anticipated to have permit-driven mitigation.

Required Technical Studies and Analyses:

Biology: ☒ Memo ☐ NES(MI) ☐ NES ☐ BA (☐ NMFS ☐ USFWS)

CESA (CDFW): ☐ Consistency Determination ☐ Incidental Take Permit

FESA: ☐ Informal Consultation: ☐ USFWS ☐ NMFS ☐ PLOC ☐ PBO ☐ LOC	☐ Formal Consultation: ☐ USFWS ☐ NMFS
EFH: ☐ Informal Consultation: NMFS ☐ PBO ☐ LOC	☐ Formal Consultation: NMFS
Wetlands: ☒ Delineation and Assessment	Agencies Involved: ☒ USACE ☒ CDFW ☒ Tribal ☒ Coastal ☒ NCRWQCB
Wildlife Connectivity / Fish Passage: ☐ Discuss in NES and ED	
Invasive Species: ☒ Discuss in NES and ED	

Sections 4(f) and 6(f)

24.	Section 4(f): Are there any historic sites or public owned parks, recreation areas, wildlife or waterfowl refuges within or immediately adjacent to the construction area?	Yes
25.	Section 6(f): Does the project have the potential to affect properties acquired or improved with Land and Water Conservation Fund Act funds?	No

Explain "Yes" and "TBD" responses:

A portion of the Eureka Waterfront Trail, known as the Hikshari Trail, is adjacent to the project area and may be considered a Section 4(f) resource. While no work is proposed on the trail, an existing service road that acts as a portion of the trail may be used to access Alternative 2 and 3, and a portion of an existing park and ride, which doubles as a trailhead, may be used for staging for all alternatives. Depending on the proposed project activities, a technical memo to document consideration of the property may be needed, or concurrence from the appropriate official that the use of the project is considered a Temporary Occupancy, and therefore Section 4(f) does not apply.

Required Technical Studies and Analyses:	***Agencies Involved:***
Section 4(f): TBD	☐ SHPO ☐ DOI ☐ HUD ☐ USDA ☐ State Parks ☒ Other: City of Eureka
Section 6(f): N/A	☐ NPS ☐ Other:

Visual Resources

26.	Does the project have the potential to affect any visual or scenic resources?	Yes

Explain "Yes" responses:

U.S. 101 in the project area is eligible for designation as a State Scenic Highway, and the Humboldt County General Plan states that agricultural features and open spaces, which are present in the southern end of the project, are considered scenic resources within the county. The proposed project would enhance facilities that would visually result in more development. Complete Street elements are proposed in this project, and it is recommended that the project include Context-Sensitive design features, such as Low Impact Development/Green Streets elements, enhancing visual quality and livability of the streetscape and reduce visual impacts. Coordination with local community stakeholders and the City of Eureka will be required for the visual assessment.

It is anticipated that a Minor level Visual Impact Assessment (VIA) will be required for this project. No substantial visual impacts are anticipated.

Required Technical Studies and Analyses: Minor VIA

Right of Way and Relocation Impacts

27.	Will the project require any right of way, including partial or full acquisitions, construction easements, or utility relocations?	Yes
	Number of parcels affected: Acquisitions: TBD TCEs: TBD	
28.	Will the project require residential or business relocations?	No

Explain "Yes" responses:

Partial acquisitions, temporary construction easments, and encroachment permits will be required on various properties for this project. Utilities will be protected in place where possible, but relocation may be needed

Required Technical Studies and Analyses: N/A

Land Use, Community, and Farmland Impacts

29.	Is the project inconsistent with plans and goals adopted by the community?	No
30.	Does the project have the potential to divide or disrupt neighborhoods/communities?	No
31.	Does the project have the potential to disproportionately affect low-income and minority populations?	No
32.	Will the project require the relocation of public utilities?	TBD
33.	Will the project affect access to properties or roadways?	No
34.	Will the project involve changes in access control to the State Highway System (SHS)?	No
35.	Will the project involve the use of a temporary road, detour, or ramp closure?	No
36.	Will the project reduce available parking?	TBD
37.	Will project construction encroach on state or federal lands?	No
38.	Will the project require conversion of any farmland to a different use or impact any farmlands?	No

Explain "Yes" responses:

Because the project is located within the City of Eureka, and the potential community interest in the project, a technical memorandum in recommended to document review of community impacts.

Public utilities will be protected in place where possible, but relocation may be needed. Parking may temporarily be reduced during project construction due to staging; and parking locations may be impacted by driveway work.

Required Technical Studies and Analyses:	***Agencies Involved:***
Technical Memorandum	☐ NRCS ☐ Coastal ☐ Other:
☐ Form AD 1006 (USDA) or NRCS CPA-106	☐ NRCS

Cultural Resources

39.	Are there National Register listed or potentially eligible historic properties (buildings, sites, objects, landscapes, etc.) within or immediately adjacent to the construction area?	TBD
40.	Is the project adjacent to or would it encroach on Tribal Land?	No
41.	Is the project located within Tribal Ancestral Territory?	Yes

Explain "Yes" and "TBD" responses:

This project is located within the traditional ancestral territory of the Wiyot. Cultural resources are currently known to exist within or adjacent to the project area. Coordination and consultation with local tribes will be required; due to the sensitivity of the area, archaeological and tribal monitors may be requested for ground disturbing activities. A task order will be required to complete cultural tasks. In all, the cultural review of the project would include the following:

- Delineation of the Environmental Study Limit (ESL)/Area of Potential Effects (APE)
- Determination of the extent of ground disturbance and delineation of the Area of Direct Impacts (ADI)
- Updated records search
- Consultation with local historical societies, the Native American Heritage Commission, and local Native American representatives
- An archaeological survey, documented in an Archaeological Survey Report (ASR)
- Built Environment Study by an Architectural Historian research into potentially impacted built environment resources and evaluation for National Register Status, documented in a Historic Resources Evaluation Report (HRER)
- An extended Phase I (XPI) investigation for remains of historic and prehistoric sites, documented in an XPI report
- Preparation of the following additional documents: Historical Properties Survey Report (HPSR) and Finding of Effect

Depending on the resources found, additional studies, reports, and coordination may be required, including geoarchaeological coring/remote sensing, a Phase II investigation (PII), Environmentally Sensitive Area (ESA) plan, Late Discovery Treatment and Monitoring Plan, coordination with the State Office of Historic Preservation, and preparation of Memorandum of Agreement (MOA) documents.

It is currently assumed that the Effects Finding of this undertaking will be No adverse Effect, and that protection measures for portions of sites not within the project footprint will be required.

Required Technical Studies and Analyses:

☐ Screened Undertaking Memorandum	☐ Geoarchaeological Study
☒ Historic Property Survey Report	☐ Phase II Evaluation Report
☒ Archaeological Survey Report	☐ Ethnographic Study
☒ Historical Resources Evaluation Report	☐ Phase III Data Recovery
☒ Extended Phase I Report	☐ ARPA, Special Use, and/or Scientific Research Permit
☐ Environmentally Sensitive Area Action Plan	☐ Other:
☒ Finding of Effects Report	***Agencies involved:*** ☒ Cultural Studies Office ☒ SHPO
☐ Memorandum of Agreement/Programmatic Agreement	***Agencies Involved:*** ☐ SHPO ☐ Advisory Council on Historic Preservation ☐ Cultural Studies Office

ANTICIPATED PERMITS

☐ Section 401 or Tribal Water Quality Certification	☐ Section 9 Structures in Navigable Waters (no fee)
☐ Section 404 Nationwide Permit	☐ Section 10 Work in Navigable Waters (no fee)
☐ NEPA/404 Integration MOU	☒ State Coastal Development Permit (no fee)
☐ Section 1602 Streambed Alteration Agreement	☒ Local Coastal Development Permit
☐ Incidental Take Permit (CDFW)	☐ State Lands Agreement (no fee)
☐ Section 408 Levee Alteration (no fee)	☐ Bridge Permit (no fee)
☐ Report of Waste Discharge	

Anticipated time to acquire permits: 9 months for Coastal Development Permit(s)

ENVIRONMENTAL RISKS					
Title	**Risk Statement**	**Current Status / Assumptions**	**Probability**	**Strategy**	**Response Options**
Offsite Mitigation Reduction (Opportunity: Alt 1 & 2)	If the ESL is expanded to include the U.S. 101/Herrick interchange, or if other locations onsite are found to be usable for onsite restoration, offsite mitigation could be reduced or eliminated, depending on the alternative chosen and the results of coordination efforts with permitting and resourcing agencies, reducing costs associated with mitigation.	For Alternatives 1 and 2, offsite mitigation is assumed to be required for impacts to ESHA, including wetlands. This is partly due to limited space within the ESL to implement onsite restoration and revegetation. For Alternative 3, an ESL expansion would better ensure that offsite mitigation would not be required.	Moderate (31-50%)	Exploit	Expand the ESL to include the U.S. 101/Herrick interchange for environmental studies and review project area for other potential areas of onsite restoration. If onsite restoration/ creation is feasible, resources and capital dollars would be needed for implementation, in addition to close coordination between the Revegetation Specialist, Landscape Architect, and other PDT members. Environmental to coordinate with agencies on potential revegetation/mitigation efforts.
Geotech: Impacts (Alt 3)	If access and drilling requirements for geotech substantially impact jurisdictional areas, additional coordination with the CCC and mitigation may be needed, impacting the costs and schedule of the project.	Drilling at the Alternative 3 bridge is anticipated to occur within wetlands or other ESHA. It is assumed that drilling impacts would be minor and temporary.	Very Low (1-10%)	Mitigate	Minimize impacts to wetlands and other ESHA for geotech drilling.
Geotech: Schedule	If geotech drilling plans are not sent to environmental early in the PA&ED phase, there may not be sufficient time to obtain permits, resulting in schedule delays.	It is assumed that permits will be required for geotech drilling at the Alternative 3 bridge location, including a CDP, which may take up to 9 months to obtain.	Moderate (31-50%)	Avoid	Provide geotech plans to environmental early in the PA&ED phase to ensure there is time to obtain permits.
Geotech: Permits (Opportunity: Alt 3)	If geotech does not impact any ESHA, permits, including a CDP, may not be required, reducing the amount of time for environmental review and approval of drilling plans.	It is assumed that wetlands or other ESHA would be affected by geotech drilling at the Alternative 3 bridge location, and that permits would be required.	Low (11-30%)	Exploit	Avoid drilling within wetland or other ESHA.
LSAA (Opportunity: Alt 1, 2, and 3)	If wetlands are determined not to be under the jurisdiction of CDFW, then no CDFW Lake and Streambed Alteration Agreement (LSAA) would be necessary, saving permitting costs and coordination effort.	CDFW typically asserts jurisdiction over wetland areas that are part of a river, stream, or lake. Wetlands within the project area are assumed to be under CDFW jurisdiction.	Moderate (31-50%)	Accept	Environmental to consult with CDFW on jurisdiction within the project area.
Work Windows	If the CA Coastal Commission imposes work windows as part of permit conditions for natural resources (such as for pile driving during nesting bird season), construction timing may be affected, impacting the project schedule.	A CDP would be required. However, due to the limited scope of work and high ambient noise at the project location, no work windows would be imposed.	Moderate (31-50%)	Mitigate	Coordinate with the CA Coastal Commission to determine if work windows will be included as a permit condition.
NMFS Effects Determination (Alt 1, 2, and 3)	If surveys, design changes, or coordination with agencies result in the determination that the project should have a different effects determination, additional consultataion efforts and reports may be needed, affecting the cost and schedule of the project.	Work adjacent to the nearby fish bearing waters would lead to a NLAA determination with NMFS, requiring informal consultation	Low (11-30%)	Accept	Coordinate with NMFS and CDFW to determine the extent of fish habitat to verify effects to fish.

Inadvertent Discovery	If human remains or cultural deposits are unearthed during construction, construction may need to halt temporarily until resources can be assessed, affecting the project cost and schedule	It is assumed that no human remains, or cultural deposits are unearthed during construction.	Low (11-30%)	Accept	Halt construction until cultural resources are assessed.
Tribal Consultation	If tribal coordination and consultation needs are greater than anticipated, additional resources may be required, potentially affecting the project's cost and schedule.	It is assumed that local tribes may have concerns about the project, and that coordination and consultation will be required, and the resources scoped would be enough for this work.	Low (11-30%)	Mitigate	Cultural to consult with tribes.
Offsite Mitigation (Alt 3)	If onsite locations are found to be unsuitable for restoration, partial or full offsite mitigation may be required, which would impact the cost and schedule of the project.	The project will have impacts to wetlands and other ESHA. It is assumed that there is enough space in the project vicinity to off-set impacts. However, there may not be sufficient onsite, as the available area may be unsuitable for a variety of reasons, including planting suitability, agency requirements, and maintenance restrictions; in this situation, at least partial offsite mitigation may be required. The risk is highest for Alternative 1 due to the amount of acreage anticipated for permit-driven mitigation.	Moderate (31-50%)	Mitigate	Discuss potential onsite planting locations with maintenance early to determine restrictions. Consult with agencies to determine potential issues with planting in scoped areas. Discuss suitability of potential restoration areas with Reveg and Landscape to further refine study limits.
Wetland Impacts and Permitting Requirements (Alt 4)	If cut/fill is required adjacent to US 101 due to limited space on existing disturbed areas, then wetlands may be impacted, which would require additional studies and permits, impacting the cost and schedule of the project.	The project will not require cut/fill within wetlands to install a Class 2 bikelane.	Low (11-30%)	Mitigate	Avoid cut/fill within wetlands.

DISCLAIMER

This report is not an environmental document or determination. The above information and recommendations are based on the project description provided in this report. The discussion and conclusions provided by this Mini-PEAR are approximate and based on a *cursory review* of existing records, databases, and mapping tools to estimate the potential for probable project effects on the environment. The purpose of this report is to provide a preliminary level of environmental analysis to support the Project Initiation Document. Changes in project scope, alternatives, existing environmental conditions, and/or environmental laws or regulations will require a reevaluation of this report.

Signatures:

Steven Croteau	June 16, 2021		6/23/2021
ENVIRONMENTAL BRANCH CHIEF	**DATE**	**PROJECT MANAGER**	**DATE**

ATTACHMENT D
Environmental Commitments Cost Estimate*
Alternative 1

DATE: 5/13/2021

TO: Dawn Yang
Project Engineer
707-296-6752
Phone Number

FROM: Kellie Eldridge
Environmental Planner
707-815-6995
Phone Number

CO-RTE-PM: HUM-101-PM 74.8/76.0
EFIS Number: 0121000033
EA: 01-0K940
Project Nickname: Broadway Complete Streets

FUNDING SOURCE(S): (check all that apply)

☒ State ☒ Federal
☐ Local ☐ Measure Funded
☐ Safety Project (010 Programming Code)
☐ Other:

ANTICIPATED PERMITS	
☒ Section 1602 Streambed Alteration	☐ Section 9 Structures in Navigable Waters
☒ Section 401 Water Quality Certification	☐ Section 10 Work in Navigable Waters
☒ Section 404 Nationwide Permit	☒ Coastal Development Permit (No Fee)
☐ NEPA/404 Integration MOU	☒ Local Coastal Development Permit
☐ Incidental Take Permit	☐ State Lands Agreement
☐ Section 408 Levee Alteration	☐ Report of Waste Discharge

ENVIRONMENTAL COMMITMENT COSTS FOR PROJECT IMPACTS (Phase 4/Construction)

	Brief description of costs	Subtotal
☐ Noise abatement or mitigation		
☐ Cultural resources (NA monitors, data recovery/mitigation)		
☐ Scenic resources		
☒ Section 401 Annual Fee (During Construction): $2000 per construction year.	Assumes two construction seasons, plus one year.	$6,000
☒ Section 401 Annual Fee for Reveg Monitoring Post Construction. If Reveg needed, assume 7 years at $2000 per year ($14,000 total).	Up to 6 years. Item Code 066916, “Annual Construction General Permit”.	$12,000
☐ Waste Discharge Permit Annual Fee (During Construction): $2000 per construction year.		
☐ Haz. Waste:		
☐ Bird and bat exclusion (Contractor)		
☐ On-site planting (Environmental)	Item Code 066234 “Revegetation”. Designated as State-Furnished Materials, Federally Non-Participating.	
☐ On-site planting (Landscape)		
☐ Other:		
Total Cost of Environmental Commitments in Phase 4/Construction		**$18,000**

Notes:

* Prepare a separate MCCE form for each viable alternative described in the Project Study Report.

RIGHT OF WAY (PHASE 9) RESOURCE NEEDS			
Action	**Agency or Responsible Party**	**Cost**	**Notes**
☒ CEQA Filing Fee	CA Fish and Wildlife (CDFW)	$5,000	
☒ Section 401 Water Quality Certification	Regional Water Quality Control Board (RWQCB)	$5,000	
☐ NPDES	RWQCB		
☒ 1602 Streambed Alteration	CDFW	$10,000	
☐ Incidental Take Permit	CDFW		
☒ Local Coastal Development Permit	City or County	$5,000	
☐ Waste Discharge Requirement Permit	RWQCB		
☐ Pre-construction Tree Removal	TBD		
☐ Mitigation Bank	TBD		
☐ In-Lieu Fee	NFWF		
☐ Off-site Mitigation Options (e.g., RCD)	TBD		
☒ Property Acquisition: Including endowment and any potential off-site planting and maintenance until success criteria are met.	Right of Way	$2,250,000	
☐ Other:			
Total:		**$2,275,000**	

Property Management until property relinquished (mowing, invasive control, clean up fencing, irrigation, repairs, etc.)		
Cost Per Year	**Number of Years until Transferred**	**Total Cost**

Total Phase 9 Costs for Environmental Commitments
$2,275,000
Number of permits to enter needed for environmental studies: 7

Environmental Branch Chief signature:	**Right of Way Branch Chief signature:**
Steven Croteau May 24, 2021	05/25/2021

A copy of this form, including updates, to be completed by Environmental Coordinator/Planner and attached to the PEAR.

ATTACHMENT D
Environmental Commitments Cost Estimate*
Alternative 2

DATE: 5/13/2021

TO: Dawn Yang
Project Engineer
707-296-6752
Phone Number

FROM: Kellie Eldridge
Environmental Planner
707-815-6995
Phone Number

CO-RTE-PM: HUM-101-PM 74.8/76.0
EFIS Number: 0121000033
EA: 01-0K940
Project Nickname: Broadway Complete Streets

FUNDING SOURCE(S): (check all that apply)

☒ State ☒ Federal
☐ Local ☐ Measure Funded
☐ Safety Project (010 Programming Code)
☐ Other:

ANTICIPATED PERMITS	
☒ Section 1602 Streambed Alteration	☐ Section 9 Structures in Navigable Waters
☒ Section 401 Water Quality Certification	☐ Section 10 Work in Navigable Waters
☒ Section 404 Nationwide Permit	☒ Coastal Development Permit (No Fee)
☐ NEPA/404 Integration MOU	☒ Local Coastal Development Permit
☐ Incidental Take Permit	☐ State Lands Agreement
☐ Section 408 Levee Alteration	☐ Report of Waste Discharge

ENVIRONMENTAL COMMITMENT COSTS FOR PROJECT IMPACTS (Phase 4/Construction)

	Brief description of costs	Subtotal
☐ Noise abatement or mitigation		
☐ Cultural resources (NA monitors, data recovery/mitigation)		
☐ Scenic resources		
☒ Section 401 Annual Fee (During Construction): $2000 per construction year.	Assumes two construction seasons, plus one year.	$6,000
☒ Section 401 Annual Fee for Reveg Monitoring Post Construction. If Reveg needed, assume 7 years at $2000 per year ($14,000 total).	Up to 6 years. Item Code 066916, "Annual Construction General Permit".	$12,000
☐ Waste Discharge Permit Annual Fee (During Construction): $2000 per construction year.		
☐ Haz. Waste:		
☐ Bird and bat exclusion (Contractor)		
☐ On-site planting (Environmental)	Item Code 066234 "Revegetation". Designated as State-Furnished Materials, Federally Non-Participating.	
☐ On-site planting (Landscape)		
☐ Other:		
Total Cost of Environmental Commitments in Phase 4/Construction		**$18,000**

Notes:

* Prepare a separate MCCE form for each viable alternative described in the Project Study Report.

RIGHT OF WAY (PHASE 9) RESOURCE NEEDS			
Action	**Agency or Responsible Party**	**Cost**	**Notes**
☒ CEQA Filing Fee	CA Fish and Wildlife (CDFW)	$5,000	
☒ Section 401 Water Quality Certification	Regional Water Quality Control Board (RWQCB)	$5,000	
☐ NPDES	RWQCB		
☒ 1602 Streambed Alteration	CDFW	$10,000	
☐ Incidental Take Permit	CDFW		
☒ Local Coastal Development Permit	City or County	$5,000	
☐ Waste Discharge Requirement Permit	RWQCB		
☐ Pre-construction Tree Removal	TBD		
☐ Mitigation Bank	TBD		
☐ In-Lieu Fee	NFWF		
☐ Off-site Mitigation Options (e.g., RCD)	TBD		
☒ Property Acquisition: Including endowment and any potential off-site planting and maintenance until success criteria are met.	Right of Way	$1,500,000	
☐ Other:			
Total:		**$1,525,000**	

Property Management until property relinquished (mowing, invasive control, clean up fencing, irrigation, repairs, etc.)		
Cost Per Year	**Number of Years until Transferred**	**Total Cost**

Total Phase 9 Costs for Environmental Commitments
$1,525,000
Number of permits to enter needed for environmental studies: 6

Environmental Branch Chief signature:	**Right of Way Branch Chief signature:**
Steven Croteau May 24, 2021	05/25/2021

A copy of this form, including updates, to be completed by Environmental Coordinator/Planner and attached to the PEAR.

ATTACHMENT D
Environmental Commitments Cost Estimate*
Alternative 3

DATE: 5/13/2021

TO: Dawn Yang
Project Engineer
707-296-6874
Phone Number

FROM: Kellie Eldridge
Environmental Planner
707-815-6995
Phone Number

CO-RTE-PM: HUM-101-PM 74.8/76.0
EFIS Number: 0121000033
EA: 01-0K940
Project Nickname: Broadway Complete Streets

FUNDING SOURCE(S): (check all that apply)

☒ State ☒ Federal
☐ Local ☐ Measure Funded
☐ Safety Project (010 Programming Code)
☐ Other:

ANTICIPATED PERMITS	
☒ Section 1602 Streambed Alteration	☐ Section 9 Structures in Navigable Waters
☒ Section 401 Water Quality Certification	☐ Section 10 Work in Navigable Waters
☒ Section 404 Nationwide Permit	☒ Coastal Development Permit (No Fee)
☐ NEPA/404 Integration MOU	☒ Local Coastal Development Permit
☐ Incidental Take Permit	☐ State Lands Agreement
☐ Section 408 Levee Alteration	☐ Report of Waste Discharge

ENVIRONMENTAL COMMITMENT COSTS FOR PROJECT IMPACTS (Phase 4/Construction)

	Brief description of costs	Subtotal
☐ Noise abatement or mitigation		
☐ Cultural resources (NA monitors, data recovery/mitigation)		
☐ Scenic resources		
☒ Section 401 Annual Fee (During Construction): $2000 per construction year.	Assumes two construction seasons, plus one year.	$6,000
☒ Section 401 Annual Fee for Reveg Monitoring Post Construction. If Reveg needed, assume 7 years at $2000 per year ($14,000 total).	Up to 6 years. Item Code 066916, “Annual Construction General Permit”.	$12,000
☐ Waste Discharge Permit Annual Fee (During Construction): $2000 per construction year.		
☐ Haz. Waste:		
☐ Bird and bat exclusion (Contractor)		
☒ On-site planting (Environmental)	Item Code 066234 “Revegetation”. Designated as State-Furnished Materials, Federally Non-Participating.	$59,000
☒ On-site planting (Landscape)		See note.
☐ Other:		
Total Cost of Environmental Commitments in Phase 4/Construction		**$77,000**

Notes: This project requires onsite restoration to offset impacts to wetlands and other ESHA. It is assumed that planting and 3 years of maintenance would be conducted by contractors, and two years of maintenance by the California Conservation Corps. A revegetation specialist would conduct all five years of monitoring. Costs relating to work conducted by the contractor will be provided in the landscaping estimates.

* Prepare a separate MCCE form for each viable alternative described in the Project Study Report.

RIGHT OF WAY (PHASE 9) RESOURCE NEEDS			
Action	**Agency or Responsible Party**	**Cost**	**Notes**
☒ CEQA Filing Fee	CA Fish and Wildlife (CDFW)	$5,000	
☒ Section 401 Water Quality Certification	Regional Water Quality Control Board (RWQCB)	$10,000	Assumes a permit is needed for geotech drilling
☐ NPDES	RWQCB		
☒ 1602 Streambed Alteration	CDFW	$20,000	Assumes a permit is needed for geotech drilling
☐ Incidental Take Permit	CDFW		
☒ Local Coastal Development Permit	City or County	$10,000	Assumes a permit is needed for geotech drilling
☐ Waste Discharge Requirement Permit	RWQCB		
☐ Pre-construction Tree Removal	TBD		
☐ Mitigation Bank	TBD		
☐ In-Lieu Fee	NFWF		
☐ Off-site Mitigation Options (e.g., RCD)	TBD		
☐ Property Acquisition: Including endowment and any potential off-site planting and maintenance until success criteria are met.	Right of Way		
☐ Other:			
Total:		**$45,000**	

Property Management until property relinquished (mowing, invasive control, clean up fencing, irrigation, repairs, etc.)		
Cost Per Year	**Number of Years until Transferred**	**Total Cost**

Total Phase 9 Costs for Environmental Commitments
$45,000

Number of permits to enter needed for environmental studies: 5

Environmental Branch Chief signature:	**Right of Way Branch Chief signature:**
Steven Croteau May 18, 2021	05/18/2021

A copy of this form, including updates, to be completed by Environmental Coordinator/Planner and attached to the PEAR.

ATTACHMENT D
Environmental Commitments Cost Estimate*
Alternative 4

DATE: 6/16/2021

TO: Dawn Yang
Project Engineer
707-296-6874
Phone Number

FROM: Kellie Eldridge
Environmental Planner
707-815-6995
Phone Number

CO-RTE-PM: HUM-101-PM 74.8/76.0
EFIS Number: 0121000033
EA: 01-0K940
Project Nickname: Broadway Complete Streets

FUNDING SOURCE(S): (check all that apply)

☒ State ☒ Federal
☐ Local ☐ Measure Funded
☐ Safety Project (010 Programming Code)
☐ Other:

ANTICIPATED PERMITS	
☐ Section 1602 Streambed Alteration	☐ Section 9 Structures in Navigable Waters
☐ Section 401 Water Quality Certification	☐ Section 10 Work in Navigable Waters
☐ Section 404 Nationwide Permit	☒ Coastal Development Permit (No Fee)
☐ NEPA/404 Integration MOU	☒ Local Coastal Development Permit
☐ Incidental Take Permit	☐ State Lands Agreement
☐ Section 408 Levee Alteration	☐ Report of Waste Discharge

ENVIRONMENTAL COMMITMENT COSTS FOR PROJECT IMPACTS (Phase 4/Construction)

	Brief description of costs	Subtotal
☐ Noise abatement or mitigation		
☒ Cultural resources (NA monitors, data recovery/mitigation)	Tribal monitoring during construction.	$15,000
☐ Scenic resources		
☐ Section 401 Annual Fee (During Construction): $2000 per construction year.	.	
☐ Section 401 Annual Fee for Reveg Monitoring Post Construction. If Reveg needed, assume 7 years at $2000 per year ($14,000 total).		
☐ Waste Discharge Permit Annual Fee (During Construction): $2000 per construction year.		
☐ Haz. Waste:		
☐ Bird and bat exclusion (Contractor)		
☐ On-site planting (Environmental)		
☐ On-site planting (Landscape)		
☐ Other:		
Total Cost of Environmental Commitments in Phase 4/Construction		**$15,000**

Notes:

* Prepare a separate MCCE form for each viable alternative described in the Project Study Report.

RIGHT OF WAY (PHASE 9) RESOURCE NEEDS			
Action	**Agency or Responsible Party**	**Cost**	**Notes**
☒ CEQA Filing Fee	CA Fish and Wildlife (CDFW)	$5,000	
☐ Section 401 Water Quality Certification	Regional Water Quality Control Board (RWQCB)		
☐ NPDES	RWQCB		
☐ 1602 Streambed Alteration	CDFW		
☐ Incidental Take Permit	CDFW		
☒ Local Coastal Development Permit	City or County	$5,000	
☐ Waste Discharge Requirement Permit	RWQCB		
☐ Pre-construction Tree Removal	TBD		
☐ Mitigation Bank	TBD		
☐ In-Lieu Fee	NFWF		
☐ Off-site Mitigation Options (e.g., RCD)	TBD		
☐ Property Acquisition: Including endowment and any potential off-site planting and maintenance until success criteria are met.	Right of Way		
☒ Other: Cultural monitoring during Phases 0 and 1.	Caltrans	$25,000	
Total:		**$35,000**	

Property Management until property relinquished (mowing, invasive control, clean up fencing, irrigation, repairs, etc.)		
Cost Per Year	**Number of Years until Transferred**	**Total Cost**

Total Phase 9 Costs for Environmental Commitments
$35,000
Number of permits to enter needed for environmental studies: 3

Environmental Branch Chief signature:	**Right of Way Branch Chief signature:**
Steven Croteau June 16, 2021	06/23/2021

A copy of this form, including updates, to be completed by Environmental Coordinator/Planner and attached to the PEAR.

ATTACHMENT D

Right-of-Way Datasheet

State of California - Department of Transportation

DATASHEET DISTRIBUTION LIST

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 74.8/76.0
ALTERNATE: 1 of 3
DATE: May 21, 2021

	Documents Included		
	Parcel Worksheet	Resource Hour Request	Cover Letter
	Mitigation Worksheet		Right of Way Datasheet
	Mitigation & Permit Estimate		
	Utility Information Sheet		
	Railroad Information Sheet		
	USA Lands Information Sheet		
	Real Property Services Information Sheet		

Send Original to:			
JOSEPH CAMINITI Design Engineer			**X**
Attention: **DAWN YANG** Project Engineer			**X**

Send Copies to:			
CHRIS JOHNSTON Right of Way Engineering			**X**
Steven Croteau Environmental Senior			**X**
Kellie Eldridge Environmental Coordinator			**X**
JAMIE MATTEOLI Project Manager		**X**	**X**
REBECCA LAW Assistant Project Manager		**X**	**X**
JOHN BALLANTYNE North Region Right of Way Division Chief	**X**	**X**	**X**
TADEUSZ RATAJCZAK Assistant Chief, Eureka/Redding RW Office	**X**	**X**	**X**
JEREMIAH JOYNER RW Project Delivery, Eureka RW Office	**X**	**X**	**X**
SAM GENTLE RW Project Coordination	**X**	**X**	**X**
ANGELA JORGENSEN Planning & Management	**X**	**X**	**X**
GRETE VALADAO Estimator	**X**	**X**	**X**
BRYAN REYNOLDS Utilities	**X**	**X**	**X**
BRYAN REYNOLDS Railroads			
GRETE VALADAO Mitigation	**X**	**X**	**X**
APRIL REYNOLDS Real Property Services			
CHRIS MARSHALL USA Lands			

Order of Documents

1. Datasheet Distribution List
2. Resource Hour Request
3. Cover Letter
4. Right of Way Datasheet
5. Utility Information Sheet
6. Railroad Information Sheet
7. Mitigation & Permit Estimate
8. Mitigation Worksheet
9. Parcel Worksheets
10. Real Property Services Information Sheet (If Applicable)
11. USA Lands Infromation Sheet (If Applica

State of California
Department of Transportation

CALIFORNIA STATE TRANSPORTATION AGENCY

MEMORANDUM

Making Conservation
A California Way of Life.

To: JOSEPH CAMINITI
Design Engineer
Department of Transportation

Attention: DAWN YANG
Project Engineer

Date: May 21, 2021

File: 01-HUM-101 PM 74.8/76.0
EFIS No.: 01 2100 0033
EA: 0K940K
Alternate: 1 of 3

From: TADEUSZ RATAJCZAK
North Region Right of Way Assistant Manager,
Project Delivery
Eureka/Redding

Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

This is not the preferred or likely alternative. Do not use for programming.

Project Description: In Humboldt County in Eureka from NB on FR Herrick Ave to Truesdale Street

Alternate Description: Alternative 1 class I path (layout sheet L-1). All three class I path alternatives have the same class IV facility (layout sheets L-4 to L-14).

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on April 29, 2021 .

Right of Way Lead Time will require a minimum of 19 months after receipt of appraisal maps, utility conflict maps, environmental clearances (HMDD) and Certificate of Sufficiency (COS). A minimum of 12 months prior to certification will be required from receipt of the last map revision. Shorter lead times may require additional support resources and may adversely affect delivery of Right of Way Certification.

Type text here

Tadj Ratajczak

TADEUSZ RATAJCZAK
Assistant Chief
North Region Right of Way
EUREKA/REDDING

Attachments:
Right of Way Data Sheet

cc. Jamie Matteoli

State of California - Department of Transportation
RIGHT OF WAY DATASHEET

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 74.8/76.0
Description: Pedestrian Infrastructure In Humboldt County in Eureka from NB on FR Herrick Ave to Truesdale Street

ALTERNATE: 1 of 3
DATE: 5/21/2021
Datasheet Type: Initial

This is not the preferred or likely alternative. Do not use for programming.

1. Right of Way Cost Estimate:

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$1,467,375	5%	$1,906,886
B. Appraisal Fees Estimate	$30,000	N/A	$30,000
C. Mitigation Acquisition & Credits	$2,362,500	5%	$3,070,121
D. Project Development Permit Fees	$25,000	5%	$32,488
Subtotal	$3,884,875		$5,039,495
E. Utility Relocation (State's Share)	$90,000	5%	$116,957
(Owner's Share: $500,000)			
F. Relocation Assistance (RAP)	$0		$0
G. Clearance/Demolition	$0		$0
H. Title & Escrow	$21,500	5%	$27,940
I. Total Estimated Right of Way Cost	$3,996,375	**Rounded**	**$5,184,000** *
J. Construction Contract Work	$30,500		

2. Current Date of Right of Way Certification October 2, 2026

3. Parcel Data:

Type		Dual/Appr	Utilities		Railroad	
X	0		U4 - 1	4	C&M Agreement	0
A	14		- 2	2	Service Contract	0
B	9		- 3	0	Easements	0
C	0	0	- 4	0	Rights of Entry	0
D	0	0	U5 - 7	1	Clauses	0
RR	0		- 8	0		
Total	**23**		- 9	6		

Excess 0

Areas:		Mitigation		Misc. R/W Work	
R/W	1.36 AC	Impacts	1	RAP Displacees	N/A
TCE	1.16 AC	Parcels	1	Clear/Demo	N/A
Excess	N/A	Credits	0	Permit to Enters	N/A
Mitigation	3 Ac.			Condemnation	2
				USA Involvement	No

4. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

6 Fee, 21 Temporary Construction Easements, 2 Permement Easements and 12 Encroachment Permits will be required for this project (EP's are not listed on the worksheet as RW does not acquire Encroachment permits). Parcels required are zoned mostly commercial or public lands along with some industrial parcels. In addition, Alternative 1 also includes the acquisition of 5 fee parcels zoned public, commercial and industrial.

5. Are any properties acquired for this project expected to be rented, leased, or sold?

Yes _____ No **X**

6. Are RAP displacements required?

Yes _____ No **X**

No. of single family N/A No. of business/nonprofit N/A

No. of multi-family N/A No. of farms N/A

Based on Draft/Final Relocation Impact Statement/Study dated N/A

N/A Sufficient replacement housing will be available without last resort housing.

N/A Sufficient replacement housing will not be available without last resort housing.

7. Is there an effect on assessed valuation?

Yes _____ No **X** Not Significant _____

8. Are there any items of Construction Contract Work?

Yes **X** No _____

Relocate Papa & Barkley sign at the intersection at PM 75.2. At same intersection (Kmart), move a sign on wheels.

9. Are utility facilities or rights of way affected?

Yes **X** No _____ Phase 4 Capital **$30,000**

Names of Utility Companies requiring verification only.

Humboldt Community Services District (Water/Sewer)

Names of Utility Companies requiring involvements.

City of Eureka (Water), City of Eureka (Sewer), PG&E (Gas), PG&E (Electric), AT&T (Communication), Suddenlink (Communication)

Additional information concerning Utility Involvement on this project.

Underground PG&E 10" Gas Transmission line, PG&E underground 12kv electric, AT&T underground fiber-optic, underground Suddenlink, City of Eureka Water and Sewer may be in conflict with the proposed cross culverts. Numerous utility lids/covers will need to be adjusted to grade for sidewalk work. Potholing required. As additional information becomes availalbe, this estimate may need to be revised.

