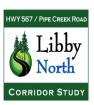


Appendix F Cost Estimates

Final 12/2007

Libby North Corridor Project HWY 567 Pipe Creek Road MDT Project # HPP-TI-STP-0068(42)26 Build options cost estimate DRAFT 09/24/07



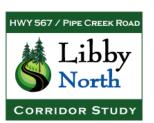
Summary of Costs	
	Total - 2006 Dollars
Option 1 - Full Reconstruction	\$ 24,727,032
Option 2- Rehab with widening to 24'	\$ 10,165,987
Option 3 - Rehab with no widening	\$ 5,698,042
Option 4 - Spot Improvments	\$ 187,501
Option 5 - Snow Storage Widening	\$ 450,528
Option 6 - Recommended in Corridor Study	\$ 15,860,000

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Summary of Costs							
	Ro	padway - 2006 Dollars	Right of Way - 2006 Dollars	7	Fotal - 2006 Dollars	Total - 2012 Dollars	Total Cost including 12% Indirect Cost Recovery - 2012 Dollars
Option 1 - Full Reconstruction	\$	22,711,542	\$ 2,015,490	\$	24,727,032		
Option 2- Rehab with widening to 24'	\$	9,832,487	\$ 333,500	\$	10,165,987		
Option 3 - Rehab with no widening	\$	5,604,001	\$ 94,041	\$	5,698,042		
Option 4 - Spot Improvments	\$	187,501	\$ -	\$	187,501		
Option 5 - Snow Storage Widening	\$	444,778	\$ 5,750	\$	450,528		
Option 6 - Corridor Plan	\$	15,640,000	\$ 218,500	\$	15,860,000	18,940,000	21,210,000
Corridor Plan Re-align RP 8	\$	890,000	\$ 6,000	\$	900,000	1,070,000	1,200,000
Corridor Plan Re-align RP 11	\$	1,110,000	\$ 6,000	\$	1,120,000	1,340,000	1,500,000
Corridor Plan Segment 1 - RP 7 to RP 12	\$	4,760,000	\$ 52,000	\$	4,810,000	5,740,000	6,430,000
Corridor Plan Segment 2 - RP 12 to RP 17	\$	4,650,000	\$ 161,000	\$	4,810,000	5,740,000	6,430,000
Corridor Plan Segment 3 - RP 17 to RP 20.1	\$	6,370,000	\$ 6,000	\$	6,380,000	7,620,000	8,530,000

Developed: DRN Checked: JC



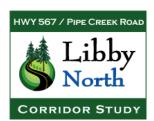
Alternative Name: Pipe Creek Road - Option 1 Full Reconstruct

RP 6.1 - RP 20.1

		Item				I	
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and					
	'	Grubbing	149	Acre	\$3,500.00	\$521,500	
Demolition and Removal	2	Demolition of					
2 00		Buildings	1	Each	\$5,000.00	\$5,000	
	3	Demolition of					
		Bridges		Each	\$30,000.00	' '	
	4		Demo	olition and I	Removal Contingency	\$83,475	15%
	_	Unclassified					
Earthwork and Grading	5	Excavation	600,000	v43	\$10.00	¢e 000 000	From Model
Earthwork and Grading		Embankement in		yus	\$10.00	. , ,	Pay for difference between cut and fill only (using
	6	place	239,000	v43	\$10.00		60% of cut)
	7	piace			Grading Contingency		·
	,	Pipe Culverts,	I	I work and	Clading Contingency	ψ900,000	1376
		Catch Basins,					
General Drainage	8	etc.	1	Lump	\$456.780.00	\$456.780	Assumed replacing all crossing structures
3	9				Orainage Contingency	¥,	
Pavement (Mainline,	10	Pavement and			<u> </u>	Ç 10,010	
Ramps, and CDs)		Base	73,920	ft	\$43.24	\$3,196,301	Assume 3.6" superpave & 8" crushed aggregate
	11				Paving Contingency	\$479,445	15%
		Bridge (2nd					
	12	Level Concrete)					
Structures			1,312	ft ²	\$110.00	\$144,320	
	13			2			
		Retaining Walls	38,610	ft ²	\$70.00	+ , - ,	
	14		•		Structure Contingency	\$427,053	15%
General Utility		Adjust / Relocate					
Adjustments/Relocations	15	Utility		Lump	\$300,000.00		Assumed to be 5% of earthwork and grading
	16				elocation Contingency		
	17	Signing		Lump	\$40,000.00		
	18	Striping	73,920		\$1.83		assume 4-4" stripes
	19		•		Striping Contingency		
	20	Guardrail	16,600		\$20.00		
	21	Landscaping		Acre	\$4,050.00		area between edge of pavement and cut/fill line
	22	Fencing	138,619		\$2.60	7000,.00	
	23			Gene	ral Other Contingency	\$113,386	10%

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Developed: DRN Checked: JC



Alternative Name: Pipe Creek Road - Option 1 Full Reconstruct

RP 6.1 - RP 20.1

		Item					
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	29				Subtotal	\$16,786,062	
	30			10%	Mobilization	\$1,678,606	
	31			2.5%	Traffic Control	\$419,652	
	32			Traffic (Control Contingency	\$41,965	10%
	33				Subtotal	\$18,926,285	
	34			10%	Design Egr.	\$1,892,628	
	35			10%	Const. Egr.	\$1,892,628	
SUBTOTAL	36				Subtotal	\$22,711,542	
	37	Administration	50	Parcel	\$5,000	\$250,000	
	38	USFS	180	Acre	\$0	\$0	
Right-of-Way	-30	Relocation (out buildings)	1	Each	\$20,000	\$20,000	
	40	ROW From Private Entities	15	Acre	\$100,000	\$1,482,600	Acquisition
	41				R/W Contingency	\$262,890	15%
	42		Total Road	way Eleme	ents2006 USD	\$24,727,032	
			•				

