

APPENDIX G

DETAILED COST ESTIMATES

**Project Cost Estimates
Cool Creek Watershed Management Plan**

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
151st Street				
Roadway Elevation Modification	TN	150	\$40	\$6,000
Milling, Striping, Surface Restoration, Traffic Control	LS	1	n/a	\$1,000
			Subtotal	\$7,000
			Contingency (20%)	\$1,400
			Total Estimated Construction	\$8,400
			Engineering, Legal, Administration (20%)	\$1,680
			151st Street Project Total	\$10,080
			SAY	\$10,000
171st Street				
Roadway Elevation Modification	TN	750	\$40	\$30,000
Milling, Striping, Surface restoration, Traffic Control	LS	1	n/a	\$3,000
Superstructure Removal	LS	1	n/a	\$60,000
Superstructure	LS	1	n/a	\$175,000
Roadway Approaches	LS	1	n/a	\$40,000
New Abutments and Pier (including removal of existing)	LS	1	n/a	\$175,000
Soil Borings	LS	1	n/a	\$5,000
			Subtotal	\$488,000
			Contingency (20%)	\$97,600
			Total Estimated Construction	\$585,600
			Engineering, Legal, Administration (20%)	\$117,120
			171st Street Project Total	\$702,720
			SAY	\$700,000
Gurley Street				
Superstructure Removal	LS	1	n/a	\$20,000
Superstructure	LS	1	n/a	\$60,000
Roadway Approaches	LS	1	n/a	\$40,000
New Abutments (including removal of existing)	LS	1	n/a	\$70,000
Soil Borings	LS	1	n/a	\$5,000
			Subtotal	\$195,000
			Contingency (20%)	\$39,000
			Total Estimated Construction	\$234,000
			Engineering, Legal, Administration (20%)	\$46,800
			Gurley Street Project Total	\$280,800
			SAY	\$280,000

**Project Cost Estimates
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<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Cherry Street				
Superstructure Removal	LS	1	n/a	\$30,000
Superstructure	LS	1	n/a	\$60,000
Roadway Approaches	LS	1	n/a	\$40,000
Widening Abutments	LS	1	n/a	\$100,000
Soil Borings	LS	1	n/a	\$5,000
			Subtotal	\$235,000
			Contingency (20%)	\$47,000
			Total Estimated Construction	\$282,000
			Engineering, Legal, Administration (20%)	\$56,400
			Cherry Street Project Total	\$338,400
			SAY	\$340,000

Carmel Drive Overtopping (Hot Lick Creek)

10' x 4' Concrete Box Culvert	LF	120	\$350	\$42,000
45° Wingwall	EA	2	\$5,000	\$10,000
Pavement Restoration	SY	70	\$50	\$3,500
Channel Regrading and Shaping	LS	1	n/a	\$6,000
			Subtotal	\$61,500
			Contingency (20%)	\$12,300
			Total Estimated Construction	\$73,800
			Engineering, Legal, Administration (20%)	\$14,760
			Cherry Street Project Total	\$88,560
			SAY	\$90,000

Swimming Pool Inundation (Hot Lick Creek)

Channel Regrading and Shaping	LS	1	n/a	\$6,000
			Subtotal	\$6,000
			Contingency (20%)	\$1,200
			Total Estimated Construction	\$7,200
			Engineering, Legal, Administration (20%)	\$1,440
			Cherry Street Project Total	\$8,640
			SAY	\$10,000

**Project Cost Estimates
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<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Streambank Erosion D/S of Stonehedge Drive (Highway Run)				
Streambank Restoration/Improvements	LF	100	\$35	\$3,500
			Subtotal	\$3,500
			Contingency (20%)	\$700
			Total Estimated Construction	\$4,200
			Engineering, Legal, Administration (20%)	\$840
			Cherry Street Project Total	\$5,040
			SAY	\$5,000
Streambank Erosion D/S of Rolling Court (H.G. Kenyan)				
Streambank Restoration/Improvements	LF	250	\$40	\$10,000
			Subtotal	\$10,000
			Contingency (20%)	\$2,000
			Total Estimated Construction	\$12,000
			Engineering, Legal, Administration (20%)	\$2,400
			Cherry Street Project Total	\$14,400
			SAY	\$15,000
Streambank Erosion U/S of Confluence with White River				
Streambank Restoration/Improvements	LF	1500	\$140	\$210,000
			Subtotal	\$210,000
			Contingency (20%)	\$42,000
			Total Estimated Construction	\$252,000
			Engineering, Legal, Administration (20%)	\$50,400
			Cherry Street Project Total	\$302,400
			SAY	\$300,000

