

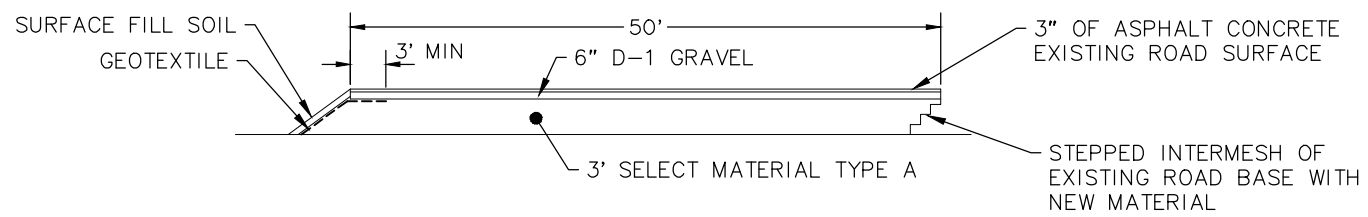
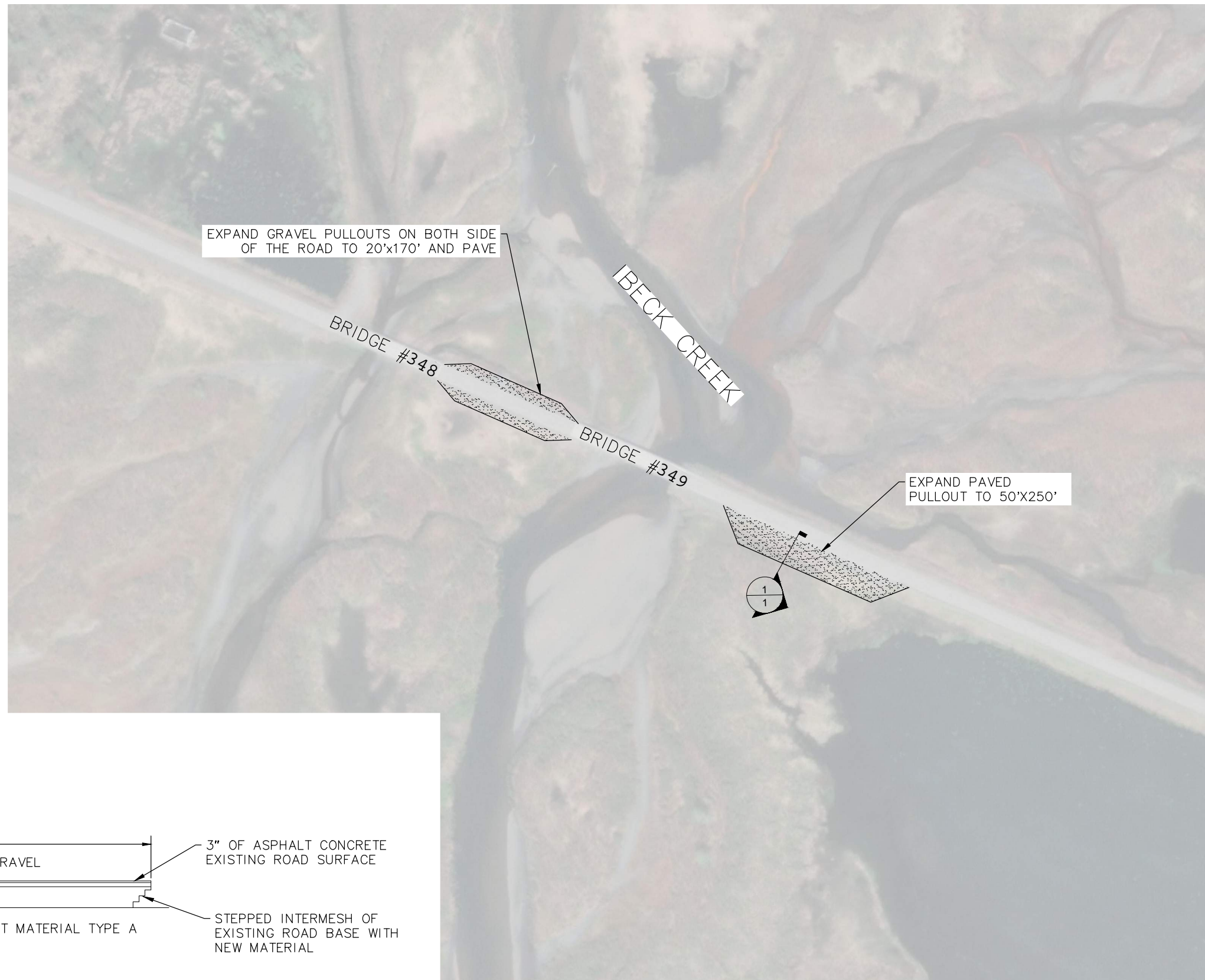
Appendix C: Identified Projects and Needs



Appendix C-1

Estimates and information for Project 1:

Improve parking at Ibeck Creek



ROAD SECTION
SCALE: N/A

1



PROJECT:
STATUS:



PROJECT #1
IMPROVE PARKING AT IBECK CREEK

DATE
06/04/23
SCALE
GRAPHIC
FIGURE
1

File: J:\JobsData\30121.00 Copper River Highway Master Plan\00_CADD 2019\02_Figures\01_DSR\CopperRiver-Highway-FIG1.dwg

Project Title **Project #1: Improve Parking at Ibeck Creek**

Project Description

Widen the existing paved pullout east of Bridge #349 on the south side of the road from 10-foot wide to 50-foot wide (measured from the outer lane-line). Retain the existing length of the pullout at 250-foot long. The new paved parking area east of Bridge #349 will accommodate approximately 25 cars to be parked perpendicular to the road and allows space for a bike path between the parked cars and the road. Pave and widen the informal pullouts on either side of the road west of Bridge #349 so that they are approximately 20-foot wide by 170-foot long. This will accommodate approximately 12 car parking spaces to parallel park and allow space for a bike path between the parked cars and the road. These improvements will provide a total of 37 cars to park in the Ibeck Creek fishing vicinity with a buffer from the highway traffic. Number of parking spaces created: 27 Assume we are working within the DOT 150' easement from the center line. Allow for a 10-ft wide multi-purpose pathway.

Estimate Methodology

Using online cinematography, we calculated the required volumes of clearing and barrow to estimate the design of a 300 foot long, 50-foot-wide parking lot over the existing parking area on Ibeck creek. This design included 3 feet of compacted select type A material over a cleared and grubbed surface, 6 inches of compacted D-1 gravel over the type A, and 3 inches of asphalt concrete on top. This should bring the parking area to equal elevation with the existing road surface. Erosional geotextile should be run along the exposed embankment of the parking area covering the type A but held in place by a 3-foot interface under the D-1 and asphalt concrete. Surface material such as fill soil should then be layered on top of the geotextile and hydroseeded to provide an anti-erosional and public facing surface. This same process should also be applied to both of the informal 200 foot long 20 feet wide parking areas to the west of Ibeck Creek.

