

30-May-17

SANITARY SEWER (SAS) IMPROVEMENTS
PRELIMINARY CONSTRUCTION COST ESTIMATE

NO.	DESCRIPTION	AMOUNT
1	SAS Point Repairs (Total)	\$ 320,000
TOTAL PRELIMINARY CONSTRUCTION COST - SAS IMPROVEMENTS		\$ 320,000

*Estimate to replace entire public sanitary sewer system is approximately \$10,049,000.00

STORM SEWER (STS) IMPROVEMENTS
PRELIMINARY CONSTRUCTION COST ESTIMATE

NO.	DESCRIPTION	AMOUNT
1	STS Point Repairs (Total)	\$ 633,000
TOTAL PRELIMINARY CONSTRUCTION COST - STS IMPROVEMENTS		\$ 633,000

*Estimate to replace entire public storm sewer system is approximately \$7,381,000.00 (This estimate does not include installing new storm sewers on roads that do not currently have existing storm sewers).

**SANITARY SEWER (SAS) IMPROVEMENTS
PRELIMINARY CONSTRUCTION COST ESTIMATE**

30-May-17

NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
East St. Near Third St. (Hole, Soil Visible)					
1	8-Inch VCP Sanitary Sewer	10	LF	\$ 600	\$ 6,000
2	Backfill Material	9	CY	\$ 50	\$ 500
3	Asphalt Pavement Replacement	6	SY	\$ 200	\$ 1,200
					\$ 7,700
East St., Third St., New Fourth St., Chestnut St., Vine St., Second St., Fifth St. (Holes, Fractures, Cracks)					
4	8-Inch CIPP Liner	2600	LF	\$ 45	\$ 117,000
5	Service Lateral Reinstatement	80	EA	\$ 200	\$ 16,000
6	Service Lateral Connection Grouting	80	EA	\$ 500	\$ 40,000
7	Manhole Lining	170	LF	\$ 450	\$ 76,500
					\$ 249,500
Second St. Repair 1 (Broken Tee Connection)					
8	8"x6" VCP Sanitary Sewer Tee Connection (Including Spool Pieces)	1	EA	\$ 7,000	\$ 7,000
9	Backfill material	5	CY	\$ 50	\$ 300
10	Asphalt Pavement Material	5	SY	\$ 200	\$ 1,000
					\$ 8,300
Second St. Repair 2 (Broken Tee Connection)					
11	8"x6" VCP Sanitary Sewer Tee Connection (Including Spool Pieces)	1	EA	\$ 7,000	\$ 7,000
12	Backfill material	5	CY	\$ 50	\$ 300
13	Asphalt Pavement Material	5	SY	\$ 200	\$ 1,000
					\$ 8,300
Fifth St. Repair 1 (Broken Tee Connection)					
14	8"x6" VCP Sanitary Sewer Tee Connection (Including Spool Pieces)	1	EA	\$ 7,000	\$ 7,000
15	Backfill material	5	CY	\$ 50	\$ 300
16	Asphalt Pavement Material	5	SY	\$ 200	\$ 1,000
					\$ 8,300
Fifth St. Repair 2 (Broken Tee Connection)					
17	8"x6" VCP Sanitary Sewer Tee Connection (Including Spool Pieces)	1	EA	\$ 7,000	\$ 7,000
18	Backfill material	5	CY	\$ 50	\$ 300
19	Asphalt Pavement Material	5	SY	\$ 200	\$ 1,000
					\$ 8,300
PRELIMINARY CONSTRUCTION COST - SAS POINT REPAIRS					\$ 290,400
	CONTINGENCY	1	10%	\$ 29,000	\$ 29,000
PRELIMINARY CONSTRUCTION COST - SAS POINT REPAIRS					\$ 320,000

*Estimated costs reflect each improvement as an individual project and mobilization