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Pipe Creek Road - Option 2-24' Widening Rehab RP 6.1 - RP 20.1 Alternative Name:

	ı	Item	ı	1			1
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and Grubbing	78	Acre	\$3,500.00	\$273,000	
Demolition and Removal	2	Demolition of					
		Buildings Demolition of	0	Each	\$5,000.00	\$0	
	3	Bridges	1	Each	\$30,000.00	\$30,000	
	4		Dem	olition and Re	emoval Contingency	\$45,450	15%
Earthwork and Grading	5	Unclassified Excavation	130,796	yd3	\$10.00	\$1,307,960	From Model
	6	Embankement in place	115,449	vd3	\$10.00	\$369 714	Pay for difference between cut and fill only (using 60% of cut)
	7	piaco			rading Contingency	\$251,651	
0 10 :		Pipe Culverts, Catch Basins,					
General Drainage	8	etc.	1	Lump	\$456,780.00 ainage Contingency		Assumed replacing all crossing structures
Pavement (Mainline, Ramps,	9	Pavement and	<u> </u>	Dr.	amage Contingency	\$45,678	10%
and CDs)	10	Base	73,920	ft	\$29.79	\$2 202 077	Assume 3.6" superpave & 8" crushed aggregate
and ODO)	11	2400	70,020		Paving Contingency	\$330,312	
		Bridge (2nd				\$000,012	1070
Structures	12	Level Concrete)	1	Each	\$30,000.00	\$30,000	cost of fixes identified in UDFS inspection report
	13	Retaining Walls	12,955	ft ²	\$70.00	\$906,850	
	14			St	ructure Contingency	\$140,528	15%
General Utility Adjustments/Relocations	15	Adjust / Relocate Utility		Lump	\$83,883.70	\$83,884	Assumed to be 5% of earthwork and grading
	16	Ger	eral Utility Adju	stment / Relo	cation Contingency	\$12,583	15%
	17	Signing		Lump	\$40,000.00		
	18	Striping	73,920		\$0.92		Assume 1-double yellow center line
	19				Striping Contingency	\$16,201	15%
	20	Guardrail	14,046		\$20.00		
	21	Landscaping		Acre	\$4,050.00		area between edge of pavement and cut/fill line
	22	Fencing	0	ft	\$2.60 Other Contingency	\$0	400/
	23 29			Genera	Subtotal	\$59,682	10%
	30			10%		\$7,267,175 \$726,717	
	31			2.5%			
	32				Control Contingency	\$18,168	10%
	33			Trainio (Subtotal	\$8,193,739	1076
	34			10%		\$819,374	
	35			10%	3 3	\$819,374	
SUBTOTAL	36				Subtotal		
	37	Administration	25	Parcel		\$125,000	
	38	USFS	71	Acre	\$0	\$0	
Right-of-Way	39	Relocation (out buildings)	0	Each	\$20,000	\$0	
	40	ROW From Private Entities	7	Acre			Easement
	41				R/W Contingency	\$43,500	15%
	42		Total Road	way Elem	ents2006 USD	\$10,165,987	
		_					
						•	



Alternative Name: Pipe Creek Road - Option 3 Rehab with no widening
Assume 3" pavement overlay, shallowing out fill slopes not by pipe creek, install guardrail as necessary, no widening

RP 6.1 - RP 20.1

		Item	1	1			
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and Grubbing	15	Acre	\$3,500.00	\$51,891	
Demolition and Removal	2	Demolition of					
		Buildings Demolition of	0	Each	\$5,000.00	\$0	
	3	Bridges	0	Each	\$30,000.00	\$0	
	4		Dem	olition and Re	emoval Contingency	\$7,784	15%
Earthwork and Grading	5	Unclassified Excavation		yd3	\$10.00	\$0	From Model
	6	Embankement in Place	52,657	vd3	\$10.00	\$526,565	
	7				rading Contingency	\$78,985	15%
General Drainage	8	Pipe Culverts, Catch Basins, etc.		Lump	\$456,780.00	*0	
General Drainage	9	eic.	0		ainage Contingency	\$0	10%
Pavement (Mainline, Ramps,	10	Pavement and					
and CDs)	11	Base	73,920		\$26.30 Paving Contingency		Assumes 3.6" superpave overlay
	11	Bridge (2nd	1		Paving Contingency	\$291,614	15%
Structures	12	Level Concrete)	0	ft²	\$110.00	\$0	
	13	Retaining Walls	8,100	ft ²	\$70.00	\$567,000	
	14		•		ructure Contingency	\$85,050	15%
General Utility Adjustments/Relocations	15	Adjust / Relocate Utility	0	Lump	\$0.00	\$0	Assumed to be 5% of earthwork and grading
	16				ocation Contingency		15%
	17	Signing	1	Lump	\$50,000.00	\$50,000	
	18	Striping	73,920	ft	\$0.92	\$67,637	Assume 1-double yellow center line
	19			Signing/S	Striping Contingency	\$17,646	15%
	20	Guardrail	16,574	ft	\$20.00	\$331,477	
	21	Landscaping	14	Acre	\$4,050.00	\$56,042	area between edge of pavement and cut/fill line
	22	Fencing	0	ft	\$2.60	\$0	
	23			Genera	Other Contingency	\$38,752	10%
	29				Subtotal	\$4,114,538	
	30			10%		\$411,454	
	31			3.5%		\$144,009	
	32			I ratfic (Control Contingency	\$14,401	10%
	33				Subtotal		
	34 35			10%		\$467,000	
SUBTOTAL	35 36			10%	Const. Egr. Subtotal	\$467,000 \$5,604,001	
SUBTUTAL	36	Administration	4	Parcel		\$5,604,001 \$20,000	
		Autilitionanon	4	Parce	φο,000	\$∠0,000	
Right-of-Way	40	USFS-easement	12	Acre	\$0	\$0	
	42	easement From Private Entities	2	Acre			Easement
	45				R/W Contingency	\$12,266	15%
	46		Total Road	way Elem	ents2006 USD	\$5,698,042	
1			·	·			