Item	Description	Units	Quantity	Price	Amount	Source of Costs
201.0009.0000	Clearing and Grubbing	SF	25,000.00	2	\$ 50,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Roadbut adjusted for current market rate
203.0019.0000	Unclassified Excavation	CY	500.00	35	\$ 17,500	2021 DOT Project 00462 Cordova Center Pedestrian Connector (TAP) Bid Tabs. Adjusted
301.0001.00D1	Aggregate Surface Course, Grading D-1	CF	11,500.00	12	\$ 138,000	Local quarry quote May 2023
	Aggregate Base Course, Select Material Type A	CF	70,000.00	8	\$ 560,000	Local quarry quote May 2023
401.0001.002A	3 " Asphalt Concrete	TONS	450.00	1300	\$ 585,000	used high end cost for anchorage
615.0001.0000	Parking Painting and Signs	LS	1.00	10000	\$ 10,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Roadbut
	Soil Fill for Slopes	CF	1,000.00	10	\$ 10,000	Local quarry quote May 2023
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	500.00	12	\$ 6,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
640.0004.0000	Worker Meals and Lodging, or Per Diem	LS	1.00	20000	\$ 20,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs adjusted
641.2000.0000	Pollution Control	LS	1.00	7500	\$ 7,500	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
641.0007.0000	SWPPP Manager	LS	1.000	10000	\$ 10,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road adjusted
640.0001.0000	Mobilization and Demobilization	LS	1.00	15000	\$ 15,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs adjusted
642.0001.0000	Construction Surveying	LS	1.00	25000	\$ 25,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
643.0002.0000	Traffic Maintenance	LS	1.00	25000	\$ 25,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
643.2016.0000	Road Closure	LS	2.00	10000	\$ 20,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
618.0001.0000	Seeding	ACRE	1.00	28000	\$ 28,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Roadbut
Subtotal					\$ 1,527,000	
			Estimating Contingency	25%	\$ 382,000	
			Design	10%	\$ 153,000	
			Construction Engineering	20%	\$ 306,000	
			Indirect Cost Allocation Plan	5%	\$ 76,000	
Estimated Total Cost for Project #1 Improve Parking at Ibeck Creek					\$ 2,500,000	

Appendix C-2

Estimates and information for Project 2:

Bike path to connect the Cordova Ferry
Terminal to Merle K (Mudhole) Smith
Airport

Project #2 Multi-use pathway to connect Cordova Ferry Terminal to Merle K (Mudhole) Smith Airport

Project Description Design and build 12 miles of seaparated multi-use pathway including 12 new multi-purpose bridges.

Assumptions This will be a 10-ft wide separated multi-use pathway with 2' shoulders (14-ft wide structural base and 2:1 slopes), including 12 multi-use bridges that are assumed to be 12-feet wide.

Planning Estimate Development A cost estimate has been developed based on costs taken from bid tabs for the Beaver Loop separated pedestrian walkway (2019) on the Kenai Peninsula, and the cost of multi-purpose bridges was developed based on costs from the Fish Creek pedestrian bridges project (2017).

				Unit	Assumptions/References
Separated Multi-Use Pathway	Separated multi-use pathway		\$ 2,848,033	per mile in 2023 dollars	Beaver Loop Separated Pedestrian Walkway costs were used as a basis. Beaver Loop Pathway is 8-ft wide and 3.75 miles long. Beaver Loop project cost \$2.4m/mile in 2019 dollars, adjusted for inflation to \$2.9m/mile in 2023 dollars. Since the CRH multi-use pathway will be 10' wide instead of 8' wide, the cost per mile from the Beaver Loop project will be multilied by a factor of 9.5/8 to give a unit cost of \$2.8m/mile.
	Milage for CRH multi-use pathway			12 miles	
	Cost of CRH multi-use pathway (no bridges)	Subtotal	\$	34,176,398	
Multi-Use Bridges	Number of bridges to cross			12	Assume the same quantity as vehicle bridges for this stretch of highway.
	Cost per LF of 12-ft wide bridges		\$ 3,000	per LF	Calculated from Fish Creek multi-use pathway bids, adjusted for inflation from 2017 to 2023 dollars.
	Total length of all bridges			2,157 feet	Assumes the multi-use bridges are the same length as existing vehicle bridges.
	Base Cost Per Bridge		\$ 207,000		Calculated from Fish Creek multi-use pathway bids, adjusted for inflation from 2017 to 2023 dollars.
		Subtotal	\$	8,955,000	Equal to 2,157 feet of bridge at \$2k per LF, and 12 bridges at \$167k per bridge.
	Construction Subtotal		\$	43,132,000	
Markups	Estimating Contingency	30%	\$	12,940,000	
	Design	10%	\$	4,314,000	
	Construction Engineering	20%	\$	8,627,000	
	Indirect Cost Allocation Plan	5%	\$	2,140,000	
Estimated Total Cost (Project #2 Multi-Use Pathway)			\$	72,000,000	

Beaver Loop Bids

Pathway 8-ft wide and 3.75 miles long, Kenai Peninsula

Location Central Kenai Peninsula

Width of pathway 8 ft

Length 3.75 miles

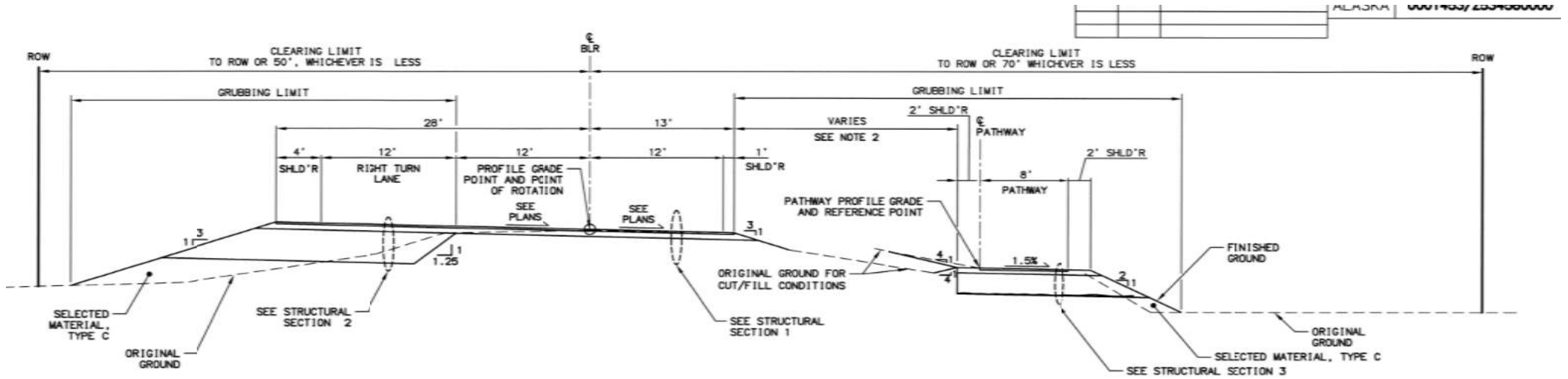
Date of Bids March 2019

Engineer's Bid \$ 9,152,486

Contractor(2) Bids Average \$ 8,993,789 \$ 2,398,344 per mile in 2019 dollars

Contractor(2) Bids Average \$ 2,861,757 per mile in 2023 dollars

Assumed design for the Copper River Highway bike path, based on the 2019 Beaver Loop Pedestrian Walkway Design



Appendix C: Identified Projects and Needs

Bridge Widening Cost

Assume cost of widening bridge 4' to add bike lane is \$ 5,000 per LF
 And it costs this much extra for each bridge \$ 10,000

Bridges Between MP 0 and MP 13

#	Name	Name	River	Milepost	Length (ft)	Width (inches)	Existing shoulder width in inches on each side of road (inches) = (Width-24 inches)/2	Additional bike width required for a total of 4ft	Year Built	Bridge Cost Estimate
1	381	Marie Smith Jones	Eyak River		5.7	255	24.3	0.15	3.99	1954 \$ 1,285,000
2	348	Michael Dean Banta			7.6	162	27.9	1.95	3.84	1966 \$ 820,000
3	349	Scott Clacier No. 2			7.7	212	28.2	2.1	3.83	1966 \$ 1,070,000
4	350	Warren Allen Paulsen			8.1	162	27.9	1.95	3.84	1966 \$ 820,000
5	351	Scott Clacier No. 4			8.5	62	28.2	2.1	3.83	1966 \$ 320,000
6	352	David Allen Lape			9.2	62	28.2	2.1	3.83	1966 \$ 320,000
7	406	Scott Glacier No. 6			9.5	402	28.2	2.1	3.83	1966 \$ 2,020,000
			David Henry							
8	407	Scott Glacier No. 7	Ellsovsky		9.7	182	28.2	2.1	3.83	1966 \$ 920,000
9	408	Scott Glacier No. 8			10	162	28.2	2.1	3.83	1966 \$ 820,000
			Leonard F.							
10	409	Scott Glacier No. 9	Olsen		10.4	82	28.2	2.1	3.83	1966 \$ 420,000
11	410	Scott Glacier No. 10			10.8	52	28.2	2.1	3.83	1966 \$ 270,000
12	411	Norman D. Osborne			11	362	28.2	2.1	3.83	1966 \$ 1,820,000
TOTAL						2157			Total	\$ 10,905,000

Appendix C: Identified Projects and Needs

**Average Daily Total of vehicle traffic (from
alaskatraficdata.drakewell.com) estimated for**

Milepost 2022 from August 2018 data

0	1070
1	980
2	2500
3	1370
4	1190
5	1190
6	1190
7	1190
8	1190
9	560
10	560
11	560
12	560
13	560

Appendix C-3

Estimates and information for Project 3:

Replace Bridges #339 and Bridge #340
with a new bridge around milepost 36.

