EXECUTIVE SUMMARY

PDG has prepared this Combined Sewer System Long-Term Control Plan on behalf of the Village of **Green Springs**. This Long-Term Control Plan submittal to the Ohio EPA does fulfill a requirement of the Village's NPDES permit along with state and federal regulations. PDG's objective was to evaluate and justify the most efficient and cost effective alternative for complying with Ohio's CSO Strategy.

Taking all things into account including, but not limited to, the Village's philosophy, proposed land use projections, antidegradation issues, alternative costs, and timing of the alternative projects brought the Village to the conclusion that the best approach for **Green Springs** would be to complete as Phase 1 a Partial Sewer Separation as illustrated in Alternative No. 1A (Table 13) and then evaluate storm water removed and then proceed with Phase 2 which would be Alternative No. 5 (Table 18) regional connection to Clyde. If the regional connection to Clyde is later determined not to be the best approach after completion of Phase 1, then the Village will pursue Alternative No. 4, Wastewater Treatment Plant Improvements. The estimated costs for each phase is listed as follows:

Phase 1 - Alternative No. 1A	$1,135,746.50
Phase 2 - Alternative No. 5	$3,092,586.75

This approach is estimated to take ten (10) years once this LTCP has been approved. During the period of time, it is suggested that the Village consider additional sewer evaluation work and residential inspections in order to assure as much storm water will be removed from the "proposed" sewer system. Also, the Village requests that during the 10-year completion schedule, the existing wastewater lagoon treatment facility be given an interim effluent limit.

GREEN SPRINGS LTCP

In October of 2005 a revision to the Green Springs LTCP was submitted to the Ohio EPA by Poggemeyer Design Group, Inc.. This revision reviewed a number of alternatives summarized below;

Alternative No. 1- **$7.7 Million**

Storm and Sanitary Sewer Separation with CSOI elimination and Upgrade of WWTP Facilities.

*****Alternative No. 1A-** **$4.0 Million**

Partial Sewer Separation via Sanitary Sewer Evaluation/ Rehabilitation, WWTP Improvements, and CSO Elimination

*****Alternative No. 2-** **$4.0 Million**

Combined Sewer Collection and Secondary Treatment (Oxidation Ditch).

*****Alternative No. 3-** **$3.0 Million**

Combined Sewer Collection with Primary and Secondary Treatment up to 0.64 MGD peak with EDI "IS" Lagoon System, Excess flows up to 1.0 MGD peak to obtain Primary Treatment followed by Disinfection.

*****Alternative No. 4-** **$3.3 Million**

Combined Sewer Collection with Primary and Secondary Treatment up to a 1.3 MGD peak with an EDI "IS" Lagoon System.

