

1.0 Executive Summary

The purpose of this report is to develop a Long Term Control Plan (LTCP) for the Village of Middleport, which upon implementation of the recommendations will eliminate and/or control existing combined sewer overflows (CSOs) to the Ohio River.

This LTCP for the Village of Middleport contains the following components:

1. Sewer system characterization and monitoring plan
2. Sewer system operational plan including nine minimum controls
3. Control alternative identification and evaluation
4. Financial affordability analysis
5. Implementation schedule
6. Public participation plan

A compliance inspection of the Village's treatment plant and combined sewer system was performed on April 20, 2006 by the Ohio EPA, Division of Surface Water. The Ohio EPA requested submission of a LTCP within six months from receipt of the compliance inspection letter. Renewal of the Village's NPDES Permit No. 0PB00025, which expired on June 30, 2005 is pending submission of a LTCP. It is anticipated that the findings and recommendation of the LTCP will be incorporated into the NPDES permit, Part I, C - Schedule of Compliance.

It is recommended through preparation of this LTCP that the Village proceed with implementation of 1) enhancements to the nine minimum controls, 2) selected long term control alternative, and 3) an identified public participation plan.

The nine minimum controls outlined in the Village's current operational plan were reviewed as part of the LTCP and enhancements have been identified to provide the Village with additional strategies to better achieve these controls. The following enhancements have been identified in this LTCP for implementation.

- Conduct a public meeting to review the findings and recommendations of the Final Draft version of the LTCP; the public participation plan section of this LTCP further explains these activities.
- Prepare and distribute an informational flyer to all Village residents; flyer to contain meeting announcement, information on CSOs, importance of pollution and litter prevention, and recycling information.
- Re-install notification signs at the 25 year flood elevation for each active CSO discharge location and the recreational boat ramp on First Street.
- Utilize Ohio Rural Water Association for televising of any combined sewers as the need arises during routine system operation and maintenance.

- The Village's monitoring and reporting program shall be modified to include a tethered float for monitoring of CSO activity; this activity can be installed and inspected at ground surface.
- Purchase additional jetter cleaning equipment.

The viable, long-term alternatives that were evaluated included sewer separation through construction of a new sanitary sewer, and conveyance and treatment. Conveyance and treatment was the selected alternative from both technical and financial standpoints. The following is a summary of the project costs for the selected alternative.

Construction Items	Quantity	Unit	Installed Unit Price	Total Costs
24-inch Gravity Sewer Pipe	3650	L.F.	\$200	\$730,000
Manholes	9	Ea.	\$3,000	\$27,000
12-inch Force Main/Pressure Sewer	8900	L.F.	\$50	\$445,000
Mill Street Pump Station Upgrade	1	L.S.	\$75,000	\$75,000
Park Street Pump Station Upgrade	1	L.S.	\$150,000	\$150,000
Influent Metering Structure at Plant	1	L.S.	\$75,000	\$75,000
Effluent Weir Modification	1	L.S.	\$50,000	\$50,000
Chlorine Feed Modifications	1	L.S.	\$50,000	\$50,000
Rock Excavation	200	C.Y.	\$100	\$20,000
Total Construction Cost				\$1,622,000
Contingency			20%	\$324,400
CCTV Inspection of Interceptor Sewer	3650	L.F.	\$5.00	\$18,250
Flow Monitoring and XPSWMM Modeling				\$130,000
Interceptor Sewer Atlas				\$50,000
Engineering and Construction Services			15%	\$243,300
Administration/Legal			1%	\$16,250
Land/Easements	5	acres	\$3,000	\$15,000
TOTAL PROJECT COST				\$2,419,200

An important part of a LTCP is to identify and outline activities included in a public participation plan. The purpose of a public participation plan is to educate the residents of Middleport on the impacts of CSOs to the environment and the LTCP process used to eliminate or control those overflows. The following is a list of the identified public participation activities to be implemented by Middleport.

- Distribute via mail an informational handout regarding information on CSOs and information about the nine minimum control techniques.
- Distribute via mail a public meeting notice to each sewer customer in the Village.
- Advertise public meeting notice in the local newspaper and availability of LTCP for review.
- Provide copy of LTCP for review by public.
- Conduct public meeting to review the draft LTCP including background information, nine minimum controls, alternative selection, financing plan and implementation schedule; receive feedback on LTCP.
- Schedule subsequent council meeting to discuss feedback and approve LTCP.
- Install CSO discharge location notification signs at 25 year flood elevations.
- Install notification sign at public boat ramp.

An implementation schedule has been prepared for the tasks associated with the long-term control alternative, nine minimum control enhancements, and public participation plan. The Village shall implement these activities and/or improvements in accordance with the following tables.