Appendix C: Identified Projects and Needs

Design Criteria

CRH is classified as a Major Collector roadway up to Bridge #339 at MP 36, which means it supports moderate traffic capacity with a maximum speed of 55mph. After MP 339 Copper River Highway is classified as "Not Functionally Classified"

Design of Preferred Bridge Alternative from 2023 Draft PEL:

Alternative 2 is the Preferred Alternative. The DOT&PF considered this alternative in 2014, in conjunction with The National Constructors' Group (NCG), who was contracted by the DOT&PF to assist in analyzing its constructability and costs. NCG's report, titled Constructability Analysis Report Copper River Highway NBI #339, dated February 11, 2014 is on file at DOT&PF's Northern Region office and is available upon request.

Alternative 2's design proposes a new bridge that is 1,400 feet long. It consists of 14 spans having distances of 100 feet each. There are 15 piers, each pier consists of two 4 feet diameter driven pipe pile that are 150' in length with a precast concrete pile cap. The superstructure consists of precast concrete box girders having dimensions of 3.5 feet wide by 5 feet deep. NBI #339 and NBI #340 would be demolished as part of his alternative because they are within DOT&PF ROW where the new bridge would need to be constructed. In addition, these two bridges are no longer used and are within a listed USCG and USACE navigable waterway.

In order to build Alternative 2, it's proposed that two construction access trestles be constructed along the same alignment as the proposed replacement bridge, one trestle on each side of bridge. The trestles would include rails for the primary hoisting equipment to travel on, which would be a 225 -ton straddle carrier gantry crane. As segments of the permanent bridge superstructure are completed those segments will providing the access road required for all material handling. Using this method of construction would allow the new bridge and its associated trestles to remain inside DOT&PF's ROW.

Cost Info From the 2023 Draft PEL:

In 2014, the cost of Alternative 2 was estimated at \$36,000,000. However, this estimate did not include the costs for the bridge abutment slopes protection, soil investigation, design and construction inspections, nor did it include a costs estimate for the demolitions of NBI #339 and NBI #340.

There were three options proposed for the protection of the bridge abutment slopes.

- 1. Install sheet pile walls; 2014 cost estimate was \$8,065,770.*
- 2. Install riprap; 2014 cost estimate was \$2,433,390.*
- 3. Install concrete blocks (dolos); 2014 cost estimate was \$4,800,000.*

Of the three options for protection of the bridge abutments, presented above, the DOT&PF believes installation of riprap (Option 2) is the most feasible.

In concerns to the demolitions of NBI #339 and NBI #340, given their relatively remote locations, the DOT&PF anticipates that the general cost estimates would be approximately \$1,000,000/100 feet. NBI #339 is 401-feet long and NBI #340 is 241-feet long, thus \$6,420,000. However, if the necessary equipment is already mobilized to this site for the construction of the new bridge then their demolition costs would be considerably lower.

Project Title Project #3 Replace NBI #339 and NBI #340 with a new, single-span bridge

Project Description Remove and replace existing failed bridge 339 with new 30-ft wide bridge, 1600 feet long, 2 pile per 100 feet, 14 pier units, and 2 abutments.

Details: For this masterplan a 1600-foot-long bridge has been estimated. The bridge will have 14 pile units using two, 4-foot-wide piles and two abutments using the sheet pile, drive, fill, riprap, and remove method. These spans are composed of 100-foot precast concrete members atop pile caps and decked with a concrete surface and guardrails. Ten ice guards would be attached to the upstream side of the pier piles under the most flow and the riverbank and abutments would all receive Class 1 riprap and spotted geotextile to reduced erosion. NBI #339 and NBI #340 will be demolished. The DOT's PEL (2023 draft) described the preferred alternative recommended a similar replacement bridge of 1,400 feet length with fourteen 100-foot spans founded upon 15 piers consisting of a two 4-foot diameter driven pipe pile that are 150-feet in length with a precast concrete pile cap. The superstructure consists of precast concrete box girders having dimensions of 3.5 feet wide by 5-feet deep. The scope also included the demolishing of NBI #339 and NBI #340. The 2019 PEL cost for this project was \$64m in 2014 dollars.

Item	Description	Units	Quantity	Price in 2023 dollars	Amount	Source of Costs
202.0001.0000	Removal of Structures and Obstructions from Old Bridge	LS	1.00	7,713,000	7,713,000	2019 draft CRH PEL
201.0009.0000	Clearing and Grubbing	ACRE	6.00	23,700	142,200	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
203.0019.0000	Unclassified Excavation	CY	2,000.00	22	44,000	2021 DOT Project 00462 Cordova Center Pedestrian Connector (TAP) Bid Tabs
505.0009.0000	Sheet pile Abutments Install and Removal	Each	35.00	11,800	413,000	Wendell Avenue Bridge Replacement
203.0005.000A	Sheet pile Fill, Select Type A	CY	1,000.00	216	216,000	Local quarry quote May 2023
505.MF02.2402	Abutment Piles with Crane and Install	Each	12.00	32,000	384,000	Scaled up 2' up to 4' cost (multiplied \$15k per pier by 2 and added \$2k for shipping per pier) from 2020 AUKE BAY FERRY TERMINAL MODIFICATIONS & IMPROVEMENTS
505.MF02.2403	Pier Piles with Crane and Install	Each	84.00	32,000	2,688,000	Scaled up 2' up to 4' cost (multiplied \$15k per pier by 2 and added \$2k for shipping per pier) from 2020 AUKE BAY FERRY TERMINAL MODIFICATIONS & IMPROVEMENTS
	Pile Caps and Headers	Each	32.00	10,000	320,000	
501.0007.0000	Precast Concrete Member 99'	Each	32.00	200,000	6,400,000	2022 QUARTZ CREEK BRIDGE REPLACEMENT (\$110k), adjusted for Cordova remoteness factor.
510.2000.0000	Decking	SF	54,000.00	200	10,800,000	2021 Seward Highway, MP 75-90 Ingram Creek to Girdwood Road and Bridge Rehabilitation, Phase II; Portage Curve Multimodal Connector. Ingram Creek project was for deck repair, we have increased the unit cost for deck replacement.
501.0004.0000	Deck Paving	CY	700.00	2,600	1,820,000	2021 Sterling Highway MP 45-60 Sunrise to Skilak Lake Rd CM/GC; Stages 3 & 4 Early Work Package
507.2000.0000	Guardrails	LF	3,600.00	325	1,170,000	2023 SEWARD HIGHWAY MP 0-8 PAVEMENT PRESERVATION
	H and H, 2 Dimensional Analysis	LS	1.00	120,000	120,000	
611.0001.0001	Riprap, Class I	CY	20,000.00	250	5,000,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	12,500.00	22	275,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
640.0004.0000	Worker Meals and Lodging, or Per Diem	LS	1.00	168,000	168,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
641.2000.0000	Pollution Control	LS	1.00	28,000	28,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
641.0007.0000	SWPPP Manager	LS	1.000	120,000	120,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
615.0001.0000	Standard Sign	LS	1.00	5,000	5,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
640.0001.0000	Mobilization and Demobilization	LS	1.00	1,000,000	1,000,000	Estimated for this project.
642.0001.0000	Construction Surveying	LS	1.00	56,000	56,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
643.2016.0000	Road Closure	LS	1.00	11,000	11,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0001.0000	Field Office	LS	1.00	112,000	112,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
Subtotal					39,100,000	
Estimating Contingency			30%		11,730,000	
Design			10%		3,910,000	
Construction Engineering			20%		7,820,000	
Indirect Cost Allocation Plan			5%		1,940,000	
Estimated Total Cost Project #3 Replace NBI #339 and #340					65,000,000	

Appendix C-4

Estimates and information for Project 4:

Reinstate access to subsistence and recreational areas past 52 Mile

Appendix C: Identified Projects and Needs

Project #4: Reinstate access to subsistence and recreational areas past MP 52

Project Scope: Replace Bridge #339 and #340 at mile 35.5 (Project #3 of this masterplan), Reroute and replace Copper River Highway from MP 38 to MP 44, Replace 9 culverts with fish passage culverts between MP 36 to 45, Repairs to The Million Dollar Bridge at MP 48.