**Project Cost Estimates
Cool Creek Watershed Management Plan**

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Streambank Erosion D/S of Gray Road				
Streambank Restoration/Improvements	LF	200	\$250	\$50,000
			Subtotal	\$50,000
			Contingency (20%)	\$10,000
			Total Estimated Construction	\$60,000
			Engineering, Legal, Administration (20%)	\$12,000
			Cherry Street Project Total	\$72,000
			SAY	\$75,000
Streambank Erosion Near Hot Lick Creek Confluence				
Streambank Restoration/Improvements	LF	575	\$150	\$86,250
			Subtotal	\$86,250
			Contingency (20%)	\$17,250
			Total Estimated Construction	\$103,500
			Engineering, Legal, Administration (20%)	\$20,700
			Cherry Street Project Total	\$124,200
			SAY	\$125,000
Streambank Erosion U/S of 131st Street				
Streambank Restoration/Improvements	LF	150	\$90	\$13,500
			Subtotal	\$13,500
			Contingency (20%)	\$2,700
			Total Estimated Construction	\$16,200
			Engineering, Legal, Administration (20%)	\$3,240
			Cherry Street Project Total	\$19,440
			SAY	\$20,000
Streambank Erosion U/S of Keystone Avenue				
Streambank Restoration/Improvements	LF	100	\$180	\$18,000
			Subtotal	\$18,000
			Contingency (20%)	\$3,600
			Total Estimated Construction	\$21,600
			Engineering, Legal, Administration (20%)	\$4,320
			Cherry Street Project Total	\$25,920
			SAY	\$30,000

**Project Cost Estimates
Cool Creek Watershed Management Plan**

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
171st Street Regional Stormwater Detention Pond				
Pond Construction/Excavation	CF	4,374,000	\$0.35	\$1,530,900
Inlet/Outlet Structure	EA	2	\$10,000	\$20,000
			Subtotal	\$1,550,900
			Contingency (20%)	\$310,180
			Total Estimated Construction	\$1,861,080
			Engineering, Legal, Administration (20%)	\$372,216
			Land Acquisition	\$330,000
			Cherry Street Project Total	\$2,563,296
			SAY	\$2,600,000

Grassy Branch Road Regional Stormwater Detention Pond

Pond Construction/Excavation	CF	2,646,000	\$0.35	\$926,100
Inlet/Outlet Structure	EA	2	\$10,000	\$20,000
			Subtotal	\$946,100
			Contingency (20%)	\$189,220
			Total Estimated Construction	\$1,135,320
			Engineering, Legal, Administration (20%)	\$227,064
			Land Acquisition	\$480,000
			Cherry Street Project Total	\$1,842,384
			SAY	\$1,800,000

Existing Pond Retrofit - Anna Kendall Drain - Railroad Impoundment

Soil Analysis - Existing Embankment	LS	1	\$15,000	\$15,000
Dambreak Analysis (Pre-design requirement)	LS	1	\$15,000	\$15,000
Obtain IDNR Dam Safety Permit	LS	1	\$12,000	\$12,000
Clearing and Grubbing	LS	1	\$10,000	\$10,000
Remove Existing Embankment	CY	6000	\$8.00	\$48,000
Construct New Embankment (Engineered Fill)	CY	12000	\$15.00	\$180,000
Primary Outlet Structure	LS	1	\$30,000	\$30,000
Primary Outlet Pipe (72" - 84" diam.)	LF	180	\$300.00	\$54,000
Emergency Spillway	LS	1	\$50,000	\$50,000
Restoration and Erosion Control	LS	1	\$17,500	\$17,500
			Subtotal	\$431,500
			Contingency (20%)	\$86,300
			Total Estimated Construction	\$517,800
			Engineering, Legal, Administration (20%)	\$103,560
			Land Acquisition	\$75,000
			Anna Kendall Pond Retrofit Project Total	\$696,360
			SAY	\$700,000