Pipe Creek Road - Option 4 Spot Improvements RP 6.1 - RP 20.1 Alternative Name:

		Item					
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and					
		Grubbing	0	Acre	\$3,500.00	\$0	
Demolition and Removal	2	Demolition of					
Demondon and Removal		Buildings	0	Each	\$5,000.00	\$0	
	3	Demolition of				4.	
		Bridges		Each	\$30,000.00		
	4		Demo	olition and F	Removal Contingency	\$0	15%
	5	Unclassified					
Earthwork and Grading	5	Excavation	١	yd3	\$10.00	90	From Model
Earthwork and Grading		Embankement in		yus	\$10.00	Φ0	Pay for difference between cut and fill only (using
	6	Place		yd3	\$10.00	\$0	60% of cut)
	7	1 lacc			Grading Contingency		15%
	,	Pipe Culverts,		l l	ordanig Contingono)	ψο	1070
		Catch Basins,					
General Drainage	8	etc.	0	Lump	\$452,780.00	\$0	Assumed replacing all crossing structures
	9			C	rainage Contingency		10%
Pavement (Mainline, Ramps,	10	Pavement and	l		1	**	
and CDs)		Base	0	ft	\$47.51	\$0	
	11			•	Paving Contingency	\$0	15%
		Bridge (2nd					
	12	Level Concrete)					
Structures			0	ft ²	\$110.00	\$0	
	13			_			
		Retaining Walls	0	ft ²	\$70.00		
	14			S	tructure Contingency	\$0	15%
General Utility		Adjust /					
Adjustments/Relocations	15	Relocate Utility		Lump	\$0.00		Assumed to be 5% of earthwork and grading
	16				location Contingency		15%
	17	Signing		Lump	\$50,000.00		
	18	Striping	73,920		\$0.92	4 - 7 - 1	Assume 1-double yellow center line
	19				Striping Contingency	\$17,646	
	20	Guardrail		ft	\$20.00		
	21	Landscaping	0	Acre	\$4,050.00	\$0	
	22	Fencing	0	ft	\$2.60		
	23			Gener	al Other Contingency		10%
	29				Subtotal	\$135,282	
	30			109		\$13,528	
	31			59		\$6,764	
	32			Traffic	Control Contingency	\$676	10%
	33				Subtotal	\$156,251	
	34			109	% Design Egr.	\$15,625	
	35			109	% Const. Egr.	\$15,625	
SUBTOTAL	36				Subtotal	\$187,501	
	37	Administration	0	Parce	el \$5,000	\$0	
Right-of-Way	40	USFS	0	Acre			
Rigiit-oi-vvay	42	ROW From					
	42	Private Entities	0	Acre			Easement
	45				R/W Contingency	\$0	15%
	46		Total Road	way Elen	nents2006 USD	\$187,501	
						, , ,,,,,,,,	
	l	1				1	

Pipe Creek Road - Option 5 Snow Storage Widening RP 6.1 - RP 20.1 Alternative Name:



Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and Grubbing	7	Acre	\$3,500.00	\$23,100	
Demolition and Removal	2	Demolition of Buildings	0	Each	\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0	
	4		Der	nolition and R	emoval Contingency	\$3,465	15%
	5	Unclassified Excavation	4100	yd3	\$10.00	\$41,000	RP 10.9 - 11.1 - Left
	5	Unclassified Excavation	900	yd3	\$10.00	\$9,000	RP 14.32 - RP 14.35 - Right
	5	Unclassified Excavation	900	yd3	\$10.00	\$9,000	RP 14.6 - 14.7 - Right
	5	Unclassified Excavation	400	yd3	\$10.00	\$4,000	RP 15.1 - RP 15.2 - Right
	5	Unclassified Excavation	650	yd3	\$10.00	\$6,500	RP 15.3 - RP 15.4 - Right
	5	Unclassified Excavation	1300	yd3	\$10.00	\$13,000	RP 15.41 - RP 15.43 - Right
	5	Unclassified Excavation	1725	yd3	\$10.00	\$17,250	RP 15.46 - RP 15.54 - Right
	5	Unclassified Excavation	2900	yd3	\$10.00	\$29,000	RP 15.9 - RP 16.1 - Right
Earthwork and Grading	5	Unclassified Excavation	200	yd3	\$10.00	\$2,000	RP 16.15 - RP 16.17 - Right
Earthwork and Grading	5	Unclassified Excavation	500	yd3	\$10.00	\$5,000	RP 16.7 - RP 16.8 - Left & Right
	5	Unclassified Excavation	5200	yd3	\$10.00	\$52,000	RP 17.9 - 18.2 - Right
	5	Unclassified Excavation	620	yd3	\$10.00	\$6,200	RP 18.32 - RP 18.36 - Left & Right
	5	Unclassified Excavation	150	yd3	\$10.00	\$1,500	RP 18.69 - RP 18.7 - Right
	5	Unclassified Excavation	250	yd3	\$10.00	\$2,500	RP 18.6 - RP 18.7 - Right
	5	Unclassified Excavation	5800		\$10.00	\$58,000	RP 18.8 - RP 20.0 - Left
	5	Unclassified Excavation - Total	25,595	yd3	\$10.00	\$255,950	From Model
	6						Pay for difference between cut and fill only (using
		Embankement in Place		yd3	\$10.00		60% of cut)
	7		Ea	arthwork and	Grading Contingency	\$38,393	15%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	0	Lump	\$452,780.00	\$0	Assumed replacing all crossing structures
Ocheral Dramage	9	r ipe duverts, dateri basiris, etc.			rainage Contingency		10%
Pavement (Mainline, Ramps,	10		1	<u>_</u>	Tamago comangono,	φο	10%
and CDs)		Pavement and Base	0	ft	\$47.51	\$0	
	11				Paving Contingency	\$0	15%
Structures	12	Bridge (2nd Level Concrete)		ft ²	\$110.00		
Oraciales	13	Retaining Walls	0	ft ²	\$70.00		
	14			S	tructure Contingency	\$0	15%
General Utility							
Adjustments/Relocations	15	Adjust / Relocate Utility		Lump	\$12,797.50 location Contingency		Assumed to be 5% of earthwork and grading
	16 17						15%
	18	Signing		Lump ft	\$50,000.00 \$0.92		Assume 1-double yellow center line
	19	Striping	0		Striping Contingency		15%
	20	Guardrail	1 0	ft	\$20.00		15%
	21	Landscaping		Acre	\$4,050.00	\$0	
	22	Fencing		ft	\$4,050.00		
	23	. s.ising	. 0		al Other Contingency		10%
	29			00/1016	Subtota		10,0
	30			10%	Mobilization	,	
	31			5%			
	32				Control Contingency	\$1,605	10%
	33				Subtota		
	34			10%			
	35			10%	Design Egr. Const. Egr.		
SUBTOTAL	36				Subtotal		
	37	Administration	1	Parcel	\$5,000	\$5,000	
Right-of-Way	40	USFS	7	Acres	\$0	\$0	
	42	ROW From Private Entities	0	Acres			Easement
	45				R/W Contingency	\$750	15%
	46		Total Road	dway Elem	ents2006 USD	\$450,528	
						•	