Description	Units	Quantity	Price	Amount
Million Dollar Bridge Repairs	LS	1	\$ 196,000,000	\$ 196,000,000
Bridge #339 and #340 Replacement	LS	1	\$ 52,000,000	\$ 52,000,000
Road repairs MP 43.5 to 44	LS	1	\$ 24,000,000	\$ 24,000,000
Road repairs MP 38 to 48	LS	1	\$ 12,000,000	\$ 12,000,000
Replace culverts between MP 39 and 42	CY	9	\$ 1,200,000	\$ 10,800,000
Subtotal				\$ 294,800,000
Estimating Contingency (already added for each line item)				-
Design 10%				29,480,000
Construction Engineering 20%				58,960,000
Indirect Cost Allocation Plan 5%				14,740,000
Estimated Total Cost (Project #4 Reinstate access to MP 52)				\$ 325,000,000

Sub-Project of Project #4: Million Dollar Bridge Repairs**Project Description**

This work includes replacing Ice Breaker Number 1 and upgrading Ice Breaker Number 2. Pier 1 and 2 will undergo seismic upgrades and their caissons will be grouted. Cracking and spalling of Abutment 1 will be repaired. Damaged chords, laterals, bolts, tie rods, and corbels will be replaced. Lead-based paint on the bridge will be abated and the bridge will be repainted.

Item	Description	Units	QTY	Price	Amount	Source of Costs
201.0009.0000	Clearing and Grubbing	ACRE	4	20,000	80,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
202.0001.0000	Removal of Structures and Obstructions	LS	1	20,000	20,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
203.0019.0000	Unclassified Excavation	CY	1,000	100	100,000	2021 DOT Project 00462 Cordova Center Pedestrian Connector (TAP) Bid Tabs
301.0004.00E1	Aggregate Surface Course, Grading E-1	CY	50	60	3,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
301.0002.00D1	Aggregate Base Course, Grading D-1	CY	300	234	70,200	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
611.0001.0003	Riprap, Class III	CY	500	269	134,500	QUARTZ CREEK BRIDGE REPLACEMENT
	Pier 1 Ice Breaker	LS	1	25,000,000	25,000,000	2014 PER
	Pier 2 Ice Breaker	LS	1	10,000,000	10,000,000	2014 PER and quote for drillstring and drilling efforts
	Pier 1 and 2 caisson grouting	LS	2	15,000,000	30,000,000	2014 PER
	Seismic Retrofit and realignment for Pier 1 and 2	LS	2	20,000,000	40,000,000	
	Repair of cracking, spalling, and adjustment of Abutment 1	LS	1	4,000,000	4,000,000	
	Replacement of missing and damaged chords, laterals, bolts, tierods, and corbels	LS	1	5,000,000	5,000,000	
	Lead abatement and Painting	LS	1	15,000,000	15,000,000	
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	500	12	6,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
640.0004.0000	Worker Meals and Lodging, or Per Diem	LS	1	200,000	200,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
641.2000.0000	Pollution Control	LS	1	55,000	55,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
641.0007.0000	SWPPP Manager	LS	1	150,000	150,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
640.0001.0000	Mobilization and Demobilization	LS	1	250,000	250,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
642.0001.0000	Construction Surveying	LS	1	45,000	45,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0001.0000	Field Office	LS	1	35,000	35,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
Subtotal					\$ 130,149,000	
Estimating Contingency 50%					65,075,000	
Subtotal for Million Dollar Bridge Repairs					\$ 196,000,000	

Sub-Project of Project #4: Repairs to highway at MP 38 to 43

Project Description		Raise Roadway up 5 feet from MP 38 to 43, 2 to 1 slopes and 30 foot driving surface.				
Item	Description	Units	Quantity	Price	Amount	Source of Costs
201.0009.0000	Clearing and Grubing	ACRE	24	\$ 20,000	\$ 480,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
203.0019.0000	Unclassified Excavation	CY	2,500	\$ 100	\$ 250,000	2021 DOT Project 00462 Cordova Center Pedestrian Connector (TAP) Bid Tabs
301.0004.00E1	Aggregate Surface Course, Grading E-1	CF	132,000	\$ 5	\$ 689,040	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
203.0007.0000	Borrow	CY	3,500	\$ 60	\$ 210,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
	Aggregate Base Course, Select Material Typ	CF	1,394,826	\$ 3	\$ 4,184,478	Local quarry quote May 2023
301.0002.00D1	Aggregate Base Course, Grading D-1	CF	264,000	\$ 7	\$ 1,742,400	Cordova Center Pedestrian Connector (TAP)
611.0001.0003	Riprap, Class III	CY	4,000	\$ 269	\$ 1,076,000	QUARTZ CREEK BRIDGE REPLACEMENT
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	22,000	\$ 12	\$ 264,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
640.0004.0000	Worker Meals and Lodging, or Per Diem	LS	1	\$ 50,000	\$ 50,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
641.2000.0000	Pollution Control, Fish Passage, H&H	LS	1	\$ 100,000	\$ 100,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
641.0007.0000	SWPPP Manager	LS	1	\$ 50,000	\$ 50,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
640.0001.0000	Mobilization and Demobilization	LS	1	\$ 100,000	\$ 100,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
642.0001.0000	Construction Surveying	LS	1	\$ 50,000	\$ 50,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
643.2016.0000	Road Closure	LS	1	\$ 10,000	\$ 10,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0001.0000	Field Office	LS	1	\$ 25,000	\$ 25,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0006.0000	Vehicle	LS	1	\$ 15,000	\$ 15,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0016.0000	Storage Container	EACH	4	\$ 15,000	\$ 60,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
Subtotal					\$ 9,355,918	
	Estimating Contingency 25%				2,339,000	
Subtotal for Repairs to Highway MP 38 to MP 43					\$ 12,000,000	

Sub-Project of Project #4: Repairs to highway at MP 43.5 to 44

Project Description Construct a new road 3.1 miles long, 5 feet above ground surface, 30 feet wide driving surface, 2 to 1 slopes, 5 culverts