10. Are railroad facilities or rights of way affected?

Yes _____ No **X** Phase 4 Capital **$0**

11. Are USA Lands or Rights Affected?

Yes _____ No **X** Phase 4 Capital **$0**

Agencies Involved:

US Forest Service _____	BLM _____	Army Corps of Engineers _____
National Parks _____	BIA _____	Vetrans Administration _____
US Fish & Wildlife _____	GSA _____	_____

Rights or Permissions to acquire:

Easement _____	Special Use Permit _____	Courtesy Letter _____
Right of Way Grant _____	Cooperative Work Agreement _____	Cost Recovery _____
Mineral Agreement _____	Letter of Concurrence _____	Timber Sale _____
		_____

12. Is an RE Office required for the project?

Yes _____ No **X**

Type of RE Office

Modular _____ Move In _____

13. Were any previously unidentified sites with hazardous waste and/or material found?

Yes _____ None Evident **X**

14. Are there material borrow and/or disposal sites required?

No **X** Optional _____ Mandatory _____

15. Are there potential relinquishments and/or abandonments?

Yes _____ No **X**

16. Are there any existing and/or potential airspace sites?

Yes _____ No **X**

17. What type of mitigation is required for the project?

Alternative 1 requires $2.5 million in offsite mitigation.

18. Is it anticipated that Caltrans will perform all Right of Way work?

Yes **X** No _____

19. Indicate the anticipated Right of Way schedule and lead time requirements.

Right of Way Lead Time will require a minimum of **19** months after we receive first appraisal maps, utility conflict maps, necessary environmental clearances and freeway agreements have been approved and obtained. Additionally a minimum of **12** months will be required after receiving the last appraisal map to Right of Way for certification.

20. Assumptions and limiting Conditions: (Check boxes that apply.)

* Design will secure necessary encroachment permits from local agencies.
* Utility lead time begins after PA&ED is met and Utility Conflict Maps have been received.
* Requested lead time provides sufficient time to acquire Resolutions of Necessity if condemnations are required.
* Requested lead time provides insufficient time to acquire Orders of Possession if condemnations are required.

Evaluation Prepared By:

Right of Way April Reynolds for Date 5/24/2021

GRETE VALADAO

Reviewed By

RW Project Coordinator for Date 5/24/2021

SAM GENTLE

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

JEREMIAH JOYNER
Senior Right of Way Agent
Project Delivery Branch
Eureka

05/24/2021
Date

Tadj Ratajczak
TADEUSZ RATAJCZAK
Assistant Chief
North Region Right of Way
Eureka/Redding

5/24/21
Date

State of California - Department of Transportation

DATASHEET DISTRIBUTION LIST

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 74.8/76.0
ALTERNATE: 2 of 3
DATE: May 20, 2021

	Documents Included		
	Parcel Worksheet	Resource Hour Request	Cover Letter
	Mitigation Worksheet		Right of Way Datasheet
	Mitigation & Permit Estimate		
	Utility Information Sheet		
	Railroad Information Sheet		
	USA Lands Information Sheet		
	Real Property Services Information Sheet		
Send Original to:			
JOSEPH CAMINITI Design Engineer			**X**
Attention: **DAWN YANG** Project Engineer			**X**
Send Copies to:			
CHRIS JOHNSTON Right of Way Engineering			**X**
Steven Croteau Environmental Senior			**X**
Kellie Eldridge Environmental Coordinator			**X**
JAMIE MATTEOLI Project Manager		**X**	**X**
REBECCA LAW Assistant Project Manager		**X**	**X**
JOHN BALLANTYNE North Region Right of Way Division Chief	**X**	**X**	**X**
TADEUSZ RATAJCZAK Assistant Chief, Eureka/Redding RW Office	**X**	**X**	**X**
JEREMIAH JOYNER RW Project Delivery, Eureka RW Office	**X**	**X**	**X**
SAM GENTLE RW Project Coordination	**X**	**X**	**X**
ANGELA JORGENSEN Planning & Management	**X**	**X**	**X**
GRETE VALADAO Estimator	**X**	**X**	**X**
BRYAN REYNOLDS Utilities	**X**	**X**	**X**
BRYAN REYNOLDS Railroads			
GRETE VALADAO Mitigation	**X**	**X**	**X**
APRIL REYNOLDS Real Property Services			
CHRIS MARSHALL USA Lands			

Order of Documents

1. Datasheet Distribution List
2. Resource Hour Request
3. Cover Letter
4. Right of Way Datasheet
5. Utility Information Sheet
6. Railroad Information Sheet
7. Mitigation & Permit Estimate
8. Mitigation Worksheet
9. Parcel Worksheets
10. Real Property Services Information Sheet (If Applicable)
11. USA Lands Infromation Sheet (If Applica

State of California
Department of Transportation

CALIFORNIA STATE TRANSPORTATION AGENCY

MEMORANDUM

Making Conservation
A California Way of Life.

To: JOSEPH CAMINITI
Design Engineer
Department of Transportation

Attention: DAWN YANG
Project Engineer

Date: May 20, 2021

File: 01-HUM-101 PM 74.8/76.0
EFIS No.: 01 2100 0033
EA: 0K940K
Alternate: 2 of 3

From: TADEUSZ RATAJCZAK
North Region Right of Way Assistant Manager,
Project Delivery
Eureka/Redding

Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

This is not the preferred or likely alternative. Do not use for programming.

Project Description: In Humboldt County in Eureka from NB on FR Herrick Ave to Truesdale Street

Alternate Description: Alternative 2 class I path (layout sheet L-2). All three class I path alternatives have the same class IV facility (layout sheets L-4 to L-14).

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on April 29, 2021 .

Right of Way Lead Time will require a minimum of 19 months after receipt of appraisal maps, utility conflict maps, environmental clearances (HMDD) and Certificate of Sufficiency (COS). A minimum of 12 months prior to certification will be required from receipt of the last map revision. Shorter lead times may require additional support resources and may adversely affect delivery of Right of Way Certification.

Tadj Ratajczak

TADEUSZ RATAJCZAK
Assistant Chief
North Region Right of Way
EUREKA/REDDING

Attachments:
Right of Way Data Sheet

cc. Jamie Matteoli

State of California - Department of Transportation
RIGHT OF WAY DATASHEET

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 74.8/76.0
Description: Pedestrian Infrastructure In Humboldt County in Eureka from NB on FR Herrick Ave to Truesdale Street

ALTERNATE: 2 of 3
DATE: 5/20/2021
Datasheet Type: Initial

This is not the preferred or likely alternative. Do not use for programming.

1. Right of Way Cost Estimate:

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$437,500	5%	$568,617
B. Appraisal Fees Estimate	$25,000	N/A	$25,000
C. Mitigation Acquisition & Credits	$1,575,000	5%	$2,047,021
D. Project Development Permit Fees	$25,000	5%	$32,492
Subtotal	$2,062,500		$2,673,130
E. Utility Relocation (State's Share)	$90,000	5%	$116,973
(Owner's Share: $500,000)			
F. Relocation Assistance (RAP)	$0		$0
G. Clearance/Demolition	$0		$0
H. Title & Escrow	$14,000	5%	$18,196
I. Total Estimated Right of Way Cost	$2,166,500	**Rounded**	**$2,808,000** *
J. Construction Contract Work	$30,500		

2. Current Date of Right of Way Certification October 2, 2026

3. Parcel Data:

Type		Dual/Appr	Utilities		Railroad	
X	0		U4 - 1	4	C&M Agreement	0
A	15		- 2	2	Service Contract	0
B	6		- 3	0	Easements	0
C	0	0	- 4	0	Rights of Entry	0
D	0	0	U5 - 7	1	Clauses	0
RR	0		- 8	0		
Total	**21**		- 9	6		

Excess 0

Areas:		Mitigation		Misc. R/W Work	
R/W	0.27 AC	Impacts	1	RAP Displacees	N/A
TCE	1.71 AC	Parcels	1	Clear/Demo	N/A
Excess	N/A	Credits	0	Permit to Enters	N/A
Mitigation	2 Ac.			Condemnation	2
				USA Involvement	No

4. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

6 Fee, 21 Temporary Construction Easements, 2 Permement Easements and 12 Encroachment Permits will be required for this project (EP's are not listed on the worksheet as RW does not acquire Encroachment permits). Parcels required are zoned mostly commercial or public lands along with some industrial parcels. In addition, Alternative 2 also includes the acquisition of 2 fee parcels zoned public.

5. Are any properties acquired for this project expected to be rented, leased, or sold?

Yes _____ No **X**

6. Are RAP displacements required?

Yes _____ No **X**

No. of single family N/A — No. of business/nonprofit N/A

No. of multi-family N/A — No. of farms N/A

Based on Draft/Final Relocation Impact Statement/Study dated N/A

N/A Sufficient replacement housing will be available without last resort housing.

N/A Sufficient replacement housing will not be available without last resort housing.

7. Is there an effect on assessed valuation?

Yes _____ No **X** Not Significant _____

8. Are there any items of Construction Contract Work?

Yes **X** No _____

Relocate Papa & Barkley sign at the intersection at PM 75.2. At same intersection (kmart), move a sign on wheels.

9. Are utility facilities or rights of way affected?

Yes **X** No _____ Phase 4 Capital **$30,000**

Names of Utility Companies requiring verification only.

Humboldt Community Services District (Water/Sewer)

Names of Utility Companies requiring involvements.

City of Eureka (Water), City of Eureka (Sewer), PG&E (Gas), PG&E (Electric), AT&T (Communication), Suddenlink (Communication)

Additional information concerning Utility Involvement on this project.

Underground PG&E 10" Gas Transmission line, PG&E underground 12kv electric, AT&T underground fiber-optic, underground Suddenlink, City of Eureka Water and Sewer may be in conflict with the proposed cross culverts. Numerous utility lids/covers will need to be adjusted to grade for sidewalk work. Potholing required. As additional information becomes availalbe, this estimate may need to be revised.

10. Are railroad facilities or rights of way affected?

Yes _____ No **X** Phase 4 Capital **$0**

11. Are USA Lands or Rights Affected?

Yes _____ No **X** Phase 4 Capital **$0**

Agencies Involved:

US Forest Service _____	BLM _____	Army Corps of Engineers _____
National Parks _____	BIA _____	Vetrans Administration _____
US Fish & Wildlife _____	GSA _____	_____

Rights or Permissions to acquire:

Easement _____	Special Use Permit _____	Courtesy Letter _____
Right of Way Grant _____	Cooperative Work Agreement _____	Cost Recovery _____
Mineral Agreement _____	Letter of Concurrence _____	Timber Sale _____
		_____

12. Is an RE Office required for the project?

Yes _____ No **X**

Type of RE Office

Modular _____ Move In _____

13. Were any previously unidentified sites with hazardous waste and/or material found?

Yes _____ None Evident **X**

14. Are there material borrow and/or disposal sites required?

No **X** Optional _____ Mandatory _____

15. Are there potential relinquishments and/or abandonments?

Yes _____ No **X**

16. Are there any existing and/or potential airspace sites?

Yes _____ No **X**

17. What type of mitigation is required for the project?

Mitigation will be off-site. Alternative 2 will impact .5 acres of wetlands.

18. Is it anticipated that Caltrans will perform all Right of Way work?

Yes **X** No _____

19. Indicate the anticipated Right of Way schedule and lead time requirements.

Right of Way Lead Time will require a minimum of **19** months after we receive first appraisal maps, utility conflict maps, necessary environmental clearances and freeway agreements have been approved and obtained. Additionally a minimum of **12** months will be required after receiving the last appraisal map to Right of Way for certification.

20. Assumptions and limiting Conditions: (Check boxes that apply.)

* Design will secure necessary encroachment permits from local agencies.
* Utility lead time begins after PA&ED is met and Utility Conflict Maps have been received.
* Requested lead time provides sufficient time to acquire Resolutions of Necessity if condemnations are required.
* Requested lead time provides insufficient time to acquire Orders of Possession if condemnations are required.

Evaluation Prepared By:

Right of Way April Reynolds for GRETE VALADAO Date 5/24/2021

Reviewed By

RW Project Coordinator for SAM GENTLE Date 5/24/2021

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

JEREMIAH JOYNER
Senior Right of Way Agent
Project Delivery Branch
Eureka

05/24/2021
Date

TADEUSZ RATAJCZAK
Assistant Chief
North Region Right of Way
Eureka/Redding

5/24/21
Date

State of California - Department of Transportation

DATASHEET DISTRIBUTION LIST

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 74.8/76.0
ALTERNATE: 3 of 3
DATE: May 20, 2021

	Documents Included		
	Parcel Worksheet	Resource Hour Request	Cover Letter
	Mitigation Worksheet		Right of Way Datasheet
	Mitigation & Permit Estimate		
	Utility Information Sheet		
	Railroad Information Sheet		
	USA Lands Information Sheet		
	Real Property Services Information Sheet		

Send Original to:			
JOSEPH CAMINITI Design Engineer			X
Attention: **DAWN YANG** Project Engineer			X

Send Copies to:			
CHRIS JOHNSTON Right of Way Engineering			X
Steven Croteau Environmental Senior			X
Kellie Eldridge Environmental Coordinator			X
JAMIE MATTEOLI Project Manager		X	X
REBECCA LAW Assistant Project Manager		X	X
JOHN BALLANTYNE North Region Right of Way Division Chief	X	X	X
TADEUSZ RATAJCZAK Assistant Chief, Eureka/Redding RW Office	X	X	X
JEREMIAH JOYNER RW Project Delivery, Eureka RW Office	X	X	X
SAM GENTLE RW Project Coordination	X	X	X
ANGELA JORGENSEN Planning & Management	X	X	X
GRETE VALADAO Estimator	X	X	X
BRYAN REYNOLDS Utilities	X	X	X
BRYAN REYNOLDS Railroads			
GRETE VALADAO Mitigation	X	X	X
APRIL REYNOLDS Real Property Services			
CHRIS MARSHALL USA Lands			

Order of Documents

1. Datasheet Distribution List
2. Resource Hour Request
3. Cover Letter
4. Right of Way Datasheet
5. Utility Information Sheet
6. Railroad Information Sheet
7. Mitigation & Permit Estimate
8. Mitigation Worksheet
9. Parcel Worksheets
10. Real Property Services Information Sheet (If Applicable)
11. USA Lands Infromation Sheet (If Applica

State of California
Department of Transportation

CALIFORNIA STATE TRANSPORTATION AGENCY

MEMORANDUM

Making Conservation
A California Way of Life.

To: JOSEPH CAMINITI
Design Engineer
Department of Transportation

Attention: DAWN YANG
Project Engineer

Date: May 20, 2021

File: 01-HUM-101 PM 74.8/76.0
EFIS No.: 01 2100 0033
EA: 0K940K
Alternate: 3 of 3

From: TADEUSZ RATAJCZAK
North Region Right of Way Assistant Manager,
Project Delivery
Eureka/Redding

Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

Project Description: In Humboldt County in Eureka from NB on FR Herrick Ave to Truesdale Street

Alternate Description: Alternative # class I path (layout sheet L-3). All three class I path alternatives have the same class IV facility (layout sheets L-4 to L-14).

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on April 29, 2021 .

Right of Way Lead Time will require a minimum of 19 months after receipt of appraisal maps, utility conflict maps, environmental clearances (HMDD) and Certificate of Sufficiency (COS). A minimum of 12 months prior to certification will be required from receipt of the last map revision. Shorter lead times may require additional support resources and may adversely affect delivery of Right of Way Certification.

Tadj Ratajczak

TADEUSZ RATAJCZAK
Assistant Chief
North Region Right of Way
EUREKA/REDDING

Attachments:
Right of Way Data Sheet

cc. Jamie Matteoli

State of California - Department of Transportation
RIGHT OF WAY DATASHEET

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 74.8/76.0
Description: Pedestrian Infrastructure In Humboldt County in Eureka from NB on FR Herrick Ave to Truesdale Street

ALTERNATE: 3 of 3
DATE: 5/20/2021
Datasheet Type: Initial

1. Right of Way Cost Estimate:

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$434,625	5%	$564,880
B. Appraisal Fees Estimate	$25,000	N/A	$25,000
C. Mitigation Acquisition & Credits	$0		$0
D. Project Development Permit Fees	$45,000	5%	$58,486
Subtotal	$504,625		$648,367
E. Utility Relocation (State's Share)	$90,000	5%	$116,973
(Owner's Share: $500,000)			
F. Relocation Assistance (RAP)	$0		$0
G. Clearance/Demolition	$0		$0
H. Title & Escrow	$14,000	5%	$18,196
I. Total Estimated Right of Way Cost	$608,625	**Rounded**	**$784,000** *
J. Construction Contract Work	$30,500		

2. Current Date of Right of Way Certification October 2, 2026

3. Parcel Data:

Type		Dual/Appr	Utilities		Railroad	
X	0		U4 - 1	4	C&M Agreement	0
A	15		- 2	2	Service Contract	0
B	6		- 3	0	Easements	0
C	0	0	- 4	0	Rights of Entry	0
D	0	0	U5 - 7	1	Clauses	0
RR	0		- 8	0		
Total	**21**		- 9	6		

Excess 0

Areas:		Mitigation		Misc. R/W Work	
R/W	0.27 AC	Impacts	0	RAP Displacees	N/A
TCE	1.69 AC	Parcels	0	Clear/Demo	N/A
Excess	N/A	Credits	0	Permit to Enters	N/A
Mitigation	N/A			Condemnation	2
				USA Involvement	No

4. **Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).**

6 Fee, 21 Temporary Construction Easements, 2 Permement Easements and 12 Encroachment Permits will be required for this project (EP's are not listed on the worksheet as RW does not acquire Encroachment permits). Parcels required are zoned mostly commercial or public lands along with some industrial parcels. In addition, Alternative 3 also includes the acquisition of 2 fee parcels zoned public.

5. **Are any properties acquired for this project expected to be rented, leased, or sold?**

Yes _____ No **X**

6. **Are RAP displacements required?**

Yes _____ No **X**

No. of single family N/A No. of business/nonprofit N/A

No. of multi-family N/A No. of farms N/A

Based on Draft/Final Relocation Impact Statement/Study dated N/A

N/A Sufficient replacement housing will be available without last resort housing.

N/A Sufficient replacement housing will not be available without last resort housing.

7. **Is there an effect on assessed valuation?**

Yes _____ No **X** Not Significant _____

8. **Are there any items of Construction Contract Work?**

Yes **X** No _____

Relocate Papa & Barkley sign at the intersection at PM 75.2. At same intersection (Kmart), move a sign on wheels.

9. **Are utility facilities or rights of way affected?**

Yes **X** No _____ Phase 4 Capital **$30,000**

Names of Utility Companies requiring verification only.

Humboldt Community Service District (Water/Sewer)

Names of Utility Companies requiring involvements.

City of Eureka (Water), City of Eureka (Sewer), PG&E (Gas), PG&E (Electric), AT&T (Communication), Suddenlink (Communication)

Additional information concerning Utility Involvement on this project.

Underground PG&E 10" Gas Transmission line, PG&E underground 12kv electric, AT&T underground fiber-optic, underground Suddenlink, City of Eureka Water and Sewer may be in conflict with the proposed cross culverts. Numerous utility lids/covers will need to be adjusted to grade for sidewalk work. Potholing required. As additional information becomes availalbe, this estimate may need to be revised.

10. Are railroad facilities or rights of way affected?

Yes _____ No ____X____ Phase 4 Capital ____$0____

11. Are USA Lands or Rights Affected?

Yes _____ No ____X____ Phase 4 Capital ____$0____

Agencies Involved:

US Forest Service _____ BLM _____ Army Corps of Engineers _____

National Parks _____ BIA _____ Vetrans Administration _____

US Fish & Wildlife _____ GSA _____ _____

Rights or Permissions to acquire:

Easement _____ Special Use Permit _____ Courtesy Letter _____

Right of Way Grant _____ Cooperative Work Agreement _____ Cost Recovery _____

Mineral Agreement _____ Letter of Concurrence _____ Timber Sale _____

_____

12. Is an RE Office required for the project?

Yes _____ No ____X____

Type of RE Office

Modular _____ Move In _____

13. Were any previously unidentified sites with hazardous waste and/or material found?

Yes _____ None Evident ____X____

14. Are there material borrow and/or disposal sites required?

No ___X___ Optional _____ Mandatory _____

15. Are there potential relinquishments and/or abandonments?

Yes _____ No ____X____

16. Are there any existing and/or potential airspace sites?

Yes _____ No ____X____

17. What type of mitigation is required for the project?

All mitigation for this alternative will be on-site.

18. Is it anticipated that Caltrans will perform all Right of Way work?

Yes **X** No _____

19. Indicate the anticipated Right of Way schedule and lead time requirements.

Right of Way Lead Time will require a minimum of **19** months after we receive first appraisal maps, utility conflict maps, necessary environmental clearances and freeway agreements have been approved and obtained. Additionally a minimum of **12** months will be required after receiving the last appraisal map to Right of Way for certification.

20. Assumptions and limiting Conditions: (Check boxes that apply.)

* Design will secure necessary encroachment permits from local agencies.
* Utility lead time begins after PA&ED is met and Utility Conflict Maps have been received.
* Requested lead time provides sufficient time to acquire Resolutions of Necessity if condemnations are required.
* Requested lead time provides insufficient time to acquire Orders of Possession if condemnations are required.

Evaluation Prepared By:

Right of Way April Reynolds for GRETE VALADAO Date 5/25/2021

Reviewed By

RW Project Coordinator for SAM GENTLE Date 5/25/2021

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

JEREMIAH JOYNER
Senior Right of Way Agent
Project Delivery Branch
Eureka

05/25/2021
Date

Tadj Ratajczak
TADEUSZ RATAJCZAK
Assistant Chief
North Region Right of Way
Eureka/Redding

5/25/21
Date

State of California - Department of Transportation

DATASHEET DISTRIBUTION LIST

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 73.3/76.1
ALTERNATE: 4 of 4
DATE: June 21, 2021

	Documents Included		
	Parcel Worksheet	Resource Hour Request	Cover Letter
	Mitigation Worksheet		Right of Way Datasheet
	Mitigation & Permit Estimate		
	Utility Information Sheet		
	Railroad Information Sheet		
	USA Lands Information Sheet		
	Real Property Services Information Sheet		
Send Original to:			
JOSEPH CAMINITI Design Engineer			X
Attention: **DAWN YANG** Project Engineer			X
Send Copies to:			
CHRIS JOHNSTON Right of Way Engineering			X
Steven Croteau Environmental Senior			X
Kellie Eldridge Environmental Coordinator			X
JAMIE MATTEOLI Project Manager		X	X
REBECCA LAW Assistant Project Manager		X	X
JOHN BALLANTYNE North Region Right of Way Division Chief	X	X	X
TADJ RATAJCZAK Assistant Chief, Eureka/Redding RW Office	X	X	X
JEREMIAH JOYNER RW Project Delivery, Eureka RW Office	X	X	X
YVONNE BECKER RW Project Coordination	X	X	X
ANGELA JORGENSEN Planning & Management	X	X	X
GRETE VALADAO Estimator	X	X	X
BRYAN REYNOLDS Utilities	X	X	X
BRYAN REYNOLDS Railroads			
GRETE VALADAO Mitigation			
APRIL REYNOLDS Real Property Services			
CHRIS MARSHALL USA Lands			

Order of Documents

1. Datasheet Distribution List
2. Resource Hour Request
3. Cover Letter
4. Right of Way Datasheet
5. Utility Information Sheet
6. Railroad Information Sheet
7. Mitigation & Permit Estimate
8. Mitigation Worksheet
9. Parcel Worksheets
10. Real Property Services Information Sheet (If Applicable)
11. USA Lands Infromation Sheet (If Applica

State of California
Department of Transportation

CALIFORNIA STATE TRANSPORTATION AGENCY

MEMORANDUM

Making Conservation
A California Way of Life.

To: JOSEPH CAMINITI
Design Engineer
Department of Transportation

Attention: DAWN YANG
Project Engineer

Date: June 21, 2021

File: 01-HUM-101 PM 73.3/76.1
EFIS No.: 01 2100 0033
EA: 0K940K
Alternate: 4 of 4

From: TADJ RATAJCZAK
North Region Right of Way Assistant Manager,
Project Delivery
Eureka/Redding

Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

Project Description: In Humboldt County in and near Eureka from 0.3 mile south of Spruce PT NB off ramp to 0.1 mile north of Truesdale Street

Alternate Description: Alternative 4 class II bike path (layout sheet L-1). All three class I path alternatives have the same class IV facility (layout sheets L-4 to L-14).

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on April 29, 2021 .

Right of Way Lead Time will require a minimum of 17 months after receipt of appraisal maps, utility conflict maps, environmental clearances (HMDD) and Certificate of Sufficiency (COS). A minimum of 12 months prior to certification will be required from receipt of the last map revision. Shorter lead times may require additional support resources and may adversely affect delivery of Right of Way Certification.

Tadj Ratajczak

TADJ RATAJCZAK
Assistant Chief
North Region Right of Way
EUREKA/REDDING

Attachments:
Right of Way Data Sheet

cc. Jamie Matteoli

State of California - Department of Transportation
RIGHT OF WAY DATASHEET

EA: 0K940K
PROJECT NO.: 01 2100 0033
LOCATION: 01-HUM-101 PM 73.3/76.1
Description: Pedestrian Infrastructure In Humboldt County in and near Eureka from 0.3 mile south of Spruce PT NB off ramp to 0.1 mile north of Truesdale Street

ALTERNATE: 4 of 4
DATE: 6/21/2021
Datasheet Type: Initial

1. Right of Way Cost Estimate:

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$393,375	5%	$451,803
B. Appraisal Fees Estimate	$25,000	N/A	$25,000
C. Mitigation Acquisition & Credits	$0		$0
D. Project Development Permit Fees	$35,000	5%	$40,199
Subtotal	$453,375		$517,002
E. Utility Relocation (State's Share)	$90,000	5%	$103,368
(Owner's Share: $500,000)			
F. Relocation Assistance (RAP)	$0		$0
G. Clearance/Demolition	$0		$0
H. Title & Escrow	$11,500	5%	$13,208
I. Total Estimated Right of Way Cost	$554,875	**Rounded**	**$634,000** *
J. Construction Contract Work	$30,500		

2. Current Date of Right of Way Certification April 22, 2024

3. Parcel Data:

Type		Dual/Appr	Utilities		Railroad	
X	0		U4 - 1	4	C&M Agreement	0
A	14		- 2	2	Service Contract	0
B	5		- 3	0	Easements	0
C	0	0	- 4	0	Rights of Entry	0
D	0	0	U5 - 7	1	Clauses	0
RR	0		- 8	0		
Total	**19**		- 9	6		

Excess 0

Areas:		Mitigation		Misc. R/W Work	
R/W	0.26 AC	Impacts	0	RAP Displacees	N/A
TCE	0.7 AC	Parcels	0	Clear/Demo	N/A
Excess	N/A	Credits	0	Permit to Enters	N/A
Mitigation	N/A			Condemnation	2
				USA Involvement	No

4. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

6 Fee, 21 Temporary Construction Easements, 2 Permament Easements and 12 Encroachment Permits will be required for this project (EP's are not listed on the worksheet as RW does not acquire Encroachment permits). Parcels required are zoned mostly commercial or public lands along with some industrial parcels.

5. Are any properties acquired for this project expected to be rented, leased, or sold?

Yes ____ No **X**

6. Are RAP displacements required?

Yes ____ No **X**

No. of single family N/A No. of business/nonprofit N/A

No. of multi-family N/A No. of farms N/A

Based on Draft/Final Relocation Impact Statement/Study dated N/A

N/A Sufficient replacement housing will be available without last resort housing.

N/A Sufficient replacement housing will not be available without last resort housing.

7. Is there an effect on assessed valuation?

Yes ____ No **X** Not Significant ____

8. Are there any items of Construction Contract Work?

Yes **X** No ____

Relocate Papa & Barkley sign at the intersection at PM 75.2. At same intersection (Kmart), move a sign on wheels.

9. Are utility facilities or rights of way affected?

Yes **X** No ____ Phase 4 Capital **$30,000**

Names of Utility Companies requiring verification only.

Humboldt Community Services District (Water/Sewer)

Names of Utility Companies requiring involvements.

City of Eureka (Water), City of Eureka (Sewer), PG&E (Gas), PG&E (Electric), AT&T (Communication), Suddenlink (Communication)

Additional information concerning Utility Involvement on this project.

Underground PG&E 10" Gas Transmission line, PG&E underground 12kv electric, AT&T underground fiber-optic, underground Suddenlink, City of Eureka Water and Sewer may be in conflict with the proposed cross culverts. Numerous utility lids/covers will need to be adjusted to grade for sidewalk work. Potholing required. As additional information becomes availalbe, this estimate may need to be revised.

10. Are railroad facilities or rights of way affected?

Yes ____ No **X** Phase 4 Capital **$0**

11. Are USA Lands or Rights Affected?

Yes ____ No **X** Phase 4 Capital **$0**

Agencies Involved:

US Forest Service ____	BLM ____	Army Corps of Engineers ____
National Parks ____	BIA ____	Vetrans Administration ____
US Fish & Wildlife ____	GSA ____	____

Rights or Permissions to acquire:

Easement ____	Special Use Permit ____	Courtesy Letter ____
Right of Way Grant ____	Cooperative Work Agreement ____	Cost Recovery ____
Mineral Agreement ____	Letter of Concurrence ____	Timber Sale ____
		____

12. Is an RE Office required for the project?

Yes ____ No **X**

Type of RE Office

Modular ____ Move In ____

13. Were any previously unidentified sites with hazardous waste and/or material found?

Yes ____ None Evident **X**

14. Are there material borrow and/or disposal sites required?

No **X** Optional ____ Mandatory ____

15. Are there potential relinquishments and/or abandonments?

Yes ____ No **X**

16. Are there any existing and/or potential airspace sites?

Yes ____ No **X**

17. What type of mitigation is required for the project?

Mitigation is not anticipated.

18. Is it anticipated that Caltrans will perform all Right of Way work?

Yes **X** No _____

19. Indicate the anticipated Right of Way schedule and lead time requirements.

Right of Way Lead Time will require a minimum of **17** months after we receive first appraisal maps, utility conflict maps, necessary environmental clearances and freeway agreements have been approved and obtained. Additionally a minimum of **12** months will be required after receiving the last appraisal map to Right of Way for certification.

20. Assumptions and limiting Conditions: (Check boxes that apply.)

* Design will secure necessary encroachment permits from local agencies.
* Utility lead time begins after PA&ED is met and Utility Conflict Maps have been received.
* Requested lead time provides sufficient time to acquire Resolutions of Necessity if condemnations are required.
* Requested lead time provides insufficient time to acquire Orders of Possession if condemnations are required.

Evaluation Prepared By:

Right of Way Grete Valadao Date 6/22/2021
GRETE VALADAO

Reviewed By

RW Project Coordinator Date 6/22/2021
YVONNE BECKER

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

JEREMIAH JOYNER
Senior Right of Way Agent
Project Delivery Branch
Eureka

06/22/2021
Date

Tadj Ratajczak
TADJ RATAJCZAK
Assistant Chief
North Region Right of Way
Eureka/Redding

6/22/21
Date

ATTACHMENT E

PIR Risk Register

Risk Register for 01-0K940K, South Broadway Complete Streets

Form v3.4 last modified 1/31/2019 CB

Risk Checkpoint:	PID
Date:	7/6/2021
Project Nickname:	South Broadway Complete Streets
EA:	01-0K940K
Co-Rt, Post Miles:	HUM-101-PM 73.3./76.1
Project Manager:	Jaime Matteoli
FY & Program (SHOPP or STIP):	2020 SHOPP
Capital Costs:	$14,878k
Support Costs:	$9,309k
Total Costs:	$24,187k
RTL Target:	10/7/2025

Alternative 1

Phase	Cost Contingency Range $k			Schedule Contingency Range (Wkg Days)		
	Optimistic	PERT	Pessimistic	Optimistic	PERT	Pessimistic
0-PA&ED	$0	$0	$0	0	0	0
1-PS&E	$0	$0	$0	0	0	0
2-RW Sup	$0	$0	$0	0	0	0
3-Con Sup	$0	$0	$0	0	0	0
Support Contingency	$0	$0	$0	0	0	0
9-RW Cap	$0	$0	$0	0	0	0
4-Con Cap	$0	$0	$0	0	0	0
Capital Contingency	$0	$0	$0	0	0	0
Total Contingency	$0	$0	$0	0	0	0

Risk Identification								Risk Assessment			Risk Response				Quantifying "Red" (High P & I) Level Risks			
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Contact	Updated	Impacted Phase	Support (Hrs) Capital Cost ($k)	Schedule (Days)	Calculated Contingency
Active	4	Opportunity	Environmental	LSAA (Opportunity)	If wetlands are determined not to be under the jurisdiction of CDFW, then no CDFW Lake and Streambed Alteration Agreement (LSAA) would be necessary, saving permitting costs and coordination effort.	CDFW typically asserts jurisdiction over wetland areas that are part of a river, stream, or lake. Wetlands within the project area are assumed to be under CDFW jurisdiction.		3-Moderate (31-50%)	1 - Very Low (Insignificant)	3	Accept	Environmental to consult with CDFW on jurisdiction within the project area.	Environmental	7/6/2021				
								40%	4 - Moderate (1-3 months)	12								
Active	5	Threat	Environmental	Work Windows	If the CA Coastal Commission requires work windows as part of permit conditions for natural resources (such as for pile driving during nesting bird season), construction timing may be affected, impacting the project schedule.	A CDP would be required. However, due to the limited scope of work and high ambient noise at the project location, no work windows would be imposed.		3-Moderate (31-50%)	2 - Low (<$1,209k)	6	Mitigate	Coordinate with the CA Coastal Commission to determine if work windows will be included as a permit condition.	Environmental	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	6	Threat	Environmental	NMFS Effects Determination	If surveys, design changes, or coordination with agencies result in the determination that the project should have a different effects determination, additional consultataion efforts and reports may be needed, affecting the cost and schedule of the project.	Work adjacent to the nearby fish bearing waters would lead to a NLAA determination with NMFS, requiring informal consultation		2-Low (11-30%)	1 - Very Low (Insignificant)	2	Accept	Coordinate with NMFS and CDFW to determine the extent of fish habitat to verify effects to fish.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	7	Threat	Environmental	Inadvertent Discovery	Because the scope involves new construction in undisturbed areas, If human remains or cultural deposits are unearthed during construction, construction may need to halt temporarily until resources can be assessed, affecting the project cost and schedule	It is assumed that no human remains, or cultural deposits are unearthed during construction.		2-Low (11-30%)	2 - Low (<$1,209k)	4	Accept	Halt construction until cultural resources are assessed.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	8	Opportunity	Environmental	Onsite Mitigation	If locations onsite are found to be usable for onsite restoration, offsite mitigation could be reduced or eliminated, depending on results of coordination efforts with agencies, reducing costs.	It is assumed that there is not enough space in the project vicinity to off-set impacts, and therefore off-site mitigation would be required.		3-Moderate (31-50%)	4 - Moderate ($1,210k - $2,419k	12	Enhance	Discuss potential onsite planting locations with maintenance early to determine restrictions. Consult with agencies to determine potential issues with planting in scoped areas. Discuss suitability of potential restoration areas with Reveg and Landscape to further refine study limits.	Environmental	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	11	Threat	Construction	Construction accomodations and right of way needs	Because the project area experiences high volumes for District 1 and all modes must be accomidated, the team could discover that additional temporary right of way easements would be needed, adding costs and delays.	It is assumed there is sufficient room to accommodate all modes.		3-Moderate (31-50%)	2 - Low (<$1,209k)	6	Mitigate	The team will mitigate this risk by studying the accomidation needs with the construction team early in environmental phase.	Construction	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	14	Threat	Design	Microsurfacing	If lanes/delineation are shifted significantly, microsurfacing may not be sufficient for restriping purposes and cold plane and overlay may be needed instead, adding costs to the project.	It is assumed that microsurfacing will be sufficient		2-Low (11-30%)	4 - Moderate ($1,210k - $2,419k	8	Mitigate	Microsurfacing is being placed on the 5th Street Safety project (0H200). The team will follow up with Traffic Safety on the application and performance of microsurfacing on that project.	Design	7/6/2021				
								20%	2 - Low (<1 month)	4								
Active	15	Threat	Design	Floodplain Mitigation	If impacts to floodplains are deemed significant, floodplain mitigation (excavation) will be required, which will increase costs and delay project schedule. This excavation would also be subject to environmental mitigation.	It is assumed that floodplain mitigation is not required.		2-Low (11-30%)	2 - Low (<$1,209k)	4	Mitigate	Attempt to mitigate the impacts to floodplains, which compliments minimizing environmental impacts.	Design	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								

Risk Register for 01-0K940K, South Broadway Complete Streets

Form v3.4 last modified 1/31/2019 CB

Risk Checkpoint:	PID
Date:	7/6/2021
Project Nickname:	South Broadway Complete Streets
EA:	01-0K940K
Co-Rt, Post Miles:	HUM-101-PM 73.3./76.1
Project Manager:	Jaime Matteoli
FY & Program (SHOPP or STIP):	2020 SHOPP
Capital Costs:	$11,952k
Support Costs:	$9,309k
Total Costs:	$21,261k
RTL Target:	10/7/2025

Alternative 2

Phase	Cost Contingency Range $k			Schedule Contingency Range (Wkg Days)		
	Optimistic	PERT	Pessimistic	Optimistic	PERT	Pessimistic
0-PA&ED	$0	$0	$0	0	0	0
1-PS&E	$0	$0	$0	0	0	0
2-RW Sup	$0	$0	$0	0	0	0
3-Con Sup	$0	$0	$0	0	0	0
Support Contingency	$0	$0	$0	0	0	0
9-RW Cap	$0	$0	$0	0	0	0
4-Con Cap	$0	$0	$0	0	0	0
Capital Contingency	$0	$0	$0	0	0	0
Total Contingency	$0	$0	$0	0	0	0

