SEWERAGE
APPROVED
OHIO
AS
LET
HEREIN

I. EXECUTIVE SUMMARY

The *Combined Sewer System Long-Term Control Plan* (CSS-LTCP) was developed for the City of Norwalk as required by the current National Pollutant Discharge Elimination System (NPDES) Permit issued to the City on August 1, 2002. This Plan follows the development of the City's Combined Sewer System Operational Plan, the Operation and Maintenance Manual for Sanitary Sewer Collection System and the Combined Sewer System Characterization Study.

The City has continued to develop and improve management and operation of its combined sewers in the years preceding this Plan. More than $6 million of sewer improvements have been constructed since 1996. Although not quantified in this Plan's analyses, it is believed that combined sewer overflows have already been significantly reduced by these efforts.

The goals for the Norwalk CSS-LTCP are consistent with the State of Ohio Combined Sewer Overflow Strategy. The approach used to develop the City's LTCP is known as the "presumptive" approach because it presumes that attainment of Water Quality Standards will not be precluded if the following levels of CSO control are achieved.

1. The number of overflow events per year total six or fewer, and
2. 85% of the combined sewage volume in the combined sewer system is captured for treatment.

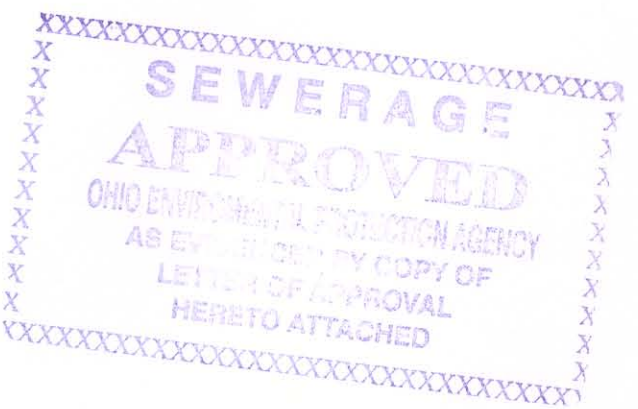
Preliminary designs for improvements at each of the four CSO's and at the wastewater treatment plant (WWTP) were developed based on this control strategy and are presented in Chapter V. The individual projects and associated total project costs were evaluated in a matrix to identify the best, overall alternative for CSO control. Based on cost and non-cost considerations, the recommended alternative is to construct $12.6 million in improvements that include the following:

1. Washington Street CSO No. 1 – Construct a new trunk sewer to transport combined sewage flow to the WWTP for treatment and/or storage. Overflows would be reduced within the State goals.
2. Cline Street CSO No. 2 – Construct a new trunk sewer to transport combined sewage flow to the WWTP for treatment and/or storage. Overflows would be reduced within the State goals.
3. Pleasant Street CSO No. 3 – Complete additional sewer separation improvements and pumping station improvements and eliminate the CSO.