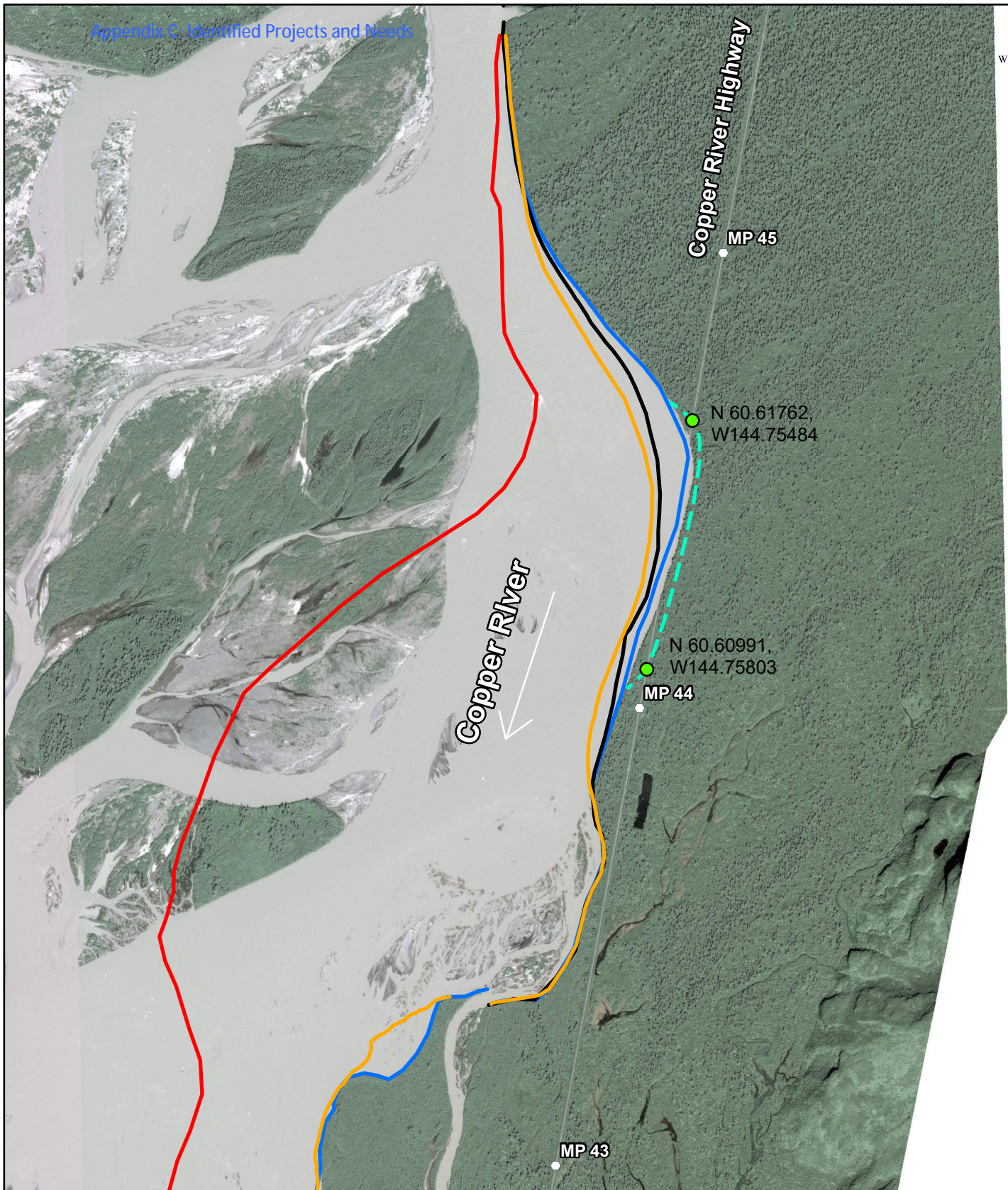
Item	Description	Units	Quantity	Price	Amount	Source of Costs
201.0009.0000	Clearing and Grubing	ACRE	40	20,000 \$	800,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
203.0019.0000	Unclassified Excavation	CY	50,000	100 \$	5,000,000	2021 DOT Project 00462 Cordova Center Pedestrian Connector (TAP) Bid Tabs
301.0004.00E1	Aggregate Surface Course, Grading E-1	CF	163,380	5 \$	852,844	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
203.0007.0000	Borrow	CY	25,000	60 \$	1,500,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
	Aggregate Base Course, Select Material Type A	CF	2,373,360	3 \$	7,120,080.00	Local quarry quote May 2023
301.0002.00D1	Aggregate Base Course, Grading D-1	CF	326,760	7 \$	2,156,616	Cordova Center Pedestrian Connector (TAP)
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	14,000	12 \$	168,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
640.0004.0000	Worker Meals and Lodging, or Per Diem	LS	1	50,000 \$	50,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
641.2000.0000	Pollution Control, Fish Passage Consultant, H&H Consultant	LS	1	100,000 \$	100,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
641.0007.0000	SWPPP Manager	LS	1	50,000 \$	50,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
640.0001.0000	Mobilization and Demobilization	LS	1	100,000 \$	100,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
642.0001.0000	Construction Surveying	LS	1	75,000 \$	75,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
643.2016.0000	Road Closure	LS	1	10,000 \$	10,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0001.0000	Field Office	LS	1	25,000 \$	25,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0006.0000	Vehicle	LS	1	15,000 \$	15,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0016.0000	Storage Container	EACH	4	15,000 \$	60,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
Subtotal					\$ 19,000,000	
Estimating Contingency 25%					4,750,000	
Subtotal for Repairs to Highway MP 43.3 to MP 44					\$ 24,000,000	

Sub-Project of Project #4: Project #3 Replace NBI #339 and NBI #340 with a new, single-span bridge

Project Description: Remove and replace existing failed bridge 339 with new 30-ft wide bridge, 1600 feet long, 2 pile per 100 feet, 14 pier units, and 2 abutments.

Details: For this masterplan a 1600-foot-long bridge has been estimated. The bridge will have 14 pile units using two, 4-foot-wide piles and two abutments using the sheet pile, drive, fill, riprap, and remove method. These spans are composed of 100-foot precast concrete members atop pile caps and decked with a concrete surface and guardrails. Ten ice guards of would be attached to the upstream side of the pier piles under the most flow and the riverbank and abutments would all receive Class 1 riprap and spotted geotextile to reduced erosion. NBI #339 and NBI #340 will be demolished. The DOT's PEL (2023 draft) described the preferred alternative recommended a similar replacement bridge of 1,400 feet length with fourteen 100-foot spans founded upon 15 piers consisting of a two 4-foot diameter driven pipe pile that are 150-feet in length with a precast concrete pile cap. The superstructure consists of precast concrete box girders having dimensions of 3.5 feet wide by 5-feet deep. The scope also included the demolishing of NBI #339 and NBI #340. The 2019 PEL cost for this project was \$64m in 2014 dollars.

Item	Description	Units	Quantity	Price in 2023 dollars	Amount	Source of Costs
202.0001.0000	Removal of Structures and Obstructions from Old Bridge	LS	1.00	7,713,000	7,713,000	2019 draft CRH PEL
201.0009.0000	Clearing and Grubbing	ACRE	6.00	23,700	142,200	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
203.0019.0000	Unclassified Excavation	CY	2,000.00	22	44,000	2021 DOT Project 00462 Cordova Center Pedestrian Connector (TAP) Bid Tabs
505.0009.0000	Sheet pile Abutments Install and Removal	Each	35.00	11,800	413,000	Wendell Avenue Bridge Replacement
203.0005.000A	Sheet pile Fill, Select Type A	CY	1,000.00	216	216,000	Local quarry quote May 2023
505.MF02.2402	Abutment Piles with Crane and Install	Each	12.00	32,000	384,000	Scaled up 2' up to 4' cost (multiplied \$15k per pier by 2 and added \$2k for shipping per pier) from 2020 AUKE BAY FERRY TERMINAL MODIFICATIONS & IMPROVEMENTS
505.MF02.2403	Pier Piles with Crane and Install	Each	84.00	32,000	2,688,000	Scaled up 2' up to 4' cost (multiplied \$15k per pier by 2 and added \$2k for shipping per pier) from 2020 AUKE BAY FERRY TERMINAL MODIFICATIONS & IMPROVEMENTS
	Pile Caps and Headers	Each	32.00	10,000	320,000	
501.0007.0000	Precast Concrete Member 99'	Each	32.00	200,000	6,400,000	2022 QUARTZ CREEK BRIDGE REPLACEMENT (\$110k), adjusted for Cordova remoteness factor.
510.2000.0000	Decking	SF	54,000.00	200	10,800,000	2021 Seward Highway, MP 75-90 Ingram Creek to Girdwood Road and Bridge Rehabilitation, Phase II; Portage Curve Multimodal Connector. Ingram Creek project was for deck repair, we have increased the unit cost for deck replacement.
501.0004.0000	Deck Paving	CY	700.00	2,600	1,820,000	2021 Sterling Highway MP 45-60 Sunrise to Skilak Lake Rd CM/GC; Stages 3 & 4 Early Work Package
507.2000.0000	Guardrails	LF	3,600.00	325	1,170,000	2023 SEWARD HIGHWAY MP 0-8 PAVEMENT PRESERVATION
	H and H, 2 Dimensional Analysis	LS	1.00	120,000	120,000	
	Ice Guards	Each	10.00	80,000	800,000	
611.0001.0001	Riprap, Class I	CY	20,000.00	250	5,000,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	12,500.00	22	275,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
640.0004.0000	Worker Meals and Lodging, or Per Diem	LS	1.00	168,000	168,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
641.2000.0000	Pollution Control	LS	1.00	28,000	28,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
641.0007.0000	SWPPP Manager	LS	1.000	120,000	120,000	2019 Northern Region River Encroachment Repairs - Cordova Eyak Lake Road
615.0001.0000	Standard Sign	LS	1.00	5,000	5,000	2023 DOT Cordova Project - Orca Road Winter Storm Repairs Bid Tabs
640.0001.0000	Mobilization and Demobilization	LS	1.00	1,000,000	1,000,000	Estimated for this project.
642.0001.0000	Construction Surveying	LS	1.00	56,000	56,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
643.2016.0000	Road Closure	LS	1.00	11,000	11,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
644.0001.0000	Field Office	LS	1.00	112,000	112,000	2021 Copper River Highway MP 21.5 Culvert Replacement bid tabs
Subtotal					39,900,000	
	Estimating Contingency		30%		11,970,000	
Subtotal for replacement of NBI #339 and #340					52,000,000	