Risk Identification								Risk Assessment			Risk Response				Quantifying "Red" (High P & I) Level Risks			
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Contact	Updated	Impacted Phase	Support (Hrs) Capital Cost ($k)	Schedule (Days)	Calculated Contingency
Active	4	Opportunity	Environmental	LSAA (Opportunity)	If wetlands are determined not to be under the jurisdiction of CDFW, then no CDFW Lake and Streambed Alteration Agreement (LSAA) would be necessary, saving permitting costs and coordination effort.	CDFW typically asserts jurisdiction over wetland areas that are part of a river, stream, or lake. Wetlands within the project area are assumed to be under CDFW jurisdiction.		3-Moderate (31 50%)	1 - Very Low (Insignificant)	3	Accept	Environmental to consult with CDFW on jurisdiction within the project area.	Environmental	7/6/2021				
								40%	4 - Moderate (1-3 months)	12								
Active	5	Threat	Environmental	Work Windows	If the CA Coastal Commission requires work windows as part of permit conditions for natural resources (such as for pile driving during nesting bird season), construction timing may be affected, impacting the project schedule.	A CDP would be required. However, due to the limited scope of work and high ambient noise at the project location, no work windows would be imposed.		3-Moderate (31 50%)	2 - Low (<$1,063k)	6	Mitigate	Coordinate with the CA Coastal Commission to determine if work windows will be included as a permit condition.	Environmental	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	6	Threat	Environmental	NMFS Effects Determination	If surveys, design changes, or coordination with agencies result in the determination that the project should have a different effects determination, additional consultataion efforts and reports may be needed, affecting the cost and schedule of the project.	Work adjacent to the nearby fish bearing waters would lead to a NLAA determination with NMFS, requiring informal consultation		2-Low (11-30%)	1 - Very Low (Insignificant)	2	Accept	Coordinate with NMFS and CDFW to determine the extent of fish habitat to verify effects to fish.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	7	Threat	Environmental	Inadvertent Discovery	Because the scope involves new construction in undisturbed areas, If human remains or cultural deposits are unearthed during construction, construction may need to halt temporarily until resources can be assessed, affecting the project cost and schedule	It is assumed that no human remains, or cultural deposits are unearthed during construction.		2-Low (11-30%)	2 - Low (<$1,063k)	4	Accept	Halt construction until cultural resources are assessed.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	8	Opportunity	Environmental	Onsite Mitigation	If locations onsite are found to be usable for onsite restoration, offsite mitigation could be reduced or eliminated, depending on results of coordination efforts with agencies, reducing costs.	It is assumed that there is not enough space in the project vicinity to off-set impacts, and therefore off-site mitigation would be required.		3-Moderate (31 50%)	4 - Moderate ($1,064k - $2,126k	12	Enhance	Discuss potential onsite planting locations with maintenance early to determine restrictions. Consult with agencies to determine potential issues with planting in scoped areas. Discuss suitability of potential restoration areas with Reveg and Landscape to further refine study limits.	Environmental	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	11	Threat	Construction	Construction accomodations and right of way needs	Because the project area experiences high volumes for District 1 and all modes must be accomidated, the team could discover that additional temporary right of way easements would be needed, adding costs and delays.	Constructability studies		3-Moderate (31 50%)	2 - Low (<$1,063k)	6	Mitigate	The team will mitigate this risk by studying the accomidation needs with the construction team early in environmental phase.	Construction	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	12	Threat	Right of Way	Class I path on City of Eureka property	Because all of the proposed class 1 paths would be built on city property, there is a potential that Caltrans would need to permently or temporarily purchase this property. Additional purchase needs would add right of way capital costs.	Based on conversations with city engineering team members, the Caltrans team assumes that the class 1 path can be constructed without a need for permanent or temporary right of way purchases.		1-Very Low (1-10%)	2 - Low (<$1,063k)	2	Mitigate	Caltrans will continue to coordinate closely with the City of Eureka on the Class I path.		7/6/2021				
								5%	4 - Moderate (1-3 months)	4								
Active	14	Threat	Design	Microsurfacing	If lanes/delineation are shifted significantly, microsurfacing may not be sufficient for restriping purposes and cold plane and overlay may be needed instead, adding costs to the project.	It is assumed that microsurfacing will be sufficient		2-Low (11-30%)	4 - Moderate ($1,064k - $2,126k	8	Mitigate	Microsurfacing is being placed on the 5th Street Safety project (0H200). The team will follow up with Traffic Safety on the application and performance of microsurfacing on that project.	Design	7/6/2021				
								20%	2 - Low (<1 month)	4								
Active	15	Threat	Design	Floodplain Mitigation	If impacts to floodplains are deemed significant, floodplain mitigation (excavation) will be required, which will increase costs and delay project schedule. This excavation would also be subject to environmental mitigation.	It is assumed that floodplain mitigation is not required.		2-Low (11-30%)	2 - Low (<$1,063k)	4	Mitigate	Attempt to mitigate the impacts to floodplains, which compliments minimizing environmental impacts.	Design	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								

Risk Register for 01-0K940K, South Broadway Complete Streets

Form v3.4 last modified 1/31/2019 CB

Risk Checkpoint:	PID
Date:	7/6/2021
Project Nickname:	South Broadway Complete Streets
EA:	01-0K940K
Co-Rt, Post Miles:	HUM-101-PM 73.3./76.1
Project Manager:	Jaime Matteoli
FY & Program (SHOPP or STIP):	2020 SHOPP
Capital Costs:	$10,724k
Support Costs:	$9,309k
Total Costs:	$20,033k
RTL Target:	10/7/2025

Alternative 3

Phase	Cost Contingency Range $k			Schedule Contingency Range (Wkg Days)		
	Optimistic	PERT	Pessimistic	Optimistic	PERT	Pessimistic
0-PA&ED	$0	$0	$0	0	0	0
1-PS&E	$0	$0	$0	0	0	0
2-RW Sup	$0	$0	$0	0	0	0
3-Con Sup	$0	$0	$0	0	0	0
Support Contingency	$0	$0	$0	0	0	0
9-RW Cap	$0	$0	$0	0	0	0
4-Con Cap	$0	$0	$0	0	0	0
Capital Contingency	$0	$0	$0	0	0	0
Total Contingency	$0	$0	$0	0	0	0

Risk Identification								Risk Assessment			Risk Response				Quantifying "Red" (High P & I) Level Risks			
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Contact	Updated	Impacted Phase	Support (Hrs) Capital Cost ($k)	Schedule (Days)	Calculated Contingency
Active	1	Threat	Environmental	Geotech: Impacts	If access and drilling requirements for geotech substantially impact jurisdictional areas, additional coordination with the CCC and mitigation may be needed, impacting the costs and schedule of the project.	Drilling at the Alternative 3 bridge is anticipated to occur within wetlands or other ESHA. It is assumed that drilling impacts would be minor and temporary.	Structures hydraulic analysis	1-Very Low (1-10%)	1 - Very Low (Insignificant)	1	Mitigate	Minimize impacts to wetlands and other ESHA for geotech drilling.	Environmental & Geotech	7/6/2021				
								5%	4 - Moderate (1-3 months)	4								
Active	3	Opportunity	Environmental	Geotech: Permits (Opportunity)	If geotech does not impact any ESHA, permits, including a CDP, may not be required, reducing the amount of time for environmental review and approval of drilling plans.	It is assumed that wetlands or other ESHA would be affected by geotech drilling at the Alternative 3 bridge location, and that permits would be required.		2-Low (11-30%)	1 - Very Low (Insignificant)	2	Enhance	Avoid drilling within wetland or other ESHA.	Environmental & Geotech	7/6/2021				
								20%	2 - Low (<1 month)	4								
Active	4	Opportunity	Environmental	LSAA (Opportunity)	If wetlands are determined not to be under the jurisdiction of CDFW, then no CDFW Lake and Streambed Alteration Agreement (LSAA) would be necessary, saving permitting costs and coordination effort.	CDFW typically asserts jurisdiction over wetland areas that are part of a river, stream, or lake. Wetlands within the project area are assumed to be under CDFW jurisdiction.		3-Moderate (31 50%)	1 - Very Low (Insignificant)	3	Accept	Environmental to consult with CDFW on jurisdiction within the project area.	Environmental	7/6/2021				
								40%	4 - Moderate (1-3 months)	12								
Active	5	Threat	Environmental	Work Windows	If the CA Coastal Commission requires work windows as part of permit conditions for natural resources (such as for pile driving during nesting bird season), construction timing may be affected, impacting the project schedule.	A CDP would be required. However, due to the limited scope of work and high ambient noise at the project location, no work windows would be imposed.		3-Moderate (31 50%)	2 - Low (<$1,002k)	6	Mitigate	Coordinate with the CA Coastal Commission to determine if work windows will be included as a permit condition.	Environmental	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	6	Threat	Environmental	NMFS Effects Determination	If surveys, design changes, or coordination with agencies result in the determination that the project should have a different effects determination, additional consultataion efforts and reports may be needed, affecting the cost and schedule of the project.	Work adjacent to the nearby fish bearing waters would lead to a NLAA determination with NMFS, requiring informal consultation		2-Low (11-30%)	1 - Very Low (Insignificant)	2	Accept	Coordinate with NMFS and CDFW to determine the extent of fish habitat to verify effects to fish.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	7	Threat	Environmental	Inadvertent Discovery	Because the scope involves new construction in undisturbed areas, If human remains or cultural deposits are unearthed during construction, construction may need to halt temporarily until resources can be assessed, affecting the project cost and schedule	It is assumed that no human remains, or cultural deposits are unearthed during construction.		2-Low (11-30%)	2 - Low (<$1,002k)	4	Accept	Halt construction until cultural resources are assessed.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	8	Threat	Environmental	Offsite Mitigation	If onsite locations are found to be unsuitable for restoration, partial or full offsite mitigation may be required, which would increase costs.	It is assumed that there is enough space in the project vicinity to off-set impacts.		3-Moderate (31 50%)	4 - Moderate ($1,003k - $2,003k	12	Mitigate	Discuss potential onsite planting locations with maintenance early to determine restrictions. Consult with agencies to determine potential issues with planting in scoped areas. Discuss suitability of potential restoration areas with Reveg and Landscape to further refine study limits.	Environmental	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	9	Opportunity	Geotechnical	Geotechnical Drilling	If geotechnical drilling indicates spread footings are suitable, there is an opportunity for realizing cost savings for foundation work.	Due to presence of clay in nearby borings, settlement assumed to be to high for spreadfootings. If after drilling borings and lab testing indicates settlement is within tolerable limits, spread footings may be an option		2-Low (11-30%)	2 - Low (<$1,002k)	4	Accept	The team will perform the required studies.	Geotechnical Services/Structure Design	7/6/2021				
								20%	2 - Low (<1 month)	4								
Active	10	Threat	Structure Design	Premanufactred design	Bridge assumed to be designed as a "minor bridge". If bridge is classified as a "major bridge" status, additional cost for both steel bridge cost and design resources may be aniticipated	Bridge is not over freeway, but over wetland area and assumed to be given a "minor bridge" status per MTD 12-8. Premanufactured "minor" bridges save on steel quantity and steel cost as well as design resources for the steel truss design. If "major bridge" classification is required the bridge cost is anticipated to increase.		2-Low (11-30%)	2 - Low (<$1,002k)	4	Accept	The team will perform the required studies.	Structure Design	7/6/2021				
								20%	2 - Low (<1 month)	4								

Risk Identification								Risk Assessment			Risk Response				Quantifying "Red" (High P & I) Level Risks			
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Contact	Updated	Impacted Phase	Support (Hrs) Capital Cost ($k)	Schedule (Days)	Calculated Contingency
Active	11	Threat	Construction	Construction accomodations and right of way needs	Because the project area experiences high volumes for District 1 and all modes must be accomidated, the team could discover that additional temporary right of way easements would be needed, adding costs and delays.	Constructability studies		3-Moderate (31 50%)	2 - Low (<$1,002k)	6	Mitigate	The team will mitigate this risk by studying the accomidation needs with the construction team early in environmental phase.	Construction	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	12	Threat	Right of Way	Class I path on City of Eureka property	Because all of the proposed class 1 paths would be built on city property, there is a potential that Caltrans would need to permently or temporarily purchase this property. Additional purchase needs would add right of way capital costs.	Based on conversations with city engineering team members, the Caltrans team assumes that the class 1 path can be constructed without a need for permanent or temporary right of way purchases.		1-Very Low (1-10%)	2 - Low (<$1,002k)	2	Mitigate	Caltrans will continue to coordinate closely with the City of Eureka on the Class I path.		7/6/2021				
								5%	4 - Moderate (1-3 months)	4								
Active	14	Threat	Design	Microsurfacing	If lanes/delineation are shifted significantly, microsurfacing may not be sufficient for restriping purposes and cold plane and overlay may be needed instead, adding costs to the project.	It is assumed that microsurfacing will be sufficient		2-Low (11-30%)	4 - Moderate ($1,003k - $2,003k	8	Mitigate	Microsurfacing is being placed on the 5th Street Safety project (0H200). The team will follow up with Traffic Safety on the application and performance of microsurfacing on that project.	Design	7/6/2021				
								20%	2 - Low (<1 month)	4								
Active	15	Threat	Design	Floodplain Mitigation	If impacts to floodplains are deemed significant, floodplain mitigation (excavation) will be required, which will increase costs and delay project schedule. This excavation would also be subject to environmental mitigation.	It is assumed that floodplain mitigation is not required.		2-Low (11-30%)	2 - Low (<$1,002k)	4	Mitigate	Attempt to mitigate the impacts to floodplains, which compliments minimizing environmental impacts.	Design	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								

Risk Register for 01-0K940, South Broadway Complete Streets

Form v3.4 last modified April 2019

Risk Checkpoint:	PID
Date:	7/6/2021
Project Nickname:	South Broadway Complete Streets
EA:	01-0K940
Co-Rt, Post Miles:	HUM-101-PM 73.3/76.1
Project Manager:	Jaime Matteoli
FY & Program (SHOPP or STIP):	2020 SHOPP
Capital Costs:	$7,718k
Support Costs:	$4,782k
Total Costs:	$12,500k
RTL Target:	6/3/2024

Alternative 4

Phase	Cost Contingency Range $k			Schedule Contingency Range (Wkg Days)		
	Optimistic	PERT	Pessimistic	Optimistic	PERT	Pessimistic
0-PA&ED	$0	$0	$0	0	0	0
1-PS&E	$0	$0	$0	0	0	0
2-RW Sup	$0	$0	$0	0	0	0
3-Con Sup	$0	$0	$0	0	0	0
Support Contingency	$0	$0	$0	0	0	0
9-RW Cap	$0	$0	$0	0	0	0
4-Con Cap	$0	$0	$0	0	0	0
Capital Contingency	$0	$0	$0	0	0	0
Total Contingency	$0	$0	$0	0	0	0

Risk Identification								Risk Assessment			Risk Response				Quantifying "Red" (High P & I) Level Risks			
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Owner	Updated	Impacted Phase	Support (Hrs) Capital Cost ($k)	Schedule (Days)	Calculated Contingency
Active	6	Threat	Environmental	Wetlands and Other Waters	If there are unanticipated impacts to wetlands or other waters (such as cut/fill required adjacent U.S 101 due to limited space on existing disturbed areas), additional studies, permits, and permit-driven mitigation may be required, impacting the cost and schedule of the project.	It is assumed that this alternative would not impact wetlands or other waters, and that permits would not be required.		2-Low (11-30%)	1 - Very Low (Insignificant)	2	Avoid	Avoid impacts to wetlands and other waters.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	7	Threat	Environmental	Inadvertent Discovery	Because the scope involves construction in areas that are sensitve for cultural resources, if human remains or cultural deposits are unearthed during construction, construction may need to halt temporarily until resources can be assessed, affecting the project cost and schedule	It is assumed that no human remains, or cultural deposits are unearthed during construction.		2-Low (11-30%)	2 - Low (<$750k)	4	Accept	Halt construction until cultural resources are assessed.	Environmental	7/6/2021				
								20%	4 - Moderate (1-3 months)	8								
Active	11	Threat	Construction	Construction accomodations and right of way needs	Because the project area experiences high volumes for District 1 and all modes must be accomodated, the team could discover that additional temporary right of way easements would be needed, adding costs and delays	Constructability studies		3-Moderate (31 50%)	2 - Low (<$750k)	6	Mitigate	The team will mitigate this risk by studying the accomodation needs with the construction team early in environmental phase.	Construction	7/6/2021				
								40%	2 - Low (<1 month)	6								
Active	13	Threat	Environmental/ Right of Way/Design	Schedule	Because the enviro, right of way, and design timelines estimated longer than allowed for in the current project schedule, in the event that the full amount of estimated time is needed by those functions, there would be schedule delays and increased support costs.	Functions will attempt to expedite for right of way		3-Moderate (31 50%)	4 - Moderate ($614k - $1,226k	12	Mitigate	Since the project is going to be programed in the 2020 SHOPP and there is no flexibility for this project to become long lead, the project needs to RTL in FY 24. The estimated enviro, right of way, and design timeline shows that the schedule will likely take longer than this. The team will work to try to meet these timelines as best as possible.	Environmental/Right of Way/Design	7/6/2021				
								40%	4 - Moderate (1-3 months)	12								
Active	14	Threat	Design	Microsurfacing	If lanes/delineation are shifted significantly, microsurfacing may not be sufficient for restriping purposes and cold plane and overlay may be needed instead, adding costs to the project.	It is assumed that microsurfacing will be sufficient		2-Low (11-30%)	4 - Moderate ($614k - $1,226k	8	Mitigate	Microsurfacing is being placed on the 5th Street Safety project (0H200). The team will follow up with Traffic Safety on the application and performance of microsurfacing on that project.	Design	7/6/2021				
								20%	2 - Low (<1 month)	4								

ATTACHMENT F

PIR Stormwater Data Reports

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Flex your power!
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Memorandum

TO: **NR Design Stormwater**

Date:	May 14, 2021
EA:	01-0K940K
Dist/Co/Rte/PM:	01-HUM-101-PM 74.8/76.0
Nickname:	Broadway Complete Streets
EFIS:	121000033
Regional Board	1/North Coast Regional Water Quality Control
Watershed	Humboldt Bay-Frontal Pacific Ocean
401 Cert (Y/N)	N

FROM:

California Department of Transportation - District 1
Joseph Caminiti, Designer
Advance Planning

SUBJECT: PIR Stormwater Data Report:

WORK DESCRIPTION: (please provide full scope of project in detail)

Project Description:

This project is proposed along US-101 and Broadway in Eureka, CA to enhance connectivity and safety for bicyclist and pedestrians. Class 1 and class 4 bike facilities are proposed with this project. The project begins near PM 74.8 with a new class 1 bike facility that will connect the existing park and ride facility located near the Herrick & US-101 interchange to the proposed class 4 bike facility that is proposed along US-101/Broadway.

The class 1 facility is proposed from the Herrick and US-101 interchange to the signalized intersection located just north, where the old K-mart was once located (PM74.8/75.2). This class 1 facility has been proposed with three different alternatives. The first alternative follows the existing US-101 highway alignment. With this alternative, high tension cable barrier and a narrow bioswale have been proposed between US-101 and the proposed class 1 facility.

The second and third alternatives for the class 1 facility proposes a new class 1 facility to be constructed along one of two existing city of Eureka maintenance roads. These existing maintenance roads will be repaved with a new structural section in order to repurpose the maintenance road into a new class 1 bike facility. The second alternative alignment includes a portion of the first alternative's alignment, and will take on the typical section for that alternative at this point. See layouts and typical sections for details.

Proposed with the third alternative is a 14-foot wide bridge with an approximate length of roughly 145-feet. This bridge will span east to west and allow users to pass over the existing wetland area, adjacent to US-101. The bridge will effectively connect the class 1 bike facility with Broadway and US-101 where the new class 4 facility is proposed.

The class 4 facility is proposed from the signalized intersection, where the old K-mart was once located to the intersection of Truesdale Street and Broadway (PM75.2/76.0). Within the class 4 segment two new bus stops are proposed that will require sidewalk modification and widening. Where there is limited width available class 2 bike facilities will be implemented. The vertical separation for the class 4 bike facility is still being investigated and remains to be determined.

Other pertinent work includes an cold planing and overlay from just south of the Kmart intersection to just north of Truesdale Street, drainage work in some locations, two midblock pedestrian crossings with either a rectangular rapid flashing beacon or pedestrian hybrid beacon (TBD), one median bikeway crossing, sidewalk/curb ramp work where needed, bus pads and bus stop upgrades, two new bus stops, construction a protected intersection at the Kmart intersection (which includes replacing the signal), and upgrading signals to have bicycle signals and non-motorized phases.

Describe changes in impervious area or drainage.

This project can be thought of in two major parts. There will be a class I shared use path built from the Herrick Ave park and ride to the old Kmart intersection. There are three alternative alignments for this path. Alt 1 will be built along the highway and will require filling in wetland that is impacted by trash/runoff from the highway. Alt 3 will be built almost solely on an unpaved City of Eureka maintenance road. Alt 2 will be a combination of a different unpaved City of Eureka maintennace road and following the highway. These paths will be where the majority of changes to impervious area come from.

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Describe Location Specifc Requirements or other environmental issues that would impact water quality design.

One advantage of the Alt 1 class I path alignment is that we could construct a bioswale between the highway and the path. This could capture runoff from the road and prevent it from entering the wetland directly.

The major environmental factor is that the class I path will be traveling through a wetland area.

Identify potential water qulity issues & cost.

1 **The project is exempt from treatment BMP consideration in accordance with the attached Evaluation Documentation Form.**

Yes/No No Click on boxes for definitions.

Place an X in box if highway project. For non-highway project leave blank (this is used to determine how much treatment is required when calculating PCTA (1 acre or more of impervious area added for highway projects; 5,000 sf for non-highway projects)

Highway: X

If No:	RIS (acres)	NNI (acres)	EIA (acres)	ATA #1 & 2 (acres)	PCTA (acres)	Comments, potential BMPs, etc
	0.00	0.93	0.93		0.00	New impervious surfaces associated with the construction of ikeways and pedestrian facilties are exempt from post construction stormwater treatment requirements.

Treatment Potential	NA	(%)
Treatment Estimated Cost	NA	(Dollars)

2 **Is the scope of the project to obtain Compliance Unit Credits or Alternative Compliance Area?**

Yes/No No

If Yes: Estimated acres

3 **Will the project potentially require a RSA?**

Yes/No No

4 **Estimate Construction BMPs**

DSA (acres)	**RL (1,2,3)**	**CBMP Estimate ($$)**	**Identify any special construcion circumstances impacting estimate**
>1 acre	2	$ 77,500	Temporary construction site BMP estimate is based on 1.50% of capital construction cost per NR Construction Site BMP Estimating Guidance (PPDG 2017).

Comments:

Dawn L. Yang

Dawn Yang - Project Engineer — 5/19/21 Date

Samantha Hadden

Samantha Hadden - NR Design Stormwater Coordinator — 5/19/21 Date

01-HUM-101-PM 74.8/76.0
01-0K940K

Evaluation Docmentation Form

May 2021

Date: 5/14/2021

Project ID(EA) 01-0K940K

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	X		See Figure 4-1, Project Evaluation Process for Consideration of Treatment BMPs. Continue to 2.
2	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance or TMDL Compliance Units)?		X	If **Yes**, go to 8. If **No**, continue to 3.
3	Is there a direct or indirect discharge to surface waters?	X		If **Yes**, continue to 4. If **No**, go to 9.
4	As defined in the WQAR or ED, does the project: a. discharge to areas of Special Biological Significance (ASBS), or b. discharge to a TMDL watershed where Caltrans is named stakeholder, or c. have other pollution control requirements for surface waters within the project limits?		X	If **Yes to any**, contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5.
		X		S H *(Dist./Reg. Coordinator initials)*
			X	If **No** to all, continue to 5.
5	Are any existing Treatment BMPs partially or completely removed? (ATA condition #1, Section 4.4.1)		X	If **Yes**, go to 8 **AND** continue to 6. If **No**, continue to 6.
6	Is this a Routine Maintenance Project?		X	If **Yes**, go to 9. If **No**, continue to 7.
7	Does the project result in an increase of <u>one acre or more</u> of new impervious surface (NIS)?		X	If **Yes**, go to 8. If **No**, go to 9.
8	Project is required to implement Treatment BMPs.	Complete Checklist T-1, Part 1.		
9	Project is not required to implement Treatment BMPs. S H *(Dist./Reg. Design SW Coord. Initials)* BY *(Project Engineer Initials)* _____ *(Date)*	Document for Project Files by completing this form and attaching it to the SWDR.		

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DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

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Memorandum

TO: **NR Design Stormwater**

Date:	May 14, 2021
EA:	01-0K940K
Dist/Co/Rte/PM:	01-HUM-101-PM 74.8/76.0
Nickname:	Broadway Complete Streets
EFIS:	121000033
Regional Board	1/North Coast Regional Water Quality Control
Watershed	Humboldt Bay-Frontal Pacific Ocean
401 Cert (Y/N)	N

FROM:

California Department of Transportation - District 1
Joseph Caminiti, Designer
Advance Planning

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Identify potential water qulity issues & cost.

1 **The project is exempt from treatment BMP consideration in accordance with the attached Evaluation Documentation Form.**

Yes/No | No | Click on boxes for definitions.

Place an X in box if highway project. For non-highway project leave blank (this is used to determine how much treatment is required when calculating PCTA (1 acre or more of impervious area added for highway projects; 5,000 sf for non-highway projects)

Highway: X

If No:	RIS (acres)	NNI (acres)	EIA (acres)	ATA #1 & 2 (acres)	PCTA (acres)	Comments, potential BMPs, etc
	0.00	0.86	0.86		0.00	New impervious surfaces associated with the construction of ikeways and pedestrian facilties are exempt from post construction stormwater treatment requirements.

Treatment Potential	NA	(%)
Treatment Estimated Cost	NA	(Dollars)

2 **Is the scope of the project to obtain Compliance Unit Credits or Alternative Compliance Area?**

Yes/No | No

If Yes: | Estimated acres

3 **Will the project potentially require a RSA?**

Yes/No | No

4 **Estimate Construction BMPs**

DSA (acres)	**RL (1,2,3)**	**CBMP Estimate ($$)**	
>1 acre	2	$ 77,500	Temporary construction site BMP estimate is based on 1.50% of capital construction cost per NR Construction Site BMP Estimating Guidance (PPDG 2017).

Comments:

Dawn L. Yang

Dawn Yang - Project Engineer

5/19/2021

Date

Samantha Hadden

Samantha Hadden - NR Design Stormwater Coordinator

5/19/21

Date

01-HUM-101-PM 74.8/76.0
01-0K940K

Evaluation Docmentation Form

May 2021

Date: 5/14/2021

Project ID(EA) 01-0K940K

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	X		See Figure 4-1, Project Evaluation Process for Consideration of Treatment BMPs. Continue to 2.
2	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance or TMDL Compliance Units)?		X	If **Yes**, go to 8. If **No**, continue to 3.
3	Is there a direct or indirect discharge to surface waters?	X		If **Yes**, continue to 4. If **No**, go to 9.
4	As defined in the WQAR or ED, does the project: a. discharge to areas of Special Biological Significance (ASBS), or		X	If **Yes to any**, contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5.
	b. discharge to a TMDL watershed where Caltrans is named stakeholder, or	X		S H *(Dist./Reg. Coordinator initials)*
	c. have other pollution control requirements for surface waters within the project limits?		X	If **No** to all, continue to 5.
5	Are any existing Treatment BMPs partially or completely removed? (ATA condition #1, Section 4.4.1)		X	If **Yes**, go to 8 **AND** continue to 6. If **No**, continue to 6.
6	Is this a Routine Maintenance Project?		X	If **Yes**, go to 9. If **No**, continue to 7.
7	Does the project result in an increase of <u>one acre or more</u> of new impervious surface (NIS)?		X	If **Yes**, go to 8. If **No**, go to 9.
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Highway: X

If No:	RIS (acres)	NNI (acres)	EIA (acres)	ATA #1 & 2 (acres)	PCTA (acres)	Comments, potential BMPs, etc
	0.00	0.78	0.78		0.00	New impervious surfaces associated with the construction of ikeways and pedestrian facilties are exempt from post construction stormwater treatment requirements.

Treatment Potential	NA	(%)
Treatment Estimated Cost	NA	(Dollars)

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Yes/No No

If Yes: Estimated acres

3 **Will the project potentially require a RSA?**

Yes/No No

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DSA (acres)	**RL (1,2,3)**	**CBMP Estimate ($$)**	**Identify any special construcion circumstances impacting estimate**
>1 acre	2	$ 77,500	Temporary construction site BMP estimate is based on 1.50% of capital construction cost per NR Construction Site BMP Estimating Guidance (PPDG 2017).

Comments:

Dawn L. Yang

Dawn Yang - Project Engineer — 5/19/21 Date

Samantha Hadden

Samantha Hadden - NR Design Stormwater Coordinator — 5/19/21 Date

01-HUM-101-PM 74.8/76.0
01-0K940K

Evaluation Docmentation Form

May 2021

Date: 5/14/2021

Project ID(EA) 01-0K940K

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	X		See Figure 4-1, Project Evaluation Process for Consideration of Treatment BMPs. Continue to 2.
2	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance or TMDL Compliance Units)?		X	If **Yes**, go to 8. If **No**, continue to 3.
3	Is there a direct or indirect discharge to surface waters?	X		If **Yes**, continue to 4. If **No**, go to 9.
4	As defined in the WQAR or ED, does the project: a. discharge to areas of Special Biological Significance (ASBS), or		X	If **Yes to any**, contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5.
	b. discharge to a TMDL watershed where Caltrans is named stakeholder, or	X		S H *(Dist./Reg. Coordinator initials)*
	c. have other pollution control requirements for surface waters within the project limits?		X	If **No** to all, continue to 5.
5	Are any existing Treatment BMPs partially or completely removed? (ATA condition #1, Section 4.4.1)		X	If **Yes**, go to 8 **AND** continue to 6. If **No**, continue to 6.
6	Is this a Routine Maintenance Project?		X	If **Yes**, go to 9. If **No**, continue to 7.
7	Does the project result in an increase of <u>one acre or more</u> of new impervious surface (NIS)?		X	If **Yes**, go to 8. If **No**, go to 9.
8	Project is required to implement Treatment BMPs.	Complete Checklist T-1, Part 1.		
9	Project is not required to implement Treatment BMPs. S H *(Dist./Reg. Design SW Coord. Initials)* BM *(Project Engineer Initials)* _____ *(Date)*	Document for Project Files by completing this form and attaching it to the SWDR.		

State of California

DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Flex your power!
Be energy efficient!

Memorandum

TO: **NR Design Stormwater**

FROM:

California Department of Transportation - District 1

Joseph Caminiti, Designer
Advance Planning

Date:	June 18, 2021
EA:	01-0K940K
Dist/Co/Rte/PM:	01-HUM-101-PM 74.8/76.0
Nickname:	Broadway Complete Streets
EFIS:	0121000033
Regional Board	1/North Coast Regional Water Quality Control Board
Watershed	Humboldt Bay-Frontal Pacific Ocean
401 Cert (Y/N)	N

SUBJECT: PIR Stormwater Data Report: Alternative 4

WORK DESCRIPTION: (please provide full scope of project in detail)

Project Description:

This project is proposed along US-101 and Broadway in Eureka, CA to enhance connectivity and safety for bicyclists and pedestrians. The project proposes a total of four build alternatives to consider a class I facility or class II bike lane from PM 74.8 to PM 75.2. A class 4 facility is then proposed for the remainder of the project limits, from PM 75.2 to PM 76.1.

Four alternatives are proposed for the Class I facility from the Herrick and US-101 interchange to the signalized intersection located just north, where the old K-mart was once located (PM74.8/75.2). The first alternative follows the existing US-101 highway alignment. With this alternative, high tension cable barrier and a narrow bioswale have been proposed between US-101 and the proposed class 1 facility. The second and third alternatives for the class 1 facility proposes a new class 1 facility to be constructed along one of two existing city of Eureka maintenance roads. These existing maintenance roads will be repaved with a new structural section in order to repurpose the maintenance road into a new class 1 bike facility. The second alternative alignment includes a portion of the first alternative's alignment, and will take on the typical section for that alternative at this point. Proposed with the third alternative is a 14-foot wide bridge with an approximate length of roughly 145-feet. This bridge will span east to west and allow users to pass over the existing wetland area, adjacent to US-101. The bridge will effectively connect the class 1 bike facility with Broadway and US-101 where the new class 4 facility is proposed.

The fourth alternative will not include the class 1 facility from the Herrick and US-101 interchange to the old Kmart intersection; but instead, replaces the class I path with class II bike lanes within Caltrans right of way in this segment (PM 74.8/75.2).

A class 4 facility is proposed from the signalized intersection, where the old K-mart was once located to the intersection of Truesdale Street and Broadway (PM75.2/76.0). Within the class 4 segment two new bus stops are proposed that will require sidewalk modification and widening. Where there is limited width available class 2 bike facilities will be implemented. The vertical separation for the class 4 bike facility is still being investigated and remains to be determined.

Other pertinent work includes an cold planning, microsurfacing from just south of the Kmart intersection to just north of Truesdale Street, drainage work in some locations, two midblock pedestrian crossings with either a rectangular rapid flashing beacon or pedestrian hybrid beacon (TBD), one median bikeway crossing, sidewalk/curb ramp work where needed, bus pads and bus stop upgrades, two new bus stops, construction a protected intersection at the Kmart intersection (which includes replacing the signal), and upgrading signals to have bicycle signals and non-motorized phases.

Describe changes in impervious area or drainage.

This project can be thought of in two major parts. There will be a class I shared use path or class 2 bike lane from the Herrick Ave park and ride to the old Kmart intersection. There are three alternative alignments for the Class 1 path. Alt 1 will be built along the highway and will require filling in wetland that is impacted by trash/runoff from the highway. Alt 3 will be built almost solely on an unpaved City of Eureka maintenance road. Alt 2 will be a combination of a different unpaved City of Eureka maintennace road and following the highway. These paths will be where the majority of changes to impervious area come from. Alt 4 proposes to place class 2 bike lanes on existing roadway facility instead of constructing a new class 1 path. Therefore, for Alt 4, there will be minimal changes to impervious areas. Changes to impervious areas will come from the other half of the project as described below.

The other half of the project involves upgrading bicycle, pedestrian, and transit facilities along broadway from the old Kmart intersection to Truesdale Street. There will be some widening along this segment, but relatively minimal impacts to impervious area.

Describe Location Specifc Requirements or other environmental issues that would impact water quality design.

For Alternative 4, the Class 2 bike lane will be placed on existing roadway facility and there will be minimal impacts to water quality.

Identify potential water qulity issues & cost.

1 **The project is exempt from treatment BMP consideration in accordance with the attached Evaluation Documentation Form.**

Yes/No No Click on boxes for definitions.

Place an X in box if highway project. For non-highway project leave blank (this is used to determine how much treatment is required when calculating PCTA (1 acre or more of impervious area added for highway projects; 5,000 sf for non-highway projects)

Highway: X

If No:	RIS (acres)	NNI (acres)	EIA (acres)	ATA #1 & 2 (acres)	PCTA (acres)	Comments, potential BMPs, etc
	0.00	0.14	0.14		0.00	New impervious surfaces associated with the construction of bikeways and pedestrian facilties are exempt from post construction stormwater treatment requirements.

Treatment Potential	NA	(%)
Treatment Estimated Cost	NA	(Dollars)

2 **Is the scope of the project to obtain Compliance Unit Credits or Alternative Compliance Area?**

Yes/No No

If Yes: Estimated acres

3 **Will the project potentially require a RSA?**

Yes/No No

4 **Estimate Construction BMPs**

DSA (acres)	**RL (1,2,3)**	**CBMP Estimate ($$)**	**Identify any special construcion circumstances impacting estimate**
>1 acre	2	$ 77,500	Temporary construction site BMP estimate is based on 1.50% of capital construction cost per NR Construction Site BMP Estimating Guidance (PPDG 2017).

Comments:

Dawn L. Yang

Dawn Yang - Project Engineer

6/18/21

Date

Samantha Hadden

Samantha Hadden - NR Design Stormwater Coordinator

6/18/21

Date

01-HUM-101-PM 74.8/76.0
01-0K940K

Evaluation Docmentation Form

June 2021

Date: 6/18/2021

Project ID(EA) 01-0K940K

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	X		See Figure 4-1, Project Evaluation Process for Consideration of Treatment BMPs. Continue to 2.
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9	Project is not required to implement Treatment BMPs. S H *(Dist./Reg. Design SW Coord. Initials)* *(Project Engineer Initials)* 6/18/21 *(Date)*	Document for Project Files by completing this form and attaching it to the SWDR.		

