

SSMP
ELEMENT 5 – Design and
Performance Standards
APPENDIX 5.1

STANDARDS FOR INSTALLATION,
REHABILITATION, AND REPAIR



IMPROVEMENT PLANS

Improvement plans shall be on 24" x 36" standard plan sheets. Drawings to become the property of the City and shall have the standard City title block located in the bottom right-hand corner. Layout sheets shall be on plan and 3-line profiles. As-built drawing to be provided. Approval signature shall be City Engineer.

SANITARY SEWERS

1. Design criteria (vitrified clay pipe)
 - a. Coefficient of friction "n" = 0.013
 - b. Minimum velocity = 2 feet per second
 - c. Maximum velocity = 10 feet per second
 - d. Flow factors

Land Use	Peak Design Flow Factor (cfs/acre)
single family	0.0065
multi family	0.0115
commercial	0.00685
light industrial	0.0080
heavy industrial	0.0100
other	determined individually

Design shall include the full peak flow for the contributory area

2. Slopes of collector lines

<u>Size</u>	<u>Slope (min)</u>
8"	0.44%
10"	0.33%
12"	0.26%
15"	0.19%
18"	0.12%
21"	0.10%
24"	0.08%
27"	0.068%

3. Laterals
 - a. Laterals serving single family residence – 6"
 - b. Laterals serving multi family residents – 6"
 - c. Minimum cover at property line – 3-1/2'
 - d. Cleanout required at property line
4. Minimum size main
 - a. Residential areas – 8"



- b. Commercial and industrial areas - 8"
5. Easements – minimum 10 feet wide
 6. Normal location in street
 7. Manhole spacing – 300 feet apart maximum
 8. Minimum cover over main – 5 feet
 9. Manholes to be eccentric
 10. Minimum clearance of 1' shall be maintained between the sewer and crossing pipes
 11. Allow 0.2 foot drop around a 90° bend in manhole
 12. Provide stubs for future extensions
 13. Change direction or size only at a manhole
 - 13a. Minimum radius 300' with approval by City Engineer
 14. Flushing inlets are required on all deadend lines – whether in a cul-de-sac or at a deadend street except where terminated at a manhole. Flushing inlets shall be located not more than 150' from a manhole. Lines shall be constructed through the development to upstream properties shall include capacity for the upstream area.
 15. Drop manholes shall be required where sewer lines do not channelize through the bottom of manhole.