Document Path: H:\Projects\CRH\NFW\00414 CRH PEL\9 Drafting\CRH_coastline_years.mxd



NOTE: Imagery acquired June 29, 2019

0 500 1,000 2,000 Feet

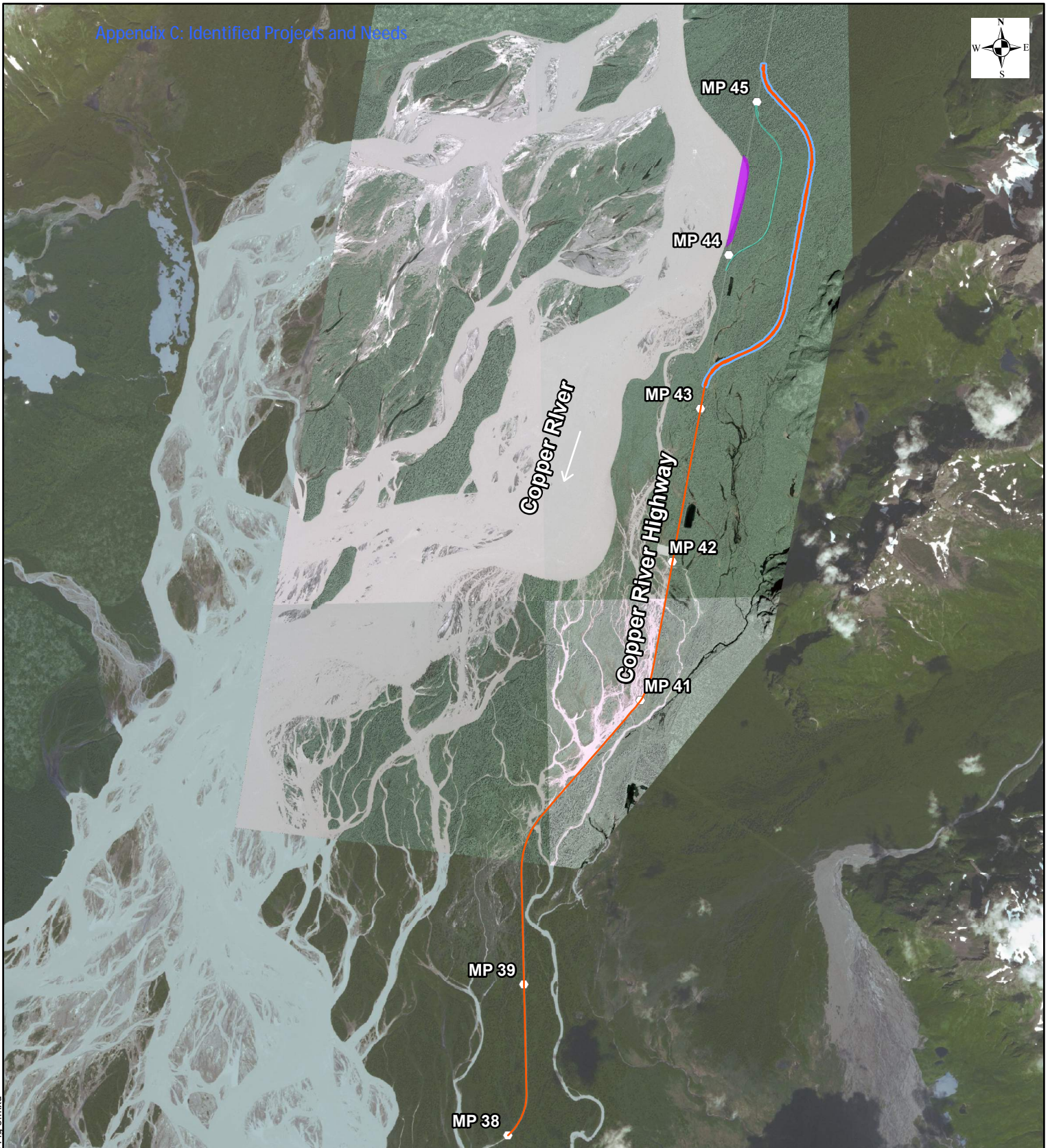
Legend	
—	July 1982 River Edge
—	July 21, 2011 River Edge
—	September 30, 2016 River Edge
—	September 30, 2018 River Edge
—	September 4, 2019 River Edge

STATE OF ALASKA
Department of Transportation and Public Facilities
2301 Peger Road Fairbanks, AK 99709

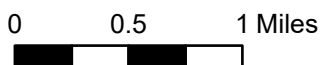
Chronology of Channel Migration Near MP 43-MP 45

DATE: December 2019

FIGURE 2



Document Path: C:\Users\lmaybrien\Desktop\CRH_Fig 3.mxd



Legend

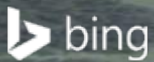
- Alt 1 - Reestablish ROW
- Alt 2 - Realign Road
- Alt 3 - Realign Road
- Alt 4 - Raise Grade of Road and Realign

STATE OF ALASKA
 Department of Transportation and Public Facilities
 2301 Peger Road Fairbanks, AK 99709

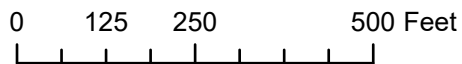
Preliminary Alternatives

DATE: November 2019

FIGURE 3



© 2019 Microsoft Corporation © 2019 DigitalGlobe © CNES (2019) Distribution Airbus DS



STATE OF ALASKA
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 2301 Peger Road Fairbanks, AK 99709

Legend

 Granite Outcrop

Potential Material Site

December 2019

Figure 7

Appendix C-5

Estimates and information for Project 5:

Replace Failing Culverts and culverts
inhibiting fish passage

Project Title **Project #5 Replace Culverts Inhibiting Fish Passage**

Project Description

This masterplan uses the CRWP’s culvert prioritization to identify culverts needing fish passage restoration. It is assumed that culverts with higher priority ratings (I, II, and III) are barriers to fish passage and will be replaced with fish friendly culverts. This project will have two phases matching the CRWP-designated priorities II and III (all priority I culverts have already been replaced). Replacement culverts are assumed to be box culverts or arch culverts that are sized for fish passage and installed with sufficient habitat considerations to allow for successful fish passage. The assumed design and costs will allow for the Copper River Watershed Project’s preferred designs. Bid tabs and estimates from three culvert replacement projects done in 2022 and 2023 along the Copper River Highway were used in the development of these estimates.

