

PROJECT NAME: Sanitary Sewer Rehabilitation

PROJECT ID: 8.01

PRIORITY: IMPORTANT

PROJECT TYPE: Utility Maintenance

TOTAL COST: \$20,000 annually as available

SUBMITTED BY: City Staff

YEARS IN CIP (Beginning year): 7 (2008)

DESCRIPTION:

Rehabilitate existing sanitary sewer to prevent stormwater infiltration and reduced wastewater capacity.

LOCATION MAP: Various Locations

Lining Completed - 823 feet of Second Street, 127 feet of Ann Arbor, 518 feet of Forest Street, 902 feet of Grand Street, 615 feet of Inverness Street, 145 feet of Alpine Street, Sewer lining- 302 feet on Ann Arbor Street and 433 feet on Cushing Ct, Sewer Grouting on Broad St, Forest St, Ann Arbor St, Edison St, Dover St, Second St, Fourth St, Alpine St, Central St, Grand St, Inverness St, Fifth St, Third St, and Hudson St. Approximately 10,000 LF lined in FY 09-10 for \$379,000.
Areas identified in report for future lining (by manhole number): 2nd from 304 to 307 and 302 to 303; Inverness from 309 to 313; 3rd from 331 to 332; 4th from 339 to 340 and 319 to 322; Edison from 595 to 597; Forest from 572 to 574; Alpine/Main from 566 to 568; NO 2011-12 Activity.

PROJECT JUSTIFICATION:

Value indicates the degree to which the project will help to: 0=Not Applicable 1=Somewhat Important 2=Important 3=Very Important

3	Protect health, safety, lives of citizens
3	Maintain or improve public infrastructure, facilities
2	Reduce energy consumption, impact on the environment
2	Enhance social, cultural, recreational, aesthetics opportunities
2	Improve customer service, convenience for citizens
12	TOTAL SCORE

BENEFICIAL IMPACTS:

Upgrade sewer infrastructure

MASTER PLAN AND/OR STUDY REFERENCE:

SRF Project Plan

SCHEDULE:

SCHEDULE JUSTIFICATION:

	Start		End	
	Month	Year	Month	Year
Study:		2008		2009
Design/Acquisition:		2009		2010
Construction:		2010		2018

SRF Funding has addressed all deficiencies permitted by funding. All others to be address as funding is available.

PROJECT COST DETAIL:

Sewer Funds

EXPENDITURES (in thousands)

Funding Source	Prior Yrs	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Beyond FY20	TOTALS
Federal Aid / SRF Loan	\$227							\$0
Grant - ARRA	\$152							\$0
Sewer Fund		\$20	\$20	\$20	\$20			\$80
								\$0
TOTALS	\$379	\$20	\$20	\$20	\$20	\$0	\$0	\$80

PROJECT NAME: WWTP Property Acquisition

PROJECT ID: 8.03

PRIORITY: DESIRABLE

PROJECT TYPE: Facility Needs

TOTAL COST: \$100,000 (TBD)

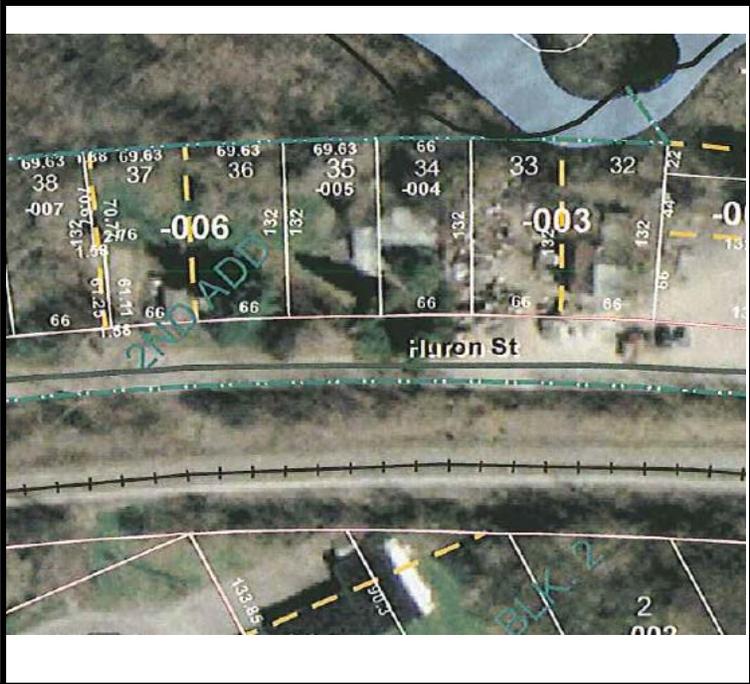
SUBMITTED BY: City Staff

YEARS IN CIP (Beginning year): 4 (2011)

DESCRIPTION:

Future property acquisition for WWTP expansion.