ATTACHMENT G

Transportation Management Plan Data Sheet

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

To: NICOLE FARRELL
Project Engineer
District 1 Advance Planning

Date: May 10, 2021
File: HUM-101 PM 74.8/76.0
EA: 01-0K940K
EFIS: 01 2100 0033 K
Broadway Complete Streets

From: SHERI RODRIGUEZ, Chief
District 1 Traffic Management & Systems Operations

Project Information

Location:	In Humboldt County in Eureka, from NB On from Herrick Ave to Truesdale St	
Type of Work:	Construct new bicycle facility and bus stops. Additional work includes cold planning/overlaying, construct midblock pedestrian and bicycle crossings, sidewalk/curb ramp upgrades, and signalized intersection upgrades.	
Anticipated Traffic Control:	Lane reduction Sidewalk closure Partial shoulder closure	
Significant Traffic Impacts:	Not anticipated	
Work Zone Speed Reduction:	Required	
Estimated Maximum Delay:	Minimal	
Bicyclist Accommodation:	Multilane facility: Provide 5 ft of space adjacent to the open traffic lane	
Pedestrian Accommodation:	Yes (max detour length of 2 city blocks)	
PID Date:	August 3, 2021	
Anticipated Construction Date	Late 2024	
District Traffic Mgr/ TMP Mgr:	Sheri Rodriguez	(707) 498-5252
TMP Contact:	Paul Hailey	(707) 496-1562

Lane Requirements

Conventional Highway Lane Requirements

County: Humboldt	Route/Direction: 101 NB/SB	PM: 74.8/76.0

Closure limits:

From hour to hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	1	1	1	1	1	1															1	1	1	1	
Fridays	1	1	1	1	1	1																			
Saturdays																									
Sundays																					1	1	1	1	

Legend:

1	Provide at least one 17 ft through traffic lane open in each direction of travel.
	No lane closures allowed. A minimum of 5 feet of paved shoulder must remain open for bicyclist accomodation.

REMARKS: One lane closure is allowed within the project limits. Pedestrian detours are allowed any time.

Adjacent Projects

Contract No	Co-Rte-PM	Construction Yr	Project	Est Delay
01-0H8304	HUM-101-77.24/78.02	2025-2028	Koster Couplet	Minimal

TMP Elements Needed for Cost Estimate

Item Code	Item	Unit	Minimum Unit Price
066062	COZEEP Contract	LS	$140/officer-hr[1]
066063	Traffic Management Plan – Public Information	LS	$2,000
066070	Maintain Traffic	LS	1.0% of Traffic Items[2]
120100	Traffic Control System	LS	$1,000/working day
124000	Temporary Pedestrian Access Route	LS	$20,000
128652	Portable Changeable Message Sign	LS	$20,000
120210A	Portable Radar Speed Feedback Sign Systems[3]	LS	$1,000/month

[1]Consult Construction for number of hours; 2 officers required during hours of darkness
[2]Traffic Items include 12XXXX items; round unit price to the nearest thousand.
[3]Need 2 total for each direction of travel (see Caltrans Revised Standard Plan T19).

ATTACHMENT H

Pavement Condition Reports

PaveM Scenario Used: #3299
APCS Data Year: 2019

Caltrans Pavement Program
Pavement Condition Summary Report (PaveM)
BOTH DIRECTIONS; ALL LANES

District: 1; County: Humboldt (HUM); Route: 101

From PM: 75.110 To PM: 76.040

L-Length: 0.930. R-Length: 0.930

L-Lane Miles: 1.860. R-Lane Miles: 1.860 (Unknown lane miles: 0.000)

	Traditional Condition (lane miles)					MAP-21 Condition (lane miles)				Effectiveness (%)	
Year/ Condition Lane Miles	Green	Yellow	Blue	Orange	Red	Good	Fair	Poor	Total Lane Miles	SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
2015	1.197	2.256	0.267	0.000	0.000	2.193	1.527	0.000	3.720	0.00	0.00
2016	3.720	0.000	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.00	0.00
2017	*No Data Available*										
2018	3.720	0.000	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.00	0.00

End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years

2019	3.720	0.000	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.00	0.00
2020	2.789	0.931	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.00	0.00
2021	1.891	1.829	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.00	0.00
2022	1.624	2.096	0.000	0.000	0.000	3.123	0.597	0.000	3.720	0.00	0.00
2023	0.000	3.720	0.000	0.000	0.000	1.860	1.860	0.000	3.720	0.00	0.00
2024	0.000	3.720	0.000	0.000	0.000	1.593	2.127	0.000	3.720	0.00	0.00
2025	0.000	3.720	0.000	0.000	0.000	1.561	2.159	0.000	3.720	0.00	0.00
2026	0.000	3.720	0.000	0.000	0.000	1.561	2.159	0.000	3.720	0.00	0.00
2027	0.000	3.688	0.000	0.032	0.000	0.000	3.720	0.000	3.720	0.86	0.00
2028	0.000	1.860	0.000	1.860	0.000	0.000	3.720	0.000	3.720	50.00	0.00
2029	0.000	1.860	0.000	1.860	0.000	0.000	3.720	0.000	3.720	50.00	0.00
2030	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.000	3.720	100.00	0.00
2031	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.000	3.720	100.00	0.00
2032	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.000	3.720	100.00	0.00
2033	0.000	0.000	0.000	3.720	0.000	0.000	3.720	0.000	3.720	100.00	0.00

	Detailed Breakdown of MAP-21 Fair Condition (lane miles)										
Year/ Condition Lane Miles	Fair (Poor Crack) F1	Fair (Poor Ride) F2	Fair (Poor Rut/Fault) F3/F4	Fair (Fair Ride Only) F5	Fair (Rut/Fault Only) F6/F7	Fair (Cracking Only) F8	Fair (Cracking & IRI) F9	Fair (Cracking & Rutting/ Faulting Only) F10	Fair (IRI & Rut/Fault) F11	Fair (All Fair) F12	Fair Total Lane Miles
2015	0.000	0.267	0.000	1.260	0.000	0.000	0.000	0.000	0.000	0.000	1.527
2016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017	*No Data Available*										
2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years

2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	0.000	0.000	0.000	0.597	0.000	0.000	0.000	0.000	0.000	0.000	0.597
2023	0.000	0.000	0.000	1.860	0.000	0.000	0.000	0.000	0.000	0.000	1.860
2024	0.000	0.000	0.000	2.127	0.000	0.000	0.000	0.000	0.000	0.000	2.127
2025	0.000	0.000	0.000	2.159	0.000	0.000	0.000	0.000	0.000	0.000	2.159
2026	0.000	0.000	0.000	2.159	0.000	0.000	0.000	0.000	0.000	0.000	2.159
2027	0.000	0.000	0.000	1.860	0.000	0.000	1.860	0.000	0.000	0.000	3.720
2028	0.000	0.000	0.000	1.860	0.000	0.000	1.860	0.000	0.000	0.000	3.720
2029	0.000	0.000	0.000	0.000	0.000	0.000	3.720	0.000	0.000	0.000	3.720
2030	0.000	0.000	0.000	0.000	0.000	0.000	3.720	0.000	0.000	0.000	3.720
2031	0.000	0.000	0.000	0.000	0.000	0.000	3.720	0.000	0.000	0.000	3.720
2032	0.000	0.000	0.000	0.000	0.000	0.000	3.720	0.000	0.000	0.000	3.720
2033	0.000	0.000	0.000	0.000	0.000	0.000	3.720	0.000	0.000	0.000	3.720

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair

PaveM Scenario Used: #3299
APCS Data Year: 2019
Using: Prior-Treatment Distresses

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 1; County: Humboldt (HUM); Route: 101
From PM: 75.110 To PM: 76.040

Year: 2019 (Current)
R-Length: 0.930. L-Length: 0.930
R-Lane Miles: 1.860. L-Lane Miles: 1.860 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator A%	Alligator B%	Rut (in)					
Post Mile: 75.110 to 75.741 Length: 0.631 Estimated Lane Mileage: 2.526	L1	Flexible				0.00	0.00	0.12	66	Good	Green	1	0.632
	L2	Flexible				4.60	0.00	0.09	76	Good	Green	1	0.632
	R1	Flexible				0.30	0.00	0.12	66	Good	Green	1	0.631
	R2	Flexible				1.00	0.00	0.10	75	Good	Green	1	0.631
Post Mile: 75.741 to 76.008 Length: 0.267 Estimated Lane Mileage: 1.068	L1	Flexible				0.70	0.00	0.11	66	Good	Green	1	0.267
	L2	Flexible				1.10	0.00	0.09	79	Good	Green	1	0.267
	R1	Flexible				0.00	0.00	0.14	78	Good	Green	1	0.267
	R2	Flexible				3.80	0.00	0.12	82	Good	Green	1	0.267
Post Mile: 76.008 to 76.040 Length: 0.032 Estimated Lane Mileage: 0.126	L1	Flexible				0.00	0.00	0.10	68	Good	Green	1	0.031
	L2	Flexible				0.00	0.00	0.07	82	Good	Green	1	0.031
	R1	Flexible				0.00	0.00	0.12	73	Good	Green	1	0.032
	R2	Flexible				3.10	0.00	0.09	80	Good	Green	1	0.032
						1.43		**0.11**	**72**				**3.720**
			Lane Weighted Average										Total

PaveM Scenario Used: #3299
APCS Data Year: 2019
Using: Prior-Treatment Distresses

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 1; County: Humboldt (HUM); Route: 101
From PM: 75.110 To PM: 76.040

Year: 2024 (Predicted)
R-Length: 0.930. L-Length: 0.930
R-Lane Miles: 1.860. L-Lane Miles: 1.860 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: 75.110 to 75.741 Length: 0.631 Estimated Lane Mileage: 2.526	L1	Flexible				4.00	3.20	0.12	84	Good	Yellow	1	0.632
	L2	Flexible				17.70	4.60	0.09	104	Fair	Yellow	1	0.632
	R1	Flexible				5.60	3.20	0.12	85	Good	Yellow	1	0.631
	R2	Flexible				10.40	4.60	0.10	102	Fair	Yellow	1	0.631
Post Mile: 75.741 to 76.008 Length: 0.267 Estimated Lane Mileage: 1.068	L1	Flexible				6.80	3.20	0.11	84	Good	Yellow	1	0.267
	L2	Flexible				10.80	4.60	0.09	106	Fair	Yellow	1	0.267
	R1	Flexible				4.00	3.20	0.14	97	Fair	Yellow	1	0.267
	R2	Flexible				16.40	4.60	0.12	109	Fair	Yellow	1	0.267
Post Mile: 76.008 to 76.040 Length: 0.032 Estimated Lane Mileage: 0.126	L1	Flexible				4.00	3.20	0.10	87	Good	Yellow	1	0.031
	L2	Flexible				6.10	4.60	0.07	109	Fair	Yellow	1	0.031
	R1	Flexible				4.00	3.20	0.12	92	Good	Yellow	1	0.032
	R2	Flexible				14.60	5.10	0.09	107	Fair	Yellow	1	0.032
						9.37	**3.90**	**0.11**	**95**				**3.720**
			Lane Weighted Average										Total

ATTACHMENT I

Project Initiation Proposal

PIP FORM - Project Initiation Proposal

District 1 - Office of Project Coordination

RECEIVED

MAJOR PROJECT 01-0K940_				SHOPP TOOL #		PIP #	1625
EFIS ID	01-2100-0033	PPNo	2544			APPROVED	
Herrick to Truesdale Complete Streets						PROGRAM CODE	
						PROJECT TYPE	

To approve, please initial next to your name on original PIP		
GB	PROJECT COORDINATION	*Gary Banducci*
AI	PROJECT COORDINATION	*Abid Ikram*
DY	ADVANCE PLANNING	*Dawn Yang*
VF	ASSET MANAGEMENT	*Valency Fitzgerald*
AK	COMPLETE STREETS	*Alexis Kelso*
SG	RIGHT OF WAY	*Jeremiah Joyner/Yvonne Becker*
SR / AC	SHOPP TMS Coordinator	*Anthony Carnemolla*
RW	ENVIRONMENTAL	*Robert Wall*
BM	DDD PLANNING	*Brad Mettam*
TF	DDD MAINTENANCE	*Tom Fitzgerald*
DM	PROGRAM COORDINATOR	*David Morgan*
JM	PROJECT MANAGER	*Jaime Matteoli*
	CHIEF - PROJECT COORDINATION	*Mark Sobota*
JB	CHIEF - PROJECT MANAGEMENT	*Jen Buck*
RM	D1 PRINCIPAL ENGINEER	*Richard Mullen*

CAPITAL COST ESTIMATE	
ROADWAY	$7.7 million
STRUCTURES	
ROW	$0.5 million

ENVIRONMENTAL CLEARANCE	
CEQA	
NEPA	
OTHER	

Please RETURN approved PIP to Betsy Bareilles	Electronic Version Saved	
	Built in PMCS	12/30/2020

CO-RTE-PM LIMITS:	
	HUM-101-74.8/76.0
LOCATION DESCRIPTION:	
	IN HUMBOLDT COUNTY IN EUREKA FROM NB ON FR HERRICK TO TRUESDALE STREET

DISTRICT 1 DIRECTOR APPROVAL

SIGNATURE:

DATE: 01/29/2021

PIP FORM - Project Initiation Proposal page 2

District 1 - Office of Project Coordination				RECEIVED		
MAJOR PROJECT 01-0K940_			SHOPP TOOL #		PIP #	1625
EFIS ID	01-2100-0033	PPNo	2544		APPROVED	
					PROGRAM CODE	

PURPOSE & NEED:

PROPOSED IMPROVEMENTS:

Please refer to the attached 2020 SHOPP Complete Streets Reservation Proposal for project details and planned work.

PERFORMANCE INDICATOR:

IF URGENCY EXISTS, PLEASE EXPLAIN

Please note that the HQ Program Advisor has agreed that the 2020 SHOPP COMPLETE STREETS RESERVATION PROPOSAL will serve as the HQ PIP for this project moving forward.

ORIGINATOR'S NAME, SIGNATURE AND DATE, PLEASE

Betsy Bareilles based on Alexis Kelso's 2020 Complete Streets Reservation Proposal / approved 9/25/2020 (attached)	*Betsy Bareilles*	12/30/2020

** Additional Information - It is estimated that 1.14 PY's will be needed to prepare the final PIR and the target for completion is August 13, 2021. The estimated breakdown of resource needs are D1 Admin 40 hours, D1 PPM 160 hours, D1 Planning / Adv Planning 1300 hours, D1Env 20 hours, D1Traffic Ops & Safety 60 hours,D1 Maint Eng & Hydralics 60 hours, NR Env 80 hours, NR RW608 hours, NR RWE 8 hours, NR Des 16*

hours, NR Hydraulics / Stormwater 80 hours, NR Landscape 40 hours, NR Con- Materials 60 hours, NR Con 8 hours and NR PPM (D3) 4 hours. Funding has been reserved for this project. After PIR completion / approval this project will be immediately amended into the 2020 SHOPP with an estimated RTL target of June 1, 2024.

PIP FORM - Project Initiation Proposal page 2						
District 1 - Office of Project Coordination				RECEIVED		
MAJOR PROJECT / EA 01-0K940_			SHOPP TOOL #		PIP #	1625
EFIS ID	01-2100-0033	PPNo	2544		APPROVED	
					PROGRAM CODE	TBD

COMMENTS (PLEASE PRINT YOUR NAME AND DATE YOUR COMMENTS)
Please refer to attached, compiled meeting notes for Caltrans and external stakeholder comments / input from the January 22, 2021 PIP meeting.

2020 SHOPP COMPLETE STREETS RESERVATION PROPOSAL

I. PROJECT DESCRIPTION

1.1 PROJECT INFORMATION					
DISTRICT	PROJECT TITLE	CONTACT NAME	COUNTY	ROUTE	PM
01	Broadway Complete Streets Improvements – Herrick to Truesdale	Alexis Kelso	HUM	101	74.8/76.0

1.2 PROJECT ELEMENTS	
Are these project elements part of a programmed 2020 SHOPP project or a proposed new standalone Complete Streets Project?	☐ 2020 SHOPP ☒ New Standalone Project EA # _____
What CS elements will be included in project?	Fill out Attachment A: CS Elements Spreadsheet - Attached

1.3 Provide a brief summary of the proposed project:

US 101 serves as a main street through the City of Eureka, a disadvantaged community. The section of highway between Herrick Avenue and 4th Street, US 101 is called Broadway. Broadway is the busiest main street segment of State Highway System within District 1, serving local, regional, and interregional traffic. The proposed project is the southern 1.2 miles of the Broadway corridor. Within the proposed project area, the roadway comprises two travel lanes in each direction, a two-way left turn lane, parking, and shoulders varying between 2 to15 feet. There are no bicycle facilities on the corridor, although several local roads perpendicular to the corridor have bicycle facilities. Broadway is a barrier to bicycle and pedestrian connections to the City of Eureka's Waterfont Trail. Sidewalks are present for about two-thirds of the project area. There are only three marked pedestrian crossings in the 1.2 miles of project area.

The Broadway corridor is marked by a significant number of vehicle/pedestrian collisions (1,068 total collisions in the most recent 10-year period), and is one of the busiest corridors in District 1 (33,000 AADT). Congestion contributes to higher collision rates and vehicle volumes are projected to continue to increase into the future. The proposed project is the first phase of a larger improvement strategy for the entire Broadway corridor. Plans for future phases are still under development. They will require more complex environmental and right-of-way processes.
The proposed project will add two new pedestrian crossings and improve existing crossings, construct a Class I (multi-use) path for 0.48 miles and a Class IV separated bikeway for 0.76 miles. These improvements will increase safety, connect with improved transit operations, decrease level of traffic stress, and result in active transportation mode shift. These improvements have been identified through an extensive public engagement process and are consistent with the established Contextual Guidance for the Selection of Bicycle Facilities Memo issued in March of 2020. Speed limits range from 55 to 40 miles per hour in the 1.2 mile section of the project area.

Dedicated bus lanes, to the greatest extent, and Transit Signal Priority (TSP) will be included in the project in order to fully benefit from the multi-modal improvements. The transit improvements are the first step in providing the necessary link to active transportation but will also assist local agencies in efforts to increase transit ridership. These improvements will also save lives under emergency response situations and evacuations in the most populated area in the County. Broadway is a component of the main thoroughfare in the region.

While many recent studies or plans have evaluated portions of the corridor, few improvements have been implemented. The most recent planning effort, the Eureka Broadway Corridor Plan, studies the entire extent of Broadway. That process is a collaboration of District 1, the City of Eureka, the Humboldt County Association of Governments, local bicycle and pedestrian proponents and the general public. This partnership allowed for a robust collaboration and process and resulted in widespread support for the Broadway Complete Streets Improvements-Herrick to Truesdale project. The many letters of support included in this application is testament to the success of the public engagement and agreement on the best way to provide safety for all users. When

implemented, this project will significantly increase safety for all users, be them connecting from transit, walking, biking and crossing four lanes of fast moving traffic.

1.4 MAP
See attached map

1.5 COST AND SCHEDULE*		
Project Phase	**Programmed/Additional Cost (1,000)**	**Start Date/Revised Start Date**
PA&ED	2,170	01/2021
PS&E	1,519	02/2023
R/W (SUPPORT)	652	10/2022
R/W (CAPITAL)	500	02/2023
CON (SUPPORT)	547	05/2024
CON (CAPITAL)	7,647	06/2024
TOTAL	13,050	

* For new standalone Complete Streets projects – only include proposed cost and schedule

1.6 CURRENT STATUS				
CURRENT PHASE	CURRENT PHASE TARGET COMPLETION DATE	% COMPLETE	RTL DATE	SHOPP PROGRAM
NA	NA	NA	NA	NA

II. POTENTIAL FOR INCREASED CONNECTIVITY (HIGH, MED, LOW)

2.1 GAP CLOSURE

US 101 serves as a main street through the City of Eureka. Between Herrick Avenue and 4th Street, US 101 is called Broadway. Broadway is the busiest main street segment of State Highway System within District 1. Within the proposed project area, the roadway comprises two travel lanes in each direction, a two-way left turn lane, parking, and shoulders varying between 2 to15 feet. The speed limit at the south end of the project area is 55 MPH as US 101 transitions from a freeway to a conventional highway/main street. The speed limit drops to 45 MPH at PM 75.03. The speed limit drops again to 40 MPH at PM 75.41.

The Broadway corridor is currently a barrier to multimodal transportation in numerous ways and has been identified as such in a number of studies and public meetings over the years. The surrounding residential communities are essentially cut off from accessing the waterfront trail or business and services by the nature and operation of the corridor and the lack of multimodal options along or across Broadway. Very few—except the more confident or those with few transportation options—are willing to use or cross the corridor on foot or by bike.

Pedestrian conditions

- Sidewalks are mostly present from PM 75.138 north. The "Broadway ADA" project (01-0B620) will fill gaps in sidewalks and fix ADA issues in 2021. There are no pedestrian facilities south of PM 75.138. Despite the presence of sidewalks, walking is uncomfortable due to the proximity and volume of high-speed vehicles. There is little to no separation between the sidewalks and the vehicle lanes.

- There are currently only three intersections with marked pedestrian crossings in the project area (a total distance of 1.2 miles). The proposed project will add two new pedestrian crossings and make improvements to existing crossings to make them more pedestrian-friendly.
    - One crossing will be added at Hilfiker Lane. There is currently a distance of 2000 feet between marked crossings at Pierson Building Center and McCullen Avenue. Adding a crossing at Hilfiker Lane will reduce the distance between crossings to 1000 feet. The crossing at Hilfiker Lane will have a pedestrian refuge median and pedestrian-activated rectangular rapid flashing beacons (RRFB).
    - One crossing will be added at Truesdale Street/Highland Avenue. These intersections are offset, and the pedestrian crossing will be an innovative solution using a median to provide a safe crossing. This crossing will also be used by bicyclists.
    - Existing pedestrian crossings will be evaluated for the potential to make them more pedestrian-friendly. Things that will be considered include bulbouts, removal of right turn lanes, and removal of acceleration lanes. These improvements need to be coordinated with the City of Eureka during the design phase to ensure truck and bus turning movements are addressed.

Transit and ride share conditions

- Transit does operate along the corridor. However, it is underutilized and inefficient due to the current traffic stress, time delays, and lack of multimodal connectivity.
- There is a park and ride facility at the south end of the project, accessed off Herrick Avenue/Pound Road, but it is currently not accessed by transit mainly due to lack of bus maneuverability. The project proposed a Class I bikeway (multi-use) between the prior K-Mart facility and the park and ride, which also is an access point for the Hikshari' Trail, a Class I bikeway along Eureka's waterfront.
- There is a bus stop on Herrick Avenue just east of Broadway that serves the city's bus system. The proposed Class I path will increase access to this transit stop as well as to the regional bus service on Broadway.
- A sheltered bus stop is located on the east side of Broadway south of Highland Avenue, and an uncovered bus stop is located on the west side of Broadway south of McCullen Avenue. The new pedestrian crossing at Truesdale Street/Highland Avenue will increase pedestrian and bicycle access to transit.
- Dedicated bus lanes, to the greatest extent, and Transit Signal Priority (TSP) will be included in the project in order to fully benefit from the multi-modal improvements. The transit improvements are the first step in providing the necessary link to active transportation but will also assist local agencies in efforts to increase transit ridership.

Bicycle conditions

- The corridor does not have any bike facilities along its length. The Hikshari' and Waterfront Trails parallel Broadway to the west, but they do not provide connections to businesses and services located along Broadway. There are several local roads that provide bicycle facilities perpendicular to Broadway, but crossing Broadway remains a safety issue. Currently, Broadway is not only a barrier to bicycle facilities along its route, but it is also a barrier to people needing to cross the roadway.
- Throughout the project area, Broadway is the Pacific Coast Bike Route, serving long-distance touring cyclists as well as local riders. Shoulders exist, but vary drastically in width, from approximately 2 feet to 15 feet in some areas. There are no indications to drivers to expect bicyclists on the road within the project area. Many bicyclists ride on the sidewalks because the roadway feels unsafe.
- The project proposes to construct a Class I bikeway (multi-use) on the west side of Broadway between the Pound Road park and ride and the former K-Mart (PM 75.237), and a Class IV separated bikeway between K-Mart and Truesdale Street (PM 76.0). As previously mentioned, there is a connection to the Hikshari' Trail at Pound Road. At the north end of the project, the Class IV facility connects to proposed Class III bikeways on Highland Avenue and Truesdale Street. The Hikshari' Trail can also be accessed via Truesdale Street a short distance (850 feet) from Broadway. The new median crossing at this location will facilitate bicycle access between the Hikshari' Trail and Eureka's residential neighborhoods.

2.2 CONNECTION TO DESTINATIONS

Broadway is the busiest main street segment of state highway system in District 1. Land use in the project area is currently a mix commercial, industrial, and residential. At the south end of the project, the land use is more auto-oriented uses (car sales and repair, construction materials and hardware). At the north end of the project, land use transitions to retail stores and restaurants, with more pedestrian-scale buildings with small setbacks. Hotels and motels are present along the extent of the corridor. Residential neighborhoods are present on both sides of the highway, though they front on side streets. The Bayshore Mall—a major regional destination—is just north of Truesdale Street. This project will enhance modal choice and help decrease vehicular emissions through healthy active transportation options for not only residents, but visitors as well.

The City's 2040 General Plan describes Broadway thusly: "The Broadway Corridor consists of those properties adjacent to Broadway (US 101) from 5th Street to Herrick Avenue. The Broadway Corridor is broken into four sub-corridors: North Broadway, Central Broadway, Bayshore Mall, and South Broadway. The primary entry to the City from the south, the Broadway Corridor includes a mix of strip and larger-scale retail, lodging and other services. This area is envisioned to increase in density with taller buildings, and to become a beautiful and well-coordinated entry." Most of the project area is designated "General Commercial" with a maximum floor area ratio of 2.5. The area is "intended to be an intensive auto- and pedestrian-oriented commercial district primarily located in or adjacent to highly visible areas, and provide for local, regional and visitor needs." The proposed project will create a more bicycle-, pedestrian-, and transit-friendly environment, which in turn will help realize the City's vision for the area.

The Eureka Transit System as well as the Regional Transit System run along Broadway with approximately 30-minute headways. During peak hours, transit generally runs behind schedule due to the inability to merge back into traffic after stops. An important component of this project will be to provide dedicated transit lanes, where possible, and move transit stops to locations after signals to improve on time performance for both systems. Utilization of TSP and dedicated bus lanes will not only provide the necessary link to active transportation but will also assist with transit riders comfort and confidence in getting them to work safely and on-time. These improvements will also save lives under emergency response situations and evacuations in the most populated area in the County.

III. LOCAL ALIGNMENT (HIGH, MED, LOW)

3.1 LOCAL ALIGNMENT

Making improvements to Broadway has been a high priority of the region for many years, and is supported by Caltrans' partners including the County of Humboldt, the City of Eureka and Humboldt County Association of Governments (HCAOG). Other stakeholders—such as civic organizations, businesses, the transit agency, the public health department, active transportation advocates, environmental organizations, and disability rights groups—and the public have been involved for years in the development of planning documents. Caltrans, HCAOG, and the City of Eureka are currently partnering to on the Eureka Broadway Multimodal Corridor Plan, funded by a Caltrans planning grant. Previous planning efforts include the Broadway Engineered Feasibility Study (Caltrans), the Koster Couplet Feasibility Study (Caltrans), Eureka South Entry Project (City of Eureka), and the Eureka Transit Line Feasibility Study (Humboldt Transit Authority). These studies are available online at: https://www.eurekabroadwaycorridorplan.com/document-library.html

Improving the Broadway corridor is a regional priority for HCAOG. Both the City of Eureka and HCAOG are dedicated to continue planning, funding and implementing projects, in partnership with Caltrans, along this corridor.

IV. COMMUNITY ENGAGEMENT (HIGH, MED, LOW)

4.1 CALTRANS ENGAGEMENT

As noted in the previous section, this project has been a high priority of the region for many years and is supported by Caltrans' partners, including the County of Humboldt, the City of Eureka, and HCAOG. The public and other stakeholder have been involved for years in the development of the multiple planning documents.

Eureka Broadway Multimodal Corridor Plan

The Eureka Broadway Multimodal Corridor Plan is currently being developed. It is a partnership effort HCAOG, the City of Eureka, and Caltrans. The purpose of this plan is to improve multimodal options and reduce congestion. It is to be completed by the end year 2020. The project proposal for the Broadway Complete Streets Improvements – Herrick to Truesdale is a result of this current planning effort, and represents

- Information is available to the public on the project website (www.eurekabroadwaycorridorplan.com).
- The first public workshop was held November 13, 2019 at the Wharfinger Building in the Eureka. It was promoted via posters throughout the project area, news releases, social media and website postings. More than 100 people attended. Attendees participated an electronic polling session to respond to questions about their transportation needs and concerns within the corridor and to provide feedback on corridor alignment concepts.
- An online mapping tool was used to allow the public to make comments related to bicycle, vehicle, truck and "other" issues along the corridor. Members of the public made 230 comments using the mapping tool.
- The first round of stakeholder focus groups was held on March 9th, 2020. Participating stakeholders included representatives of businesses and business organizations, bicycle and pedestrian advocates, elected officials, environmental groups, and social service organizations. Focus groups provided feedback specific to issues affecting their interests and members.
- Community feedback sought and received at critical steps in the planning process. The initial community wide meeting presented general themes, concepts and posed many questions via interactive poster boards and instant poll that started during the meeting and continued for a weeks after, allowing both physical participants and those who were not able to join to provide feedback. This feedback helped shape the initial broad set of alternatives which included adding robust bicycle and pedestrian safety improvements to all options. Between this initial meeting and the second community wide meeting two rounds of stakeholder meetings were held to seek more specific feedback from interested parties. The first round of stakeholder meetings attempted to discern preference for larger concepts such as a Waterfront Drive Extension, which would act as a Broadway bypass, or for using a couplet model such as the Koster Couplet, or staying within the existing right-of-way to address safety and non-motorized concerns. These concepts were discussed in detail weighing pros and cons of each including environmental factors such as wetland impacts, sea level rise and contamination as well as robust bicycle, pedestrian and safety facilities. This feedback was used to narrow down the alternative options, which were than brought back to the stakeholder groups for consideration. The alternatives were than further refined with this input and brought back to the final community meeting to introduce them to the larger public and receive comment once again. This meeting was a more detailed discussion of the preferred set of alternatives, where the community provided input and discussion about the options. This helped inform that they were on the right track to allow for development of the final sweet of alternatives. The project will be brought before the Eureka City Council on October 20th for presentation of the final project alternatives. HCAOG will consider approval on the Corridor Plan on November 15th.
- An online questionnaire went out to all businesses along the Broadway Corridor in June, 2020. There were 139 respondents to 12 questions. A 13th question allowed participants to comments regarding the "biggest challenges/problems". We received 79 comments. The 14th question asked for a list of improvements to improve safety and access along the highway. We received 31 suggestions.
- A second public meeting was held via Zoom August 25, 2020 in compliance with COVID-19 social distancing measures. The project team shared progress on the plan and presented the draft preferred concept. At least 66 people attended this event.

Eureka Transit Line Feasibility Study
The Eureka Transit Line Feasibility Study was completed by the City of Eureka and Humboldt Transit Authority in October 2018. The goal of this study was to evaluate the suitability of a line-based transit system, increase Eureka Transit System ridership, and position the Eureka Transit System for long-term financial sustainability. In December 2017, an extensive community engagement process was initiated and requested input from both current and potential riders. This engagement effort sought to understand community concerns, experiences, and ideas to inform potential route and service alternatives. A variety of methods were used to inform the community of the project and receive input. Key components and methods of community outreach included online and print surveys, social media and local radio programs, in-person outreach to collect surveys at key locations, and direct outreach to transit users on buses. Two surveys were conducted – one for current ETS riders and one for non-riders. Surveys and project information sheets were developed in both English and Spanish. In-person outreach included tabling and conducting conversations at key locations including the Bayshore Mall, Silvercrest Senior Residences, Humboldt County Public Library, Humboldt Senior Resource Center, Humboldt County Access & Resource Center, Tri-County Independent Living, North Coast Co-op, and bus transfer stops at 3rd and H Streets, and F and Harris Streets. In-person outreach also included interviews with key groups such as the HCAOG Social Services Technical Advisory Committee, Paso a Paso, LatinoNet, and English Express classes.

Koster Couplet Feasibility Study
The Koster Couplet Feasibility Study was completed by Caltrans in October 2017. A meeting was held with the City on November 17, 2016 to present the preliminary alternatives for the northern and southern connections. The City responded with formal comments and requests for a few changes to the study alternatives. The study alternatives, as developed and analyzed, were preliminary since the area-wide microsimulation was not yet available for use for analysis and alternative evaluation. As such, during this study phase, it was agreed with the City of Eureka that in lieu of holding a public meeting, Caltrans provided two presentations—one to the Eureka Traffic Safety Commission (4/17/17) and one to the Eureka City Council (6/6/17).

Eureka South Entry Project
The Eureka South Entry Project was completed by the City of Eureka in December 2015. Property owners, business owners, agencies, organizations and members of the general public were involved in the development of the proposed design alternative throughout the PSR/PDS process. This includes the following meetings:

- Stakeholder meeting, February 11, 2015
- Community meeting, March 11, 2015
- City of Eureka and Caltrans, April 14, 2015
- City Council workshop, April 15, 2015
- City Council meeting, April 21, 2015
- Community meeting, April 23, 2015

Additionally, the City of Eureka and the PSR/PDS project team met with Caltrans, property owners and business owners on a regular basis during development of the project. Prior to the stakeholder involvement for the PSR/PDS development, the community was engaged by a Caltrans effort in 2014 for the Broadway Engineered Feasibility study which included extensive outreach and included portions of the Eureka South Entry Project. In addition, the development of the 2014 Humboldt County Regional Transportation Plan included community outreach for projects in the City of Eureka.

Broadway Engineered Feasibility Study
The Broadway Engineered Feasibility Study (EFS) was completed in June 2014.

- As part of this effort, a Technical Advisory Group (TAG) was formed to gather more detailed input from stakeholders to develop concepts for traffic modeling of transportation scenarios. The TAG was composed of local government agencies and local community organizations. The group provided comments regarding the type of parameters that would be included in the microsimulation modeling. There were questions about the collision analysis performed for the EFS and how it would be incorporated into the analysis. The TAG asked how pedestrians and bicyclists would be included in the model. Caltrans Staff used comments to supplement the existing modeling process with additional technical analysis.
- There were a series of public meetings for the Broadway EFS, starting in 2012. The first round of public meetings included two formal presentations and an open house. The Project Engineer provided an overview and presented the improvement scenarios, followed by a public question and answer session. After and between the two presentations, the community was invited to review displays, discuss issues,

and ask questions of the project team. A series of large storyboard displays provided a history of the EFS, including a graphic representation of the transportation improvements. Caltrans staff provided computer displays of the microsimulation modeling used to generate the scenarios. Comments received during the meeting were used to develop a final set of six scenarios for the final public meeting in February 2014.

- On February 8, 2012, Caltrans District 1 held a business stakeholder meeting. Initial door-to-door business stakeholder contact was conducted in mid-January 2012 to remind stakeholders of the purpose of the study and invite them to the meeting. The meeting was focused on getting business/owner feedback regarding the initial set of scenarios. There was discussion regarding access to properties, raised medians, alleviation of congestion, the number of vehicles making left turns on Broadway, and speed limits.
- On February 16, 2012, Caltrans District 1 held a Public Stakeholder Meeting for the EFS. The community expressed support for access for disabled individuals, traffic calming, bicycle and pedestrian safety including bicycle lanes, narrow traffic lanes, continuous sidewalks, and incorporating ideas from the Pedestrian and Bicycle Road Safety Audit.

The Final Public Meeting was held on February 27, 2014. The meeting was attended by over 100 members of the community. The presentation covered the history of the project and outlined the final six scenarios under consideration, followed by a question and answer session. The community was invited to review displays, discuss issues, and ask questions of the project team. A series of large storyboard displays provided a history of the EFS, including a graphic representation of the proposed transportation improvement scenarios. Caltrans' staff provided computer displays of the microsimulation modeling used to generate the scenarios. The community provided comments using comment cards and had the ability to mail or email comments by March 15, 2014.

Caltrans is pleased to have provided numerous support letters for this project. The support and enthusiasm for this project is telling of a successful planning process for a project that will have meaningful impact to the community.

V. DISADVANTAGED COMMUNITIES (HIGH, MED, LOW)

5.1 DAC ANALYSIS	
Is any part of the project located in a Disadvantaged Community (DAC)?	☒ Yes ☐ No ☐ Partially in a DAC What was the basis for determining if any part of project is located in a DAC: (only check a box if in or partially in a DAC) a. ☒ Median Household Income b. ☐ CalEnviroScreen 3.0 c. ☐ Free or Reduced Price School Meals d. ☐ Regional Definition What is the DAC score using criteria above? MHI is $43,375 per 2018 ACS 5-year estimates.

5.2 BENEFITS TO DAC

Most census tracts within the City of Eureka have a very low median household income (MHI), and some of the most severely income-disadvantaged areas in District 1 are along the Broadway Corridor. The proposed project is within census tract 4, which has a MHI of $43,375. Census tract 1 at the north end of Broadway has a MHI of only $27,259. People in neighborhoods adjacent to the Broadway corridor are close enough to walk or bike to everyday destinations, but many choose not to because the walking and biking environment is unpleasant and stressful.

In terms of other census data (Poverty Status Table S1701 2108 ACS 5-year estimates) 22.3% of residents in the City of Eureka are below the poverty level as compared to 14.3% in California; (Disability Status Table DP02 2108 ACS 5-year estimates) in the City of Eureka 18.5% of the civilian noninstitutional population is disabled as compared to only 10.0% in California; (Carless Households Table DP04 2108 ACS 5-year estimates) 13.6% of occupied housing units have no vehicles available as compared to those in California; and (Population over 65 Table DP05 2108 ACS 5-year estimates) 16.6% of Eureka's population is over age 65, compared to only 13.6% in California.

