

APPENDIX L
Construction Cost Estimate

CONSTRUCTION COST ESTIMATE

The construction cost estimate was generated based on the 30% conceptual plans which include the following items:

- Installation of a bulkhead and tie-back system
- Construction of a 10' multi-use asphalt path
- Replacement of the interceptor sanitary sewer
- Removing the existing Riverbed Street storm sewer
- Re-grading the site
- Realigning Franklin Avenue
- Constructing a new drainage system for the trail and hillside

Unit rates were used from ODOT's Estimator software, which places a price adjustment factor dependent on project location and quantity of material. Also, unit rates from projects that have been recently completed and constructed for NASA GRC Lewis Field in Cleveland, Ohio were used for storm sewer repairs and water main lining. The cost figures have been rounded in the report and reflect a conceptual future use plan and are subject to change based on future use of the site.

WATERMAIN REPLACEMENT

	Qty	Unit	Unit Cost	Total
16" Watermain (Cleaning & Reline)	325	FT	\$600	\$195,000
12" Watermain (Cleaning & Reline)	325	FT	\$400	\$130,000
Maintenance of Traffic	1	LS	\$25,000	\$25,000
Shoring	6500	SF	\$100	\$650,000
			TOTAL	\$1,000,000

RIVERBED STORM SEWER REPLACEMENT

	Qty	Unit	Unit Cost	Total
24" Conduit including bedding	1465	FT	\$80	\$117,200
30" Conduit including bedding	900	FT	\$90	\$81,000
36" Conduit including bedding	110	FT	\$150	\$16,500
Concrete Headwalls	20	CY	\$800	\$16,000
Excavation	10511	CY	\$20	\$210,222
Embankment	7007	CY	\$15	\$105,111
Manholes	8	EA	\$14,500	\$116,000
Catchbasins	6	EA	\$2,500	\$15,000
Testing, Inspection & Video	1	LS	\$132,000	\$132,000
			TOTAL	\$809,033

UTILITY POLE RELOCATION

	Qty	Unit	Unit Cost	Total
40' Utility Pole	18	EA	\$5,500	\$99,000
			TOTAL	\$99,000

BULKHEAD

	Qty	Unit	Unit Cost	Total
SKZ 31 Sheetpiling	172500	SF	\$70	\$12,075,000
SKZ 31 Sheetpiling	62100	SF	\$65	\$4,036,500
Tieback	230	EA	\$100	\$23,000
			TOTAL	\$16,134,500

RIVERBED SANITARY SEWER REPLACEMENT

	Qty	Unit	Unit Cost	Total
60" RCP	700	FT	\$500	\$350,000
Excavation	4444	CY	\$20	\$88,889
Embankment	14015	CY	\$15	\$210,222
Manholes	2	EA	\$14,500	\$29,000
Testing, Inspection & Video	1	LS	\$100,000	\$100,000
			TOTAL	\$778,111

GRADING AND HILLSIDE DRAINAGE

	Qty	Unit	Unit Cost	Total
6" PCPP	13800	FT	\$20	\$276,000
6" NPCPP	55200	FT	\$15	\$828,000
Porous backfill with filter	1000	CY	\$75	\$75,000
24" Conduit including bedding	500	FT	\$80	\$40,000
Excavation	40000	CY	\$30	\$1,200,000
Engineered light weight fill	40000	CY	\$50	\$2,000,000
Retaining Wall	500	FT	\$7,000	\$3,500,000
Manholes	4	EA	\$4,500	\$18,000
Seeding & Mulching	4000	SY	\$3	\$12,000
			TOTAL	\$7,949,000

FRANKLIN AVENUE

	Qty	Unit	Unit Cost	Total
Ashalt Surface Course (Full Depth)	62.5	CY	\$190	\$11,875
Ashalt Surface Course (Mill & Fill)	125	CY	\$180	\$22,500
Pavement Planing	3600	SY	\$4	\$12,600
Asphalt Intermediate Course	87.5	CY	\$135	\$11,813
Asphalt Base	400	CY	\$130	\$52,000
Aggregate Base	300	CY	\$45	\$13,500
Prime Coat	720	GAL	\$5	\$3,600
Tack Coat	360	GAL	\$4	\$1,440
Maintenance of Traffic	4	MTH	\$75,000	\$300,000
Curb, Type 6	2700	FT	\$20	\$54,000
Guardrail	2700	FT	\$15	\$40,500
Anchor Assemblies, Type E	2	EA	\$2,000	\$4,000
Parking Lot	34600	SF	\$10	\$346,000
Traffic Signal Modification	1	EA	\$110,000	\$110,000
Reline 24" Conduit	1600	FT	\$320	\$512,000
Excavation	50000	CY	\$30	\$1,500,000
Engineered light weight fill	60000	CY	\$50	\$3,000,000
Seeding & Mulching	6111	SY	\$3	\$18,333
			TOTAL	\$5,995,828

Trail Development

	Qty	Unit	Unit Cost	Total
Trail Development	1	LS	\$2,000,000	\$2,000,000
			TOTAL	\$2,000,000

Environmental Remediation

	Qty	Unit	Unit Cost	Total
Properties	6	EA	\$2,400,000	\$14,400,000
			TOTAL	\$14,400,000