

Memorandum

date: December 12, 2017

- to: Heart of the Valley Metropolitan Sewerage District (memorandum) David Casper, President Commissioners Brian Helminger, Manager Kevin Skogman, Superintendent
- cc: (none)
- from: Strategic Municipal Services, Inc. Scott M. Schramm, PE, PLS David J. Schlichting, PE

re: WORKING MEETING Priority Action Plan - Interceptor System Heart of the Valley Metropolitan Sewerage District Outagamie County, Wisconsin

Summary

- A. November 14 Meeting Followup
- B. Funding Overview
- C. Proposed Planning Step 2

A. November 14 Meeting Followup

1. General Questions

2. Sonar Inspection of Syphon Crossings

- a. siphon barrels
 - 1) 6 inch
 - 2) 16 inch
 - 3) 30 inch

b. coordinated effort between

1)	Great Lakes TV Seal	jet / clean	~ \$5 - 10,000
2)	R&R Visual (Indiana)	2 days	~ \$10,000

c. estimated cost

~ \$15 - 20,000



B. Funding Overview

1. Summary of Funding Examples (Attachment B)

C. Proposed Planning Step 2

- 1. Summary of Major Tasks
- 2. Major and Sub-Tasks
- 3. Summary of Level of Effort and Services

Attachment C.1 Attachment C.2 Attachment C.3

We welcome the opportunity to further discuss these items at your convenience.

enc: as noted

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EXHIBITS



Exhibit B SUMMARY of FUNDING EXAMPLES



SUMMARY of BORROWING ALTERNATIVES and RATE INCREASES



Interceptor System Improvements

Heart of the Valley Metropolitan Sewerage District

Description	A	nnual payment		Notes	
	CWF (1)	STF (2)	Bank (3)		
SUMMARY					
	0.0597	0.0736	0.0794	(A/P) factor	
customers				TBV	
examples - rate adjustments				TBV	
examples - borrowing					
50,000	3,000				
100,000 annual principal annual interest	6,000 5,000 1,000	7,400 5,000 2,400	7,900	annual averages	
250,000 500,000 750,000 1,000,000 annual principal annual interest	14,900 29,900 44,800 59,700 50,000 9,700				
21,475,330	1,283,100			opinion of cost summary s.4 (11/05/17)	
Footnotes: (1) 20 years, ~1-3/4% (1.760) (2) 20 years, 4.0 % term and rates (4 th 1/4 2016) 2 - 5 years 3.0 6 - 10 3.5 11 - 20 4.0		Clean Water Fur State Trust Fund		was 2-5/8% (2.625) bonds)	
(3) 20 years, 4-7/8 % (rates need to be confirm	ned)	Bank Loan			

Exhibits C.1 SUMMARY of MAJOR TASKS



SUMMARY of PRE-DESIGN TASKS

Priority Action Plan - Interceptor System Heart of the Valley Metropolitan Sewerage District



A Opinion of Cost - Relocate Gravity Interceptor on Land

- review key planning reports including 1975 Facility Plan
- develop plan / profile drawings (north and south banks)
- review / discuss with large Utility Contractors for feasibility and costs
- Opinion of Cost planning level
- compare alternatives and advantages / disadvantages

B Agencies (continued permit preparations)

- FRSNA (Stark)
- wisDNR
 - NR 347 "pre-application" (Kincaid, Donoughe)
 - profile river bed at access points
 - test sediment from representative samples
 - Chapter 30 "pre-application" (Koehnke)

C Finance, Funding, Rates

- consider borrowing alernatives and impacts to rates
- EIF Clean Water Fund (CWF) why it's recommended

D Sulfides

- review historical Odalog data
- review sulfur / sulfide sample data

January - June 2018

- evaluate alternatives to "bind" wastewater sulfides in interceptor
- review CIPP and coating system resistance to MIC
- recommendations / Plan of Action

E Workshops / Working Meetings

- Rehabilitation Alternatives / Methods
- Alternative Relocate System to Land
- Finance, Funding, Rates
- Public Relations (develop Strategy)
- Review and Select Alternative