The City of Eureka is less than 3 miles wide, and people from throughout the City use the Broadway corridor daily to access essential businesses, services, and jobs. The City is relatively walkable and bikeable, with a gridded network of low volume residential streets and few sidewalk gaps. Despite these good conditions for walking and biking, the Broadway Corridor discourages walking and biking because of its high level of traffic stress (LTS 3 or 4). The proposed project will reduce the level of traffic stress so that users of all ages and abilities, such as parents, children families and caregivers pushing strollers, wheelchairs and shopping carts to accomplish daily and essential functions. Expected benefits to disadvantaged communities include: (1) increased number of walking and bicycling trips, (2) increased safety and mobility, (3) reduced greenhouse gas generation, (4) enhanced public health by providing an active alternative, and (5) access to essential businesses, jobs and services.

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VI. SAFETY (HIGH, MED, LOW)

6.1 SAFETY

The Broadway corridor is marked by a significant number of vehicle/pedestrian collisions and is one of the busiest corridors in District 1 (36,500 AADT). Congestion, high speeds, and number of lanes contribute to higher collision rates. In addition, there are few crossing opportunities and no bicycle facilities within project limits. Vehicle volumes are projected to continue to increase into the future.

To date, vehicle movement on the Broadway corridor has been prioritized over the needs of other users. The City of Eureka consistently ranks in the top of Office of Traffic Safety Statistics for Cities of similar size for pedestrian and bicycle collisions partially due to collisions on the Broadway corridor. For example, in 2015 there were 515 collisions and two fatal collisions in the City of Eureka, both fatalities and 149 of those collisions occurred on Highway 101 facilities. The City has approximately 114 centerline miles with Highway 101 having approximately 7 miles or about 6%, yet the 6% of the highway had 29% of the entire city collisions and 100% of fatal collisions in 2015. These are some of the reasons that the Broadway corridor has had planning studies undertaken approximately every 5 years. It's a gap that is known to exist and there is a desire to fill it. Throughout public meetings over the years regarding safety in Eureka, the Broadway corridor has risen to the top as a priority by residents and the traveling public at large.

For the ten-year period from 1/1/10 through 12/31/19, the total collision rate within project limits is 1.41 col/MVM, which is 1.28 times the statewide average for similar facilities. The Fatal+Injury collision rate is 0.73 col/MVM, which is 1.66 times the statewide average for similar facilities. The Fatal collision rate is 0.041 col/MVM, which is 2.56 times the statewide average for similar facilities. There were 174 Total highway collisions: 5 Fatal, 85 injury, 131 multi-vehicle, resulting in 5 fatalities and 125 people injured. All three of these rates are statistically significant for this type of facility; there are a high number of collisions, on the order of 99th percentile for similar facilities. For bicyclists and pedestrians during this ten-year period, there were 23 incidents -- 8 were bicyclists and 15 were pedestrians. Of these, 3 were fatal and 20 resulted in injury, resulting in 3 total of fatalities and 21 people injured. A large number of collisions occurred outside of a crosswalk, further illuminating the lack of facilities within project limits.

VII. ADDITIONAL ATTACHMENTS

7.1 SUPPLEMENTAL MATERIALS

Attachment B: Project Area Photos
Attachment C: Typical Cross sections
Attachment D: Support Letters

Reviewed by:

Alexis Kelso 9/25/20

CS Proposal Lead (Date)

09/25/2020

District Director (Date)

ATTACHMENT J

Transportation Planning Scoping Information Sheet

Transportation Planning Scoping Information Sheet

Proposed Project Summary

EA #	01-0K940K	AM Tool ID #		EFIS Project ID #	0121000033
County-Route-PM	01-HUM-101-PM 74.8/76.0				
Anchor Asset	Complete Streets				
Proposed Project Scope	Add Class I and Class IV bike facilities to Broadway in Eureka				
Proposed Fund Type	2020 Complete Streets SHOPP Reservation				

Section 1: TPSIS Summary Statements & Recommended Actions

1-1 Project Needs/Opportunities:	Refer to TPSIS Section: ☐ 2 ☐ 3 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10
1-1-1 Scope: 1-1-2 Schedule: PID to be completed by the 2022 Solutions for Congested Corridor grant program call for proposals 1-1-3 Cost/Funding: $13.05 million	
1-2 Project Risks/Challenges:	**Refer to TPSIS Section: ☐ 2 ☐ 3 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10**
1-2-1 Scope: 1-2-2 Schedule: 1-2-3 Cost/Funding:	
1-3 Recommended Actions:	**Refer to TPSIS Section: ☐ 2 ☐ 3 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10**
1-3-1 Provide justification if none of identified Complete Streets needs/opportunities are included in project scope.	

1-3-2 County-Route-PM	Description of Identified Action/Planning Consideration	Justification

Prepared for use in Project Nomination by:

Jesse Robertson 06-04-2021

District Planning Representative (Date)

Received for use in Project Nomination by:

06/04/2021

District Asset Manager (Date)

Section 2: Tribal Government, Local Partners, and Public Engagement Coordination

2-1 TRIBAL GOVERNMENT COORDINATION		
2-1-1 Tribal Lands – *Is the proposed project*: ☐ within or near an Indian Reservation Rancheria, or Tribal Trust Land? No ☐ involves trust lands (including tribal and individual allotted lands) outside of a reservation or Rancheria	*If so, indicate if*: ☐ Tribe(s) or individual allotment holders have been notified ☐ The Bureau of Indian Affairs (BIA) has been notified (if trust lands and/or a Reservation/Rancheria is involved) ☐ All applicable tribal laws and regulations been reviewed for required coordination	*Provide names of reservations, Rancherias, tribal trust lands and describe concerns/topics discussed.*
2-1-2 Does the Tribe have a Tribal Employment Rights Office/Ordinance (TERO)? ☐ Yes ☒ No	*If so, indicate if:* ☐ The TERO been reviewed for required coordination ☐ There is a related Memorandum of Understanding (MOU) between the District and the Tribe ☐ Caltrans has other MOUs with the Tribe; *Provide title and description or content*	
2-1-3 Have any tribes expressed concern about areas of cultural sensitivity that may be affected by this project?	☒ Yes ☐No	*Provide Tribal name(s) and details* *Bear River Rancheria, Blue Lake Rancheria and Wiyot Tribe have expressed concerns regarding potential buried cultural resources.* *The area of Truesdale is of known historic sensitivity.*
2-1-4 Has the Tribal Government been contacted or are you aware of any Tribal concerns related to the project?	☒ Yes ☐ No	*Who was contacted? Describe concerns/topics discussed.* The PID information was sent to all federally recognized tribes in Humboldt County. Blue Lake Rancheria, Bear River Ranchera, and Wiyot Tribe all responded regarding concern for buried cultural resources.
2-2 DISADVANTAGED COMMUNITIES		
2-2-1 Is the project located in or benefit a disadvantage community? *You can use these links to identify if project is located in DAC area: https://map.healthyplacesindex.org/https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30 and web service link to the statewide DAC data*	☒ Yes ☐ No	Median household income City-wide poverty levels
2-3 IDENTIFIED LOCAL PARTNERS/STAKEHOLDERS /PUBLIC	SOURCE/ DATE CONTACTED	COMMITMENT/OUTCOME/CONCERNS & COMMUNITIES' PRIORITIES
City of Eureka		

Humboldt Transit Authority		
Emergency Services		

2-4 PRELIMINARY PROPOSED PUBLIC ENGAGEMENT STRATEGY	OPTIONS		
2-4-1 What is the preliminary recommended Public Engagement Strategy for this project?	☐ Inform ☒ Consult	☐ Collaborate ☐ Involve	☐ No Recommendation

Section 3: Plan and Document Review

3-1 PLANNING DOCUMENTS AND SCOPING TOOLS	SUMMARY OF RECOMMENDATIONS & CONSIDERATIONS
3-1-1 Active Transportation Plans: ☐ California Active Transportation Plan (CAT Plan) ☐ District Bike and Ped Plan ☒ Regional/Local Plan	Humboldt County Association of Governments and the City of Eureka received grant funding to prepare a Strategic Partnership Plan with Caltrans. The Plan evaluated the length of Broadway, from Herrick Ave to 4th Street. The proposed Complete Streets SHOPP project corresponds to the southern of three planning segments.
3-1-2 Broadband: ☐ Caltrans Broadband Partnership Opportunity Map	☐ Priority1 ☐ Priority2 ☐ Priority3
3-1-3 Climate Change Planning: ☒ Caltrans District Vulnerability Assessment ☒ Caltrans Climate Change Adaptation Priority Plans ☐ Local Climate Action Plan/ GHG reduction plan ☐ Greenhouse gas section of EIR for RTP/SCS ☐ Locally Adopted Transportation Adaptation Plan	Refer to the District Vulnerability Assessment, and Climate Change Adaptation Priority Plan for D1.
3-1-4 Cultural/Historic Preservation Scoping Tools: ☐ Caltrans Cultural Resources Database ☐ Caltrans Historic Bridge Inventory ☐ Archaeological Site Sensitivity Model ☐ AB52 Letter	
3-1-5 Freight Planning: ☐ California Freight Mobility Plan ☐ California Sustainable Freight Action Plan ☐ Caltrans Safety Roadside Rest Areas (SRRA) ☐ Truck Parking Study	N/A

☐ Regional/Local Plan	
3-1-6 Project Planning: ☐ District 10 Year Project Book ☒ MONSTER List ☐ Preliminary Investigation/Feasibility Study	The MONSTER list identifies the Broadway Corridor in general for multi-modal congestion and safety improvements. See the Broadway Multi-modal Corridor for the most detailed planning effort for corridor improvements.
3-1-7 Rail and Mass Transportation Planning: ☒ California State Rail Plan ☐ Statewide Transit Strategic Plan	Amtrak throughway bus connects the Eureka/Arcata Airport in McKinleyville to Martinez Amtrak station via US 101 through Eureka. No stops are located within the project segment.
3-1-8 Regional & Local Planning: ☐ Regional Transportation Plan ☐ Sustainable Community Strategy ☒ General and Local Plans ☐ Regional Concept of Transportation Operations ☐ Local Coastal Program Plan	The Broadway Multimodal Corridor Study (FHWA Strategic Partnership Program) was developed in partnership with Humboldt County Association of Governments, Caltrans, and the City of Eureka.
3-1-9 System Planning: ☒ Interregional Transportation Strategic Plan (ITSP) ☒ Corridor Plans (TCR, CSMP, CMCP)	US 101 is identified as a Strategic Interregional Corridor in the 2015 ITSP. The District 1 TCR for US 101 was approved in October 2017. The TCR identifies multi-modal operational improvements within the City of Eureka (PM 74.78/79.57) to address traffic congestion.
3-1-10 Tribal Planning: ☐ Tribal Transportation Plan	
3-1- 11 Other (Identify): ☐ _____	

Section 4: Caltrans Stakeholder Information (OPTIONAL)

4-1 Title	Name	Phone Number
4-1-1 Complete Street/Bicycle and Pedestrian Coordinator	Lisa Hockaday	707-684-6883
4-1-2 Climate Change Coordinator/Liaison	Clancy DeSmet	707-572-7933
4-1-3 District Native American Coordinator and/or District Cultural Resources PQS Staff (Environmental/Cultural Resources) PQS = Professionally Qualified Staff: Caltrans cultural resources staff who meet the Secretary of Interior's Professional Qualifications Standards for Historic Preservation disciplines	Darrell Cardiff (District 1 Environmental Planning) Whitney Petrey (NR Env Planning)	707-298-0904 707-815-6724
4-1-4 District Native American Liaison (Transportation Planning)	Sara Atchley-Thomas	707-834-1486
4-1-5 Environmental Planner	Kellie Eldridge	(707) 815-6995

4-1-6 Freight Planner	Jacob Rightnar	707-684-6895
4-1-7 Local Development Intergovernmental Review (LD-IGR) Planner	Jesse Robertson	707-684-6879
4-1-8 Park and Ride Coordinator		
4-1-9 Regional Planner	Saskia Rymer-Burnett	707-684-6889
4-1-10 Sustainable Planning Grant Coordinator	Saskia Rymer-Burnett	707-684-6889
4-1-11 System Planner	Rex Jackman	707-834-2413
4-1-12 Rail & Transit Planner	Suresh Ratnam	707-684-6880
4-1-13 Other Coordinators		

Section 5: System Planning (OPTIONAL)

5-1 ROUTE DESIGNATIONS			
5-1-1 Freeway and Expressway	Conventional highway	5-1-8 Scenic Highway	Eligible
5-1-2- National Highway System	Yes	5-1-9 National Highway Freight Network	
5-1-3 Federal Functional Classification	Principal Arterial	5-1-10 Critical Urban Freight Corridor	
5-1-4 Strategic Highway Network	Yes	5-1-11 Critical Rural Freight Corridor	
5-1-5 Strategic Interregional Corridor		5-1-12 NHS and STAA Route Classification	Terminal Access Route STAA
5-1-6 Interregional Road System	Yes	5-1-13 Truck Network Designation	
5-1-7 Priority Interregional Facility	Yes	5-1-14 Other	

5-2 FACILITY TYPE	
5-2-1 Current	4-Lane Conventional Highway
5-2-2 Concept	4-Lane Conventional Highway
5-2-3 Ultimate	4-Lane Conventional Highway

Section 6: Smart Mobility, Active Transportation and Transit (OPTIONAL)

6-1 APPLICABILITY OF CHECKLIST	
6-1-1 Is the project located entirely on a facility where bicyclists and pedestrians are legally prohibited and the project does not involve a shared use path, pedestrian/bicycle structure or work impacting a local road crossing or interchange? *(i.e. project including freeway mainline and ramp work where the project freeway segment legally prohibits bicyclists and pedestrians per the MUTCD.)* If no, continue, if yes, you may stop here.	☐Yes ☒No
6-1-2 Is the primary project purpose to address assets that are outside of the roadbed where pedestrian and bicycle travel is not affected, and construction will not affect future pedestrian and bicycle facilities? *(i.e. culvert outfalls, storm water treatment facilities, bridge substructure or scour mitigation, planting or vegetation removal, retaining walls, etc.)* If no, continue, if yes, you may stop here.	☐Yes ☒No

6-2 PLACE TYPES	Comment/Action
6-2-1 Identify the Smart Mobility Framework Place Type(s) surrounding the project limits.	☐ Central Cities ☒ Urban Communities ☐ Suburban Communities ☐ Rural Areas ☐ Protected Lands and Special Use Areas
6-2-2 Are there any -existing or proposed- Pedestrian/ Bicyclist/ Passenger Rail/Transit Trip Generators in or adjacent to the project area?	☒ Residential Areas ☐ Parks ☒ Recreational Areas ☐ Religious Facilities ☐ Schools ☐ Town Centers ☒ Shopping Centers ☒ Bus Stops ☐ Large Employment Businesses ☒ Shared-use trail access/parking. ☐Public Transit /Passenger Rail Facilities ☐Health/Medical Facilities ☐ Other
6-2-3 *Check all that apply:* ☒ the highway segment functions as a "Main Street" or a "Safe Route to School" ☐ the project provides unique or primary access into or out of any of the trip generators or between communities ☐ the project provides unique or primary access across a river, highway corridor or other natural and/or man-made barrier	
6-2-4 Summary of place type related considerations (see Smart Mobility Framework Guide) Compact Community	

6-3 BICYCLE, PEDESTRIAN, RAIL AND TRANSIT CONDITIONS	Comment/Action				
6-3-1 Identify existing bicycle and pedestrian facilities within project limits.	☐ Bicycle/Pedestrian Accessibility ☐ Bicycle Lane Choose an item. ☐ Backpacking/Hiking/Equestrian Trail ☒ Shoulder ☒ Sidewalks ☐ Other:				☒ Curb Ramps ☐ California Coastal Trail ☒ Signage ☐ Green Striping ☐ Bike Boxes ☐ Two-Stage Turn Boxes
6-3-2 Identify physical and/or perceived impediments for bicyclists and pedestrians.	☐ Narrow Shoulders ☐ Narrow Sidewalks ☒ Connectivity Gaps ☐ Curbs and Gutters				☐ Utility Boxes ☒ High Vehicle Speeds ☒ AADT ☐ Other:
6-3-3 Identify complete Street existing Asset Inventory and Condition in the project area	Bikeway (Class I) Bikeway (Class II) Bikeway (Class III) Bikeway (Class IV) Sidewalk Crosswalk	Miles: Miles: Miles: Miles: Miles: Miles:	% Poor: % Poor: % Poor: % Poor: % Poor: % Poor:	% Fair: % Fair: % Fair: % Fair: % Fair: % Fair:	% Good: % Good: % Good: % Good: % Good: % Good:
6-3-4 Design Year ADT	☐<2,500 ☐2,500-5,000 ☐5,000-10,000 ☒>10,000				
6-3-5 Posted Speed	☐15-20 ☐25-30 ☒35-40 ☒>45				
6-3-6 Level of Traffic Stress (LTS)	Bicycle LTS: 4 Pedestrian LTS:				

6-3-7 Identify existing Rail and transit facilities within the project vicinity/ corridor.	☒ Rail and Transit Stops ☒Active Rail/Transit Line ☒Park and Ride Lot ☐ Connections to other services ☐ Signal Priority ☐ Seamless Transfer Opportunities ☐ Other:	
6-4 BICYCLE, PEDESTRIAN &TRANSIT NEEDS/OPPORTUNITIES	Comment/Action	
6-4-1 Are there opportunities to improve safety for bicyclists and pedestrians with Complete Street features?	☒Yes ☐No	Class 1 pathway from Herrick Ave to the K-Mart signal, west of 101. Class IV bikeway from Kmart to Truesdale on NB & SB shoulders. Crossing enhancements.
6-4-2 Identify any pedestrian, bicycle or transit needs in/linking to the project area as identified in an existing Bicycle/Pedestrian Plan or comprehensive planning study for the corridor.	Enhanced non-motorized crossings are needed at intersections and mid-block locations to connect to the Eureka Waterfront/Hikshari Trail.	
6-4-3 Is there a public/partner identified need for bicycle/pedestrian/ transit or "way finding" signs that could be incorporated into the project?	☒Yes ☐No	City of Eureka, Humboldt Bay Bicycle Commuters Association, Humboldt County Association of Governments, Redwood Community Action Agency, Coalition for Responsible Transportation Priorities, Humboldt Trails Council
6-4-4 Provide recommendations to address physical and/or perceived impediments for bicyclists and pedestrians (identified in 6-3-2) within project limits".	☐Yes ☐No	Calss I & IV Bikeways, Mid-block crossings, pedestrian refuge islands in the median, RRFB or HAWK beacons, Leading Pedestrian Interval at signals
6-4-5 Is there any opportunity to improve transit on state owned roads or improve access to transit?	☒Yes ☐No	Transit priority lanes were recommended where Right of Way is available. Coordinate with Humboldt Transit Authority.
6-4-6 Preferred Bikeway Facilities	☒ Class I ☐ Class II ☐ Class III ☒ Class IV ☐ Standard Shoulder or Shared Lane	

Section 7: Local Development – Intergovernmental Review (OPTIONAL)

7-1 LOCAL DEVELOPMENTS IMPACTING PROJECT		
Project Title: *Add Title* Project Location: *Lat/Long or Street address/ County-Route-PM and APN(s)* GTS link: *Add Link*		Encroachment Permit Required ☐
7-1-1 Project Description:		
7-1-2 Distance to Caltrans Project:		
7-1-3 Summary of Mitigation Measures:		
7-1-4 Mitigation Funding Source(s)	7-1-5 Amount of Available Funding	7-1-6 Summary of Caltrans Concerns:

Section 8: Climate Change, Planning and Environmental Linkage Considerations (OPTIONAL)

8-1 AIR QUALITY, WILDLIFE, AND NATURAL HABITAT CONSIDERATIONS		
8-1-1 Check all that apply: ☐ Air Quality – proposed project is located in a Federal non-attainment or attainment maintenance area ☐ Project is within identified Wildlife Corridors in a Habitat Conservation Plan, South Coast Wildlife Linkage or California Essential Habitat Connectivity Plan. ☐ Proposed project is located within or near any lands protected under a National Scenic Rivers Act, US Fish and Wildlife Services such as Critical Habitat, National Wildlife Refuge System, etc., or within the boundaries of other resource agencies such as HCPs, USFS or BLM designated critical habitat areas or Habitat Conservation Plans		
8-1-2 Are any of the following Officially Designated Habitat Types located within or near the proposed Project Location? ☒ Wetlands ☒ Riparian or Stream Habitats ☒ Jurisdictional Waters ☒ Important Bird Areas ☐ Important Rare Plants Areas ☐ Natural Communities of Conservation Concern ☒ Environmentally Sensitive Habitat Areas	*If so, describe here:* *A variety of wetland areas adjacent to 101 would likely be affected by this project.*	
8-1-3 Is there an identified fish passage barrier(s)? www.cafishpac.org	☐Yes ☐No	*Describe.* Unknown
8-1-4 Is the project located in the Coastal Zone Boundary, Local Coastal Program Area (https://www.coastal.ca.gov/maps/), or within the San Francisco Bay Conservation and Development Commission (BCDC)? https://bcdc.ca.gov/bcdc-cities-jurisdiction.html.	☒Yes ☐No	*Describe.* *Coastal Zone in this area is both state and local jurisdiction.*
8-2 CLIMATE CHANGE CONSIDERATIONS	**Comment/Action**	
8-2-1 Caltrans climate change considerations tool kit – forthcoming or remove if not relevant: *Attach toolkit as an appendix and check GHG reduction measures that could apply to the proposed project for consideration.*	*Describe.*	
8-2-2 Using the District Vulnerability Assessment appropriate for the proposed project area, identify the potential climate stressors that could affect transportation assets within the project limits. *Using the vulnerability assessment interactive Webmap; print and attach map of potential project site vulnerability*	☐Temperature ☐Precipitation ☐Wildfire ☐ Other: ☒Sea-Level Rise ☐Storm Surge ☐Cliff Retreat	
8-2-3 Are there potential climate risks to major assets within the project area? *(e.g. Bridge potentially at risk of SLR inundation, stretch of highway at risk for high temp, and wildfire- consider appropriate materials)*	☒Yes ☐No	*Sea level rise will impact Highway 101 in this area. Consider the H++ scenario.*
8-3 ADVANCE BIOLOGICAL MITIGATION OPPORTUNITIES	**Comment/Action**	
8-3-1 Identify Potential Environmental Mitigation Opportunities for the project: ☐ Mitigation bank within the project limits with available credits to purchase ☐ Mitigation Fees from existing Habitat Conservation Plan ☐ Projects timeline allows participation in the Advance Mitigation Program ☐ Any opportunities available within the project limits to offset project impacts	*Describe.*	

Section 9: Broadband Coordination (OPTIONAL)

9-1 BROADBAND OPPORTUNITIES	
9-1-1 Does the work create an opportunity (for either Caltrans or broadband service providers) to incorporate the installation of broadband infrastructure (e.g., underground or aerial facility etc.) as part of this project for the use of either Caltrans or other public or private agencies?	Yes. Broadband conduit should be installed throughout the project limits. Confirm with Traffic Operations.

Section 10: Freight Considerations (OPTIONAL)

10-1 FREIGHT OPPORTUNITIES AND CONSIDERATIONS		
10-1-1 Are there any known unauthorized truck parking issues or deficiencies along the route?	☐Yes ☒No	*Describe.*
10-1-2 Are there any existing or planned restrictions/limitations pertaining to truck weight or height?	☐Yes ☒No	*Describe.*
10-1-3 Identify truck usage impacts within the project area: ☐Truck Bottleneck/Congestion ☒Shoulder Width ☐Distressed Pavement ☐Shoulder Dust Issues ☐Truck Geometric Constraints *(Truck/Weight/Height restrictions)* ☐Bridge Conditions	The route segment has been constructed and maintained to be used by STAA trucks.	
10-1-4 Check if apply: ☐ The project area contains Intermodal connections to other freight facilities (sea ports, rail, airport) ☒ Freight key services along route *(e.g. agriculture (crops, processing, packing))*	Lumber, wood pulp, and other agricultural products are the primary exports	
10-1-5 Are there any opportunities for Truck Parking, based on SRRA Master Plan or any relevant truck parking studies?	☒ Yes ☐No	The park and ride lot, shoulders and cross streets allow overnight parking
10-1-6 Identify opportunities for zero emission fueling (electric charging, hydrogen) for vehicles including trucks.	☐ Yes ☒No	An Electrify America Charging Station is located north of Truesdale

SEGMENT **MAP/PICTURES (OPTIONAL)**

ATTACHMENT K

Preliminary Materials Recommendation

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

M e m o r a n d u m

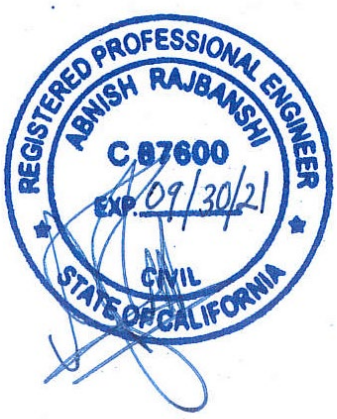
Making Conservation
A California Way of Life.

To: Kirsten Thuresson, Acting Chief
District 1 Advance Planning

Date: May 05, 2021

File: 01-HUM-101
PM: 74.8/76.0
EA: 01-0K940K
EFIS: 0121000033
Broadway Complete Streets

Attn: Nicole Farrell, Project Engineer
District 1 Advance Planning



From: Abnish Rajbanshi
Materials Engineering
Eureka Materials Lab
North Region Construction – West Area

Subject: **Preliminary Materials Recommendation**

To meet a request for a preliminary materials recommendation, the following information is provided. We reviewed the as built files from the Department's Document Retrieval System (DRS), to determine the existing structural section, and the thicknesses of Hot Mix Asphalt (HMA) surface layers placed within this project limits. Additionally, we reviewed the current (2019) Automated Pavement Condition Survey (APCS) report, and the images of the roadway available on the Department's PaveM Portal site, to determine the existing pavement surface condition.

The next phase of project development will require a field review, collection of sample materials and testing to update the structural section calculation. For the purpose of this report the variables of the structural section calculation come from historical data. For the Class I bikeway (Alternatives 1, 2 and 3) a 20-year Traffic Index of 5 was selected, and for the Class IV Bikeway a 20-year Traffic Index of 7.5 for the adjacent shoulder was used for the structural section calculation. Please request an updated materials recommendation that will be based on soil testing when this project enters the next phase of project development.

Existing Structural Section and Pavement Conditions

A review of the as built files indicates lanes with an existing structural section consisting of 0.65 foot AC over 0.67 foot Cement Treated Base (CTB) over 0.25 foot of gravel, and shoulders with an existing structural section consisting of 0.45 foot AC over 0.67 Foot AB. The upper layer of the existing wearing course in this project consists of 0.08 foot of Open Grade Friction Course (OGFC) placed in 2003 under project 01-402334. The 0.08' of OGFC was cold planed and replaced with 0.10 foot of Rubberized Hot Mix Asphalt -Gap Graded (RHMA-G) from post mile 74.8 to PM 75.13 in the year 2015 under project 01-0C4804. A portion of this project limits, from PM 74.8 to 75.20, will be overlaid with 0.15 foot of RHMA-G under a rehab project (# 01-0C570) currently in construction (Year 2021).

A review of the Department's 2019 APCS report indicates, that the existing pavement surface within this project's limits is overall in "Good" condition and is predicted to be " Good" to "Fair" condition (32% Good, 68% Fair) when this project reaches the milestone Ready to List (RTL) in 2026. The following table shows the pavement distresses and International Roughness Index (IRI) of the existing pavement surface within this project's limits, taken from the Department's 2019 APCS report.

Table 1. Existing Pavement Conditions (PM 74.8/76.0)

Year	Alligator "A" Cracking (%)	Alligator "B" Cracking (%)	Rut (in)	IRI (inches/mile)
Current Condition (Data Year 2019)	0.00 to 4.60 (Avg. = 1.10)	0.00 (Avg.= 0.00)	0.06 to 0.14 (Avg. = 0.10)	64 to 91 (Avg. = 72)
Predicted Condition (RTL Year 2026)	6.80 to 22.90 (Avg. =14.02)	5.50 to 14.40 (Avg. = 8.43)	0.06 to 0.14 (Avg. = 0.10)	92 to 120 (Avg.= 105)

Pavement Smoothness

According to the Memorandum "Providing Pavement Profile Smoothness Data", signed by Steve Takigawa and Karla Sutliff, dated August 12, 2016, the District will provide to bidders the existing pavement profile smoothness data taken **within six months of the project's ready to list (RTL) milestone**. However, with multiple signalized intersections within this project limits, collection of continuous inertial profile trace for IRI determination may not be practical due to tendency of traffic slowing down or stopping before and at the intersection. The need of Pre RTL pavement smoothness trace should be discussed with the project development team. And if pavement profile smoothness data is required, please request an inertial profiling through this office to determine the updated IRI of the existing pavement surface within six months of RTL date and allow enough lead time to schedule.

Rubberized HMA and Reporting Requirement

Documents submitted with the request for services indicate estimated Rubberized Hot Mix Asphalt (RHMA) overlay quantities to be more than 1,000 tons; therefore, this project should use RHMA products as a default pavement surface course of choice, following the guidelines in the *Crumb Rubber Usage in Hot Mix Asphalt Pavements* memo signed in February 2015 by K. Sutliff and S. Takigawa and Highway Design Manual (HDM), Section 631.5. If during project development the calculated quantity of RHMA is determined be less than 1000 tons, please request for recommendation on change of type of HMA overlay.

New Structural Section

Alternative 1, 2 & 3 – Class I Bikeway Shared Use Path (20-Year Design)

Currently, the R-value of native soil at all three locations proposed for Class I Bikeway is unknown. Assuming a conservative R-value of 20 gained by use of Subgrade Enhancement Geosynthetics (SEG) for the native soil, and a 20-Year Traffic Index of 5.0, the following structural section is recommended for bicycle, pedestrian, and occasional maintenance vehicle traffic.

	HMA-A	AB (Cl-2)	SEG
Strategy 1	0.25’	0.60’	YES

Alternative 1-Class IV Separated Bikeway on US 101/Broadway

Separated bikeways are considered Class IV in accordance with Design Information Bulletin 89-01 (DIB 89-01). The Highway Design Manual (HDM), section 1003.1(15) *Pavement Structure*, states the design of the bike paths are to be considered the same as roadway design. Following this guideline and based on R-value of **50**, and a 20-year Traffic Index (TI_{20}) of **7.5** for shoulder condition, the following structural section strategy is recommended for Class IV Bikeways.

	HMA-A	AB (Cl-2)
Strategy 1	0.35’	0.50’

Alternative 2-Class IV Separated Bikeway on US 101/Broadway

Alternative 2 proposes to overlay existing pavement for Class 4 Separated Bikeway. A minimum of 0.25 foot of HMA-A overlay is recommended for this alternative.

Repairs Prior to Overlay- US Route 101

Prior to overlay, a thorough inspection should be made to locate areas of severe pavement failure such as, rutting greater than 1/2 inch and/or loose spalling pavement. Identify all areas of pavement failure as a dig out locations. Based on field inspection, where dig out is required, dig out and repair the identified localized failure to a maximum depth of 0.33 foot (mill and fill with HMA-A) and rout seal cracks wider than 1/4 inch by rout and seal method. See attachment "A" for details of rout and seal crack repair. For the areas subjected to col plane, inspect and repair after cold planning, and before overlay.

Overlay Existing Pavement - US Route 101

To provide a surface with a uniform appearance, and a fresh surface to receive pavement delineation, upon completion of street improvements, and repairs on existing pavement, overlay existing pavement with 0.10 foot of RHMA-G. If it is necessary to perpetuate existing profile grade, cold plane 0.10 foot of existing pavement, and overlay with 0.10 foot of RHMA-G.

Bus Pads

According to Section 626.4(3) of HDM, the minimum pavement structure for bus pads should be 0.85-foot Jointed Plain Concrete Pavement (JPCP) with dowel bars at transverse joints on top of 0.50-foot Lean Concrete Base (LCB). Relative slab dimension for bus pads should be approximately 1:1 to 1:1.25, transverse to longitudinal.

	JPCP	LCB
Strategy 1	0.85'	0.50'

Sidewalks and Curb Ramps

Concrete sidewalk should be constructed by placing a 0.33 foot (min.) concrete over 0.35 foot (min.) compacted aggregate base (Class 2). Sidewalks and ramp thickness at driveway entrances in commercial area shall be 0.50 foot (min.) and should be placed over 0.50 foot (min.) of compacted aggregate base (Class 2). Bar steel reinforcement or a welded wire reinforcement should be placed in the lower half of the 0.50 foot concrete. Construction of concrete curbs, sidewalks, and their appurtenances such as gutter depression, island paving, curb ramps and driveway shall comply with the Section 73 of the 2018 Standard Specifications and 2018 Standard Plan A87A.

Raised Median

The raised median for pedestrian refuge should be constructed by placing a 0.50-foot (min.) concrete over 0.50 foot (min.) of compacted aggregate base (Class 2). Bar steel reinforcement or a welded wire reinforcement should be placed in the lower half of the 0.50 foot concrete.

Hardscape

The Hardscape should be constructed by placing a 0.50 foot (min.) concrete on top of 0.50 foot (min.) compacted aggregate base (Class 2). Bar steel reinforcement or a welded wire reinforcement should be placed in the lower half of the 0.50 foot concrete. If planned to place rock blanket on the concrete surface, a minimum thickness of 0.50 foot of concrete should extend below lower surface of the embedded rock. The rock blanket shall comply with Section 20-5.03B of the 2018 Standard Specification.

Notes:

- Routing Cracks: Rout cracks 1/4 inch wide and wider. The width of the routing should be 1/4 inch wider than the crack width. The depth should be equal to the width of the routing plus 1/4 inch. In order to alleviate the potential bump in the overlay from the crack sealant, leave the crack sealant 1/4 inch below grade to allow for expansion. Please see Attachment "A" for details.

- Imported borrow used to construct the embankment for Class1 bikeway shared use Path must meet a minimum R-value of **20** when placed within 4 feet of finished grade.

Material Specifications

- Hot Mix Asphalt- Type A (HMA-A): Shall conform to Section 39 of 2018 Standard Specifications. The estimated unit weight of HMA-A is 155 lbs/ft^3.

- Rubberized Hot Mix Asphalt- Gap Graded (RHMA-G): Shall conform to Section 39 of the 2018 Standard Specifications. The estimated unit weight of RHMA-G is 150 lbs/ft^3.

- Asphalt Binder: Asphalt binder for "**North Coast**" climate region shall be **PG 64-16** for RHMA-G, and for HMA-A. The estimated percentage of asphalt to be added per total weight of mixture (Superpave) 7.5% for RHMA-G, and 5.5% for HMA-A.

- Paint Binder (Tack Coat): Shall conform to Section 39 of the 2018 Standard Specifications.

- Aggregate Base (AB): Shall be Class 2, conforming to Section 26 of the 2018 Standard Specifications.

- Shoulder Backing. Shoulder backing shall conform to Section 19-9 of the 2018 Standard Specifications.

- Asphalt Concrete Dike: Hot Mix Asphalt used in the construction of dikes shall be 3/8-inch, Hot Mix Asphalt (HMA-A), conforming to Section 39 of the 2018 Standard Specifications.

- Subgrade Enhancement Geosynthetics (SEG): Shall be Class B2 Geotextile conforming to Section 96-1.02O of the 2018 Standard Specifications.

- Reinforcing Bars and Welded Wire Reinforcement: Shall comply with Section 52 of the 2018 Standard Specification.

- Portland Cement Concrete (PCC): Concrete for Bus pad shall comply with Section 90 of 2018 Standard Specification. Concrete for curbs, sidewalks and their appurtenances shall comply with Section 90-2 Minor Concrete of the 2018 Standard Specification.

- Lean Concrete Base (LCB): Shall comply with Section 28-2 of the 2018 Standard Specifications.

If you have any questions, please call Abnish Rajbanshi at (707) 496-7070.

Attachments:

AR: ar

cc: D.Yang (ec)
K. Thuresson (ec)
R. Harrison (ec)
J. Caminiti (ec)
A. Guimaraes (ec)
Lab Files (orig.)