**STORM SEWER (STS) IMPROVEMENTS
 PRELIMINARY CONSTRUCTION COST ESTIMATE**

30-May-17

NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
East St. (Broken Pipe)					
1	10-Inch VCP Storm Sewer	5	LF	\$ 1,500	\$ 7,500
2	Backfill Material	5	CY	\$ 50	\$ 300
3	Asphalt Pavement Replacement	6	SY	\$ 200	\$ 1,200
					\$ 9,000
New Fourth St. (Intruding Pipe, Buried Manhole)					
4	Raise Existing Manhole To Grade	1	EA	\$ 3,000	\$ 3,000
5	8-Inch VCP Storm Sewer	5	LF	\$ 1,000	\$ 5,000
6	Backfill Material	6	CY	\$ 50	\$ 300
7	Asphalt Pavement Replacement	7	SY	\$ 200	\$ 1,400
					\$ 9,700
New Fourth St. (Replace Incorrect Size Tee Connection)					
8	10-Inch VCP Storm Sewer	5	LF	\$ 800	\$ 7,000
9	10-Inch x 6-Inch Tee Connection	1	EA	\$ 1,000	\$ 1,000
10	Backfill Material	5	CY	\$ 50	\$ 300
11	Asphalt Pavement Replacement	5	SY	\$ 200	\$ 1,000
					\$ 9,300
New Fourth St. (Broken Pipe)					
12	10-Inch VCP Storm Sewer	50	LF	\$ 800	\$ 40,000
13	Backfill Material	44	CY	\$ 50	\$ 2,300
14	Asphalt Pavement Replacement	28	SY	\$ 200	\$ 5,600
					\$ 47,900
New Fourth St. Lining (Holes, Fractures, Cracks)					
15	10-Inch CIPP Liner	800	LF	\$ 50	\$ 40,000
16	Service Lateral Reinstatement	5	EA	\$ 200	\$ 1,000
17	Service Lateral Connection Sealing	5	EA	\$ 2,500	\$ 12,500
18	Manhole Lining	70	LF	\$ 450	\$ 31,500
					\$ 85,000
Third St. (Intruding Pipe)					
19	10-Inch VCP Storm Sewer	5	LF	\$ 1,500	\$ 7,500
20	Backfill Material	5	CY	\$ 50	\$ 300
21	Asphalt Pavement Replacement	5	SY	\$ 200	\$ 1,000
					\$ 8,800
Easement - High School (Deformed Pipe)					
22	18-Inch VCP Storm Sewer	155	LF	\$ 400	\$ 62,000
23	Backfill Material	138	CY	\$ 50	\$ 6,900
24	Grading and Seeding	1	LS	\$ 500	\$ 500
					\$ 69,400
Plum St. (Deformed Pipe)					
25	24-Inch CMP Storm Sewer	70	LF	\$ 700	\$ 49,000
26	Backfill Material	62	CY	\$ 50	\$ 3,200
27	Asphalt Pavement Replacement	39	SY	\$ 200	\$ 7,800
					\$ 60,000
Third St. Lining (Hole, Fractures)					
28	10-Inch CIPP Liner	400	LF	\$ 50	\$ 20,000
29	Service Lateral Reinstatement	4	EA	\$ 250	\$ 1,000
30	Service Lateral Connection Grouting	4	EA	\$ 500	\$ 2,000
31	Manhole Lining	20	LF	\$ 450	\$ 9,000
					\$ 32,000
Third St./Easement Through High School Lining (Hole, Fractures)					
32	18-Inch CIPP Liner	800	LF	\$ 85	\$ 68,000
33	Service Lateral Reinstatement	4	EA	\$ 250	\$ 1,000
34	Service Lateral Connection Grouting	4	EA	\$ 500	\$ 2,000
35	Manhole Lining	36	LF	\$ 450	\$ 16,200
36	New Precast Manhole	1	EA	\$ 5,000	\$ 5,000
					\$ 92,200
Gully From Eagle St. Through Lyondell Property (Fractures, Slight Deformity)					
37	24-Inch CIPP Liner	815	LF	\$ 120	\$ 97,800
38	Service Lateral Reinstatement	4	EA	\$ 250	\$ 1,000
39	Service Lateral Connection Grouting	4	EA	\$ 500	\$ 2,000
40	Manhole Lining	72	LF	\$ 450	\$ 32,400
					\$ 133,200
Gully From Building to Manhole 100052 (Fractures)					
41	15-Inch CIPP Liner	70	LF	\$ 75	\$ 5,300
42	Manhole Lining	10	LF	\$ 450	\$ 4,500
43	New Precast Manhole	1	EA	\$ 5,000	\$ 5,000
					\$ 14,800
York St. - Rehab Catch Basin					
44	Rehab Existing Catch Basin	1	EA	\$ 3,000	\$ 3,000
					\$ 3,000
SUBTOTAL PRELIMINARY CONSTRUCTION COST - STS POINT REPAIRS					\$ 575,000
	CONTINGENCY	1	10%	\$ 57,500	\$ 58,000
TOTAL PRELIMINARY CONSTRUCTION COST - STS POINT REPAIRS					\$ 633,000