Alternative Name:

Pipe Creek Road - Corridor Plan RP 7 - RP 20.1



		Item					
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and Grubbing	72	Acre	\$3,500.00	\$252,000	
Demolition and Removal	2	Demolition of Buildings	0	Each	\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0	
	4	Bridgee	, and the second	Edon	Demolition and Removal Contingency	\$37,800	15%
					, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	
Earthwork and Grading	5	Unclassified Excavation	222,609	vd3	\$10.00	\$2,226,090	From Model
	6	Embankement in place	87,863		\$10.00		Pay for difference between cut and fill only (using 60% of cut)
	7	place	07,003	yus	Earthwork and Grading Contingency	\$556,523	
	,	Pipe Culverts,			Earthwork and Grading Goritingency	φ000,020	2070
0 10 :		Catch Basins,			0.450.704.00	0.450.704	
General Drainage	9	etc.	1	Lump	\$456,781.00	\$456,781 \$91,356	Assumed replacing all crossing structures
Pavement (Reconstruct)	10	Pavement and			Drainage Contingency	\$91,330	20%
, ,		Base	2,000	ft	\$40.68	\$81,360	Assume 3.6" superpave & 8" crushed aggregate
Pavement (24' Widening)	11	Pavement and Base	50,800	ft	\$29.79	\$1,513,332	Assume 3.6" superpave & 8" crushed aggregate
Pavement (22' Widening)	12	Pavement and Base	16,368		\$26.74		Assume 3.6" superpave & 8" crushed aggregate
Pavement Rehabilitation	13	FDR w/ Foam					Assume FDR w/ foam mix w 3% PG 58-28 PG
	14	mix	67,168	π	\$21.11 Paving Contingency	\$1,417,916 \$508,093	binder and 1% cement
	14	Bridge (2nd		1	Faving Contingency	\$508,093	25%
	15	Level Concrete)					
Structures			1	Each	\$30,000.00	\$30,000	cost of fixes identified in UDFS inspection report
	16	Retaining Walls	38,472	ft ²	\$70.00	\$2,693,040	
General Utility	17	Adjust / Relocate	1		Structure Contingency	\$544,608	20%
Adjustments/Relocations	18	Utility	1	Lump	\$111,304.50	\$111 305	Assumed to be 5% of earthwork and grading
	19				neral Utility Adjustment / Relocation Contingency	\$16,696	
	20	Signing	1	Lump	\$40,000.00	\$40,000	
	21	Striping	69,168	ft	\$1.00	\$69,168	Assume 1-double yellow center line
	22				Signing/Striping Contingency	\$16,375	15%
	23	Guardrail	4,804		\$20.00	\$96,080	
	24	Landscaping		Acre	\$4,050.00		area between edge of pavement and cut/fill line
	25	Fencing	0	ft	\$2.60	\$0	1450/
	26 32				General Other Contingency Subtotal	\$58,152 \$11,545,955	15%
	33	-		10%	Subtotal	\$11,545,955 \$1,154,595	
	34			2.5%	Traffic Control	\$288,649	
	35			2.070	Traffic Control Contingency	\$43,297	
	36				Subtotal	\$13,032,497	
	37			10%	Design Egr.	\$1,303,250	
	38			10%	Const. Egr.	\$1,303,250	
SUBTOTAL	39				Subtotal	\$15,638,996	
	40	Administration	18	Parcel	\$5,000	\$90,000	
	41	USFS	100	Acre	\$0	\$0	
Right-of-Way	42	Relocation (out buildings)	0	Each	\$20,000	\$0	
	43	ROW From Private Entities	А	Acre	\$25,000	\$100,000	Easement
	44	1 114ate Littiles	4	Acre	R/W Contingency	\$28,500	
	45				Total Roadway Elements2006 USD	\$15,857,496	10,0
		1			. C.a Cadhay Elemento 2000 COD	ψ10,001,430	

Developed: DRN Checked: JC

Pipe Creek Road - Corridor Plan RP 8 Re-alignement Alternative Name:

Length of Re-Alignment =

		Item					
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and	_				
		Grubbing Demolition of	5	Acre	\$3,500.00	\$17,850	
Demolition and Removal	2	Buildings	0	Each	\$5,000.00	\$0	
		Demolition of		Lacii	ψ0,000.00	ψυ	
	3	Bridges	0	Each	\$30,000.00	\$0	
	4				Demolition and Removal Contingency	\$2,678	15%
	5	Unclassified					
Earthwork and Grading	5	Excavation	3,500	vd3	\$10.00	\$35,000	From Model
Lattiwork and Oracing		Embankement in	0,000	yuu	ψ10.00	φοσ,σσσ	Pay for difference between cut and fill only (using
	6	place	0	yd3	\$10.00		60% of cut)
	7				Earthwork and Grading Contingency	\$8,750	25%
		Pipe Culverts,					
General Drainage	8	Catch Basins, etc.	0	Lump	\$456,780.00	\$225.424	Assumed replacing all crossing structures
General Dialilage	9	etc.	0	Lump	Drainage Contingency	\$47,087	
Pavement (Reconstruct)	10	Pavement and	1		Dramage contingency	Ψ-1,001	2070
,		Base	1,000	ft	\$40.68	\$40,680	Assume 3.6" superpave & 8" crushed aggregate
Pavement (24' Widening)	11	Pavement and					
D (001)4/1 1 1	12	Base Pavement and	0	ft	\$29.79	\$0	Assume 3.6" superpave & 8" crushed aggregate
Pavement (22' Widening)	12	Base	0	ft	\$26.74	90	Assume 3.6" superpave & 8" crushed aggregate
	13	Bacc	<u> </u>	Įit.	Paving Contingency	\$10,170	
		Bridge (2nd			gg	\$10,110	2070
	14	Level Concrete)					
Structures			0	ft ²	\$110.00	\$0	
	15	Retaining Walls	1,614	442	\$70.00	\$112,980	
	16	ixetairiirig vvalis	1,614	Įit.	Structure Contingency	\$22,596	20%
General Utility	10	Adjust / Relocate	ı	l l	Structure containing may	Ψ22,030	2070
Adjustments/Relocations	17	Utility		Lump	\$1,750.00	\$1,750	Assumed to be 5% of earthwork and grading
	18			Ge	neral Utility Adjustment / Relocation Contingency	\$263	15%
	19	Signing		Lump	\$2,000.00	\$2,000	
	20	Striping	1,000	ft	\$1.00		Assume 1-double yellow center line
	21	Consideration		6	Signing/Striping Contingency	\$450	15%
	22 23	Guardrail Landscaping	300	π Acre	\$20.00 \$4,050.00	\$6,000	area between edge of pavement and cut/fill line
	24	Fencing		ft	\$2.60	\$10,223	
	25	- Cricing	<u> </u>	ii.	General Other Contingency	\$3,634	
	31				Subtotal	\$566,546	
	32			20%	Mobilization	\$113,309	
	33			10.0%	Traffic Control	\$56,655	
	34				Traffic Control Contingency	\$8,498	15%
	35			,	Subtotal	\$745,007	
	36 37			10% 10%	Design Egr. Const. Egr.	\$74,501 \$74,501	
SUBTOTAL	38			10%	Const. Egr. Subtotal	\$74,501 \$894,009	
OODIOIAL	39	Administration	1	Parcel	\$5,000	\$5,000	
	40	USFS	5		\$0,500	\$0	
Right-of-Way	41	Relocation (out					
rugiti or vvay	41	buildings)	0	Each	\$20,000	\$0	
	42	ROW From	_		***		F
	43	Private Entities	0	Acre	\$25,000 R/W Contingency	\$0 \$750	Easement 15%
	43				Total Roadway Elements2006 USD	\$899,759	10 /0
		-			Total Noadway Lielliellis2000 USD	φυσσ,1 39	
	l	l				l	

Developed: DRN Checked: JC

Pipe Creek Road - Corridor Plan RP 11 Re-alignement Alternative Name:

1000 ft

Length of Re-Alignment =

		Item					
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and Grubbing	4	Acre	\$3,500.00	\$15,400	
Demolition and Removal	2	Demolition of Buildings	0	Each	\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0	
	4				Demolition and Removal Contingency	\$2,310	15%
Fasternal and Cardina	5	Unclassified Excavation	14,640	d2	\$10.00	£146 400	From Model
Earthwork and Grading		Embankement in	14,640	yus	\$10:00	\$140,400	Pay for difference between cut and fill only (using
	6	place	260	yd3	\$10.00	\$0	60% of cut)
	7			, , , ,	Earthwork and Grading Contingency	\$36,600	
		Pipe Culverts,			, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	
		Catch Basins,					
General Drainage	8	etc.	0	Lump	\$456,780.00		Assumed replacing all crossing structures
	9				Drainage Contingency	\$47,087	20%
Pavement (Reconstruct)	10	Pavement and					
		Base	1,000	ft	\$40.68	\$40,680	Assume 3.6" superpave & 8" crushed aggregate
Pavement (24' Widening)	11	Pavement and Base	0	ft	\$29.79	\$0	Assume 3.6" superpave & 8" crushed aggregate
Pavement (22' Widening)	12	Pavement and Base		ft	\$26.74	\$0	Assume 3.6" superpave & 8" crushed aggregate
	13	Dase		μτ	Paving Contingency	\$10,170	
	13	Bridge (2nd			I aving contingency	\$10,170	2376
	14	Level Concrete)					
Structures		Lovor Corneroto,	0	ft ²	\$110.00	\$0	
	15	Retaining Walls	1,614	ft ²	\$70.00	\$112,980	
	16	, , , , , , , , , , , , , , , , , , ,	.,		Structure Contingency	\$22,596	20%
General Utility		Adjust / Relocate	l		J,	7,000	
Adjustments/Relocations	17	Utility	0	Lump	\$7,320.00	\$0	Assumed to be 5% of earthwork and grading
	18				neral Utility Adjustment / Relocation Contingency	\$0	15%
	19	Signing		Lump	\$2,000.00	\$2,000	
	20	Striping	1,000	ft	\$1.00		Assume 1-double yellow center line
	21				Signing/Striping Contingency	\$450	15%
	22	Guardrail	500		\$20.00	\$10,000	
	23	Landscaping		Acre	\$4,050.00		area between edge of pavement and cut/fill line
	24	Fencing	. 0	ft	\$2.60	\$0	
	25				General Other Contingency	\$3,626	15%
	31 32			20%	Subtotal	\$700,908	<u> </u>
	32			10.0%	Mobilization Traffic Control	\$140,182 \$70,091	
	34			10.0%	Traffic Control Contingency	\$10,514	159/.
	35				Subtotal	\$921,694	1070
	36			10%	Design Egr.	\$92,169	
	37			10%	Const. Egr.	\$92,169	
SUBTOTAL	38			.070	Subtotal	\$1,106,033	
	39	Administration	1	Parcel	\$5,000	\$5,000	
	40	USFS	4		\$0	\$0	
Right-of-Way	41	Relocation (out buildings)	0	Each	\$20,000	\$0	
	42	ROW From Private Entities	0		\$25,000		Easement
	43	2.12 2.100		010	R/W Contingency	\$750	
	44				Total Roadway Elements2006 USD	\$1,111,783	
						\$.,,100	
	<u> </u>	l				l .	I .