Phase	Description	Units	Quantity	Price	Amount	Culverts to be replaced
II	New 0' to 10'-wide fish passage culvert	EA	1	1,000,000	\$ 1,000,000	Cop36 (#20100502)
	New 10' to 20'-wide fish passage culvert	EA	2	1,200,000	\$ 2,400,000	Cop5 (20100471) and CopA (20203433)
	New 20' to 30'-wide fish passage culvert	EA	4	1,300,000	\$ 5,200,000	Cop0 (20101906) & Cop21 (20100487) & Cop30 (20100496) & Cop39(20100505)
	New >30'-wide fish passage culvert	EA	1	1,500,000	\$ 1,500,000	Cop3 (20100469)
Phase II Subtotal					\$ 10,100,000	
	Estimating Contingency		25%	\$	2,525,000	
	Design		10%	\$	1,010,000	
	Construction Engineering		20%	\$	2,020,000	
	Indirect Cost Allocation Plan		5%	\$	500,960	
Phase II Total					\$ 16,200,000	
III	New 10' to 20'-wide fish passage culvert	EA	2	1,200,000	\$ 2,400,000	CopB (20100551) & Cop6 (20100472)
Phase III Subtotal					\$ 2,400,000	
	Estimating Contingency		25%	\$	600,000	
	Design		10%	\$	240,000	
	Construction Engineering		20%	\$	480,000	
	Indirect Cost Allocation Plan		5%	\$	119,040	
Phase III Total					\$ 3,900,000	
Estimated Total Cost (Project #5 Replace Culverts Inhibiting Fish Passage)					\$ 21,000,000	

Engineers Estimate of Construction Costs, 100% Submittal						
Item No.	Work Description	Pay Unit	Unit	Unit price	Quantity	Amount
201.0009.0000	CLEARING AND GRUBBING	LUMP SUM	LUMP SUM	\$13,000.00	ALL REQUIRED	\$13,000.00
202.0004.0000	REMOVAL OF CULVERT PIPE	LUMP SUM	LINEAR FOOT	\$70.00	78	\$5,460.00
203.0019.0000	UNCLASSIFIED EXCAVATION	LUMP SUM	CUBIC YARD	\$65.00	1760	\$114,400.00
203.0020.000A	BORROW, SELECTED MATERIAL, TYPE A	LUMP SUM	CUBIC YARD	\$40.00	847	\$33,880.00
203.0020.000F	SUBBASE, GRADING F	LUMP SUM	CUBIC YARD	\$156.00	440	\$68,640.00
206.0001.0000	FILTER BLANKET	LUMP SUM	CUBIC YARD	\$100.00	11	\$1,100.00
301.0004.0000	AGGREGATE SURFACE COURSE, GRADING E-1	LUMP SUM	CUBIC YARD	\$101.00	192	\$19,392.00
602.0004.0000	STRUCTURAL PLATE ALUMINUM BOX CULVERT, 16'-8" SPAN, 7'-6" RISE	LUMP SUM	LINEAR FOOT	\$3,300.00	90	\$297,000.00
611.0003.0001	RIPRAP, CLASS I	LUMP SUM	CUBIC YARD	\$150.00	253	\$37,950.00
613.0002.0000	CULVERT MARKER POST	LUMP SUM	EACH	\$308.00	2	\$616.00
618.0005.0000	SEEDING	LUMP SUM	POUND	\$484.00	21	\$10,164.00
620.0003.0000	TOPSOIL (4")	LUMP SUM	SQUARE YARD	\$18.00	1130	\$20,340.00
630.0003.0002	GEOTEXTILE, REINFORCEMENT TYPE 2	LUMP SUM	SQUARE YARD	\$10.00	473	\$4,730.00
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	LUMP SUM	\$39,000.00	ALL REQUIRED	\$39,000.00
641.0003.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	LUMP SUM	\$32,000.00	ALL REQUIRED	\$32,000.00
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	LUMP SUM	\$52,000.00	ALL REQUIRED	\$52,000.00
642.0014.0000	AS-BUILT PLANS	LUMP SUM	LUMP SUM	\$1,650.00	ALL REQUIRED	\$1,650.00
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	LUMP SUM	\$96,000.00	ALL REQUIRED	\$96,000.00
644.0015.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	LUMP SUM	LUMP SUM	\$1,000.00	ALL REQUIRED	\$1,000.00
672.0001.0000	STREAM DIVERSION & DEWATERING	LUMP SUM	LUMP SUM	\$75,000.00	ALL REQUIRED	\$75,000.00
690.2001.0000	WATERWAY BED FILL	LUMP SUM	CUBIC YARD	\$155.00	160	\$24,800.00
690.2003.0000	WATERWAY BANK REVEGETATION AND PROTECTION	LUMP SUM	LUMP SUM	\$52,000.00	ALL REQUIRED	\$52,000.00
TOTAL						\$1,000,200.00

Engineers Estimate of Construction Costs, 100% Submittal						
Item No.	Work Description	Pay Unit	Unit	Unit price	Quantity	Amount
201.0009.0000	CLEARING AND GRUBBING	LUMP SUM	LUMP SUM	\$15,000.00	ALL REQUIRED	\$15,000.00
202.0004.0000	REMOVAL OF CULVERT PIPE	LUMP SUM	LINEAR FOOT	\$70.00	77	\$5,390.00
203.0019.0000	UNCLASSIFIED EXCAVATION	LUMP SUM	CUBIC YARD	\$65.00	1760	\$114,400.00
203.0020.000A	BORROW, SELECTED MATERIAL, TYPE A	LUMP SUM	CUBIC YARD	\$40.00	1650	\$66,000.00
203.0020.000F	SUBBASE, GRADING F	LUMP SUM	CUBIC YARD	\$156.00	440	\$68,640.00
206.0001.0000	FILTER BLANKET	LUMP SUM	CUBIC YARD	\$100.00	13	\$1,320.00
301.0004.0000	AGGREGATE SURFACE COURSE, GRADING E-1	LUMP SUM	CUBIC YARD	\$101.00	144	\$14,544.00
602.0003.0000	STRUCTURAL PLATE ALUMINUM ARCH CULVERT, 18'-0" SPAN, 11"-4" RISE	LUMP SUM	LINEAR FOOT	\$2,530.00	88	\$222,640.00
611.0003.0001	RIPRAP, CLASS I	LUMP SUM	CUBIC YARD	\$150.00	231	\$34,650.00
611.0003.0002	RIPRAP, CLASS II	LUMP SUM	CUBIC YARD	\$290.00	220	\$63,800.00
613.0002.0000	CULVERT MARKER POST	LUMP SUM	EACH	\$308.00	2	\$616.00
618.0005.0000	SEEDING	LUMP SUM	POUND	\$484.00	25	\$12,100.00
620.0003.0000	TOPSOIL (4")	LUMP SUM	SQUARE YARD	\$18.00	1340	\$24,120.00
630.0003.0002	GEOTEXTILE, REINFORCEMENT TYPE 2	LUMP SUM	SQUARE YARD	\$10.00	484	\$4,840.00
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	LUMP SUM	\$43,000.00	ALL REQUIRED	\$43,000.00
641.0003.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	LUMP SUM	\$36,000.00	ALL REQUIRED	\$36,000.00
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	LUMP SUM	\$57,000.00	ALL REQUIRED	\$57,000.00
642.0014.0000	AS-BUILT PLANS	LUMP SUM	LUMP SUM	\$1,650.00	ALL REQUIRED	\$1,650.00
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	LUMP SUM	\$107,000.00	ALL REQUIRED	\$107,000.00
644.0015.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	LUMP SUM	LUMP SUM	\$1,000.00	ALL REQUIRED	\$1,000.00
672.0001.0000	STREAM DIVERSION & DEWATERING	LUMP SUM	LUMP SUM	\$165,000.00	ALL REQUIRED	\$165,000.00
690.2001.0000	WATERWAY BED FILL	LUMP SUM	CUBIC YARD	\$155.00	477	\$73,935.00
690.2003.0000	WATERWAY BANK REVEGETATION AND PROTECTION	LUMP SUM	LUMP SUM	\$58,000.00	ALL REQUIRED	\$58,000.00
TOTAL						\$1,190,700.00