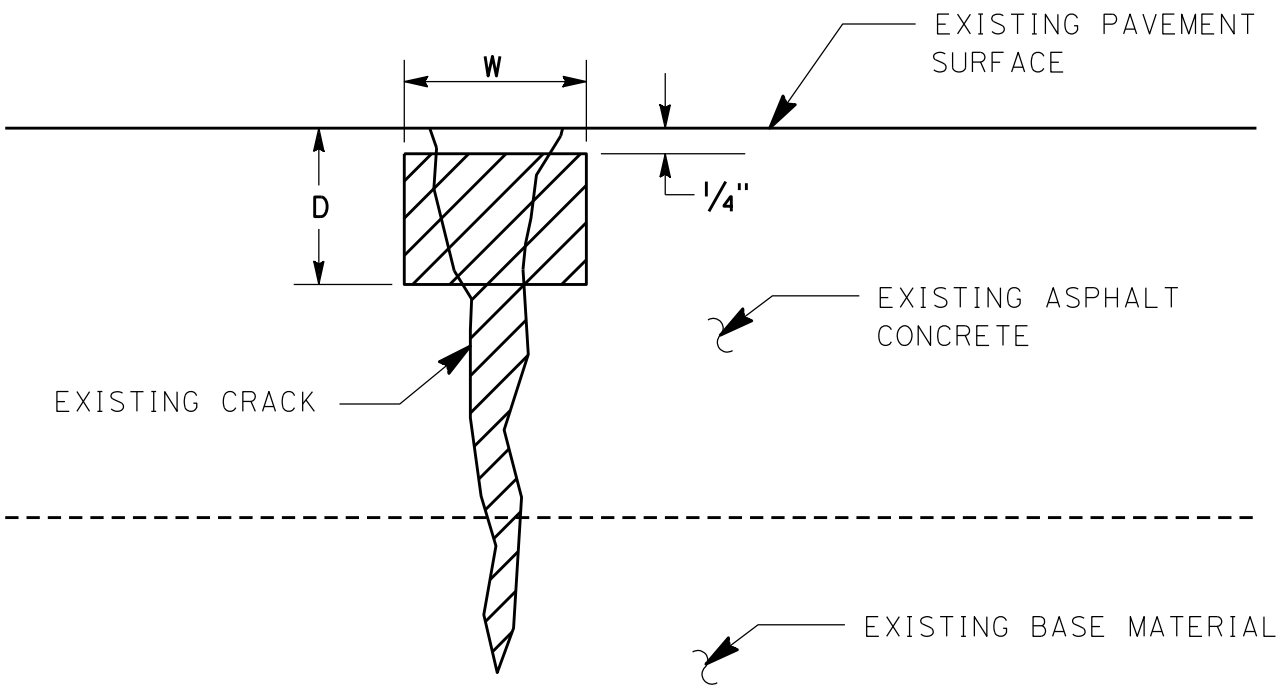
ATTACHMENT A

01-HUM-101_PM74.8/76.0

01-0K940K

W = WIDTH OF ROUTING = WIDTH OF CRACK + 1/4" MIN

D = DEPTH OF ROUTING = W + 1/4" MIN



NOTES:

1. ALL CRACKS 1/4" WIDE OR GREATER ARE TO BE ROUTED AND SEALED.
2. IF ANY PART OF ANY CRACK IS 1/4" OR WIDER, THEN THE ENTIRE CRACK WILL BE ROUTED AND SEALED.
3. NO SEALANT MATERIAL WILL BE ALLOWED ON HMA PAVEMENT SURFACE.

CRACK SEALANT

ROUT AND SEAL RANDOM CRACKS
TYPICAL CROSS SECTION

ATTACHMENT B

01-HUM-101_PM74.8/76.0
01-0K940K

Alternative Pipe Culverts (Recommended Minimum Thickness - 50 Year Service Life)

		Tested Values			Galvanized Corrugated Steel Pipe[1]					Polymeric Sheet Coated Galvanized Corrugated Steel Pipe[1]				Corrugated Aluminum Pipe[1,5]					Reinforced Concrete Pipe[3]	Corrugated PVC[2]	Corrugated HDPE Plastic Pipe Type-S[2]	Comments
					0.168"	0.138"	0.109"	0.079"	0.064"	0.138"	0.109"	0.079"	0.064"	0.164"	0.135"	0.105"	0.075"	0.060"				
DS #	Post Mile	pH	Ohms Ω	Diam.	8 Gage	10 Gage	12 Gage	14 Gage	16 Gage	10 Gage	12 Gage	14 Gage	16 Gage	8 Gage Equiv.	10 Gage Equiv.	12 Gage Equiv.	14 Gage Equiv.	16 Gage Equiv.				
NA	PM74.8 to 76.0	NA	NA	24"	Yes	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	Yes	- - - -	- - - -	- - - -	- - - -	- - - -	Yes	Note (4)	Yes	Yes	

Notes:
(1) Corrugated Metal Pipe shall conform to Section 66 of the 2018 Standard Specifications
(2) Plastic Pipe shall conform to Section 64 of the 2018 Standard specifications.
(3) Reinforced Concrete Pipe shall conform to Section 65 of the 2018 Standard Specifications.
(4) Concrete for RCP at this location shall comply with Section 90-1.02H Concrete in Corrosive Environments.
(5) Please review Highway Design Manual, Section 852.4(2)(e) if corrugated aluminum pipe planned use is pipe extension.

ATTACHMENT L

Floodplain Analysis and Preliminary Hydraulics Recommendation

M e m o r a n d u m

To: JOSEPH Caminiti, Designer
District 1 Advance Planning

Date: May 6, 2021

File: 01-MEN-101-PM 74.8/76.0
01-0K940K, (0121000033)

From: FARIAR KOHZAD, PhD
North Region Hydraulics Design
District 1- Eureka

Subject: **Floodplain Analysis and Preliminary Hydraulics Recommendation**

Advance Planning requested a hydraulic analysis on March 30, 2021. The project is in Humboldt County on US 101 from PM 74.8 to PM 76.0. Advanced Planning proposes to enhance connectivity and safety for bicyclist and pedestrians, and level of comfort and to improve accessibility and on-time performance of the transit facility.

Class 1 and class 4 bike facilities are proposed with this project. The project begins near PM 74.8 with a new class 1 bike facility that will connect the existing park and ride facility located near the Herrick & US-101 interchange to the proposed class 4 bike facility that is proposed along US-101/Broadway.

The second and third alternatives for the class 1 facility proposes a new class 1 facility to be constructed along one of two existing city of Eureka maintenance roads. These existing maintenance roads will be repaved with a new structural section in order to repurpose the maintenance road into a new class 1 bike facility.

The class 4 facility is proposed from the signalized intersection, where the old K-mart was once located to the intersection of Truesdale Street and Broadway (PM75.2/76.0). Within the class 4 segment two new bus stops are proposed that will require sidewalk modification and widening.

Hydraulics Design performed a quick floodplain analysis based on FEMA Floodplain Maps. The outcome is provided below:

The Broadway itself is gradually going up with a small grade to the north. At PM 74.8 which is just north of Herrick Bridge the Broadway is submerged northward and is designated as flood **"Zone AE"** with a flood elevation of **10 ft**. North of the bridge the HWY 101 is flooded for a distance of 0.4 mile (2112 ft). To the south of the bridge, although not part of this project, the flooded length of the US 101 is 0.9 mile to the south. The rest of the Broadway within the limits of this project is not flooded and is designated as **"Zone X",** or the area of minimal flood hazard. **"Zone AE"** is designated as **Special Flood Hazard Area (SFHA)** inundated by a flood event

having a 1-percent chance of being equal or exceeded in a given year. It is also referred as base flood or 100-year flood.

Flood **"Zone A"** and **"Zone AE"** are further described as the **1-percent annual chance flood**, by FEMA which has a frequency or return period of 100 year. They are shown in FIRMEtte MAPS enclosed.

FIRMETTE Maps are shown below.

Overall Status of the Drainage System and Recommendations

On Tuesday 5/4/21 together with Joseph Caminiti, from Advanced Planning, I visited the site and got a better feeling of what needs to be done in this project in terms of a suitable drainage system and stormwater treatment. The existing drainage system is incomplete and need some modification. The project is in K-Phase and the purpose is to gather information to create a good cost estimate to secure funding. At this phase there is not enough time to design a complete drainage system, however I recommend the following items to be included in the project for securing sufficient fund and in next phase there should be allocated time to carry out a detail drainage analysis and design. The recommendations are:

1- To extend the existing 36" pipe which is located on the east side of the street on Broadway. This pipeline is flowing south to north to McCullen Avenue and Broadway intersection. Then crosses Broadway and flows to the West in the middle of McCullen Avenue.
The water from large 36" pipe already flows to a water body, although it was not visible during the site visit because it was passing through houses and some businesses but the flow definitely joins either the bay or a swampy area which impacts the water quality.

2- To build a new line parallel to Broadway on the west side of the road flowing north to south all the way to the wetland near Lithia Car Sale. The flow from the line would drain to the wetland. A minimum pipe size which is 24" would be sufficient for this application as the drainage area is only half of Broadway from road crown to the footpath curb.
The stormwater flow from this line would also capture and carry pollutants, sediments, metal particles and oil/grease from the road surface and drain them to the wetland.

3- It is recommended that at the end of these two lines to install structured stormwater technologies to treat the flow and separate the pollutants such as plastic bottles, cans, plastic bags, cigarette bud, oil and grease that are washed from the street surface and parking lots on the east side of Broadway. In addition to other pollutants there will be metal particles that are dropped from old cars and ultimately washed by stormwater.
The size of the treatment technologies will be different for the two applications.

The treatment capacity, size, footprint, depth and other physical dimensions and characteristics of the two units will be done once some site information, hydrology and hydraulic analysist are carried out in next stage. But an approximate cost estimate can be made.

cc: 1. Project files

FK:fk

124°13'7.98"W 40°46'59.11"N

124°11'14.62"W 40°44'53.43"N

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on **4/14/2021 1:19 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at https://www.fema.gov/media-library/assets/documents/118418

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure. The flood hazard data inside this boundary on the FIRM panel has been republished from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88.

SCALE

Map Projection:
GCS, Geodetic Reference System 1980;
Vertical Datum: NAVD88

For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at https://msc.fema.gov

N

1 inch = 500 feet 1:6,000

0 250 500 1,000 1,500 2,000 Feet

0 50 100 200 300 400 Meters

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

HUMBOLDT COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 839 OF 2050

Panel Contains:

COMMUNITY	NUMBER	PANEL
CITY OF EUREKA	060062	0839
U.S. COAST GUARD RESERVATION	06FED	0839
HUMBOLDT COUNTY UNINCORPORATED AREAS	060060	0839

MAP NUMBER
06023C0839G
EFFECTIVE DATE
June 21, 2017

NFHL FIRMETTE 01-0K940K HUM 101 PM

FEMA

0 250 500 1,000 1,500 2,000 Feet 1:6,000

124°11'3"W 40°45'17"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
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GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
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OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/14/2021 at 1:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

FLOODPLAIN EVALUATION REPORT SUMMARY

Dist: 1, Co: Humboldt, State Road: 101 PM 74.8/76.0 (Eureka Broadway)

Project No: EA 01-0K940K, EFIS 0121000033, HUM 101 PM 74.8/76.0

Limits: The purpose of this project is to increase pedestrian and bicyclist safety, connectivity, and level of comfort and to improve accessibility and on-time performance of the transit facility.This project proposes to enhance connectivity and safety for bicyclist and pedestrians along US-101 called Broadway in Eureka, CA. Class 1 and class 4 bike facilities are proposed with this project. The project begins near PM 74.8 with a new class 1 bike facility that will connect the existing park and ride facility located near the Herrick & US-101 interchange to the proposed class 4 bike facility that is proposed along US-101/Broadway. The class 1 facility is proposed from the Herrick and US-101 interchange to the signalized intersection located just north, where the old K-Mart was once located (PM74.8/75.2). This class 1 facility has been proposed with three different alternatives. The first alternative follows the existing US-101 highway alignment. With this alternative, high tension cable barrier and a narrow bioswale have been proposed between US-101 and the proposed class 1 facility. There are a second and third alternative to this proposal. Proposed with the third alternative is a 14-foot wide bridge with an approximate length of roughly 145-feet. This bridge will span east to west and allow users to pass over the existing wetland area, adjacent to US-101.

Floodplain Description: The proposed project area lies in the stretch of HWY 101 from PM 74.8 to PM 76.0 which is located within the City of Eureka, called Broadway. The street itself is in a flat area. The western area to the street is slowly sloping down to the Humboldt Bay. The eastern side is rather hilly and sloping up. The street itself is gradually going up with a small grade to the north. At PM 74.8 which is just north of Herrick Bridge the Broadway is submerged northward and is designated as flood **"Zone AE"** with a **flood elevation of 10 ft**. North of the bridge the HWY 101 is flooded for a distance of 0.4 mile which is 2112 ft. To the south of the bridge, although not part of this project, the flooded length of the HWY 101 is 0.9 mile to the south from Herrick Bridge. The rest of the Broadway within the limits of this project is not flooded and is designated as **"Zone X"**, or the area of minimal flood hazard. "**Zone AE"** is designated as **Special Flood Hazard Area (SFHA)** inundated by a flood event having a 1-percent chance of being equal or exceeded in a given year. It is also referred as **base flood** or **100-year flood**.

		PM =	74.8		75.4		75.8		76.0	
		Cross Street Name =	Herrick Ave.		Sunset Ave.		Allard Ave.		Highland Ave.	
			No	Yes	No	Yes	No	Yes	No	Yes
1 -	Is the proposed action a longitudinal encroachment of the base floodplain?			X	X		X		X	
2 -	Are the risks associated with the implementation of the proposed action significant?		X		X		X		X	
3 -	Will the proposed action support probable incompatible floodplain development?		X		X		X		X	
4 -	Are there any significant impacts on natural and beneficial floodplain values?		X		X		X		X	
5 -	Routine construction procedures are required to minimize impacts on the floodplain. Are there any special mitigation measures necessary to minimize impacts or restore and preserve natural and beneficial floodplain values? If yes, explain.		X		X		X		X	
6 -	Does the proposed action constitute a significant floodplain encroachment as defined in 23 CFR, Section 650.105(q)?		X		X		X		X	
7 -	Are Floodplain Hydraulic Studies that document the above answers on file? If not explain.			X		X		X		X

PREPARED BY:

Hydraulic Engineer Fariar Kohzad F.K. 5/05/2021

Signature - Dist. Hydraulic Engineer Sheila Sadkowski Date 05/05/2021

Signature - Dist. Environmental Branch Chief Date_____

Signature - Dist. Project Engineer Date_____

Existing Drainage Facilities

SYS_CO_text	SYSRoute	SYSPMBegin	SYSNO	Inlet End Treatment No.:	Outlet End Treatment No.:	Health_Assess	Condition	te of Inspectio	Diameter:	Width:	Height	CLENGTH	CBARREL	Material:	EA	Construction EA	Completion Date	Video
HUM	101	73.54	41010007354	41010007354002	41010007354001	N/A	N/A	7/28/2011	2			100	1	Concrete				No
HUM	101	73.54	41010007354	41010007354004	41010007354003	N/A	N/A	7/28/2011	2			40	1	Concrete				No
HUM	101	73.54	41010007354	41010007354003	41010007354002	N/A	N/A	7/28/2011	2			60	1	Concrete				No
HUM	101	73.54	41010007354	41010007354005	41010007354004	N/A	N/A	7/28/2011	2			50	1	Concrete				No
HUM	101	73.75	41018007375	41018007375002	41018007375001	96	Good	2/5/2014	1			50	1	HDPE				NO
HUM	101	73.76	41018007376	41018007376002	41018007376001	20	Poor	2/5/2014	1			50	1	Concrete	Potential Fish Passage, 0H650-removed			NO
HUM	101	73.76	41018007376	41018007376003	41018007376002	93	Good	2/5/2014	1			40	1	Concrete				211
HUM	101	73.77	41018007377	41018007377002	41018007377001	94	Good	2/5/2014	1			40	1	PVC				NO
HUM	101	73.8	41018007380	41018007380002	41018007380001	89	Good	2/5/2014	1.5			30	1	Concrete				NO
HUM	101	73.83	41016007383	41016007383003	41016007383002	93	Good	2/5/2014	1.5			105	1	Concrete				211
HUM	101	73.83	41016007383	41016007383002	41016007383001	55	Fair	2/5/2014	1.5			70	1	Concrete				211
HUM	101	73.83	41018007383	41018007383002	41018007383001	62	Fair	7/28/2011	1.5			50	1	Concrete				176
HUM	101	73.85	41016007385	41016007385002	41016007385001	93	Good	2/5/2014	1.5			60	1	Concrete				211
HUM	101	73.98	41010007398	41010007398002	41010007398001	93	Good	2/5/2014	1.5			75	1	Concrete				211
HUM	101	73.98	41016007398	41016007398002	41016007398001	93	Good	2/5/2014	1.5			50	1	Concrete				211
HUM	101	74.24	41014007424	41014007424002	41014007424001	0	Poor	7/28/2011	2			160	1	Concrete	0E250	0E250	10/23/13	
HUM	101	74.41	41014007441	41014007441003	41014007441002	82	Good	7/28/2011	2			70	1	Concrete				176
HUM	101	74.41	41014007441	41014007441002	41014007441001	82	Good	7/28/2011	2			65	1	Concrete				176
HUM	101	74.5	41010007450	41010007450002	41010007450001	76	Fair	2/5/2014	1.5			80	1	Concrete				211
HUM	101	74.72	41016007472	41016007472002	41016007472001	0	Poor	2/10/2014	1.5			90	1	Concrete				212
HUM	101	74.73	41014007473	41014007473002	41014007473001	79	Fair	2/10/2014	2.5			155	1	Concrete				212
HUM	101	74.73	41014007473	41014007473006	41014007473005	76	Fair	2/10/2014	2			85	1	Concrete				212
HUM	101	74.73	41014007473	41014007473004	41014007473003	88	Good	2/10/2014	1.5			20	1	Concrete				212
HUM	101	74.73	41014007473	41014007473007	41014007473003	94	Good	2/10/2014	1.5			180	1	Concrete				212
HUM	101	74.73	41014007473	41014007473003	41014007473002	98	Good	2/10/2014	2			75	1	Concrete				212
HUM	101	74.73	41014007473	41014007473008	41014007473007	66	Fair	2/10/2014	1.5			140	1	Concrete				212
HUM	101	74.73	41014007473	41014007473005	41014007473004	76	Fair	2/10/2014	2			55	1	Concrete				212
HUM	101	74.75	41018007475	41018007475002	41018007475001	N/A	N/A	2/10/2014	6			650	2	CSP				No
HUM	101	74.85	41016007485	41016007485002	41016007485001	94	Good	2/11/2014	2			100	1	HDPE				212
HUM	101	75.11	41010007511	41010007511004	41010007511003	79	Fair	6/2/2011	1.5			61	1	Concrete				173
HUM	101	75.11	41010007511	41010007511002	41010007511001	79	Fair	5/22/2011	2			83	1	Concrete				173
HUM	101	75.11	41010007511	41010007511003	41010007511002	79	Fair	5/22/2011	1.5			175	1	Concrete				173
HUM	101	75.22	41010007522	41010007522003	41010007522002	76	Fair	5/22/2011	1.5			62	1	Concrete				173
HUM	101	75.22	41010007522	41010007522002	41010007522001	52	Fair	5/22/2011	1.5			83	1	Concrete	0B620			173
HUM	101	75.26	41010007526	41010007526002	41010007526001	49	Poor	5/22/2011	1.5			81	1	Concrete	0B620			173
HUM	101	75.26	41010007526	41010007526003	41010007526002	74	Fair	5/22/2011	1.5			81	1	Concrete				173
HUM	101	75.28	41010007528	41010007528002	41010007528001	28	Poor	5/22/2011	2			81	1	Concrete	0B620?			173
HUM	101	75.3	41010007530	41010007530002	41010007530001	100	Good	5/23/2011	1.5			77	1	Concrete	0B620?			173
HUM	101	75.31	41010007531	41010007531003	41010007531002	0	Poor	5/23/2011	1.3			178	1	Concrete	0B620?			173
HUM	101	75.31	41010007531	41010007531006	41010007531005	100	Good	5/23/2011	1.5			119	1	Concrete				173
HUM	101	75.31	41010007531	41010007531004	41010007531002	69	Fair	5/23/2011	2			75	1	HDPE				173
HUM	101	75.31	41010007531	41010007531007	41010007531006	93	Good	5/23/2011	1.5			158	1	Concrete				173
HUM	101	75.31	41010007531	41010007531002	41010007531001	N/A	N/A	5/23/2011	2			30	1	Concrete				no
HUM	101	75.31	41010007531	41010007531005	41010007531004	76	Fair	5/23/2011	1.5			101	1	Concrete				173
HUM	101	75.9	41014007590	41014007590011	41014007590009	100	Good	6/6/2011	1.5			20	1	HDPE	0B620			no
HUM	101	75.9	41014007590	41014007590007	41014007590006	100	Good	6/2/2011	2			291	1	HDPE				173
HUM	101	75.9	41014007590	41014007590006	41014007590005	100	Good	6/2/2011	2			313	1	HDPE				173
HUM	101	75.9	41014007590	41014007590005	41014007590004	100	Good	6/2/2011	2			270	1	HDPE				173
HUM	101	75.9	41014007590	41014007590004	41014007590002	100	Good	6/2/2011	2			267	1	HDPE				173
HUM	101	75.9	41014007590	41014007590009	41014007590007	29	Poor	6/2/2011	1.5			96	1	Concrete	0H650			173
HUM	101	75.9	41014007590	41014007590003	41014007590002	100	Good	6/2/2011	1.5			15	1	HDPE	0B620			no
HUM	101	75.9	41014007590	41014007590002	41014007590001	100	Good	6/2/2011	2			60	1	HDPE				173
HUM	101	75.9	41014007590	41014007590012	41014007590011	N/A	N/A	5/23/2011	1.5			20	1	HDPE				no
HUM	101	75.9	41014007590	41014007590010	41014007590009	29	Poor	5/23/2011	1.5			61	1	Concrete	0H650			173
HUM	101	75.9	41014007590	41014007590010	41014007590008	100	Good	5/23/2011	1.5			12	1	HDPE				no
HUM	101	75.9	41014007590	41014007590008	41014007590007	100	Good	5/23/2011	1.5			12	1	HDPE				no
HUM	101	76.01	41010007601	41010007601003	41010007601002	32	Poor	6/8/2011	1.5			75	1	Concrete	0H650			174
HUM	101	76.01	41010007601	41010007601002	41010007601001	29	Poor	6/8/2011	1.5			75	1	Concrete	0H650-removed			174

ATTACHMENT M

Drainage Worksheet

SHOPP ID: 22715
EA: 01-0K940
EFIS: 0121000033
Prepared by: Brittany Wattle

Alt. 1 Only
Alt. 1 & 2

Drainage Worksheet - (HUM-101) - Alt. 3

No.	Route	PM	SYSNO	INETNO	OUTETNO	Material	Inspection Date	Health Assessment Score	Condition (Good/Fair/Poor)	Dia (ft.)	Width (ft)	Height (ft.)	Length (ft.)	Number of Barrels	Proposed Work	Comment
N/A	101	75.02	N41010007502	N41010007502002	N41010007502001	Concrete				2.0			30.00		New culvert on bike path (approx. PM)	Assumed end treatment numbers, a few longitudinal sections NB/SB were not in original inspections
N/A	101	75.05	N41010007505	N41010007505002	N41010007505001	Concrete				2.0			30.00		New culvert on bike path (approx. PM)	
N/A	101	75.08	N41010007508	N41010007508002	N41010007508001	Concrete				2.0			30.00		New culvert on bike path (approx. PM)	
N/A	101	75.11	N41011207511	N41011207511002	N41011207511001	Concrete				2.0			30.00		New culvert on bike path Connects to PM75.11 system via bioswale	
1	101	75.11	N41010007511	N41010007511009	N41010007511004	Concrete				2.0			40.44	1	New culvert new DI, replace DI	
2	101	75.11	N41010007511	N41010007511010	N41010007511009	Concrete				2.0			52.58	1	New culvert new DI	
3	101	75.11	N41010007511	N41010007511006	N41010007511005	Concrete				2.0			87.62	1	New culvert new DI, replace DI	
4	101	75.11	N41010007511	N41010007511007	N41010007511005	Concrete				2.0			14.68	1	New culvert new DI	
5	101	75.11	N41010007511	N41010007511008	N41010007511007	Concrete				2.0			59.60	1	New culvert new DI	
6	101	75.22	N/A DI modification only												Two new DIs, replace three DIs	
7	101	75.26	N41010007526	N41010007526005	N41010007526004	Concrete				2.0			140.21	1	New culvert three new DIs, replace two DIs	
8	101	75.31	N/A DI modification only												Replace two DIs at Node #4	
9	101	75.60	N41010007560	N41010007560002	N41010007560001	Concrete				2.0			143.57	1	New culvert two new DIs	
10	101	75.60	N41010007560	N41010007560003	N41010007560002	Concrete				2.0			197.57	1	New culvert, replace DI	
11	101	75.60	N41010007560	N41010007560033	N41010007560006	Concrete				2.0			70.58	1	New culvert two new DIs	
14	101	75.60	N41010007560	N41010007560030	N41010007560029	Concrete				2.0			59.36	1	New culvert two new DIs	
15	101	75.60	N41010007560	N41010007560029	N41010007560010	Concrete				2.0			76.15	1	New culvert, replace DI	
16	101	75.60	N41010007560	N41010007560015	N41010007560014	Concrete				2.0			12.30	1	New culvert new DI, replace two DIs	
17	101	75.60	N41010007560	N41010007560016	N41010007560015	Concrete				2.0			59.78	1	New culvert new DI	
18	101	75.60	N41010007560	N41010007560021	N41010007560016	Concrete				2.0			68.22	1	New culvert new DI	
19	101	75.60	N41010007560	N41010007560022	N41010007560021	Concrete				2.0			5.82	1	New culvert new DI	
20	101	75.60	N41010007560	N41010007560023	N41010007560021	Concrete				2.0			66.69	1	New culvert new DI	
21	101	75.60	N41010007560	N41010007560024	N41010007560023	Concrete				2.0			66.69	1	New culvert new DI	
22	101	75.60	N41010007560	N41010007560025	N41010007560024	Concrete				2.0			6.55	1	New culvert new DI	
23	101	75.60	N41010007560	N41010007560026	N41010007560024	Concrete				2.0			96.96	1	New culvert new DI	
24	101	75.60	N41010007560	N41010007560017	N41010007560016	Concrete				2.0			97.81	1	New culvert new DI	
25	101	75.60	N41010007560	N41010007560018	N41010007560017	Concrete				2.0			63.87	1	New culvert new DI	
26	101	75.60	N41010007560	N41010007560020	N41010007560018	Concrete				2.0			5.72	1	New culvert new DI	
27	101	75.60	N41010007560	N41010007560019	N41010007560018	Concrete				2.0			74.22	1	New culvert new DI	
													Total	23.00		

ATTACHMENT N

Landscape Architecture Assessment Study

NORTH REGION
LANDSCAPE ARCHITECTURE ASSESSMENT STUDY (LAAS)
NR-K-Phase LAAS-0001 (Rev. 1/19)

Date: 6/21/2021

PRSM NICKNAME: Broadway Complete Streets

EFIS #	EA#	District	County	Route	Post Mile Station/Fin
0121000033	01-0K940	01	Hum	101	73.3/76.1

LAAS PHASE: ☒ K-PID

LAAS VERSION: ☐ Original Request ☒ Revision No: 3

FUNDING

Program: ☒ SHOPP MAJOR ☐ STIP ☐ SHOPP MINOR ☐ LOCAL ☐ OTHER

Cost:

Roadway ($K):	$6278
Structures ($K):	$0
Right of Way ($K):	$784
Total ($K):	$7062

DELIVERY MILESTONES*

M010 Approve PID:	08/03/21
M200 PA&ED:	06/21/23
M300 Dist Circ:	02/12/24
M377 PS&E to DOE:	04/08/24
M380 Proj PS&E:	TBD
M460 RTL:	06/03/24
M500 Approve Cont:	12/03/24
M600 Cont. Accept:	12/01/25

*Subject to change

Separate Contract Requirement for Highway Planting Work on Roadway Construction Projects

(Per PDPM Ch. 29, "Highway Planting with an estimated cost of $300K or more, in conjunction with or resulting from a roadway construction project, must be accomplished by separate contract and must include three years of plant establishment. This policy applies to all highway planting projects within the State operational right-of-way regardless of funding source.")

☒ *Highway Planting work included in this project EA*

☐ *Highway Planting work to be delivered under separate EA*
(PCR to be processed by Project Manager during 0-Phase to separate funding and establish new EA)

☒ *Plant Establishment Period (PEP) is necessary and **Adds 250** working days to project*

☐ *Permanent EC Establishment (PECE) is necessary and Adds 250 working days to project*

I have reviewed the Landscape Architecture Assessment Study and found it to be complete, current, and accurate:

06/30/2021
Approved by Jaime Matteoli, Project Manager *Date*

06/21/2021
Checked by Tim Boose, OE Branch Chief (Acting DLA) *Date*

06/21/2021
Prepared by Phlora Barbash, Landscape Associate *Date*

Project Description

The proposed project is located along US-101 and Broadway in Eureka, CA to enhance connectivity and safety for bicyclists and pedestrians. The project begins near PM 74.8 with a new class 1 bike facility that will connect the existing park and ride facility near the Herrick & US-101 interchange to a proposed class 4 bike facility located along US-101/Broadway.

The class 1 facility is proposed from the Herrick and US-101 interchange to the signalized intersection located just north, where the old K-mart was once located (PM 74.8/75.2). This class 1 facility has been proposed with three different alternatives. The first alternative follows the existing US-101 highway alignment. With this alternative, high tension cable barrier and a narrow bioswale have been proposed between US-101 and the proposed class 1 facility. The second and third alternatives for the class 1 facility proposes a new class 1 facility to be constructed along one of two existing City of Eureka maintenance roads. These existing maintenance roads will be repaved with a new structural section to repurpose the maintenance road into a new class 1 bike facility. The second alternative alignment includes a portion of the first alternative's alignment and will take on the typical section for that alternative. A 14-foot wide ~145-foot long bridge is proposed in the third alternative. The bridge will span east to west and allow users to pass over the existing wetland area, adjacent to US-101. The bridge will effectively connect the class 1 bike facility with Broadway and US-101 where the new class 4 facility is proposed.

A fourth alternative would include replacing the existing class I path with class II bike lanes within the Caltrans right of way, connecting to the proposed class 4 facility.

The class 4 facility is proposed from the signalized intersection at the old K-mart location (PM 74.8/75.2) to the intersection of Truesdale Street and Broadway (PM 75.2/76.0). Along the class 4 segment two new bus stops are proposed that will require sidewalk modification and widening. Where there is limited width available, class 2 bike facilities will be implemented. The vertical separation for the class 4 bike facility is still being investigated and remains to be determined.

Other work includes cold planning and overlay from just south of the K-mart intersection to just north of Truesdale Street, drainage work in some locations, two midblock pedestrian crossings with either a rectangular rapid flashing beacon or pedestrian hybrid beacon, one median bikeway crossing, sidewalk/curb ramp work where needed, but pads and bus stop upgrades, two new bus stops, construction of a protected intersection at the K-mart intersection (includes signal replacing), and upgrading signals to have bicycle signal and non-motorized phases.

Recommendations/Comments

1. Per recommendations from the City of Eureka and the Keep Eureka Beautiful, landscape areas and street trees are proposed (see Layout sheets). These features are applicable under Director's Policy (DP) 22 for Context Sensitive Solutions (CSS) and under Deputy Directive (DR) 64-R2 for Complete Streets. Landscape areas would consist of Low Impact Development (LID) features, such as street trees, which are encouraged by the City of Eureka in their City Plan and the Humboldt County General Plan for treatment of stormwater, as well as ornamental landscaped areas. Landscaped areas and street trees would be maintained by the City through the existing 2021 Landscape Maintenance Agreement (LMA). If the City determines that they would not be able to maintain the proposed landscape features in future phases, they would be removed from the project scope and other CSS considerations may be taken. See PDPM Chapter 29 for guidance on allowable new highway planting in conventional highways.
2. For street trees shown in sidewalks, include concrete removal for tree well construction (3x3) and install tree frames, grates, and PVC watering tubes for hose bibb connection, per City of Eureka Engineering Standard Details website for tree installation and tree frame and grate work.
3. Per discussions with Advance Planning, Environmental, and Project Management, it was determined to assume all biological impacts would be offset offsite for Alternatives (Alt) 1 and 2, and all biological impacts would be offset onsite for Alternative 3. In future phases there is an opportunity to look for full or partial onsite impact planting for Alt 1 and 2 to reduce offsite costs.

4. For Alt 3 (and if there is enough room onsite as determined in future phases for Alt 1 and 2), per discussions with Environmental and Stewardship, it was determined to scope costs for onsite biological planting work (materials and maintenance) for 3 years (750 WD) by a Landscape Contractor (see LAAS estimate) under a separate EA (Child Project 1), and 2 years under the work of the California Conservation Corps in coordination with the Coastal Stewardship Branch (see PEAR estimate) as a separate EA (Child EA 2). See PDPM chapter 29 for guidance on separate highway planting contract policy.
5. Based on current costs as seen in the LAAS estimate, Child EA 1 for Alt 3 would likely go through the DPAC process (<$330K). If there is room for onsite planting for Alt 1 and 2, they would likely have to go through the project delivery process and DPAC process, respectively, once separated from the Parent Project by a PCR after PAED (>$330K).
6. In coordination with Advance Planning and Environmental to reduce the risk of not having enough room onsite to offset biological impacts for future phases, it was recommended to extend the project limits south to increase viable revegetation areas for Alt 1, 2, and 3.
7. All onsite planting areas, including ornamental landscape areas, street trees, and biological revegetation areas, must be reviewed, and agreed upon, by District Maintenance.
8. Additional Child EA Costs shown in the LAAS estimate for Alt 3 include Traffic Control, Job Site Management, Water Pollution Control Plan, and Mobilization for separate contract costs.
9. Include context sensitive hardscape design treatments on island/curb extension areas and pedestrian refuge islands. This work would be paid for by Minor Concrete (Textured Paving) and is included in the LAAS estimate. Pedestrian refuge islands will likely be stamped brick and stained red to be consistent with other future pedestrian refuge islands installed on Broadway (see 01-0K920).
10. If bollards are installed as part of the bike buffer delineation, consider opportunities that would enhance them as an ‘artistic’ element, as typical highway bollard installations are usually regarded by the public as an unattractive feature that contributes to highway clutter. One example would be to have varying colored bollards that create an overall pattern or visual effect. All colors and design decisions would have to be coordinated through, and approved of by, Traffic Safety.
11. If there are visual concerns brought up in the CDP process, consider staining the high-tension cable barrier (HTCB) brown as a minimization or avoidance measure. See SSP 78-4.07.
12. Stakeholders have expressed their interest in having interpretive displays and other wayfinding devices along, and for, the proposed Class 1 bikeway. Locations will need to be identified in future phases to leave open for wayfinding work by others.
13. Install context sensitive bridge railing for Alternative 3.
14. Colorize minor concrete (vegetation control) under HTBC to match color of asphalt. See SSP 83-2.01B.
15. Maintain existing natural grade wherever practical.
16. Rip and amend soil where onsite biological revegetation work is scoped to take place as feasible to promote vegetative growth.
17. Use a native and context appropriate erosion control seed mix in hydroseed applications.
18. Use linear sediment barriers as grade breaks, including some combination of fiber roll, compost socks, and/or compost berms.
19. Though Permanent Treatment BMPS are likely not required, the project currently scopes for a bioswale in Alternatives 1 and 2 between the Class 1 bikeway and US 101. Bioswale materials include compost, incorporate materials, rolled erosion control product (netting), hydroseed, and hydromulch.