*Estimated costs reflect each improvement as an individual project and mobilization

LAKE COUNTY DEPARTMENT OF UTILITIES
I/I INVESTIGATION - VILLAGE OF FAIRPORT HARBOR
STORM SEWER (STS) IMPROVEMENTS



STS CLEANING & INSPECTION
PRELIMINARY CONSTRUCTION COST ESTIMATE

30-May-17

NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	Mobilization	1	LS	\$ 5,000	\$ 5,000
Cleaning & Inspection of Remaining STS*					
2	Cleaning and CCTV Inspection of Storm Sewer Pipes and Catch Basin Laterals	30,900	LF	\$ 6	\$ 185,400
SUBTOTAL PRELIMINARY CONSTRUCTION COST - STS CLEANING & INSPECTION					\$ 191,000
		CONTINGENCY	1	10%	\$ 18,500
TOTAL PRELIMINARY CONSTRUCTION COST - STS CLEANING & INSPECTION					\$ 210,000

*Total storm sewer system pipe is estimated at 35,700 ft. For this investigation, LCSMD had 4,800 feet within and tributary to the pilot area cleaned and inspected

LAKE COUNTY DEPARTMENT OF UTILITIES
 I/I INVESTIGATION - VILLAGE OF FAIRPORT HARBOR
 SANITARY SEWER (SAS) AND STORM SEWER (STS)
 REPLACEMENT OF ENTIRE PUBLIC SYSTEMS
 PRELIMINARY CONSTRUCTION COST ESTIMATE



30-May-17

NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
Sanitary Sewer Quantity					
1	6-Inch VCP Sewer	898	LF	\$ 60	\$ 54,000
2	8-Inch VCP Sewer	38,706	LF	\$ 65	\$ 2,516,000
3	10-Inch VCP Sewer	3,093	LF	\$ 70	\$ 217,000
4	12-Inch VCP Sewer	6,217	LF	\$ 80	\$ 498,000
5	15-Inch VCP Sewer	251	LF	\$ 100	\$ 26,000
7	18-Inch VCP Sewer	8,035	LF	\$ 150	\$ 1,206,000
8	Sanitary Manholes	172	EA	\$ 7,000	\$ 1,204,000
9	Backfill	53,000	CY	\$ 35	\$ 1,855,000
10	Pavement Replacement & Restoration	33,000	SY	\$ 75	\$ 2,475,000
					\$ 10,051,000
Storm Sewer Quantity					
1	6-Inch PVC Sewer	5,000	LF	\$ 40	\$ 200,000
2	8-Inch PVC Sewer	5,000	LF	\$ 45	\$ 225,000
3	10-Inch PVC Sewer	6,000	LF	\$ 60	\$ 360,000
4	12-Inch RCP Sewer	7,700	LF	\$ 120	\$ 924,000
5	18-Inch RCP Sewer	6,000	LF	\$ 140	\$ 840,000
6	24-Inch RCP Sewer	5,000	LF	\$ 175	\$ 875,000
7	48-Inch RCP Sewer	1,000	LF	\$ 350	\$ 350,000
8	Storm Manholes	89	EA	\$ 4,000	\$ 356,000
9	Storm Catch Basins	330	EA	\$ 2,200	\$ 726,000
10	Backfill	30,000	CY	\$ 35	\$ 1,050,000
11	Pavement Replacement & Restoration	22,000	SY	\$ 75	\$ 1,650,000
					\$ 7,556,000
	SUBTOTAL PRELIMINARY SANITARY AND STORM SEWER COST				\$ 17,607,000
	CONTINGENCY		10%	\$ 1,760,700	\$ 1,761,000
	TOTAL PRELIMINARY SANITARY AND STORM COST				\$ 19,400,000

*Quantities for storm sewer are estimated as exact quantities are unknown.

*Pavement replacement estimated for all sewers; manholes; catch basins