

**Table A-1
Master Plan Cost Summary (Detailed)**

Present Value* of Capital Projects and Labor Needs

	Memo ID**	Item #	Critical Project or Program	Early Action Projects (Years 1-5)	Long-Term CIP (Years 6-20)	Additional City Staffing Needs (FTEs)	Total 20-year Cost
Sanitary Sewer	SA4	1	Complete Smoke Testing, Manhole Inspection and Sewer Televising in Priority Sewersheds	\$ 635,000	\$ -	-	\$ 635,000
	SA3	2	Manhole and Pipe Repairs Identified in SSES Memorandum	\$ 410,000	\$ -	-	\$ 410,000
	SA4	3	Arcadia / Broadmoor Rehabilitation Pilot Study	\$ 1,653,000	\$ -	-	\$ 1,653,000
	SA3	4	Post-Rehabilitation Flow Analysis	\$ 100,000	\$ -	-	\$ 100,000
	SA2	5	Hawthorne Collector Sewer Hydraulic Upgrade	\$ -	\$ 1,450,000	-	\$ 1,450,000
	SA5	6	Pump Station Control Upgrades	\$ 583,000	\$ -	-	\$ 583,000
	SA4	7	Wet Weather Storage Project (10 MG Tank)	\$ -	\$ 12,160,000	-	\$ 12,160,000
	N/A	8	Locust/Colton – Remaining Sewer Separation Projects (primarily sanitary sewer costs)	\$ 4,000,000	\$ 4,900,000	-	\$ 8,900,000
	N/A	9	Citywide Sanitary Sewer Rehabilitation Program***	\$ 16,250,000	\$ 39,250,000	2.50	\$ 55,500,000
	N/A	10	Pay off inter-fund advance	\$ 1,900,000	\$ -	-	\$ 1,900,000
SUBTOTAL (SANITARY)				\$ 25,531,000	\$ 57,760,000	2.50	\$ 83,291,000
Storm Sewer	ST4	11	Pond Inspection and Maintenance Program (Public and Private Ponds)	\$ 2,055,000	\$ 6,165,000	0.55	\$ 8,220,000
	ST5	12	Floodplain/Floodway Encroachment Program	\$ 375,000	\$ 1,125,000	0.25	\$ 1,500,000
	ST4	13	Urban Channel Retrofits	\$ 1,375,000	\$ 2,225,000	0.15	\$ 3,600,000
	ST5	14	Floodplain Remapping	\$ 330,000	\$ -	-	\$ 330,000
	ST5	15	Detention Pond Retrofits	\$ 450,000	\$ -	-	\$ 450,000
	ST4	16	Streambank Stabilization (Planning Areas 4, 7, and 8)	\$ -	\$ 5,550,000	0.10	\$ 5,550,000
	ST4	17	Remove Railroad Hydraulic Restriction (Planning Area 8)	\$ -	\$ 3,300,000	-	\$ 3,300,000
	ST3	18	Urban Stream Repairs (From Streambank Inventory) and Ongoing Stream Inspections	\$ 3,510,000	\$ 300,000	0.20	\$ 3,810,000
	ST4	19	Update Stormwater Ordinances	\$ 130,000	\$ -	-	\$ 130,000
	ST2	20	Storm Sewer Hydraulic Improvements	\$ 642,000	\$ -	-	\$ 642,000
	ST2	21	Sewer Separation Projects	\$ 100,000	\$ 3,354,000	0.20	\$ 3,454,000
	ST2	22	Storm Trunk Sewer to Sugar Creek	\$ -	\$ 2,000,000	-	\$ 2,000,000
	ST2	23	Regional Stormwater Detention Facilities (Ponds 1 and 2)	\$ -	\$ 2,900,000	0.10	\$ 2,900,000
	N/A	24	Pay off inter-fund advance	\$ 250,000	\$ -	-	\$ 250,000
SUBTOTAL (STORM)				\$ 9,217,000	\$ 26,919,000	1.55	\$ 36,136,000
Asset Management	AM2	25	ESRI/GIS/CCTV/MUNIS Tool Upgrades	\$ 280,000	\$ 158,000	-	\$ 438,000
	AM5	26	CCTV Inspection Program (Ongoing)	\$ 3,700,000	\$ 4,300,000	2.00	\$ 8,000,000
	AM5	27	Inventory Manholes/Structures	\$ 120,000	\$ -	-	\$ 120,000
	AM5	28	Manhole Inspection Program (Ongoing)	\$ 446,000	\$ 850,000	0.25	\$ 1,296,000
	AM5	29	FOG Inspection Program	\$ 1,200,000	\$ 3,700,000	2.50	\$ 4,900,000
	AM5	30	GIS Coordinator Position	\$ 450,000	\$ 1,500,000	1.00	\$ 1,950,000
SUBTOTAL (ASSET MANAGEMENT)				\$ 6,196,000	\$ 10,508,000	5.75	\$ 16,704,000
MASTER PLAN TOTAL				\$ 40,944,000	\$ 95,187,000	9.80	\$ 136,131,000

* Present value based on a 20-year cycle of all costs identified above (assumes discount rate and inflation rate will cancel each other out)
Assumed overhead/fringe burden for new City staff: 50%

** Technical Memoranda Designation (identified costs referenced in memoranda as listed in Table A-2)

*** Based on approximately 1% of sewer system rehab/replacement per year