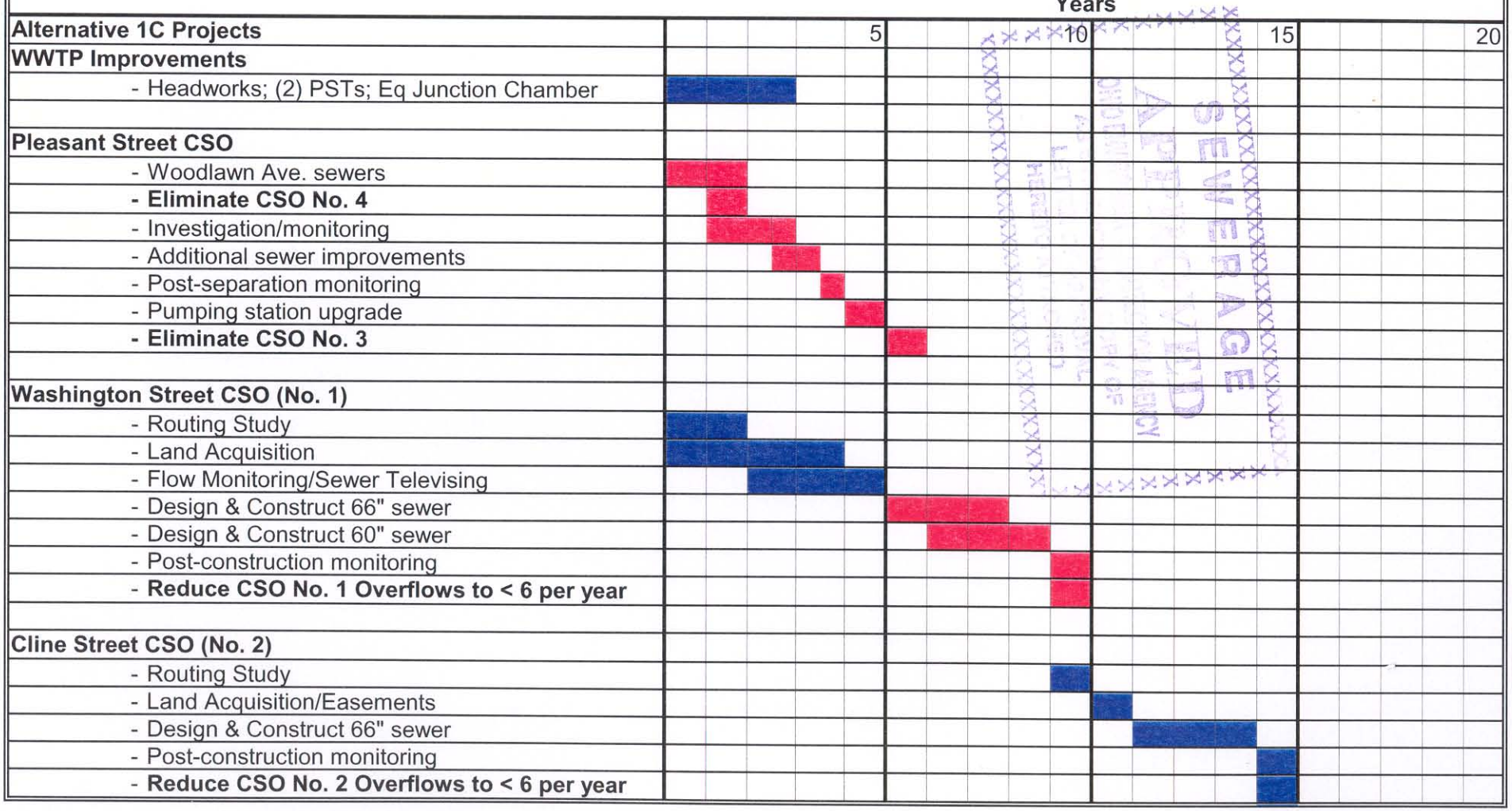
4. Woodlawn Avenue CSO No. 4 – Complete separation of sewers and eliminate the CSO.

5. Wastewater Treatment Plant – Construct an expansion of the headworks, primary treatment facilities and equalization junction chamber to accommodate transported peak combined sewage flows.

The proposed improvements were prioritized. An implementation schedule is provided in Chapter VI. It is proposed to complete the constructed improvements to the combined sewer system over a 15-year period. CSO No. 4 will be eliminated by year 2. CSO No. 3 will be eliminated by year 6. CSO Nos. 1 and 2 will be controlled to six or fewer overflows per year.



NORWALK, OHIO
COMBINED SEWER SYSTEM
LONG-TERM CONTROL PLAN
TABLE VI-2
IMPLEMENTATION SCHEDULE



* WITH CRITICAL PATH SHOWN IN RED

WWTP
(IMPROVEMENTS
NECESSARY)

TRUNK
SEWER

TRUNK
SEWER

CLINE STREET
CSO # 2

WASHINGTON STREET
CSO # 1

FORCE MAIN TO
WWTP TRUNK
SEWER DOWNSTREAM
OF CSO #1

UPGRADE
PLEASANT STREET
LIFT STATION, CSO # 3
(CSO TO BE ELIMINATED)

WOODLAWN AT
MADISON CSO # 4
(TO BE ELIMINATED)

LS (private)
Private sewer & lift station

LS #1
LS #2
LS #3
LS #4
LS #5
LS #6
LS #7
LS #8
LS #9
LS #10
LS #11

N

1" = 1000'

LEGEND

- PROPOSED FORCE MAIN
- PROPOSED SEWER SEPARATION
- PROPOSED TRUNK SEWERS
- SEPARATE SANITARY SEWERS CONVEYING COMBINED SEWAGE
- COMBINED SEWERS
- SANITARY SEWERS
- WASHINGTON STREET CSO AREA
- CLINE STREET CSO AREA
- WOODLAWN/MADISON CSO AREA
- PLEASANT STREET CSO AREA
- LS = LIFT STATION
- COMBINED SEWER OVERFLOW

SEWERAGE
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OHIO EPA
AS-1-88 (P) SPECIAL

EXHIBIT N
RECOMMENDED ALTERNATIVE SYSTEM MAP
NORWALK, OHIO

FINKBEINER, PETTIS & STROUT, INC.
CONSULTING ENGINEERS
AKRON, OHIO
2004