Developed: DRN Checked: JC



Pipe Creek Road - Corridor Plan Segment 1 RP 7 - RP 12 Alternative Name:

Length of Re-Alignment =

		Item					
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	1	Clearing and Grubbing	27	Acre	\$3,500.00	\$94,500	
Demolition and Removal	2	Demolition of Buildings	0	Each	\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0	
	4	bridges	0	Eacii	Demolition and Removal Contingency	\$14,175	
	-				Demonition and removal contangency	ψ14,175	1070
ļ	5	Unclassified					
Earthwork and Grading		Excavation	91,361	yd3	\$10.00	\$913,610	From Model
	6	Embankement in place	22,254	d2	\$10.00	\$0	Pay for difference between cut and fill only (using 60% of cut)
	7	piace	22,234	yus	Earthwork and Grading Contingency	\$228,403	
	·	Pipe Culverts,			Edition and Ordaing Commigency	\$220,100	Assumed replacing all crossing structures Except
ļ		Catch Basins,					Bridge and Culvert Arch over Pipe Creek at RP
General Drainage	8	etc.	1	Lump	\$108,918.00	\$108,918	
	9				Drainage Contingency	\$21,784	20%
Pavement (Reconstruct)	10	Pavement and Base	2,000	ft	\$40.68	\$81,360	Assume 3.6" superpave & 8" crushed aggregate
Pavement (24' Widening)	11	Pavement and Base	24,400	ft	\$29.79	\$726,876	Assume 3.6" superpave & 8" crushed aggregate
Pavement (22' Widening)	12	Pavement and Base		ft	\$26.74	20	Assume 3.6" superpave & 8" crushed aggregate
Pavement Rehabilitation	13	FDR w/ Foam	U	IL	\$20.74	Φ0	Assume FDR w/ foam mix w 3% PG 58-28 PG
avomont (tonabilitation		mix	24,400	ft	\$21.11	\$515,084	binder and 1% cement
	13				Paving Contingency	\$202,059	25%
		Bridge (2nd					
ا ا	14	Level Concrete)			#00.000.00	****	
Structures			1	Each	\$30,000.00	\$30,000	cost of fixes identified in UDFS inspection report
ļ	15	Retaining Walls	3,867	ft ²	\$70.00	\$270,690	
	16		0,001	<u> </u>	Structure Contingency	\$60,138	
General Utility		Adjust / Relocate			Ŭ,		Assumed percentage of overall Corridor plan
Adjustments/Relocations	17	Utility	1	Lump	\$42,296.00		Utility costs (38%)
	18	0: :			neral Utility Adjustment / Relocation Contingency	\$6,344	
	19 20	Signing	26,400	Lump	\$15,380.00 \$1.00	\$15,380	Assume 1-double yellow center line-6" wide
	21	Striping	26,400	п	Signing/Striping Contingency	\$26,400 \$6.267	15%
	22	Guardrail	1,000	ft	\$20.00	\$20,000	
ļ	23	Landscaping		Acre	\$4,050.00		area between edge of pavement and cut/fill line
ļ	24	Fencing	0		\$2.60	\$0	
	25				General Other Contingency	\$19,403	15%
	31		•		Subtotal	\$3,513,036	
	32	.		10%	Mobilization	\$351,304	
	33			2.5%	Traffic Control	\$87,826	
	34 35				Traffic Control Contingency Subtotal	\$13,174 \$3,965,339	15%
	36			10%	Design Egr.	\$3,965,339	
	37	t		10%	Const. Egr.	\$396,534	
SUBTOTAL	38			.070	Subtotal	\$4,758,407	
	39	Administration	4	Parcel	\$5,000	\$20,000	
	40	USFS	38	Acre	\$0	\$0	
Right-of-Way	41	Relocation (out buildings)	0	Each	\$20,000	\$0	
	42	ROW From Private Entities	1	Acre	\$25,000	\$25,000	Easement
	43	vaic Entitles	<u> </u>	Acie	R/W Contingency	\$6,750	
	44				Total Roadway Elements2006 USD	\$4,810,157	

Developed: DRN Checked: JC

Pipe Creek Road - Corridor Plan Segment 2 RP 12 - RP 17 Alternative Name:

Length of Re-Alignment =

Demolition and Removal Earthwork and Grading General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening) Pavement (22' Widening) Pavement Rehabilitation	1 2 3 4 5 6 7 8 9 10 11 12	Description Cilearing and Grubbing Demolition of Buildings Demolition of Bridges Unclassified Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and Base Pavement and	77,148 54,144		### \$3,500.00 \$5,000.00 \$30,000.00 Demolition and Removal Contingency \$10.00 \$10.00 Earthwork and Grading Contingency \$90,801.00	\$78,552 \$212,508	15% From Model Pay for difference between cut and fill only (using 60% of cut)
Earthwork and Grading General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	2 3 4 5 6 7 8 9 10 11	Grubbing Bridges Unclassified Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and Pavement and Pavement and Pavement and	77,148 54,144	Each Each yd3 yd3	\$5,000.00 \$30,000.00 Demolition and Removal Contingency \$10.00 \$10.00 Earthwork and Grading Contingency	\$0 \$17,325 \$771,480 \$78,552 \$212,508	15% From Model Pay for difference between cut and fill only (using 60% of cut)
Earthwork and Grading General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	2 3 4 5 6 7 8 9 10 11	Demolition of Buildings Demolition of Bridges Unclassified Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Bassa Base Bayement and Bassa Bayement and Bassa Bayement and Bassa Bayement and	77,148 54,144	Each Each yd3 yd3	\$5,000.00 \$30,000.00 Demolition and Removal Contingency \$10.00 \$10.00 Earthwork and Grading Contingency	\$0 \$17,325 \$771,480 \$78,552 \$212,508	15% From Model Pay for difference between cut and fill only (using 60% of cut)
Earthwork and Grading General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	2 3 4 5 6 7 8 9 10 11	Buildings Demolition of Bridges Unclassified Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	77,148 54,144	Each yd3 yd3	\$30,000.00 Demolition and Removal Contingency \$10.00 \$10.00 Earthwork and Grading Contingency	\$0 \$17,325 \$771,480 \$78,552 \$212,508	From Model Pay for difference between cut and fill only (using 60% of cut)
General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	3 4 5 6 7 8 9 10 11	Demolition of Bridges Unclassified Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and Base Bas Base Base Bas Bas Bas Bas Bas Bas Bas Bas	77,148 54,144	Each yd3 yd3	\$30,000.00 Demolition and Removal Contingency \$10.00 \$10.00 Earthwork and Grading Contingency	\$0 \$17,325 \$771,480 \$78,552 \$212,508	From Model Pay for difference between cut and fill only (using 60% of cut)
General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	4 5 6 7 8 9 10 11	Unclassified Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	77,148 54,144	yd3 yd3	Demolition and Removal Contingency \$10.00 \$10.00 Earthwork and Grading Contingency	\$17,325 \$771,480 \$78,552 \$212,508	From Model Pay for difference between cut and fill only (using 60% of cut) 25%
General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	5 6 7 8 9 10 11	Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	54,144	yd3	\$10.00 \$10.00 S10.00 Earthwork and Grading Contingency	\$771,480 \$78,552 \$212,508	From Model Pay for difference between cut and fill only (using 60% of cut) 25%
General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	6 7 8 9 10 11 12	Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	54,144	yd3	\$10.00 Earthwork and Grading Contingency	\$78,552 \$212,508	Pay for difference between cut and fill only (using 60% of cut) 25%
General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	6 7 8 9 10 11 12	Excavation Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	54,144	yd3	\$10.00 Earthwork and Grading Contingency	\$78,552 \$212,508	Pay for difference between cut and fill only (using 60% of cut) 25%
General Drainage Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	8 9 10 11	Embankement in place Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	54,144	yd3	\$10.00 Earthwork and Grading Contingency	\$78,552 \$212,508	Pay for difference between cut and fill only (using 60% of cut) 25%
Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	8 9 10 11	Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	1		Earthwork and Grading Contingency	\$212,508	60% of cut)
Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	7 8 9 10 11	Pipe Culverts, Catch Basins, etc. Pavement and Base Pavement and	1		,	\$212,508	25%
Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	8 9 10 11 12	Catch Basins, etc. Pavement and Base Pavement and		Lump	\$90,801.00		Assumed replacing all crossing structures Except
Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	8 9 10 11 12	Pavement and Base Pavement and		Lump	\$90,801.00		
Pavement (Reconstruct) Pavement (24' Widening) Pavement (22' Widening)	9 10 11 12	Pavement and Base Pavement and		Lump	\$90,801.00		Bridge and Culvert Arch over Pipe Creek at RP
Pavement (24' Widening) Pavement (22' Widening)	10 11 12	Base Pavement and	_			\$90,801	
Pavement (24' Widening) Pavement (22' Widening)	11	Base Pavement and	_		Drainage Contingency	\$18,160	20%
Pavement (22' Widening)	12		. 0	ft	\$40.68	\$0	Assume 3.6" superpave & 8" crushed aggregate
,	12			_		·	
,		Base Pavement and	26,400	ft	\$29.79	\$786,456	Assume 3.6" superpave & 8" crushed aggregate
Pavement Rehabilitation		Base	0	ft	\$26.74	90	Assume 3.6" superpave & 8" crushed aggregate
	13	FDR w/ Foam	0	ıı	Ψ20.14	Ψ0	Assume FDR w/ foam mix w 3% PG 58-28 PG
		mix	26,400	ft	\$21.11	\$557,304	binder and 1% cement
	14				Paving Contingency	\$196,614	25%
		Bridge (2nd					
10.	15	Level Concrete)			#00.000.00		
Structures			0	Each	\$30,000.00	\$0	
	16	Retaining Walls	3,562	ft ²	\$70.00	\$249,340	
	17	Total III	0,002	11-	Structure Contingency	\$49,868	
General Utility		Adjust / Relocate	l		<i>J.</i> .,		Assumed percentage of overall Corridor plan
Adjustments/Relocations		Utility	1	Lump	\$42,296.00		Utility costs (38%)
	19				neral Utility Adjustment / Relocation Contingency	\$6,344	
. –	20	Signing	1	Lump	\$15,380.00	\$15,380	
	21	Striping	26,400	Ħ	\$1.00		Assume 1-double yellow center line-6" wide
		Guardrail	1,600	4	Signing/Striping Contingency \$20.00	\$6,267 \$32,000	
. —	24	Landscaping		Acre	\$20.00		area between edge of pavement and cut/fill line
<u> </u>		Fencing		ft	\$2.60	\$100,000	area between eage or pavement and eagin inc
	26	J. J	-	11-	General Other Contingency	\$24,848	15%
	32				Subtotal	\$3,431,093	
	33	10%			Mobilization	\$343,109	
	34			2.5%	Traffic Control	\$85,777	
	35				Traffic Control Contingency	\$12,867 \$3,872,846	15%
	36				Subtotal		
	37 38	10% 10%			Design Egr.	\$387,285	
SUBTOTAL	38 39			10%	Const. Egr. Subtotal	\$387,285 \$4,647,416	
SUBTUTAL		Administration	13	Parcel	\$5,000 \$5,000	\$65,000	
 	41	USFS	44		\$5,000	\$05,000	
Bight of Way		Relocation (out			40	40	
Right-of-Way		buildings)	0	Each	\$20,000	\$0	
		ROW From					
		Private Entities	3	Acre		\$75,000 \$21,000	Easement
	44 4E	R/W Contingency					
	45	Total Roadway Elements2006 USD \$4,80					

