Appendix F:

Preliminary Cost Estimates

Project	MP	Quantity	Unit	Total	
Segment 1: US 89 to Pinkerton Road					
Reconstruct					
Typical 1 (24 feet)	0 - 3.8	3.8	mi	\$2,300,000	
Typical 2 (28 feet)	0 - 3.8	3.8	mi	\$3,500,000	
Typical 3 (30 feet)	0 - 3.8	3.8		\$3,900,000	
Segm	ent 2: Pinkerton Ro	ad to Porcupin	e Road		
Reconstruct					
Typical 1 (24 feet) ¹	3.8 - 8.4	4.6	mi	\$3,300,000	
Typical 2 (28 feet) 1	3.8 - 8.4	4.6	mi	\$5,100,000	
Typical 3 (30 feet) ¹	3.8 - 8.4	4.6	mi	\$5,600,000	
Se	gment 3: Porcupine	Road to Hill R	oad		
Reconstruct					
Typical 1 (24 feet)	8.4 - 14.2	5.8	mi	\$3,500,000	
Typical 2 (28 feet)	8.4 - 14.2	5.8	mi	\$5,300,000	
Typical 3 (30 feet)	8.4 - 14.2	5.8	mi	\$5,900,000	
Segment 4: Hill Road to Smith Creek Road					
Preservation and Maintenance					
Chip Seal	14.2 - 15.7	1.5	mi	\$70,000	
Resurfacing	14.2 - 15.7	1.5		\$640,000	
Segment 5: Smith Creek Road to End Project					
Preservation and Maintenance					
Resurfacing	15.7 - 19.5	3.8	mi	\$790,000	
Combined Reconstruction					
Reconstruct					
Typical 1 (24 feet) 1	0.0 - 14.2	14.2		\$9,100,000	
Typical 2 (28 feet) ¹	0.0 - 14.2	14.2	mi	\$13,900,000	
Typical 3 (30 feet) ¹	0.0 - 14.2	14.2	mi	\$15,400,000	

¹ Includes a 20% inflation to account for installment of guardrail, bank stabilization, and other geotechnical considerations on Segment 2.

Unit Costs:			
Reconstruction:			
Typical 1 (24 feet)	\$588,315	/mi	
Typical 2 (28 feet)	\$906,075	/mi	
Typical 3 (30 feet)	\$1,005,075	/mi	
Resurfacing:			
Pavement (Chip Seal)	\$43,200	/mi	
Pavement (Resurfacing)	\$421,200	/mi	
Gravel	\$205,296	/mi	
Geotech/Stabilization:	20%		

24 -Foot Typical Section Cost

Road Length: 5280 ft Average Width: 24.5 ft

		Rounded U	nit Price (Cost
Full Depth Recycling	14373.33 sqyd/mile	14400	\$3.00	\$43,200.00
2" Agg. Base	1695.076 ton/mile	1700	\$25.00	\$42,500.00
3" Pavement	2352.142 ton/mile	2400	\$90.00	\$216,000.00
Incidentals			30%	\$90,510.00

Subtotal cost per mile: \$392,210.00

 Construction Engineering
 15%
 \$58,831.50

 Preliminary Engineering
 15%
 \$58,831.50

 Contingency
 20%
 \$78,442.00

Total cost per mile: \$588,315.00

28 -Foot Typical Section Cost

Road Length: 5280 ft Average Width: 24.5 ft

		Rounded	Unit Price	Cost
Full Depth Recycling	14373.33 sqyd/mile	14400	\$3.00	\$43,200.00
3" Pavement	2731.52 ton/mile	2800	\$90.00	\$252,000.00
2" Agg. Base	1926.222 ton/mile	2000	\$25.00	\$50,000.00
6" Agg. Base	1386.88 ton/mile	1400	\$25.00	\$35,000.00
Unclassified borrow	1486.222 cuyd/mile	1500	\$15.00	\$22,500.00
Incidentals			50%	\$201,350.00
		Subtotal cost per mile:		\$604,050.00
Construction Engineering			15%	\$90,607.50
Preliminary Engineering			15%	\$90,607.50
Contingency			20%	\$120,810.00

Total cost per mile:

\$906,075.00

30 -Foot Typical Section Cost

Road Length: 5280 ft Average Width: 24.5 ft

		Rounded	Unit Price	Cost
Full Depth Recycling	14373.33 sqyd/mile	14400	\$3.00	\$43,200.00
3" Pavement	2921.209 ton/mile	3000	\$90.00	\$270,000.00
2" Agg. Base	2080.32 ton/mile	2100	\$25.00	\$52,500.00
6" Agg. Base	1772.124 ton/mile	1800	\$25.00	\$45,000.00
Unclassified borrow	2346.667 cuyd/mile	2400	\$15.00	\$36,000.00
Incidentals			50%	\$223,350.00
		Subtotal cost per mile:		\$670,050.00
Construction Engineering			15%	\$100,507.50
Preliminary Engineering			15%	\$100,507.50

Total cost per mile: \$1,005,075.00

20%

\$134,010.00

Pavement Maintenance Cost

Contingency

Road Length: 5280 ft Average Width: 24.5 ft

Average Width:	24.5 ft			
		Rounded	Unit Price	Cost
Chip Seal, Type 1C	14373.33 sqyd/mi	14400	\$1.75	\$25,200.00
Emulsified Asphalt	14.37333 ton/mi	14.4	\$650.00	\$9,360.00
Incidentals			25%	\$8,640.00
		Total cost per mile	(chip seal):	<u>\$43,200.00</u>
3" Pavement	2352.142 ton/mile	2400	\$90.00	\$216,000.00
Incidentals			30%	\$64,800.00
		Subtotal co	ost per mile:	\$280,800.00
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Construction Engineering			15%	. ,
Preliminary Engineering			15%	\$42,120.00
Contingency			20%	\$56,160.00

Total cost per mile (resurfacing): \$421,200.00

Gravel Maintenance Cost

Road Length: 5280 ft Average Width: 24.5 ft

Rounded Unit Price Cost

6" Agg Surfacing 4931.129 ton/mile 5000 \$20.00 \$100,000.00 Roadway Reconditioning 5280 ft/mile 5280 \$1.00 \$5,280.00 Incidentals \$31,584.00 30%

Subtotal cost per mile:

\$136,864.00

Construction Engineering 15% \$20,529.60 **Preliminary Engineering** 15% \$20,529.60 Contingency 20% \$27,372.80

> Total cost per mile (resurfacing): **\$205,296.00**