Selected Alternative Implementation Schedule

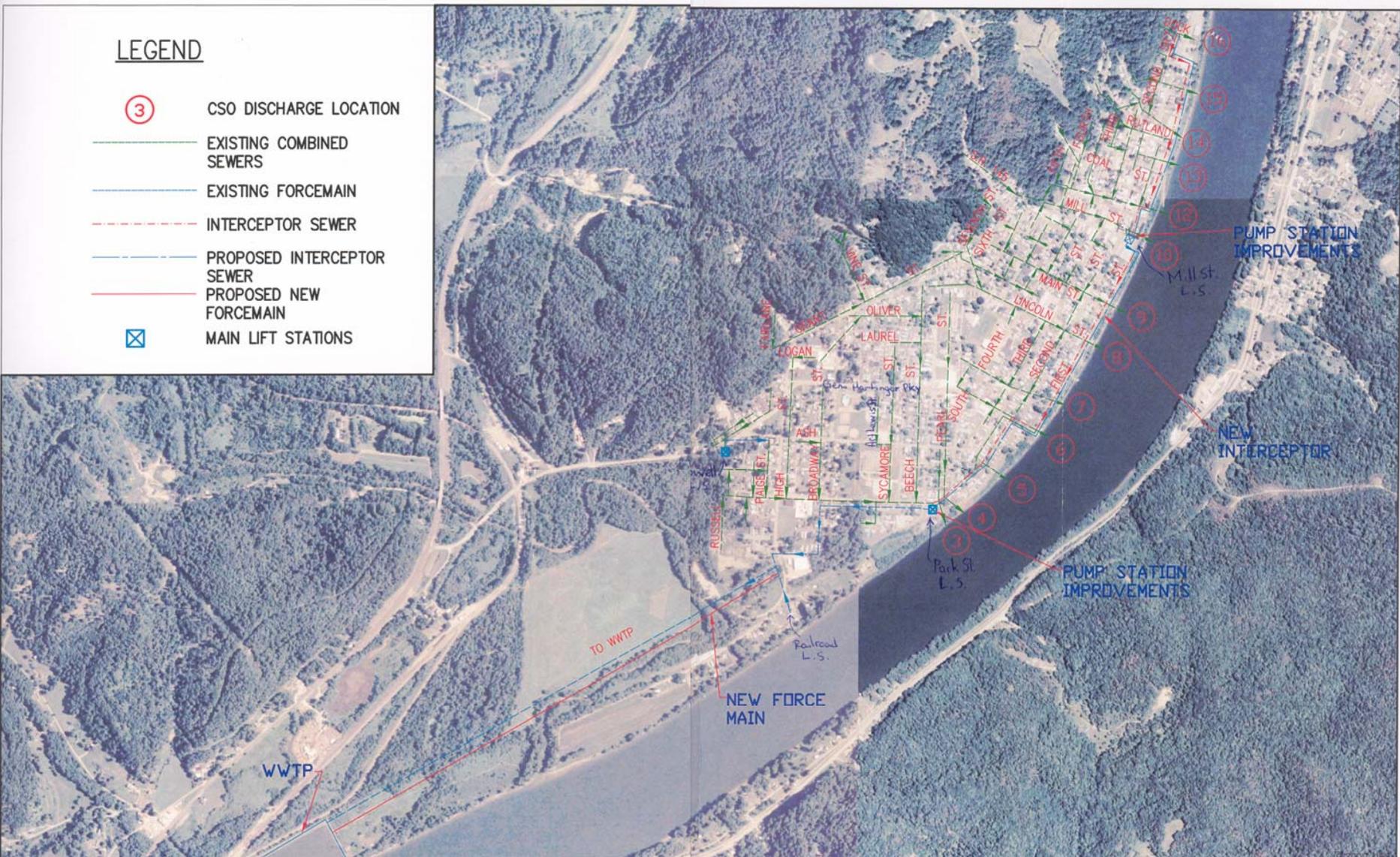
Item	Start	Complete
Village Review and Adoption of LTCP	June-2007	September-2007
Ohio EPA Review and Approval of LTCP	June-2007	September-2007
Obtain Interim Project Financing	October-2007	December-2007
Interceptor CCTV and Condition Assessment	January-2008	April-2008
Flow Monitoring and XPSWMM Modeling	March-2008	December-2008
Final Engineering Design and Construction Plan Preparation	January-2009	November-2009
Ohio EPA Review and Approval of Plans	November-2009	February-2010
Bidding and Contract Award	March-2010	May-2010
Construction & System Start-Up	June-2010	August-2011

Public Participation Plan and Nine Minimum Control Enhancements – Implementation Schedule

Item	Start	Complete
Distribute Public Meeting Notice and Newspaper Advertisement	June 2007	July 2007
Distribute Informational Handout	June 2007	July 2007
Draft LTCP Review Period	June 2007	August 2007
Conduct Public Meeting	August 2007	
Village Council Meeting to Approve LTCP	September 2007	
Install CSO Discharge Location Signs and Boat Ramp Sign	September 2007	November 2007
Purchase Additional Cleaning Equipment	September 2007	November 2007
Install Tethered Floats in Diversion Manholes	September 2007	November 2007

LEGEND

- 3 CSO DISCHARGE LOCATION
- EXISTING COMBINED SEWERS
- EXISTING FORCEMAIN
- INTERCEPTOR SEWER
- PROPOSED INTERCEPTOR SEWER
- PROPOSED NEW FORCEMAIN
- ⊗ MAIN LIFT STATIONS



PROJECT	VILLAGE OF MIDDLEPORT	FCP
SUBJECT	CONVEYANCE AND TREATMENT	ALTERNATIVE GENERAL LAYOUT
DRAWN BY	LDH	CHECKED BY TM

JOB NO.	14575545
DATE	05/15/07
SHEET NO.	5