Bid Tabulation

Proposal Description: Copper River Highway MP 21.5 Culvert Replacement

Proposal ID: NFHWY00494

Borough(s): Statewide

Opened At: Fairbanks AK

Federal Project Number(s): 0851071

Region(s): Northern Region

Letting Date: November 23, 2021 02:00:00 PM

State Project Number(s): NFHWY00494

Certified Date: November 23, 2021

Certified By: Barbara L. Tanner, P.E. *Barbara Tanner*

Line No / Item ID Item Description	Quantity Units	(0) Engineer's Estimate		(1) WILSON CONSTRUCTION INC		(2) D & L CONSTRUCTION CO INC		(3) GRANITE CONSTRUCTION COMPANY	
		Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount
SECTION: 1	Basic Bid								
0010 201.0009.0000 Clearing and Grubbing	All Req'd LS	5,000.00	5,000.00	6,950.00	6,950.00	10,000.00	10,000.00	25,000.00	25,000.00
0020 202.0001.0000 Removal of Structures and Obstructions	All Req'd LS	10,000.00	10,000.00	9,810.00	9,810.00	40,000.00	40,000.00	5,000.00	5,000.00
0030 203.0019.0000 Unclassified Excavation	All Req'd LS	10,000.00	10,000.00	88,900.00	88,900.00	36,300.00	36,300.00	50,000.00	50,000.00
0040 204.2003.0000 Embedment Material	All Req'd LS	22,500.00	22,500.00	113,200.00	113,200.00	18,000.00	18,000.00	25,000.00	25,000.00
0050 205.0005.0000 Controlled Low-Strength Material	35.00 CY	275.00	9,625.00	656.00	22,960.00	2,000.00	70,000.00	1,000.00	35,000.00
0060 301.0004.00E1 Aggregate Surface Course, Grading E-1	90.00 CY	60.00	5,400.00	124.00	11,160.00	100.00	9,000.00	200.00	18,000.00
0070 304.0002.000F Subbase, Grading F	115.00 CY	125.00	14,375.00	237.00	27,255.00	60.00	6,900.00	100.00	11,500.00
0080 602.2012.1000 Aluminum Structural Plate Pipe, 10'-0" Diameter, 0.125"	81.00 LF	1,500.00	121,500.00	1,614.00	130,734.00	5,000.00	405,000.00	5,000.00	405,000.00

11/23/2021

Bid Tabulation

Proposal Description: Copper River Highway MP 21.5 Culvert Replacement

Proposal ID: NFHWY00494

Borough(s): Statewide

Opened At: Fairbanks AK

Federal Project Number(s): 0851071

Region(s): Northern Region

Letting Date: November 23, 2021 02:00:00 PM

State Project Number(s): NFHWY00494

Certified Date: November 23, 2021

Certified By: Barbara L. Tanner, P.E.

Line No / Item ID Item Description	Quantity Units	(0) Engineer's Estimate		(1) WILSON CONSTRUCTION INC		(2) D & L CONSTRUCTION CO INC		(3) GRANITE CONSTRUCTION COMPANY	
		Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount
SECTION: 1	Basic Bid								
0090 602.2020.0000 Special Dewatering	50,000.00 CS	1.00	50,000.00	1.00	50,000.00	1.00	50,000.00	1.00	50,000.00
0100 611.0001.0001 Riprap, Class I	240.00 CY	120.00	28,800.00	175.00	42,000.00	200.00	48,000.00	200.00	48,000.00
0110 613.0002.0000 Culvert Marker Post	2.00 EACH	500.00	1,000.00	791.00	1,582.00	500.00	1,000.00	1,000.00	2,000.00
0120 628.2000.0000 Fish Passage Substrate	All Req'd LS	25,000.00	25,000.00	39,800.00	39,800.00	19,000.00	19,000.00	50,000.00	50,000.00
0130 630.0003.0002 Geotextile, Reinforcement - Type 2	340.00 SY	10.00	3,400.00	18.40	6,256.00	6.00	2,040.00	10.00	3,400.00
0140 631.0002.0001 Geotextile, Erosion Control, Class 1	450.00 SY	10.00	4,500.00	11.80	5,310.00	8.00	3,600.00	5.00	2,250.00
0150 640.0001.0000 Mobilization and Demobilization	All Req'd LS	40,000.00	40,000.00	50,635.00	50,635.00	100,000.00	100,000.00	600,000.00	600,000.00
0160 640.0004.0000 Worker Meals and Lodging, or Per Diem	All Req'd LS	25,000.00	25,000.00	6,750.00	6,750.00	60,000.00	60,000.00	75,000.00	75,000.00

Bid Tabulation

Proposal Description: Copper River Highway MP 21.5 Culvert Replacement

Proposal ID: NFHWY00494

Borough(s): Statewide

Opened At: Fairbanks AK

Federal Project Number(s): 0851071

Region(s): Northern Region

Letting Date: November 23, 2021 02:00:00 PM

State Project Number(s): NFHWY00494

Certified Date: November 23, 2021

Certified By: Barbara L. Tanner, P.E.

Line No / Item ID Item Description	Quantity Units	(0) Engineer's Estimate		(1) WILSON CONSTRUCTION INC		(2) D & L CONSTRUCTION CO INC		(3) GRANITE CONSTRUCTION COMPANY		
		Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount	
SECTION: 1 Basic Bid										
0170 641.2000.0000 Pollution Control	All Req'd LS	5,000.00	5,000.00	2,600.00	2,600.00	65,000.00	65,000.00	25,000.00	25,000.00	
0180 642.0001.0000 Construction Surveying	All Req'd LS	25,000.00	25,000.00	17,550.00	17,550.00	30,000.00	30,000.00	15,000.00	15,000.00	
0190 643.0002.0000 Traffic Maintenance	All Req'd LS	25,000.00	25,000.00	45,750.00	45,750.00	25,000.00	25,000.00	10,000.00	10,000.00	
0200 643.2016.0000 Road Closure	All Req'd LS	7,000.00	7,000.00	5,350.00	5,350.00	10,000.00	10,000.00	10,000.00	10,000.00	
0210 644.0001.0000 Field Office	All Req'd LS	25,000.00	25,000.00	7,170.00	7,170.00	40,000.00	40,000.00	10,000.00	10,000.00	
0220 644.0006.0000 Vehicle	All Req'd LS	50,000.00	50,000.00	11,520.00	11,520.00	40,000.00	40,000.00	10,000.00	10,000.00	
Basic Bid Section Totals:			\$513,100.00		\$703,242.00		\$1,088,840.00		\$1,485,150.00	

Bid Tabulation

Proposal Description: Copper River Highway MP 21.5 Culvert Replacement

Proposal ID: NFHWY00494

Borough(s): Statewide

Opened At: Fairbanks AK

Federal Project Number(s): 0851071

Region(s): Northern Region

Letting Date: November 23, 2021 02:00:00 PM

State Project Number(s): NFHWY00494

Certified Date: November 23, 2021

Certified By: Barbara L. Tanner, P.E.

Bid Totals:	\$513,100.00	\$703,242.00	\$1,088,840.00	\$1,485,150.00
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Bidder Summary

Proposal Description: Copper River Highway MP 21.5 Culvert Replacement

Proposal ID: NFHWY00494

Borough(s): Statewide

Opened At: Fairbanks AK

Federal Project Number(s): 0851071

Region(s): Northern Region

Letting Date: November 23, 2021 02:00:00 PM

State Project Number(s): NFHWY00494

Certified Date: November 23, 2021

Certified By: Barbara L. Tanner, P.E.

Vendor ID/Name	Bid Total
-EST- Engineer's Estimate	\$513,100.00
WIC84386 WILSON CONSTRUCTION INC	\$703,242.00
DLC87034 D & L CONSTRUCTION CO INC	\$1,088,840.00
WIC84244 GRANITE CONSTRUCTION COMPANY	\$1,485,150.00