Commission Staff and Commission Commission Staff and Commission Staff and Commission



Exhibit C.2 MAJOR and SUB - TASKS



SUMMARY of PRE-DESIGN TASKS

Priority Action Plan - Interceptor System Heart of the Valley Metropolitan Sewerage District

A Opinion of Cost - Relocate Gravity Interceptor on Land

- review key planning reports including 1975 Facility Plan
 - review alternatives / routes
 - opinions of cost (construction, O&M)
 - capacity, projections (1975 present)
 - compare with present-day and future 50-year
- develop plan / profile drawings (north and south banks)
 - prepare 3D surface from County 2' contours
 - evaluate gravity system layout including
 - existing / proposed meter stations
 - river / syphon crossing(s)
 - bedrock (1975, 2004 and meter station plan drawings)
 - land ownership, easements, construction impacts
 - impacts to private shoreline property
 - shoreline disturbance "footprint"
 - evaluate alternatives to "reuse" interceptor for community stormwater drainage
- review / discuss with large Utility Contractors for feasibility and costs
 - alternatives
 - conventional excavation
 - directional drill / bore and jack

likely not an option, large diameter, flat grade / construction tolerances, shallow / surface

- Opinion of Cost planning level (north / south bank alternatives)
 - interceptor and structures
 - meter stations
 - river crossings
- Compare Alternatives and advantages / disadvantages
 - consider phasing construction for rehabilitation project components
 - determine planning level "cost of phasing"
- **B** Agencies (continued permit preparations)
 - FRSNA (Stark)
 - wisDNR
 - NR 347 "pre-application"
 - communications
 - <u>propose</u> uniform composite samples
 - profile river bed at access points
 - lab test sediment from representative samples
 - dredge disposal alternatives

Kincaid, Donoughe

Koehnke

Riverside and Central Parks dredge depths / work limits

Chapter 30 "pre-application"

reuse existing or construct new reuse existing or construct new



C Finance, Funding, Rates

- wisDNR CWF (likely best alternative)
- annual principal / interest
- review rate alternatives
 - evaluate budget impacts
 - evaluate community allocations

SUMMARY of PRE-DESIGN TASKS

Priority Action Plan - Interceptor System Heart of the Valley Metropolitan Sewerage District

D Sulfides

- review historical Odalog data
- review sulfur / sulfide sample data
 - evaluate alternatives to "bind" wastewater sulfides in interceptor
 - dosing locations
 - required improvements
 - annual costs
- review CIPP and coating system resistance to MIC
- recommendations / Plan of Action

E Workshops / Working Meetings

- Rehabilitation Alternatives / Methods Work Items, locations Opinion of Cost Schedules
- Alternative Relocate System to Land
- Finance, Funding, Rates
- Public Relations (develop Strategy)
 - communities
 - public along river banks adjacent to construction
 - website / electronic
- Review and Select Alternative

January - June 2018

Commission

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Strategic Municipal Services, Inc.





scope amendments

Exhibit C.3 SUMMARY of LEVEL of EFFORT and SERVICES



SUMMARY of PRE-DESIGN WORK ITEMS

Priority Action Plan - Interceptor System Heart of the Valley Metropolitan Sewerage District



Description	Summary		Notes
-	Hours	Value	
Summary	392	48,380	
Opinion of Cost - Relocate Gravity Interceptor on Land			
• review key planning reports including 1975 Facility Plan	36	4,620	
• develop plan / profile drawings (north and south banks)	102	11,760	
• review / discuss with large Utility Contractors	24	2,760	
• Opinion of Cost - planning level	56	6,500	
• compare alternatives	12	1,380	
 B Agencies (continued permit preparations) FRSNA wisDNR 	92	12,600	
C Finance, Funding, Rates	24	2,820	
D Sulfides	66	7,680	
 Workshops / Working Meetings Rehabilitation Alternatives / Methods Alternative - Relocate System to Land Finance, Funding, Rates Public Relations (develop Strategy) Review and Select Alternative 	58	7,320	
Strategic Municipal Service	es, Inc.		