*****Alternative No. 5-** **$3.1 Million**

Regional Connection to Clyde

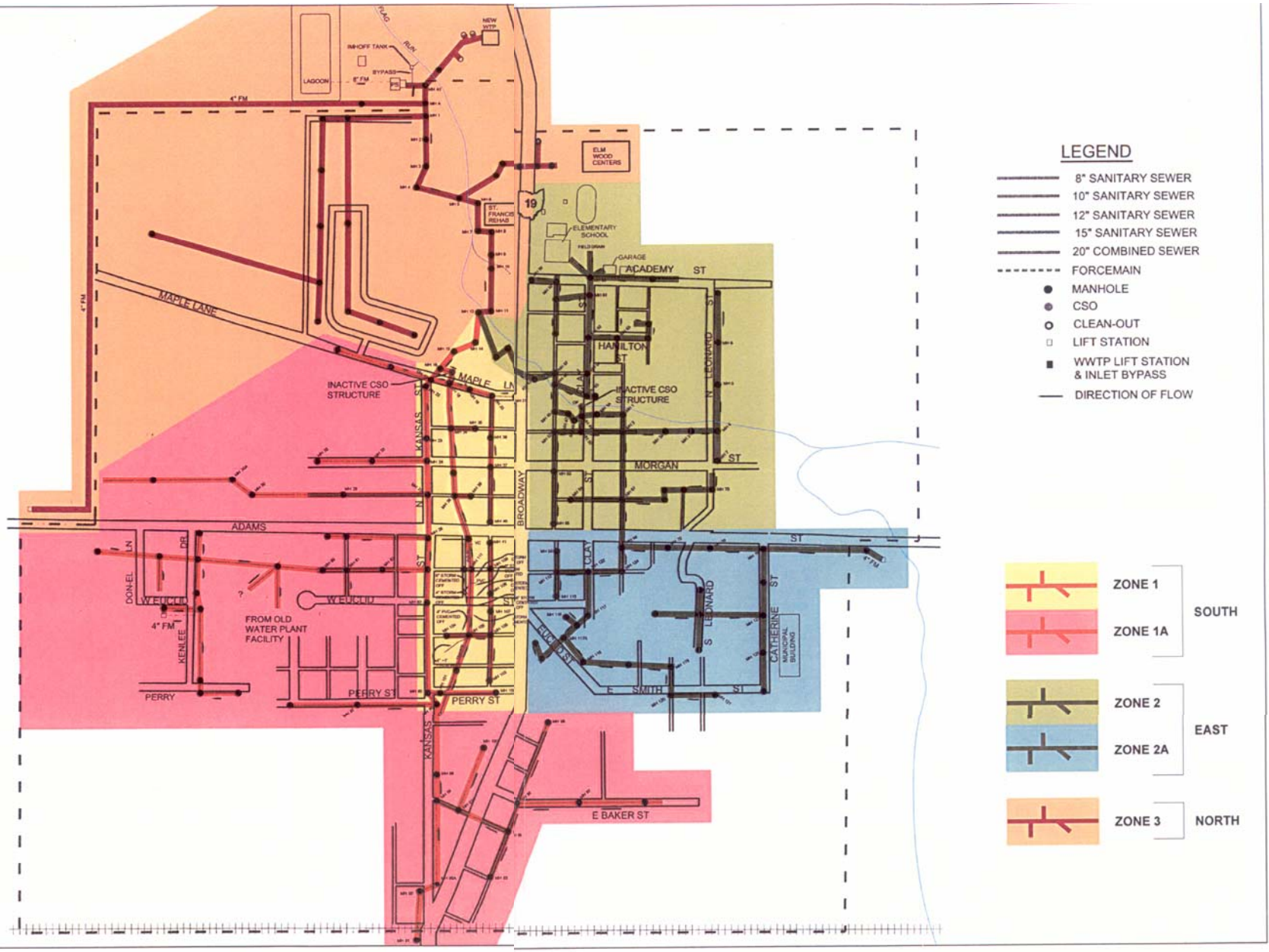
****Parallel Interceptor Sewer was proposed for this Alternative. The Cost for the Interceptor Sewer was listed as $275,000 and not reflected in the Alternative price.*

Alternative No.5 was chosen including the partial sewer separation, as listed within Alternative 1A. Upon completion of the Partial Sewer Separation the LTCP recommended the regional connection to Clyde, subject to the negotiating of reasonable rates. The total cost for the entire recommendation was approximately $4.9 Million between the Village and its homeowners. This recommendation was selected to eliminate the remaining CSO on the Green Springs system and improve Wastewater Treatment.

This Addendum has been included with the October 2005 Revision of the LTCP to allow for slight modifications of the LTCP control projects as well as to define those controls. Therefore, the following is offered as the Village of Green Springs revised LTCP Implementation Schedule that will allow for the elimination of the remaining CSO located at the WWTP Imhoff Tank. The Implementation Schedule is followed by a brief summary of each of the proposed controls.

Project Name	Completion Year	Projected Cost
Zone 1 (Sewer Investigation and Downspout Program)	2007	$20,000
Green Springs Transfer Station (Regional Connection To Clyde)	2008	$3,000,000
Zone 1A (Sewer Investigation and Downspout Program)	2008	$20,000
Kansas Street Sewer Separation Improvements	2009	$250,000
Zone 1A (Sewer repairs and cross connection Removals)	2009	$100,000
Zone 2 (Sewer Investigation and Downspout Program)	2009	$20,000
Zone 2 (Sewer repairs and cross connection Removals)	2010	$100,000
Zone 2A (Sewer Investigation and Downspout Program	2010	$20,000
Zone 2A (Sewer repairs and cross connection Removals)	2011	$100,000
Zone 3 (Sewer Investigation and Downspout Program	2011	$20,000
Zone 3 (Sewer repairs and cross connection Removals)	2012	$100,000
Sewer Separation Project To be Determined based on sewer investigations	2013	$250,000
	Total	$4,000,000

A map has been included with this Addendum. The map divides the Village's Collection System into five zones; Zone 1, Zone 1A, Zone 2, Zone 2A, and Zone 3.



GGJ inc consulting engineers

GREEN SPRINGS TO CLYDE SANITARY SEWER

PREPARED BY: