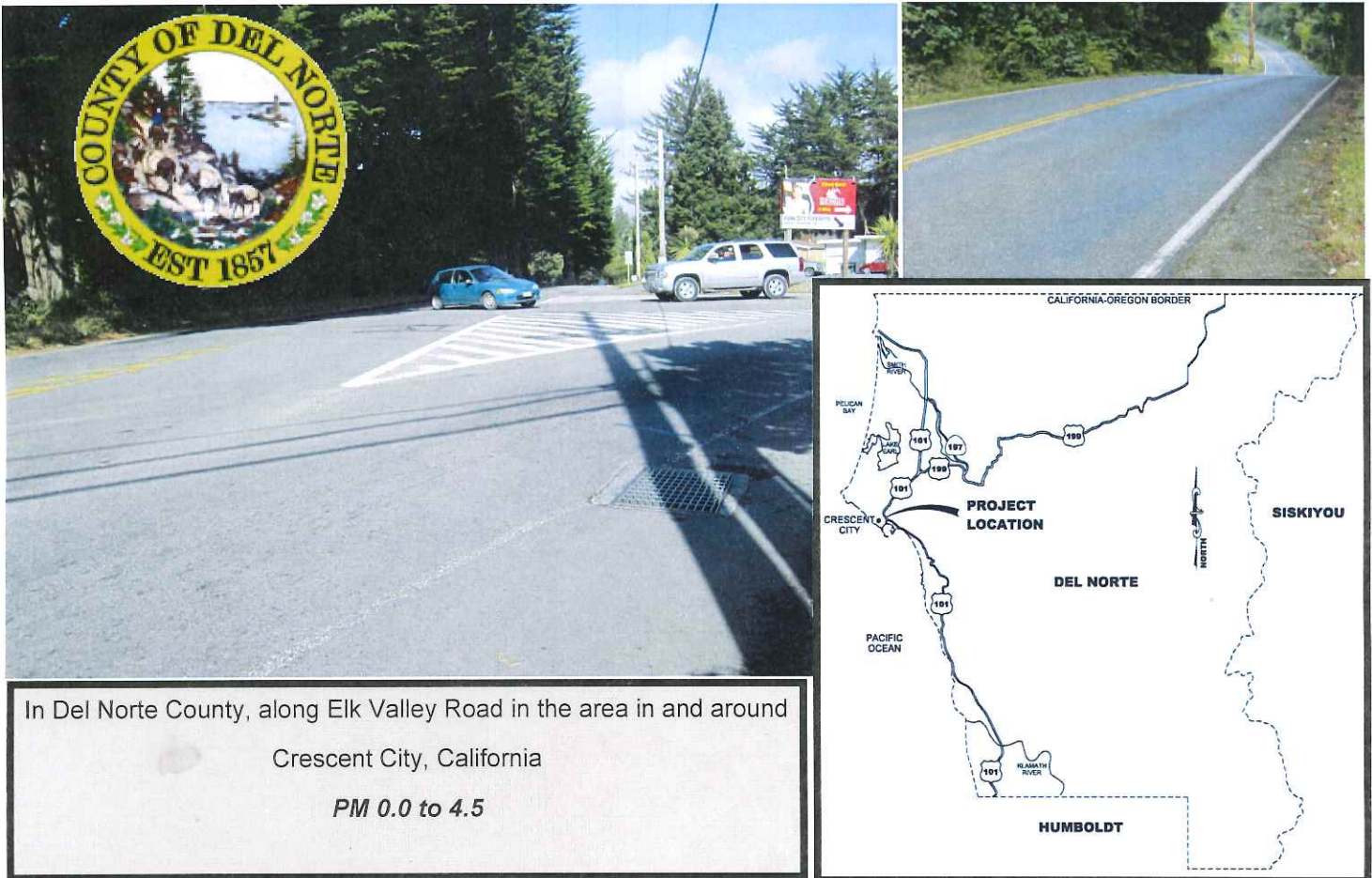




Elk Valley Road Multimodal Corridor Plan

01-DN-EVR
PM 0.0-4.5
June 2017



In Del Norte County, along Elk Valley Road in the area in and around
Crescent City, California
PM 0.0 to 4.5

I have reviewed the right of way information contained in this Plan and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:

Brian Stephenson

Brian Stephenson, Dokken Engineering

APPROVAL RECOMMENDED:

Tamera Leighton

Tamera Leighton, Executive Director
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APPROVED:

Heidi Kunstal

Heidi Kunstal, Director
Community Development Department

6-14-2017

DATE

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



Brian R. Stephenson

REGISTERED CIVIL ENGINEER

5/15/2017

DATE

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ATTACHMENTS:

- A Project Location Map
- B Alternatives Exhibit's
- C Alternatives Cost Estimates
- D Environmental Constraints Overview Report
- E Existing Right of Way Records Sheet
- F Existing Conditions Report
- G Public Meeting Records

1. INTRODUCTION

Brief Project Description:

The Elk Valley Road Multimodal Corridor Plan proposes to improve safety and address traffic crash rate issues. The Multimodal Corridor plan would include improvements to pedestrian and bicycle facilities, lateral and vertical sight distance, intersection turn pockets, a roundabout and triangular intersection improvements.

See the cost estimates for specific work items included in each alternative.

Project Limits (Dist., Co., Rte., PM)	01-DN-EVR-PM 0.0-4.5
Number of Alternatives:	6
Programmed or Proposed Capital Construction Costs	Varies
Programmed or Proposed Capital Right of Way Costs:	Varies
Programmed or Proposed Support Costs:	Varies
Funding Source:	TBD
Type of Facility (conventional, expressway, freeway):	Conventional
Number of Structures:	1
Anticipated Environmental Determination/Document	IS/MND/CE
Legal Description	In Del Norte County, along Elk Valley Road from Hwy 101 to Parkway Drive, Crescent City, California.

2. BACKGROUND

Elk Valley Road is a 4.5 mile stretch of roadway between US Highway 101 (US-101) and Parkway Drive which links to US-199. Elk Valley Road currently consists of a three lane urban cross section in its urban section from US 101 to Howland Hill Road, and a two, 11' lane rural cross section between Howland Hill Road and Parkway Drive. This roadway serves residential neighborhoods, the Elk Valley Casino, the North Operations Center for the National Park, a gravel quarry, and is the main off haul route for the county solid waste



Figure 1: Elk Valley Road

transfer station. Elk Valley Road is an important element of the regional bicycle network, but does not contain a safe multimodal profile. The Elk Valley Road Multimodal Corridor Plan is a product of the Del Norte Local Transportation Commission 2016-17 Overall Work Program. Six alternatives have been evaluated to increase multimodal traffic safety.

3. PURPOSE AND NEED STATEMENT

Need:

Improvements along Elk Valley Road are needed to address safety and provide for multimodal travel. The existing corridor has an accident rate higher than the local, county and state averages for similar roadways. It is not multimodal.

Purpose:

The purpose of the Elk Valley Road Multimodal Corridor Plan is to improve safety for all users (motorists, bicyclists, transit passengers, and pedestrians) and to enhance non-motorized travel along and/or across Elk Valley Road in the unimproved zones between the urban Crescent City segment and the northerly rural roadway segment which connects with Parkway Drive.

Other Goals and Objectives

- Provide a paved shoulder for safe bicycle and pedestrian use.
- Identify accident rates at intersections.
- Identify horizontal and vertical sight distance deficiencies along the existing corridor.
- Identify existing environmental constraints along the corridor.
- Identify existing Right of Way constraints along the corridor.

4. DEFICIENCIES

The existing alignment was compared to the December 2016 version of the Caltrans Highway Design Manual. There are geometric deficiencies at four locations along the Elk Valley Road corridor. Two vertical curves must be corrected between Howland Hill Road and Aubell Lane to comply with the minimum vertical curve stopping sight distance required by the Caltrans Highway Design Manual. Two horizontal curves near Mayas Lane and near Parkway Drive do not offer the minimum corner sight distant for the posted speed limit of 45 mph.

There are lane standard width and non-motorized facility deficiencies along the current corridor between Howland Hill Road and Parkway Drive. The existing lane width is 11' with no paved shoulder. This does not characterize a multimodal corridor. Improvements to be made will require lane widening to the 12' standard and paved shoulder widening to 4' for safe bike and pedestrian traffic.

At numerous intersections, stopping sight distance and corner sight distances are below the standards. Increasing the road width will address the bulk of the intersections with residential driveways. For the busier roadway intersections, additional measure must be taken, such as adding left turn pockets.

Collison Data

Intersection traffic volumes were monitored on Friday, October 21, 2016 at both AM and PM peak hour period. Roadway traffic volumes were conducted from Friday, October 21 through Saturday, October, 22nd 2016 on a northerly and southerly portion of the rural segment of the corridor. The LOS was evaluated as a B, signifying no increase in capacity is required for this roadway. One traffic generator observed is the Elk Valley Casino, focusing on Howland Hill Road as a busy intersection in comparison to the other intersections along Elk Valley Road.

Historical crash data for Elk Valley Road over the last 10 years was gathered using the State Wide Integrated Traffic Records System (SWITRS). Approximately 2/3 of the accidents did not result in injury. Table 1 shown below summarizes this data. More details and an exhibit showing the segments can be found in the Existing Conditions Report Attachment F. Table 2 details the crash type. As shown in Table 3, the crash summary by primary collision factor, improper turning movements totaled a third of the crashes, implying left turn pockets, sight distance improvements and shoulder widening would be beneficial.

The crash rate for the urban segment of Elk Valley Road, between US 101 and Howland Hill Road, is similar to the State and County wide averages for similar roads. The crash rates for the rural segment of Elk Valley Road are higher than State and County averages, in collisions per million vehicle miles (mvm), when compared to similar roads. The rural segment of Elk Valley Road should be the focus of improvements to address safety.

Supplemental information can be found in Attachment F, Elk Valley Road Existing Conditions Report, along with an accident summary table for each intersection.

Table 1: Elk Valley Road - Crash Summary by Segment

October 1, 2006 to October 1, 2016

Segment	Total Crashes	Length of PM Peak Hour 2-way Traffic Segment (miles)	Crashes per mile per Vehicle	Total PM Peak Hour		Crash Severity			Bicyclist Involved in Crash
				Intersection Volume	Crashes per Vehicle	Fatal	Injury	Property Damage Only	
At US 101	6			1368	0.004	0	3	3	0
– between	12	0.9	420	0.032		0	8	4	1
State Street	5			468	0.011	0	0	5	0
– between	2	0.2	487	0.021		0	1	1	2
At Howland Hill Drive	12			474	0.025	0	2	10	0
– between	4	0.4	170	0.059		0	2	2	0
At Norris Avenue/Harbor View Drive	9			254	0.035	0	3	6	0
– between	3	0.6	203	0.025		0	1	2	0
At Aubell Lane	1			199	0.005	0	0	1	0
– between	41	2	187	0.110		0	13	28	1
Cooke Street	4			179	0.022	0	1	3	0
– between	1	0.4	154	0.016		0	0	1	0
At Elk Valley Cross Road/Parkway	9			241	0.037	0	3	6	0
Total	109					0	37	72	4

Note: Collisions within 200 feet of an intersection are included in the total for the intersection.

Note: There were no reported crashes involving pedestrians.

Source: LSC Transportation Consultants INC., California Highway Patrol - Statewide Integrated Traffic Records System (SWITRS)

Table 2 : Elk Valley Road - Crash Type

October 1,2006 to October 1, 2016

Segment	Total Crashes	Crash Type								
		Head-On	Sideswipe	Rear End	Broadside	Hit Object	Overtaken	Vehicle/ Pedestrian	Other	Not Stated
At US 101	6	0	1	3	1	0	0	1	0	0
- between	12	0	1	2	2	4	1	0	1	1
State Street	5	0	1	1	1	1	1	0	0	0
- between	2	1	0	0	1	0	0	0	0	0
At Howland Hill Drive	12	0	2	1	7	2	0	0	0	0
- between	4	0	0	1	0	2	1	0	0	0
At Norris Avenue/Harbor View Drive	9	0	0	3	2	4	0	0	0	0
- between	3	0	0	2	0	1	0	0	0	0
At Aubell Lane	1	0	0	0	0	0	0	0	1	0
- between	41	1	2	1	2	32	0	0	3	0
Cooke Street	4	0	1	1	0	2	0	0	0	0
- between	1	0	1	0	0	0	0	0	0	0
At Elk Valley Cross Road/Parkway Drive	9	1	0	1	1	5	1	0	0	0
Total	109	3	9	16	17	53	4	1	5	1
Percent of Total		3%	8%	15%	16%	48%	3%	1%	5%	1%

Note: Collisions within 200 feet of an intersection are included in the total for the intersection.

Source: LSC Transportation Consultants INC., California Highway Patrol - Statewide Integrated Traffic Records System (SWITRS)

Table 3: Elk Valley Road - Primary Collision Factor

October 1, 2006 to October 1, 2016

Segment	Total Collisions	Primary Collision Factor												
		Alcohol or Drugs	Unsafe Speed	Wrong Side of Road	Improper Passing	Improper Turning	Right of Way	Traffic Signals and Signs	Other Equipment	Other Hazardous Violation	Other Than Driver	Unsafe Starting or Backing	Unknown	Not
At US 101	6	1	1	0	0	2	0	0	0	0	0	1	1	0
- between	12	2	1	0	0	5	2	0	0	0	2	0	0	0
State Street	5	0	2	0	0	1	0	1	0	0	0	0	0	1
- between	2	0	0	0	0	0	0	0	0	2	0	0	0	0
At Howland Hill Drive	12	2	2	0	0	0	8	0	0	0	0	0	0	0
- between	4	0	2	0	0	2	0	0	0	0	0	0	0	0
At Norris Avenue/Harbor View Drive	9	1	2	0	0	2	2	0	1	0	0	0	1	0
- between	3	0	2	0	0	1	0	0	0	0	0	0	0	0
At Aubell Lane	1	0	0	0	0	0	0	0	0	0	1	0	0	0
- between	41	8	6	3	1	18	1	0	0	0	4	0	0	0
Cooke Street	4	1	1	0	0	1	0	0	0	0	0	1	0	0
- between	1	0	0	0	0	1	0	0	0	0	0	0	0	0
At Elk Valley Cross Road/Parkway Drive	9	1	2	0	0	4	2	0	0	0	0	0	0	0
Total	109	16	21	3	1	37	15	1	1	2	7	2	2	1
Percent of Total		15%	19%	3%	1%	33%	14%	1%	1%	2%	6%	2%	2%	1%

Note: Collisions within 200 feet of an intersection are included in the total for the intersection.

Source: LSC Transportation Consultants INC., California Highway Patrol - Statewide Integrated Traffic Records System (SWITRS)

Comparison of Traffic Control Options at Elk Valley Road / Howland Hill Road -- Impacts on Traffic Safety

Traffic safety at the key intersection of Elk Valley Road and Howland Hill Road would be impacted by changes in the traffic controls. Table 4 presents an analysis of the existing controls (Stop sign on the Howland Hill Road approach only) in comparison with an all-way stop and with a roundabout. Key results are as follows:

- over the most recent 10 year period, there were a total of 12 crashes at (within 200') of the intersection, of which 2 resulted in injuries and the remaining 10 resulted in property damage only. This corresponds to a rate of 0.583 total crashes per Million Vehicle Movements (MVM) and 0.097 injury or fatal crashes per MVM. In comparison with statewide averages for T intersections in rural areas with side-street Stop controls, the observed rates at this location are 265 percent above statewide average for total crashes, and 49 percent above the statewide average for injury/fatal crashes.
- The California statewide crash rate data indicates that conversion to an all-way Stop sign control would increase the expected total crash rate by 125 percent, and increase the injury/fatal crash rate by 80 percent. This is consistent with other studies that indicate that all-way Stop control results in crashes due to drivers that fail to heed the Stop signs. Crash rates would therefore increase significantly if Stop signs are installed on the Elk Valley Road approaches.
- A recent detailed analysis of crash data for modern U.S. roundabouts yields an estimation equation, as documented in the National Cooperative Highway Research Program's Report 672: Roundabouts – An Informational Guide. Entering the geometrics and volumes for a roundabout at the subject location, the expected annual crashes would be substantially lower than today, for both total crashes and for injury/fatal crashes.
- As shown in the bottom portion of the table, conversion to an **All-Way Stop** control would increase the expected number of crashes over a 10-year period by 15, of which 3 would be injury or fatal crashes.
- Conversion to a **Roundabout** control would reduce the number of crashes from that expected under the current control by 5 total crashes, of which 1 would be an injury or fatal crash.

This analysis clearly depicts the traffic safety benefits of a roundabout, as well as the negative safety impacts of all-way stop control. From a traffic safety perspective, a roundabout would be the optimal modification to this intersection to address the poor existing traffic safety condition.

Table 4: Elk Valley Rd/Howland Hill Rd Traffic Control Options - Safety Impacts

Annual Average Daily Traffic	5637	
Annual Million Vehicle Movements	2.06	
	Crashes	
	Total	Injury or Fatal
Existing (Over 10 Years)	12	2
Crash Rate (Per Million Vehicle Movements)	0.583	0.097
Statewide Avg. for Rural T Intx with Side-Street Stop	0.160	0.065
Ratio of Observed to Statewide Average	3.65	1.49
Annual Expected Crashes		
Existing Side-Street Stop	1.2	0.20
Ratio of All-Way Stop to Side-Street Stop Crash Rate (1)	2.25	1.80
All-Way Stop	2.7	0.48
Roundabout (2)	0.7	0.13
Impact of Traffic Control Change		
<u>Convert to 3-Way Stop</u>		
Change in Crash Rate	125%	141%
Change in Crashes Over 10 Years	15	3
<u>Convert to Roundabout</u>		
Change in Crash Rate	-41%	-33%
Change in Crashes Over 10 Years	-5	-1
Source 1: 2013 Collision Data on California State Highways		
Source 2: NCHRP Report 672: Roundabouts - An Informational Guide		

5. CORRIDOR AND SYSTEM COORDINATION

There are no projects planned along this corridor at this time.

6. ALTERNATIVES

Alternatives have been developed for the Multimodal Corridor Plan that include lane and shoulder widening, curb, gutter and sidewalk, intersection

improvements, sight distance improvements, re-striping of urban stretch and no-build. The following description of the alternatives gives location, types and limits of the improvements. Following the alternatives is the planning level cost estimates associated with each alternative that has estimated costs for construction, right of way, environmental mitigation, preliminary engineering, and construction engineering for a total estimated cost.

Alternative 1: Lane and Shoulder widening from Howland Hill Road to Parkway Drive

Alternative 1, **Option A** would construct standard lane widths and shoulders along Elk Valley Road from Howland Hill Road to Parkway Drive. The existing roadside utilities and drainage ditch will need to be relocated to construct the standard shoulder widths. A 60-foot wide Right of Way corridor would be secured from Howland Hill Road to Parkway Drive to contain the standard lane shoulders, drainage ditches and utility pole relocations. The 4 foot paved shoulder would be striped and signed as a Class 2 bike lane. The following key project elements will be included as part of the Alternative 1, Option A:

- “**12 foot Standard Lane Widths**” for 3.4 mile stretch on both sides of the corridor between Howland Hill Road and Parkway Drive
- “**Driveway Improvements**” for all current driveways along this corridor up to the right of way limits.

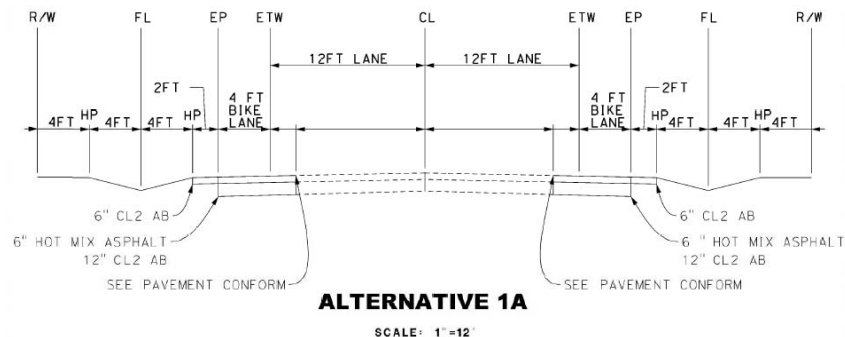


Figure 1 Alternative 1A typical section. See Attachment B for more details.

Alternative 1, **Option B** would keep the existing lane widths as 11 foot, construct a 2 foot buffer along each side of the corridor and widen the shoulder 3 additional feet to sustain a striped separated bike/pedestrian lane. A 60 foot wide Right of Way would be necessary to encompass the new corridor width and roadside elements.

- “**11 foot Lane Widths**” for 3.4 mile stretch on both sides of the corridor between Howland Hill Road and Parkway Drive
- “**Driveway Improvements**” for all current driveways along this corridor up to the right of way limits.

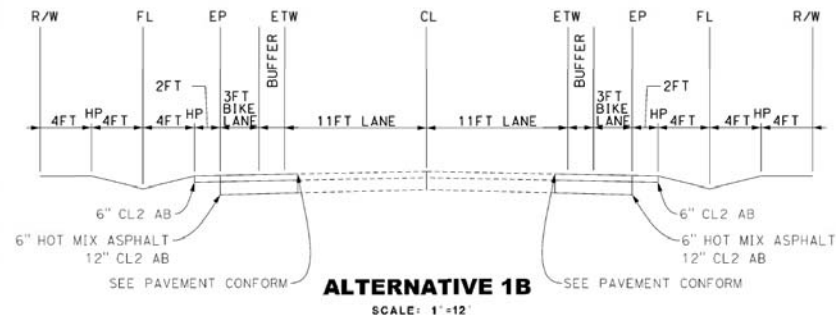


Figure 2 Alt 1B typical section. See Attachment B for more details.

Alternative 2: Intersection Improvement's

Alternative 2, **Option A** entails the construction of a 135-foot diameter inscribed circle roundabout located at the intersection of Howland Hill Road and Elk Valley Road. The roundabout would require additional Right of Way and utility relocations. The connections to the existing Elk Valley Road would begin at the existing sidewalk on Elk Valley Road and end approximately 250 feet north of the existing intersection. The roundabout would have crosswalks at each approach and provide sidewalks around the perimeter. Low maintenance improvements, such as raised medians, will separate pedestrians from the traffic lane around the roundabout. Local driveways in the footprint of the roundabout would be modified to conform to the new road geometrics. It is anticipated that a building would need to be acquired in the northeast corner of the intersection to allow for the roundabout. See Attachment B, Alternative 2A.

Alternative 2, **Option B** would construct two left turn pockets along with lane and shoulder widening along Elk Valley Road at the intersection of Norris Avenue and Harbor View Drive. The minimum requirements of 250 feet of storage and 540 feet of taper for each turn pocket results in the total length of the project being approximately 2000 feet. The intersection would be improved by constructing the 12 foot left turn pocket and 4 foot of paved shoulders for bike and pedestrian traffic. This option would require the 60 foot of Right of Way acquisition and drainage/utility pole relocation in the footprint of the improvements. See Attachment B, Alternative 2B.

Alternative 2, **Option C** would be the addition of one left turn pocket at Cooke Street. The turn pocket would be 12 foot wide and 250 feet long for storage. With the 540 feet of deceleration and 540 feet of flare on the northerly segment, the total project length is approximately 1500 ft. The improvement would include 4 foot of paved shoulder for bike and pedestrian traffic. A small portion of the southern end of the planned project limits would encroach on two parcels and require right of way acquisition. Utility pole and drainage ditch relocations would be necessary. See Attachment B, Alternative 2C.

Alternative 2, **Option D** would modify the northerly end of Elk Valley Road, which intersects with Parkway Drive. The elimination of the southbound lane on

Elk Valley Road at Parkway Drive will force fast-paced vehicles to slow down before turning left and entering onto Elk Valley Road. The existing roadway from Elk Valley Road to the Parkway Drive/Elk Valley Cross Road intersection would be widened for the southbound traffic entering onto Elk Valley Road from Parkway Drive to have California legal turning radius. Road widening would involve right of way acquisition from the parcel south of the intersection. Within the existing triangular vegetated median area, a new curb and gutter will be constructed along the full perimeter and the existing drainage inlets adjusted to maintain roadway drainage. See Attachment B, Alternative 2D.

Alternative 3: Sight Distance Improvements

Alternative 3, **Option A** would correct all horizontal curves not in compliance with Chapter 200 of the Caltrans Highway Design Manual, latest edition, based on the design speed for Elk Valley Road. Curve 1 on Elk Valley Road, near Mayas Lane, would require clearing and grubbing beyond the edge of shoulder to maintain proper sight distance. Current lateral sight clearance is approximately 13 feet from lane to obstructions. Given the design speed of 55 mph (posted for 45 mph), a minimum lateral sight distance of 26 feet (center of lane to obstruction) is required for this curve.

Elk Valley Curve 2, near Parkway Drive, would require an additional 26 feet of clearance to meet standards for lateral sight clearance. Consultation with the USFWS, along with work restricted to non-breeding season and compensatory mitigation for tree removal could be affected by this clearing and grubbing.

For both curves, temporary ESA fencing, ditch excavation and reseeding would be required. See Attachment B, Alternative 3A/B.

Alternative 3, **Option B** would correct vertical curves along Elk Valley Road between Howland Hill Road and Aubell Lane. Elk Valley Road Vertical Curve 1 is just north of Howland Hill Road. Elk Valley Road Vertical Curve 2 is just south of Aubell Lane. To provide the standard stopping distances required, the roadway in these areas would be regraded to adjust the crest vertical curves. This reconstruction of the roadway segments would include 12 foot wide lanes and 4 foot paved shoulders. Right of way width of 60 feet would be acquired as needed and utilities relocated as needed. See Attachment B, Alternative 3A/B for locations needing horizontal and vertical sight clearance improvements.

Alternative 4: Sidewalk Addition between Howland Hill Road and Norris Avenue

Alternative 4 would increase bike and pedestrian safety along Elk Valley Road between Howland Hill Road and Norris Avenue. A 5 foot wide sidewalk would be required, along with curb and gutter and a 5 foot clearance distance from gutter flowline to the edge of travel way. The sidewalk would be placed on both sides of the corridor to accommodate pedestrian traffic. An estimated 18" diameter corrugated steel pipe with drainage inlets located approximately every 250 feet are necessary on one side of the roadway to address drainage needs. In

addition, 12 foot standard lane widths on both lanes and 4 foot paved shoulders would be constructed. See Attachment B, Alternative 4.

Alternative 5: Vertical Curve Improvement North of Howland Hill Road

Alternative 5 would be applicable to improve the vertical curve sight distance just north of the Howland Hill Road intersection. Alternative improvements at this intersection have not been decided upon; the improvement of this curve could be necessary for stopping sight distance needs. Length of the improvements would be controlled by the amount of sight distance required for the design speed. See Attachment B, Alternative 5.

Alternative 6: Re-Striping Urban Stretch of Elk Valley Road

Alternative 6 proposes to restripe the urban stretch of Elk Valley Road located between US 101 to Howland Hill Road. This one-mile stretch of roadway involves re-striping pavement markings and thermoplastic striping. This improvement is to be an aesthetic and visibility enhancing safety improvement for the surrounding community when the rural section is improved. See Attachment B, Alternative 6.

Alternative 7: No-Build Alternative

The No-Build Alternative proposes to maintain the existing configuration of Elk Valley Road in its current configuration. However, this alternative does not allow Elk Valley Road to comply with standard lane widths, stopping sight distances, or multimodal safety standards. The crash rates along this corridor are above local, County and State averages for the given classification and volume of traffic. The No-Build option would not address any issues or concerns with bike, pedestrian or multimodal transportation facilities.

Supplemental: 60 foot wide Corridor Right of Way

In the event that funding for right of way is secured, an estimate to acquire the 60-foot wide Right of Way along Elk Valley Road from Howland Hill Road to Parkway Drive in all areas not already secured to the 60 foot width was estimated. Estimated square footages and estimated costs for parcels requiring additional right of way can be found in Attachment E. Based on preliminary right of way record search, it is estimated an additional 586,567 SQFT at an estimated cost of \$4 per square foot would cost approximately \$2.35 million.

This estimate is based on available right of way records for existing roadway easements as recorded in the County Recorder's office. Preliminary Title Reports were not generated for this Corridor, so there is the possibility that certain easements along Elk Valley Road are not shown on the maps and records of surveys gathered for this effort. The 60 foot width was assumed to be

centered on the existing roadway and/or the parcel lines are at the center of roadway.

Access to and from all existing parcels is proposed to be maintained for drivers traveling in either direction along the roadway.

7. ALTERNATIVES COMPARISON MATRIX

For each alternative generated, a scale of 1 to 5 was given for the safety factor of each alternative with respect to each multi-modal aspect. A value of 1 signifies minimal safety improvements; a value of 5 signifies a large safety improvement value. A total value is shown as the sum of each value and ranges from 12 to 19.

Alternative	Vehicle Safety Improvement	Pedestrian Safety	Bicycle Safety	Transportation Safety	Total	Total Cost
1. Lane and Shoulder Widening Throughout						
1 A - 12' Lanes, 4' Paved Shoulders	5	4	4	4	17	\$20,612,000
1 B - 11' Lanes, 2' Safety Striping, 3' Paved Shoulder	4	5	5	5	19	\$20,882,000
2. Intersection Improvements						
2 A - Howland Hill Rd Roundabout	5	5	4	4	18	\$4,670,000
2 B - Norris Ave/ Harbor View Dr. Left Turn Pockets	4	4	3	3	14	\$2,930,000
2 C - Cooke St. Left Turn Pocket	3	3	3	3	12	\$2,090,000

2 D - Parkway Dr. Lane Elimination	4	2	3	3	12	\$780,000
3. Sight Distance Improvements						
3 A - Vertical Curve Sight Distance (2 Locations)	5	4	4	4	17	\$4,955,000
3 B - Lateral Sight Distance (2 Locations)	4	4	4	4	16	\$573,900
4. Sidewalk Addition between Howland Hill Road and Norris Avenue						
5' Sidewalk both side of Elk Valley Road	4	5	4	3	16	\$2,147,500
5. Vertical Curve Improvement north of Howland Hill Road						
Vertical Curve Sight Distance Improvements	5	3	4	4	16	\$1,477,500
6. Re-Striping Urban Stretch of Elk Valley Road						
Re-stripe existing roadway	3	3	3	3	12	\$175,000

The results from the comparison matrix indicate that the most beneficial improvements to safety along this corridor are lane and shoulder widening, along with intersection improvements. Lane and shoulder widening along the entire rural stretch of the corridor, as described by alternative 1B, would have the best safety improvement benefit with a score of 19 and cost of \$20.88 million. The intersection improvement proposed in alternative 2A has a benefit score of 18 and cost of \$4.67 million.

8. ALTERNATIVES COST ESTIMATES

The following table is the summary of the alternative cost estimates. See Attachment C for individual detailed alternative cost estimates.

Table 4 Alternative Cost Estimates Summary

Alternative	Construction Cost	Right of Way	Permits & Environmental Mitigation	PA & ED/ PS&E	Construction Engineering	Total
1. Lane and Shoulder Widening Throughout						
1 A - 12' Lanes, 4' Paved Shoulders	\$13,500,000	\$2,400,000	\$252,000	\$2,430,000	\$2,030,000	\$20,612,000
1 B - 11' Lanes, 2' Safety Striping, 3' Paved Shoulder	\$13,700,000	\$2,400,000	\$252,000	\$2,470,000	\$2,060,000	\$20,882,000
2. Intersection Improvements						
2 A - Howland Hill Rd Roundabout	\$3,200,000	\$300,000	\$110,000	\$580,000	\$480,000	\$ 4,670,000
2 B - Norris Ave/ Harbor View Dr. Left Turn Pockets	\$1,900,000	\$300,000	\$110,000	\$340,000	\$280,000	\$ 2,930,000
2 C - Cooke St. Left Turn Pocket	\$1,500,000	\$25,000	\$85,000	\$260,000	\$220,000	\$2,090,000
2 D - Parkway Dr. Lane Elimination	\$500,000	\$25,000	\$85,000	\$90,000	\$80,000	\$780,000
3. Sight Distance Improvements						

3 A -Vertical Curve Sight Distance (2 Locations)	\$3,000,000	\$830,000	\$155,000	\$530,000	\$440,000	\$4,955,000
3 B - Lateral Sight Distance (2 Locations)	\$300,000	\$26,400	\$137,500	\$60,000	\$50,000	\$573,900
4. Sidewalk Addition between Howland Hill Road and Norris Avenue						
5' Sidewalk both side of Elk Valley Road	\$1,500,000	-	\$147,500	\$270,000	\$230,000	\$2,147,500
5. Vertical Curve Improvement north of Howland Hill Road						
Vertical Curve Sight Distance Improvements	\$700,000	\$400,000	\$137,500	\$130,000	\$110,000	\$1,477,500
6. Re-Striping Urban Stretch of Elk Valley Road						
Re-stripe existing roadway	\$120,000	-	\$5,000	\$30,000	\$20,000	\$175,000

9. COMMUNITY INVOLVEMENT

A preliminary public workshop was conducted on November 15, 2016 to inform the community of the multimodal corridor plan investigation. The information and public input can be found in Attachment G.

A second public workshop was conducted on March 14, 2017 to inform the community about the proposed alternative elements and to allow the opportunity for community members to comment on the proposed alternatives. A summary of comments received from this workshop can also be found in Attachment G.

To inform the public of these workshops, direct emailing of local officials, posting on DNLTC project website, flyers, radio advertisements, roadside banners, and newspaper ads were displayed in and around Elk Valley Road and Crescent City. After each public workshop the website was updated with the current information presented at the workshop so the public could review the information presented.

10. ENVIRONMENTAL DETERMINATION/DOCUMENT

An Environmental Constraints Overview Report was completed for the Elk Valley Road Multimodal Corridor Plan. Various potential work constraints exist along the corridor, such as fish passage migration season, non-breeding season, and summer low flow season. Three sensitive areas exist as cultural resources and collaboration with the Elk Valley Rancheria could be required. The Marbled Murrelet Critical Habitat, Jordan Creek fish passage requirements, Elk Creek summer low flow, potential Marbled Murrelet habitat, and Crescent City Plank and Turnpike Rd are all observed to have potential environmental constraints. Further alternative review will be prepared for alternative advancement. See Attachment D.

11. FUNDING

The specific funding source for this project has yet to be determined. The current federal authorization is Fixing America's Surface transportation (FAST) Act, which include Highway Safety Improvement Program (HSIP) and Congestion Mitigation & Air Quality (CMAQ). State funding options range from the Regional Transportation Improvement Program (RTIP) to the State Active Transportation Program (ATP). The purpose of this multimodal plan is to provide the County and DNLTC the needed information to program future projects to improve Elk Valley Road. Different funding sources have different application cycles, and due to Elk Valley Road's accident history, HSIP and ATP funding are two of the more likely viable funding options.

12. SCHEDULE

Milestones	Delivery Date (Month, Day, Year)
Draft Corridor Plan	4/3/2017
Final Corridor Plan	6/1/2017

Advancement of alternatives is dependent on future funding as it becomes available.

13. FHWA COORDINATION

FHWA coordination will depend on the funding type for this project. The specific funding source for this project has yet to be determined.

14. DEVELOPMENT TEAM

<u>Name</u>	<u>Title</u>	<u>Telephone</u>
Heidi Kunstal	Director Community Development, DNC	707-464-7254
Rosanna Bower	Assistant Engineer, Del Norte County	707-464-7229

Tamera Leighton	Executive Director, DN LTC	707-465-3878
Brian Stephenson	Project Engineer, Dokken Engr.	916-858-0642
Namat Hosseinion	Enviro. Coordinator, Dokken Engr.	916-858-0642
Tim Chamberlain	Assoc. Enviro. Planner, Dokken Engr.	916-274-0557

15. PROJECT REVIEWS

Del Norte Local Transportation Commission

Date _____

Del Norte County

Date _____

ATTACHMENTS:

- A Project Location Map
- B Alternatives Exhibits
- C Alternatives Cost Estimates
- D Environmental Constraints Overview Report
- E Existing Right of Way Records Sheet
- F Existing Conditions Report
- G Public Meeting Records

ATTACHMENT A:
PROJECT LOCATION MAP



V:\2273 Elk Valley Multimodal Corridor\F1_Vicinity_20160907.mxd

Source: ESRI 2008; Dokken Engineering 9/7/2016; Created By: brianm



0 5 10 15 Miles

FIGURE 1
Project Vicinity
 Elk Valley Road Corridor Project
 Del Norte County, California

ELK VALLEY ROAD

Multimodal Corridor Plan

END CORRIDOR

COOKE STREET

PARKWAY DRIVE

ELK VALLEY ROAD

US 101

AUBELL LANE

HARBOR VIEW DRIVE

NORRIS AVENUE

HOWLAND HILL DRIVE

STATE STREET

ELK VALLEY ROAD

US 101

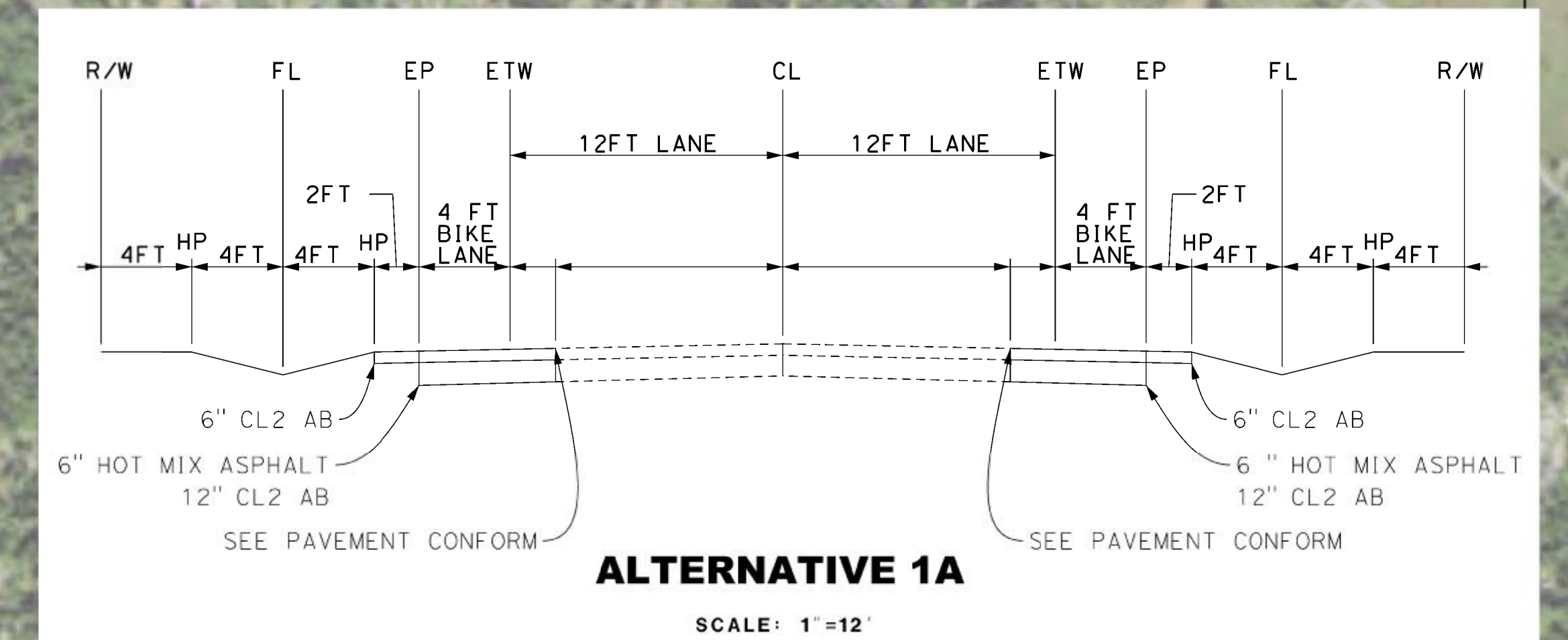
BEGIN CORRIDOR

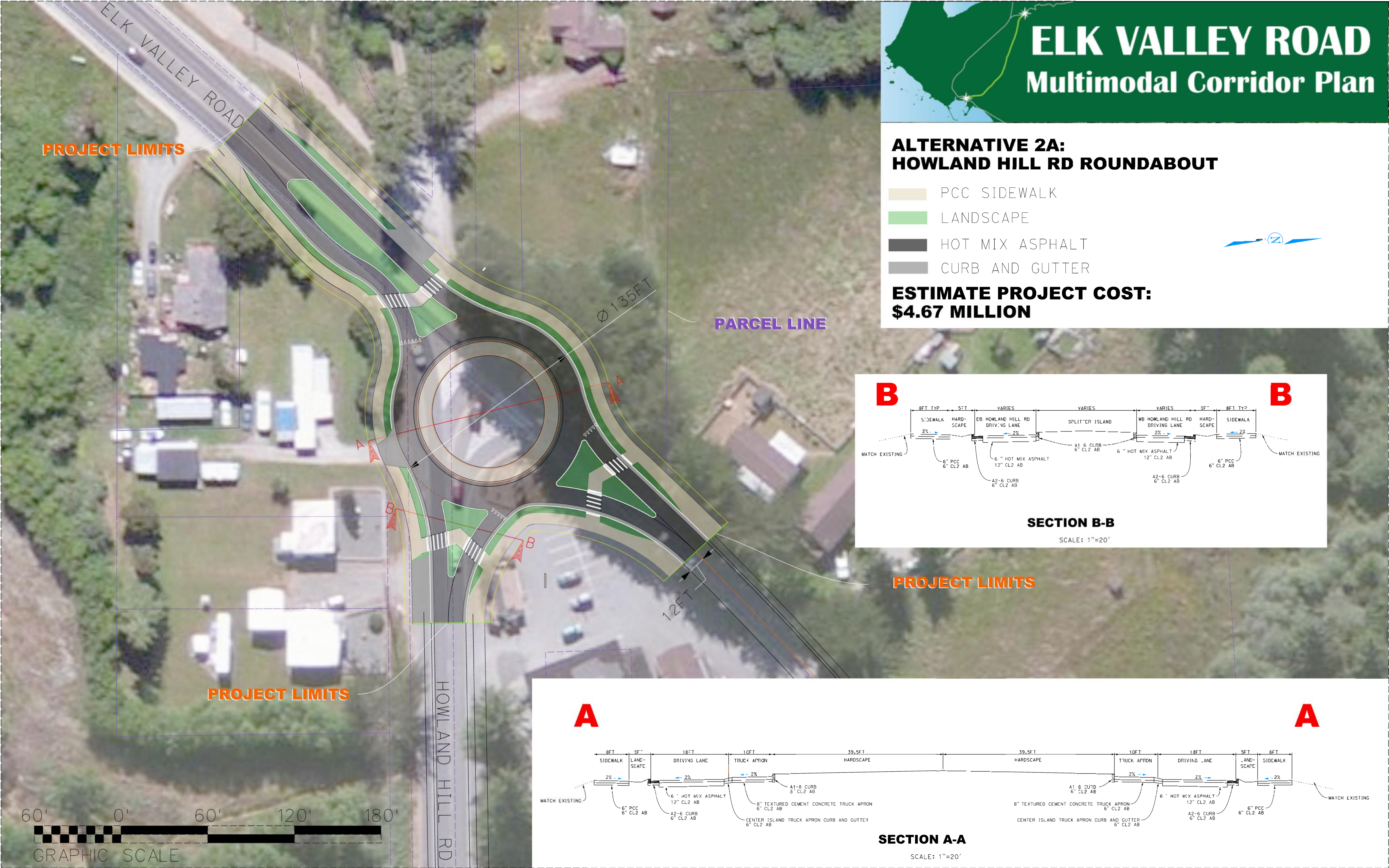
LEGEND

PARCEL WITHIN
300 FEET OF
ELK VALLEY ROAD

ELK VALLEY ROAD MULTIMODAL CORRIDOR PLAN
EXHIBIT

ATTACHMENT B:
PROJECT LOCATION MAP





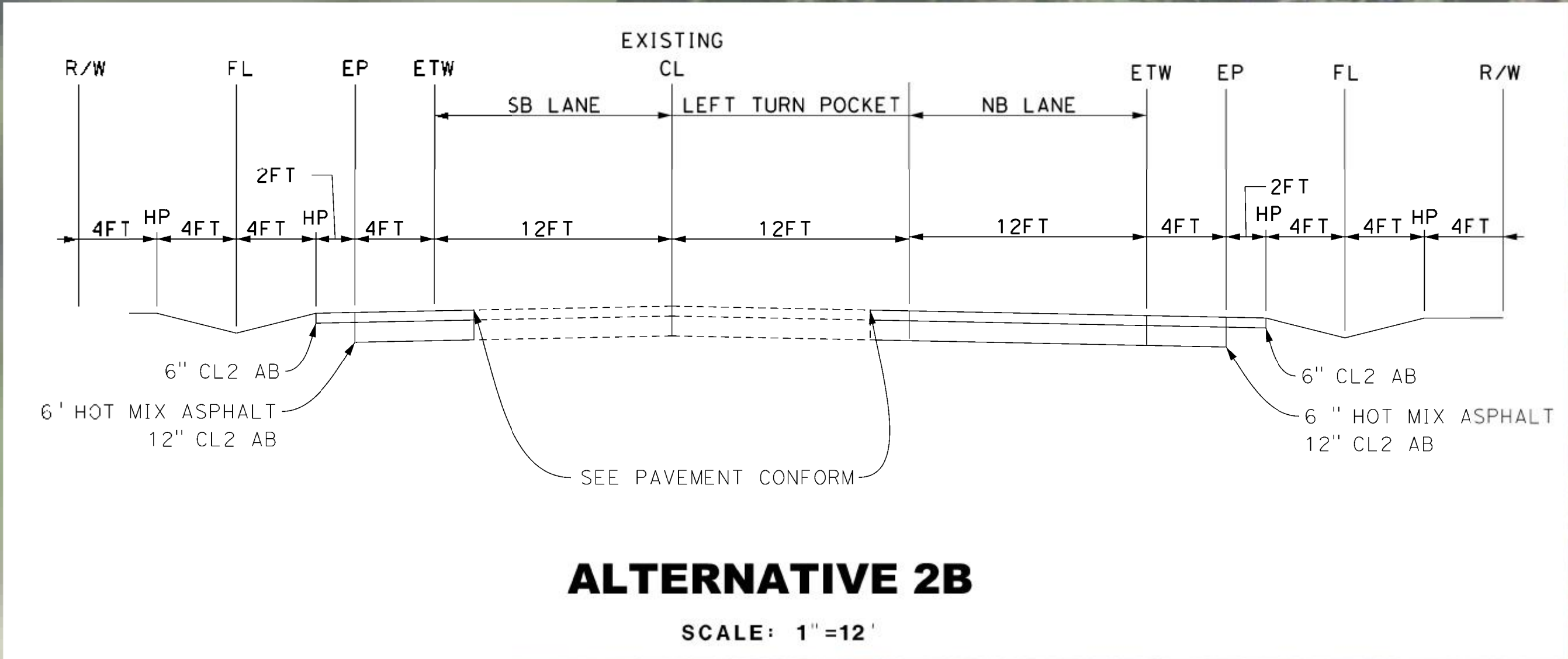
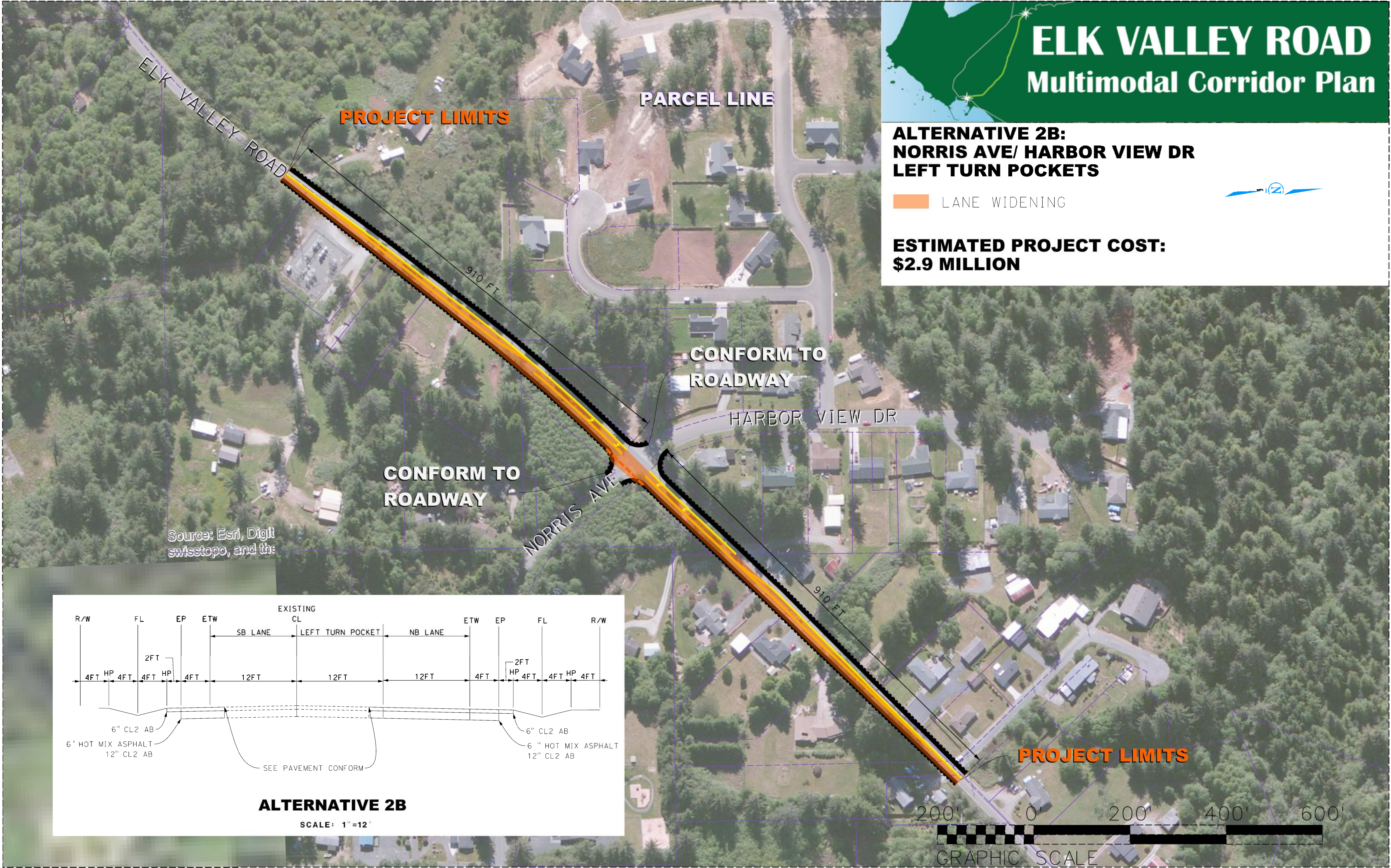
ELK VALLEY ROAD

Multimodal Corridor Plan

**ALTERNATIVE 2B:
NORRIS AVE/ HARBOR VIEW DR
LEFT TURN POCKETS**

LANE WIDENING

**ESTIMATED PROJECT COST:
\$2.9 MILLION**





ELK VALLEY ROAD

Multimodal Corridor Plan

ALTERNATIVE 2C: COOKE STREET LEFT TURN POCKET

LANE WIDENING

**ESTIMATED PROJECT COST:
\$2.2 MILLION**

PROJECT LIMIT

RIGHT OF WAY

PARCEL LINE

COOKE STREET

910 FT

PROPOSED RIGHT OF WAY

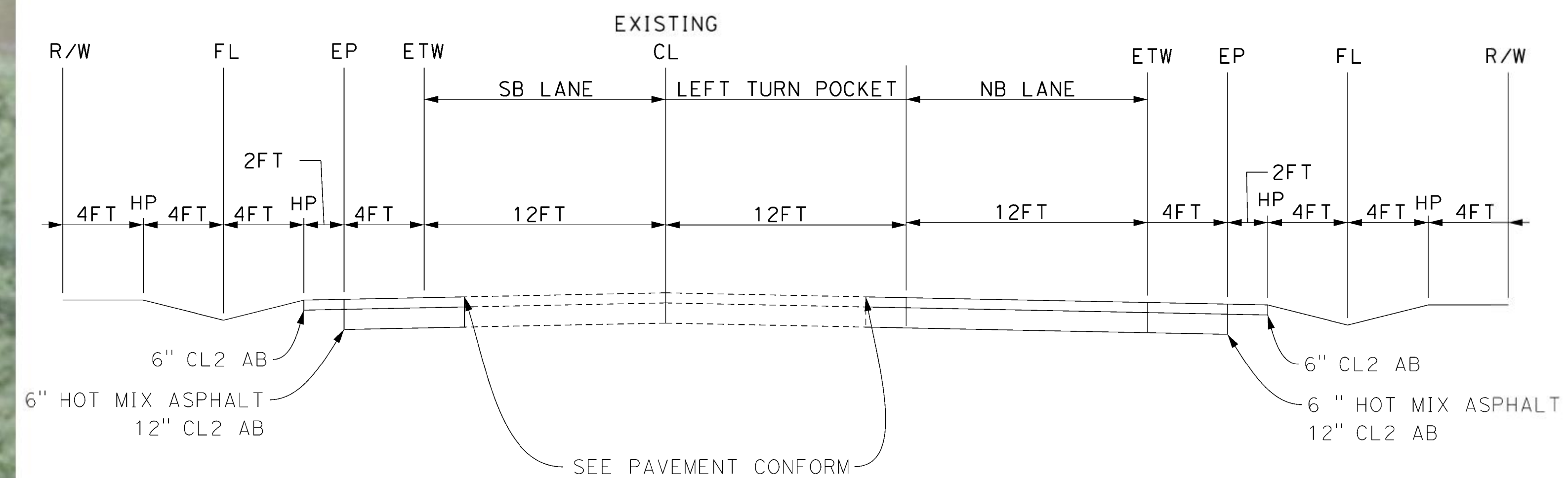
RIGHT OF WAY

CONFORM TO DRIVEWAY

542 FT

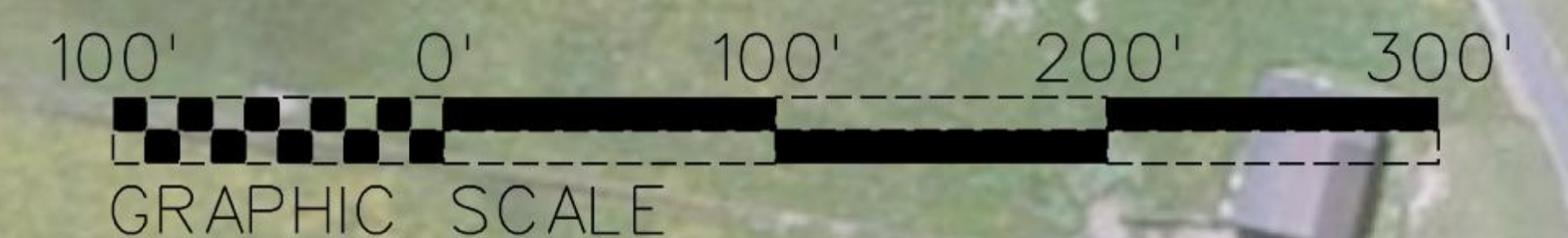
PROJECT LIMIT

PARCEL LINE



ALTERNATIVE 2C

SCALE: 1"=10'

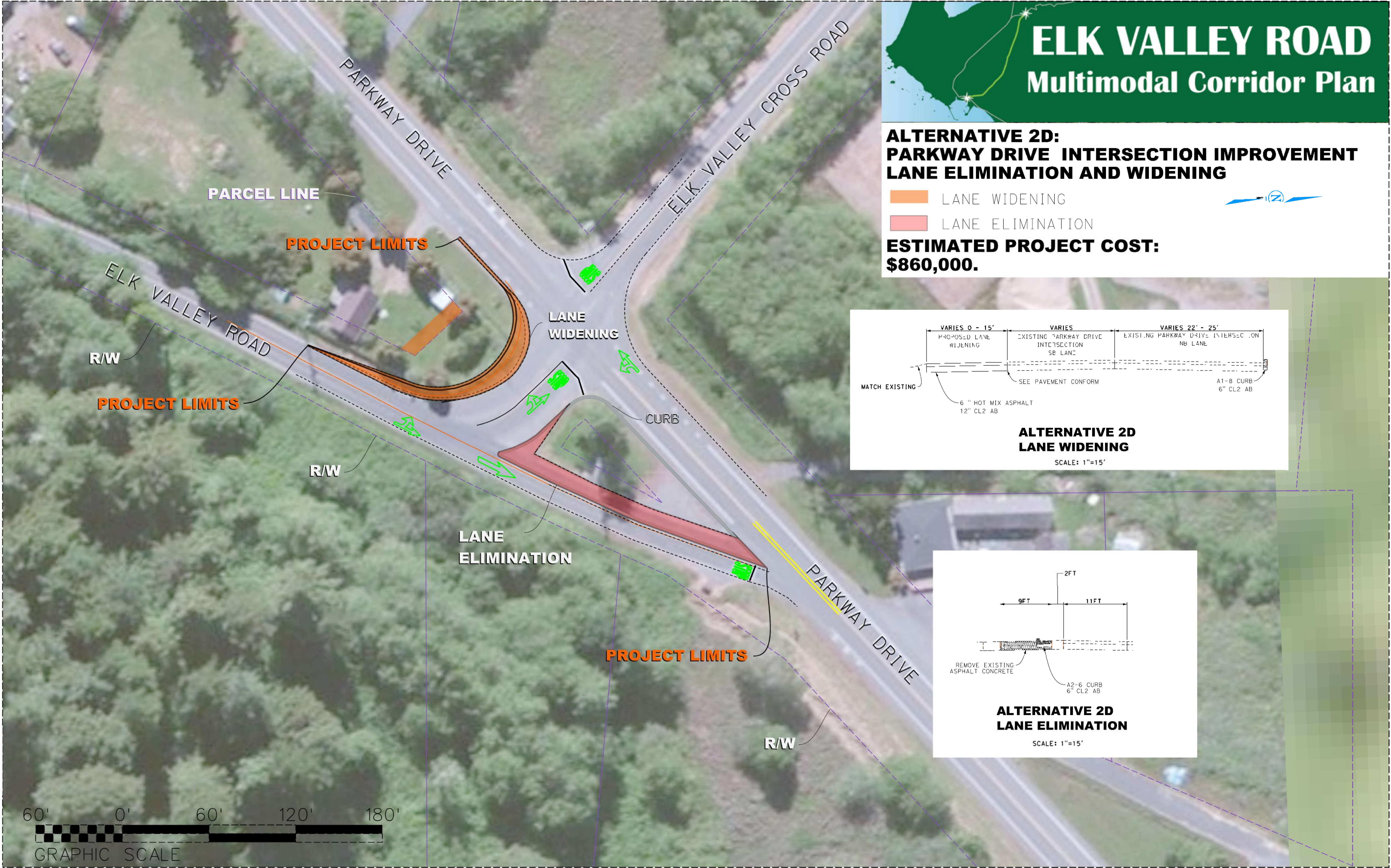
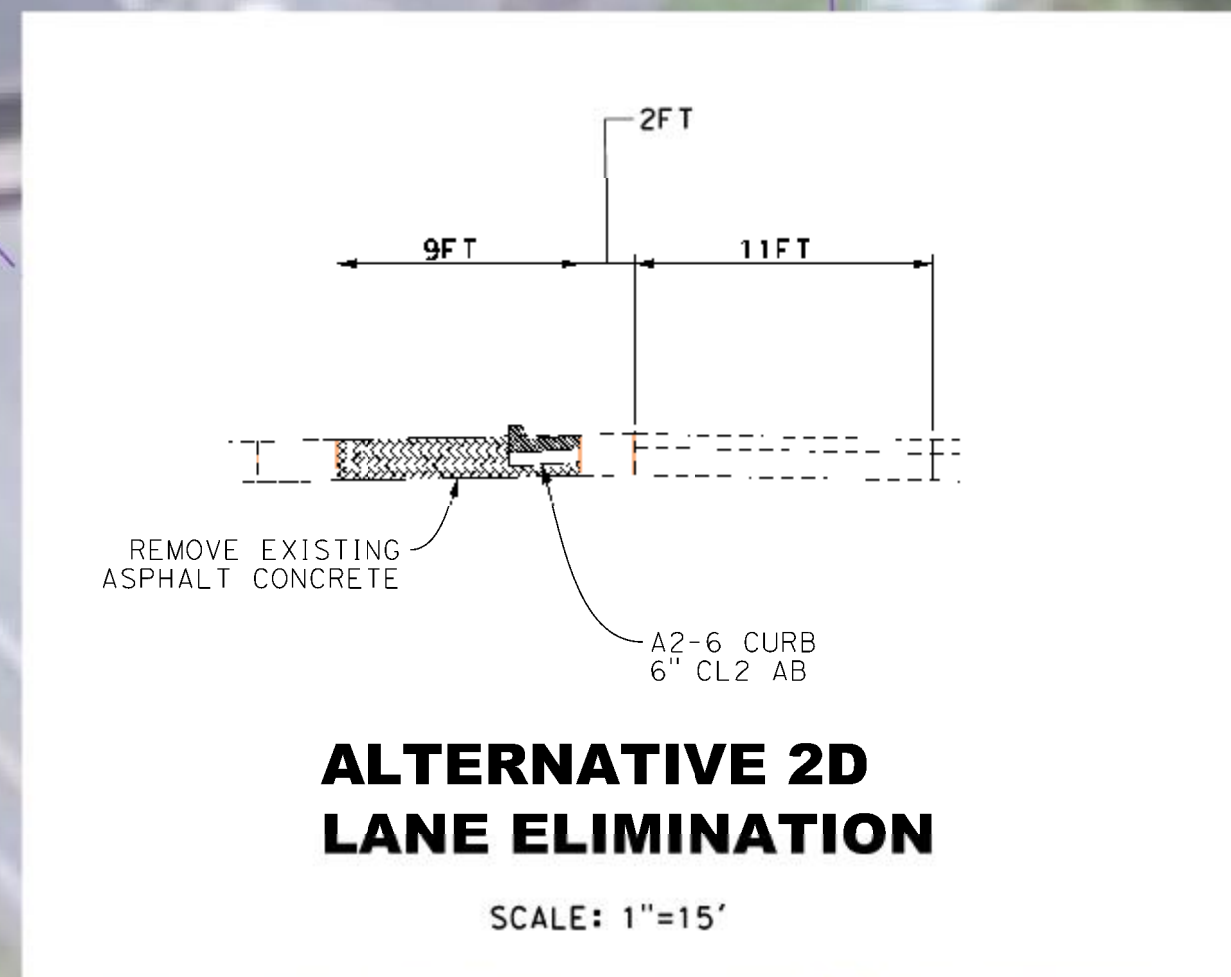
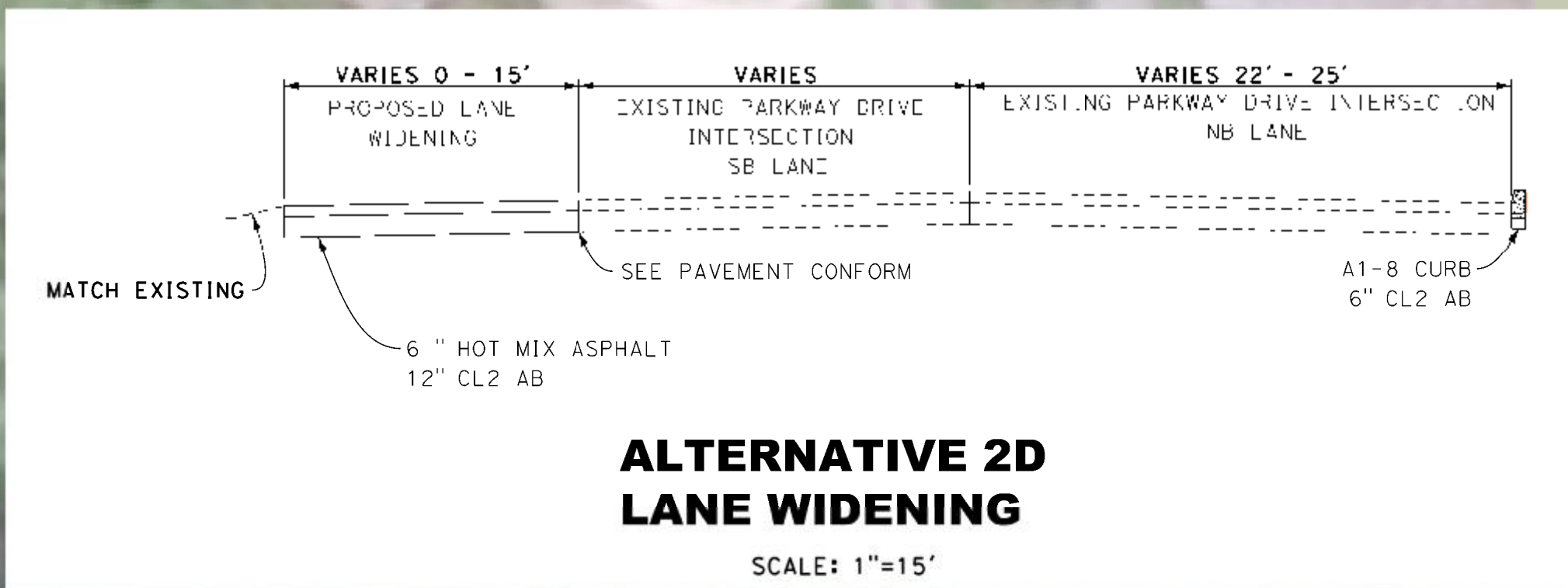


ELK VALLEY ROAD Multimodal Corridor Plan

ALTERNATIVE 2D: PARKWAY DRIVE INTERSECTION IMPROVEMENT LANE ELIMINATION AND WIDENING

- LANE WIDENING
- LANE ELIMINATION

**ESTIMATED PROJECT COST:
\$860,000.**



ELK VALLEY ROAD

Multimodal Corridor Plan

ALTERNATIVE 3A/B: A. VERTICAL CURVE CORRECTIONS B. LATERAL SIGHT DISTANCE CORRECTIONS*

- EXISTING CENTERLINE OF ELK VALLEY ROAD CORRIDOR
- VERTICAL CURVE (3A)
- HORIZONTAL CURVE (3B)



ESTIMATED PROJECT COST:
ALTERNATIVE 3A \$5 MILLION
ALTERNATIVE 3B \$650,000.

* WIDENING OF CLEAR SHOULDER AREA ONLY - NO PAVEMENT WORK

PARCEL LINE

VERTICAL CURVE 1

HOWLAND HILL ROAD

NORRIS AVE

HARBOR VIEW DR

STEEPS LN

AUBEL LN

E. JEFFERSON ST

HORIZONTAL CURVE 1

PARKWAY DR

CHURCH TREE RD

COOKE ST

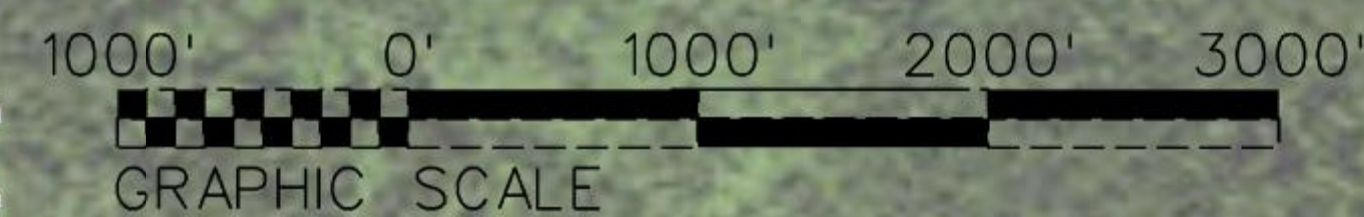
CLYDE ST

HORIZONTAL CURVE 2

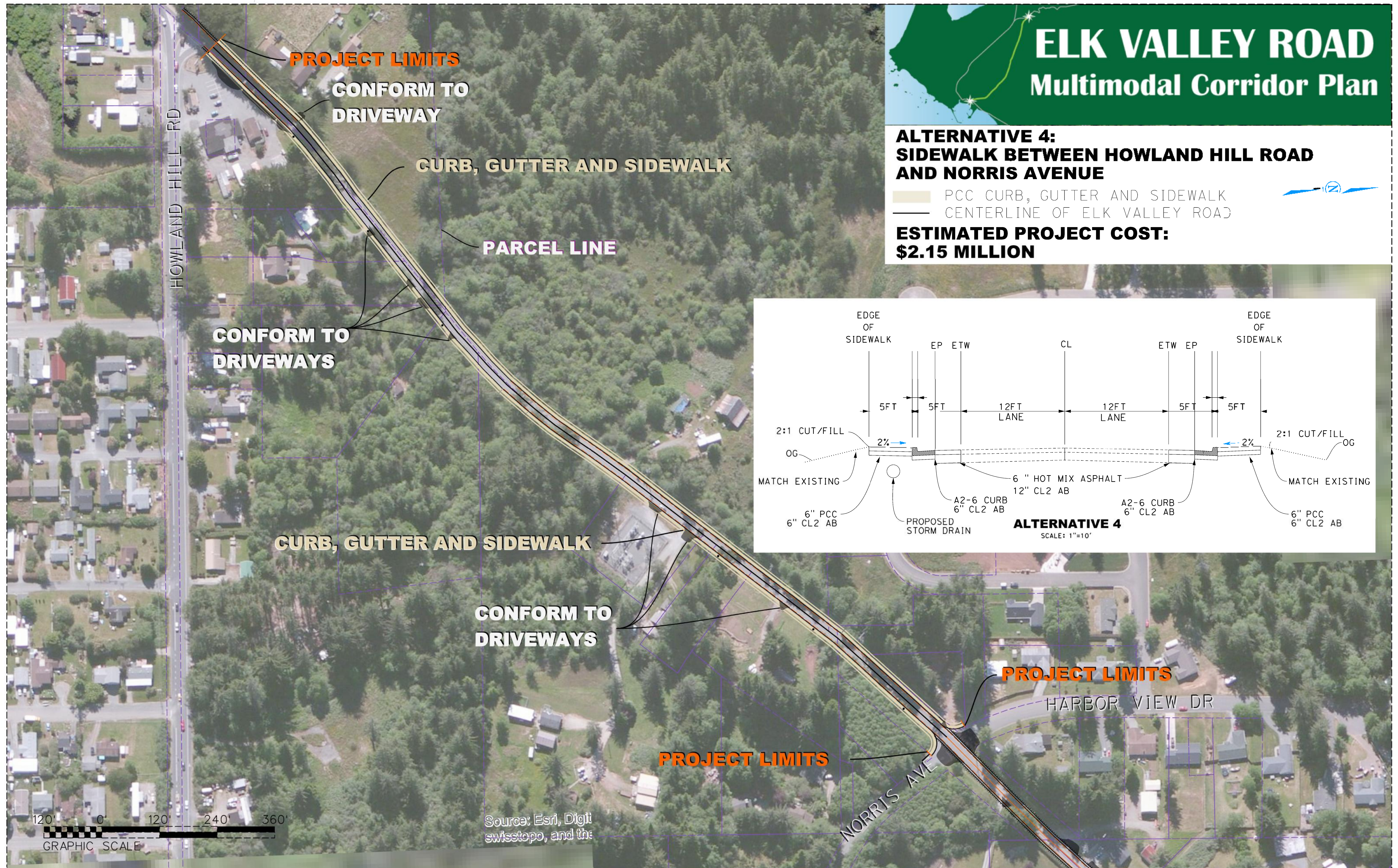
VERTICAL CURVE 2

VERTICAL CURVE 3

PARCEL DELINEATIONS



Source: Esri, DigitalGlobe, GeoEye, Earthstar, and the GIS User Community



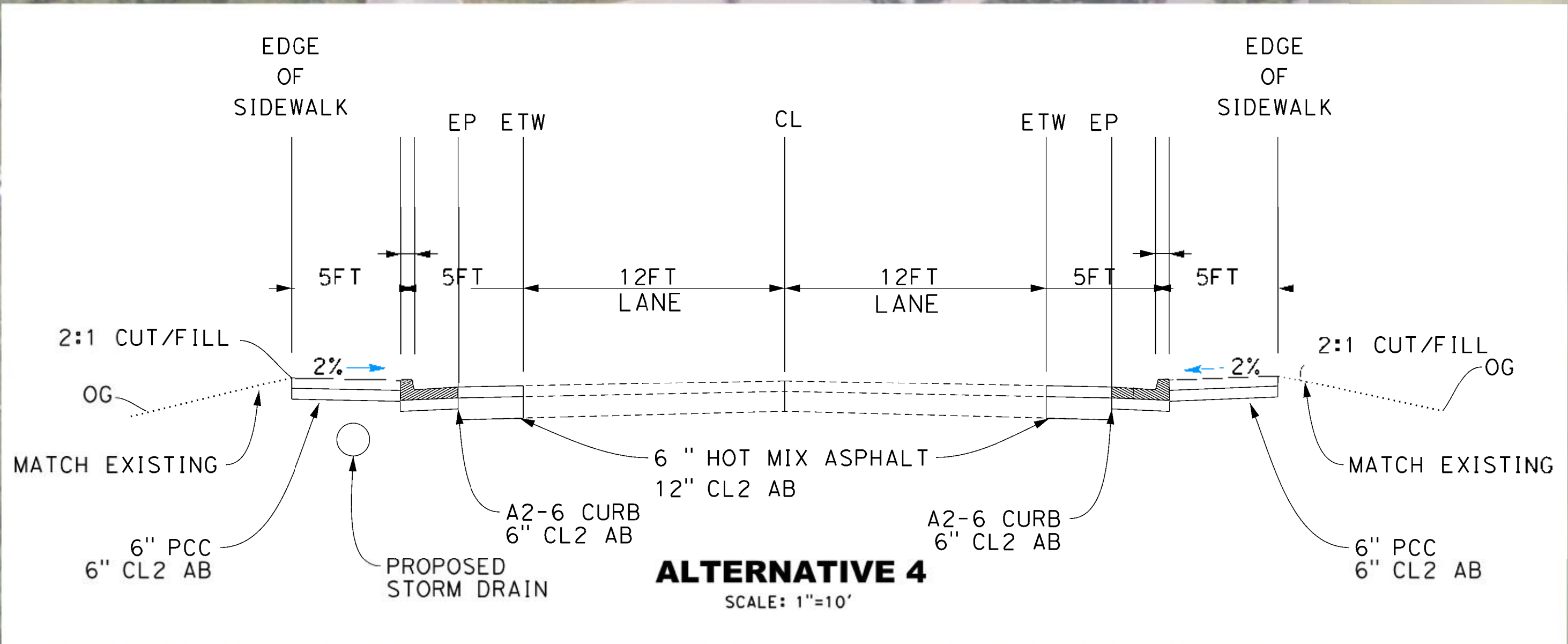
ELK VALLEY ROAD

Multimodal Corridor Plan

ALTERNATIVE 4: SIDEWALK BETWEEN HOWLAND HILL ROAD AND NORRIS AVENUE

— PCC CURB, GUTTER AND SIDEWALK
— CENTERLINE OF ELK VALLEY ROAD

**ESTIMATED PROJECT COST:
\$2.15 MILLION**

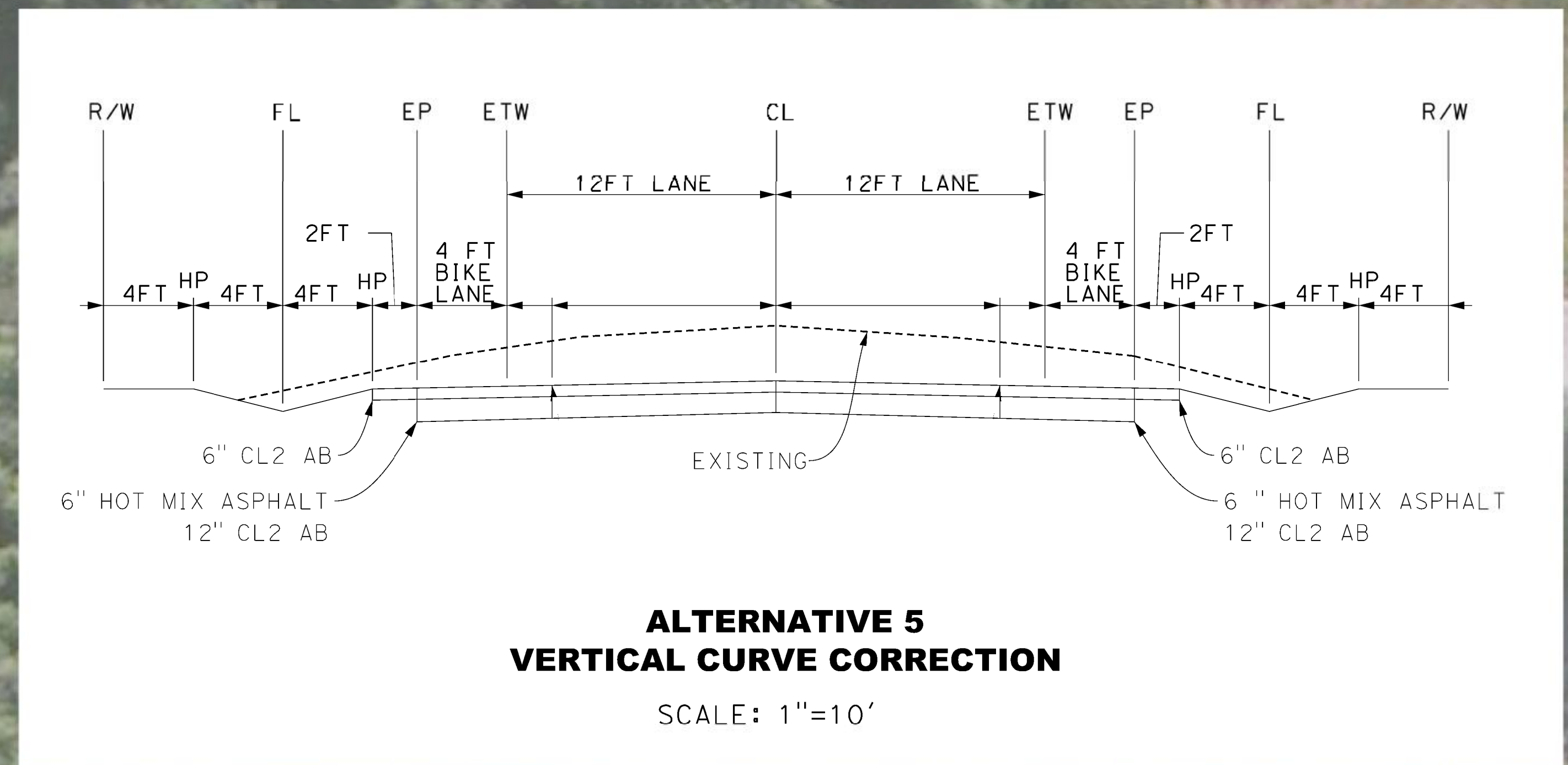
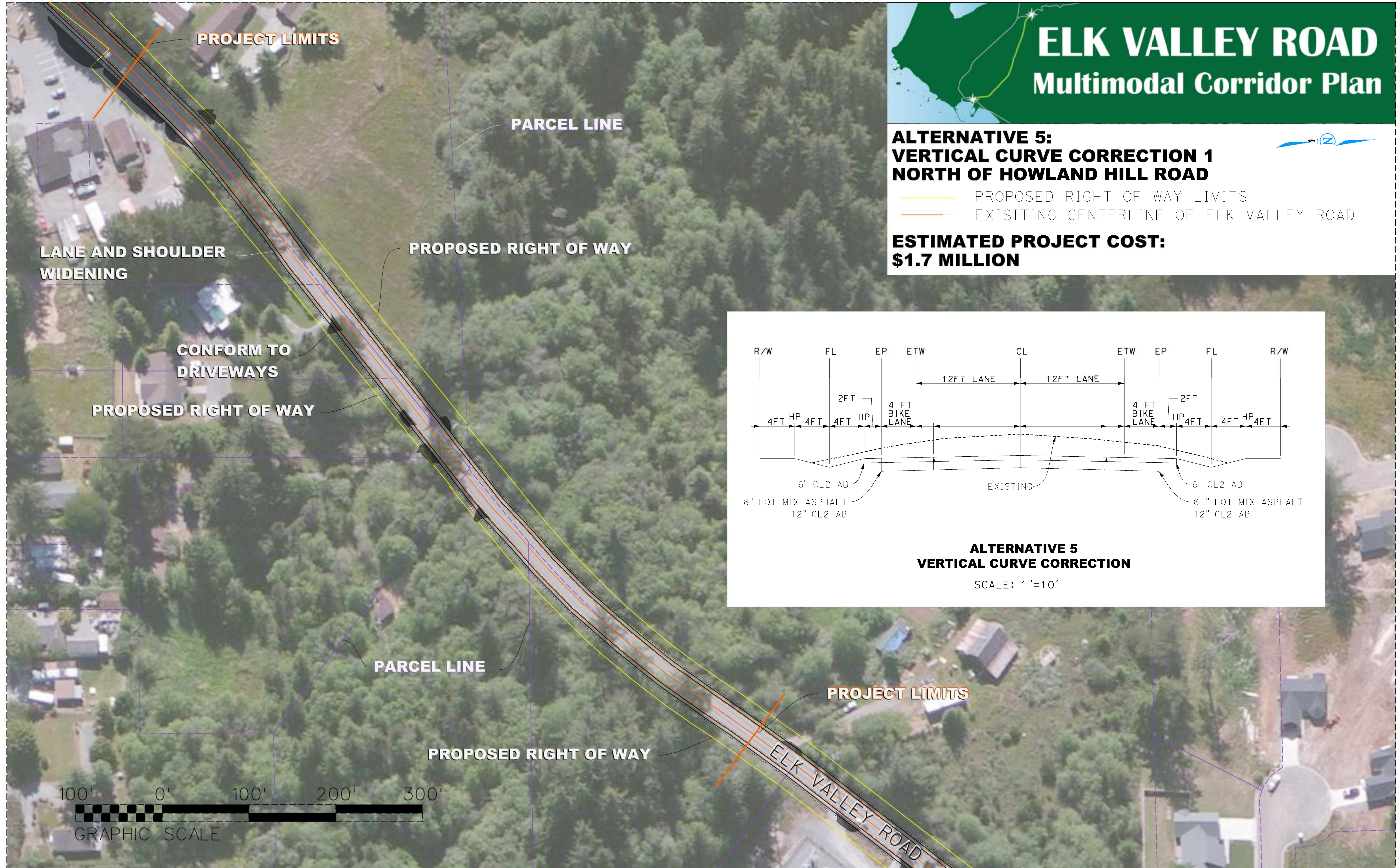


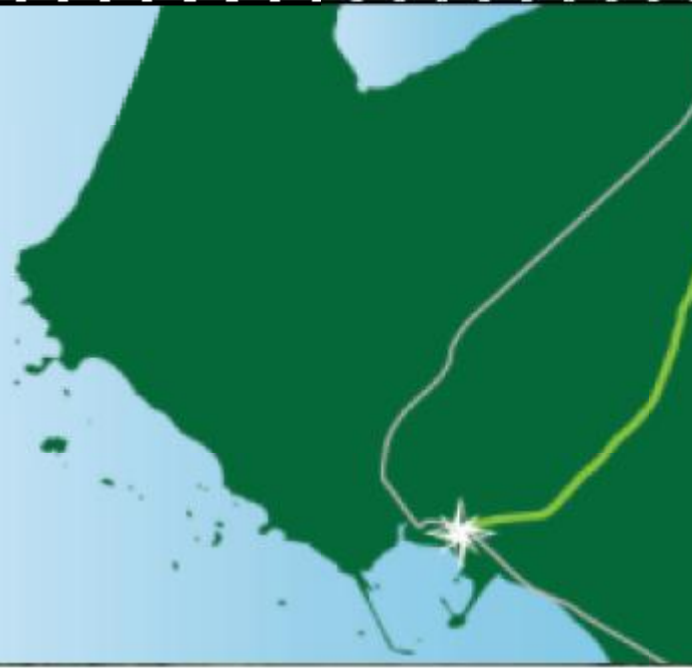
ELK VALLEY ROAD Multimodal Corridor Plan

ALTERNATIVE 5: VERTICAL CURVE CORRECTION 1 NORTH OF HOWLAND HILL ROAD

— PROPOSED RIGHT OF WAY LIMITS
— EXISTING CENTERLINE OF ELK VALLEY ROAD

**ESTIMATED PROJECT COST:
\$1.7 MILLION**





ELK VALLEY ROAD

Multimodal Corridor Plan

**ALTERNATIVE 6:
RE-STRIPING OF URBAN STRETCH
OF ELK VALLEY ROAD**



— EXISTING CENTERLINE OF ELK VALLEY ROAD CORRIDOR

**ESTIMATED PROJECT COST:
\$175,000.**

PROJECT LIMITS

PROJECT LIMITS

ATTACHMENT C:
ALTERNATIVE COST
ESTIMATES

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from Howland Hill Dr to Parkway Drive

Project Description: Widen roadway to have 12' Lanes, 4' Paved Shoulders and 2' graded soft shoulder

Scope :

Alternative : Alternative #1A

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 11,664,500	\$ 13,417,007
TOTAL STRUCTURES COST	\$ 66,000	\$ 75,916
SUBTOTAL CONSTRUCTION COST	\$ 11,730,500	\$ 13,492,923
TOTAL RIGHT OF WAY COST	\$ 2,396,268	\$ 2,396,268
TOTAL CAPITAL OUTLAY COSTS	\$ 14,127,000	\$ 15,890,000
PR/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 14,150,000	\$ 15,900,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 522

Estimated Mid-Point of Construction (Month/Year) 6 / 2023

Estimated Construction End (Month/Year) 10 / 2024

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	6/1/2018
PA/ED Approval	10/1/2020
PS&E	10/1/2021
RTL	1/1/2022
Begin Construction	6/1/2022

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project
Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 969,200
2	Pavement Structural Section	\$ 2,227,800
3	Drainage	\$ 902,000
4	Specialty Items	\$ 822,800
5	Environmental	\$ 523,100
6	Traffic Items	\$ 470,600
7	Detours	\$ -
8	Minor Items	\$ 591,600
9	Roadway Mobilization	\$ 650,800
10	Supplemental Work	\$ 310,300
11	State Furnished	\$ 295,300.00
12	Time-Related Overhead	\$ 656,900.00
13	Roadway Contingency	\$ 3,244,100.00
TOTAL ROADWAY ITEMS		\$ 11,664,500

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	16,515	x	35.00	= \$	578,025
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY	5,287	x	70.00	= \$	370,090
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	21,000.00	= \$	21,000
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					-

TOTAL EARTHWORK SECTION ITEMS	\$	969,200
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	9,987	x	120.00	= \$	1,198,440
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		= \$	-
260203	Class 2 Aggregate Base	CY	11,330	x	90.00	= \$	1,019,700
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY		x		= \$	-
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF		x		= \$	-
150771	Remove Asphalt Concrete Dike	LF		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
153130	Remove Concrete	LF	87	x	60.00	= \$	5,220
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
731504	Minor Concrete (Curb and Gutter)	LF	87	x	50.00	= \$	4,350

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	2,227,800
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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost
150809	Remove Culvert	EA/LF	2,725	x	70.00	= \$	190,750
152604	Modify Inlet	EA	11	x	2,000.00	= \$	22,000
155232	Sand Backfill	CY		x		= \$	-
15020X	Abandon Culvert	EA/LF		x		= \$	-
152430	Adjust Inlet	LF		x		= \$	-
155003	Cap Inlet	EA		x		= \$	-
510501	Minor Concrete	LS		x		= \$	-
510502	Minor Concrete (Minor Structure)	CY		x		= \$	-
510092	Structural Concrete, Headwall	CY	2	x	2,000.00	= \$	4,000
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		= \$	-
941107	18" Plastic Pipe	LF	2,725	x	250.00	= \$	681,250
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		= \$	-
69011X	XX" Corrugated Steel Pipe Downdrain (0.XXX" Thi	LF		x		= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		= \$	-
7050XX	XX" Steel Flared End Section	EA		x		= \$	-
703233	Grated Line Drain	LF		x		= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		= \$	-
721420	Concrete (Ditch Lining)	CY		x		= \$	-
721430	Concrete (Channel Lining)	CY		x		= \$	-
750001	Miscellaneous Iron and Steel	LB		x		= \$	-
150821	Remove Headwall	LS	1	x	4,000.00	= \$	4,000

TOTAL DRAINAGE ITEMS	\$	902,000
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS	1	x	2,500.00	= \$	2,500
582001	Sound Wall (Masonry Block)	SQFT		x		= \$	-
510530	Minor Concrete (Wall)			x		= \$	-
15325X	Remove Sound Wall	LF/LS		x		= \$	-
070030	Lead Compliance Plan	LS	1	x	10,000.00	= \$	10,000
141120	Treated Wood Waste	LB		x		= \$	-
153221	Remove Concrete Barrier	LF		x		= \$	-
150662	Remove Metal Beam Guard Railing	LF	250	x	10.00	= \$	2,500
150668	Remove Flared End Section	EA		x		= \$	-
8000XX	Chain Link Fence (Type XX)	LF		x		= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		= \$	-
832001	Metal Beam Guard Railing	LF		x		= \$	-
839301	Single Thrie Beam Barrier	LF		x		= \$	-
839310	Double Thrie Beam Barrier	LF		x		= \$	-
839521	Cable Railing	LF		x		= \$	-
839536	Type SRT-31 Terminal System	EA	4	x	3,500.00	= \$	14,000
839585	Alternative Flared Terminal System	EA		x		= \$	-
839584	Alternative In-line Terminal System	EA		x		= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		= \$	-
839XXX	Crash Cushion (Insert Type)	EA		x		= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		= \$	-
510060	Structural Concrete, Retaining Wall	CY		x		= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		= \$	-
511035	Architectural Treatment	SQFT		x		= \$	-
598001	Anti-Graffiti Coating	SQFT		x		= \$	-
203070	Rock Stain	SQFT		x		= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		= \$	-
83954X	Transition Railing (Type X)	EA		x		= \$	-
597601	Prepare and Stain Concrete	SQFT		x		= \$	-
839561	Rail Tensioning Assembly	EA		x		= \$	-
83958X	End Anchor Assembly (Type X)	EA		x		= \$	-
XXXXXX	Relocate Utility Pole	EA	78	x	10,000.00	= \$	780,000
152390	Relocate Mailbox	EA	55	x	250.00	= \$	13,750

TOTAL SPECIALTY ITEMS	\$	822,800
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
141000 Temporary Reinforced Silt Fence	LF	17,845	x 5.00 = \$	89,225
160120 Temporary Fence (Type ESA)	EA	336	x 250.00 = \$	84,000
Remove Tree				
Subtotal Environmental Mitigation				\$ 173,225

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend A Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	294434	x \$ 0.31 = \$	91,275
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 91,275

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	x 6,000.00 = \$	6,000
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	1	x 15,000.00 = \$	15,000
130330 Storm Water Annual Report	EA	3	x 2,000.00 = \$	6,000
130310 Rain Event Action Plan (REAP)	EA	12	x 550.00 = \$	6,600
130320 Storm Water Sampling and Analysis Day	EA	12	x 575.00 = \$	6,900
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	294,434	x 0.31 = \$	91,275
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	6	x 1,500.00 = \$	9,000
130640 Temporary Fiber Roll	LF	17,845	x 4.50 = \$	80,303
130900 Temporary Concrete Washout	EA	2	x 2,500.00 = \$	5,000
130710 Temporary Construction Entrance	EA	2	x 3,725.00 = \$	7,450
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	1	x 25,000.00 = \$	25,000
Subtotal NPDES				\$ 258,527

Supplemental Work for NPDES

066595 Water Pollution Control Maintenance Sharing*	LS	1	x 10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	x 10,000.00 = \$	10,000
066597 Storm Water Sampling and Analysis***	LS	1	x 10,000.00 = \$	10,000
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NDPS				\$ 30,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 523,100

SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	17,845	x 9.25 = \$	165,066
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	26	x 500.00 = \$	13,000
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	71,378	x 2.50 = \$	178,445
846012 Thermoplastic Crosswalk and Pavement Marking (T)	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	x 5,000.00 = \$	5,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 361,511

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	6	x \$ 1,500 = \$	9,000
Subtotal Traffic Management Plan				\$ 9,000

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	x 100,000.00 = \$	100,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 100,000

TOTAL TRAFFIC ITEMS	\$ 470,600
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 5,915,500

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items

1.0% \$ 59,155

8B - Bike Path Items

Bike Path Items

1.0% \$ 59,155

8C - Other Minor Items

Other Minor Items

8.0% \$ 473,240

Total of Section 1-7 \$ 5,915,500 x 10.0% = \$ 591,550

TOTAL MINOR ITEMS \$ 591,600**SECTIONS 9: MOBILIZATION**

Item code

999990

Total Section 1-8

\$ 6,507,100 x 10% = \$ 650,710

TOTAL MOBILIZATION \$ 650,800**SECTION 10: SUPPLEMENTAL WORK**

Item code

066670

Payment Adjustments For Price Index
Fluctuations

Unit

LS

Quantity

Unit Price (\$)

x

= \$

Cost

-

066094

Value Analysis

LS

1

x

10,000.00

= \$

10,000

066070

Maintain Traffic

LS

1

x

10,000.00

= \$

10,000

066919

Dispute Resolution Board

LS

x

= \$

-

066921

Dispute Resolution Advisor

LS

x

= \$

-

066015

Federal Trainee Program

LS

x

= \$

-

066610

Partnering

LS

x

= \$

-

066204

Remove Rock and Debris

LS

x

= \$

-

066222

Locate Existing Crossover

LS

x

= \$

-

XXXXXX

Some Item

Unit

x

= \$

-

Cost of NPDES Supplemental Work specified in Section 5D = \$ 30,000

Total Section 1-8 \$ 6,507,100 4% = \$ 260,284

TOTAL SUPPLEMENTAL WORK \$ 310,300

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	1	x	10,000.00	=	\$10,000
066063	Traffic Management Plan - Public Information	LS	1	x	10,000.00	=	\$10,000
066901	Water Expenses	LS	1	x	10,000.00	=	\$10,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	5,000.00	=	\$5,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	6,507,100		4%	= \$	260,284

TOTAL STATE FURNISHED	\$295,300
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$6,568,700 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency) \$7,829,500 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	522	X	\$1,258	=	\$656,900

TOTAL TIME-RELATED OVERHEAD	\$656,900
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 8,110,100 x **40%** = \$3,244,040

TOTAL CONTINGENCY	\$3,244,100
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II. STRUCTURE ITEMS**Bridge 1**

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Bridge Name	Elk Valley Rd over Jordan Creek	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	Widening Concrete Slab	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	10 LF	0 LF	0 LF
Total Bridge Length (Feet)	20 LF	0 LF	0 LF
Total Area (Square Feet)	200 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	1 LF	0 LF	0 LF
Footing Type (pile or spread)	Spread	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$220	\$0	\$0
COST OF EACH	\$44,000	\$0	\$0

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100	\$0	\$0
COST OF EACH	\$0	\$0	\$0

TOTAL COST OF BRIDGES	\$44,000
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$4,400
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	40%	\$17,600
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TOTAL COST OF STRUCTURES	\$66,000
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	2,346,268
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	50,000

L)	TOTAL RIGHT OF WAY ESTIMATE	\$2,396,268
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M)	TOTAL R/W ESTIMATE: Escalated	\$2,396,268
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$14,127,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from Howland Hill Dr to Parkway Drive

Project Description: Widen roadway to have 2' safety striping, 3' paved shoulder, and 2' soft shoulder on each side of the corridor for 3.4 miles

Scope :

Alternative : Alternative #1B - 11' Lanes, 2' Safety Striping, 3' Paved Shoulder

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 11,840,400	\$ 13,619,335
TOTAL STRUCTURES COST	\$ 66,000	\$ 75,916
SUBTOTAL CONSTRUCTION COST	\$ 11,906,400	\$ 13,695,251
TOTAL RIGHT OF WAY COST	\$ 2,396,268	\$ 2,396,268
TOTAL CAPITAL OUTLAY COSTS	\$ 14,303,000	\$ 16,092,000
PR/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 14,350,000	\$ 16,100,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 522

Estimated Mid-Point of Construction (Month/Year) 6 / 2023

Estimated Construction End (Month/Year) 10 / 2024

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	6/1/2018
PA/ED Approval	10/1/2020
PS&E	10/1/2021
RTL	1/1/2022
Begin Construction	6/1/2022

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project
Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 969,200
2	Pavement Structural Section	\$ 2,227,800
3	Drainage	\$ 902,000
4	Specialty Items	\$ 822,800
5	Environmental	\$ 523,100
6	Traffic Items	\$ 560,600
7	Detours	\$ -
8	Minor Items	\$ 600,600
9	Roadway Mobilization	\$ 660,700
10	Supplemental Work	\$ 314,300
11	State Furnished	\$ 299,300.00
12	Time-Related Overhead	\$ 666,800.00
13	Roadway Contingency	\$ 3,293,200.00
TOTAL ROADWAY ITEMS		\$ 11,840,400

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	16,515	x	35.00	= \$	578,025
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY	5,287	x	70.00	= \$	370,090
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	21,000.00	= \$	21,000
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					-

TOTAL EARTHWORK SECTION ITEMS	\$	969,200
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	9,987	x	120.00	= \$	1,198,440
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		= \$	-
260203	Class 2 Aggregate Base	CY	11,330	x	90.00	= \$	1,019,700
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY		x		= \$	-
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF		x		= \$	-
150771	Remove Asphalt Concrete Dike	LF		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
153130	Remove Concrete	LF	87	x	60.00	= \$	5,220
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
731504	Minor Concrete (Curb and Gutter)	LF	87	x	50.00	= \$	4,350

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	2,227,800
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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost
150809	Remove Culvert	EA/LF	2,725	x	70.00	= \$	190,750
152604	Modify Inlet	EA	11	x	2,000.00	= \$	22,000
155232	Sand Backfill	CY		x		= \$	-
15020X	Abandon Culvert	EA/LF		x		= \$	-
152430	Adjust Inlet	LF		x		= \$	-
155003	Cap Inlet	EA		x		= \$	-
510501	Minor Concrete	LS		x		= \$	-
510502	Minor Concrete (Minor Structure)	CY		x		= \$	-
510092	Structural Concrete, Headwall	CY	2	x	2,000.00	= \$	4,000
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		= \$	-
941107	18" Plastic Pipe	LF	2,725	x	250.00	= \$	681,250
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		= \$	-
69011X	XX" Corrugated Steel Pipe Downdrain (0.XXX" Thi	LF		x		= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		= \$	-
7050XX	XX" Steel Flared End Section	EA		x		= \$	-
703233	Grated Line Drain	LF		x		= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		= \$	-
721420	Concrete (Ditch Lining)	CY		x		= \$	-
721430	Concrete (Channel Lining)	CY		x		= \$	-
750001	Miscellaneous Iron and Steel	LB		x		= \$	-
150821	Remove Headwall	LS	1	x	4,000.00	= \$	4,000

TOTAL DRAINAGE ITEMS	\$	902,000
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS	1	x	2,500.00	= \$	2,500
582001	Sound Wall (Masonry Block)	SQFT		x		= \$	-
510530	Minor Concrete (Wall)			x		= \$	-
15325X	Remove Sound Wall	LF/LS		x		= \$	-
070030	Lead Compliance Plan	LS	1	x	10,000.00	= \$	10,000
141120	Treated Wood Waste	LB		x		= \$	-
153221	Remove Concrete Barrier	LF		x		= \$	-
150662	Remove Metal Beam Guard Railing	LF	250	x	10.00	= \$	2,500
150668	Remove Flared End Section	EA		x		= \$	-
8000XX	Chain Link Fence (Type XX)	LF		x		= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		= \$	-
832001	Metal Beam Guard Railing	LF		x		= \$	-
839301	Single Thrie Beam Barrier	LF		x		= \$	-
839310	Double Thrie Beam Barrier	LF		x		= \$	-
839521	Cable Railing	LF		x		= \$	-
839536	Type SRT-31 Terminal System	EA	4	x	3,500.00	= \$	14,000
839585	Alternative Flared Terminal System	EA		x		= \$	-
839584	Alternative In-line Terminal System	EA		x		= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		= \$	-
839XXX	Crash Cushion (Insert Type)	EA		x		= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		= \$	-
510060	Structural Concrete, Retaining Wall	CY		x		= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		= \$	-
511035	Architectural Treatment	SQFT		x		= \$	-
598001	Anti-Graffiti Coating	SQFT		x		= \$	-
203070	Rock Stain	SQFT		x		= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		= \$	-
83954X	Transition Railing (Type X)	EA		x		= \$	-
597601	Prepare and Stain Concrete	SQFT		x		= \$	-
839561	Rail Tensioning Assembly	EA		x		= \$	-
83958X	End Anchor Assembly (Type X)	EA		x		= \$	-
XXXXXX	Relocate Utility Pole	EA	78	x	10,000.00	= \$	780,000
152390	Relocate Mailbox	EA	55	x	250.00	= \$	13,750

TOTAL SPECIALTY ITEMS	\$	822,800
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
141000 Temporary Reinforced Silt Fence	LF	17,845	x 5.00 = \$	89,225
160120 Temporary Fence (Type ESA)	EA	336	x 250.00 = \$	84,000
Remove Tree				
Subtotal Environmental Mitigation				\$ 173,225

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend A Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	294434	x \$ 0.31 = \$	91,275
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 91,275

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	x 6,000.00 = \$	6,000
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	1	x 15,000.00 = \$	15,000
130330 Storm Water Annual Report	EA	3	x 2,000.00 = \$	6,000
130310 Rain Event Action Plan (REAP)	EA	12	x 550.00 = \$	6,600
130320 Storm Water Sampling and Analysis Day	EA	12	x 575.00 = \$	6,900
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	294,434	x 0.31 = \$	91,275
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	6	x 1,500.00 = \$	9,000
130640 Temporary Fiber Roll	LF	17,845	x 4.50 = \$	80,303
130900 Temporary Concrete Washout	EA	2	x 2,500.00 = \$	5,000
130710 Temporary Construction Entrance	EA	2	x 3,725.00 = \$	7,450
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	1	x 25,000.00 = \$	25,000
Subtotal NPDES				\$ 258,527

Supplemental Work for NPDES

066595 Water Pollution Control Maintenance Sharing*	LS	1	x 10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	x 10,000.00 = \$	10,000
066597 Storm Water Sampling and Analysis***	LS	1	x 10,000.00 = \$	10,000
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NDPS				\$ 30,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 523,100

SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	17,845	x 9.25	= \$ 165,066
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	26	x 500.00	= \$ 13,000
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	71,378	x 2.50	= \$ 268,445
846012 Thermoplastic Crosswalk and Pavement Marking (T)	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	x 5,000.00	= \$ 5,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 451,511

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	6	x \$ 1,500	= \$ 9,000
Subtotal Traffic Management Plan				\$ 9,000

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	x 100,000.00	= \$ 100,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 100,000

TOTAL TRAFFIC ITEMS	\$ 560,600
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 6,005,500

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items

1.0% \$ 60,055

8B - Bike Path Items

Bike Path Items

1.0% \$ 60,055

8C - Other Minor Items

Other Minor Items

8.0% \$ 480,440

Total of Section 1-7 \$ 6,005,500 x 10.0% = \$ 600,550

TOTAL MINOR ITEMS \$ 600,600**SECTIONS 9: MOBILIZATION**

Item code

999990

Total Section 1-8

\$ 6,606,100 x 10% = \$ 660,610

TOTAL MOBILIZATION \$ 660,700**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	x	= \$	-
066094 Value Analysis	LS	1	x 10,000.00	= \$ 10,000
066070 Maintain Traffic	LS	1	x 10,000.00	= \$ 10,000
066919 Dispute Resolution Board	LS	x	= \$	-
066921 Dispute Resolution Advisor	LS	x	= \$	-
066015 Federal Trainee Program	LS	x	= \$	-
066610 Partnering	LS	x	= \$	-
066204 Remove Rock and Debris	LS	x	= \$	-
066222 Locate Existing Crossover	LS	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-

Cost of NPDES Supplemental Work specified in Section 5D = \$ 30,000

Total Section 1-8 \$ 6,606,100 4% = \$ 264,244

TOTAL SUPPLEMENTAL WORK \$ 314,300

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	1	x	10,000.00	=	\$10,000
066063	Traffic Management Plan - Public Information	LS	1	x	10,000.00	=	\$10,000
066901	Water Expenses	LS	1	x	10,000.00	=	\$10,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	5,000.00	=	\$5,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	6,606,100		4%	= \$	264,244

TOTAL STATE FURNISHED	\$299,300
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$6,667,700 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency) \$7,946,400 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	522	X	\$1,277	=	\$666,800

TOTAL TIME-RELATED OVERHEAD	\$666,800
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 8,232,900 x **40%** = \$3,293,160

TOTAL CONTINGENCY	\$3,293,200
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II. STRUCTURE ITEMS**Bridge 1**

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Bridge Name	Elk Valley Rd over Jordan Creek	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	Widening Concrete Slab	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	10 LF	0 LF	0 LF
Total Bridge Length (Feet)	20 LF	0 LF	0 LF
Total Area (Square Feet)	200 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	1 LF	0 LF	0 LF
Footing Type (pile or spread)	Spread	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$220	\$0	\$0
COST OF EACH	\$44,000	\$0	\$0

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100	\$0	\$0
COST OF EACH	\$0	\$0	\$0

TOTAL COST OF BRIDGES	\$44,000
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$4,400
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	40%	\$17,600
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TOTAL COST OF STRUCTURES	\$66,000
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	2,346,268
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	50,000

L)	TOTAL RIGHT OF WAY ESTIMATE	\$2,396,268
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M)	TOTAL R/W ESTIMATE: Escalated	\$2,396,268
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$14,303,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from 260' South of Howland Hill Rd to 135' North of Howland Hill Rd

Project Description: Adding a roundabout at the intersection between Howland Hill Rd and Elk Valley Rd

Scope :

Alternative : Alternative #2A - Howland Hill Rd Roundabout Intersection Improvement

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 2,767,600	\$ 3,183,412
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 2,767,600	\$ 3,183,412
TOTAL RIGHT OF WAY COST	\$ 234,472	\$ 234,472
TOTAL CAPITAL OUTLAY COSTS	\$ 3,003,000	\$ 3,418,000
 PRI/ED SUPPORT	 \$ -	 \$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 3,050,000	\$ 3,450,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 200

Estimated Mid-Point of Construction (Month/Year) 10 / 2022

Estimated Construction End (Month/Year) 6 / 2023

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	xx/xx/xxxx
PA/ED Approval	xx/xx/xxxx
PS&E	xx/xx/xxxx
RTL	xx/xx/xxxx
Begin Construction	xx/xx/xxxx

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project
Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 69,000
2	Pavement Structural Section	\$ 857,400
3	Drainage	\$ -
4	Specialty Items	\$ 85,000
5	Environmental	\$ 92,700
6	Traffic Items	\$ 194,700
7	Detours	\$ -
8	Minor Items	\$ 129,900
9	Roadway Mobilization	\$ 142,900
10	Supplemental Work	\$ 217,200
11	State Furnished	\$ 107,200.00
12	Time-Related Overhead	\$ 142,900.00
13	Roadway Contingency	\$ 728,700.00
TOTAL ROADWAY ITEMS		\$ 2,767,600

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	1,584	x	35.00	= \$	55,440
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY	121	x	70.00	= \$	8,470
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	5,000.00	= \$	5,000
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					-

TOTAL EARTHWORK SECTION ITEMS	\$	69,000
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	580	x	120.00	= \$	69,600
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		= \$	-
260203	Class 2 Aggregate Base	TON/CY	850	x	90.00	= \$	76,500
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY	67	x	615.00	= \$	41,205
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF		x		= \$	-
150770	Remove Asphalt Concrete	SQFT	20,000	x	4.50	= \$	90,000
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
153130	Remove Concrete	LF/CY/LS		x		= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
731510	Minor Concrete(Curb, gutter and sidewalk)	CY	290	x	2,000.00	= \$	580,000

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	857,400
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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost
150809	Remove Culvert	EA/LF	0	x	70.00	= \$	-
150820	Modify Inlet	EA		x		= \$	-
155232	Sand Backfill	CY		x		= \$	-
15020X	Abandon Culvert	EA/LF		x		= \$	-
152430	Adjust Inlet	LF		x		= \$	-
155003	Cap Inlet	EA		x		= \$	-
510501	Minor Concrete	CY		x		= \$	-
510502	Minor Concrete (Minor Structure)	CY		x		= \$	-
5105XX	Minor Concrete (Type XX)	CY		x		= \$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		= \$	-
941107	18" Plastic Pipe	LF	0	x	250.00	= \$	-
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		= \$	-
69011X	XX" Corrugated Steel Pipe Downrain (0.XXX" Thi	LF		x		= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		= \$	-
7050XX	XX" Steel Flared End Section	EA		x		= \$	-
703233	Grated Line Drain	LF		x		= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		= \$	-
721420	Concrete (Ditch Lining)	CY		x		= \$	-
721430	Concrete (Channel Lining)	CY		x		= \$	-
750001	Miscellaneous Iron and Steel	LB		x		= \$	-
XXXXXX	Additional Drainage	LS		x		= \$	-

TOTAL DRAINAGE ITEMS	\$	-
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS	1	x	5,000.00	= \$	5,000
582001	Sound Wall (Masonry Block)	SQFT		x		= \$	-
510530	Minor Concrete (Wall)	CY		x		= \$	-
15325X	Remove Sound Wall	LF/LS		x		= \$	-
070030	Lead Compliance Plan	LS	1	x	10,000.00	= \$	10,000
141120	Treated Wood Waste	LB		x		= \$	-
153221	Remove Concrete Barrier	LF		x		= \$	-
150662	Remove Metal Beam Guard Railing	LF		x		= \$	-
150668	Remove Flared End Section	EA		x		= \$	-
8000XX	Chain Link Fence (Type XX)	LF		x		= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		= \$	-
832001	Metal Beam Guard Railing	LF		x		= \$	-
839301	Single Thrie Beam Barrier	LF		x		= \$	-
839310	Double Thrie Beam Barrier	LF		x		= \$	-
839521	Cable Railing	LF		x		= \$	-
8395XX	Terminal System (Type CAT)	EA		x		= \$	-
839585	Alternative Flared Terminal System	EA		x		= \$	-
839584	Alternative In-line Terminal System	EA		x		= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		= \$	-
839XXX	Crash Cushion (Insert Type)	EA		x		= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		= \$	-
510060	Structural Concrete, Retaining Wall	CY		x		= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		= \$	-
511035	Architectural Treatment	SQFT		x		= \$	-
598001	Anti-Graffiti Coating	SQFT		x		= \$	-
203070	Rock Stain	SQFT		x		= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		= \$	-
83954X	Transition Railing (Type X)	EA		x		= \$	-
597601	Prepare and Stain Concrete	SQFT		x		= \$	-
839561	Rail Tensioning Assembly	EA		x		= \$	-
83958X	End Anchor Assembly (Type X)	EA		x		= \$	-
XXXXXX	Relocate Utility Pole	Unit	7	x	10,000.00	= \$	70,000

TOTAL SPECIALTY ITEMS	\$	85,000
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
130670 Temporary Reinforced Silt Fence	LF	500	5.00 = \$	2,500
141000 Temporary Fence (Type ESA)	LF	19	250.00 = \$	4,750
160120 Remove Tree				
Subtotal Environmental Mitigation				\$ 7,250

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	1	20,000.00 = \$	20,000
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend X" Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ 20,000

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	6765	\$ 0.31 = \$	2,097
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 2,097

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	5,000.00 = \$	5,000
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	1	5,000.00 = \$	5,000
130330 Storm Water Annual Report	EA	1	5,000.00 = \$	5,000
130310 Rain Event Action Plan (REAP)	EA	4	500.00 = \$	2,000
130320 Storm Water Sampling and Analysis Day	EA	4	500.00 = \$	2,000
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	6,765	0.31 = \$	2,097
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	0	= \$	-
130640 Temporary Fiber Roll	LF	0	4.50 = \$	-
130900 Temporary Concrete Washout	LS	4	1,500.00 = \$	6,000
130710 Temporary Construction Entrance	EA	3	3,725.00 = \$	11,175
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	1	25,000.00 = \$	25,000
Subtotal NPDES				\$ 63,272

Supplemental Work for NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
066595 Water Pollution Control Maintenance Sharing*	LS	1	10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	10,000.00 = \$	10,000
066597 Storm Water Sampling and Analysis***	LS	1	10,000.00 = \$	10,000
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NDPS				\$ 30,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL	\$ 92,700
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SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	3,000	9.25	27,750
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	6	500.00	3,000
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	3,000	3.30	9,900
846012 Thermoplastic Crosswalk and Pavement Marking (T	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	5,000.00	5,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 45,650

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	6	\$ 1,500	9,000
Subtotal Traffic Management Plan				\$ 9,000

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	140,000.00	140,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 140,000

TOTAL TRAFFIC ITEMS	\$ 194,700
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 1,298,800

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items 1.0% \$ 12,988

8B - Bike Path Items

Bike Path Items 1.0% \$ 12,988

8C - Other Minor Items

Other Minor Items 8.0% \$ 103,904

Total of Section 1-7 \$ 1,298,800 x 10.0% = \$ 129,880

TOTAL MINOR ITEMS \$ 129,900**SECTIONS 9: MOBILIZATION**

Item code						
999990	Total Section 1-8	\$	1,428,700	x	10%	= \$ 142,870

TOTAL MOBILIZATION \$ 142,900**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	x	= \$	-
066094 Value Analysis	LS	1	x 10,000.00 = \$	10,000
066070 Maintain Traffic	LS	1	x 120,000.00 = \$	120,000
066919 Dispute Resolution Board	LS	x	= \$	-
066921 Dispute Resolution Advisor	LS	x	= \$	-
066015 Federal Trainee Program	LS	x	= \$	-
066610 Partnering	LS	x	= \$	-
066204 Remove Rock and Debris	LS	x	= \$	-
066222 Locate Existing Crossover	LS	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-

Cost of NPDES Supplemental Work specified in Section 5D = \$ 30,000

Total Section 1-8 \$ 1,428,700 4% = \$ 57,148

TOTAL SUPPLEMENTAL WORK \$ 217,200

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	1	x	20,000.00	=	\$20,000
066063	Traffic Management Plan - Public Information	LS	1	x	10,000.00	=	\$10,000
066901	Water Expenses	LS	1	x	15,000.00	=	\$15,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	5,000.00	=	\$5,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	1,428,700		4%	= \$	57,148

TOTAL STATE FURNISHED	\$107,200
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization	\$1,428,700 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency)	\$1,896,000 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	200	X	\$715	=	\$142,900

TOTAL TIME-RELATED OVERHEAD	\$142,900
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11	\$	1,821,700	x	40%	=	\$728,680
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TOTAL CONTINGENCY	\$728,700
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II. STRUCTURE ITEMS

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0		\$0		\$0
COST OF EACH	\$0		\$0		\$0

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$0
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	10%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	184,472
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	50,000

L)	TOTAL RIGHT OF WAY ESTIMATE	\$234,472
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M)	TOTAL R/W ESTIMATE: Escalated	\$234,472
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$3,003,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from 980' South to 910' North of the Norris Ave/ Harbor Dr Intersection

Project Description: Two left turn lanes and lane widening at the Norris Avenue and Harbor Drive Intersection

Scope : (2) 12' Left turn pockets with widening to achieve 2' safety striping and 3' paved shoulders with 2' soft shoulder on each side

Alternative : Alternative #2B - Norris Ave/Harbor Dr Intersection Improvements

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 1,639,100	\$ 1,854,759
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 1,639,100	\$ 1,854,759
TOTAL RIGHT OF WAY COST	\$ 298,108	\$ 298,108
TOTAL CAPITAL OUTLAY COSTS	\$ 1,938,000	\$ 2,153,000
 PRI/ED SUPPORT	 \$ -	 \$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 1,950,000	\$ 2,200,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 70

Estimated Mid-Point of Construction (Month/Year) 6 / 2022

Estimated Construction End (Month/Year) 10 / 2022

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	xx/xx/xxxx
PA/ED Approval	xx/xx/xxxx
PS&E	xx/xx/xxxx
RTL	xx/xx/xxxx
Begin Construction	xx/xx/xxxx

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 141,400
2	Pavement Structural Section	\$ 386,400
3	Drainage	\$ 94,400
4	Specialty Items	\$ 71,500
5	Environmental	\$ 74,900
6	Traffic Items	\$ 91,000
7	Detours	\$ -
8	Minor Items	\$ 86,000
9	Roadway Mobilization	\$ 94,600
10	Supplemental Work	\$ 119,900
11	State Furnished	\$ 44,900.00
12	Time-Related Overhead	\$ -
13	Roadway Contingency	\$ 434,100.00
TOTAL ROADWAY ITEMS		\$ 1,639,100

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	2,830	x	35.00	= \$	99,050
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY	533	x	70.00	= \$	37,310
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	5,000.00	= \$	5,000
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					-

TOTAL EARTHWORK SECTION ITEMS	\$	141,400
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	1,780	x	120.00	= \$	213,600
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		= \$	-
260203	Class 2 Aggregate Base	TON/CY	1,920	x	90.00	= \$	172,800
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY		x		= \$	-
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF		x		= \$	-
150771	Remove Asphalt Concrete Dike	LF		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
153130	Remove Concrete	LF/CY/LS		x		= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
731504	Minor Concrete (Curb and Gutter)	Unit		x		= \$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	386,400
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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost
150809	Remove Culvert	EA/LF	295	x	70.00	= \$	20,650
150820	Modify Inlet	EA		x		= \$	-
155232	Sand Backfill	CY		x		= \$	-
15020X	Abandon Culvert	EA/LF		x		= \$	-
152430	Adjust Inlet	LF		x		= \$	-
155003	Cap Inlet	EA		x		= \$	-
510501	Minor Concrete	CY		x		= \$	-
510502	Minor Concrete (Minor Structure)	CY		x		= \$	-
5105XX	Minor Concrete (Type XX)	CY		x		= \$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		= \$	-
941107	18" Plastic Pipe	LF	295	x	250.00	= \$	73,750
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		= \$	-
69011X	XX" Corrugated Steel Pipe Downrain (0.XXX" Thi	LF		x		= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		= \$	-
7050XX	XX" Steel Flared End Section	EA		x		= \$	-
703233	Grated Line Drain	LF		x		= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		= \$	-
721420	Concrete (Ditch Lining)	CY		x		= \$	-
721430	Concrete (Channel Lining)	CY		x		= \$	-
750001	Miscellaneous Iron and Steel	LB		x		= \$	-
XXXXXX	Additional Drainage	LS		x		= \$	-

TOTAL DRAINAGE ITEMS	\$	94,400
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS	1	x	500.00	= \$	500
582001	Sound Wall (Masonry Block)	SQFT		x		= \$	-
510530	Minor Concrete (Wall)	CY		x		= \$	-
15325X	Remove Sound Wall	LF/LS		x		= \$	-
070030	Lead Compliance Plan	LS	1	x	1,000.00	= \$	1,000
141120	Treated Wood Waste	LB		x		= \$	-
153221	Remove Concrete Barrier	LF		x		= \$	-
150662	Remove Metal Beam Guard Railing	LF		x		= \$	-
150668	Remove Flared End Section	EA		x		= \$	-
8000XX	Chain Link Fence (Type XX)	LF		x		= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		= \$	-
832001	Metal Beam Guard Railing	LF		x		= \$	-
839301	Single Thrie Beam Barrier	LF		x		= \$	-
839310	Double Thrie Beam Barrier	LF		x		= \$	-
839521	Cable Railing	LF		x		= \$	-
8395XX	Terminal System (Type CAT)	EA		x		= \$	-
839585	Alternative Flared Terminal System	EA		x		= \$	-
839584	Alternative In-line Terminal System	EA		x		= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		= \$	-
839XXX	Crash Cushion (Insert Type)	EA		x		= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		= \$	-
510060	Structural Concrete, Retaining Wall	CY		x		= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		= \$	-
511035	Architectural Treatment	SQFT		x		= \$	-
598001	Anti-Graffiti Coating	SQFT		x		= \$	-
203070	Rock Stain	SQFT		x		= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		= \$	-
83954X	Transition Railing (Type X)	EA		x		= \$	-
597601	Prepare and Stain Concrete	SQFT		x		= \$	-
839561	Rail Tensioning Assembly	EA		x		= \$	-
83958X	End Anchor Assembly (Type X)	EA		x		= \$	-
XXXXXX	Relocate Utility Pole	Unit	7	x	10,000.00	= \$	70,000

TOTAL SPECIALTY ITEMS	\$	71,500
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
141000 Temporary Reinforced Silt Fence	LF	1,889	5.00 = \$	9,445
160120 Temporary Fence (Type ESA)	LF	26	250.00 = \$	6,500
Remove Tree				
Subtotal Environmental Mitigation				\$ 15,945

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend X" Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	29700	\$ 0.31 = \$	9,207
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 9,207

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	5,000.00 = \$	5,000
130200 Prepare WPCP	LS	x	0.00 = \$	-
130100 Job Site Management	LS	1	2,500.00 = \$	2,500
130330 Storm Water Annual Report	EA	1	2,500.00 = \$	2,500
130310 Rain Event Action Plan (REAP)	EA	4	500.00 = \$	2,000
130320 Storm Water Sampling and Analysis Day	EA	4	500.00 = \$	2,000
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	29,700	0.31 = \$	9,207
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	x	= \$	-
130640 Temporary Fiber Roll	LF	1,889	4.50 = \$	8,501
130900 Temporary Concrete Washout	LS	1	1,500.00 = \$	1,500
130710 Temporary Construction Entrance	EA	1	1,500.00 = \$	1,500
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	1	15,000.00 = \$	15,000
Subtotal NPDES				\$ 49,708

Supplemental Work for NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
066595 Water Pollution Control Maintenance Sharing*	LS	1	10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	10,000.00 = \$	10,000
066597 Storm Water Sampling and Analysis***	LS	1	10,000.00 = \$	10,000
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NDPS				\$ 30,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL	\$ 74,900
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SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	1,889	9.25	17,473
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	6	500.00	3,000
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	3,778	3.30	12,467
846012 Thermoplastic Crosswalk and Pavement Marking (T	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	5,000.00	5,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 37,941

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	2	\$ 1,500	3,000
Subtotal Traffic Management Plan				\$ 3,000

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	50,000.00	50,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 50,000

TOTAL TRAFFIC ITEMS	\$ 91,000
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 859,600

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items

1.0% \$ 8,596

8B - Bike Path Items

Bike Path Items

1.0% \$ 8,596

8C - Other Minor Items

Other Minor Items

8.0% \$ 68,768

Total of Section 1-7 \$ 859,600 x 10.0% = \$ 85,960

TOTAL MINOR ITEMS \$ 86,000**SECTIONS 9: MOBILIZATION**

Item code	Total Section 1-8	\$	945,600	x	10%	= \$	94,560
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TOTAL MOBILIZATION \$ 94,600**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	x	= \$	-
066094 Value Analysis	LS	1	x 10,000.00	= \$ 10,000
066070 Maintain Traffic	LS	1	x 42,000.00	= \$ 42,000
066919 Dispute Resolution Board	LS	x	= \$	-
066921 Dispute Resolution Advisor	LS	x	= \$	-
066015 Federal Trainee Program	LS	x	= \$	-
066610 Partnering	LS	x	= \$	-
066204 Remove Rock and Debris	LS	x	= \$	-
066222 Locate Existing Crossover	LS	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-

Cost of NPDES Supplemental Work specified in Section 5D = \$ 30,000

Total Section 1-8 \$ 945,600 4% = \$ 37,824

TOTAL SUPPLEMENTAL WORK \$ 119,900

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	0	x	5,000.00	=	\$0
066063	Traffic Management Plan - Public Information	LS	1	x	5,000.00	=	\$5,000
066901	Water Expenses	LS	1	x	1,000.00	=	\$1,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	1,000.00	=	\$1,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	945,600	4%	=	\$	37,824

TOTAL STATE FURNISHED	\$44,900
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization	\$945,600 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency)	\$1,205,000 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	70	X	\$0	=	\$0

TOTAL TIME-RELATED OVERHEAD	\$0
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11	\$	1,085,100	x	40%	=	\$434,040
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TOTAL CONTINGENCY	\$434,100
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II. STRUCTURE ITEMS

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0		\$0		\$0
COST OF EACH	\$0		\$0		\$0

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$0
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	10%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	298,108
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	0

L)	TOTAL RIGHT OF WAY ESTIMATE	\$298,108
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M)	TOTAL R/W ESTIMATE: Escalated	\$298,108
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$1,938,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Vallley Rd from 880' South of Cooke St to 570' North of Cook St Intersection

Project Description: Road widening to contain 12' left turn pocket, 2' safety striping and 3' paved shoulders along each side of the corridor.

Scope :

Alternative : Alternative #2C - Cooke St Intersection Improvements

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 1,239,500	\$ 1,402,583
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 1,239,500	\$ 1,402,583
TOTAL RIGHT OF WAY COST	\$ 15,600	\$ 15,600
TOTAL CAPITAL OUTLAY COSTS	\$ 1,256,000	\$ 1,419,000
PR/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 1,300,000	\$ 1,450,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 50

Estimated Mid-Point of Construction (Month/Year) 7 / 2022

Estimated Construction End (Month/Year) 9 / 2022

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	xx/xx/xxxx
PA/ED Approval	xx/xx/xxxx
PS&E	xx/xx/xxxx
RTL	xx/xx/xxxx
Begin Construction	xx/xx/xxxx

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project
Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 107,800
2	Pavement Structural Section	\$ 282,100
3	Drainage	\$ 29,600
4	Specialty Items	\$ 111,500
5	Environmental	\$ 63,500
6	Traffic Items	\$ 66,500
7	Detours	\$ -
8	Minor Items	\$ 66,100
9	Roadway Mobilization	\$ 72,800
10	Supplemental Work	\$ 69,100
11	State Furnished	\$ 36,100.00
12	Time-Related Overhead	\$ -
13	Roadway Contingency	\$ 334,400.00
TOTAL ROADWAY ITEMS		\$ 1,239,500

Estimate Prepared By :

Name and Title	Date	Phone
----------------	------	-------

Estimate Reviewed By :

Name and Title	Date	Phone
----------------	------	-------

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	2,070	x	35.00	= \$	72,450
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY	433	x	70.00	= \$	30,310
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	5,000.00	= \$	5,000
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					-

TOTAL EARTHWORK SECTION ITEMS	\$	107,800
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	1,296	x	120.00	= \$	155,520
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		= \$	-
260203	Class 2 Aggregate Base	TON/CY	1,406	x	90.00	= \$	126,540
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY		x		= \$	-
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF		x		= \$	-
150771	Remove Asphalt Concrete Dike	LF		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
153130	Remove Concrete	LF/CY/LS		x		= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
731504	Minor Concrete (Curb and Gutter)	Unit		x		= \$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	282,100
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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost
150809	Remove Culvert	EA/LF	80	x	70.00	= \$	5,600
150820	Modify Inlet	EA	2	x	2,000.00	= \$	4,000
155232	Sand Backfill	CY		x		= \$	-
15020X	Abandon Culvert	EA/LF		x		= \$	-
152430	Adjust Inlet	LF		x		= \$	-
155003	Cap Inlet	EA		x		= \$	-
510501	Minor Concrete	CY		x		= \$	-
510502	Minor Concrete (Minor Structure)	CY		x		= \$	-
5105XX	Minor Concrete (Type XX)	CY		x		= \$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		= \$	-
941107	18" Plastic Pipe	LF	80	x	250.00	= \$	20,000
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		= \$	-
69011X	XX" Corrugated Steel Pipe Downrain (0.XXX" Thi	LF		x		= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		= \$	-
7050XX	XX" Steel Flared End Section	EA		x		= \$	-
703233	Grated Line Drain	LF		x		= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		= \$	-
721420	Concrete (Ditch Lining)	CY		x		= \$	-
721430	Concrete (Channel Lining)	CY		x		= \$	-
750001	Miscellaneous Iron and Steel	LB		x		= \$	-
XXXXXX	Additional Drainage	LS		x		= \$	-

TOTAL DRAINAGE ITEMS	\$	29,600
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS	1	x	1,500.00	= \$	1,500
582001	Sound Wall (Masonry Block)	SQFT		x		= \$	-
510530	Minor Concrete (Wall)	CY		x		= \$	-
15325X	Remove Sound Wall	LF/LS		x		= \$	-
070030	Lead Compliance Plan	LS	1	x	10,000.00	= \$	10,000
141120	Treated Wood Waste	LB		x		= \$	-
153221	Remove Concrete Barrier	LF		x		= \$	-
150662	Remove Metal Beam Guard Railing	LF		x		= \$	-
150668	Remove Flared End Section	EA		x		= \$	-
8000XX	Chain Link Fence (Type XX)	LF		x		= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		= \$	-
832001	Metal Beam Guard Railing	LF		x		= \$	-
839301	Single Thrie Beam Barrier	LF		x		= \$	-
839310	Double Thrie Beam Barrier	LF		x		= \$	-
839521	Cable Railing	LF		x		= \$	-
8395XX	Terminal System (Type CAT)	EA		x		= \$	-
839585	Alternative Flared Terminal System	EA		x		= \$	-
839584	Alternative In-line Terminal System	EA		x		= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		= \$	-
839XXX	Crash Cushion (Insert Type)	EA		x		= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		= \$	-
510060	Structural Concrete, Retaining Wall	CY		x		= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		= \$	-
511035	Architectural Treatment	SQFT		x		= \$	-
598001	Anti-Graffiti Coating	SQFT		x		= \$	-
203070	Rock Stain	SQFT		x		= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		= \$	-
83954X	Transition Railing (Type X)	EA		x		= \$	-
597601	Prepare and Stain Concrete	SQFT		x		= \$	-
839561	Rail Tensioning Assembly	EA		x		= \$	-
83958X	End Anchor Assembly (Type X)	EA		x		= \$	-
XXXXXX	Relocate Utility Pole	Unit	10	x	10,000.00	= \$	100,000

TOTAL SPECIALTY ITEMS	\$	111,500
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
141000 Temporary Reinforced Silt Fence	LF	1,450	5.00 = \$	7,250
160120 Temporary Fence (Type ESA)	LF	7	250.00 = \$	1,750
Remove Tree				
Subtotal Environmental Mitigation				\$ 9,000

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend X" Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	24115	\$ 0.31 = \$	7,476
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 7,476

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	5,000.00 = \$	5,000
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	1	2,500.00 = \$	2,500
130330 Storm Water Annual Report	EA	1	2,500.00 = \$	2,500
130310 Rain Event Action Plan (REAP)	EA	3	500.00 = \$	1,500
130320 Storm Water Sampling and Analysis Day	EA	3	500.00 = \$	1,500
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	24,115	0.31 = \$	7,476
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	x	= \$	-
130640 Temporary Fiber Roll	LF	1,889	4.50 = \$	8,501
130900 Temporary Concrete Washout	LS	1	1,500.00 = \$	1,500
130710 Temporary Construction Entrance	EA	1	1,500.00 = \$	1,500
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	1	15,000.00 = \$	15,000
Subtotal NPDES				\$ 46,976

Supplemental Work for NPDES

066595 Water Pollution Control Maintenance Sharing*	LS	1	x	= \$	-
066596 Additional Water Pollution Control**	LS	1	x	= \$	-
066597 Storm Water Sampling and Analysis***	LS	1	x	= \$	-
XXXXXX Some Item	LS	x	= \$	-	
Subtotal Supplemental Work for NDPS				\$ -	

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL	\$ 63,500
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SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	1,450	9.25	13,413
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	4	500.00	2,000
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	2,900	3.30	9,570
846012 Thermoplastic Crosswalk and Pavement Marking (T	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	5,000.00	5,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 29,983

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	1	\$ 1,500	1,500
Subtotal Traffic Management Plan				\$ 1,500

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	35,000.00	35,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 35,000

TOTAL TRAFFIC ITEMS	\$ 66,500
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 661,000

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items

1.0% \$ 6,610

8B - Bike Path Items

Bike Path Items

1.0% \$ 6,610

8C - Other Minor Items

Other Minor Items

8.0% \$ 52,880

Total of Section 1-7 \$ 661,000 x 10.0% = \$ 66,100

TOTAL MINOR ITEMS \$ 66,100**SECTIONS 9: MOBILIZATION**

Item code

999990

Total Section 1-8

\$ 727,100 x 10% = \$ 72,710

TOTAL MOBILIZATION \$ 72,800**SECTION 10: SUPPLEMENTAL WORK**

Item code

066670

Payment Adjustments For Price Index
Fluctuations

Unit

LS

Quantity

Unit Price (\$)

x

= \$

Cost

-

066094

Value Analysis

LS

1

x

10,000.00

= \$

10,000

066070

Maintain Traffic

LS

1

x

30,000.00

= \$

30,000

066919

Dispute Resolution Board

LS

x

= \$

-

066921

Dispute Resolution Advisor

LS

x

= \$

-

066015

Federal Trainee Program

LS

x

= \$

-

066610

Partnering

LS

x

= \$

-

066204

Remove Rock and Debris

LS

x

= \$

-

066222

Locate Existing Crossover

LS

x

= \$

-

XXXXXX

Some Item

Unit

x

= \$

-

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

Total Section 1-8 \$ 727,100 4% = \$ 29,084

TOTAL SUPPLEMENTAL WORK \$ 69,100

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	0	x	10,000.00	=	\$0
066063	Traffic Management Plan - Public Information	LS	1	x	5,000.00	=	\$5,000
066901	Water Expenses	LS	1	x	1,000.00	=	\$1,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	1,000.00	=	\$1,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	727,100	4%	=	\$	29,084

TOTAL STATE FURNISHED	\$36,100
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$727,100 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency) \$905,100 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	50	X	\$0	=	\$0

TOTAL TIME-RELATED OVERHEAD	\$0
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 836,000 x **40%** = \$334,400

TOTAL CONTINGENCY	\$334,400
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II. STRUCTURE ITEMS

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0		\$0		\$0
COST OF EACH	\$0		\$0		\$0

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$0
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	10%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	15,600
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	0

L)	TOTAL RIGHT OF WAY ESTIMATE	\$15,600
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M)	TOTAL R/W ESTIMATE: Escalated	\$15,600
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$1,256,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : At the triangular Intersection of Elk Valley Rd and Parkway Drive

Project Description: Road widening and striping to eliminate the Southbound lane from Parkway Dr onto Elk Valley Rd and widen road to comply with Cal legal turn radius standards

Scope :

Alternative : Alternative #2D - Parkway Drive Intersection Improvement

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 426,900	\$ 483,068
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 426,900	\$ 483,068
TOTAL RIGHT OF WAY COST	\$ 6,000	\$ 6,000
TOTAL CAPITAL OUTLAY COSTS	\$ 433,000	\$ 490,000
PR/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 435,000	\$ 490,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 20

Estimated Mid-Point of Construction (Month/Year) 6 / 2022

Estimated Construction End (Month/Year) 7 / 2022

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	xx/xx/xxxx
PA/ED Approval	xx/xx/xxxx
PS&E	xx/xx/xxxx
RTL	xx/xx/xxxx
Begin Construction	xx/xx/xxxx

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 5,900
2	Pavement Structural Section	\$ 30,800
3	Drainage	\$ 4,500
4	Specialty Items	\$ 72,500
5	Environmental	\$ 53,500
6	Traffic Items	\$ 50,300
7	Detours	\$ -
8	Minor Items	\$ 21,800
9	Roadway Mobilization	\$ -
10	Supplemental Work	\$ 61,600
11	State Furnished	\$ 21,600.00
12	Time-Related Overhead	\$ -
13	Roadway Contingency	\$ 104,400.00
TOTAL ROADWAY ITEMS		\$ 426,900

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	90	x	35.00	= \$	3,150
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY	38	x	70.00	= \$	2,660
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	0	x	5,000.00	= \$	-
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					-

TOTAL EARTHWORK SECTION ITEMS	\$	5,900
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	59	x	120.00	= \$	7,080
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		= \$	-
260203	Class 2 Aggregate Base	TON/CY	65	x	90.00	= \$	5,850
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY		x		= \$	-
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF		x		= \$	-
150770	Remove Asphalt Concrete	SQFT	2,475	x	4.50	= \$	11,138
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
153130	Remove Concrete	LF/CY/LS		x		= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
731504	Minor Concrete (Curb and Gutter)	Unit	14	x	475.00	= \$	6,650

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	30,800
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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost
150809	Remove Culvert	EA/LF	0	x	70.00	= \$	-
150820	Modify Inlet	EA	1	x	2,000.00	= \$	2,000
155232	Sand Backfill	CY		x		= \$	-
15020X	Abandon Culvert	EA/LF		x		= \$	-
152430	Adjust Inlet	LF		x		= \$	-
155003	Cap Inlet	EA		x		= \$	-
510501	Minor Concrete	CY		x		= \$	-
510502	Minor Concrete (Minor Structure)	CY		x		= \$	-
5105XX	Minor Concrete (Type XX)	CY		x		= \$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		= \$	-
941107	18" Plastic Pipe	LF	10	x	250.00	= \$	2,500
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		= \$	-
69011X	XX" Corrugated Steel Pipe Down drain (0.XXX" Thi	LF		x		= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		= \$	-
7050XX	XX" Steel Flared End Section	EA		x		= \$	-
703233	Grated Line Drain	LF		x		= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		= \$	-
721420	Concrete (Ditch Lining)	CY		x		= \$	-
721430	Concrete (Channel Lining)	CY		x		= \$	-
750001	Miscellaneous Iron and Steel	LB		x		= \$	-
XXXXXX	Additional Drainage	LS		x		= \$	-

TOTAL DRAINAGE ITEMS	\$	4,500
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS	1	x	1,500.00	= \$	1,500
582001	Sound Wall (Masonry Block)	SQFT		x		= \$	-
510530	Minor Concrete (Wall)	CY		x		= \$	-
15325X	Remove Sound Wall	LF/LS		x		= \$	-
070030	Lead Compliance Plan	LS	1	x	1,000.00	= \$	1,000
141120	Treated Wood Waste	LB		x		= \$	-
153221	Remove Concrete Barrier	LF		x		= \$	-
150662	Remove Metal Beam Guard Railing	LF		x		= \$	-
150668	Remove Flared End Section	EA		x		= \$	-
8000XX	Chain Link Fence (Type XX)	LF		x		= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		= \$	-
832001	Metal Beam Guard Railing	LF		x		= \$	-
839301	Single Thrie Beam Barrier	LF		x		= \$	-
839310	Double Thrie Beam Barrier	LF		x		= \$	-
839521	Cable Railing	LF		x		= \$	-
8395XX	Terminal System (Type CAT)	EA		x		= \$	-
839585	Alternative Flared Terminal System	EA		x		= \$	-
839584	Alternative In-line Terminal System	EA		x		= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		= \$	-
839XXX	Crash Cushion (Insert Type)	EA		x		= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		= \$	-
510060	Structural Concrete, Retaining Wall	CY		x		= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		= \$	-
511035	Architectural Treatment	SQFT		x		= \$	-
598001	Anti-Graffiti Coating	SQFT		x		= \$	-
203070	Rock Stain	SQFT		x		= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		= \$	-
83954X	Transition Railing (Type X)	EA		x		= \$	-
597601	Prepare and Stain Concrete	SQFT		x		= \$	-
839561	Rail Tensioning Assembly	EA		x		= \$	-
83958X	End Anchor Assembly (Type X)	EA		x		= \$	-
XXXXXX	Relocate Utility Pole	Unit	7	x	10,000.00	= \$	70,000

TOTAL SPECIALTY ITEMS	\$	72,500
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
141000 Temporary Reinforced Silt Fence	LF	1,000	5.00 = \$	5,000
160120 Temporary Fence (Type ESA)	LF	0	250.00 = \$	-
Remove Tree				
Subtotal Environmental Mitigation				\$ 5,000

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X XX" Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	2104	\$ 0.31 = \$	652
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 652

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	5,000.00 = \$	5,000
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	1	2,500.00 = \$	2,500
130330 Storm Water Annual Report	EA	1	2,500.00 = \$	2,500
130310 Rain Event Action Plan (REAP)	EA	4	500.00 = \$	2,000
130320 Storm Water Sampling and Analysis Day	EA	4	500.00 = \$	2,000
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	2,104	0.31 = \$	652
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	2	1,500.00 = \$	3,000
130640 Temporary Fiber Roll	LF	1,000	4.50 = \$	4,500
130900 Temporary Concrete Washout	LS	2	1,500.00 = \$	3,000
130710 Temporary Construction Entrance	EA	1	1,500.00 = \$	1,500
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
150770 Remove Asphalt Concrete	SQFT	2,475	4.50 = \$	11,138
130730 Street Sweeping	LS	1	10,000.00 = \$	10,000
Subtotal NPDES				\$ 47,790

Supplemental Work for NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
066595 Water Pollution Control Maintenance Sharing*	LS	1	10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	10,000.00 = \$	10,000
066597 Storm Water Sampling and Analysis***	LS	1	10,000.00 = \$	10,000
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NPDES				\$ 30,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL	\$ 53,500
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SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	2,000	9.25	18,500
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	5	500.00	2,500
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	1,750	3.30	5,775
846012 Thermoplastic Crosswalk and Pavement Marking (T	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	5,000.00	5,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 31,775

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	3	\$ 1,500	4,500
Subtotal Traffic Management Plan				\$ 4,500

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	14,000.00	14,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 14,000

TOTAL TRAFFIC ITEMS	\$ 50,300
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 217,500

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items

1.0% \$ 2,175

8B - Bike Path Items

Bike Path Items

1.0% \$ 2,175

8C - Other Minor Items

Other Minor Items

8.0% \$ 17,400

Total of Section 1-7 \$ 217,500 x 10.0% = \$ 21,750

TOTAL MINOR ITEMS \$ 21,800**SECTIONS 9: MOBILIZATION**

Item code	Total Section 1-8	\$ 239,300	x	10%	= \$	-
999990						
TOTAL MOBILIZATION						\$ -

SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	x	= \$	-
066094 Value Analysis	LS	1	x 10,000.00	= \$ 10,000
066070 Maintain Traffic	LS	1	x 12,000.00	= \$ 12,000
066919 Dispute Resolution Board	LS	x	= \$	-
066921 Dispute Resolution Advisor	LS	x	= \$	-
066015 Federal Trainee Program	LS	x	= \$	-
066610 Partnering	LS	x	= \$	-
066204 Remove Rock and Debris	LS	x	= \$	-
066222 Locate Existing Crossover	LS	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
<i>Cost of NPDES Supplemental Work specified in Section 5D</i>				<i>= \$ 30,000</i>
Total Section 1-8	\$	239,300	4%	= \$ 9,572
TOTAL SUPPLEMENTAL WORK				\$ 61,600

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	0	x	10,000.00	=	\$0
066063	Traffic Management Plan - Public Information	LS	1	x	10,000.00	=	\$10,000
066901	Water Expenses	LS	1	x	1,000.00	=	\$1,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	1,000.00	=	\$1,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	239,300		4%	= \$	9,572

TOTAL STATE FURNISHED	\$21,600
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization	\$239,300 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency)	\$322,500 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	20	X	\$0	=	\$0

TOTAL TIME-RELATED OVERHEAD	\$0
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11	\$	260,900	x	40%	=	\$104,360
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TOTAL CONTINGENCY	\$104,400
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II. STRUCTURE ITEMS

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0		\$0		\$0
COST OF EACH	\$0		\$0		\$0

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$0
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	10%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	6,000
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	0

L)	TOTAL RIGHT OF WAY ESTIMATE	\$6,000
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M)	TOTAL R/W ESTIMATE: Escalated	\$6,000
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate Prepared By	Project Coordinator ¹	Phone
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Utility Estimate Prepared By	Utility Coordinator ²	Phone
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R/W Acquisition Estimate Prepared By	Right of Way Estimator ³	Phone
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Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$433,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from Howland Hill Dr to Aubell Ln at 2 separate locations totaling 1720 LF

Project Description: Vertical Curve Corrections in 2 locations along Elk Valley Rd between Howland Hill Rd and Aubell Ln

Scope :

Alternative : Alternative #3A - Vertical Curve Corrections

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 909,627	\$ 1,046,292
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 909,627	\$ 1,046,292
TOTAL RIGHT OF WAY COST	\$ 503,260	\$ 503,260
TOTAL CAPITAL OUTLAY COSTS	\$ 1,413,000	\$ 1,550,000
PR/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 1,450,000	\$ 1,550,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 50

Estimated Mid-Point of Construction (Month/Year) 7 / 2022

Estimated Construction End (Month/Year) 9 / 2022

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	6/1/2018
PA/ED Approval	10/1/2020
PS&E	10/1/2021
RTL	1/1/2022
Begin Construction	6/1/2022

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project
Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 969,200
2	Pavement Structural Section	\$ 2,218,200
3	Drainage	\$ 4,000
4	Specialty Items	\$ 12,500
5	Environmental	\$ 439,100
6	Traffic Items	\$ 409,900
7	Detours	\$ -
8	Minor Items	\$ 405,300
9	Roadway Mobilization	\$ 445,900
10	Supplemental Work	\$ 228,400
11	State Furnished	\$ 213,400.00
12	Time-Related Overhead	\$ 445,900.00
13	Roadway Contingency	\$ 2,225,400.00
TOTAL ROADWAY ITEMS		\$ 8,017,200

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	16,515	x	35.00	= \$	578,025
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY	5,287	x	70.00	= \$	370,090
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	21,000.00	= \$	21,000
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					-

TOTAL EARTHWORK SECTION ITEMS	\$	969,200
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	9,987	x	120.00	= \$	1,198,440
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		= \$	-
260203	Class 2 Aggregate Base	CY	11,330	x	90.00	= \$	1,019,700
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY		x		= \$	-
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF		x		= \$	-
150771	Remove Asphalt Concrete Dike	LF		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
153130	Remove Concrete	LF		x	60.00	= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
731504	Minor Concrete (Curb and Gutter)	LF		x	50.00	= \$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	2,218,200
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SECTION 3: DRAINAGE

Item code		Unit	Quantity	Unit Price (\$)	Cost
150809	Remove Culvert	EA/LF	x	70.00	= \$ -
152604	Modify Inlet	EA	x	2,000.00	= \$ -
155232	Sand Backfill	CY	x		= \$ -
15020X	Abandon Culvert	EA/LF	x		= \$ -
152430	Adjust Inlet	LF	x		= \$ -
155003	Cap Inlet	EA	x		= \$ -
510501	Minor Concrete	LS	x		= \$ -
510502	Minor Concrete (Minor Structure)	CY	x		= \$ -
510092	Structural Concrete, Headwall	CY	2	2,000.00	= \$ 4,000
620XXX	XX" Alternative Pipe Culvert (Type X)	LF	x		= \$ -
941107	18" Plastic Pipe	LF	x	250.00	= \$ -
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF	x		= \$ -
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF	x		= \$ -
68XXXX	XX" Plastic Pipe (Edge Drain)	LF	x		= \$ -
69011X	XX" Corrugated Steel Pipe Downdrain (0.XXX" Thi	LF	x		= \$ -
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF	x		= \$ -
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF	x		= \$ -
7050XX	XX" Steel Flared End Section	EA	x		= \$ -
703233	Grated Line Drain	LF	x		= \$ -
72XXXX	Rock Slope Protection (Type and Method)	CY/TON	x		= \$ -
72901X	Rock Slope Protection Fabric (Class X)	SQYD	x		= \$ -
721420	Concrete (Ditch Lining)	CY	x		= \$ -
721430	Concrete (Channel Lining)	CY	x		= \$ -
750001	Miscellaneous Iron and Steel	LB	x		= \$ -
150821	Remove Headwall	LS	x	4,000.00	= \$ -

TOTAL DRAINAGE ITEMS	\$	4,000
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity	Unit Price (\$)	Cost
080050	Progress Schedule (Critical Path Method)	LS	1	2,500.00	= \$ 2,500
582001	Sound Wall (Masonry Block)	SQFT	x		= \$ -
510530	Minor Concrete (Wall)		x		= \$ -
15325X	Remove Sound Wall	LF/LS	x		= \$ -
070030	Lead Compliance Plan	LS	1	10,000.00	= \$ 10,000
141120	Treated Wood Waste	LB	x		= \$ -
153221	Remove Concrete Barrier	LF	x		= \$ -
150662	Remove Metal Beam Guard Railing	LF	x	10.00	= \$ -
150668	Remove Flared End Section	EA	x		= \$ -
8000XX	Chain Link Fence (Type XX)	LF	x		= \$ -
80XXXX	XX" Chain Link Gate (Type CL-6)	EA	x		= \$ -
832001	Metal Beam Guard Railing	LF	x		= \$ -
839301	Single Thrie Beam Barrier	LF	x		= \$ -
839310	Double Thrie Beam Barrier	LF	x		= \$ -
839521	Cable Railing	LF	x		= \$ -
839536	Type SRT-31 Terminal System	EA	x	3,500.00	= \$ -
839585	Alternative Flared Terminal System	EA	x		= \$ -
839584	Alternative In-line Terminal System	EA	x		= \$ -
4906XX	CIDH Concrete Piling (Insert Diameter)	LF	x		= \$ -
839XXX	Crash Cushion (Insert Type)	EA	x		= \$ -
83XXXX	Concrete Barrier (Insert Type)	LF	x		= \$ -
520103	Bar Reinforced Steel (Retaining Wall)	LB	x		= \$ -
510060	Structural Concrete, Retaining Wall	CY	x		= \$ -
513553	Retaining Wall (Masonry Wall)	SQFT	x		= \$ -
511035	Architectural Treatment	SQFT	x		= \$ -
598001	Anti-Graffiti Coating	SQFT	x		= \$ -
203070	Rock Stain	SQFT	x		= \$ -
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT	x		= \$ -
83954X	Transition Railing (Type X)	EA	x		= \$ -
597601	Prepare and Stain Concrete	SQFT	x		= \$ -
839561	Rail Tensioning Assembly	EA	x		= \$ -
83958X	End Anchor Assembly (Type X)	EA	x		= \$ -
XXXXXX	Relocate Utility Pole	EA	x	10,000.00	= \$ -
152390	Relocate Mailbox	EA	x	250.00	= \$ -

TOTAL SPECIALTY ITEMS	\$	12,500
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
141000 Temporary Reinforced Silt Fence	LF	17,845	5.00 = \$	89,225
160120 Temporary Fence (Type ESA)	EA	x	250.00 = \$	-
Remove Tree				
Subtotal Environmental Mitigation				\$ 89,225

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend A Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	294434	\$ 0.31 = \$	91,275
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 91,275

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	x 6,000.00 = \$	6,000
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	1	x 15,000.00 = \$	15,000
130330 Storm Water Annual Report	EA	3	x 2,000.00 = \$	6,000
130310 Rain Event Action Plan (REAP)	EA	12	x 550.00 = \$	6,600
130320 Storm Water Sampling and Analysis Day	EA	12	x 575.00 = \$	6,900
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	294,434	x 0.31 = \$	91,275
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	6	x 1,500.00 = \$	9,000
130640 Temporary Fiber Roll	LF	17,845	x 4.50 = \$	80,303
130900 Temporary Concrete Washout	EA	2	x 2,500.00 = \$	5,000
130710 Temporary Construction Entrance	EA	2	x 3,725.00 = \$	7,450
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	1	x 25,000.00 = \$	25,000
Subtotal NPDES				\$ 258,527

Supplemental Work for NPDES

066595 Water Pollution Control Maintenance Sharing*	LS	1	x 10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	x 10,000.00 = \$	10,000
066597 Storm Water Sampling and Analysis***	LS	1	x 10,000.00 = \$	10,000
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NDPS				\$ 30,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 439,100

SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	17,845	x 9.25 = \$	165,066
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	26	x 500.00 = \$	13,000
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	35,689	x 3.30 = \$	117,774
846012 Thermoplastic Crosswalk and Pavement Marking (T)	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	x 5,000.00 = \$	5,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 300,840

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	6	x \$ 1,500 = \$	9,000
Subtotal Traffic Management Plan				\$ 9,000

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	x 100,000.00 = \$	100,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 100,000

TOTAL TRAFFIC ITEMS	\$ 409,900
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 4,052,900

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items

1.0% \$ 40,529

8B - Bike Path Items

Bike Path Items

1.0% \$ 40,529

8C - Other Minor Items

Other Minor Items

8.0% \$ 324,232

Total of Section 1-7 \$ 4,052,900 x 10.0% = \$ 405,290

TOTAL MINOR ITEMS \$ 405,300**SECTIONS 9: MOBILIZATION**

Item code

999990

Total Section 1-8

\$ 4,458,200 x 10% = \$ 445,820

TOTAL MOBILIZATION \$ 445,900**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	x	= \$	-
066094 Value Analysis	LS	1	x 10,000.00 = \$	10,000
066070 Maintain Traffic	LS	1	x 10,000.00 = \$	10,000
066919 Dispute Resolution Board	LS	x	= \$	-
066921 Dispute Resolution Advisor	LS	x	= \$	-
066015 Federal Trainee Program	LS	x	= \$	-
066610 Partnering	LS	x	= \$	-
066204 Remove Rock and Debris	LS	x	= \$	-
066222 Locate Existing Crossover	LS	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-

Cost of NPDES Supplemental Work specified in Section 5D = \$ 30,000

Total Section 1-8 \$ 4,458,200 4% = \$ 178,328

TOTAL SUPPLEMENTAL WORK \$ 228,400

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	1	x	10,000.00	=	\$10,000
066063	Traffic Management Plan - Public Information	LS	1	x	10,000.00	=	\$10,000
066901	Water Expenses	LS	1	x	10,000.00	=	\$10,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	5,000.00	=	\$5,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	4,458,200		4%	= \$	178,328

TOTAL STATE FURNISHED	\$213,400
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$4,458,200 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency) \$5,345,900 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	50	X	\$8,918	=	\$445,900

TOTAL TIME-RELATED OVERHEAD	\$445,900
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 5,563,400 x **40%** = \$2,225,360

TOTAL CONTINGENCY	\$2,225,400
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II. STRUCTURE ITEMS**Bridge 1**

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Bridge Name	Elk Valley Rd over Jordan Creek		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	Widening Concrete Slab		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Bridge Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	1 LF		0 LF		0 LF
Footing Type (pile or spread)	Spread		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot			\$0		\$0
COST OF EACH	\$0		\$0		\$0

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$0
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	40%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	503,260
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	

L)	TOTAL RIGHT OF WAY ESTIMATE	\$503,260
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M)	TOTAL R/W ESTIMATE: Escalated	\$503,260
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$1,413,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from Howland Hill Dr to Parkway Drive

Project Description: Lateral Sight Distance Improvements along two horizontal curves near Parkway Drive and Mayas Lane

Scope : Primarily Clearing and grubbing to achieve minimum sight distance per Caltrans highway design manual ch 200

Alternative : Alternative #3B - Lateral Sight Distance Improvements

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 248,200	\$ 285,490
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 248,200	\$ 285,490
TOTAL RIGHT OF WAY COST	\$ 26,400	\$ 26,400
TOTAL CAPITAL OUTLAY COSTS	\$ 275,000	\$ 312,000
PR/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 275,000	\$ 315,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 15

Estimated Mid-Point of Construction (Month/Year) 6 / 2022

Estimated Construction End (Month/Year) 6 / 2022

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	6/1/2018
PA/ED Approval	10/1/2020
PS&E	10/1/2021
RTL	1/1/2022
Begin Construction	6/1/2022

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project
Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 14,200
2	Pavement Structural Section	\$ -
3	Drainage	\$ -
4	Specialty Items	\$ -
5	Environmental	\$ 75,000
6	Traffic Items	\$ 13,500
7	Detours	\$ -
8	Minor Items	\$ 10,300
9	Roadway Mobilization	\$ -
10	Supplemental Work	\$ 43,600
11	State Furnished	\$ 33,100.00
12	Time-Related Overhead	\$ -
13	Roadway Contingency	\$ 58,500.00
TOTAL ROADWAY ITEMS		\$ 248,200

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	x	= \$		-
19010X	Roadway Excavation (Type X) ADL	CY	x	= \$		-
194001	Ditch Excavation	CY	160	x 70.00	= \$	11,200
19801X	Imported Borrow	CY/TON	x	= \$		-
192037	Structure Excavation (Retaining Wall)	CY	x	= \$		-
193013	Structure Backfill (Retaining Wall)	CY	x	= \$		-
193031	Pervious Backfill Material (Retaining Wall)	CY	x	= \$		-
16010X	Clearing & Grubbing	LS/ACRE	1	x 3,000.00	= \$	3,000
170101	Develop Water Supply	LS	x	= \$		-
19801X	Imported Borrow	CY/TON	x	= \$		-
210130	Duff	ACRE	x	= \$		-
XXXXXX	Some Item	Unit				

TOTAL EARTHWORK SECTION ITEMS	\$	14,200
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity	Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY	x	= \$		-
400050	Continuously Reinforced Concrete Pavement	CY	x	= \$		-
404092	Seal Pavement Joint	LF	x	= \$		-
404093	Seal Isolation Joint	LF	x	= \$		-
413117	Seal Concrete Pavement Joint (Silicone)	LF	x	= \$		-
413118	Seal Pavement Joint (Asphalt Rubber)	LF	x	= \$		-
280010	Rapid Strength Concrete Base	CY	x	= \$		-
410095	Dowel Bar (Drill and Bond)	EA	x	= \$		-
390132	Hot Mix Asphalt (Type A)	TON	0	x 120.00	= \$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	x	= \$		-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD	x	= \$		-
260203	Class 2 Aggregate Base	CY	0	x 90.00	= \$	-
290201	Asphalt Treated Permeable Base	CY	x	= \$		-
250401	Class 4 Aggregate Subbase	CY	x	= \$		-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON	x	= \$		-
397005	Tack Coat	TON	x	= \$		-
377501	Slurry Seal	TON	x	= \$		-
3750XX	Screenings (Type XX)	TON	x	= \$		-
374492	Asphaltic Emulsion (Polymer Modified)	TON	x	= \$		-
370001	Sand Cover (Seal)	TON	x	= \$		-
731530	Minor Concrete (Textured Paving)	CY	x	= \$		-
731502	Minor Concrete (Miscellaneous Construction)	CY	x	= \$		-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF	x	= \$		-
150771	Remove Asphalt Concrete Dike	LF	x	= \$		-
420201	Grind Existing Concrete Pavement	SQYD	x	= \$		-
150860	Remove Base and Surfacing	CY	x	= \$		-
390095	Replace Asphalt Concrete Surfacing	CY	x	= \$		-
153130	Remove Concrete	LF	0	x 60.00	= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	x	= \$		-
153103	Cold Plane Asphalt Concrete Pavement	SQYD	x	= \$		-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA	x	= \$		-
413113	Repair Spalled Joints, Polyester Grout	SQYD	x	= \$		-
420102	Groove Existing Concrete Pavement	SQYD	x	= \$		-
390136	Minor Hot Mix Asphalt	TON	x	= \$		-
394095	Roadside Paving (Miscellaneous Areas)	SQYD	x	= \$		-
731504	Minor Concrete (Curb and Gutter)	LF	0	x 50.00	= \$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	-
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SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost
150809	Remove Culvert	EA/LF	0	x	70.00	= \$	-
152604	Modify Inlet	EA	0	x	2,000.00	= \$	-
155232	Sand Backfill	CY		x		= \$	-
15020X	Abandon Culvert	EA/LF		x		= \$	-
152430	Adjust Inlet	LF		x		= \$	-
155003	Cap Inlet	EA		x		= \$	-
510501	Minor Concrete	LS		x		= \$	-
510502	Minor Concrete (Minor Structure)	CY		x		= \$	-
510092	Structural Concrete, Headwall	CY	0	x	2,000.00	= \$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		= \$	-
941107	18" Plastic Pipe	LF	0	x	250.00	= \$	-
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		= \$	-
69011X	XX" Corrugated Steel Pipe Downdrain (0.XXX" Thi	LF		x		= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		= \$	-
7050XX	XX" Steel Flared End Section	EA		x		= \$	-
703233	Grated Line Drain	LF		x		= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		= \$	-
721420	Concrete (Ditch Lining)	CY		x		= \$	-
721430	Concrete (Channel Lining)	CY		x		= \$	-
750001	Miscellaneous Iron and Steel	LB		x		= \$	-
150821	Remove Headwall	LS	0	x	4,000.00	= \$	-

TOTAL DRAINAGE ITEMS	\$	-
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost
080050	Progress Schedule (Critical Path Method)	LS		x	500.00	= \$	-
582001	Sound Wall (Masonry Block)	SQFT		x		= \$	-
510530	Minor Concrete (Wall)			x		= \$	-
15325X	Remove Sound Wall	LF/LS		x		= \$	-
070030	Lead Compliance Plan	LS	0	x	10,000.00	= \$	-
141120	Treated Wood Waste	LB		x		= \$	-
153221	Remove Concrete Barrier	LF		x		= \$	-
150662	Remove Metal Beam Guard Railing	LF	0	x	10.00	= \$	-
150668	Remove Flared End Section	EA		x		= \$	-
8000XX	Chain Link Fence (Type XX)	LF		x		= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		= \$	-
832001	Metal Beam Guard Railing	LF		x		= \$	-
839301	Single Thrie Beam Barrier	LF		x		= \$	-
839310	Double Thrie Beam Barrier	LF		x		= \$	-
839521	Cable Railing	LF		x		= \$	-
839536	Type SRT-31 Terminal System	EA	0	x	3,500.00	= \$	-
839585	Alternative Flared Terminal System	EA		x		= \$	-
839584	Alternative In-line Terminal System	EA		x		= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		= \$	-
839XXX	Crash Cushion (Insert Type)	EA		x		= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		= \$	-
510060	Structural Concrete, Retaining Wall	CY		x		= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		= \$	-
511035	Architectural Treatment	SQFT		x		= \$	-
598001	Anti-Graffiti Coating	SQFT		x		= \$	-
203070	Rock Stain	SQFT		x		= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		= \$	-
83954X	Transition Railing (Type X)	EA		x		= \$	-
597601	Prepare and Stain Concrete	SQFT		x		= \$	-
839561	Rail Tensioning Assembly	EA		x		= \$	-
83958X	End Anchor Assembly (Type X)	EA		x		= \$	-
XXXXXX	Relocate Utility Pole	EA	0	x	10,000.00	= \$	-
152390	Relocate Mailbox	EA	0	x	250.00	= \$	-

TOTAL SPECIALTY ITEMS	\$	-
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
130670 Biological Mitigation	LF	x	= \$	-
141000 Temporary Reinforced Silt Fence	LF	1,050	5.00 = \$	5,250
160120 Temporary Fence (Type ESA)	EA	58	250.00 = \$	14,500
Remove Tree				
Subtotal Environmental Mitigation				\$ 19,750

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend A Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Subtotal Landscape and Irrigation				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	22796	\$ 0.31 = \$	7,067
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ 7,067

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	6,000.00 = \$	6,000
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	1	10,000.00 = \$	10,000
130330 Storm Water Annual Report	EA	1	2,000.00 = \$	2,000
130310 Rain Event Action Plan (REAP)	EA	2	550.00 = \$	1,100
130320 Storm Water Sampling and Analysis Day	EA	2	575.00 = \$	1,150
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	22,796	0.31 = \$	7,067
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	1	1,500.00 = \$	1,500
130640 Temporary Fiber Roll	LF	2,060	4.50 = \$	9,270
130900 Temporary Concrete Washout	EA	0	2,500.00 = \$	-
130710 Temporary Construction Entrance	EA	0	3,725.00 = \$	-
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	1	10,000.00 = \$	10,000
Subtotal NPDES				\$ 48,087

Supplemental Work for NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
066595 Water Pollution Control Maintenance Sharing*	LS	1	10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	10,000.00 = \$	10,000
066597 Storm Water Sampling and Analysis***	LS	1	10,000.00 = \$	10,000
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NDPS				\$ 30,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL	\$ 75,000
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SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	0	9.25	= \$ -
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	1	500.00	= \$ 500
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	0	3.30	= \$ -
846012 Thermoplastic Crosswalk and Pavement Marking (E	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	1,000.00	= \$ 1,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 1,500

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	1	\$ 1,500	= \$ 1,500
Subtotal Traffic Management Plan				\$ 1,500

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	10,500.00	= \$ 10,500
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 10,500

TOTAL TRAFFIC ITEMS	\$ 13,500
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 102,700

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items 1.0% \$ 1,027

8B - Bike Path Items

Bike Path Items 1.0% \$ 1,027

8C - Other Minor Items

Other Minor Items 8.0% \$ 8,216

Total of Section 1-7 \$ 102,700 x 10.0% = \$ 10,270

TOTAL MINOR ITEMS \$ 10,300**SECTIONS 9: MOBILIZATION**

Item code	Total Section 1-8	\$	113,000	x	10%	= \$	-
999990							
TOTAL MOBILIZATION							\$ -

SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	x	= \$	-
066094 Value Analysis	LS	x	= \$	-
066070 Maintain Traffic	LS	1	x 9,000.00 = \$	9,000
066919 Dispute Resolution Board	LS	x	= \$	-
066921 Dispute Resolution Advisor	LS	x	= \$	-
066015 Federal Trainee Program	LS	x	= \$	-
066610 Partnering	LS	x	= \$	-
066204 Remove Rock and Debris	LS	x	= \$	-
066222 Locate Existing Crossover	LS	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
<i>Cost of NPDES Supplemental Work specified in Section 5D</i>				<i>= \$ 30,000</i>
Total Section 1-8	\$	113,000	4%	= \$ 4,520
TOTAL SUPPLEMENTAL WORK				\$ 43,600

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	1	x	3,500.00	=	\$3,500
066063	Traffic Management Plan - Public Information	LS	1	x	10,000.00	=	\$10,000
066901	Water Expenses	LS	1	x	10,000.00	=	\$10,000
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS		x		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS	1	x	5,000.00	=	\$5,000
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	113,000		4%	= \$	4,520

TOTAL STATE FURNISHED	\$33,100
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization	\$113,000 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency)	\$189,700 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	15	X	\$0	=	\$0

TOTAL TIME-RELATED OVERHEAD	\$0
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11	\$	146,100	x	40%	=	\$58,440
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TOTAL CONTINGENCY	\$58,500
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II. STRUCTURE ITEMS**Bridge 1**

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Bridge Name	Elk Valley Rd over Jordan Creek	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	Widening Concrete Slab	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total Bridge Length (Feet)	0 LF	0 LF	0 LF
Total Area (Square Feet)	0 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	1 LF	0 LF	0 LF
Footing Type (pile or spread)	Spread	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0	\$0	\$0
COST OF EACH	\$0	\$0	\$0

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100	\$0	\$0
COST OF EACH	\$0	\$0	\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$0
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	40%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	26,400
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	0

L)	TOTAL RIGHT OF WAY ESTIMATE	\$26,400
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M)	TOTAL R/W ESTIMATE: Escalated	\$26,400
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$275,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from Howland Hill Road to Norris Avenue

Project Description: Add curb, gutter, sidewalk, drainage pipe and inlets along Elk Valley Road From Howland Hill Road to Norris Avenue

Scope : A \$514/LF cost from construction in Alternative 1 was used and applied to the length of the vertical curve, with an additional construction items described above, to calculate the total roadway cost.

Alternative : Alternative #4

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 1,364,200	\$ 1,469,732
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 1,364,200	\$ 1,469,732
TOTAL RIGHT OF WAY COST	\$ -	\$ -
TOTAL CAPITAL OUTLAY COSTS	\$ 1,365,000	\$ 1,470,000
 PRI/ED SUPPORT	 \$ -	 \$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 1,400,000	\$ 1,500,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 522

Estimated Mid-Point of Construction (Month/Year) 6 / 2022

Estimated Construction End (Month/Year) 10 / 2022

Number of Plant Establishment Days 40

Estimated Project Schedule

PID Approval	6/1/2018
PA/ED Approval	10/1/2020
PS&E	10/1/2021
RTL	1/1/2022
Begin Construction	6/1/2022

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd at 1 location totaling 1120 LF

Project Description: Vertical Curve Corrections at 1 location just north of the Howland Hill Road intersection

Scope : A \$514/LF cost from construction in Alternative 1 was used and applied to the length of the vertical curve, with an additional earthwork amount added to calculate the roadway cost found below.

Alternative : Alternative 5 - Vertical Curve 1 Correction

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 592,315	\$ 681,306
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 592,315	\$ 681,306
TOTAL RIGHT OF WAY COST	\$ 327,777	\$ 327,777
TOTAL CAPITAL OUTLAY COSTS	\$ 921,000	\$ 1,010,000
PR/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 925,000	\$ 1,050,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 50

Estimated Mid-Point of Construction (Month/Year) 7 / 2022

Estimated Construction End (Month/Year) 9 / 2022

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	6/1/2018
PA/ED Approval	10/1/2020
PS&E	10/1/2021
RTL	1/1/2022
Begin Construction	6/1/2022

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

PROJECT

PLANNING COST ESTIMATE

EA: 01-LOCAL

EA: 01-LOCAL PID: 01 - Elk Valley Rd

PID: 01 - Elk Valley Rd

District-County-Route: 01-DN-EVR

PM: 0.0-4.5

Type of Estimate : Programming

Program Code : K

Project Limits : Along Elk Valley Rd from US101 to Howland Hill Road totaling 5380 LF

Project Description: Re-stripping and pavement marking along Elk Valley Road in the urban stretch

Scope :

Alternative : Alternative 6 - Urban Restriping

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 103,700	\$ 119,280
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 103,700	\$ 119,280
TOTAL RIGHT OF WAY COST	\$ -	\$ -
TOTAL CAPITAL OUTLAY COSTS	\$ 104,000	\$ 120,000
 PRI/ED SUPPORT	 \$ -	 \$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 105,000	\$ 120,000
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If Project has been programmed enter Programmed Amount

Month / Year

Date of Estimate (Month/Year) 1 / 2017

Estimated Construction Start (Month/Year) 6 / 2022

Number of Working Days = 50

Estimated Mid-Point of Construction (Month/Year) 7 / 2022

Estimated Construction End (Month/Year) 9 / 2022

Number of Plant Establishment Days 261

Estimated Project Schedule

PID Approval	6/1/2018
PA/ED Approval	10/1/2020
PS&E	10/1/2021
RTL	1/1/2022
Begin Construction	6/1/2022

Reviewed by District O.E.

xx/xx/xxxx

(xxx) xxx-xxxx

Office Engineer

Date

Phone

Approved by Project
Manager

xx/xx/xxxx

(xxx) xxx-xxxx

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ -
2	Pavement Structural Section	\$ -
3	Drainage	\$ -
4	Specialty Items	\$ -
5	Environmental	\$ -
6	Traffic Items	\$ 57,400
7	Detours	\$ -
8	Minor Items	\$ 5,800
9	Roadway Mobilization	\$ 6,400
10	Supplemental Work	\$ 2,600
11	State Furnished	\$ 2,600.00
12	Time-Related Overhead	\$ -
13	Roadway Contingency	\$ 28,900.00
TOTAL ROADWAY ITEMS		\$ 103,700

Estimate Prepared By :

Name and Title	Date	Phone
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Estimate Reviewed By :

Name and Title	Date	Phone
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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	x	= \$	-
19010X	Roadway Excavation (Type X) ADL	CY	x	= \$	-
194001	Ditch Excavation	CY	x	= \$	-
19801X	Imported Borrow	CY/TON	x	= \$	-
192037	Structure Excavation (Retaining Wall)	CY	x	= \$	-
193013	Structure Backfill (Retaining Wall)	CY	x	= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY	x	= \$	-
16010X	Clearing & Grubbing	LS/ACRE	x	= \$	-
170101	Develop Water Supply	LS	x	= \$	-
19801X	Imported Borrow	CY/TON	x	= \$	-
210130	Duff	ACRE	x	= \$	-
XXXXXX	Some Item	Unit			

TOTAL EARTHWORK SECTION ITEMS	\$	-
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity	Unit Price (\$)	Cost
401050	Jointed Plain Concrete Pavement	CY	x	= \$	-
400050	Continuously Reinforced Concrete Pavement	CY	x	= \$	-
404092	Seal Pavement Joint	LF	x	= \$	-
404093	Seal Isolation Joint	LF	x	= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF	x	= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF	x	= \$	-
280010	Rapid Strength Concrete Base	CY	x	= \$	-
410095	Dowel Bar (Drill and Bond)	EA	x	= \$	-
390132	Hot Mix Asphalt (Type A)	TON	x	= \$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	x	= \$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD	x	= \$	-
260203	Class 2 Aggregate Base	CY	x	= \$	-
290201	Asphalt Treated Permeable Base	CY	x	= \$	-
250401	Class 4 Aggregate Subbase	CY	x	= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON	x	= \$	-
397005	Tack Coat	TON	x	= \$	-
377501	Slurry Seal	TON	x	= \$	-
3750XX	Screenings (Type XX)	TON	x	= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON	x	= \$	-
370001	Sand Cover (Seal)	TON	x	= \$	-
731530	Minor Concrete (Textured Paving)	CY	x	= \$	-
731502	Minor Concrete (Miscellaneous Construction)	CY	x	= \$	-
39407X	Place Hot Mix Asphalt Dike (Type X)	LF	x	= \$	-
150771	Remove Asphalt Concrete Dike	LF	x	= \$	-
420201	Grind Existing Concrete Pavement	SQYD	x	= \$	-
150860	Remove Base and Surfacing	CY	x	= \$	-
390095	Replace Asphalt Concrete Surfacing	CY	x	= \$	-
153130	Remove Concrete	LF	x	= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	x	= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD	x	= \$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA	x	= \$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD	x	= \$	-
420102	Groove Existing Concrete Pavement	SQYD	x	= \$	-
390136	Minor Hot Mix Asphalt	TON	x	= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD	x	= \$	-
731504	Minor Concrete (Curb and Gutter)	LF	x	= \$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	-
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SECTION 3: DRAINAGE

Item code		Unit	Quantity	Unit Price (\$)	Cost
150809	Remove Culvert	EA/LF	x	= \$	-
152604	Modify Inlet	EA	x	= \$	-
155232	Sand Backfill	CY	x	= \$	-
15020X	Abandon Culvert	EA/LF	x	= \$	-
152430	Adjust Inlet	LF	x	= \$	-
155003	Cap Inlet	EA	x	= \$	-
510501	Minor Concrete	LS	x	= \$	-
510502	Minor Concrete (Minor Structure)	CY	x	= \$	-
510092	Structural Concrete, Headwall	CY	x	= \$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF	x	= \$	-
941107	18" Plastic Pipe	LF	x	= \$	-
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF	x	= \$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF	x	= \$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF	x	= \$	-
69011X	XX" Corrugated Steel Pipe Down drain (0.XXX" Thi	LF	x	= \$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF	x	= \$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF	x	= \$	-
7050XX	XX" Steel Flared End Section	EA	x	= \$	-
703233	Grated Line Drain	LF	x	= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON	x	= \$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD	x	= \$	-
721420	Concrete (Ditch Lining)	CY	x	= \$	-
721430	Concrete (Channel Lining)	CY	x	= \$	-
750001	Miscellaneous Iron and Steel	LB	x	= \$	-
150821	Remove Headwall	LS	x	= \$	-

TOTAL DRAINAGE ITEMS	\$	-
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity	Unit Price (\$)	Cost
080050	Progress Schedule (Critical Path Method)	LS	x	= \$	-
582001	Sound Wall (Masonry Block)	SQFT	x	= \$	-
510530	Minor Concrete (Wall)		x	= \$	-
15325X	Remove Sound Wall	LF/LS	x	= \$	-
070030	Lead Compliance Plan	LS	x	= \$	-
141120	Treated Wood Waste	LB	x	= \$	-
153221	Remove Concrete Barrier	LF	x	= \$	-
150662	Remove Metal Beam Guard Railing	LF	x	= \$	-
150668	Remove Flared End Section	EA	x	= \$	-
8000XX	Chain Link Fence (Type XX)	LF	x	= \$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA	x	= \$	-
832001	Metal Beam Guard Railing	LF	x	= \$	-
839301	Single Thrie Beam Barrier	LF	x	= \$	-
839310	Double Thrie Beam Barrier	LF	x	= \$	-
839521	Cable Railing	LF	x	= \$	-
839536	Type SRT-31 Terminal System	EA	x	= \$	-
839585	Alternative Flared Terminal System	EA	x	= \$	-
839584	Alternative In-line Terminal System	EA	x	= \$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF	x	= \$	-
839XXX	Crash Cushion (Insert Type)	EA	x	= \$	-
83XXXX	Concrete Barrier (Insert Type)	LF	x	= \$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB	x	= \$	-
510060	Structural Concrete, Retaining Wall	CY	x	= \$	-
513553	Retaining Wall (Masonry Wall)	SQFT	x	= \$	-
511035	Architectural Treatment	SQFT	x	= \$	-
598001	Anti-Graffiti Coating	SQFT	x	= \$	-
203070	Rock Stain	SQFT	x	= \$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT	x	= \$	-
83954X	Transition Railing (Type X)	EA	x	= \$	-
597601	Prepare and Stain Concrete	SQFT	x	= \$	-
839561	Rail Tensioning Assembly	EA	x	= \$	-
83958X	End Anchor Assembly (Type X)	EA	x	= \$	-
XXXXXX	Relocate Utility Pole	EA	x	= \$	-
152390	Relocate Mailbox	EA	x	= \$	-

TOTAL SPECIALTY ITEMS	\$	-
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SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
Biological Mitigation	LS	x	= \$	-
130670 Temporary Reinforced Silt Fence	LF	x	= \$	-
141000 Temporary Fence (Type ESA)	LF	x	= \$	-
160120 Remove Tree	EA	x	= \$	-
<i>Subtotal Environmental Mitigation</i>				\$ -

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	x	= \$	-
204101 Extend Plant Establishment Work	LS	x	= \$	-
20XXXX Follow-up Landscape Project	LS	x	= \$	-
150685 Remove Irrigation Facility	LS	x	= \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil (X)	CY/TON	x	= \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
208304 Water Meter	EA	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extended Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
<i>Subtotal Landscape and Irrigation</i>				\$ -

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
210010 Move In/Move Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (X)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	x	= \$	-
210600 Compost	SQFT	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
<i>Subtotal Erosion Control</i>				\$ -

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	x	= \$	-
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	x	= \$	-
130330 Storm Water Annual Report	EA	x	= \$	-
130310 Rain Event Action Plan (REAP)	EA	x	= \$	-
130320 Storm Water Sampling and Analysis Day	EA	x	= \$	-
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQFT	x	= \$	-
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	x	= \$	-
130640 Temporary Fiber Roll	LF	x	= \$	-
130900 Temporary Concrete Washout	EA	x	= \$	-
130710 Temporary Construction Entrance	EA	x	= \$	-
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	x	= \$	-
<i>Subtotal NPDES</i>				\$ -

Supplemental Work for NPDES

Supplemental Work for NDPS						
066595	Water Pollution Control Maintenance Sharing*	LS	x	10,000.00	= \$	-
066596	Additional Water Pollution Control**	LS	x	10,000.00	= \$	-
066597	Storm Water Sampling and Analysis***	LS	x	10,000.00	= \$	-
XXXXXX	Some Item	LS	x		= \$	-
Subtotal Supplemental Work for NDPS						\$ -

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
860460 Lighting and Sign Illumination	LS	x	= \$	-
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elen	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Some Item	LS	x	= \$	-
Subtotal Traffic Electrical				\$ -

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	x	= \$	-
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	21,512	x 2.50 = \$	53,780
846012 Thermoplastic Crosswalk and Pavement Marking (T	SQFT	592	x 6.00 = \$	3,552
120090 Construction Area Signs	LS	x	5,000.00 = \$	-
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 57,332

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	x	\$ 1,500 = \$	-
Subtotal Traffic Management Plan				\$ -

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	x	= \$	-
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ -

TOTAL TRAFFIC ITEMS	\$ 57,400
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
190101 Roadway Excavation	CY	x	= \$	-
19801X Imported Borrow	CY/TON	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X Class 2 Aggregate Base	TON/CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
128601 Temporary Signal System	LS	x	= \$	-
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X Temporary Fence (Type X)	LF	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-
TOTAL DETOURS				\$ -

SUBTOTAL SECTIONS 1 through 7 \$ 57,400

SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items

1.0% \$ 574

8B - Bike Path Items

Bike Path Items

1.0% \$ 574

8C - Other Minor Items

Other Minor Items

8.0% \$ 4,592

Total of Section 1-7 \$ 57,400 x 10.0% = \$ 5,740

TOTAL MINOR ITEMS \$ 5,800**SECTIONS 9: MOBILIZATION**

Item code

999990

Total Section 1-8

\$ 63,200 x 10% = \$ 6,320

TOTAL MOBILIZATION \$ 6,400**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	x	= \$	-
066094 Value Analysis	LS	x	= \$	-
066070 Maintain Traffic	LS	x	= \$	-
066919 Dispute Resolution Board	LS	x	= \$	-
066921 Dispute Resolution Advisor	LS	x	= \$	-
066015 Federal Trainee Program	LS	x	= \$	-
066610 Partnering	LS	x	= \$	-
066204 Remove Rock and Debris	LS	x	= \$	-
066222 Locate Existing Crossover	LS	x	= \$	-
XXXXXX Some Item	Unit	x	= \$	-

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

Total Section 1-8 \$ 63,200 4% = \$ 2,528

TOTAL SUPPLEMENTAL WORK \$ 2,600

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity	Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	x	=		\$0
066063	Traffic Management Plan - Public Information	LS	x	=		\$0
066901	Water Expenses	LS	x	=		\$0
8609XX	Traffic Monitoring Station (X)	LS	x	=		\$0
066841	Traffic Controller Assembly	LS	x	=		\$0
066840	Traffic Signal Controller Assembly	LS	x	=		\$0
066062	COZEEP Contract	LS	x	=		\$0
066838	Reflective Numbers and Edge Sealer	LS	x	=		\$0
066065	Tow Truck Service Patrol	LS	x	=		\$0
066916	Annual Construction General Permit Fee	LS	x	=		\$0
XXXXXX	Some Item	Unit	x	=		\$0
Total Section 1-8		\$	63,200	4%	= \$	2,528

TOTAL STATE FURNISHED	\$2,600
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$63,200 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency) \$74,800 (used to check if project is greater than \$5 million excluding contingency)

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

Item code		Unit	Quantity	Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	50	X	\$0 =	\$0

TOTAL TIME-RELATED OVERHEAD	\$0
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 72,200 x **40%** = \$28,880

TOTAL CONTINGENCY	\$28,900
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II. STRUCTURE ITEMS**Bridge 1**

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Bridge Name	Elk Valley Rd over Jordan Creek	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	Widening Concrete Slab	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total Bridge Length (Feet)	0 LF	0 LF	0 LF
Total Area (Square Feet)	0 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	1 LF	0 LF	0 LF
Footing Type (pile or spread)	Spread	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot		\$0	\$0
COST OF EACH	\$0	\$0	\$0

DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total 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)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100	\$0	\$0
COST OF EACH	\$0	\$0	\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Structures Mobilization Percentage	10%	\$0
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	40%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	0
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	

L)	TOTAL RIGHT OF WAY ESTIMATE	\$0
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M)	TOTAL R/W ESTIMATE: Escalated	\$0
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N)	RIGHT OF WAY SUPPORT	\$0
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Support Cost Estimate Prepared By	Project Coordinator ¹	Phone
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Utility Estimate Prepared By	Utility Coordinator ²	Phone
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R/W Acquisition Estimate Prepared By	Right of Way Estimator ³	Phone
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Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

EA: 01-LOCAL PID: 01 - Elk Valley Rd

IV. SUPPORT COST ESTIMATE SUMMARY

Note: Use PRSM project data.

Total by FY		Escalated Support Cost for Estimate To Completion (ETC)				
		PA&ED	PS&E	RW	CON	Total \$
< 2010	Expended					
	ETC					
2011	Expended					
	ETC					
2012	Expended					
	ETC					
2013	Expended					
	ETC					
2014	Expended					
	ETC					
2015	Expended					
	ETC					
2016	Expended					
	ETC					
2017	Expended					
	ETC					
2018	Expended					
	ETC					
2019	Expended					
	ETC					
2020	Expended					
	ETC					
2021	Expended					
	ETC					
2022	Expended					
	ETC					
2023	Expended					
	ETC					
2024	Expended					
	ETC					
2025 >	Expended					
	ETC					
EAC (Expended + ETC)		\$0	\$0	\$0	\$0	\$0
Approved Budget (PRSM)						
Difference (Budget - EAC)		\$0	\$0	\$0	\$0	\$0
Support Ratio (EAC / Cap Cost)		0.0%	0.0%	0.0%	0.0%	0.0%

Total Capital Cost:	\$104,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

PRSM workplan hours/costs verified
against approved MWA:

Office Chief -

Date

Approved by:

Project Control -

Date

Alternate 4 :

60' of Right of Way along entire stretch of Roadway

2273 Elk Valley Rd
Multimodal Corridor

West Side			
APN	Width(ft)	Zone	Area (ft ²)
112-180-33	50		2061
112-180-34	50		6248
112-020-32	30		19017
112-020-30	30		31384
112-220-02	30		782
112-060-06	30		5484
112-060-03	30		6058
112-060-04	30		3827
112-050-06	30		2922
112-050-13	30		2097
112-050-19	30		3618
112-050-18	30		6654
112-050-05	30		3007
112-050-04	30		7007
112-050-23	30		12901
112-200-02	30		2765
112-040-19	30		10152
112-040-18	30		2563
112-040-17	30		9750
112-040-16	30		2571
112-040-48	30		5929
112-040-47	30		10427
112-040-14	30		3965
112-040-13	30		5104
112-040-12	30		4508
112-040-11	30		3062
112-040-11	30		5148
112-020-25	30		7450
112-038-02	10		1516
112-038-01	10		2483
112-034-03	10		2483
112-034-04	10		3469
112-020-24	5		375
112-020-43	5		1461
112-020-22	5		2733
112-020-48	5		1320
112-020-47	5		1187
112-020-42	5		238
112-020-41	5		884
112-020-38	5		12654
112-020-19	5		306
110-032-21	5		17415
110-300-10	30		13205
110-300-28	30		6426

East Side			
APN	Width(ft)	Zone	Area (ft ²)
112-700-01	30		10540
112-180-09	30		4197
112-180-31	30		3539
112-180-28	30		944
112-180-39	30		3669
112-180-43	30		12576
112-180-06	30		6098
112-180-42	30		2784
112-180-02	30		7109
112-060-10	30		5400
112-060-12	30		4558
112-060-11	30		8678
112-060-07	30		1175
112-060-18	30		4228
112-060-17	30		6068
112-060-01	30		8220
112-020-15	30		19354
112-020-68	30		27107
112-020-51	30		15407
112-040-39	25		5220
112-020-36	30		16067
112-020-13	30		5139
112-020-11	30(part of)		7463
112-020-10	5(part of)		1314
112-020-09	5		5802
112-020-85	5		756
112-020-08	5		878
112-020-84	5		10607
112-020-05	5		2171
110-300-08	triangle		1474
110-300-20	30		4906
110-300-31	30		25555
110-300-29	30		15197
110-300-04	30		5834
110-300-24	30		7649
110-300-23	30		8908

Alternate 4 :

60' of Right of Way along entire stretch of Roadway

2273 Elk Valley Rd
Multimodal Corridor

110-300-27	30		11392
110-300-15	30		12102
110-300-16	30		16012
110-300-03	30		4296
110-210-16	Median Trangle		1018
Unknown	South end		10540

ft²

\$/ft2

Total Land Acquisition Area 586567

Estimated Price \$ 4.00

\$ 2,346,268.00

* Need to input Zoning for each lot and Price Estimate for each zone

* Supporting data can be found in "60 ROW Outline" Level in yellow on MS

ATTACHMENT D:
ENVIRONMENTAL CONSTRAINTS
OVERVIEW REPORT

Environmental Constraints Overview Report

Elk Valley Road Multimodal Corridor Plan

Attention: Tamera Leighton, Executive Director, Del Norte Local Transportation Commission

From: Tim Chamberlain, Senior Environmental Planner, Dokken Engineering

Subject: Elk Valley Road Multimodal Corridor Project

Date: February 27, 2017

Project Introduction

The Del Norte Local Transportation Commission (DNLTC) is evaluating Elk Valley Road to determine potential transportation improvements along the corridor to improve safety, traffic and multimodal use. Elk Valley Road is located in Del Norte County and the City of Crescent City (see Figures 1 and 2). The Elk Valley Road Multimodal Corridor Plan is evaluating potential improvements that would improve the safety and multimodal use of Elk Valley Road. Corridor improvements are expected to be proposed as individual project packages which may include adding shoulders, changing the roadway profile, improving sight distance, and realigning curves.

Elk Valley is a northwest/southeast roadway between US Highway 101 (US-101) and US Highway 199 (US-199). In the project area, Elk Valley Road is two lane roadway between Howland Hill Road and Parkway Drive. Between Howland Hill Road and US-101, Elk Valley Road also has bike lanes, sidewalks, and a center turn lane. Numerous residents live off of Elk Valley Road or attached side streets. The roadway is also used by large trucks and others as a route from US-199 to US-101 and commercial locations located along Elk Valley Road. The County maintains a solid waste transfer station off of Elk Valley Road and State Street and utilizes Elk Valley Road as the main off haul route.



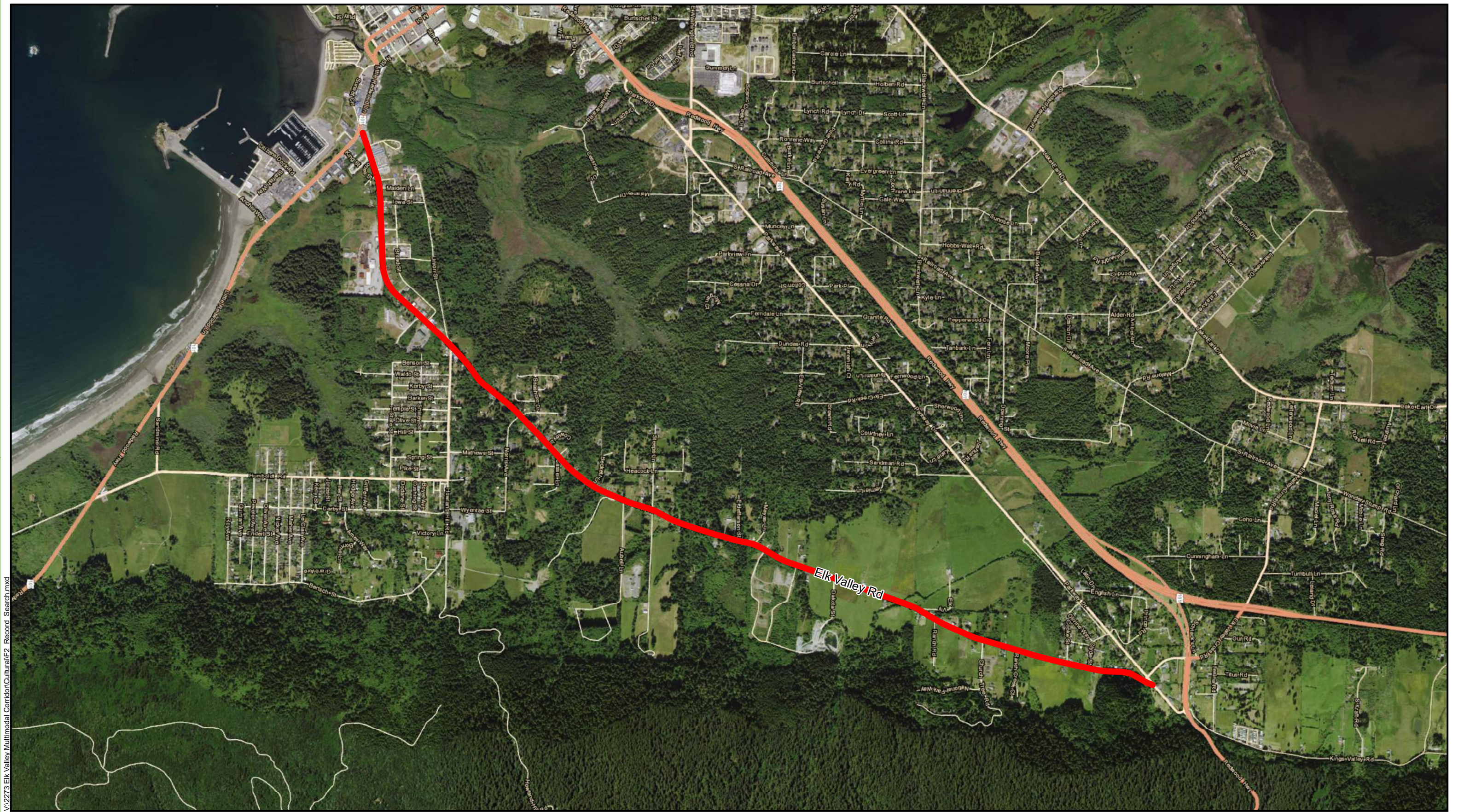
V:\2273 Elk Valley Multimodal Corridor\F1_Vicinity_20160907.mxd

Source: ESRI 2008; Dokken Engineering 9/7/2016; Created By: brianm



0 5 10 15 Miles

FIGURE 1
Project Vicinity
 Elk Valley Road Corridor Project
 Del Norte County, California



\\2273 Elk Valley Multimodal Corridor\Cultural\F2 Record Search.mxd

Source: ESRI Aerials Online; Dokken Engineering 3/13/2017; Created By: briann



FIGURE 2
Project Location Map
 Elk Valley Road Corridor PProject
 Del Norte County, California

1. ALTERNATIVES

Alternatives have been developed for the Corridor Plan that include Lane and shoulder widening, curb, gutter and sidewalk, intersection improvements, sight distance improvements, and no-build. The following descriptions of the alternatives gives location, types and limits of the improvements. Following the alternatives is the planning level cost estimates associated with each alternative that has estimated costs for construction, right of way, environmental mitigation, preliminary engineering, and construction engineering for a total estimated cost.

Alternative 1: Lane and Shoulder widening throughout

Alternative 1, **Option A** would construct standard lane widths and shoulders along Elk Valley Road from Howland Hill Road to Parkway Drive. The existing roadside utilities and drainage ditch will need to be relocated to construct the standard shoulder widths. A 60-foot wide Right of Way corridor would be secured from Howland Hill Road to Parkway Drive to contain the standard lane shoulders, drainage ditches and utility pole relocations. The 4 foot paved shoulder would be striped and signed as a Class 2 bike lane. The following key project elements will be included as part of the Alternative 1, Option A:

- **“12-foot Standard Lane Widths”** for 3.4 mile stretch on both sides of the corridor between Howland Hill Road and Parkway Drive
 - o 6” Hot Mix Asphalt
 - o 12” Class 2 Aggregate Base
- **“4-foot Class 2 Bike Lane”** Paved, marked
 - o 6” Hot Mix Asphalt
 - o 12” Class 2 Aggregate Base
- **“2-foot Graded Shoulders”**
 - o 6” Class 2 Aggregate Base
- **“Driveway Improvements”** for all current driveways along this corridor up to the right of way limits.

Alternative 1, **Option B** would keep the existing lane widths as 11 foot, construct a 2 foot striping barrier along each side of the corridor and widen the shoulder 3 additional feet to sustain a striped separated bike/ pedestrian lane. As with Alt. 1, Option A, a 60 foot wide Right of Way would be necessary to encompass the new corridor width and roadside elements.

- **“11-foot Lane Widths”** for 3.4 mile stretch on both sides of the corridor between Howland Hill Road and Parkway Drive
 - o 6” Hot Mix Asphalt
 - o 12” Class 2 Aggregate Base
- **“2-foot Safety Striping”**
- **“3-foot Bike Lane”** Paved, marked
 - o 6” Hot Mix Asphalt
 - o 12” Class 2 Aggregate Base
- **“2-foot Graded Shoulders”**
 - o 6” Class 2 Aggregate Base

Alternative 2: Intersection Improvement's

Alternative 2, **Option A** entails the construction of a 135-foot diameter inscribed circle roundabout located at the intersection of Howland Hill Road and Elk Valley Road. The roundabout would require additional Right of Way and utility relocations. The connections to the existing Elk Valley Road would begin at the existing sidewalk on Elk Valley Road and end approximately 250 feet north of the existing intersection. The roundabout would have crosswalks at each approach and provide sidewalks around the perimeter. Landscape areas will separate pedestrians from the traffic lane around the roundabout. Local driveways in the footprint of the roundabout would be modified to conform to the new road geometrics. It is anticipated that a building would need to be acquired in the northeast corner of the intersection to allow for the roundabout.

Alternative 2, **Option B** would construct two left turn pockets along with lane and shoulder widening along Elk Valley Road at the intersection of Norris Avenue and Harbor View Drive. The minimum requirements of 250 ft. of storage and 540 ft. of taper for each turn pocket results in the total length of the project being approximately 2,000 feet. The intersection would be improved by constructing the 12-foot left turn pocket and 4 foot of paved shoulders for bike and pedestrian traffic. This option would require the 60 foot of Right of Way acquisition and drainage/utility pole relocation in the footprint of the improvements

Alternative 2, **Option C** would be the addition of one left turn pocket at Cooke Street. The turn pocket would be 12-foot wide and 250 feet long for storage. With the 540 feet of deceleration and 540 feet of flare on the northerly segment, the total project length is approximately 1500 ft. The improvement would include 4 foot of paved shoulder for bike and pedestrian traffic. A small portion of the southern end of the planned project limits would encroach on two parcels and require Right of Way acquisition. Utility pole and drainage ditch relocations would be necessary.

Alternative 2, **Option D** would modify the northerly end of Elk Valley Road, which intersects with Parkway Drive. The elimination of the southbound lane on Elk Valley Road at Parkway Drive will force fast-paced vehicles to slow down before turning left and entering onto Elk Valley Road. The existing roadway from Elk Valley Road to the Parkway Drive/Elk Valley Cross Road intersection would be widened for the southbound traffic entering onto Elk Valley Road from Parkway Drive to have California legal turning radius. Road widening would involve right of way acquisition from the parcel south of the intersection. Within the existing triangle, vegetated median area a new curb and gutter will be constructed the full perimeter and the existing drainage inlets adjusted to maintain roadway drainage.

Alternative 3: Sight Distance Improvements

Alternative 3, **Option A** would correct all horizontal curves not in compliance with Chapter 200 of the Caltrans Highway Design Manual, latest edition, based on the design speed for Elk Valley Road. Curve 1 on Elk Valley Road, near Mayas Lane, would require clearing and grubbing beyond the edge of shoulder to maintain proper sight distance. Current lateral sight clearance is approx. 13 feet from lane to obstructions. Given the design speed of 55 mph (posted for 45 mph), a minimum lateral sight distance of 26 feet (center of lane to obstruction) is required for this curve.

Elk Valley Curve 2, near Parkway Drive, would require an additional 26 feet of clearance to meet standards for lateral sight clearance. Consultation with the UWFWS, along with work restricted to non-breeding season and compensatory mitigation for tree removal could be affected by this clearing and grubbing.

For both curves, temporary ESA fencing, ditch excavation and reseeding would be required.

Alternative 3, **Option B** would correct vertical curves along Elk Valley Road between Howland Hill Road and Aubell Lane. Elk Valley Vertical Curve 1 is just North of Howland Hill Road. Elk Valley

Vertical Curve 2 is just South of Aubell Lane. To provide the standard stopping distances required, the roadway in these areas would be regraded to adjust the crest vertical curves. This reconstruction of the roadway segments would include 12-foot wide lanes and 4 foot paved shoulders. Right of way width of 60 feet would be acquired as needed and utilities relocated as needed.

Alternative 4: Sidewalk Addition between Howland Hill Road and Norris Avenue

Alternative 4 would increase bike and pedestrian safety along Elk Valley Road between Howland Hill Road and Norris Avenue. A 5 foot wide sidewalk would be required, along with curb and gutter and a 5 foot clearance distance from flowline to the edge of travel way. This sidewalk would be placed on the eastern side of the corridor to accommodate the pedestrian traffic coming from Howland Hill Road. An 18" diameter corrugated steel pipe with drainage inlets located approximately every 250 feet are necessary to address drainage needs. In addition, 12-foot standard lane widths on both lanes and 4 foot paved shoulder extension would constructed on the western side of the corridor.

Alternative 5: Vertical Curve Improvement North of Howland Hill Road

Alternative 5 would be applicable to improve the vertical curve sight distance just north of the Howland Hill Road intersection. Alternative improvements at this intersection are pending, and the improvement of this curve could be necessary for stopping sight distance needs. Length of the improvements would be controlled by the amount of sight distance required for the design speed.

Alternative 6: Re-Striping Urban Stretch of Elk Valley Road

Alternative 6 proposes to restripe the urban stretch of Elk Valley Road located between US 101 to Howland Hill Road. This one-mile stretch of roadway involves re-striping pavement markings and thermoplastic striping. This improvement is to be an aesthetic improvement for the surrounding community when the rural section is improved.

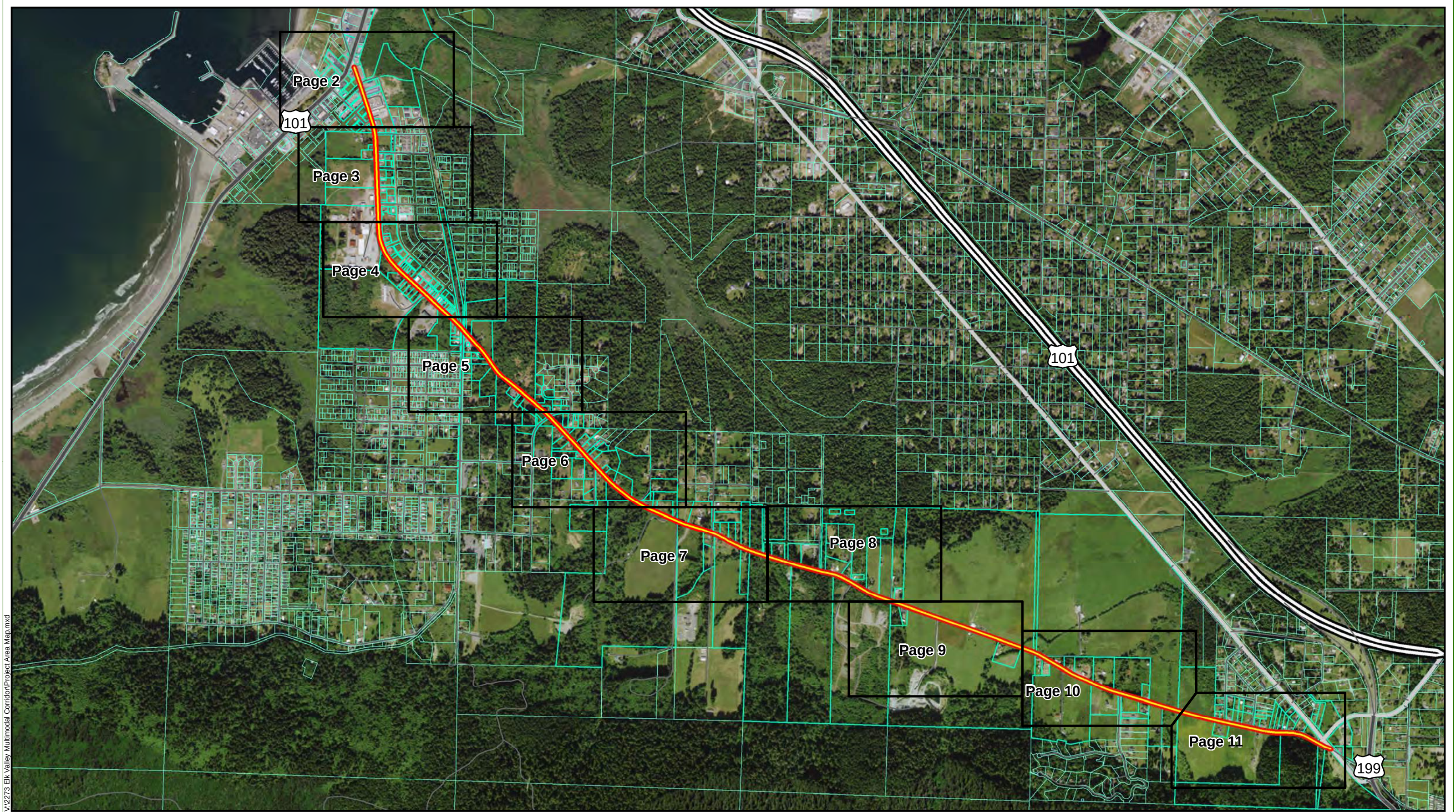
Alternative 7: No-Build Alternative

The No-Build Alternative proposes to maintain the existing configuration of Elk Valley Road in its current configuration. However, this alternative does not allow Elk Valley Road to comply with standard lane widths, stopping sight distances, or multimodal safety standards. The crash rates along this corridor are above local, County and State averages for the given classification and volume of traffic. The No-Build option would not address any issues or concerns with bike, pedestrian or multimodal transportation facilities.

Supplemental: 60 foot wide Right of Way Corridor

In the event that funding for right of way is secured, an estimate to acquire the 60-foot wide Right of Way along Elk Valley Road from Howland Hill Road to Parkway Drive in all areas not already secured to the 60-foot width was estimated. This estimate is based on available right of way records for existing roadway easements as recorded in the County Recorder's office. Preliminary Title Reports were not generated for this Corridor, so there is the possibility that certain easements along Elk Valley Road are not shown on the maps and records of surveys gathered for this effort. The 60-foot width was assumed to be centered on the existing roadway and/or parcel lines are at the center of roadway.

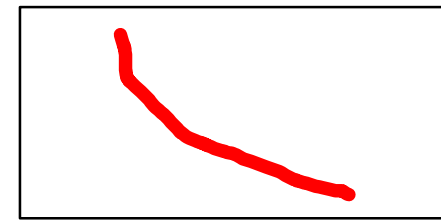
Access to and from all existing parcels is proposed to be maintained for drivers traveling in either direction along the roadway.



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Source: ESRI Maps Online; Dokken Engineering 10/17/2016; Created By: brianm



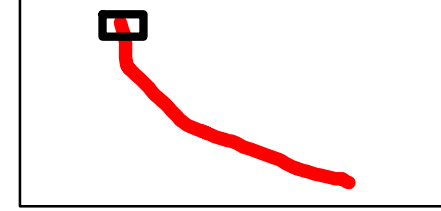
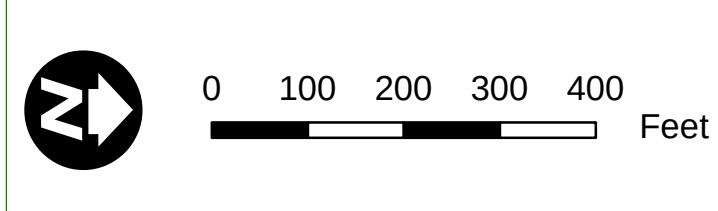
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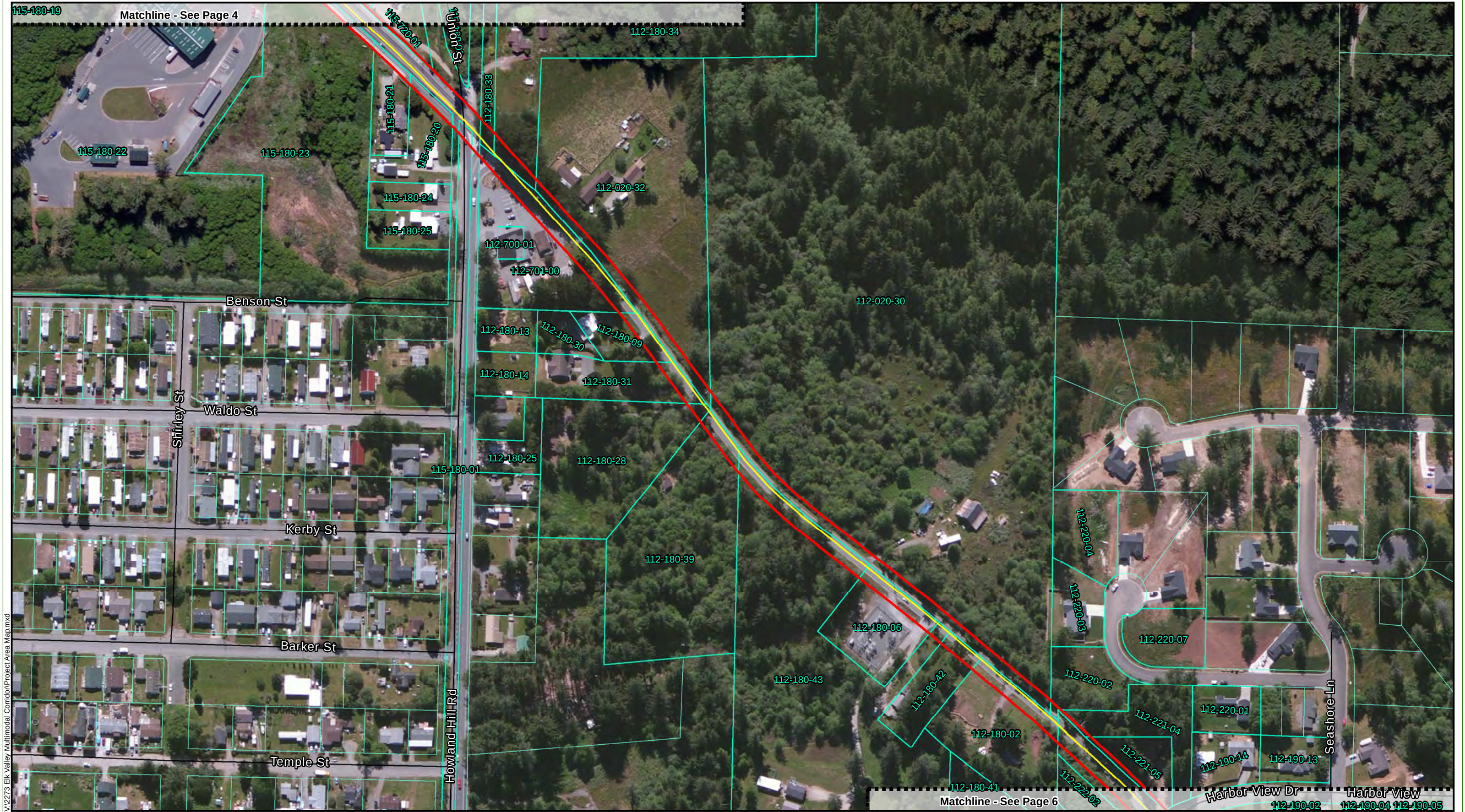
- Elk Valley Corridor
- Project Area
- Parcels



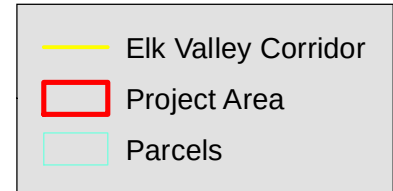
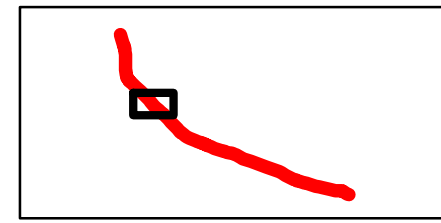
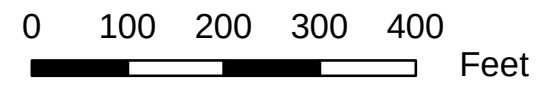
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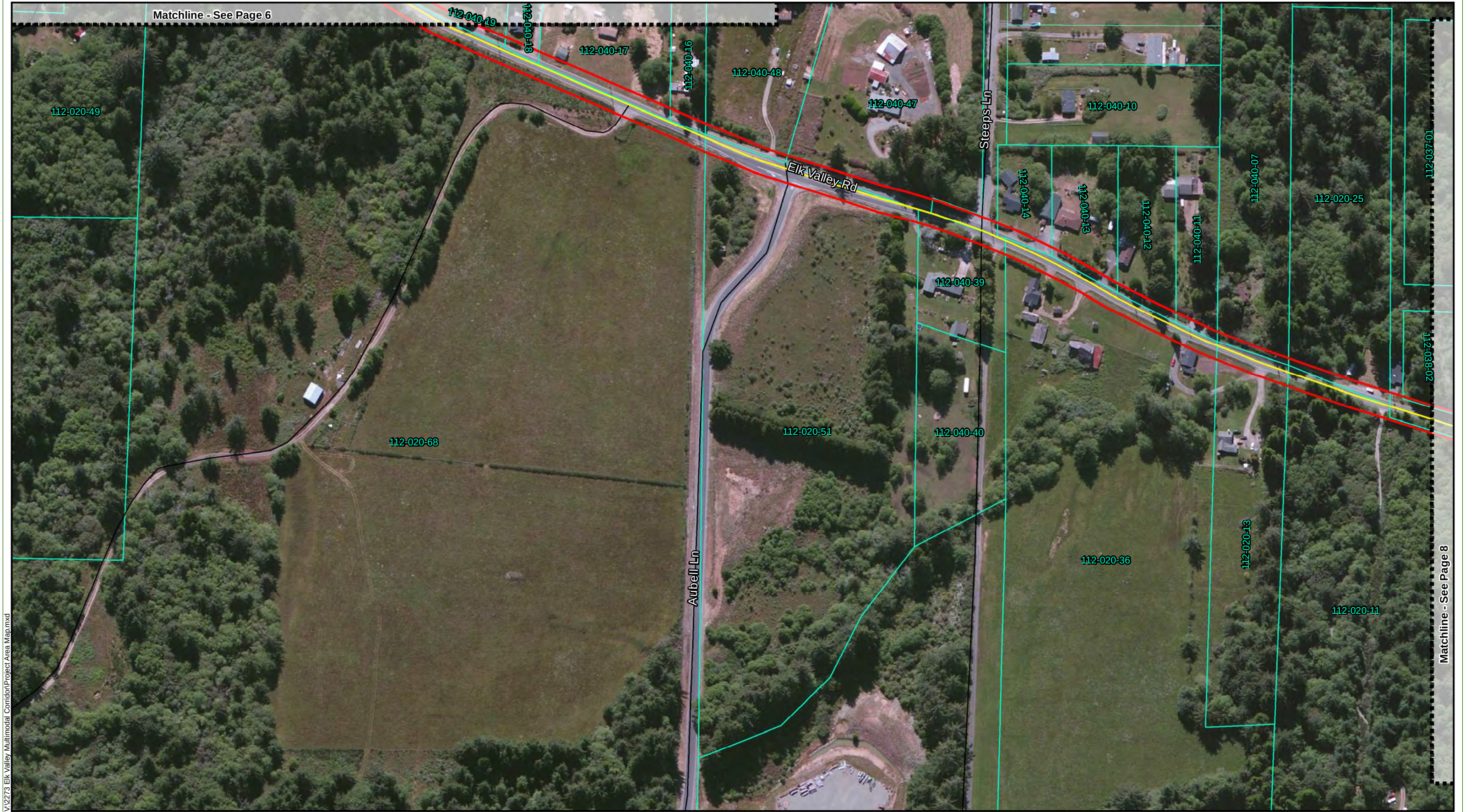


- Elk Valley Corridor
- Project Area
- Parcels

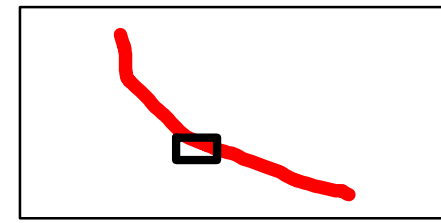
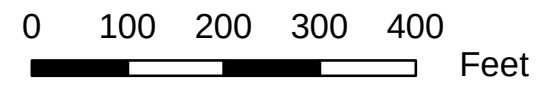


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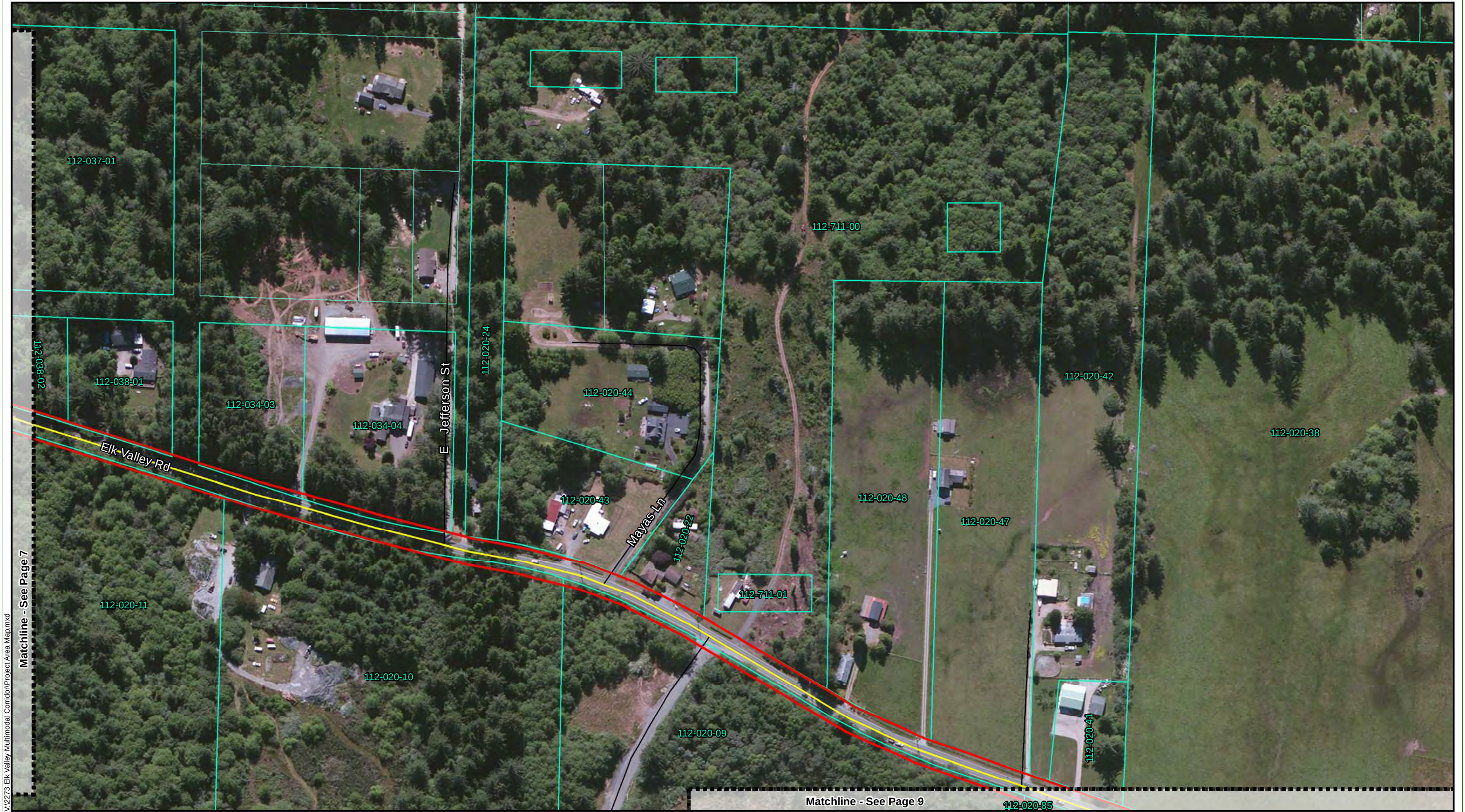




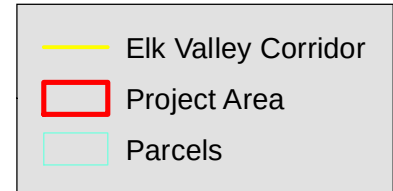
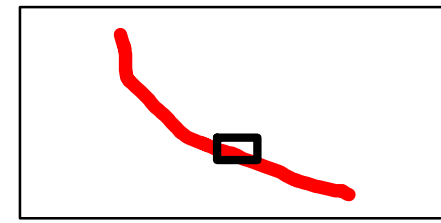
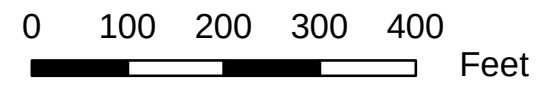
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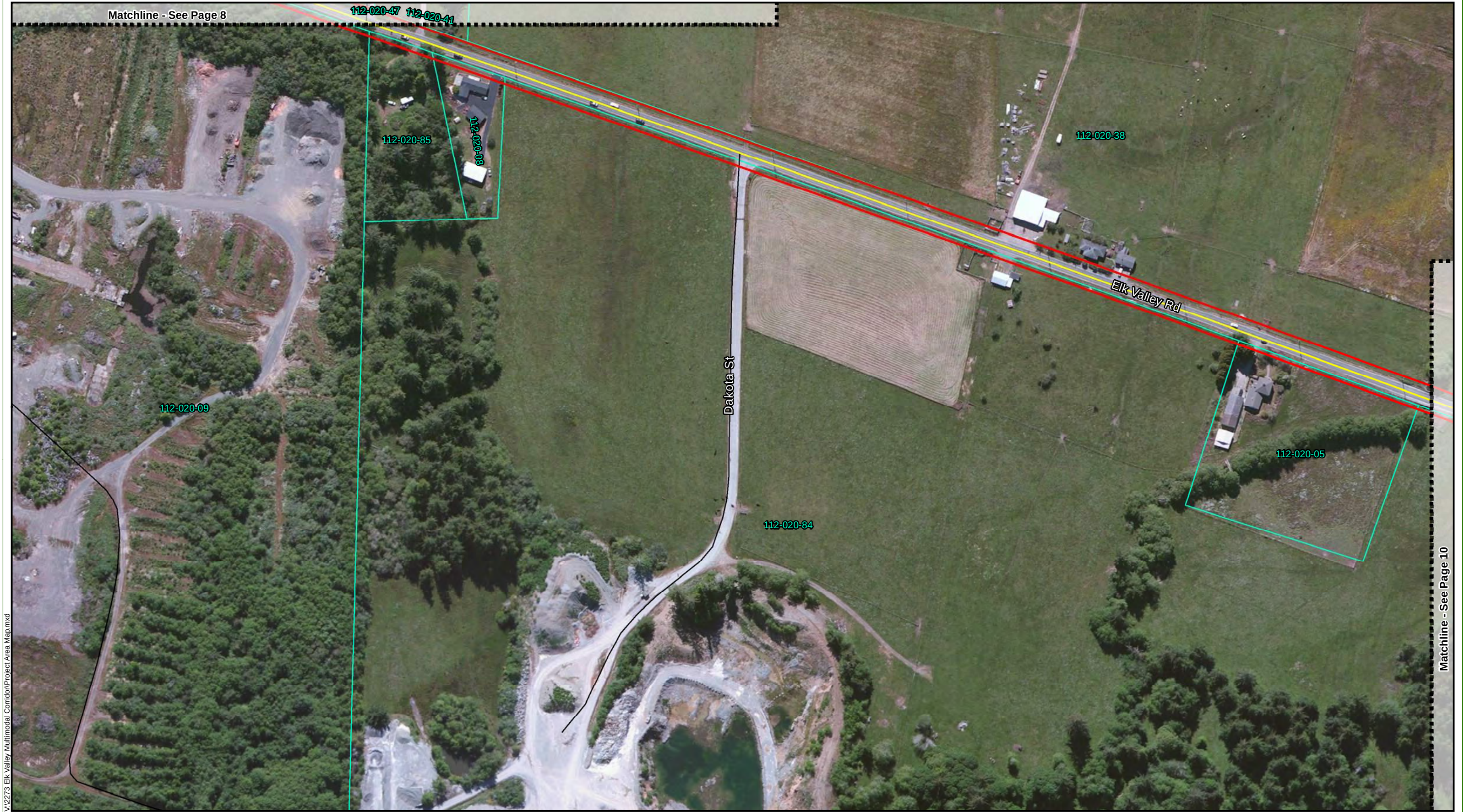


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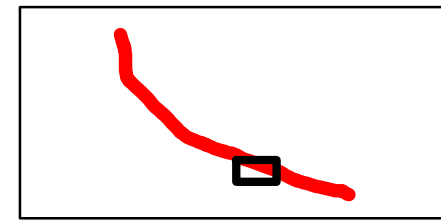




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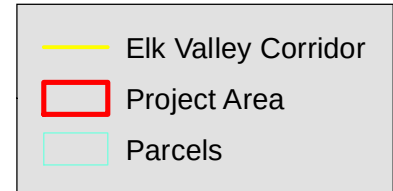
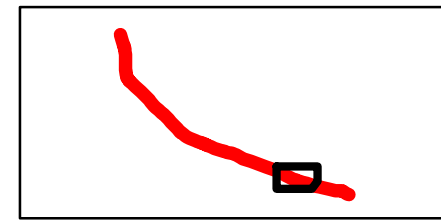
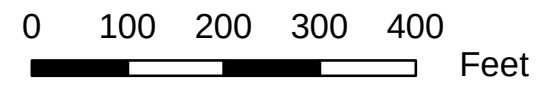
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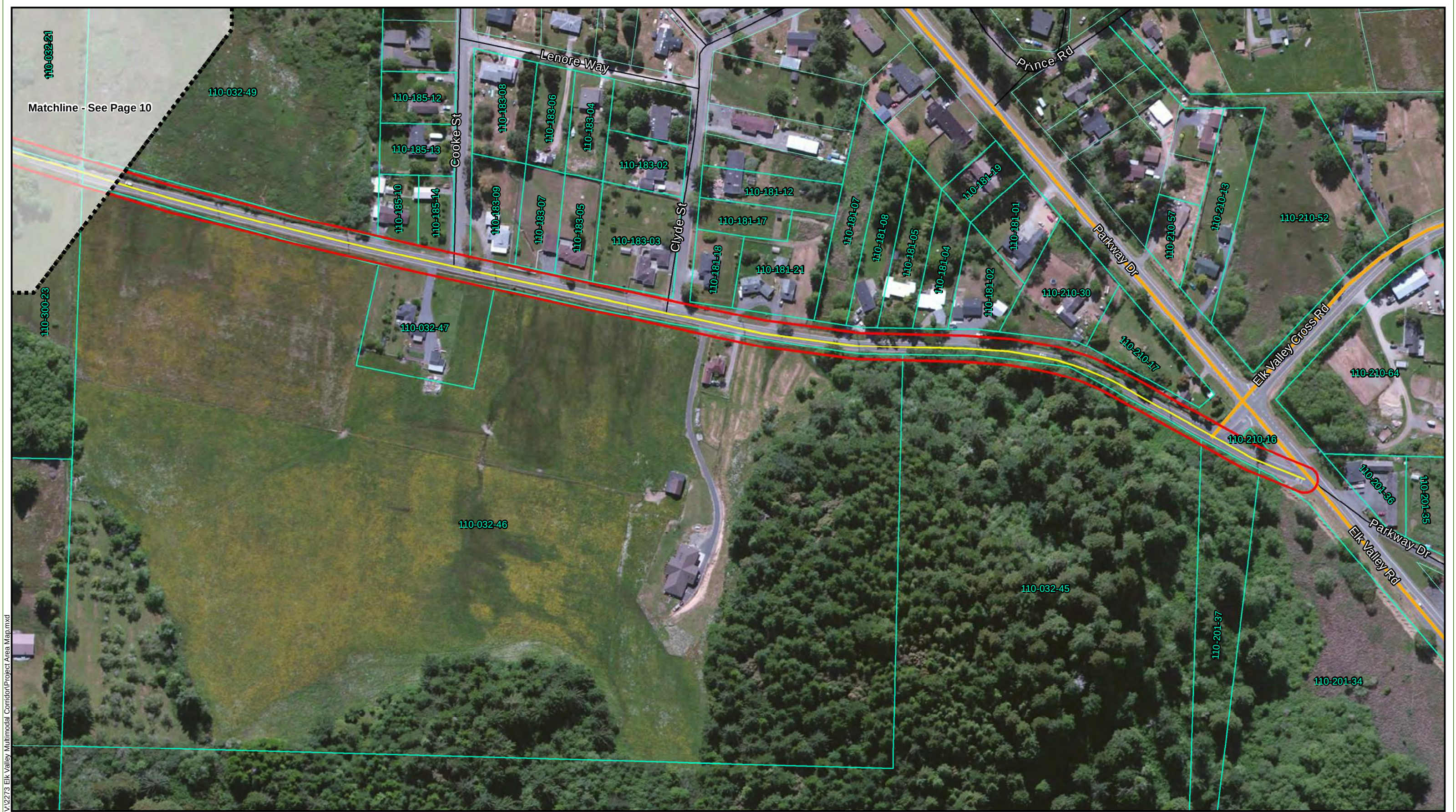


- Elk Valley Corridor
- Project Area
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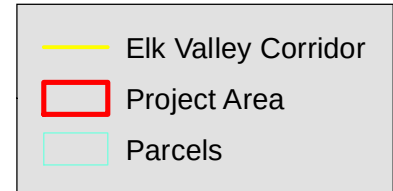
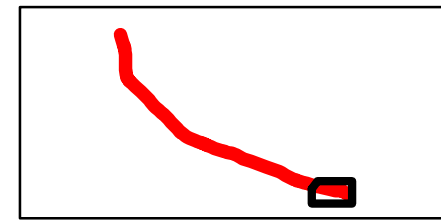
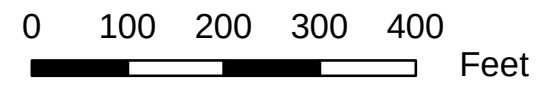


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Environmental Technical Summaries

Land Use

As designated in the Del Norte County General Plan Land Diagram, the area between Howland Hill Road and US-101, the land uses surrounding Elk Valley Road in the project area include the following: Urban Residential, General Commercial, Light Industrial, and General Industrial. The area between Howland Hill Road and US-199 has the land uses of Suburban Residential, Visitor Serving Commercial, Resource Conservation Area, Agriculture General, Rural Residential, Timberland, Agriculture Prime, Public Lands and Rural Neighborhood.

Future transportation improvement projects are expected to require varying amounts of right-of-way acquisition and conversion to a transportation land-use, but these conversions are consistent with the direction of both local jurisdictions' general plan to provide a safe and adequate transportation system throughout the region. Acquisitions would be expected to be predominantly small slivers directly adjacent to the existing roadway right-of-way. The proposed changes in land use designation would not be substantial in terms of overall direction of the General Plans and is anticipated to only be a minor environmental impact. The right-of-way acquisition would not result in the displacement or relocation of any residents.

The project is also included in the list of Long Term Projects (11-20 years) of the Del Norte County 2016 Regional Transportation Improvement Program, and local general plans. Consistency with state, regional, and local plans will be included and discussed further in the Land Use portion of the environmental document.

Growth

Each of the build alternatives are designed to improve roadway safety and traffic operations along the Elk Valley Road corridor and would not cause growth as a result of project implementation. In addition, the proposed improvements would be in a rural area, therefore the additional capacity would not encourage future growth. No impacts to growth are anticipated.

Farmlands/Timberlands

According to the National Resources Conservation Service (NRCS), the entire roadway is located within soils designated as Prime Farmland if Irrigated. No Williamson Act Contract lands were identified adjacent to Elk Valley Road, or within Del Norte County. There is a 500 foot strip of land along the west side of Elk Valley Road designated as timberlands.

Community Impacts

As the project will not be capacity increasing, there would be no community impacts in terms of substantive changes in access and the transportation network, changes in visual environment, increases in noise, and housing displacements. There is the potential for some nuisance noise impacts during construction

Section 4(f) Resources

A preliminary review of the project area identified one section Section 4(f) resources that could be affected by the proposed project. The Jedediah Smith Redwoods State Park is adjacent to the east side of Elk Valley Road along the northern most 0.2 miles of the project. The proposed project is anticipated to impact less than 1 acre of the Jedediah Smith Redwoods State Park. Considering the 10,000 acre size of the Park, project related impacts would have little to no effect on the function of the park and, if impacts did occur, they would be anticipated to result in a *de minimus* impact to this Section 4(f) resource.

If, at a later date, the Crescent City Plank and Turnpike Road (California Registered Historic Landmark #645) is determined to be eligible for the National Register of Historic Places, it would be considered a Section 4(f) resource. The proposed modification should have little to no effect on the landmark, which would result in a *de minimus* impact or no impact to this Section 4(f) resource.

If other sensitive cultural resources are located during future investigations, evaluation of these resources may be necessary to determine if they are eligible for inclusion on the NRHP. If the sites are determined to be eligible, a Section 4(f) evaluation of these properties will also be necessary.

Traffic and Operations Analysis

An analysis of existing traffic conditions and operations analysis for future conditions will be prepared as part of the preliminary engineering effort. This analysis will include data review from prior studies and as well as State Wide Integrated Traffic Records Systems (SWITRS) and Police Reports. Data collection will be done to determine an existing baseline condition including existing levels-of-service (LOS) volume to capacity ratios, average delay and queuing. Using the baseline as a comparison, traffic forecast volumes will be modeled for an opening day as well as the design year 2030. The assumptions, methodologies, and findings of the traffic forecast results will be used to prepare a Traffic Operational Analysis for the existing condition, the opening day condition, as well as the design year condition for each of the build alternatives and compared to the conditions modeled for the No-Build Alternative. The final report would include recommendations for design changes (if necessary) based on the results of the traffic operations analysis.

Visual/Aesthetics

Depending on the modifications proposed for Elk Valley Road, there would be negligible to minor changes to the views of the surrounding area. The roadway is visible to residents and users of the roadway. The addition of shoulders to the roadway would not change the overall visual characteristic of the roadway, and the proposed changes would likely result in no further analysis beyond the Visual Impact Assessment Questionnaire. However, a change in elevation profile may require a higher level document such as a Visual Impact Assessment. Other minor changes could occur if any trees that are adjacent to the existing roadway were removed. Although these types of impacts are expected to be minor, specific impacts by project should be evaluated individually to confirm that no substantial impacts would occur.

Cultural Resources

As part of this environmental constraints overview, a cultural resources records search was obtained from the Northwestern Information Center (NWIC) at the Sonoma State University on October 3, 2016. The record search revealed on previously recorded resource within the corridor, as well as three previously recorded resources and an isolated find adjacent to the corridor. The previously recorded resource within the corridor is the Crescent City Plank and Turnpike Road (P-08-0469), which roughly followed the current alignment of Elk Valley Road and is identified as California Historical Landmark #643. The other resources include, Crescent City and Smith River Railroad (P-08-0343), old school property (P-08-0366), plus a Native American ceremonial site (C-33). In conjunction with this search, a letter requesting a search of the Sacred Land File at Native American Heritage Commission was obtained revealing that Native American sites were found on the Sacred Land File (location is confidential).

The project has the potential to impact the Crescent City Plank and Turnpike Road and possibly known and unknown prehistoric archaeological resources. The potential of effect on these resources depends on the type of changes that will occur to Elk Valley Road. Based on current knowledge of resources within the area, it is unlikely the project will impact prehistoric cultural resources; however, additional resource

investigation and testing will be required on a project by project basis to ensure that the sensitive cultural materials would be identified and avoided wherever possible.

The current understanding of the Crescent City Plank and Turnpike Road is that Elk Valley Road follows the general alignment of the old road, but there are no remnants of the old road. The existing roadway is exempt from evaluation for the NRHP under Attachment 4 of the Section 106 PA as a converted roadway. However, if geotechnical investigations reveal intact redwood planks beneath the existing roadway, the resource would no longer be exempt and would need to be evaluated.

In order to ensure that all cultural resources in the project area are identified and all potential impacts to those resources are evaluated, full archaeological and historic resource surveys and reports will be prepared for each future project. Identification of an Area of Potential Effects, additional background research, Native American Consultation, and a pedestrian survey of the project by a professionally qualified staff would be part of these technical studies. Additional surveys and subsurface testing may be necessary and could include Extended Phase 1 or Phase 2 archaeological investigations.

Consistent with Caltrans' policy, the Del Norte Transportation Commission intends to consider avoidance of sensitive cultural resources during the preliminary environmental evaluations of any project. After avoidance alternatives are considered and an Area of Potential Effects has been determined, each cultural resource will be evaluated to determine if it is eligible for inclusion in the National Register of Historic Places. Any eligible resources that would be impacted by project construction will require a Finding of Effect Report documenting what impacts are expected and determining if those impacts would be considered adverse. Consultation with SHPO would be required and if impacts are determined to be adverse, a Memorandum of Agreement would be prepared to minimize those adverse effects to the cultural resource in compliance with Section 106 of the National Historic Preservation Act.

Hydrology and Floodplain

No floodplains identified on FEMA's floodplain maps occur within the proposed study. As a result, future project are not expected to encroach into any floodplain.

Water Quality and Storm Water Runoff

Most of Elk Valley Road is flanked by deep drainage ditches that convey storm water runoff either to Jordan Creek or Elk Creek. Jordan Creek flows north and empties into Lake Earl. Elk Creek flows south, emptying into the Pacific Ocean.

Future projects are expected to have increases in impervious surfaces which would increase stormwater run-off from the roadway. Drainage improvements may need to be incorporated into the proposed design as necessary to control additional runoff, and further investigation would be necessary to determine if the existing flood control facilities would be adequate for diverting the extra runoff. With the appropriate storm water design features incorporated, any additional runoff created by the improvements is not expected to exceed the facility's capacity.

Future projects over 1 acre would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit with BMPs as required by the Del Norte Transportation Commission and the Regional Water Quality Control Board to minimize water erosion of exposed soils and resultant sediment and surface contaminant loading into the storm drain system and downstream water bodies. As part of the NPDES General Permit, a SWPPP would be prepared. Consequently, the proposed project is not expected to violate any water quality or waste discharge standard, in this regard.

Using the Caltrans Highway Design Manual as a guide, storm water management strategies would be incorporated. Construction site BMPs would also be implemented for temporary construction impacts. A

more thorough discussion of water quality and associated BMPs will be provided in a Water Quality Study and will be included in the environmental document.

Geology, Soils, Seismic, and Topography

The proposed project would improve the safety of the existing Elk Valley Road and would be designed to be consistent with Caltrans and federal guidelines for safety and design standards. However, the overall change to the roadway and depth of excavation is expected to be minimal. Should more substantial earthwork or structures be required for a future project (retaining walls or drainage culvers) a Preliminary Geotechnical Report would be prepared for this project. The report would consist of archival research of pre-existing data, field reconnaissance, and preliminary analysis and recommendations. The study would evaluate existing topography, site geology, subsurface soil conditions, groundwater, seismicity, and the potential for impacts as a result of this project's ground disturbing activities.

Paleontology

The project area is underlain by the Quaternary-aged Battery Formation. The Battery formation is a thin marine terrace and is known to contain invertebrate fossils.

Future projects are expected to have a relatively small depth of excavation to complete the roadway improvements. If more substantial earthwork is necessary for a future project, a Paleontological Identification Report may be necessary to evaluate if paleontological monitoring would be recommended during construction.

Hazardous Waste/Materials

Future project will require a Phase I Hazardous Waste Initial Site Assessment in order to assess the potential for hazardous waste or other hazardous materials in the study area. The report will include an evaluation of the study area history through review of available reports and historic maps/aerial photographs etc., field reconnaissance to document the potential occurrence of and contamination by waste or hazardous materials in the study area, and review of regulatory agency files and databases regarding the use, storage, unauthorized release and remediation of hazardous materials in the project area. If any sites are found additional testing may be required. During preliminary field investigations, no major hazardous sites were observed or otherwise identified along the Elk Valley Road Corridor.

Air Quality

Future projects are not expected to be capacity increasing and would be exempt from regional air quality conformity review. Temporary air quality impacts would be minimized by requiring BMPs during construction to minimize construction vehicle emissions and generation of particulate matter (dust). No Air Quality Reports are expected to be necessary for future projects.

Noise and Vibration

Future projects are not expected to be Type 1 for noise analysis as they would not include additional through lanes and would not substantially change the vertical or horizontal alignment of the roadway. Temporary noise increases will occur during construction activities, as such, only a brief technical memo evaluating the predicted construction noise is expected to be required and the results would be included in the project specific environmental document.

Energy and Climate Change

The range of transportation improvements proposed are not expected to have any substantial change in energy usage or generation of greenhouse gasses associated with climate change. No additional study for these resources is expected to be necessary.

Biological Environment

The proposed project could have potentially significant impacts on sensitive biological habitat and resources present adjacent to Elk Valley Road. It is anticipated that a biological technical report would be required for any transportation improvement project to fully document biological resources present along Elk Valley Road.

Description of Vegetation Communities along Elk Valley Road

Vegetation communities along Elk Valley Road include: coastal redwood forest, Sitka spruce/grand fir forest, managed pasture, coastal riparian forest, and landscaped areas. These vegetation communities may provide suitable habitat for rare, threatened, or endangered species protected by the Endangered Species Act or State Regulations.

Coastal Redwood Forest

Coastal redwood forest is present along the eastern edge of the northern 0.2 miles of Elk Valley Road (see **Figure 4 - Biological Constraints Map**). Dominant overstory species of this community include coast redwood (*Sequoia sempervirens*), and coastal Douglas fir (*Pseudotsuga menziesii*). Understory trees include red alder (*Alnus rubra*), and immature overstory trees. The shrub/vine layer consists of a mix coast rhododendron (*Rhododendron macrophyllum*), Western sword fern (*Polystichum munitum*), and Himalayan blackberry (*Rubus armeniacus*).

Sitka Spruce/Grand Fir Forest

Sitka spruce/grand fir forest is found in three distinct locations along Elk Valley Road (see Biological Constraints Map). Dominant overstory species in this vegetation community include Sitka spruce (*Picea sitchensis*) and grand fir (*Abies grandis*). Occasional coast redwoods and coast Douglas firs are also present in this community but are not dominant. Understory trees include red alder and immature overstory trees. The shrub/vine layer primarily consists of Western sword fern (*Polystichum munitum*), and Himalayan blackberry (*Rubus armeniacus*).

Coastal Riparian Forest

Coastal riparian forest associated with Jordan Creek is present in the northern portion of Elk Valley Road. The overstory is comprised of red alder and white alder (*Alnus rhombifolia*) with an understory of arroyo willow (*Salix lasiolepis*) and Himalayan blackberry.

Managed Pasture

Managed Pasture consists of areas that have been cleared of trees and shrubs for the purpose of grazing cattle or other domesticated livestock. Along Elk Valley Road vegetation within this plant community is predominantly a mix of native and non-native grasses, sedges (*Carex sp.*), and rushes (*Juncus sp.*).

Landscaped areas Along Elk Valley Road

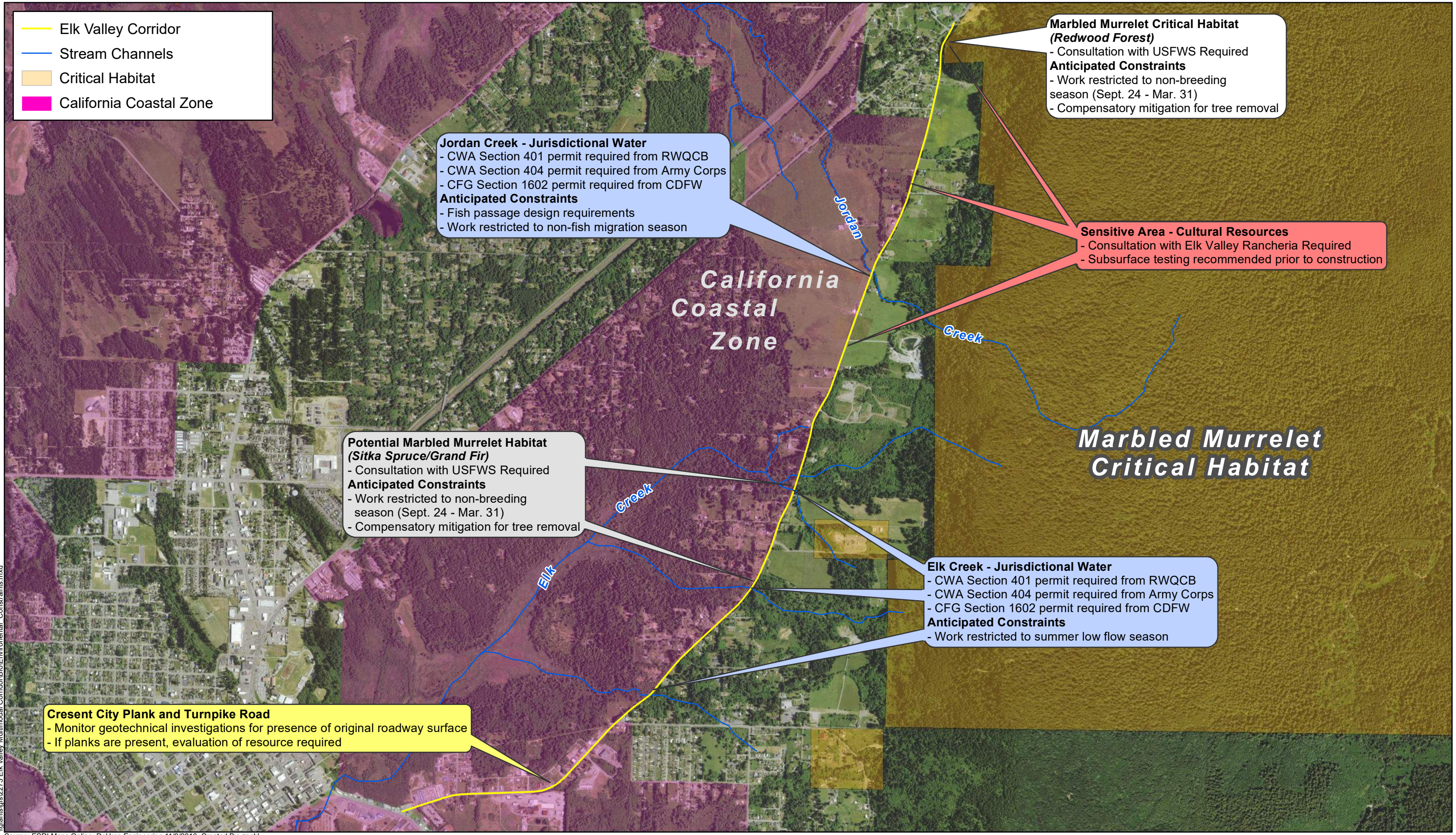
Landscaped areas along Elk Valley Road consist primarily of planted hedgerow, planted trees, and Residential landscapes. Common planted species include apple trees (*Malus pumila*), incense cedar (*Calocedrus decurrens*), redwood, and Monterey cypress (*Hesperocyparis macrocarpa*).

Sensitive Habitats along Elk Valley Road

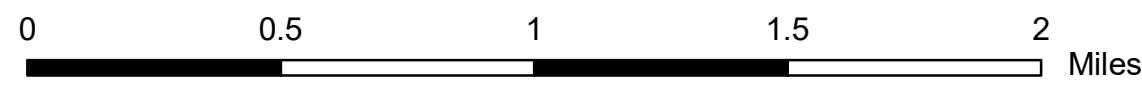
Jurisdictional Waters

Jurisdictional waters are present directly adjacent to Elk Valley Road in four locations along four individual stream channels that cross under the roadway. The northernmost stream channel is Jordan Creek which flows south to north under Elk Valley Road before terminating at Lake Earl. Elk Valley Road crosses Jordan Creek through a concrete open box culvert. Adjacent to Elk Valley Road, Jordan Creek supports a narrow band of riparian vegetation and adjacent wetlands were not visible. The other three stream channels include the main channel of Elk Creek and two tributaries to Elk Creek. Each of the

Elk Creek stream channels are located within a larger forested corridor and may not support a defined riparian overstory but may support riparian specific shrubs or herbs. A formal jurisdictional delineation would be conducted during the environmental document phase of a future project to define the specific boundaries of jurisdictional waters that could be affected during construction.



Source: ESRI Maps Online; Dokken Engineering 11/9/2016; Created By: zachl



All four of the creek channels are under the jurisdiction of the United States Army Corps of Engineers (USACE). Project related impacts to these creeks will require permitting under section 404 of the Clean Water Act (CWA). It is anticipated that future projects would be able to obtain a Nationwide 14 Permit for impacts to Waters of the U.S.

The bed, bank, channel, active floodplains, and associated riparian vegetation of each of these creeks are under the jurisdiction of the California Department of Fish and Wildlife (CDFW). Project related impacts to these areas would require a Section 1600 Lake or Streambed Alteration Agreement from CDFW.

Marbled Murrelet Critical Habitat

Final designated marbled murrelet critical habitat is present adjacent to Elk Valley Road along the eastern edge of the northern 0.2 miles of Elk Valley Road (see Biological Constraints Map). Prior to any work within or adjacent to marbled murrelet critical habitat, the County will need to consult with the United States Fish and Wildlife Service (USFWS), as required under Section 7 or Section 10 of the Federal Endangered Species Act. Consultation would likely result in work timing restrictions and compensatory mitigation if the project has impacts to marbled murrelet critical habitat.

Potential Threatened or Endangered Species along Elk Valley Road

Based on a review of the USFWS Information for Planning and Conservation (IPaC) official species list, CDFW California Natural Diversity Database (CNDDDB) species occurrences, and the habitat requirements of each species, the following two threatened or endangered species were determined to have potential to occur along Elk Valley Road:

Marbled Murrelet (Brachyramphus marmoratus)

The marbled murrelet is a small sea bird that nests in mature coniferous forests along the coast of Northern California, Oregon, Washington, British Columbia, and Alaska. Marbled murrelet is listed as threatened under the Federal Endangered Species Act and as endangered under the California Endangered Species Act. The species nests in the upper portion of large conifers during their nesting season (Defined as April 1st – September 23rd) before returning to the sea, where it spends the remaining months of the year (USFWS 2012). Marbled murrelet has potential to occur within the Coastal Redwood Forest and Sitka Spruce/Grand Fir Forest vegetation communities found along Elk Valley Road. Prior to construction, the County will need to consult with USFWS for potential project related impacts to marbled murrelet, as required under Section 7 or Section 10 of the Endangered Species Act.

It is likely that construction work in the vicinity of potential marbled murrelet habitat would be limited to the non-nesting season (September 24th – March 31st) to avoid potential direct impacts to the species. If large trees are removed from potential marbled murrelet habitat, compensatory mitigation may be required.

Western Lily (Lilium occidentale)

The Western lily is a perennial bulb found in fens, poorly drained forests, riparian habitats, and coastal prairies. The species is listed as endangered under the Federal Endangered Species Act and by California State Law. Fens, and coastal prairies are not found adjacent to Elk Valley Road but the Sitka Spruce/Grand Fir Forest and Coastal Riparian Forest vegetation communities may provide potentially suitable habitat for the species. A botanical survey should be conducted during the blooming season for the species prior to construction by a qualified botanist. If the species is present in the project area and direct or indirect impacts would occur, consultation with USFWS and CDFW would be required.

Environmental Document Type

For locally funded projects, the most likely CEQA documents would be either a Categorical Exemption or an Initial Study with Mitigated Negative Declaration. A mitigated negative declaration would be required when potentially significant environmental impacts are identified which would require mitigation measures to reduce them to a less than significant level.

If federal funds are used for future projects, compliance with the National Environmental Policy Act (NEPA) would also be required. For most transportation projects in California, NEPA is administered by Caltrans Local Assistance under delegation from the Federal Highways Administration. All of the proposed transportation improvements along Elk Valley Road would be processed with a NEPA Categorical Exclusion supported by environmental technical studies.

Permits and Other Approvals

Depending on the location and type of improvements proposed, the following permits listed below may be necessary to ensure compliance with federal, state, and local environmental laws.

- Section 7 or Section 10 Consultation with USFWS would be required for potential project related impacts to marbled murrelet and designated critical habitat. Consultation would result in USFWS issuing a Biological Opinion that will include final avoidance/minimization measures and compensatory mitigation recommended by USFWS to reduce potential project related impacts to marbled murrelet to less than significant levels. If Western Lily is discovered adjacent to Elk Valley Road during botanical surveys, Consultation with USFWS will also be required for this species.
- A 2080.1 consistency determination will be required from CDFW for potential project related impacts to species protected under the California Endangered Species Act after consultation with USFWS for the same species has been completed.
- Clean Water Act Section 404 Permit would be required for fill activities within Waters of the U.S. and within the Army Corps of Engineers jurisdiction. It is anticipated that Del Norte County will be able to obtain a Nationwide 14 permit for this project.
- Clean Water Act Section 401 Water Quality Certification is required from the Regional Water Quality Control Board to ensure that construction activities are managed such that water quality is not substantially impacted.
- Clean Water Act Section 402 General Construction Permit through the State Water Resources Control Board is required for all project over one acre in construction impacts. This permit enforces the requirements of the NPDES.
- A Section 1602 Streambed Alteration Agreement is required before work can commence within areas under CDFW jurisdiction. The 1602 permit issued by CDFW will include final avoidance/minimization measures and compensatory mitigation recommended by CDFW to avoid, minimize, or mitigate for potential project related impacts to jurisdictional waters of the state and associated sensitive species.
- Coastal Development Permit/Coastal Grading Permit issued by Del Norte County for development within the California Coastal Zone.
- Grading Permit issued by Del Norte County for project activities.
- Encroachment Permit issued by Del Norte County for work in the County right-of-way.

Attachment A

Environmental Studies Required

Environmental Studies that may be Required

- Community Impact Assessment
- Section 4(f) Evaluation
- Traffic and Operations Study
- Visual Impact Assessment
- Cultural Resources Report
 - Archaeological Survey Report
 - Historic Resources Evaluation Report
 - Extended Phase 1 Testing*
 - Phase 2 Testing*
 - Finding of Effect Report*
 - Memorandum of Agreement*
- Water Quality Study
- Preliminary Geotechnical Report
- Paleontological Identification Report
- Phase 1 Hazardous Waste Initial Site Assessment
- Construction Noise Memorandum
- Biological Resources Report
- Biological Assessment (Marbled Murrelet, Western Lily)
- Wetland Delineation Report

*Additional cultural reports noted above will only be required if resources are identified within the APE and cannot be avoided by the project. Some or all of these studies may not be required if resources can be avoided.

Attachment B

Environmental Constraints Matrix

California Natural Diversity Database Species List



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Arcata Fish and Wildlife Office

1655 HEINDON ROAD

ARCATA, CA 95521

PHONE: (707)822-7201 FAX: (707)822-8411



Consultation Code: 08EACT00-2017-SLI-0008

October 18, 2016

Event Code: 08EACT00-2017-E-00008

Project Name: Elk Valley Multimodal Corridor Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Elk Valley Multimodal Corridor Project

Official Species List

Provided by:

Arcata Fish and Wildlife Office
1655 HEINDON ROAD
ARCATA, CA 95521
(707) 822-7201

Consultation Code: 08EACT00-2017-SLI-0008

Event Code: 08EACT00-2017-E-00008

Project Type: TRANSPORTATION

Project Name: Elk Valley Multimodal Corridor Project

Project Description: The Del Norte Local Transportation Commission (DNLTC) is evaluating Elk Valley Road to determine potential modifications along the roadway to improve safety and traffic along the roadway located in Del Norte County and the City of Crescent City. The proposed roadway improvements may include adding shoulders, changing the elevation profile, and realigning curves.

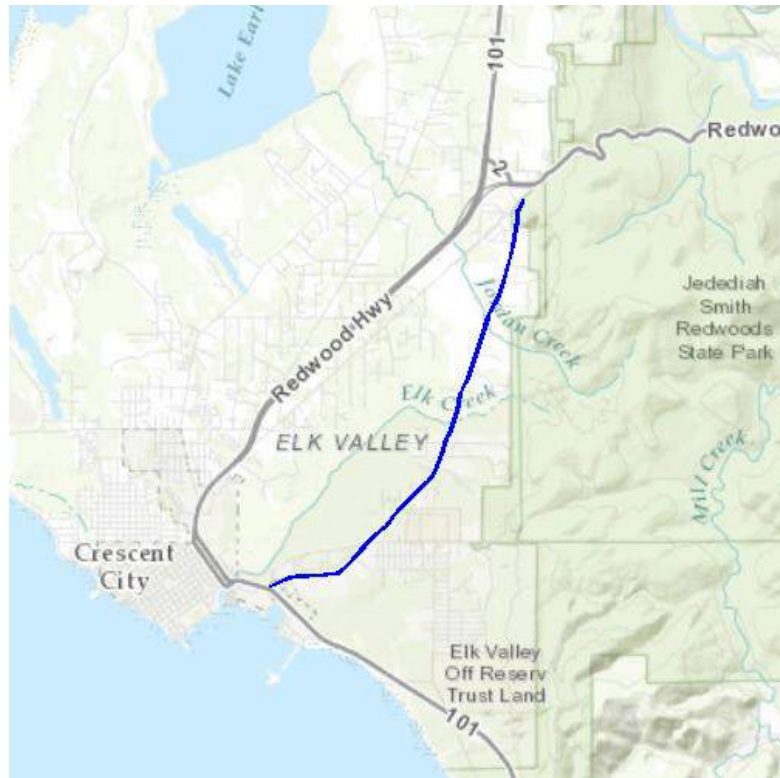
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Elk Valley Multimodal Corridor Project

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Del Norte, CA



United States Department of Interior
Fish and Wildlife Service

Project name: Elk Valley Multimodal Corridor Project

Endangered Species Act Species List

There are a total of 7 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Marbled murrelet (<i>Brachyramphus marmoratus</i>) Population: U.S.A. (CA, OR, WA)	Threatened	Final designated	
Northern Spotted owl (<i>Strix occidentalis caurina</i>) Population: Wherever found	Threatened	Final designated	
western snowy plover (<i>Charadrius nivosus ssp. nivosus</i>) Population: Pacific Coast population DPS&U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast)	Threatened	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Tidewater goby (<i>Eucyclogobius newberryi</i>) Population: Wherever found	Endangered	Final designated	
Flowering Plants			



United States Department of Interior
Fish and Wildlife Service

Project name: Elk Valley Multimodal Corridor Project

Western lily (<i>Lilium occidentale</i>) Population: Wherever found	Endangered		
Insects			
Oregon Silverspot butterfly (<i>Speyeria zerene hippolyta</i>) Population: Wherever found	Threatened	Final designated	



United States Department of Interior
Fish and Wildlife Service

Project name: Elk Valley Multimodal Corridor Project

Critical habitats that lie within your project area

The following critical habitats lie fully or partially within your project area.

Birds	Critical Habitat Type
Marbled murrelet (<i>Brachyramphus marmoratus</i>) Population: U.S.A. (CA, OR, WA)	Final designated

ATTACHMENT E:
EXISTING RIGHT OF WAY
RECORDS SHEET

West Side			
APN	Width(ft)	Zone	Area (ft ²)
112-180-33	50		2061
112-180-34	50		6248
112-020-32	30		19017
112-020-30	30		31384
112-220-02	30		782
112-060-06	30		5484
112-060-03	30		6058
112-060-04	30		3827
112-050-06	30		2922
112-050-13	30		2097
112-050-19	30		3618
112-050-18	30		6654
112-050-05	30		3007
112-050-04	30		7007
112-050-23	30		12901
112-200-02	30		2765
112-040-19	30		10152
112-040-18	30		2563
112-040-17	30		9750
112-040-16	30		2571
112-040-48	30		5929
112-040-47	30		10427
112-040-14	30		3965
112-040-13	30		5104
112-040-12	30		4508
112-040-11	30		3062
112-040-11	30		5148
112-020-25	30		7450
112-038-02	10		1516
112-038-01	10		2483
112-034-03	10		2483
112-034-04	10		3469
112-020-24	5		375
112-020-43	5		1461
112-020-22	5		2733
112-020-48	5		1320
112-020-47	5		1187
112-020-42	5		238
112-020-41	5		884
112-020-38	5		12654
112-020-19	5		306
110-032-21	5		17415
110-300-10	30		13205
110-300-28	30		6426

East Side			
APN	Width(ft)	Zone	Area (ft ²)
112-700-01	30		10540
112-180-09	30		4197
112-180-31	30		3539
112-180-28	30		944
112-180-39	30		3669
112-180-43	30		12576
112-180-06	30		6098
112-180-42	30		2784
112-180-02	30		7109
112-060-10	30		5400
112-060-12	30		4558
112-060-11	30		8678
112-060-07	30		1175
112-060-18	30		4228
112-060-17	30		6068
112-060-01	30		8220
112-020-15	30		19354
112-020-68	30		27107
112-020-51	30		15407
112-040-39	25		5220
112-020-36	30		16067
112-020-13	30		5139
112-020-11	30(part of)		7463
112-020-10	5(part of)		1314
112-020-09	5		5802
112-020-85	5		756
112-020-08	5		878
112-020-84	5		10607
112-020-05	5		2171
110-300-08	triangle		1474
110-300-20	30		4906
110-300-31	30		25555
110-300-29	30		15197
110-300-04	30		5834
110-300-24	30		7649
110-300-23	30		8908

110-300-27	30		11392
110-300-15	30		12102
110-300-16	30		16012
110-300-03	30		4296
110-210-16	Median Trangle		1018
Unknown	South end		10540

Total Land Acquisition Area 586567 ft²

*Estimated Price \$ 4.00 \$/ft2

\$ 2,346,268.00

* Estimated Price per square foot

ATTACHMENT F:
EXISTING CONDITIONS
REPORT

ELK VALLEY ROAD MULTIMODAL CORRIDOR PLAN

EXISTING TRANSPORTATION CONDITIONS

Introduction

Elk Valley road is a 4.5-mile long roadway located in the Crescent City area of Del Norte County, California. The road lies predominantly outside the City Limits, with the exception of the first tenth-mile of roadway immediately east of US 101. Elk Valley Road has a general north-south orientation, with the first mile east of US 101 running east-west. According to the Del Norte County General Plan, this roadway is classified as follows:

- US 101 to Howland Hill Road – Urban Arterial
- Howland Hill Road to Norris Avenue – Urban Collector
- Norris Avenue to Parkway Drive – Rural Collector

According to the County Road System Map, Elk Valley Road is a Major Collector. Elk Valley Road is a diverse corridor serving businesses and residential neighborhoods, and it is the western access for Jedidiah Smith Redwood State Park. Elk Valley Road is also a popular cut-through route connecting the northern and southern portion of Crescent City while bypassing the central commercial corridor.

Roadway Characteristics

Elk Valley Road can be divided into two distinct segments. For the first mile immediately east of US 101, Elk Valley Road serves primarily industrial uses. Many retail businesses, warehouses, and light industrial operations front the roadway. This “urban” segment of Elk Valley Road has a three-lane cross section with bike lanes and sidewalks. The travel lanes measure 11 feet wide, with a 12-foot wide center turn lane, bikes lanes that are approximately 4 feet wide, and 5-foot sidewalks on both sides. The speed limit immediate east of US 101 is 35 mph, and it changes to 45 mph within one-third of a mile to the east.

Between Howland Hill Road and Parkway Drive, Elk Valley Road becomes predominantly a rural residential roadway (although the segment between Howland Hill Road and Norris Avenue is designated as an Urban Collector). The pavement narrows and becomes a two-lane roadway (with 11-foot wide lanes), with no bike lanes, no sidewalks, and little to no shoulders. Note that the County Road Standards (Section 12.04.070B) call for a minimum pavement width of 24 feet with 4-foot graded shoulders for this type of roadway. The existing roadway does not meet these standards. Turn pockets are not present along this section of Elk Valley Road, except at the intersection of Aubell Lane. Left and right-turn lanes are provided along Elk Valley Road for turns into Aubell Lane. In addition, a median refuge area is provided immediately south of the intersection. The speed limit for this segment of Elk Valley Road (Howland Hill Road to Parkway Drive) is 45 mph.

Intersection Traffic Volumes

Intersection turning-movement volumes were conducted at the following intersections on Friday October 21, 2016 (as Friday is typically the busiest day of the week):

- Elk Valley Road/US 101
- Elk Valley Road/State Street
- Elk Valley Road/Howland Hill Road
- Elk Valley Road/Norris Avenue/Harbor View Drive
- Elk Valley Road/Aubell Lane
- Elk Valley Road/Cooke Street
- Elk Valley Road/Elk Valley Cross Road/Parkway Drive

AM and PM counts were conducted in order to capture peak-hour periods. The intersection turning-movement volumes were collected using a video recording system. A temporary video recording device was installed at each count location for the duration of the count period. The video footage was then reviewed and the volume data recorded. Peak-hour traffic volumes are summarized in [Table 1](#). The AM peak hour for the majority of the intersections occurs from 7:30 AM to 8:30 AM, while the PM peak hour varies. The intersections along the urban segment have PM peak hours occurring from 4:30 PM to 5:30 PM, which is typical of commuter-related traffic. The intersections towards the northern portion of Elk Valley Road have earlier peak hours, occurring from 3:30-4:30 PM or 4:00-5:00 PM.

Roadway Traffic Volumes

Continuous 48-hour roadway volume counts were conducted from Friday October 21 through Saturday October 22, 2016 along Elk Valley Road. The counts were conducted at the following two locations:

- Immediately north of Howland Hill Road, north of the driveways of the Superette convenience store and the trailer park.
- South of Cooke Street, south of the two residential driveways immediately south of Cooke Street.

Roadway traffic volume data was collected using a radar count device, which sends a microwave signal across the roadway. Vehicles which cross the path of the signal are recorded by the device. In addition to recording the time and direction of travel, the radar recording unit collects speed and vehicle length data. These additional pieces of information allow for accurate speed survey and approximate vehicle classification. [Table 2](#) shows the daily traffic volumes on Elk Valley Road at the two count locations. The highest volume occurred at the northern location (south of Cooke Street), with a total daily volume of about 2,230 one-way trips. At both locations, the volumes on Friday were substantially higher than those recorded on Saturday.

The peak-hour traffic volumes along each segment of Elk Valley Road are estimated based upon the intersection traffic volumes, and the results are shown in [Table 3](#). As indicated, the highest peak-hour traffic volumes occurred on the urban segment between State Street and Howland Hill Road, with a total two-way volume of approximately 366 and 487 trips during the AM and PM peak hours, respectively.

Roadway Level of Service

Roadway Level of Service (LOS) was evaluated for Elk Valley Road using the standard set forth in the 2016 Regional Transportation Plan (Del Norte Local Transportation Commission). For a Rural Major Collector (2-lane) such as Elk Valley Road, the LOS and correlating daily volumes are as follows:

- LOS A - 1,300
- LOS B - 3,900
- LOS C - 7,500
- LOS D - 12,600
- LOS F - 16,900

According to the RTP, the traffic volume on Elk Valley Road north of Howland Hill Road between the years of 2013-2015 was 1,795 ADT, which equates to LOS B. Based on the data collected by LSC as a part of this study, a maximum volume of about 2,230 ADT was observed, which also results in a LOS B. Compared to the County's LOS threshold for this type of roadway, which is LOS C (Del Norte County General Plan, 2003), the roadway currently operates at an acceptable LOS.

Speed Survey

Using the radar counters, speed surveys were conducted at the following two locations along the rural segment of Elk Valley Road:

- Immediately north of Howland Hill Road
- Immediately south of Cooke Street

The posted speed limit at both locations is 45 mph. The survey results are presented in [Table 4](#). In general, the speeds near Howland Hill Road are much slower than those recorded near Cooke Street. This is due to the fact that Elk Valley Road immediately north of Howland Hill Road has limited sight distance due to the vertical curvature of the roadway and the traffic calming effect of the large canopy of trees. It is also observed that the traffic traveling southbound is generally faster than those traveling northbound. This can be attributed to the presence of the intersection of Howland Hill Road and Elk Valley Road to the south. The average speed at a point immediately north of Howland Hill Road is approximately 37 mph (average of both directions), and the 85th-percentile speed (the speed that is only exceeded by 15 percent of the vehicles) is calculated to be approximately 43 mph.

The survey location immediately south of Cooke Street exhibits substantially higher travel speeds. The average observed speed (46 mph) is close to the posted speed limit, and the 85th-percentile speed (54 mph) is about 10 mph above the posted speed limit. In addition, northbound vehicles exhibit a slightly slower travel speed than southbound. The vertical and horizontal curvature of the roadway north of Cooke Street, as well as the presence of the downstream stop-controlled intersection of Elk Valley Road and Parkway Drive, tend to reduce travel speeds.

Truck Traffic

The volume of heavy truck traffic on Elk Valley Road was collected during the volume counts at the following three locations:

- At the intersection of State Street and Elk Valley Road
- At a point immediately north of Howland Hill Road
- At a point immediately south of Cooke Street

The results can be found in [Table 5](#). At the intersection of State Street and Elk Valley Road, truck volumes were collected as part of the intersection peak-hour turning movement counts. Based on the data collected, about 3.5 percent of total AM peak-hour traffic on Elk Valley Road at State Street is made up of truck traffic, and about 1.3 percent of PM peak-hour traffic immediately consists of trucks. Note that the AM and PM traffic count periods may not reflect typical busy truck operations at the Transfer Station on State Street.

At the roadway locations immediately north of Howland Hill Road and immediately south of Cooke Street, truck volumes were recorded using a radar counting device. Rather than identifying each vehicle as a truck, the device simply records the approximate length of each passing vehicle. Two lengths were compiled to compare the difference of truck traffic between the count locations. A large box van, such as a U-Haul truck, or a dump truck is represented by a length of 40 feet or greater. Over the course of the day on Friday, the northern count location (south of Cooke Street) saw approximately 41 trucks this size, which is about four times that of the southern count location. Similarly, on Friday the northern count location saw 7 trucks greater than 60 feet in length (tractor trailer/semi-truck), while the southern count location (north of Howland Hill Road) saw none. The higher volume of truck traffic at the northern count location is assumed to be associated with the Tidewater quarry/gravel lot located 1963 Elk Valley Road in between the two count locations, which generates truck trips to and from the north on Elk Valley Road.

Finally, the rural segment of Elk Valley Road is utilized by large trucks making trips to/from the Transfer Station on State Street. These commercial trucks typically access Highway 199 via Elk Valley Road. Based on the radar count data, roughly 1 percent of total traffic on Elk Valley Road immediately south of Cooke Street consists of trucks greater than 50 feet long. Considering the relatively low level of truck traffic observed north of Howland Hill Road, it is likely that the traffic count period did not capture typical busy truck traffic generated by the Transfer Station. According to Del Norte Solid Waste Management Authority staff, the Transfer Station currently generates less than 300 vehicles per day.

Traffic Generators (Driveway Counts)

The following two driveways were observed and counted during the PM period (4-6 PM) on Friday October 21, 2016:

- Elk Valley Casino on Howland Hill Road

- Superette- Mini Mart on the corner of Howland Hill Road and Elk Valley Road (725 Elk Valley Road, APN: 112-700-001)

These two properties were identified as key traffic generators along the study corridor. The total number of vehicles traveling in and out of each driveway was recorded, and the results are displayed in [Table 6](#). As shown, a total of approximately 147 peak-hour one-way trips occurred at the casino driveway, and a total of 40 one-way trips were made at the Superette driveways. Note that the traffic generators can have peak periods which occur outside the count period. The Elk Valley Casino has one driveway; however, the Superette has several driveways accessing the site. The corner lot of the Superette could potentially be used as a “cut-through” route for those wishing to bypass the intersection of Howland Hill Road and Elk Valley Road. However, a review of the driveway volumes does not reveal a cut-through pattern.

Bicycle and Pedestrian Volumes

In general, bicycle and pedestrian activity is minimal along Elk Valley Road. As a part of the intersection turning movement counts, bike and pedestrian volumes were recorded. The results are summarized in [Table 7](#). With the exception of the intersection of US 101/Elk Valley Road, bike and pedestrian volumes were less than 7 over the course of any hour. The intersection of US 101/Elk Valley Road saw the highest number of bikes and pedestrians of all the intersections sampled. During the PM peak hour, 12 bicycles and 40 pedestrians were observed to travel through the intersection. It should be noted that the peak time for bike and pedestrian activity was not the same time in which the volume of motorized vehicles peaked. This is generally true for all of the intersections observed. No bicycle or pedestrian activity was observed at the intersections of Elk Valley Road/Aubell Lane and Elk Valley Road/Cooke Street during the 4 hours of observation, although it was raining during part of the count period.

Driver Sight Distance

There are two types of driver sight distance criteria to consider in the study area: stopping sight distance (SSD) and corner sight distance (CSD). Stopping sight distance is the minimum distance required by the driver of a vehicle to bring his/her vehicle to a stop after an object on the road becomes visible. This is the minimum distance needed for a driver on the main roadway approaching an intersection or driveway to see an object in his/her travel path (such as a vehicle exiting a driveway) and safely come to a stop. SSD is measured from the center of the travel lane on Elk Valley Road at a height of 3.5 feet to an object on the road with a height of 0.5 feet. The Caltrans Highway Design Manual specifies minimum stopping sight distance requirements as a function of roadway design speed.

Corner sight distance (CSD) is the minimum distance that a driver waiting at a cross street should be able to see in either direction along the main roadway in order to accurately identify an acceptable gap in through traffic. CSD is measured from a point on the side of Elk Valley Road, at a 15-foot setback from the edge of traveled way at a height of 3.5 feet, to a point in the center of each approaching travel lane at a height of 4.25 feet. The Caltrans Highway Design Manual sets forth minimum CSD values as a function of design speed.

Driver sight distance was reviewed along the study corridor. In general, the vertical and horizontal curvature of Elk Valley Road hinders the driver sight distance at various locations, especially along the segment between Howland Hill Road and the old lumber mill driveway (immediately north of Mayas Lane). For instance, the corner sight distance looking to the south along Elk Valley Road from a 15-foot setback on Norris Avenue is about 285 feet. Based on a speed of 45 mph on Elk Valley Road, the corner sight distance criteria is 495 feet. As such, the existing corner sight distance to the south is about 210 feet short of the minimum value. However, the corner sight distance improves as the driver on Norris Avenue approaches the Stop bar. At the Stop bar, the corner sight distance to the south is about 375 feet, or 120 feet short of the minimum value. Approaching the fog line (edge of traveled way), the corner sight distance improves to about 515 feet.

Some flexibility in corner sight distance is allowed. The Caltrans standards state that where restrictive conditions exist (such as horizontal and vertical curvature of an existing roadway), the minimum value for corner sight distance at unsignalized intersections shall be equal to the stopping sight distance value. Based on a speed of 45 mph, the required stopping sight distance value is 360 feet. The corner sight distance looking south from the Stop bar on Norris Avenue meets and exceeds this value by about 15 feet. Furthermore, no stopping sight distance concerns are identified for drivers along Elk Valley Road at this location.

About 325 feet of stopping sight distance is provided for northbound drivers on Elk Valley Road approaching the old lumber mill driveway. Based on a speed of 50 mph, the required stopping sight distance is 430 feet. As such, the stopping sight distance at this location is about 105 feet short of the requirement. The stopping sight distance is limited by the horizontal curvature along Elk Valley Road to the south.

Historical Crash Data

SWITRS Crash Data 2006-2016

Crash data for Elk Valley Road over the last 10 years (October 1st 2006-2016) was obtained from the State Wide Integrated Traffic Records System (SWITRS). This data base centrally stores crash information submitted by county and statewide agencies such as Highway Patrol, Sheriffs, and local law enforcement. The crash data for this period of time is summarized in [Table 8](#), and a collision summary by segment is presented in the attached exhibit. The total number of reported crashes on Elk Valley Road between US 101 and Parkway Drive over the last ten years is 109. Of these crashes there were no fatalities, 37 injury crashes, and 72 crashes with resulted in property damage only. In other words, approximately two-thirds of the crashes were relatively minor, as they did not result in injuries.

No crashes involved pedestrians, although four crashes involved bicyclists. Three of the four crashes involving bicyclists occurred along the urban segment of Elk Valley Road (between US 101 and Howland Hill Road), and only one occurred along the rural segment. The crash along the rural segment occurred on October 10, 2006, at a point immediately south of the Elk Valley Road/Ranch Creek Road intersection (between Aubell Lane and Cooke Street), where a motorcycle hit a bicyclist. The crash occurred in the dark (with no streetlights) at 6:45 AM. Both parties were injured.

The segment of Elk Valley Road between Aubell Lane and Cooke Street had the highest number of crashes, with a total of 41. However, this segment is more than twice the length of the other segments. For comparison purposes, the total number of crashes per mile per PM peak hour vehicle trip is calculated for each segment. The comparison indicates that the segment between Aubell Lane and Cooke Street has a crash rate about twice as high as the next highest segment (which is the segment between Howland Hill Drive and Norris Avenue/Harbor View Drive). [Table 9](#) shows a crash summary by type of crash. About half (48 percent) of the crashes were the “Hit Object” type. Notably, 32 “Hit Object” crashes occurred between Aubell Lane and Cooke Street. Of the 41 total crashes along this segment, 32 (or 78 percent) are “Hit Object” crashes. Due to the close proximity of property (fencing, trees, mail boxes, etc...) and lack of shoulders, it is assumed that a “hit object” crash can more accurately be described as “ran off road”. The next-highest crash types were “Broadside” (16 percent) and “Rear End” (15 percent) crashes. A total of 7 “Broadside” crashes were reported at the Elk Valley Road/Howland Hill Drive intersection.

Similar to the method of comparison for the segment summary, an evaluation of crashes at intersections is calculated. The middle column in [Table 8](#) shows the total crashes per PM peak-hour total intersection volume. The intersections of Elk Valley Road/Parkway Drive and Elk Valley Road/Norris Ave/Harbor View Drive have the highest crash rates.

[Table 10](#) presents a crash summary by primary collision factor. One-third of the total crashes were due to “improper turning”. Notably, 18 of the 41 crashes (or approximately 44 percent) between Aubell Lane and Cooke Street were due to improper turning movements. The next-highest primary collision factors were “unsafe speed” (19 percent of all crashes), “alcohol or drugs” (15 percent), and “right of way” (14 percent). Two-thirds of the crashes at the Elk Valley Road/Howland Hill Drive intersection involved drivers that did not yield the proper right-of-way.

Police Reports 1992-2006

Del Norte County provided crash reports dating back to 1992. These are copies of hand-written police reports. A review of these reports indicates that of the 164 crashes documented from 1992 to 2006, no fatalities or pedestrian-related crashes occurred. There were approximately eight crashes involving bicyclists. Seven of these crashes occurred along the urban segment between US 101 and Howland Hill Road, and only one crash occurred along the rural segment. The crash along the rural segment occurred on June 22, 2000, at a point south of Church Tree Road (between Aubell Lane and Cooke Street), where a bicyclist turned in front of a car traveling in the same direction. The bicyclist was reported to be at fault, and the bicyclist suffered a broken hand. There were no other reported injuries for this incident.

Crash Rates

The California Department of Transportation publishes an annual Collision Data on California State Highways Report (2012 is the latest year available). Within the report are accident rates (per million vehicle mile traveled) for various roadway types and counties within California. Crash rates were calculated for both the urban segment (between US 101 and Howland Hill Drive) and the rural segment (between Howland Hill Drive and Parkway Drive). The crash rate is dependent on the number of

crashes, length of the roadway segment, and the Annual Average Daily Traffic (AADT). The AADT was estimated for these roadway segments based on the 24-hour roadway counts, adjusted to represent an average day based on traffic data from a Caltrans permanent traffic count station located on US 101 at Smith River (approximately 12 miles north of Crescent City, the closest count station for which weekly and seasonal data is available).

Table 11 presents the estimated crash rates for Elk Valley Road. As shown, the total crash rate and injury crash rate for the urban segment of Elk Valley Road is similar to the State and County wide averages for similar roads. The crash rates for the rural segment of Elk Valley Road are substantially higher than State and County averages.

Transit

Redwood Coast Transit provides public transportation in Crescent City and the surrounding area. Route 4, the Bertsch Ave/Howland Hill Route is the only route that serves the Elk Valley Road study corridor. This route travels from the Cultural Center (at 1001 Front Street) down US 101 then back north via Humboldt Road and Howland Hill Road. It then enters the corridor and travels westbound on Elk Valley Road back to the Cultural Center. This route also has an available route deviation to Norris Avenue to the Elk Valley Rancheria Community Center. Route 4 service is provided hourly from 6:30 AM to 7:00 PM on weekdays and 8:30 AM to 7:00 PM on Saturdays. Average daily boardings by stop were developed as part of the *Redwood Coast Transit Authority 2013 Short Range Transit Plan* (LSC, 2013). The following are the results within the vicinity of Elk Valley Road:

- Elk Valley Road/US 101 = 2.8 average boardings per day
- Elk Valley Road/Iowa Street = 1.9 average boardings per day
- Elk Valley Road/Howland Hill Road = 5.5 average boardings per day
- Casino on Howland Hill Road = 7.6 average boardings per day
- Rancheria Community Center on Norris Avenue = 2.8 average boardings per day

As indicated, the Casino stop on Howland Hill Road has the highest number of boardings in the study area.

Table 1: Peak Hour Intersection Traffic Volumes- Friday October 21, 2016

Intersection		Northbound			Southbound			Eastbound			Westbound			Total
North/South	East/West	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
AM														
US 101	Elk Valley Rd	1	264	8	168	230	8	3	5	7	19	0	209	922
Elk Valley Rd	State St	0	150	9	5	213	0	0	0	1	4	0	1	383
Elk Valley Rd	Howland Hill Rd	0	37	111	15	70	0	0	0	0	145	0	8	386
Elk Valley Rd	Norris Ave/ Harbor View Dr	7	21	19	21	62	3	2	0	16	8	1	22	181
Elk Valley Rd	Aubell Lane	0	48	2	2	73	0	0	0	0	1	0	1	127
Elk Valley Rd	Cooke St	14	43	0	0	65	0	0	0	7	0	0	0	129
Elk Valley Rd	Parkway Dr	29	4	2	11	4	0	0	46	13	2	33	16	160
PM														
US 101	Elk Valley Rd	2	351	42	234	406	14	7	9	1	48	5	249	1368
Elk Valley Rd	State St	0	245	11	4	240	2	0	0	1	19	0	2	468
Elk Valley Rd	Howland Hill Rd	0	64	176	19	68	0	0	0	0	173	0	19	474
Elk Valley Rd	Norris Ave/ Harbor View Dr	15	64	6	26	64	5	4	2	15	6	0	47	254
Elk Valley Rd	Aubell Lane	0	104	3	1	87	0	0	0	0	2	0	2	199
Elk Valley Rd	Cooke St	9	86	0	0	71	0	0	0	13	0	0	0	179
Elk Valley Rd	Parkway Dr	15	12	5	24	9	4	2	44	31	1	36	58	241

Source: LSC Transportation Consultants INC.

Table 2: Daily Roadway Traffic Volumes on Elk Valley Road

Location	Day	Date	Northbound	Southbound	Total
Immediately North of Howland Hill Road	Friday	10/21/2016	908	1101	2009
	Saturday	10/22/2016	795	903	1698
Immediately South of Cooke Street	Friday	10/21/2016	1123	1104	2227
	Saturday	10/22/2016	963	942	1905
Source: LSC Transportation Consultants INC.			Elk Valley Rd 48hr Vol.xls		

Table 3: Peak-Hour Roadway Segment Traffic Volumes*Friday October 21, 2016*

On Elk Valley Road Between	And	2-way Traffic Volume	
		AM Peak Hour	PM Peak Hour
US 101	State St	307	420
State St	Howland Hill Rd	366	487
Howland Hill Rd	Norris Ave/ Harbor View Dr	132	170
Norris Ave/ Harbor View Dr	Aubell Lane	128	203
Aubell Lane	Cooke St	127	187
Cooke St	Parkway Dr	111	154

Source: LSC Transportation Consultants INC.

Table 4: Speed Survey Results on Elk Valley Road

Location	Day	Date	Speed (mph)			Number of Vehicles > 55 mph	Percent of Vehicles > 55 mph
			Average	85 th %	Max		
Immediately North of Howland Hill Road	Friday	10/21/2016	37	43	69	4	0.2%
	Saturday	10/22/2016	37	43	73	6	0.4%
				Northbound		Southbound	
	By Direction			Average	85 th %	Average	85 th %
	Friday			36	41	38	45
	AM Peak hour (7:45-8:45)			37	41	39	44
	PM Peak hour (2:30-3:30)			37	41	40	45
Location	Day	Date	Speed (mph)			Number of Vehicles > 55 mph	Percent of Vehicles > 55 mph
			Average	85 th %	Max		
Immediately South of Cooke Street	Friday	10/21/2016	46	54	79	210	9.4%
	Saturday	10/22/2016	46	54	77	202	10.6%
				Northbound		Southbound	
	By Direction			Average	85 th %	Average	85 th %
	Friday			44	50	48	56
	AM Peak hour (7:45-8:45)			44	51	46	53
	PM Peak hour (2:45-3:45)			45	51	49	57

Source: LSC Transportation Consultants INC.

Elk Valley Rd 48hr Vol.xls

Table 5: Truck Traffic on Elk Valley Road

Location on Elk Valley Road		2-Hour Period				
		7:00-9:00 AM		3:30-5:30 PM		
West of State Street		3.7%		1.3%		
East of State Street		3.4%		1.2%		
Location on Elk Valley Road	Day	Date	Trucks >40'	Percent of Total Traffic	Trucks >60'	Percent of Total Traffic
Immediately North of Howland Hill Road	Friday	10/21/2016	10	0.5%	0	0.0%
	Saturday	10/22/2016	7	0.4%	0	0.0%
Immediately South of Cooke Street	Friday	10/21/2016	41	1.8%	7	0.3%
	Saturday	10/22/2016	13	0.7%	1	0.1%
Note: Trucks recorded at State St/Elk Valley Rd are any 2+ Axle medium and heavy commercial trucks. Source: LSC Transportation Consultants INC.						
Elk Valley Rd 48hr Vol.xls						

Table 6: Driveway Traffic Volumes*Friday October 21, 2016*

Location	PM Peak Hour			peak hour
	In	Out	Total	
Casino	85	62	147	4:30-5:30 PM
<u>Superette</u>				
SE Driveway	7	10	17	
SW Driveway	3	6	9	
NW Driveway	11	3	14	
<i>Total Superette</i>	<i>21</i>	<i>19</i>	<i>40</i>	<i>3:45-4:45 PM</i>

Source: LSC Transportation Consultants INC.

Table 7: Peak Hour Bicycle and Pedestrian Volumes- Friday October 21, 2016

Intersection		Northbound				Southbound				Eastbound				Westbound				Total		Peak Hr of Bike/Ped Starting
		Bikes			PEDS	Bikes			PEDS	Bikes			PEDS	Bikes			PEDS			
North/South	East/West	LEFT	THRU	RIGHT		LEFT	THRU	RIGHT		LEFT	THRU	RIGHT		LEFT	THRU	RIGHT		LEFT	THRU	
AM																				
US 101	Elk Valley Rd	1	1	0	4	0	0	3	0	0	2	0	5	4	0	0	4	11	13	7:45 AM
Elk Valley Rd	State St	0	1	1	0	0	2	0	1	0	0	0	0	1	0	0	1	5	2	7:15 AM
Elk Valley Rd	Howland Hill Rd	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	1	4	2	7:15 AM
Elk Valley Rd	Norris Ave/ Harbor View Dr	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	7:15 AM
Elk Valley Rd	Aubell Lane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Elk Valley Rd	Cooke St	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Elk Valley Rd	Parkway Dr	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	7:30 AM
PM																				
US 101	Elk Valley Rd	0	2	0	13	0	0	1	0	1	1	1	7	2	3	1	20	12	40	4:00 PM
Elk Valley Rd	State St	0	1	1	0	0	1	0	2	0	1	0	0	2	0	0	1	6	3	3:30 PM
Elk Valley Rd	Howland Hill Rd	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	2	2	3:30 PM
Elk Valley Rd	Norris Ave/ Harbor View Dr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Elk Valley Rd	Aubell Lane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Elk Valley Rd	Cooke St	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Elk Valley Rd	Parkway Dr	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	4:00 PM

Note: Peak hour of bike/ped activity does not always correlate with peak hour of motor vehicle volume.

Source: LSC Transportation Consultants INC.

TABLE 8: Elk Valley Road - Crash Summary by Segment

October 1, 2006 to October 1, 2016

Segment	Total Crashes	Length of Segment (miles)	PM Peak Hour 2-way Traffic Volume	Crashes per mile per Vehicle	Total PM Peak Hour Intersection Volume	Crashes per Vehicle	Crash Severity			Bicyclist Involved in Crash
							Fatal	Injury	Property Damage Only	
At US 101	6				1368	0.004	0	3	3	0
- between	12	0.9	420	0.032			0	8	4	1
State Street	5				468	0.011	0	0	5	0
- between	2	0.2	487	0.021			0	1	1	2
At Howland Hill Drive	12				474	0.025	0	2	10	0
- between	4	0.4	170	0.059			0	2	2	0
At Norris Avenue/Harbor View Drive	9				254	0.035	0	3	6	0
- between	3	0.6	203	0.025			0	1	2	0
At Aubell Lane	1				199	0.005	0	0	1	0
- between	41	2	187	0.110			0	13	28	1
Cooke Street	4				179	0.022	0	1	3	0
- between	1	0.4	154	0.016			0	0	1	0
At Elk Vally Cross Road/Parkway Drive	9				241	0.037	0	3	6	0
Total	109						0	37	72	4

Note: Collisions within 200 feet of an intersection are included in the total for the intersection.

Note: There were no reported crashes involving pedestrians.

Source: LSC Transportation Consultants INC., California Highway Patrol - Statewide Integrated Traffic Records System (SWITRS)

TABLE 9: Elk Valley Road - Crash Type

October 1, 2006 to October 1, 2016

Segment	Total Crashes	Crash Type								
		Head-On	Sideswipe	Rear End	Broadside	Hit Object	Overtaken	Vehicle/ Pedestrian	Other	Not Stated
At US 101	6	0	1	3	1	0	0	1	0	0
- between	12	0	1	2	2	4	1	0	1	1
State Street	5	0	1	1	1	1	1	0	0	0
- between	2	1	0	0	1	0	0	0	0	0
At Howland Hill Drive	12	0	2	1	7	2	0	0	0	0
- between	4	0	0	1	0	2	1	0	0	0
At Norris Avenue/Harbor View Drive	9	0	0	3	2	4	0	0	0	0
- between	3	0	0	2	0	1	0	0	0	0
At Aubell Lane	1	0	0	0	0	0	0	0	1	0
- between	41	1	2	1	2	32	0	0	3	0
Cooke Street	4	0	1	1	0	2	0	0	0	0
- between	1	0	1	0	0	0	0	0	0	0
At Elk Valley Cross Road/Parkway Drive	9	1	0	1	1	5	1	0	0	0
Total	109	3	9	16	17	53	4	1	5	1
Percent of Total		3%	8%	15%	16%	48%	3%	1%	5%	1%

Note: Collisions within 200 feet of an intersection are included in the total for the intersection.

Source: LSC Transportation Consultants INC., California Highway Patrol - Statewide Integrated Traffic Records System (SWITRS)

TABLE 10: Elk Valley Road - Primary Collision Factor

October 1, 2006 to October 1, 2016

Segment	Total Collisions	Primary Collision Factor												
		Alcohol or Drugs	Unsafe Speed	Wrong Side of Road	Improper Passing	Improper Turning	Right of Way	Traffic Signals and Signs	Other Equipment	Other Hazardous Violation	Other Than Driver	Unsafe Starting or Backing	Unknown	Not Stated
At US 101	6	1	1	0	0	2	0	0	0	0	0	1	1	0
- between	12	2	1	0	0	5	2	0	0	0	2	0	0	0
State Street	5	0	2	0	0	1	0	1	0	0	0	0	0	1
- between	2	0	0	0	0	0	0	0	0	2	0	0	0	0
At Howland Hill Drive	12	2	2	0	0	0	8	0	0	0	0	0	0	0
- between	4	0	2	0	0	2	0	0	0	0	0	0	0	0
At Norris Avenue/Harbor View Drive	9	1	2	0	0	2	2	0	1	0	0	0	1	0
- between	3	0	2	0	0	1	0	0	0	0	0	0	0	0
At Aubell Lane	1	0	0	0	0	0	0	0	0	0	1	0	0	0
- between	41	8	6	3	1	18	1	0	0	0	4	0	0	0
Cooke Street	4	1	1	0	0	1	0	0	0	0	0	1	0	0
- between	1	0	0	0	0	1	0	0	0	0	0	0	0	0
At Elk Vally Cross Road/Parkway Drive	9	1	2	0	0	4	2	0	0	0	0	0	0	0
Total	109	16	21	3	1	37	15	1	1	2	7	2	2	1
Percent of Total		15%	19%	3%	1%	33%	14%	1%	1%	2%	6%	2%	2%	1%

Note: Collisions within 200 feet of an intersection are included in the total for the intersection.

Source: LSC Transportation Consultants INC., California Highway Patrol - Statewide Integrated Traffic Records System (SWITRS)

Table 11: Elk Valley Road - Crash Rate		
Elk Valley Road Segment	Per Million Vehicle Miles	
	Total Crash Rate	Injury Crash Rate
US 101 to Howland Hill Rd	1.66	0.57
Howland Hill Rd to Parkway Dr	2.98	0.88
Average Crash Rates		
Del Norte County All Roadways	1.53	0.71
Statewide Average for Rural 2-3 lane	0.93	0.30
Statewide Rural rolling 2 lane <55mph	1.30	0.58
Statewide 3 lane Suburban	1.16	0.46
Statewide 3 lane Urban	1.57	0.60
Note: Statewide and Del Norte County Crash Rates are from Caltrans's 2012 Collision Data on California Highways Publication		

ELK VALLEY ROAD

Multimodal Corridor Plan

@ ELK VALLEY
CROSS RD/
PARKWAY DR

TOTAL = 9
INJURY = 3
PROPERTY
DAMAGE = 6

ROAD SEGMENT

TOTAL = 1
INJURY = 0
PROPERTY
DAMAGE = 1

@ COOKE STREET

TOTAL = 4
INJURY = 1
PROPERTY
DAMAGE = 3

ROAD SEGMENT

TOTAL = 41
INJURY = 13
PROPERTY
DAMAGE = 28
*1 ACCIDENT W/
BICYCLIST

ROAD SEGMENT

TOTAL = 4
INJURY = 2
PROPERTY
DAMAGE = 2

ROAD SEGMENT

TOTAL = 3
INJURY = 1
PROPERTY
DAMAGE = 2

ROAD SEGMENT

TOTAL = 2
INJURY = 1
PROPERTY
DAMAGE = 1
*2 ACCIDENTS W/
BICYCLIST

ROAD SEGMENT

TOTAL = 12
INJURY = 8
PROPERTY
DAMAGE = 4
*1 ACCIDENT W/
BICYCLIST

@ AUBELL LANE

TOTAL = 1
INJURY = 0
PROPERTY
DAMAGE = 1

@ NORRIS AVENUE/ HARBOR VIEW DRIVE

TOTAL = 9
INJURY = 3
PROPERTY
DAMAGE = 6

@ HOWLAND HILL DRIVE

TOTAL = 12
INJURY = 2
PROPERTY
DAMAGE = 10

@ STATE STREET

TOTAL = 5
INJURY = 0
PROPERTY
DAMAGE = 5

@ US 101

TOTAL = 6
INJURY = 3
PROPERTY
DAMAGE = 3

ELK VALLEY ROAD - COLLISION SUMMARY BY SEGMENT
OCTOBER 1, 2006 - OCTOBER 1, 2016

Summary of Crashes by Location -- 2006 to 2016

Cross Street	Distance From Howland Hill Rd (Feet)	Type of Collision							Severity			Total
		Head-On	Sideswipe	Rear End	Broadside	Hit Object	Overtaken	Other	Fatal	Injury	PDO	
HOWLAND HILL	0	0	2	1	7	2	0	0	0	2	10	12
	528	0	0	0	0	1	1	0	0	1	1	2
	765	0	0	0	0	1	0	0	0	0	1	1
	1056	0	0	1	0	0	0	0	0	1	0	1
NORRIS AV	2250	0	0	3	2	4	0	0	0	3	6	9
	2460	0	0	1	0	0	0	0	0	0	1	1
	3900	0	0	1	0	0	0	0	0	1	0	1
	4692	0	0	0	0	1	0	0	0	0	1	1
AUBELL LN	5250	0	0	0	0	0	0	1	0	0	1	1
STEEPS LN	5920	0	1	0	0	4	0	0	0	2	3	5
	6186	0	0	0	0	1	0	0	0	0	1	1
	6195	0	0	0	0	0	0	0	0	0	0	0
	6249	0	0	0	0	1	0	0	0	0	1	1
E JEFFERSON ST	7167	0	0	0	0	1	0	0	0	0	1	1
	7305	0	0	0	0	5	0	1	0	2	4	6
	7695	0	0	0	0	1	0	0	0	1	0	1
	7895	0	0	0	0	1	0	0	0	0	1	1
MAYAS LN	7917	0	0	0	0	0	0	0	0	0	0	0
	8132	0	0	0	0	1	0	0	0	0	1	1
	8751	0	0	0	0	3	0	0	0	0	3	3
	8889	0	0	0	0	1	0	0	0	0	1	1
	9095	0	0	0	0	1	0	0	0	1	0	1
	9195	0	0	0	0	1	0	0	0	0	1	1
	9279	0	0	0	0	1	0	0	0	0	1	1
	10335	0	0	0	0	0	0	1	0	0	1	1
	12704	0	0	0	0	0	0	0	0	0	0	0
	13800	0	0	0	0	0	0	1	0	1	0	1
	14288	0	0	0	0	2	0	0	0	0	2	2
	15344	1	0	0	0	0	0	0	0	0	1	1
	15719	0	0	0	0	1	0	0	0	1	0	1
	16400	0	0	1	1	1	0	0	0	1	2	3
	16442	0	0	0	0	1	0	0	0	1	0	1
	17210	0	1	0	0	0	0	0	0	1	0	1
	17612	0	0	0	0	0	0	0	0	0	0	0
	19030	0	1	1	0	2	0	0	0	1	3	4
	20832	0	1	0	0	0	0	0	0	0	1	1
PARKWAY DR	21840	1	0	1	1	5	1	0	0	3	6	9

Crashes within 200' of an intersection assigned to the intersection.

ATTACHMENT G:
PUBLIC MEETING
RECORDS

Elk Valley Road Multitmodal Cooridor Plan



Public Workshop
November 15, 2016



	Add to mailing list?	Full Name	E-Mail Address	Site/Mailing Address	City	State	ZIP
1	YES / NO	Thomas Sander	tmsander@msn.com	405 Fernwood lane	Crescent City	CA	95531
2	YES / NO	Larry Brock	dianejbrock@charter.net	PO Box 294	Fort Dick	CA	95538
3	YES / NO	Rosanna Bower	rbower@co.de-norte.ca.us	981 H Street, Suite 110	Crescent City	CA	95531
4	YES / NO	Heidi Kunstal	hkunstal@co.del-norte.ca.us	981 H Street, Suite 110	Crescent City	CA	95531
5	YES / NO	Jason Price	jason.price@dot.ca.gov	Union Street	Eureka	CA	95501
6	YES / NO	Stuart Blanco	-	PO Box 1956	Brookings	OR	97415
7	YES / NO	Roy & Pam Holloway	pholloway37@yahoo.com	120 Mayas Lane	Crescent City	CA	95531
8	YES / NO	Ron & Mary Van Nord	pazazia@yahoo.com	2835 Elk Valley Road	Crescent City	CA	95531
9	YES / NO	Tamera Leighton	tamera@dnltc.org		Crescent City	CA	95531
#	YES / NO	Genevieve Wakenman	-	1780 Elk Valley Road	Crescent City	CA	95531

Elk Valley Road Multitmodal Cooridor Plan



Public Workshop
November 15, 2016



	Add to mailing list?	Full Name	E-Mail Address	Site/Mailing Address	City	State	ZIP
#	YES / NO	Bob Berkowitz	bberkowitz@yahoo.com	PO Box 927	Crescent City	CA	95531
#	YES / NO	Bonnie Brown	cypressblond@aol.com	109 Olive Street	Crescent City	CA	95531
#	YES / NO	Dave Harper	-	PO Box 1785 795 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Gary James	-	PO Box 1190 771 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Roland & Janet James	mapiglet@yahoo.com	2145 Laurel Lane	Crescent City	CA	95531
#	YES / NO	Doug Corrigan	corrigan@charter.net	2591 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Jean Corrigan	-	2591 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Harley & Jill Munger	flowerchild401@hotmail.com	1130 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Thomas Carr	trcarr@aol.com	2361 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Janet Wilbert	-	2361 Elk Valley Road	Crescent City	CA	95531

Elk Valley Road Multimodal Corridor Plan



Public Workshop
November 15, 2016



	Add to mailing list?	Full Name	E-Mail Address	Site/Mailing Address	City	State	ZIP
#	YES / NO	Wendy Rinkel	littlestarr8@gmail.com	971 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Eileen Cooper	upsprout@yahoo.com	2644 Roy Avenue	Crescent City	CA	95531
#	YES / NO	Richard Pederson	-	PO Box 1195	Crescent City	CA	95531
#	YES / NO	Krists Carter	kristinunes1@gmail.com	1401 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Robert & Kim Nunes	nuneskim@gmail.com	990 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Paul Ronjoin	dougronjoin@yahoo.com	800 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Paul Dillard	ngetme505@hotmail.com	-			
#	YES / NO	David Finigan	dfinigan@co.del-norte.ca.us	1847 Parkway	Crescent City	CA	95531
#	YES / NO	Herman Rinkel	hrinkel@gmail.com	971 Elk Valley Road	Crescent City	CA	95531
#	YES / NO	Linda Wagnon	lindawagnon@yahoo.com	150 Steeps Lane	Crescent City	CA	95531

Elk Valley Road Multitmodal Cooridor Plan



Public Workshop
November 15, 2016



	Add to mailing list?	Full Name	E-Mail Address	Site/Mailing Address	City	State	ZIP
#	YES / NO	Rachel Owen	-	Cooper Avenue	Crescent City	CA	95531
#	YES / NO	Sara Hawley					
	YES / NO	Brian Stephenson					
	YES / NO						
	YES / NO						
	YES / NO						
	YES / NO						
	YES / NO						
	YES / NO						
	YES / NO						
	YES / NO						

Public Comments Log											
Elk Valley Road Multitmodal Corridor Plan											
Source	Updated 11/13/2016										
	Name		Email	Phone	Address				Comment	Multiples	Add to Mailing List
	First	Last			Street	City	State	Zip			
Webpage	Tedd	Ward	tedd@recycledelnorte.ca.gov						Please keep this agency informed regarding the plans for Elk Valley Road	1	
Webpage	Linda	Wagnon	lwagnon@co.del-norte.ca.us						Since I live off of Elk Valley and travel it daily for work, I am very interested in what will be going on.	2	
Webpage	Eileen	Cooper	upsprout@yahoo.com	707-465-8904					Out of nowhere this project is listed as a priority project in the RTP, although I have seen no letters or substantial public outcry to fix this route. It will be a substantial expenditure, as the route is very long. What is the safety record, accident history, of this route which would necessitate prioritization rather than fixing very dangerous spots around the county? I would like to see a comparison of most needed safety fixes. Please provide the letters of request for this project. What were the intentions of the request? At this point in time, there has been no prioritization process for this project. Thank you, Eileen Cooper	1	
Webpage	Joel	Wallen	joel.wallen@hambrowsg.com	http://hambrowsg.com					Please add me to your list	1	
Webpage	Herman	Rinkel	hrinkel@gmail.com						Please add me to the mailing list	1	
Webpage	Wendy	Rinkel	littlestarr8@gmail.com						Please add me to the mailing list	1	
Webpage	Bob	Berkowitz	bberkowitz@yahoo.com						The corner of Elk Valley Road and Howland Hill Road is a dangerous area. Many accidents have occurred there. I believe that there should be some way to slow the traffic coming along Elk Valley Road heading towards Hwy 101. At current speeds, the traffic heading in this direction is going too fast to see oncoming traffic from Howland Hill Rd. Either a lowered speed limit sign should be placed on Elk Valley Road at this location or a Stop Sign placed at the corner of Elk Valley Road where it meets Howland Hill Road"	1	

Email	Paul	Senyszyn	psenyszyn@charter.net	210-792-7626	2980 Elk Valley Road	Crescent City	CA	95531	Hello, My name is Paul Senyszyn and I live at the north end of Elk Valley road. I saw that there is a workshop to express our concerns for improvements on Elk Valley road. I will not be able to make it to the meeting to express my concerns due to other commitments. I have been living at my address, 2980 elk valley road for 11 years now. I have expressed concerns and improvement concerns to David Finnigan for years without any reply. Bob Berkowitz posted this meeting on Facebook so I am taking advantage in hopes that you listen to my concerns and take to heart that the proposals I would like to see are both beneficial to public safety but also beneficial to the community business environment. The first problem is the amount of truck traffic on Elk Valley road. Many trucks use this road as a by pass around town. I highly urge considering a by pass that connects highway 101 from the south end of town at anchor way, routed behind the motels, across Elk Valley and behind the fairgrounds, eventually connecting up to highway 101 around Washington blvd. we need to get these trucks off the city streets. After all, many of these trucks are just passing thru, which is why they use Elk Valley road, and if they want to stop they will, otherwise they clog up the streets and add traffic to Elk Valley road. I understand business might be opposed to it but the reality is that people will stop if they need to and most tourists who are here to visit the park will stop anyway. They use Howland hill road and Elk Valley road to access Jedediah Smith Redwood state park. Second, Elk Valley road is too narrow, there are no shoulders and no bike lanes. I would like to see this improvement in the county biking system and create bike lanes that go all the way to the borders of Del Norte county. The bike alliance formed by local Joe Gillespie has been trying to get more bike lanes and off trail riding in our county. This is a new area of recreation that will attract biking tourists and tourist dollars to our community. I like biking but I don't go down Elk Valley road due to the dangers of the traffic, no bike lane and no shoulder. It is terrible and dangerous. We can easily create a network of bike lanes on all the roads in our county. There really aren't a lot of roads when you consider it, highway 101, 197, 199, elk valley road, old mill road, lake Earl drive, lower lake drive, Howland hill road, Kings Valley road, Elk Valley cross road, Kings Valley cross road, Parkway drive, Railroad drive, Morehead road, Ocean View drive and Fred Haight drive. That seems like a lot but the reality is that there are already bike lanes on some of those streets and we need to connect the rest so we have loops and safe thorough fares. We have lots of bikers coming thru town as they bike the highway 101. It would be great to add a separate bike/hike bridge over smith river I love biking and would utilize these roads more if they were safer. Third, where I live near the north end of elk valley road, drivers come speeding south off Parkway drive, sometimes doing speeds over 50, even 80 miles an hour even though it is a thirty five mile speed limit. I have constantly complained to CHP and they always go down the road to park and use their radar instead of parking in front of my house and slowing people down. We need signage that there are hidden driveways and to slow people down. I have almost been hit multiple times and many people are aggressive, passing on the blind curve as I pull into my driveway. When large trucks are coming down, their stopping distance is even longer. This is a serious hazard and it is a wonder why there isn't more accidents in this part of the road. It is the same for all my neighbors and likely everyone else on Elk Valley road. For the last several years I complained to CHP about two motorcyclists who must live locally. They would come by my house late afternoon every day for about 5 or 6 weeks straight. They were racing south, presumably just getting off work and having a good time going home. They were going so fast I couldn't even see a bike color. My guess is they were travelling in excess of 80 miles an hour, doing wheelies, and just terribly dangerous. This needs to end. We need to some how direct more traffic to stay on the highway and slow people down who use Elk Valley road, which is one reason why I would like a by-pass to connect the north and south ends of highway 101. It would be much faster for those people to drive that route at highway speeds instead of using Elk Valley road to make their cut around town. The lights in town are a killer, they are slow and traffic is increasing. It is difficult to say how to end this problem but my only other suggestion is to build a traffic circle like in other towns. It would be at the junction of Elk Valley, parkway and Elk Valley cross road. There is plenty of space here with this weird triangular junction. It can almost build itself, just make it circular and add arrows for the direction. Take down the stop signs and make everyone use the circle. It would slow everyone down and make this part of the road much safer for everyone. Drivers couldn't zoom off Parkway and onto Elk Valley and floor it down the hill past these driveways. Thus people couldn't zoom south as they would be slowed down considerably by the traffic circle. I highly recommend you put this in and change the traffic pattern for the residents in this part of Elk Valley road. I think more of the out of town truck traffic would then use the highway as their route of choice. I would love it if it was done by summer 2017. Please remember, these suggestions are about public safety and the children that live out here. We have bus stops along Elk Valley road and no shoulder. Even the mail person can't pull off in many places when delivering the mail and block the road. I have my two children living with me and things get very scary when we get our mail. This should not be. We like bike riding together and we can't do it from our house, we need to put the bikes in the car and drive somewhere else. This is ridiculous!! Please put in a traffic circle, it is proven effective. And please don't just think of the Howland hill intersection, we need help at both ends and everywhere in between. Thank you for listening and I look forward to any and all changes. Please feel free to contact me and if you need to stop by and watch what I am talking about, then by all means do so. I will be happy to help. Sincerely, Paul f senyszyn	1	
Comment Card	Genevieve	Wakeman							45 mph is too fast for EVR. It should go back to 35 mph	1	

Comment Card	Staurt	Blanco	blanco52@twcontractors.com	541-469-5341	PO Box 1956 1963 Elk Valley Road	Brookings Crescent City	OR CA	97415	I've heard that there are proponents to close Elk Valley Road to truck traffic. I oppose closing the road to truck traffic. Tidewater's starry plant is located at 1963 Elk Valley Road. This site processes and delivers concrete and aggregate materials to residents in Del Norte County. Closing Elk Valley Road to truck traffic would adversely affect our operations and also drive the cost/price of road building materials we sell. Tidewater holds a valid conditional use permit to produce these road building materials. Without truck traffic we would not be able to deliver these materials. As far as improving the road, I believe a bike lanes or shoulder would reduce accidents on the narrow roadway. Widening the road is an improvement I think residents and businesses agree is needed.	1	yes
Comment Card	Eileen	Cooper	upsprout@yahoo.com	707-465-8904	2644 Roy Ave	Crescent City	CA		Fix the Elk Valley/Howland Hill intersection. I live in the neighborhood and use the road. I want the spots in the county where injury and death accidents occur to be fixed. Although if we had the money in the world to spend - wider shoulders for pedestrian and bikes would be nice - but exorbitantly expensive. VMT rates do not help to clarify our safety issues.	1	
Comment Card	Ron & Pam	Halloway	pholloway37@yahoo.com	707-218-5056	120 Mayas Lane	Crescent City	CA	95531	Glad this is being looked at. Would like to see bike lanes road widened. Don't feel safe walking or riding bikes on Elk Valley. Too many elk. Problem with elk populations in road and coming on property.	1	yes
Comment Card	Herman	Rinkel	hrinkel@gamil.com	916-705-5510	971 Elk Valley Road	Crescent City	CA	95531	Traffic controls definitely needed @ Howland Hills. Biggest concern is expanding road will increase traffic and speeds creating larger safety risk and also extremely concerned on how it will affect real estate desirability and diminish property values. Not completely opposed to improvement that may take some land, but very concerned about quality and workmanship and either maintaining or increasing aesthetics, safety and property values. I do want to stop the the big trucks and roundabouts and deter the idea of a bypass. Keep the main traffic in town.	1	yes
Comment Card	Richard	Pederson							I suggest stop signs at intersection of Howland Hills Road (very low expense). Widen road to allow bike lanes, walking along road, keep posted speed limits as is. Dangerous speeding is currently a problem. Different types of traffic calming devices, speed bumps at critical spots with warning signs.	1	no
Comment Card	Ron	Van Noord	pazazia@yahoo.com	925-301-6152	2835 Elk Valley Road	Crescent City	CA	95531	1. Obviously a 35 mph speed limit throughout is warranted by the accidents recorded 2. Trucks should be prohibited on on Elk Valley Road from Howland Hill to Parkway, except for local traffic. 3. Lanes could then be narrowed and bike lanes added like Pebble Beach Drive.	1	yes
Comment Card	TR	Carr		619-606-6046	2361 Elk Valley Road	Crescent City	CA	95531	To widen road for turn lanes, pedestrian walkways, bike lanes will require how much of frontage properties?? Lots of bicyclists use the road and it is unsafe due to lack of shoulder and no clearance to ditches on both sides of road. Road is utilized by residents and industrial businesses - large trucks and passenger cars and tourist RV's are on the road a lot. Willing to work with planners to facilitate plan and construction. Traffic counts during tourist season should be completed. Risk of livestock on road. Elk commonly cross the road and leap out of brush onto road as do CA gray fox, black bear, raccoon, cougars, coyotes and domestic pets, owls at night. Road needs traffic calming effects. Don't want Elk Valley Road to be a Bypass.	1	
Comment Card	Harley & Jill	Munger	flowerchild401@hotmail.com	707-464-5337	1130 Elk Valley Road	Crescent City	CA	95531	Excessive speed, constant traffic, rattling windows, concerned about property loss. Environmental concerns regarding year round creek, and ditch drainage. Visibility turning out of driveway, unsafe for bikes and pedestrians. A lot of pedestrian traffic, school children waiting at bus stops, morning and afternoon. A lot of elk crossing in our creek drainage - way more than ever. Several bear and elk hit, many dead animals, trash flying out of pickups headed to the dump.	1	yes
Comment Card	Margaret & Roger	Wakeman	randmwakeman@gmail.com	707-464-9930	105 Ranch Creek Court	Crescent City	CA	95531	I have a bicycle, but with no shoulders on Elk Valley Road, I am afraid to ride it. The few times I have taken the chance, I have had to ride down and cross over Cooke Street to Parkway Drive where I can ride safely in the bicycle lane. I would like bicycle lanes on Elk Valley Road. I also like to walk to exercise and have a number of times walked facing the traffic a mile up the road and then back home again. One time a driver deliberately came around a corner speeding and crossed the road and nearly hit me. Again a walking/bicycle lane would be good. Many people speed on Elk Valley Road. I think the speed limit should be lowered.	1	yes
Comment Card	Paul	Ronjoin	dougronjoin@yahoo.com	707-954-3265	800 Elk Valley Road	Crescent City	CA	95531	I believe that reducing the speed limit back down to 35 mph, from Howland Hill North on Elk Valley Road would decrease the number of accidents and damage. The speed limit use to be 35 mph. I believe it was a bad idea to increase it to 45 mph.	1	yes
Comment Card	Douglas	Corrigan	corrigan@charter.net		2591 Elk Valley Road	Crescent City	CA	95531	I am deeply opposed to this project. Too much of a subsoil is clay. Very little of the roadway is wide enough to accommodate a bike path or sidewalk, without taking land under eminent domain. It would greatly effect me. People drive way too fast. Cell phone usage, CHP lack of manpower. I don't want to lose any of my property, fence or shrubry. Open ditches are a problem for rain runoff. Differences in elevation on where houses were built on grade and level of new width of roadway needed for wanted improvements.	1	yes

Comment Card	Roland & Janet	Jones	mapiplet@yahoo.com	707-954-4343	2145 Laurel Lane	Crescent City	CA	95531	Concerns About - Home set back. Now sets at 25' from existing white line. This is county law frontage therefore bike lanes would come from the other side. Width taken for Easement?? Example 8' wide length 1/2 mile. Value? Speed limit - now 45 mph lived in residence 5 years, the wave passed by speed trucks vibrate whole house - no under layment under road. As county found out, up grading section from 101 to Howland Hill Road. The proposed modifications to larger truck on 199 need to be addressed as it would turn Elk Valley into a Bypass. Suggest ban on trucks weighing more than 30,000 until road structure is rebuilt and speed is lowered to 35 mph, maybe stop signs at Howland Hills - steep lane and church tree after Crescent City already 400 plus stop signs. Concerns of speed cars also- in living at residence. Would contend weekday had excess of 3500 cars per day and speeds exceeding 60 MPH. This assessment made by my speed from pole to pole at 45 mph taking 4.5 seconds, then taking less than 3 seconds. We have had between dates approximately 6/2012 and 8/2015 cars go through the fence 7 times - 1 bull killed 0 more cars means more property damage. Do wild animals take precedent of 70 caows on working 200 acres ranch??	1	
Comment Card	Herman	Rinkel	hrinkel@gmail.com	916-706-5510	971 Elk Valley Road	Crescent City	CA	95531	Suggestion: I am looking at your maps, it appears to be a simple modifications that would lessen the traffic load on Elk Valley Road. Please note that a road from the 101/EVR intersection to the 101/Washington interchange would be a good bypass. 2 easy tie-ins and minimal impact to property owners.	yes	yes
Comment Card	UNKNOWN								Brining EVR to encompass the 60' easement will remove much of a building, a fence, will impact a well and create drainage issues, possibly further making septic issue arise. Answers to these items - timely answers - would be helpful to personal planning: Will homes utilizing wells & septic be required to abandon these and hookup to provided utilities? Are electric/cable to be buried? Are power poles to be relocated outside the 60' corridor - utilizing eminent domain? Elk Valley Road is aptly named, a literal description. Four years running bull elk arrives on the same day, to visit an apple tree for 3 days. Hunting allowed for this area has had a devastating & harsh impact. How will elk be accommodated? This increase in traffic, driven by GPS, bypassing downtown businesses will weaken the local economy. If speed limits are increased we will be visited by an appreciable and directly proportional increase in garbage flying out of vehicles racing to the "recovery Park". Will CHP be increasing patrol frequency? Generations of Nune/s have experiences flourishing stream ecosystems dwindle. Salmon and steelhead runs still occur across Elk Valley Road with each run under 100 fish. Will the time/date arrival of the spawning salmon be noted in the report suggesting work schedule adjustment to accomodate.	1	
Sticky Note	Concerns that Elk Valley Road will become a bypass versus community road									1	
	Need bike lanes									1	
	Bike Lane									1	
	Sight distance turning left into Howland, dip on EVR									1	
	1 fatality (unreported) daytime on EVR, East of Aubell, vehicle turning left from driveway and vehicle northbound on EVR									1	
	Near Ranch Street drainage is a concern as road is below the level of the adjacent properties/driveways									1	
	Transfer Station trucks (double trailers) go from/to grants pass (north of EVR) - check with Transfer Station on hauling days.									1	
Business generators: Tidewater Concrete, State maintenance, Transfer Station, Casino Traffic, Commercial Fishing Sheds, Hemmingson Concrete, Ranchers.									1		

Elk Valley Road Multitmodal Cooridor Plan

Public Workshop
March 14, 2017



	Add to mailing list?	Full Name	E-Mail Address	Site/Mailing Address	City	State	ZIP
1	YES / NO	Janet Gilbert	jgilbertcarr@gmail.com	2361 Elk Valley Road	Crescent City	CA	95531
2	YES / NO	Heidi Kunstal	hkunstal@co.del-norte.ca.us	981 H Street, Suite 110	Crescent City	CA	95531
3	YES / NO	Charliw Helves	charlie@ccharbor.com	100 Cotreus Dock Road	Crescent City	CA	95531
4	YES / NO	Bob Berkowitz	bberkowitz@yahoo.com	po box 927	Crescent City	CA	95531
5	YES / NO	Bonnie Brown	cypressblond@aol.com	109 Olive Street	Crescent City	CA	95531
6	YES / NO	Maya Beatty-Hanko		1011 Elk Valley Road	Crescent City	CA	95531
7	YES / NO	Glen Hanko		1011 Elk Valley Road	Crescent City	CA	95531
8	YES / NO	Scott Casanova					
9	YES / NO	Michelle Sullenberger					
10	YES / NO	Janet Jones	mapiglet@yahoo.com	2150 Elk Valley Road	Crescent City	CA	95531

Elk Valley Road Multitmodal Cooridor Plan

Public Workshop
March 14, 2017



	Add to mailing list?	Full Name	E-Mail Address	Site/Mailing Address	City	State	ZIP
11	YES / NO	Roland Jones		2150 Elk Valley Road	Crescent City	CA	95531
12	YES / NO	Margaret & Roger Wakeman	randmwakeman@gmail.com	105 Ranch Creek Road	Crescent City	CA	95531
13	YES / NO	Paul Dillman	ugotme505@hotmail.com	225 Saraha Drive	Crescent City	CA	95531
14	YES / NO	Jeff Sogge	jeff@pacredwood.com	po box 3626	Carmel	CA	93921
15	YES / NO	Steve Amarant	steve3069@gmail.com	po box 1478	Crescent City	CA	95531
16	YES / NO	Roger Gitlin	rgitlin@co.del-norte.ca.us	Board of Supervisors			
17	YES / NO	Kim	nueskim@sima		Crescent City	CA	95531
18	YES / NO	Eileen Cooper	upsprout@yahoo.com	2644 Roy Avenue	Crescent City	CA	95531
19	YES / NO	Diane & Larry Brock	dianebrock@charter.net	po box 294	Fort Dick	CA	95538
20	YES / NO	Jimmy	Community Youth		Crescent City	CA	

Elk Valley Road Multitmodal Cooridor Plan

Public Workshop
March 14, 2017



	Add to mailing list?	Full Name	E-Mail Address	Site/Mailing Address	City	State	ZIP
21	YES / NO	Dillon	Community Youth		Crescent City		
22	YES / NO	Rosanna Bower	rbower@co.del-norte.ca.us	981 H Street, Suite 110	Crescent City	CA	95531
23	YES / NO	Kyle James		1401 Elk Valley Road	Crescent City	CA	95531
24	YES / NO	Brian Stephenson					
25	YES / NO	Sara Sanders					
26	YES / NO	Gordon Shaw					
27	YES / NO	Rosanna Bower					
28	YES / NO	Heidi Kunstal					
29	YES / NO						
30	YES / NO						

Public Comments Log										
Elk Valley Road Multitmodal Corridor Plan										
Source	Updated 3/16/2016									
	Name		Email	Phone	Address				Comment	Multples
	First	Last			Street	City	State	Zip		
Webpage	Eileen	Cooper		707.465.8904	2644 Roy Ave		CC		We would like to know the crash statistics, cause effect to make intelligent proposals. Clarify 'purpose of plan'. If purpose is to encourage bicycling, we want to give the bikes their own lane. If it is safety, then we should fix the car accidents. (Reduce Speed) for cars and bikes, alternative 1B for bikes, 11' lanes. Roundabout good.	1
Webpage	Janet	Gilbert	jgilbertcarr@gmail.com	619.606.6051					Recommend pro-active safety features while other data is being gathers: - white striping on road edges - reflective striping on power poles - reduced speed zones with flashing light signs at sites of most accidents. Research replacing drainage ditches with underground pipes and gravel over, creating a bike path/walkway and preventing cars from winding up in the ditches - use money saved on Last Chance Grade.	1
Webpage	Larry	Brock		707.464.4286	1690 Morehead Rd.				I own the parcel (9.5 acres) at Church Tree Rd and Elk Valley Rd, West wise of Elk Valley Rd.(2540 Elk Valley Rd). I would like to see Alt 1A used for this project. Please keep in mind there is a water drainage problem at my driveway. It runs down my driveway/ruining my gravel.	1
Webpage	Maya	Beatty- Hanko			1011 Elk Valley Rd.	Crescent	Ca	95531	Entire project is misdirected use of money in this time of failing infrastructure. Lets repair! 3A &B Look excessively expensive and unnecessary etc, etc. Speed bumps work well.	1
Webpage	Paul	Dillard		218.8100.					1. Widen and pave lines. 2. No stop signs on E.V. it is the through fare. 3. Roundabout expensive by progressive if new casino is built. 4. Flashing caution ligh cheaper at Howland Hill and E.V. 5. Eliminate dip 100 yds N.E. of intersection of Howland and E.V. 6. The problem at HOWland HILL is that people stop at Howland Hills and assume all traffice approaching from the left (W) will turn and go to the casino. Traffic approaching from the right are difficult to see because of the dip.	1
Webpage	Glen	Hanko		707.464.4517	1011 Elk Valley Rd.				This entire project is not warranted by the population size, a bike lane is warranted.	1
Webpage	Jeff	Sogge	jeff@pacredwood.com	707.513.7782	2400 Elk Valley Rd				Jeff from Pacific Redwood Products. We would like to see water and sewer put in at the time of the road work.	1
Email	Steve	Amarant	stever3069@gmail.com	530.921.5351	P.O. Box 1478	CC	Ca	95531	Business Owner. Sewer and water when road contruction would be cheaper in the long run. When replacing parts.	1

From Sticky Notes:	- Like the Rumble Strip	Alt1
	- Like the Rumble Strip	Alt1
	- 11' - 1B Better for bike safety - slows traffic down	Alt 1
	- Stop Sign	Alt2A
	- Ditches could be filled in with under ground pipes and allow for pedestrians and bikes without encroching on private property and prevent car ditch encounters!	Comment Board
	Edge striping	Comment Board
	- wide shoulders of compacted sand and gravel, lower speed limits, bend some straight aways to reduce passing on wrong side of the road, will your proposed enhancements change ingress/egress requests?, Don't increase the use of this road for though traffic!	Comment Board
	People driving to trash transfer station often have debris flying out of their cats. Lowering speeds may solve this problem.	Comment Board
	- Yield Sign	Alt2A
	- Stop Sign	Alt2A
	- No more stop signs. Roundabout great idea.	Alt2A
	- Roundabout and light	Alt2A
	- Vertical curve correction needed at Aubel.	Alt1
	- Stop Sign Instead!	Alt2A
	- county needs to enforce tarping on dump loads	