LOCATION MAP: Huron Street



PROJECT JUSTIFICATION:

Value indicates the degree to which the project will help to: 0=Not Applicable 1=Somewhat Important 2=Important 3=Very Important

2	Protect health, safety, lives of citizens
3	Maintain or improve public infrastructure, facilities
1	Reduce energy consumption, impact on the environment
1	Enhance social, cultural, recreational, aesthetics opportunities
2	Improve customer service, convenience for citizens
9	TOTAL SCORE

BENEFICIAL IMPACTS:

Meet the capacity needs of the City's WWTP.

MASTER PLAN AND/OR STUDY REFERENCE:

SRF Project Plan AND Master Plan

SCHEDULE:

SCHEDULE JUSTIFICATION:

	Start		End	
	Month	Year	Month	Year
Study:				
Design/Acquisition:		TBD		
Construction:				

When funding and properties become available purchase should be considered for WWTP expansion and capacity needs.

PROJECT COST DETAIL:

Property Acquisition		
Canter - Purchased in 2012		\$78,000
Stacey	Estimate based on 2011 assessment data	\$100,000

EXPENDITURES (in thousands)

Funding Source	Prior Yrs	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Beyond FY20	TOTALS
Sewer Fund	\$78							\$0
							\$100	\$100
								\$0
TOTALS	\$78	\$0	\$0	\$0	\$0	\$0	\$100	\$100

PROJECT NAME: Wastewater System - Equipment Assets

PROJECT ID: 8.04

PRIORITY: IMPORTANT

PROJECT TYPE: Equipment Maintenance

TOTAL COST: \$3.68 million

SUBMITTED BY: Asset Management

YEARS IN CIP (Beginning year): 4 (2011)

DESCRIPTION:

Wastewater System - Equipment Assets requiring replacement over the next 5 years in accordance with the Asset Management Plan as part of the SRF Project Plan.

PROJECT JUSTIFICATION:

Value indicates the degree to which the project will help to: 0=Not Applicable 1=Somewhat Important 2=Important 3=Very Important

2	Protect health, safety, lives of citizens
3	Maintain or improve public infrastructure, facilities
2	Reduce energy consumption, impact on the environment
1	Enhance social, cultural, recreational, aesthetics opportunities
2	Improve customer service, convenience for citizens
10	TOTAL SCORE

BENEFICIAL IMPACTS:

Asset maintenance and management, budget planning.

LOCATION MAP: Wastewater System

Wastewater System – Equipment Assets	Asset ID	Quantity	Unit Price	2010 Replacement Cost
Effluent Flow Meter	226	1	\$15,000	\$15,000
Floating Sludge Cover (Digester)	056A	1	\$700,000	\$700,000
Floating Sludge Cover (Gas Holder/Sludge Storage)	056B	1	\$700,000	\$700,000
Grit Air Lift Tank	003	1	\$40,000	\$40,000
Digester Feed Sludge Plunger Pumps	052	2	\$10,000	\$20,000
Digester Gas Collection	053	1	\$50,000	\$50,000
Ferric Chloride Storage Tank	050	1	\$5,000	\$5,000
High Pressure Air Tank	042	1	\$1,500	\$1,500
Roof Exhaust Fan (digester building)	058	1	\$2,000	\$2,000
Gas Recirculation System	057	1	\$75,000	\$75,000
Ferric Chloride Transfer Pump	049	1	\$1,500	\$1,500
Sodium Hypochlorite Pumps	046B	2	\$5,000	\$10,000
Sodium Bisulfite Pumps	047	2	\$5,000	\$10,000
Ferric Chloride Pumps	048	2	\$5,000	\$10,000
Grit Washer and Dewatering Screw	009A	1	\$40,000	\$40,000
Subtotal Wastewater System – Equipment Assets				\$1,680,000

SRF Sludge - All sludge related items were addressed in FY12-13 with SRF Funding.

MASTER PLAN AND/OR STUDY REFERENCE:

Asset Management / SRF Project Plan

SCHEDULE:

SCHEDULE JUSTIFICATION:

	Start		End	
	Month	Year	Month	Year
Study:		2011		2012
Design/Acquisition:		2011		2012
Construction:		2013		2017

SRF Project Plan to be completed for major items in accordance with MDEQ requirements in FY11-12. Construction on sludge items to take place in FY's 12-13 and 14-15. Remaining projects as funding permits.

PROJECT COST DETAIL:

SRF	\$3 million
Sewer Fund	\$680,000
See asset list above for detailed project list	

EXPENDITURES (in thousands)

Funding Source	Prior Yrs	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Beyond FY20	TOTALS
SRF	\$3,000							\$0
Sewer Fund					\$680			\$680
								\$0
								\$0
TOTALS	\$3,000	\$0	\$0	\$0	\$680	\$0	\$0	\$680

PROJECT NAME: Wastewater System - Building Assets

PROJECT ID: 8.05

PRIORITY: IMPORTANT

PROJECT TYPE: Equipment Maintenance

TOTAL COST: \$265,000

SUBMITTED BY: Asset Management

YEARS IN CIP (Beginning year): 4 (2011)

DESCRIPTION:

Wastewater System - Equipment Assets requiring replacement over the next 5 years in accordance with the Asset Management Plan as part of the SRF Project Plan.