Cost Estimate

ALTERNATIVE 1					
Item Code	**Description**	**Unit**	**Quantity**	**Unit Price ($)**	**Total ($)**
HIGHWAY PLANTING (Landscape Maintenance Agreement required; 1 yr PEP)					
153123	Remove Concrete (SQYD)	SQYD	33	75.00	2475.00
202006	Soil Amendment	CY	12	200.00	2400.00
202038	Packet Fertilizer	EA	400	1.00	200.00
204013	Plant (Group K)	EA	100	450.00	45,000.00
204035	Plant (Group A)	EA	200	50.00	10,000.00
204099	Plant Establishment Work	LS	1	30,000.00	30,000.00
205035	Wood Mulch	CY	60	130.00	7800.00
205052	Root Barrier	EA	33	100.00	3300.00
206006A	Tree Frame and Grate	EA	33	500.00	16,500.00
EROSION CONTROL					
210270	RECP (Netting)	SQFT	15,000	1.00	15,000.00
210300	Hydromulch	SQFT	40,000	0.20	8000.00
210350	Fiber Rolls	LF	5500	7.00	38,500.00
210430	Hydroseed	SQFT	40,000	0.25	10,000.00
210610	Compost (CY)	CY	250	110.00	27,500.00
210630	Incorporate Materials	SQFT	87,100	0.20	17,420.00
Bioswale					
210270	RECP (Netting)	SQFT	15,000	1.00	15,000.00
210610	Compost (CY)	CY	280	110.00	30,800.00
210630	Incorporate Materials	SQFT	15,000	0.20	3000.00
HARDSCAPE					
731530	Minor Concrete (Textured Paving)	CY	13	1400.00	18,200.00

ALTERNATIVE 2					
Item Code	**Description**	**Unit**	**Quantity**	**Unit Price ($)**	**Total ($)**
HIGHWAY PLANTING (Landscape Maintenance Agreement required; 1 yr PEP)					
153123	Remove Concrete (SQYD)	SQYD	33	75.00	2475.00
202006	Soil Amendment	CY	12	200.00	2400.00
202038	Packet Fertilizer	EA	400	1.00	200.00
204013	Plant (Group K)	EA	100	450.00	45,000.00
204035	Plant (Group A)	EA	200	50.00	10,000.00
204099	Plant Establishment Work	LS	1	30,000.00	30,000.00
205035	Wood Mulch	CY	60	130.00	7800.00
205052	Root Barrier	EA	33	100.00	3300.00
206006A	Tree Frame and Grate	EA	33	500.00	16,500.00
EROSION CONTROL					
210270	RECP (Netting)	SQFT	6000	1.50	9000.00
210300	Hydromulch	SQFT	30,000	0.20	6000.00

210350	Fiber Rolls	LF	1500	7.50	11,250.00
210430	Hydroseed	SQFT	30,000	0.25	7500.00
210610	Compost (CY)	CY	360	100.00	36,000.00
210630	Incorporate Materials	SQFT	93,100	0.20	18,620.00
Bioswale					
210270	RECP (Netting)	SQFT	6000	1.50	9000.00
210610	Compost (CY)	CY	110	110.00	12,100.00
210630	Incorporate Materials	SQFT	6000	0.20	1200.00
HARDSCAPE					
731530	Minor Concrete (Textured Paving)	CY	13	1400.00	18,200.00

ALTERNATIVE 3					
Item Code	**Description**	**Unit**	**Quantity**	**Unit Price ($)**	**Total ($)**
HIGHWAY PLANTING (Landscape Maintenance Agreement required; 1 yr PEP)					
153123	Remove Concrete (SQYD)	SQYD	33	75.00	2475.00
202006	Soil Amendment	CY	12	200.00	2400.00
202038	Packet Fertilizer	EA	400	1.00	200.00
204013	Plant (Group K)	EA	100	450.00	45,000.00
204035	Plant (Group A)	EA	200	50.00	10,000.00
204099	Plant Establishment Work	LS	1	30,000.00	30,000.00
205035	Wood Mulch	CY	60	130.00	7800.00
205052	Root Barrier	EA	33	100.00	3300.00
206006A	Tree Frame and Grate	EA	33	500.00	16,500.00
HIGHWAY PLANTING (Onsite Biological Planting; Child EA 1; 3 yr PEP)					
200001A	Additional Child EA Costs	LS	1	46,000.00	46,000.00
200002	Roadside Clearing	LS	1	15,000.00	15,000.00
202038	Packet Fertilizer	EA	1000	1.00	1000.00
204011	Plant (Group M)	EA	1000	35.00	35,000.00
204099	Plant Establishment Work	LS	1	54,000.00	54,000.00
205035	Wood Mulch	CY	9	200.00	1800.00
205051	Foliage Protector	EA	1000	25.00	25,000.00
202006	Soil Amendment	CY	2	250.00	500.00
208830A	Temporary Irrigation	LS	1	15,000.00	15,000.00
EROSION CONTROL					
210300	Hydromulch	SQFT	23,000	0.20	4600.00
210350	Fiber Rolls	LF	1000	8.00	8000.00
210430	Hydroseed	SQFT	23,000	0.25	5750.00
210610	Compost (CY)	CY	70	150.00	10,500.00
210630	Incorporate Materials	SQFT	22,800	0.20	4560.00
HARDSCAPE					
731530	Minor Concrete (Textured Paving)	CY	13	1400.00	18,200.00

ALTERNATIVE 4					
Item Code	**Description**	**Unit**	**Quantity**	**Unit Price ($)**	**Total ($)**
HIGHWAY PLANTING (Landscape Maintenance Agreement required; 1 yr PEP)					
153123	Remove Concrete (SQYD)	SQYD	33	75.00	2475.00
202006	Soil Amendment	CY	12	200.00	2400.00
202038	Packet Fertilizer	EA	400	1.00	200.00
204013	Plant (Group K)	EA	100	450.00	45,000.00
204035	Plant (Group A)	EA	200	60.00	12,000.00
204099	Plant Establishment Work	LS	1	36,000.00	36,000.00
205035	Wood Mulch	CY	60	130.00	7800.00
205052	Root Barrier	EA	33	100.00	3300.00
206006A	Tree Frame and Grate	EA	33	500.00	16,500.00
HARDSCAPE					
731530	Minor Concrete (Textured Paving)	CY	13	1400.00	18,200.00

Environmental and Visual Setting

Scenic Highway Status: ☐ Officially Designated ☒ Eligible ☐ Not Designated

Scenic Byway: ☐ Designated ☒ Not Designated

	YES	NO	TBD
Classified Landscaped Freeway Status:	☐	☒	
National Wild and Scenic Rivers Status:	☐	☒	
Oak Woodlands:	☐	☒	
Visual or Scenic Resources within project limits: (per County General Plan – agricultural features and open spaces)	☒	☐	☐
☑ visual PEAR prepared for this project — Visual PEAR prepared by: Phlora Barbash			
Visual impact mitigation required:	☐	☐	☒
☐ Planting/Natural Features ☐ Architectural/Structural			
Community and Local Involvement:	☒	☐	☐
☑ Public Displays Required ☐ Community Identification ☐ Transportation Art ☐ Gateway Monuments ☐ Outdoor Advertising			
Architectural Aesthetic Treatment: (architectural design, texture/pattern, color)	☒	☐	☐

☑ Bridge structure (slope paving, barriers, abutments, wing walls, girders) ☐ Concrete barrier ☐ MBGR barrier
☐ Paving (beyond the gore/narrow area/side slopes ☐ Retaining/soundwall ☐ Noise barrier
☐ Rock slope protection (RSP) ☐ Sidewalk ☐ Roundabout
☑ Other ☐ Crosswalk

Pedestrian refuge islands; curb extensions; pedestrian bridge; pedestrian bridge rail

Livability features: Multimodal travel facilities that enhance the aesthetic, environmental, scenic, and cultural values of the local community.	☒	☐	☐

Livability Design Elements		**Livability Programs**	
☑ Multimodal Travel	☑ Human Health	☐ Community Identification & Cohesion	☐ Vista Points
☑ Sense of Place	☑ Ecological Health	☑ Main Street California	☐ Roadside Rest
☑ Daily Activities	☐ Roundabouts	☐ Transportation Art	☐ Gateway Monuments
☑ Inspiration, Reflection & Aesthetic Enjoyment		☐ Blue Star Memorials	☐ Mission Bells

Complete Streets: safe mobility for all users, Transportation agencies and local communities should go beyond minimum design standards and requirements to create safe, attractive, sustainable, accessible, and convenient bicycling and walking networks. ☒ ☐ ☐

☑ Urban setting ☐ Suburban setting ☐ Rural setting ☑ Rural-Urban setting

Design Elements

☐ Retain charm/history/identity	☑ Integrate bike ability	☑ LID (low impact development)
☑ Maintain human scale	☑ Public transportation	☑ Reduction in greenhouse gasses (GHG)
☐ Safe routes to school	☑ Disabilities, ADA ramps, crosswalks	☐ All motorists & movers of commercial goods
☑ Integrate walkability	☐ Parking Management strategies	☑ Accessibility to amenities, access points, stairs, ramps

Other sensitive uses or resources: ☒ ☐ ☐

Coastal Zone; Park and Ride Facility; Pacific Coast Bike Route; Secondary Ca Coastal Trail route

Erosion Control / Stormwater Design

Construction Seasons: ☐ One ☒ Two ☐ Three ☐ Four

Notice of Termination (NOT) Risk Level ☐ WPCP ☐ RL1 ☒ RL2 LS<=1.0 ☐ RL2 LS>1.0 ☐ RL3

Strategy for NOT ☒ 70% Vegetative Cover ☒ Construction Staff Consultation (Alt. Method) ☐ RUSLE

	YES	NO	TBD
Permanent EC Establishment (PECE): PECE should be considered if the project has at least two of the following: (If you check yes to this it also needs to be marked on the first page for acknowledgement of the additional hours)	☐	☒	☐

☐ Slopes 2:1 or steeper
☐ Poor soil health which slows sustainable plant growth (ie. Serpentine or Decomposed Granite)
☐ A significant number of erosion control design elements (blankets, netting, mesh, fiber rolls & socks)
☐ Potential direct discharge of sediment into receiving water that are 303D listed under the Clean Water Act

☐ Adds 250 working days to project

Treatment BMPs: ☐ ☒ ☐

☐ Proposed On Site ☐ Proposed Off Site ☐ Existing BMP's

Stormwater Alternative Compliance: Are we treating 100% of the Stormwater runoff **N/A**

Project Water shed or sheds: Humboldt Bay-Frontal Pacific Ocean

Environmental Stormwater Coordinator: Samantha Hadden Contact Date: 5/17/2021

New impervious surface areas are exempt (bikeways and pedestrian walkways)

Concentrated Flow Systems: ☒ ☐ ☐

☐ AC Dikes ☑ Curb & Gutter ☑ Swales ☐ Ditches ☐ Channel ☐ Berms

Hard Armor Surface Protection Systems: ☐ ☒ ☐

☐ Rock Slope Protection (RSP) ☐ Slope Paving

Disturbed Soil Areas (DSA)	YES	NO	TBD
DSA (Flat) 4:1 or Flatter	☒	☐	☐
DSA (Cut) 4:1-2:1	☐	☒	☐
DSA (Cut- Steep) 2:1-1:1	☐	☒	☐
DSA (Fill) 4:1-2:1	☒	☐	☐
DSA (Fill-Steep) 2:1-1:1	☐	☐	☒

Highway Planting/ Irrigation/ Mitigation Planting

	YES	NO	TBD
New Highway Planting (Warranted):	☒	☐	☐

☐ New highway construction where adjacent properties are developed at the time of highway construction contract acceptance
☐ Major modification to existing highway where adjacent properties are developed at the time of highway construction contract acceptance
☐ Adjacent properties developed on or before June 30,1987
☐ Satisfy conditions from a memorandum of understanding or agreement (MOU) or (MOA) between Caltrans and another governing agency
☑ Mitigate enviro. impact in compliance with enviro. commitments, agreed to, for example, part of project develp., agency permit requirement or court order
☐ Planting necessary for reveg, EC, stormwater pollution prevention, traffic safety improve. (headlight screen, delineation of roadway, fire, wind breaks)

Street Trees and ornamental landscape areas under a Maintenance Agreement with the City of Eureka; A3 – Onsite biological planting for 3 years; A1&2 – Potential onsite biological planting for 3 years in future phases

Replacement Highway Planting (Classified Landscape Freeway):	☐	☒	☐

N/A

Highway Planting Revegetation (Native): *planting must be programmed to be under construction within two years after acceptance of the highway contract.	☐	☒	☐

☐ Native vegetation was damaged due to roadway construction project
☐ Native vegetation was removed due to roadway construction project

Wildflower Planting: *Must be included with all projects that have federal participation. ("conventional Highways") revegetation, erosion control, and irrigation-only projects are exempt from this requirement.	☐	☒	☐

N/A

Irrigation System:	☒	☐	☐

☐ New irrigation system
☐ Existing irrigation system keeping as is
☐ Modify existing Irrigation system
☐ Replace existing irrigation system
☐ Potable water source
☐ Non-Potable water source
☑ Temporary irrigation system

Temporary irrigation for onsite biological planting needs

Required Mitigation Planting (Visual):	☐	☐	☒
Required Mitigation Planting (Biological Site Prep Work):	☒	☐	☐

Environmental Coordinator/Project Biologist: Kellie Eldgridge/Ali Thiel Contact Date: 3/30/2021

Permits required: 401, 404, 1600, CDP

Roadside Worker Safety Improvements

	YES	NO	TBD
Safe Access:	☐	☒	☐
Barriers:	☐	☒	☐
Miscellaneous Paving/ Treatment:	☐	☒	☐
Vegetation Control:	☐	☒	☐
Miscellaneous Facilities & Equipment:	☐	☒	☐

Signs, Lighting, Vehicle Detection, Ramp Meters, CMS, Irrigation, etc.

Chain Control Areas

Irrigation System

Drainage/Storm Water Facilities

Graffiti

ATTACHMENT O

Preliminary Geotechnical Assessment

Memorandum

To: JOSEPH CAMINITI
Project Designer
Advance Planning

Date: May 5, 2021

File: 01-HUM-101 PM 74.8/76.0
Broadway Complete Streets
EA: 01-0K940
EFIS: 0121000033

From: Pete O'Donnell
Office of Geotechnical Design West
Geotechnical Services
Division of Engineering Services

Subject: **PRELIMINARY GEOTECHNICAL ASSESSMENT**

The Office of Geotechnical Design West (OGDW) has prepared this memorandum summarizing the findings of our preliminary geotechnical site assessment to support the design and construction of the proposed Broadway Complete Streets Project located on U.S. Route 101 between PM 74.8 and 76.0 in Humboldt County, California. This memo is in response to your request for Geotechnical Analysis dated March 24, 2021.

The project intends to enhance safety and connectivity for bicyclists and pedestrians via construction of new Class 1 and 4 facilities. To construct the facilities, earthwork will be necessary on the south end of the project. Earthwork will include import borrow and placement of earthen fill to form a Class 1 path that connects the Class 4 portion of the facility along Broadway to the existing park and ride located near the Herrick Ave OC (Br. No. 04-0280).

The following documents were used to form the basis of our recommendations:

- Pertinent project documents, including:
  - Geotechnical Analysis Request Memo
  - Preliminary Layout Plan Sheets L-1 through L-14 (undated)
  - Cross-Sections Sheets 1 through 4.
- As-Built plans and reports available on BIRIS, DRS, and GeoDog including:

  - 1981 As-Built Plans for Construction on State Highway in Humboldt County, between 0.2 mile south to 0.5 mile north of Elk River Bridge.
  - 1981 As-Built Plans and Log of Test Borings for Herrick Ave OC.
- Existing geologic mapping of the area, including:
  - Geologic Map of California, Redding Sheet, California Division of Mines and Geology, Olaf P. Jenkins Edition, compiled by Rudolph G. Strand, 1962.
  - Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern Part of the Hayfork 30 x 60 Minute Quadrangles and Adjacent Offshore Area, Northern California (USGS Miscellaneous Field Studies Map MF-2336), US Geological Survey, US Department of the Interior, R.J McLaughlin et al., 2000.

A field review of the site was conducted on April 30, 2021.

SITE TOPOGRAPHIC AND GEOLOGIC SETTING

The project is situated on the southern end of Eureka where the Redwood Highway segment of US-101 transitions to a reduced speed urban environment along Broadway Street. The roadway is constructed on low fills with large radius curves, long tangents, and a generally flat profile. Road connections and driveways join the mainline, primarily along the northbound edge of pavement along the east side, while vegetated wetlands persist below the embankment on the southern end of the project along the west side.

The site is located in the Coast Ranges geomorphic province of northern California, east of Humboldt Bay. According to the Redding Sheet of the Geologic Map of California (O.P. Jenkins and R.G. Strand, 1962), materials in the vicinity of the site are composed of undifferentiated Quaternary nonmarine terrace (Qt) and Quaternary recent alluvium (Qal) deposits. The USGS Miscellaneous Field Studies Map MF-2336 identifies the project location as Holocene and Pleistocene alluvial deposits (Qal), described as "Clay, silt, sand, gravel, and boulders, deposited in stream beds, alluvial fans, terraces, flood plains and ponds; and soils formed on these deposits. Includes largely Holocene deposits in modern stream channels and on flood plains" (R. J. McLaughlin et al., 2000).

Faulting & Seismicity

The project is in a seismically active region where large earthquakes may be expected to occur during the lifespan of the planned improvements. The site is located approximately 1 mile north of the nearest active fault surface trace, identified as the Little Salmon fault zone. The Little Salmon is described as an undifferentiated Quaternary thrust fault with a well constrained location, NE dip direction, and slip rate of greater than 5.0-mm per year (USGS, 2021). Preliminary screening for fault rupture indicates that the project is not located within an Alquist-Priolo Earthquake Fault Zone (CGS, 2015). Similarly, the project does not fall within 1,000 feet of any known unzoned fault that is Holocene-Latest Pleistocene age or younger (CGS, 2015 & USGS, 2021). Therefore, a Surface Fault Rupture Displacement Hazard Analysis (SFRDHA) is not warranted. However, the site is mapped within an area where liquefaction may be a concern (HCP&BD, 2015). The potential for liquefaction will be assessed with respect to the preferred alternative as the project develops.

RECOMMENDATONS

Foundations

Segments of the project are likely to be underlain by soft, saturated soils. Ponded water was noted during the field review between Station "B" 211 and 215 along the Alternative 1 alignment. Dewatering and removal of unsuitable foundation material beneath the proposed embankment should be anticipated. The use of lightweight fill may be considered for the construction of embankments to reduce settlement. Specified settlement periods and surcharges may also be considered, depending on the alternative selected, tolerable movement, and the height of the embankments to receive surfacing. For similar reasons as stated above, pile foundations will likely be required for the bridge proposed in Alternative 3.

Fill Slopes

Fill slopes may be constructed 2:1 (H:V) and flatter without modification to standard roadway embankment specifications. Fill slopes between 2:1 and 1.5:1 should be constructed using select granular fill. Slopes steeper than 1.5:1 up to 1:1 should be constructed as a GRE (fill reinforced with geosynthetic reinforcement).

FUTURE WORK

The preliminary recommendations provided above are based on literature review and a limited site reconnaissance. As project development progresses, a subsurface exploration program including drilling, laboratory testing, and seismic refraction surveys may be required to support the geotechnical analysis of the proposed improvements.

Any questions regarding the above recommendations should be directed to Pete O'Donnell (707) 441-5678.

Report by:

PETE O'DONNELL, P.E.
Transportation Engineer
Office of Geotechnical Design West

cc:
Project Folder

REFERENCES

California Geologic Survey (CGS). (2015). CGS Information Warehouse: Regulatory Maps; [accessed April 25, 2021]. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps

Humboldt County Planning and Building Department (HCP&B). (2015). Liquefaction Hazard Zones: Humboldt County, California, 2015. Humboldt County Planning and Building Department; [accessed April 25, 2021]: https://purl.stanford.edu/nk595pg0743

Jenkins, O.P., and Strand, R.G. (1962). Geologic Map of California, Redding Sheet, California Division of Mines and Geology.

McLaughlin, R.J., et al. (2000). Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern Part of the Hayfork 30 x 60 Minute Quadrangles and Adjacent Offshore Area, Northern California (USGS Miscellaneous Field Studies Map MF-2336), US Geological Survey, US Department of the Interior.

U.S. Geological Survey (USGS) and California Geological Survey (CGS), Quaternary fault and fold database for the United States; [accessed April 5, 2021]. https://www.usgs.gov/natural-hazards/earthquake-hazards/faults

ATTACHMENT P

Complete Streets Decision Document

Complete Streets Decision Document (CSDD)

1) Is the project located entirely on a facility where bicyclists and pedestrians are legally prohibited and the project does not involve a shared use path, pedestrian/bicycle structure or work impacting a local road crossing or interchange? (For example, a project including freeway mainline and ramp work, not including the ramp connection with the minor road, where the project freeway segment legally prohibits bicyclists and pedestrians.)

__X___ NO - Proceed to Question 2
_____ YES - Stop here. The project is exempt from further complete streets evaluation. Sign and attach to the Project Initiation Document (PID).

2) Is the primary project purpose to address assets that are outside of the roadbed where pedestrian and bicycle travel is not affected, and proposed project will not affect future pedestrian and bicycle facilities? Examples may include culvert outfalls, storm water treatment facilities, bridge substructure or scour mitigation, planting or vegetation removal, retaining walls, etc.

__X___ NO - Continue to Question 3
_____ YES - Stop here. The project is exempt from further complete streets evaluation. Sign and attach to PID.

3) Has a Transportation Planning Scoping Information Sheet (TPSIS) been completed for this project?

_____ NO – Proceed to Question 4
__X___ YES – Skip to Question 5 (Note: TPSIS is attached to the PID)

4) Which of the following planning documents were consulted to determine bicycle, pedestrian or transit needs? Select all that apply and proceed to Question 5.
   - _____a. District Active Transportation Plan
   - _____b. Other Caltrans or local/regional agency bike/ped/transit/safe routes to school plans
   - _____c. ADA Transition Plan/Grievances (consult with the District ADA Coordinator)
   - _____d. Corridor planning documents
   - _____e. Other (list here) _____

5) Based on the reviews completed in Question 4 or identified in the TPSIS, after a review of the roadway geometrics, or identified by the PDT, are there any bicycle, pedestrian, or transit needs, deficiencies or opportunities for improvement identified for the project location?

_____ NO – Provide brief description of findings:

_____

Stop here. The project meets the requirements for consideration of Complete Streets elements. Sign and attach to the PID.
__X___ YES – Describe them here and proceed to Question 6:

The scope of the project is complete streets. There is a gap in non-motorized facilities between Herrick Avenue and Papa & Barkley Co. There are no bicycle facilities from Papa & Barkley Co. to Truesdale Street. There is a need to implement transit stops near Pierson Building Center. The

bus stops at McCullens Avenue, particularly the SB one, need upgrades. A midblock crossing is needed near Hilfiker Lane and Truesdale Street/Highland Avenue to provide connection to the Hikshari' Trail. The intersection at Truesdale Street/Highland Avenue also needs a bicycle crossing to connect the proposed class III bike route on Highland Avenue to the Hikshari' Trail at the end of Truesdale Street. Intersection improvements are required at the Papa & Barkley Co. and Pierson Building Center intersections. Shoulder widening is needed to accommodate class IV separated bikeway widths between Papa & Barkley Co. and Lithia.

6) Based on the needs identified in Question 5, what would be the preferred complete streets elements to address those needs (e.g. road diet, separated bikeway, reconstructed sidewalk, etc.)? Resources include the Complete Streets Elements Toolbox, the Contextual Guidance for Bikeway Facility Selection, the Bikeway Facility Selection Guidance Memorandum, etc. List them in the table below and provide a rough estimated cost to construct preferred project complete streets elements (including right-of-way and support costs) and proceed to Question 7.

FACILITY TYPE	UNIT	QUANTITY	ESTIMATED TOTAL COST
Class I Shared Use Path	LF	2,111	$3,960,000
Class IV Separated Bikeway	LF	7,520	$1,390,000
Upgraded Papa & Barkley Co. Intersection	EA	1	$1,050,000
Hilfiker Lane Midblock Crossing	EA	1	$770,000
Highland/Truesdale Midblock Crossing	EA	1	$690,000
Widening from Papa & Barkley Co. and Lithia	LF	600	$540,000
Median and Lane Width Reduction	LF	4500	$530,000
McCullens SB Upgraded Transit Stop	EA	1	$300,000
76 Gas Station New Transit Stop	EA	1	$270,000
Landscaping	LS	1	$210,000
Pacific Motorsports New Transit Stop	EA	1	$190,000
McCullens NB Upgraded Transit Stop	EA	1	$170,000
Miscellaneous Signal Upgrades	EA	1	$90,000
Upgraded Pierson's Intersection	EA	1	$50,000
Highland/Truesdale Bicycle Crossing	EA	1	$40,000

7) Was there any known public and stakeholder opposition to any preferred complete streets elements identified for the project? Provide response and proceed to Question 8.

__X___ NO
_____ YES – Describe the opposition position here: _____

8) Does the programmable project alternative/project scope include all the complete streets elements identified in Question 6?

__X__ NO - Proceed to Question 9
_____ YES - Stop here. The project has met the requirements for consideration of complete streets elements. Sign and attach to PID.

9) Does the project include any of the complete streets elements that are identified in Question 6? Or are there any proposed incremental improvements related to the complete streets elements in Question 6? Provide response and proceed to Question 10.

_____ NO – The programmable project alternative does not include any complete streets elements, and therefore does not address identified needs for complete streets elements.
__X___ YES – List them here:

FACILITY TYPE	UNIT	QUANTITY	ESTIMATED TOTAL COST
US 101 Striping/Marking/Signage Upgrades*	LS	1	$25,000
Class IV Separated Bikeway	LF	7,520	$1,390,000
Upgraded Papa & Barkley Co. Intersection	EA	1	$1,050,000
Hilfiker Lane Midblock Crossing	EA	1	$770,000
Highland/Truesdale Midblock Crossing	EA	1	$690,000
Widening from Papa & Barkley Co. and Lithia	LF	600	$540,000
Median and Lane Width Reduction	LF	4500	$530,000
McCullens SB Upgraded Transit Stop	EA	1	$300,000
76 Gas Station New Transit Stop	EA	1	$270,000
Landscaping	LS	1	$210,000
Pacific Motorsports New Transit Stop	EA	1	$190,000
McCullens NB Upgraded Transit Stop	EA	1	$170,000
Miscellaneous Signal Upgrades	EA	1	$90,000
Upgraded Pierson's Intersection	EA	1	$50,000
Highland/Truesdale Bicycle Crossing	EA	1	$40,000

*Replaces Class I shared use path identified in question 8

10) Does the project funding have constraints that would preclude the ability to incorporate additional complete streets elements into the project (For example, cannot combine funding with other sources.)? Provide response and proceed to Question 11.

_____ NO
__X___ YES – Describe the constraints here: This is a SHOPP reservation project, so the project funding is fixed. It was determined that the class I path cannot be included due to the limited funding available. A future project, possibly in partnership with the City of Eureka, could implement the class I path.

11) Provide a rationale and justification for not including all the recommended complete streets elements into the project: (Consider the engineering justification, right-of-way constraints, environmental impacts, etc.). Funding, as described above. Environmental and right-of-way impacts are also reduced by not constructing the class I path. The PDT will pursue other future funding for the Class I path. In the meantime, implementation of class II or III facilities as an interim improvement will need to be investigated in the next phase to provide this much needed connectivity to Herrick Ave.

Prepared by:

Dawn Yang, PID Preparer in responsible charge
Advance Planning/D1 Caltrans

Concurred by:

Alexis Kelso
District Complete Streets Coordinator

7/8/21
Date

Brad Mettam
Deputy District Director, Planning

07/16/2021
Date

Carlos Portillo
Division Chief, North Region Project Development

7/18/2021
Date

Revalidation of CSDD at PA&ED

Does the project scope defined in the project approval document include the complete streets elements identified in Question 6 or 9 of this CSDD and the PID?

_____ NO – Prepare a Superseding CSDD (answer Questions 1 through 11) replacing the original CSDD, obtain all certified and concurrence signatures below, and attach the superseding CSDD to the project approval document.
_____ YES – Certify there are no changes to the scope of complete streets elements with only the project engineer certification signature below on the original approved CSDD and attach the CSDD to the project approval document.

Certified by:

_____ _____
Name, Project Engineer Date
Branch/Company

Concurred by: (Only include concurrence signatures if a Superseding CSDD is prepared.)

_____ _____
Name Date
District Complete Streets Coordinator

_____ _____
Name Date
Deputy District Director, Planning

_____ _____
Name Date
Deputy District Director, Design or
Division Chief, Design/Project Development

Revalidation of CSDD at PS&E

Does the project scope designed in the plans, specifications and estimate include the complete streets elements identified in Question 6 or 9 of the CSDD (or Superseding CSDD, if applicable) certified at the PA&ED revalidation and the project approval document?

_____ NO – Prepare a Superseding CSDD (answer Questions 1 through 11) replacing the CSDD that was approved at PA&ED revalidation, obtain all certified and concurrence signatures below, and attach to the Supplemental PR. If a Supplemental PR is not required, place in the project history file.
_____ YES – Certify there are no changes to scope of complete streets elements in the project, and that temporary bike and pedestrian facilities during construction have been considered. Include only the project engineer certification signature below on the CSDD that was approved at PA&ED revalidation and place the CSDD in the project history file.

Certified by:

_____ _____
Name, Project Engineer Date
Branch/Company

Concurred by: (Only include concurrence signatures if a Superseding CSDD is prepared.)

_____ _____
Name Date
District Complete Streets Coordinator

_____ _____
Name Date
Deputy District Director, Planning

_____ _____
Name Date
Deputy District Director, Design or
Division Chief, Design/Project Development

ATTACHMENT Q

Signs, Lights, and Guardrail Logs

PRINT	route	pm prefix	post mile	legend	sign code	sign code	MUTCD	mph	color	mat'l	inst. date	length	height	ltr. size	loc.	f_bt	arrow	offset	support	sign no.	sequence
Y	101		74.70	TRAFFIC INFO / TUINE RADIO TO / 1610 AM	G81-64	(CA)		3		1	051801	108	60	I	A	N		16	7	38037	
Y	101		74.70	WHEN FLASHING	G81-64A	(CA)		8		1	051801	108	18	J	A	N		16	7	38038	
Y	101		74.70	TRAFFIC INFO / TUINE RADIO TO / 1610 AM	G81-64	(CA)		3		1	120214	108	60	I	B	S		12	7	38914	
Y	101		74.70	WHEN FLASHING	G81-64A	(CA)		8		1	120214	108	18	J	B	S		10	7	38915	
Y	101		74.70	REDUCED SPEED LIMIT AHEAD	FED	W3-5		55	8	6	061715	48	48	S	A	N	C	8	E	415001	
Y	101		74.72	PEDESTRIANS PROHIBITED	FED	R5-10c		4		1	050898	24	12	M	I	S		9	7	36267	
Y	101		74.73	HERRICK PARK AND RIDE	S22	(CA)		4		4	112103	48	30	S	S			7		39017	
Y	101		74.76	FREEWAY ENTRANCE	G92	(CA)		7		6	102601	48	30	N	I	E		7	7	27877	
Y	101		74.76	101	G26-2	(CA)		4		1	051006	28	24	S	I	E		7	7	27878	
Y	101		74.76	SOUTH	G48	(CA)		7		1	051006	21	9	N	I	E		5	7	27879	
Y	101		74.76	DIR. ARROW	FED	M6-2		7		1	102601	21	15		I	E	E	7	7	27880	
Y	101		74.76	FREEWAY ENTRANCE	G92	(CA)		7		6	110306	48	30	N	I	W		7	7	27881	
Y	101		74.76	101	G26-2	(CA)		4		6	110306	28	24	S	I	W		7	7	27882	
Y	101		74.76	SOUTH	G48	(CA)		7		1	110306	21	9	N	I	W		7	7	27883	
Y	101		74.76	DIRECTIONAL ARROW	FED	M6-2		7		6	110306	21	15		I	W	F	7	7	27884	
Y	101		74.76	PARK & RIDE	G95	(CA)		7		7	061799	30	36	K	F	N	A	8	7	27885	
Y	101		74.76	CROSS / TRAFFIC / AHEAD	W70	(CA)		8		6	031615	60	60	I	E	N		12	0	28262	
Y	101		74.76	CROSS / TRAFFIC / AHEAD	W70	(CA)		8		6	061715	60	60	I	A	N		16	7	28263	
Y	101		74.76	PEDESTRIANS PROHIBITED	FED	R5-10c		4		1	050898	24	12	M	I	N		8	7	36274	
Y	101		74.77	PARK & RIDE	G95	(CA)		7		7	043001	30	36	K	C	W	C	11	7	27887	
Y	101		74.77	HERRICK AVE	G07	(CA)		7		6	052704	72	18	E	F	N		14	7	27888	
Y	101		74.77	101 / FORTUNA	G78	(CA)		7		7	030696	66	42	E	N	W	A	12	7	27889	
Y	101		74.77	STOP	FED	R1-1		5		6	122695	30	30	H	F	N		7		34567	
Y	101		74.77	HEADWATERS / FOREST RESERVE	G07	(CA)		A		6	111303	72	18	K	F	N	B	11	7	38990	
Y	101		74.78	EUREKA WATERFRONT TRAIL	G08	(CA)					2014	96	30	J	H	S	A	12	7		0
Y	101		74.78	STOP (HERRICK PARK & RIDE)	FED	R1-1		5		6	112905	30	30	H	C	W		10	7	2779	
Y	101		74.78	STOP	FED	R1-1		5		6	081909	30	30	H	F	N		8	7	27787	
Y	101		74.78	DO NOT ENTER	FED	R5-1		5		6	072694	36	36	N	F	E		15	7	27890	
Y	101		74.78	WRONG WAY	R11A	(CA)		5		6	071897	36	21	N	F	E		15	7	27891	
Y	101		74.78	DO NOT ENTER	FED	R5-1		5		6	010715	36	36	N	F	W		8	7	27892	
Y	101		74.78	WRONG WAY	FED	R5-1a		5		6	010715	36	24	N	F	W		8	7	27893	
Y	101		74.78	ONE-WAY ARROW LT	FED	R6-1		4		1	031318	54	18	N	F	E		13	7	27895	
Y	101		74.78	STOP	FED	R1-1		5		6	122104	30	30	H	H	S		8	7	27896	
Y	101		74.78	ONE-WAY ARROW LT	FED	R6-1		4		6	022007	54	18	N	H	W		8	7	27897	
Y	101		74.78	DO NOT ENTER	FED	R5-1		5		6	120304	36	36	N	H	E		6	7	27899	
Y	101		74.78	WRONG WAY	R11A	(CA)		5		6	120304	36	21	N	H	E		6	7	27900	
Y	101		74.78	DO NOT ENTER	FED	R5-1		5		6	022007	36	36	N	H	W		8	7	27901	
Y	101		74.78	WRONG WAY	FED	R5-1a		5		6	022007	36	24	N	H	W		8	7	27902	
Y	101		74.78	ONE-WAY ARROW RT	FED	R6-1		4		1	031318	54	18	N	H	E		6	7	36268	
Y	101	R	74.78	DIRECTIONAL ARROW LT	G33-1	(CA)		A		1	080106	18	4		H	S		12	7	37108	
Y	101		74.78	GOLF	G200-80	(CA)		7		6	080106	18	18		H	S		12	7	38510	
Y	101		74.78	HEADWATERS / FOREST RESERVE	G08	(CA)		A		6	111403	96	30	J	H	S	A	12	7	38989	0
Y	101		74.79	HANDICAPPED / PARKING / ONLY	G81	(CA)		7		1	100184	12	18	S	C			7		27904	
Y	101		74.79	101 / EUREKA	G78	(CA)		7		7	042897	84	54	I	N	E	A	12	7	27905	
Y	101		74.79	PARK & RIDE	G95	(CA)		7		7	092784	30	36	S	N	W	C	12	7	27906	
Y	101		74.79	PARK & RIDE	G95-3	(CA)		7		7	012298	36	48	S	C	E		7		28567	
Y	101		74.79	OVERNIGHT / CAMPING / PROHIBITED / EPS ORD # 5-2.01	SR	(CA)		4		1	012298	24	24	S	C	E		7		32955	
Y	101		74.79	AAH - RECOGNITION PANEL (30 X 15)	S32	(CA)		0		1	080602	36	30	S	B	E		8	7	35218	0
Y	101		74.79	BEAR RVR BND ROHNRVILLE RNCHRIA	S32B	(CA)		4		4	103003	30	15	S	B	E		8	7	35218	0
Y	101		74.79	AAH - HEART SUB PANEL	S32A	(CA)		0		1	080602	10	12	S	B	E		8	7	37526	0
Y	101		74.79	AAH - LITTER REMOVAL SYMBOL	S32-1	(CA)		0		1	080602	15	18		B	E		8	7	37527	0
Y	101		74.79	HERRICK PARK AND RIDE	S22	(CA)		4		4	112103	48	30	S	S			7		39018	0
Y	101		74.79	AAH - VEGETATION CONTROL	S32-5	(CA)		0		1	103003	15	18		B	E		8	7	352185	0
Y	101		74.80	WRONG WAY	FED	R5-1		5		0	071018	36	36	N	F	W		12	7	27669	
Y	101		74.80	DO NOT ENTER	R11A	(CA)		5		6	071897	36	21	N	F	W		7		27670	
Y	101		74.80	PARK & RIDE	G95	(CA)		7		7	012298	30	36	S	H	S	B	12	7	27903	
Y	101		74.80	FREEWAY / ENTRANCE	G92	(CA)		7		6	022013	48	30	N	G	E		10	7	27907	
Y	101		74.80	101	G26=2	(CA)		4		6	022013	28	24	S	G	E		10	7	27908	
Y	101		74.80	NORTH	G47	(CA)		4		6	022013	21	9	S	G	E		10	7	27909	
Y	101		74.80	DIRECTIONAL ARROW AUX	FED	M6-2		4		6	022013	21	15		G	E	F	10	7	27910	
Y	101		74.80	FREEWAY / ENTRANCE	G92	(CA)		7		6	022613	48	30	N	G	W		7	7	27911	
Y	101		74.80	101	G26-2	(CA)		4		6	022613	28	24	S	G	W		7	7	27912	
Y	101		74.80	NORTH	G47	(CA)		4		6	022613	21	9	S	G	W		7	7	27913	
Y	101		74.80	DIRECTIONAL ARROW AUX	FED	M6-2		4		6	022613	21	15		G	W	E	7	7	27914	
Y	101		74.80	SOUTH / (101) / NORTH	G77	(CA)		7		6	012110	54	54	S	N	W	K	16	7	27915	
Y	101		74.80	TO	G59	M4-5		7		1	071306	18	12	S	N	N		14	7	27916	
Y	101		74.80	101	G26-2	(CA)		4		1	071306	28	24	S	N	N		11	7	27917	
Y	101		74.80	DIRECTIONAL ARROW LT	FED	M6-1		7		1	071306	21	15		N	N	A	14	7	27918	
Y	101		74.80	WRONG WAY	FED	R5-1		5		0	071018	36	36	N	F	E		7	7	34102	0
Y	101		74.80	DO NOT ENTER	R11A	(CA)		5		6	071018	36	21	N	F	E		7		34103	0
Y	101		74.80	PBLIC AWRNSS/HERRICK AVE. PRK&RD	SG	(CA)		0		4	062696	12	33	S	R	W		7		35513	0
Y	101		74.80	GOLF	G200-80	(CA)		A		6	100812	18	18		F	N		10	7	38511	
Y	101		74.80	LEAVING TSUNAMI HAZARD ZONE	EM1CL	(CA)		0		6	032408	18	24	M	B	S		10	7	41751	0
Y	101		74.83	SPEED LIMIT	FED	R2-1		65	4	6	022206	48	60	S	B	S		12	7	40031	
Y	101		74.84	STOP AHEAD	FED	W3-1		0		0	012318	48	48	S	H	S		9	7	27922	
Y	101		74.84	EUREKA CITY LIMIT POP 28606 ELEV 44	G09	(CA)		7		7	061715	60	42	S	A	N		21	7	32712	
Y	101		74.86	SPEED LIMIT	FED	R2-1		55	4	6	061715	48	60	S	B	N		15	7	415003	
Y	101		74.87	RECOGNITION PANEL (60 X 15)	S32	(CA)		0		1	042595	72	54	S	B	S		21	7	33473	0
Y	101		74.87	MOVED PANEL 100' SOUTH	S32-1	(CA)		0		1	061715	15	18	S	B	S		21	7	37985	0
Y	101		74.89	NAVY LEAGUE COUNCIL	S32B	(CA)		4		4	042501	45	21	S	B	S		7		31186	0
Y	101		74.89	VOLUNTEER OF THE YEAR	S32V	(CA)		4		4	032205	45	21	S	B	S		7		31186	0
Y	101		74.89	AAH -HEART SUB PANEL	S32A	(CA)		0		1	040191	15	18	K	B	S		7		31187	0
Y	101		74.89	AAH - LITTER REMOVAL	S32-1	(CA)		0		1	070301	15	18	S	B	S		7		37985	0
Y	101		74.89	ALL VEHICLES WHEN TOWING 55 MAX	R06-4	(CA)		55	4	1	061715	48	60	S	B	S		18	7	415004	0
Y	101		74.90	MERGE (RT)	FED	W4-1		8		1	100284	48	48		A	N		12	7	27923	
Y	101		74.92	EXIT #702(HERRICK AVE/ELK RIVER RD)	G84	(CA)		7		6	022806	48	60	H	B	S	E	13	7	27924	
Y	101		74.98	EXIT 702/HERRICK AVE/ELK RIVER RD	G85	(CA)		7		6	080101	132	78	C	B	S	E	8	7	27925	
Y	101		74.98	EXIT #702	G70-3	(CA)				6	40903	132	18	D						27925	2
Y	101		74.98	GOLF	G200-80	(CA)		7		6	080106	24	24		B	S		10	7	38509	
Y	101		75.00	AAH -HEART SUB PANEL	S32A	(CA)		0		1	121901	15	18		A	N		7		37197	
Y	101		75.00	AAH	S32	(CA)		0		1	121901	54	42	S	A	N		14	7	38197	
Y	101		75.00	LACO ASSOCIATES ENGNRS/GEOLGSTS 10-30-03	S32B	(CA)		4		4	103003	45	21	S	A	N		7		38197	
Y	101		75.00	AAH - LITTER REMOVAL	S32-1	(CA)		0		1	121901	15	18		A	N		7		381971	
Y	101		75.03	TRUCKS/3 AXLES OR MORE/55 / MAX	R06-3	(CA)		55	4	1	022206	48	60	S	B	S		11	7	35389	
Y	101		75.06	SIGNAL AHEAD SYMBOL	FED	W3-3		0		6	082614	48	48		A	N		12	0	28277	
Y	101		75.06	TRAFFIC SIGNAL AHEAD SYMBOL	FED	W3-3		0		6	082714	48	48		B	N		8	0	28278	
Y	101		75.08	END FREEWAY	R58	(CA)		4		1	012099	48	26	S	A	N		12	7	27928	
Y	101		75.08	BEGIN FREEWAY	R57	(CA)		4		6	030216	48	26	S	B	S		12	7	27929	
Y	101		75.08	EMERGENCY PARKING ONLY	FED	R8-4		4		6	081515	48	36	S	B	S		12	7	27930	
Y	101		75.10	SPEED / ENFORCED / BY / RADAR	R48	(CA)		4		6	031208	48	60	I	A	N		9	7	28281	UPDATE
Y	101		75.13	END SPEED LIMIT	R03	(CA)		45	4	6	061715	48	60	S	B	S		10	7	28218	
Y	101		75.15	SPEED / ENFORCED / BY / AIRCRAFT	SR14	(CA)		4		1	122095	36	54	J	B	S		7		30444	
Y	101		75.16	PARK & RIDE / NEXT RIGHT	G95B	(CA)		7		1	081804	96	60	S	B	S		8	7	27931	
Y	101		75.16	HEADWATERS / FOREST RESERVE	G8	(CA)		A		7	111303	96	30	J	B	S	E	11	7	39372	0
Y	101		75.20	TSUNAMI HAZARD ZONE	EM1E	(CA)		0		6	042408	24	24	S	A	N		13	C	41785	
Y	101		75.20	TSUNAMI HAZARD ZONE	EM1E	(CA)		0		6	042408	24	24	S	B	S		12	7	41786	0
Y	101		75.24	STOP	FED	R1-1		5		6	050609	30	30	H	C	W		2	7	32344	
Y	101		75.24	NO PEDESTRIAN CROSSING	FED	R9-3a		0		6	021115	18	18		B	W		7	7	32499	
Y	101		75.31	REDWOOD / HIGHWAY	SG1	(CA)		7		7	042198	54	30	E	B	S		12	7	2790	
Y	101		75.31	NO / U / TURN	FED	R3-4		0		1	041506	24	24		R	N		0	D	40132	
Y	101		75.32	STOP	FED	R1-1		5		6	111608	30	30	H	C	W		8	7	32345	
Y	101		75.32	NO / U / TURN	FED	R3-4		0		1	041506	24	24		R	S		0	D	40129	0
Y	101		75.34	EXIT 702 / HERRICK AVE / ELK RIVER RD / EXIT 1/2 MILE	G83-4	(CA)		7		6	011603	132	84	C	B	S		14	7	27932	
Y	101		75.41	SPEED LIMIT	FED	R2-1		45	4	0	030113	36	48	I	B	S		11	7	27156	
Y	101		75.42	NO PARKING ANY TIME	R26A	(CA)		4		4	122804	24	30	S	B	S		14	7	38556	0
Y	101		75.43	SPEED LIMIT	FED	R2-1		40	4	0	032718	36	48	S	A	N		12	7	2791	
Y	101		75.45	NO PARKING ANY TIME	R26A	(CA)		4		4	122804	24	30	S	B	S		12	7	38557	0
Y	101		75.49	NO PARKING ANY TIME	R26	(CA)		1		6	112007	12	18	S	A	N		8	5	27792	
Y	101		75.51	NO PARKING ANY TIME W/ RT ARROW	R28	(CA)		1		4	040168	12	18	S	B	W		15	7	2387	0
Y	101		75.52	NO LEFT TURN	FED	R3-2		0		1	121896	30	36	J	C	W		7		34104	