Developed: DRN Checked: JC

Pipe Creek Road - Corridor Plan Segment 3 RP 17 - RP 20.1 Alternative Name:

Length of Re-Alignment =

		Item					
Category	Line Number ¹	Description	Quantity	Units	Unit Cost	Extended Cost	Notes
Demolition and Removal	1	Clearing and	40		ê0 500 00	* 40.000	
		Grubbing Demolition of	12	Acre	\$3,500.00	\$42,000	
	2	Buildings	0	Each	\$5,000.00	\$0	
		Demolition of	·	Laon	\$0,000.00	Ψ	
	3	Bridges	0	Each	\$30,000.00	\$0	
	4				Demolition and Removal Contingency	\$6,300	15%
Earthwork and Grading							
	5	Unclassified Excavation	54,100	v43	\$10.00	\$5.41 000	From Model
Earthwork and Grading		Embankement in	34,100	yus	\$10.00	\$341,000	Pay for difference between cut and fill only (using
Ì	6	place	11,465	yd3	\$10.00	\$0	60% of cut)
	7				Earthwork and Grading Contingency	\$135,250	25%
		Pipe Culverts,					
0 10 :		Catch Basins,			#0F7 000 00	8057.000	
General Drainage	8	etc.] 1	Lump	\$257,062.00	\$257,062	
Pavement (Reconstruct)	10	Pavement and	1		Drainage Contingency	\$51,412	20%
	-	Base	0	ft	\$40.68	\$0	Assume 3.6" superpave & 8" crushed aggregate
Pavement (24' Widening)	11	Pavement and Base	0	ft	\$29.79	\$0.	Assume 3.6" superpave & 8" crushed aggregate
Pavement (22' Widening)	12	Pavement and	ı		Ψ23.13	φυ	caporparo a o oracnos aggregate
. aromoni (ZZ Widoning)		Base	16,368	ft	\$26.74	\$437,680	Assume 3.6" superpave & 8" crushed aggregate
Pavement Rehabilitation	13	FDR w/ Foam					Assume FDR w/ foam mix w 3% PG 58-28 PG
		mix	16,368	ft	\$21.11		binder and 1% cement
	13				Paving Contingency	\$109,420	25%
	14	Bridge (2nd Level Concrete)					
Structures	14	Level Collete)	0	Each	\$30,000.00	\$0	
	45				+,	**	
	15	Retaining Walls	31,043	ft ²	\$70.00	\$2,173,010	
	16				Structure Contingency	\$434,602	
General Utility	4-	Adjust / Relocate					Assumed percentage of overall Corridor plan
Adjustments/Relocations	17 18	Utility	1 1	Lump	\$26,712.50 neral Utility Adjustment / Relocation Contingency	\$26,713 \$4,007	Utility costs (24%)
	19	Signing	1	Lump	\$9,535.60	\$9,536	1576
	20	Striping	16,368		\$1.00		Assume 1-double yellow center line-6" wide
	21	ourpring	10,000	P	Signing/Striping Contingency	\$3,886	
	22	Guardrail	2,204	ft	\$20.00	\$44,080	
	23	Landscaping	12	Acre	\$4,050.00	\$48,600	area between edge of pavement and cut/fill line
	24	Fencing	0	ft	\$2.60	\$0	
	25				General Other Contingency	\$13,902	
	31				Subtotal	\$4,700,356	
	32			10%	Mobilization	\$470,036	
	33 34			2.5%	Traffic Control Traffic Control Contingency	\$117,509 \$17,626	
	35				Traffic Control Contingency Subtotal	\$17,626 \$5,305,527	1376
	36			10%	Design Egr.	\$5,305,527 \$530,553	
	37			10%	Const. Eqr.	\$530,553	
SUBTOTAL	38			.070	Subtotal	\$6,366,632	
Right-of-Way	39	Administration	1		\$5,000	\$5,000	
	40	USFS	18	Acre	\$0	\$0	
	41	Relocation (out					
		buildings) ROW From	0	Each	\$20,000	\$0	
	42	Private Entities	0	Acre	\$25,000	\$0	Easement
	43				R/W Contingency		15%
	44				Total Roadway Elements2006 USD	\$6,372,382	
					*		
							1