PROJECT JUSTIFICATION:

Value indicates the degree to which the project will help to: 0=Not Applicable 1=Somewhat Important 2=Important 3=Very Important

- 2 Protect health, safety, lives of citizens
- 3 Maintain or improve public infrastructure, facilities
- 2 Reduce energy consumption, impact on the environment
- 1 Enhance social, cultural, recreational, aesthetics opportunities
- 2 Improve customer service, convenience for citizens

10 TOTAL SCORE

BENEFICIAL IMPACTS:

Asset maintenance and management, budget planning.

LOCATION MAP: Wastewater System

	Asset ID	Quantity	Unit Price	2010 Replacement Cost
Wastewater System – Building System Assets				
Main Building Interior	102	1	\$35,000	\$35,000
Digester Building Finish Materials	105	1	\$10,000	\$10,000
Utility Building Interior	108	1	\$10,000	\$10,000
Hydronic Circulation Pump	213	1	\$1,000	\$1,000
Unit Heater – Workshop	214	1	\$3,000	\$3,000
Unit Heater – Chemical Feed	220	1	\$3,000	\$3,000
Unit Heater – Chlorine	221	1	\$3,000	\$3,000
Unit Heater – Generator	222	1	\$3,000	\$3,000
Laboratory Room	110	1	\$80,000	\$80,000
Air Conditioning Unit (RTU-1)	201	1	\$5,000	\$5,000
Doors and Hardware (Main Building)	109	1	\$25,000	\$25,000
Cabinet Unit Heater	209	1	\$4,000	\$4,000
Motor Control Center	215	1	\$30,000	\$30,000
Roof Exhaust Fan – Lunch Room	203	1	\$2,000	\$2,000
Roof Exhaust Fan – Bathrooms	204	1	\$2,000	\$2,000
Roof Exhaust Fan – Fume Hood	205	1	\$2,000	\$2,000
Roof Exhaust Fan – Workshop	207	1	\$2,000	\$2,000
Energy Recovery Unit (RTU-2)	202	1	\$30,000	\$30,000
Bathroom Fixtures	111	1	\$13,500	\$13,500
Lunchroom	113	1	\$1,000	\$1,000
Subtotal Wastewater System – Building Assets				\$264,500

MASTER PLAN AND/OR STUDY REFERENCE:

Asset Management Plan

SCHEDULE:

SCHEDULE JUSTIFICATION:

	Start		End	
	Month	Year	Month	Year
Study:		2010		2011
Design/Acquisition:		2015		2016
Construction:		2015		2018

As funding permits projects will be completed. For budgeting purposes project funding has been allocated across years of CIP, likely to extend beyond 2018.

PROJECT COST DETAIL:

See above for detailed project list

EXPENDITURES (in thousands)

Funding Source	Prior Yrs	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Beyond FY20	TOTALS
Sewer Fund			\$20	\$20	\$20	\$205		\$265
								\$0
								\$0
								\$0
TOTALS	\$0	\$0	\$20	\$20	\$20	\$205	\$0	\$265

PROJECT NAME: Baker Road Sanitary Sewer Replacement

PROJECT ID: 8.06

PRIORITY: IMPORTANT

PROJECT TYPE: Utility Upgrades

TOTAL COST: \$400,000

SUBMITTED BY: City Staff

YEARS IN CIP (Beginning year): 3 (2012)

LOCATION MAP: Baker Rd between Hudson St and Dan Hoey Rd

DESCRIPTION:

Replace 2100 feet of old sanitary main from Hudson Street to Dan Hoey Road with a 24" main to provide additional capacity required for redevelopment along the Baker Road Corridor. Main installed with development of DBRP in late 80's. This project could/should be coordinated with DDA & City Streetscape Projects: ID1.04 and 6.04

PROJECT JUSTIFICATION:

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2	Reduce energy consumption, impact on the environment
2	Enhance social, cultural, recreational, aesthetics opportunities
2	Improve customer service, convenience for citizens

11 TOTAL SCORE

BENEFICIAL IMPACTS:

Sanitary service improvements needed to meet capacity requirements as area gets redeveloped and use increases.



MASTER PLAN AND/OR STUDY REFERENCE:

SRF Project Plan AND Master Plan

SCHEDULE:

SCHEDULE JUSTIFICATION:

	Start		End	
	Month	Year	Month	Year
Study:		2015		2015
Design/Acquisition:		2016		2016
Construction:		2017		2018

Project is a priority due to potential redevelopment implications, however should be coordinated with water main installation, potential regional storm management plans and/or DDA/City Streetscape projects ID 1.04 and 6.04.

PROJECT COST DETAIL:

Replace/Upgrade of sanitary sewer Sewer Fund \$400,000

EXPENDITURES (in thousands)

Funding Source	Prior Yrs	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20	Beyond FY20	TOTALS
Sewer Fund					\$400			\$400
								\$0
								\$0
								\$0
TOTALS	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$400