Y	101	75.53 NO PEDESTRIAN CROSSING	FED	R9-3a	0	6 021115	18	18	A	E		7 7	32501	
Y	101	75.55 NO / PARKING / ANY / TIME	R26A	(CA)	1	6 010213	24	30 S	B	S		15 7	15348	
Y	101	75.55 NO / PARKING / ANY / TIME	R26A	(CA)	1	6 010213	24	30 S	A	W		15 7	34837	
Y	101	75.57 NO / PARKING / ANY / TIME	R26A	(CA)	4	1 020995	24	30 S	B	S		6 7	2795	
Y	101	75.57 NO / PARKING / ANY / TIME	R26A	(CA)	4	1 012898	24	30 S	B	W		7	34838	
Y	101	75.60 NO / PARKING / ANY / TIME	R26A	(CA)	4	4 020995	24	30 S	B	S		15 7	2793	
Y	101	75.60 NO / PARKING / ANY / TIME	R26A	(CA)	4	1 020995	24	30 S	A	W		7	34839	
Y	101	75.63 NO / PARKING / ANY / TIME	R26A	(CA)	1	6 120814	24	30 S	A	S		1 7	2794	
Y	101	75.63 NO / PARKING / ANY / TIME	R26A	(CA)	1	6 040913	24	30 S	A	W		13 7	34840	
Y	101	75.65 SPEED LIMIT	FED	R2-1	40 4	6 042417	36	48 S	A	N		9 E	2797	
Y	101	75.65 STOP	FED	R1-1	5	0 050818	30	30 H	C	W		4 E	20338	
Y	101	75.66 TSUNAMI HAZARD ZONE	EM1E	(CA)	0	6 043008	24	24 S	B	S		9 C	41806	
Y	101	75.71 COASTAL ACCESS LT	SG28	(CA)	A	6 091614	48	48 S	A	N	A	13 7	28720	
Y	101	75.72 SPEED LIMIT	FED	R2-1	40 4	6 030113	36	48 S	B	S		10 7	2798	
Y	101	75.74 NO PARKING ANY TIME W/LT ARROW	R28A	(CA)	1	4 040168	12	18 S	A	E	A	5 7	2799	
Y	101	75.74 NO PARKING ANY TIME	R26	(CA)	1	4 121395	12	18 S	A	N		10 7	2800	
Y	101	75.74 STOP	FED	R1-1	5	6 013097	30	30 H	C	E		20 7	2801	
Y	101	75.74 NO / PARKING / ANY / TIME	R26A	(CA)	1	4 012898	12	18 S	B	S		5 7	28140	
Y	101	75.76 COASTAL ACCESS RT	SG28	(CA)	A	6 091614	48	48 S	B	S		14 7	28721	
Y	101	75.77 TSUNAMI HAZARD ZONE	EM1E	(CA)	0	6 043008	24	24 S	A	N		12 C	41805	
Y	101	75.80 NO PARKING ANY TIME	R26	(CA)	1	4 041582	12	18 S	A	N		6 3	2803	
Y	101	75.80 NO / PARKING / ANY / TIME	R26A	(CA)	1	4 012898	12	18 S	B	S		7 7	28141	
Y	101	75.83 NO / PARKING / ANY / TIME	R26	(CA)	1	6 030113	12	18 S	A	S		9 7	28142	
Y	101	75.83 NO / PARKING / ANY / TIME	R26A	(CA)	1	4 012898	12	18 S	B	W		7	34106	
Y	101	75.83 NO / PARKING / ANY / TIME	R26	(CA)	1	4 000000	12	18 S	A	N		7	34107	
Y	101	75.85 STOP (ALLARD ST)	FED	R1-1	5	6 082715	30	30 H	C	E		2 7	2805	
Y	101	75.85 MCCULLENS / AVENUE	G07	(CA)	7	7 012898	60	30 E	A	N		4 7	15601	
Y	101	75.85 US 101 (ALLARD ST)	G26	(CA)	4	6 090115	28	24 S	C	E		6 7	20341	
Y	101	75.85 DIRECTIONAL ARROW (ALLARD ST)	FED	M6-4	4	6 090115	21	15	C	E		6 7	20342	
Y	101	75.86 NO / PARKING / ANY / TIME	R26	(CA)	1	4 131395	12	18 S	B	S		7 7	28143	
Y	101	75.87 NO / PARKING / ANY / TIME	R26	(CA)	1	4 020690	12	18 S	B	S		10 5	28144	
Y	101	75.87 BIKE RTE / PACIF COAST S17 / G33-1 RT	FED	D11-1	7	1 030309	24	18 M	A	N		12 7	38629	
Y	101	75.90 NO / PARKING / ANY / TIME	R26	(CA)	6	4 100785	12	18 S	B	S		10 5	20344	
Y	101	75.91 US 101 (MCCULLENS AVE)	G26	(CA)	4	1 020206	28	24 S	A	E		16 7	20347	
Y	101	75.91 DIR. ARROW(MCCULLENS AVE)	FED	M6-4	4	6 020206	21	15	A	E		16 7	20348	
Y	101	75.91 US 101 (MCCULLENS AVE)	G26	(CA)	4	1 020590	28	24 S	C	W		12 7	20349	
Y	101	75.91 DIRCTNAL ARROW(MCCULLENS AVE)	FED	M6-4	4	1 013076	21	15	C	W		12 7	20350	0
Y	101	75.91 MCCULLENS / AVE	G07	(CA)	7	7 012898	60	30 E	B	S		1	29418	
Y	101	75.92 NO / PARKING / ANY / TIME	R26	(CA)	1	6 120213	12	18 S	B	S		3 5	28146	
Y	101	75.93 NO / PARKING / ANY / TIME	R26	(CA)	1	4 102885	12	18 S	B	S		10 5	28145	
Y	101	75.95 NO / PARKING / ANY / TIME	R26	(CA)	1	4 121197	12	18 S	B	S		10 5	28147	
Y	101	75.95 FRT HUM ST PK NCST RDWDS DISTR	G72	(CA)	A	1 102301	84	48 J/K	A	N	B	14 7	28180	
Y	101	75.96 STOP	FED	R1-1	5	6 111918	30	30 H	C	E		8 E	2809	
Y	101	75.96 101	G26	(CA)	4	1 010215	28	24 S	C	E		10 7	20354	
Y	101	75.96 DIRECTIONAL ARROW	FED	M6-4	4	6 010215	21	15	C	E		10 7	20355	
Y	101	75.98 NO PARKING ANY TIME	R26	(CA)	1	1 022792	12	18 S	B	S		7	31901	
Y	101	76.00 STOP (HIGHLAND ST)	FED	(CA)	5	6 102504	30	30 H	C	E		3 7	2812	
Y	101	76.00 CITY EUREKA / HISTORICAL LANDMARK NO 477	G13	(CA)	B	4 040197	36	30 S	A	N		8 7	2816	
Y	101	76.00 NO / PARKING / ANY / TIME	R23	(CA)	6	4 020116	12	18 S	B	S		2 7	20357	
Y	101	76.00 US 101 (HIGHLAND ST)	G26	(CA)	4	6 011916	28	24 S	C	W		12 7	20358	
Y	101	76.00 DIRECTIONAL ARROW(HIGHLAND ST)	FED	M6-4	4	6 103113	21	15	C	W	G	8 7	20359	
Y	101	76.00 NO PARKING ANY TIME	R26	(CA)	1	1 022792	12	18 S	B	S		7	31902	
Y	101	76.01 NO PARKING ANY TIME	R26A	(CA)	1	4 040168	12	18 S	B	W		12 7	2815	
Y	101	76.01 NO PARKING ANYTIME	R26A	(CA)	1	4 013076	12	18 S	B	S		12 7	20362	0
Y	101	76.01 NO PED CROSSING (HIGHLAND ST)	FED	R9-3a	0	1 012898	18	18	C	W		7	29136	
Y	101	76.01 USE CROSSWALK W/ LT (HIGHLAND ST)	FED	R9-3b	4	1 012898	18	12 S	C	W	A	7	29137	
Y	101	76.02 NO PARKING W/ LT	R28A	(CA)	1	4 082483	12	18 S	A	E	A	8 7	20363	
Y	101	76.03 101	G26	(CA)	4	1 021898	28	24 S	C	E		40 7	20360	
Y	101	76.03 TWO WAY DIR. ARROW	FED	M6-4	4	1 021898	21	15	C	E		40 7	20361	
Y	101	76.04 NO PARKING ANY TIME	R26A	(CA)	1	4 040168	12	18 S	B	W		12 7	2818	
Y	101	76.04 NO PARKING ANYTIME	R26A	(CA)	1	4 101685	12	18 S	B	S		12 7	2819	
Y	101	76.04 NO PARKING ANYTIME	R26	(CA)	1	1 080504	12	18 S	A	N		8 2	32512	
Y	101	76.05 PED SYMBOL	FED	W11-2	8	1 040168	36	36	B	S		12 7	2820	
Y	101	76.06 NO PARKING ANYTIME	R26	(CA)	1	4 061593	12	18 S	B	S		8 7	2822	
Y	101	76.06 INTERSECTION LANE CONTROL	R61-13	(CA)	4	1 000000	48	30 S	C	E		7	36075	0
Y	101	76.07 FORT HUMBOLDT / STATE PARK // * NORTHCOAST REDWOODS / DISTRICT OFFICE	G72	(CA)	A	1 062100	84	48 J/K	B	S	A	12 7	28181	
Y	101	76.07 NO / U / TURN	FED	R3-4	0	1 012898	24	30 S	R	N		1	29408	
Y	101	76.07 NO PARKING ANY TIME	R26	(CA)	1	1 000000	12	18 S	A	N		7	34108	
Y	101	76.07 INTERSECTION LANE CONTROL	R61-13	(CA)	4	1 000000	48	30 K	R	E		7	36657	
Y	101	76.08 SPEED LIMIT	FED	R2-1	40 4	6 071306	36	48 S	A	N		13 7	2821	
Y	101	76.08 (SO. ENTRANCE TO MALL) INTERSECTION LANE CONTROL	FED	R9-3a	0	1 070592	18	18	B	W		7 7	32504	0
Y	101	76.08 INTERSECTION LANE CONTROL	FED	R9-3a	0	1 070592	18	18	A	E		7	32505	0
Y	101	76.10 STOP HIGHLAND AVE	FED	R1-1	5	0 032018	30	30 H	C	W		24 E	2813	
Y	101	76.10 TSUNAMI HAZARD ZONE	EM1E	(CA)	0	6 043008	24	24 S	A	N		9 7	41804	

Streetlights		
PM	Quantity	Notes
73.55/74.04	7	Spruce Point Overcrossing
74.52/75.01	14	Herrick Avenue Overcrossing
75.08	1	Across from Butler Valley Carole Sund Center
75.13	1	Carpet Depot
75.19	1	Great Western Clothing
75.24	4	Papa & Barkley Co.
75.28	1	Sunset Memorial Park
75.31	1	Sunset Memorial Park
75.34	1	Lithia
75.39	1	Sunset Memorial Park
75.42	2	3300 Broadway (dual light on one post)
75.47	1	Flamingo Motel
75.54	3	Pierson Building Center/Tetrault Tire Center
75.56	1	Pierson Building Center
75.57	1	Pocket of Posies
75.62	1	Lamplighter Inn
75.65	1	76 Gas Station
75.70	1	Across from Hilfiker Pipe Co.
75.73	1	Hilfiker Lane
75.80	1	Across from Pure Water Spas
75.85	1	Allard Avenue
75.91	4	McCullens Avenue
75.94	1	AT&T
75.96	1	Tomlinson Street
75.99	1	Highland Avenue
76.00	1	Truesdale Street
76.04	1	Across from McDonald's

Guardrail (All MGS Steel Post)	
PM	Notes
73.68/73.72	SPRUCE PONT OC NB APPROACH TO ABUTMENT
73.70/73.72	SPRUCE POINT OC NB MEDIAN BRIDGE COLUMNS
73.72/73.74	SPRUCE POINT OC SB MEDIAN BRIDGE COLUMNS
73.72/74.72	SPRUCE POINT OC SE SYSTEM, (BB, Rt)
73.72/73.72	SPRUCE POINT OC SW SYSTEM, (BB, Lt)
73.73/73.73	SPRUCE POINT OC NE SYSTEM (EB, Rt)
73.73/73.73	SPRUCE POINT OC NW SYSTEM (EB, Lt)
73.73/73.74	SPRUCE PONT OC SB APPROACH TO ABUTMENT
73.96/74.08	
74.16/74.32	
74.56/74.60	ELK RIVER BRIDGE NB MEDIAN
74.59/74.59	ELK RIVER BRIDGE NB RIGHT APROACH
74.62/74.66	ELK RIVER BRIDGE SB MEDIAN
74.62/74.64	ELK RIVER BRIDGE SB RIGHT APPROACH
74.76/74.78	HERRICK AVE OC NB MEDIAN BRIDGE COLUMNS
74.76/74.78	HERRICK AVE OC SB MEDIAN BRIDGE COLUMNS
74.77/74.77	HERRICK AVE OC SW SYSTEM (BB, Lt)
74.77/74.77	HERRICK AVE OC SE SYSTEM (BB, Rt)
74.78/74.78	HERRICK AVE OC NE SYSTEM (EB, Rt)
74.78/74.78	HERRICK AVE OC NW SYSTEM (EB, Lt)

ATTACHMENT R

Performance Output

Pre-PID Performance Measures

SHOPP Project - Accomplishment - Performance Measures - Benefits

District: 01 **Tool ID:** 22715 **Project ID:** 0121000033 **EA:** 0K940 **Co-Rte-PM:** HUM-101-74.8/76.0 (Primary Location) View/Print PIR (Performance) Report

☐ Bridge ☐ Pavement ☐ Drainage ☐ Facilities ☑ Safety ☑ Mobility ☐ Roadside ☑ Complete Streets ☐ Sustainability /Climate Change ☐ Advance Mitigation/Mitigation ☐ Major Damage ☐ Green-house Gases ☐ Relinquishment

Performance & Accomplishments (TYP)

	ActID	Activity Detail	Performance Objective	Unit of Measurement	Quantity	Assets in Good Cond	Assets in Fair Cond	Assets in Poor Cond	New Asset Added	Comment
1	E05	Flashing Beacons (201.010, .015)	No Performance Objective in the SHSMP	Each	4.000				4.000	Add either rectangular rapid flashing beacons or pedestrian hybrid beacons at two midblock crossings. Advance warning beacons assumed to be added
2	F16	New Pedestrian Refuge Islands (201.310, .010, .015)	No Performance Objective in the SHSMP	Each	1.000				1.000	1 new at Hilfiker
3	F22	ADA - Repair Existing Sidewalk (201.361)	No Performance Objective in the SHSMP	Linear Feet	240.000			240.000		
4	F23	ADA - New Curb Ramp Installed (201.361)	No Performance Objective in the SHSMP	Each	5.000				5.000	
5	F24	ADA - Repair/Upgrade Curb Ramp (201.361)	No Performance Objective in the SHSMP	Each	2.000	2.000				
6	F29	ADA - New Crosswalk (201.361)	No Performance Objective in the SHSMP	Linear Feet	60.000				60.000	
7	F43	ADA - Deficient Elements	ADA Pedestrian Infrastructure	Deficient Elements	15.000	2.000		8.000	5.000	
8	H05	Class I Bike Paths	No Performance Objective in the SHSMP	Linear Feet	2270.000				2270.000	Measured down center line
9	H06	Class II Bike Lanes	No Performance Objective in the SHSMP	Linear Feet	845.000				845.000	Measured each direction separately
10	H08	Class IV Separated Bikeways	No Performance Objective in the SHSMP	Linear Feet	8026.000				8026.000	Measured each direction separately
11	H10	Conflict Zone Green Paint	No Performance Objective in the SHSMP	Each	39.000				39.000	
12	H12	Enhanced Crosswalk Visibility	No Performance Objective in the SHSMP	Each	9.000			9.000		
13	H15	Lane Narrowing	No Performance Objective in the SHSMP	Linear Miles	0.810				0.810	Measured down center line
14	H17	Led Lighting	No Performance Objective in the SHSMP	Each	6.000				6.000	
15	H28	New Transit Stops	No Performance Objective in the SHSMP	Each	2.000				2.000	
16	H32	Is any Location Within the Project Limits Ped/Bike Accessible?	No Performance Objective in the SHSMP	Yes/No	Yes					
17	H34	Shared-Lane Markings	No Performance Objective in the SHSMP	Each	6.000				6.000	
18	H56	Complete Streets Fix Existing	Complete Streets Fix Existing	Linear Feet						
19	H57	Complete Streets Build New	Complete Streets Build New	Linear Feet	11141.000			11141.000		

(Last Saved - 06/16/21 @ 9:58 AM by Brittany Wattle)

Programming Performance Summary (All Locations)

Program Code	Activity Category	Asset Class	Asset	Performance Value	Performance Measure	Unit	Pre-Good	Pre-Fair	Pre-Poor	Pre-Total	Post Good	New	Post Good+New	Post-Fair	Post-Poor	Post-Total
201.361	Mobility - ADA	Supplementary	Sidewalks and Park & Ride ADA Infrastructure	7.0	Curb ramp(s)	Each	2.0	0.0	0.0	2.0	2.0	5.0	7.0	0.0	0.0	7.0
201.378	Mobility - ADA	Supplementary	Sidewalks and Park & Ride ADA Infrastructure	7.0	Curb ramp(s)	Each	2.0	0.0	0.0	2.0	2.0	5.0	7.0	0.0	0.0	7.0

Notes:

1. The crosswalk for reporting performance in the "Programming Performance Summary" was developed to assist the districts on performance reporting requirements for CTC and PCRs. For discrepancies or errors, please notify AM Tool admins via e-mail at CT-TAM@dot.ca.gov.
2. The data summarized in the table represents the performance reported or to be reported in CTIPS.
3. Programming only requires the breakdown of Good, Fair and Poor for Primary and Supplementary Asset Classes.
4. Reporting of bridge pre and post conditions may contain errors if the project RTL is before 2024/25.

Post-PID Performance Measures

SHOPP Project - Accomplishment - Performance Measures - Benefits

District: 01 **Tool ID:** 22715 **Project ID:** 0121000033 **EA:** 0K940 **Co-Rte-PM:** HUM-101-73.3/76.1 (Primary Location)
Res In PID WP: 02/03/21 **Project Manager:** Jaime Matteoli

☐ Bridge ☑ Pavement ☐ Drainage ☐ Facilities ☑ Safety ☑ Mobility ☐ Roadside ☑ Complete Streets ☐ Sustainability /Climate Change ☐ ...on/Mitigation ☐ ...ajor Damage ☑ ...use Gases ☐ Relinquishment

Performance & Accomplishments (PRG)

	ActID	Activity Detail	Performance Objective	Unit of Measurement	Quantity	Assets in Good Cond	Assets in Fair Cond	Assets in Poor Cond	New Asset Added	Comment
1	B25	Asphalt Pavement Minor Rehab (CAPM)	Pavement Class I	Lane Miles	3.72	1.294	2.426			Microsurfacing
2	C11	Energy Dissipation & Other Element (RSP,DI, FES etc.) (201.151)	No Performance Objective in the SHSMP	Each	41.0			13.0	28.0	New: 28 DIs; Replace: 13 DIs
3	C13	New Culvert	No Performance Objective in the SHSMP	Each	23.0				23.0	New culverts added to existing systems
4	C14	New Culvert	Drainage Restoration	Linear Feet	1566.99				1566.99	
5	C17	Fish Passage in the Priority List	Fish Passage	Each	0.0					
6	C18	Fish Passage Not in the Priority List	No Performance Objective in the SHSMP	Each	0.0					
7	E05	Flashing Beacons (201.010, .015)	No Performance Objective in the SHSMP	Each	8.0				8.0	Add either rectangular rapid flashing beacons or pedestrian hybrid beacons at two midblock crossings. Advance warning beacons assumed to be added
8	E11	Lighting (201.010, .015)	No Performance Objective in the SHSMP	Each	3.0		3.0			Adjust three lights away from sidewalk
9	E17	Signing (201.010, .015)	No Performance Objective in the SHSMP	Each	20.0				20.0	Assuming 20 new signs. This will be detailed in the next phase
10	F08	Widen Roadway (201.310)	No Performance Objective in the SHSMP	Linear Feet	765.0			765.0		
11	F16	New Pedestrian Refuge Islands (201.310, .010, .015)	No Performance Objective in the SHSMP	Each	7.0			1.0	6.0	3 new at Papa & Barkley Co. intersection, 1 new at Pierson's, 1 modify at Pierson's, 1 new at Hilfiker, 1 new at Highland
12	F22	ADA - Repair Existing Sidewalk (201.361)	No Performance Objective in the SHSMP	Linear Feet	1156.0			1156.0		
13	F23	ADA - New Curb Ramp Installed (201.361)	No Performance Objective in the SHSMP	Each	4.0				4.0	
14	F24	ADA - Repair/Upgrade Curb Ramp (201.361)	No Performance Objective in the SHSMP	Each	7.0	7.0				
15	F28	ADA - Modify Driveway (201.361)	No Performance Objective in the SHSMP	Linear Feet	435.0	435.0				67' New widening south, 153' New widening north, 29' New McCullens bus stop NB south, 64' New McCullens bus stop NB north, 107' New Tomlinson, 15' New Highland East
16	F29	ADA - New Crosswalk (201.361)	No Performance Objective in the SHSMP	Linear Feet	532.0				532.0	New: 70' southern Pierson's, 45' eastern Pierson's, 18' NW Pierson's, 33' east Hilfiker midblock, 32' west Hilfiker midblock, 70' Hilfiker, 42' Allard, 45' Tomlinson, 40' east Highland Midblock, 34' west highland midblock, 41' hihgland, 62' Truesdale
17	F30	ADA - Modify Crosswalk (201.361)	No Performance Objective in the SHSMP	Linear Feet	635.0			635.0		78' Papa & Barkley co. East, 91' Papa& Barkley Co. North, 69' Sunset, 76' Pierson's East, 60' Pierson's West, 96' mcCullens South, 44' McCullens East, 84' McCullens North, 37' McCullens West,
18	F39	Traffic Signals (201.315)	Transportation Management Systems	Each	1.0			1.0		
19	F43	ADA - Deficient Elements	ADA Pedestrian Infrastructure	Deficient Elements	65.0	22.0		39.0	4.0	
20	H08	Class IV Separated Bikeways	No Performance Objective in the SHSMP	Linear Feet	7520				7520	measured in both directions
21	H10	Conflict Zone Green Paint	No Performance Objective in the SHSMP	Each	40.0				40.0	
22	H15	Lane Narrowing	No Performance Objective in the SHSMP	Linear Miles	0.85				0.85	Inside lane to 11', TWLTL to 12'
23	H27	Transit Stop Improvements	No Performance Objective in the SHSMP	Each	2.0			2.0		2 improved bus stops (McCullens NB and SB)
24	H28	New Transit Stops	No Performance Objective in the SHSMP	Each	2.0				2.0	2 new (Pacific Motorsports and 76 Gas Station
25	H32	Is any Location Within the Project Limits Ped/Bike Accessible?	No Performance Objective in the SHSMP	Yes/No	Yes					
26	H54	Landscaped Areas	No Performance Objective in the SHSMP	Square Feet	9200.0				9200.0	Planting opportunities throughout the project
27	H56	Complete Streets Fix Existing	Complete Streets Fix Existing	Linear Feet	0.0					
28	H57	Complete Streets Build New	Complete Streets Build New	Linear Feet	7520			7520		converted to centerline miles for summary (bike lanes only)
29	N04	Defer	No Performance Objective in the SHSMP	-						Defer to next phase

Programming Performance Summary (All Locations)

Program Code	Activity Category	Asset Class	Asset	Performance Value	Unit	Pre-Good	Pre-Fair	Pre-Poor	Pre-Total	Post Good	New	Post Good+New	Post -Fair	Post-Poor	Post-Total
201.999	Sustainability/Climate Change		Other Performance Objectives	1.42	Centerline Mile(s)	0.0	0.0	0.0	0.0	0.0	1.42	1.42	0.0	0.0	1.42

ATTACHMENT S

Programming Sheet

Programming Sheet with Risk and OE

AMS ID: 0121000033 EA: 01-0K940 COUNTY: HUM ROUTE: 101 POSTMILE: 73.3/76.1

Project Manager: MATTEOLI, JAIME C PM Assistant: LAW, REBECCA L Project Nickname: Broadway Complete Streets
Project Description - Long: IN HUMBOLDT COUNTY IN AND NEAR EUREKA FROM 0.3 MI SOUTH OF SPRUCE PT NB OFF RAMP TO 0.1 MI NORTH OF
Work Description - Long: PEDESTRIAN INFRASTRUCTURE
PPNO: 2544 Program: shopp RPT: No Funding No PROGRAM YR: Working Days: 250
Open for Time: Yes Subprogram: Pedestrian Infrastructure CT Status: APL RMP: RMP Date:
10 Yr SHOPP: No AADD: Yes Dist SHOPP K- FED Aid Eligible:

MS	MS Description	MS Date	
M000	ID NEED	02/04/2021	(A)
M003	BEGIN FUNCT PID	03/23/2021	(A)
M006	DRAFT FOR DIST CIRC	05/25/2021	(A)
M009	FINAL DRAFT FOR	07/13/2021	(T)
M010	APPROVE PID	08/03/2021	(T)
M015	PROG PROJ	08/18/2021	(T)
M020	BEGIN ENVIRO	10/21/2021	(T)
M040	BEGIN PROJ	09/20/2021	(T)
M120	CIRC DPR & DED EXT	01/23/2023	(T)
M200	PA&ED	06/21/2023	(T)
M224	R/W REQTS	02/21/2023	(T)
M225	REGULAR R/W	06/21/2023	(T)
M300	CIRC PLANS IN DIST	02/12/2024	(T)
M377	PS&E TO DOE	04/08/2024	(T)
M410	R/W CERT	04/22/2024	(T)
M430	DCR	05/20/2024	(T)
M460	RTL	06/03/2024	(T)
M470	FUND ALLOCATION	08/21/2024	(T)
M475	CONST CONTR	08/26/2024	(T)
M480	HQ ADVERT	09/04/2024	(T)
M495	AWARD	11/15/2024	(T)
M500	APPROVE CONTRACT	12/03/2024	(T)
M600	CONTRACT ACCEPT	12/01/2025	(T)
M700	FINAL REPORT	12/01/2026	(T)
M800	END PROJ EXP	12/01/2027	(T)
M900	FINAL PROJ	09/02/2029	(T)

Env CE (NEPA), IS

Capital Cost Estimates ($k)

	Amount $k	EST Date
Roadway	6245	06/23/21
Structures	0	
Const Total	6245	
ROW	555	06/21/21
Total	6800	

Risk & Operating Expense Budget

	Risk Bud. ($k)	OE ($k)
Phase 0 - PAED	$0	$0
Phase 1 - PS&E	$0	$0
Phase 2 - RW	$0	$0
Phase 3 - Con	$0	$0
Phase 4 - Con Cap	$0	$0
Phase 9 - RW Cap	$0	$0
Total	$0	$0

Note: For Phase 0, 1, 2 and 3, only enter Risk Budget amount if not already entered in PRSM

Funding Info ($k)

Fund Source	PA&ED	PS&E	ROW	CON	ROW CAP	CON CAP
4050201.999	0	0	0	0	0	0
null	null	null	null	null	null	null
4050201.378	0	0	0	0	0	0
Total:	**0**	**0**	**0**	**0**	**0**	**0**

Alt 4 -Escalated without Risk

	Capital Cost Est.($k)
FY Mid M500-M600	2025
CC Escalation %:	3.20%
CC Escalated $:	7,084
ROW CAPITAL:	634
TOTAL:	7,718

PROJECT SUPPORT COSTS ($k)

Phase Esc. Rate	PRIOR ACT $	FY20/21 ETC (0.00%)	FY21/22 (2.00%)	FY22/23 (3.00%)	FY23/24 (3.00%)	FY24/25 (3.00%)	Future (3.00%)	Total	Sup/Cap %
0	**0**	**0**	**704**	**676**	**0**	**0**	**0**	**1,380**	**17.88%**
1	**0**	**0**	**0**	**21**	**955**	**346**	**18**	**1,340**	**17.36%**
2	**0**	**0**	**0**	**103**	**351**	**42**	**105**	**601**	**7.79%**
3	**0**	**0**	**0**	**0**	**0**	**720**	**741**	**1,461**	**18.93%**
							TOTAL SUPPORT COSTS:	4,782	61.96%
							TOTAL PROJECT COSTS:	12,500	

PROJECT SUPPORT PYs

	Division	PRIOR ACT PYS	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs
01	ADMN	0.06	0.00	0.02	0.01	0.01	0.01	0.01	0.12
01	MTCE	0.01	0.00	0.03	0.03	0.01	0.01	0.01	0.09
01	PPM	0.00	0.01	0.15	0.10	0.15	0.08	0.09	0.59
01	TPLN	0.43	0.04	0.39	0.07	0.06	0.01	0.01	1.00
01	TROP	0.06	0.00	0.09	0.07	0.32	0.14	0.07	0.75
01	TOTALS :	0.56	0.05	0.68	0.28	0.55	0.25	0.19	2.55
	Division	PRIOR ACT PYS	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs
03	CONS	0.03	0.00	0.07	0.07	0.19	2.51	2.33	5.21
03	ENVM	0.07	0.00	0.76	1.10	0.45	0.19	0.13	2.70
03	ESRV	0.06	0.00	0.12	0.08	0.33	0.12	0.04	0.76
03	PRJD	0.01	0.00	1.03	0.81	1.88	0.81	0.06	4.59
03	RWLS	0.06	0.01	0.22	0.27	2.12	0.20	0.38	3.26
03	SURV	0.00	0.00	0.93	1.08	0.51	0.58	0.49	3.59
03	TOTALS :	0.23	0.01	3.13	3.41	5.48	4.41	3.43	20.11
	Division	PRIOR ACT PYS	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs
59	GS	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01

Programming Sheet with Risk and OE

AMS ID: 0121000033 EA: 01-0K940 COUNTY: HUM ROUTE: 101 POSTMILE: 73.3/76.1

	Division	PRIOR ACT PYS	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs
59	METS	0.00	0.00	0.00	0.00	0.00	0.12	0.09	0.21
59	PPM	0.00	0.00	0.01	0.01	0.04	0.14	0.01	0.21
59	SDSN	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
59	TOTALS :	0.03	0.00	0.01	0.01	0.04	0.26	0.10	0.45
PROJECT TOTALS:		0.82	0.06	3.82	3.70	6.07	4.92	3.72	23.11

Comments: Resources in the workplan are as follows:
Alt 4 - DES hours added per allocation sheet in collab tab dated 6/21/2021.
Alt 4 - Env Hours entered per the PEAR on the collab tab dated 6/16/2021. (does not match the RRT)
Alt 4 - ROW hours entered per the document on the collab tab dated 6/21/21
Alt 4 - Surveys, 03.0366, hours reduced to 3700 per Tom Gallup's email on 6/22/2021
Alt 4 - Construction hours added per allocation sheet in collab tab dated 6/21/2021. On 6/23/21- 03.0460 hours were reduced by 600hrs-task 280, 600 hrs-task 285 and 1000hrs-task 270 due to programming constraints

Capital escalation calculated by PRSM

Alt 4 -Escalated without Risk