**Project Cost Estimates
Cool Creek Watershed Management Plan**

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Private Drive Culvert Replacement - Immediately Downstream of US 31 (Highway Run)				
Remove and dispose of existing culvert	LS	1	\$4,000	\$4,000
Construct new 10' x 6' box culvert (includes excavation)	LF	76	\$500	\$38,000
Headwall/wingwall	EA	2	\$7,500	\$15,000
Riprap (w/geotextile fabric)	CY	75	\$50	\$3,750
Driveway regrading and restoration	LS	1	\$7,500	\$7,500
			Subtotal	\$68,250
			Contingency (20%)	\$13,650
			Total Estimated Construction	\$81,900
			Engineering, Legal, Administration (20%)	\$16,380
			Private Drive @ US 31 Project Total	\$98,280
			SAY	\$100,000

US 31 Culvert Replacement (Highway Run)

Channel Reshaping near culverts	LS	1	\$10,000	\$10,000
Bore and Jack 84" Casing, 60" RCP	LF	270	\$1,600	\$432,000
Headwall/wingwall	EA	2	\$15,000	\$30,000
Riprap w/geotextile fabric	CY	100	\$50	\$5,000
Restoration	LS	1	\$7,500	\$7,500
			Subtotal	\$484,500
			Contingency (20%)	\$96,900
			Total Estimated Construction	\$581,400
			Engineering, Legal, Administration (20%)	\$116,280
			US 31 Project Total	\$697,680
			SAY	\$700,000

Walter Street / Walter Court / Private Crossing Culvert Replacements (Highway Run)

Sawcut Roadways, Driveways	LF	150	\$4	\$600
Remove and dispose of existing culverts	EA	3	\$2,000	\$6,000
Channel reshaping	LF	400	\$60	\$24,000
12' x 4' Reinforced Concrete Box Culvert	LF	135	\$400	\$54,000
Headwall/wingwall	EA	6	\$5,000	\$30,000
Riprap (replace existing riprap in channel)	CY	75	\$50	\$3,750
Roadway/Driveway Patches	EA	3	\$2,000	\$6,000
Restoration	LS	1	\$10,000	\$10,000
			Subtotal	\$134,350
			Contingency (20%)	\$26,870
			Total Estimated Construction	\$161,220
			Engineering, Legal, Administration (20%)	\$32,244

Walter Street Area Culvert Replacement Project Total **\$193,464**

SAY **\$200,000**

**Project Cost Estimates
Cool Creek Watershed Management Plan**

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Thornberry Drive Culvert Replacement (Highway Run)				
Channel Reshaping near culvert	LS	1	\$2,000	\$2,000
Sawcut pavement, excavation, culvert removal	LS	1	\$4,000	\$4,000
11' x 3.5' Reinforced Concrete Box Culvert	LF	78	\$400	\$31,200
Headwall/wingwall	EA	2	\$6,000	\$12,000
Riprap w/geotextile fabric	CY	50	\$50	\$2,500
Pavement patch	SF	600	\$5	\$3,000
Restoration	LS	1	\$3,000	\$3,000
			Subtotal	\$57,700
			Contingency (20%)	\$11,540
			Total Estimated Construction	\$69,240
			Engineering, Legal, Administration (20%)	\$13,848
			US 31 Project Total	\$83,088
			SAY	\$80,000

SR 32 (Main Street) Culvert Replacement (J.M. Thompson Drain)

Channel Reshaping near culvert	LS	1	\$5,000	\$5,000
Sawcut pavement, excavation, culvert removal	LS	1	\$15,000	\$15,000
12' x 8' Reinforced Concrete Box Culvert	LF	200	\$650	\$130,000
Headwall/wingwall	EA	2	\$20,000	\$40,000
Riprap w/geotextile fabric	CY	100	\$50	\$5,000
Pavement patch	SF	1500	\$5	\$7,500
Traffic Control	LS	1	\$5,000	\$5,000
Restoration	LS	1	\$5,000	\$5,000
			Subtotal	\$212,500
			Contingency (20%)	\$42,500
			Total Estimated Construction	\$255,000
			Engineering, Legal, Administration (20%)	\$51,000
			US 31 Project Total	\$306,000
			SAY	\$310,000

TOTAL OF ALL COST ESTIMATES	\$8,490,000
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