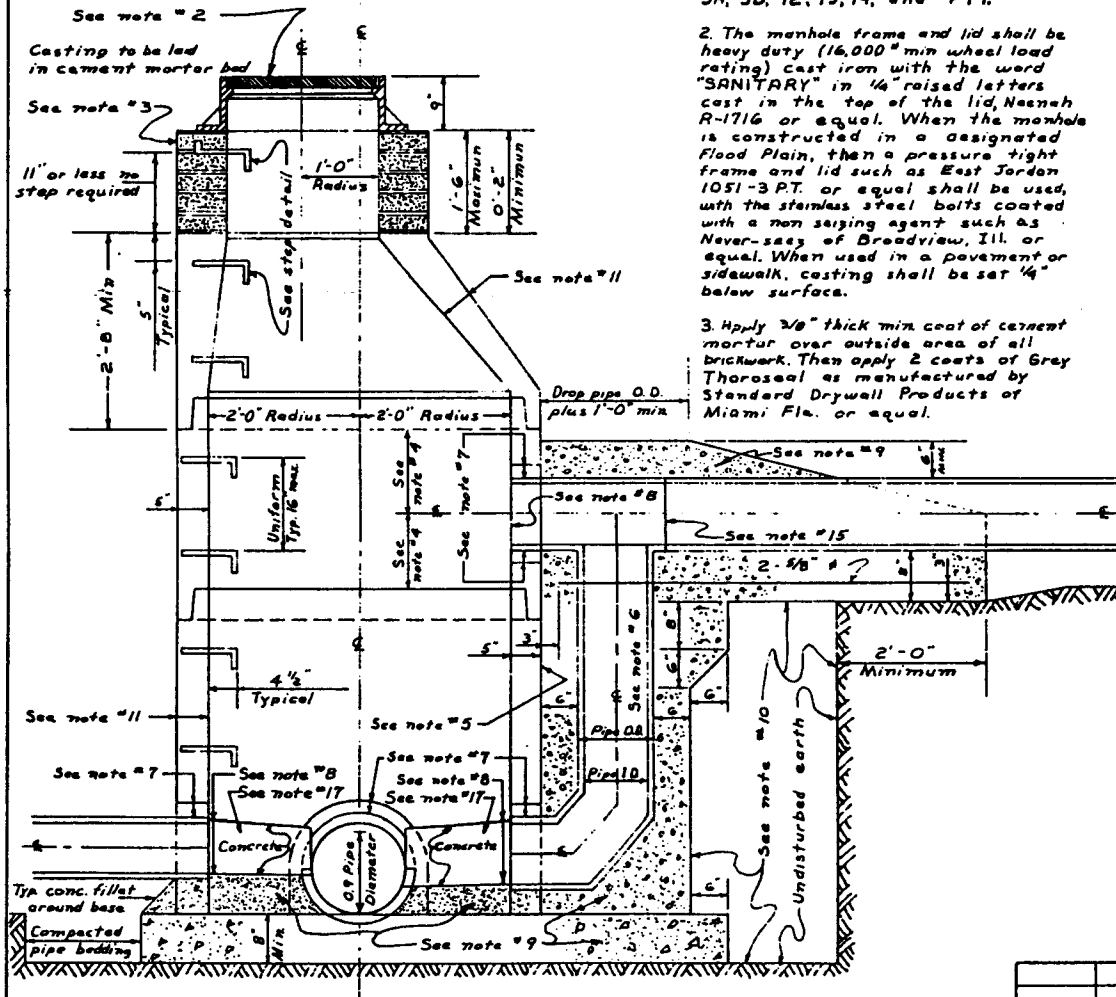


'NOTE - DROP MANHOLES SHALL BE USED WHEN THE INVERT OF THE INFLOW SEWER IS 0.6 FEET OR MORE ABOVE THE MANHOLE INVERT. DROP MANHOLE SHALL BE CONSTRUCTED WITH OUTSIDE DROP CONNECTION.

2' (PER EPA)



TYPICAL SECTION THROUGH E's
NO SCALE

NOTES

1. Additional requirements maybe found in the detailed CONSTRUCTION AND MATERIALS SPECIFICATIONS for the CITY OF ELYRIA, dated May 1, 1978 or later, under some or more of the following items, 1, 1B, 2, 3A, 3B, 12, 13, 14, and 499.

2. The manhole frame and lid shall be heavy duty (16,000# min wheel load rating) cast iron with the word "SANITARY" in 1/4" raised letters cast in the top of the lid. Neenah R-1716 or equal. When the manhole is constructed in a designated Flood Plain, then a pressure tight frame and lid such as East Jordan 1051-3 P.T. or equal shall be used, with the stainless steel bolts coated with a non searing agent such as Never-seaz of Broadview, Ill. or equal. When used in a pavement or sidewalk, casting shall be set 1/4" below surface.

3. Apply 3/8" thick min coat of cement mortar over outside area of all brickwork. Then apply 2 coats of Grey Thoroseal as manufactured by Standard Drywall Products of Miami Fla. or equal.

4. Incoming sewer pipe shall not be less than 1/2 pipe O.D. + 4" from M.H. construction joints. The height of vertical M.H. sections used shall be selected so as to meet this requirement.

5. M.H. surface outside diameter shall be clean and scored to insure bond between M.H. and drop structure.

6. All pipe shall be Vitrifired Clay ASTM C-700-78 and joints C-425-77. Drop structure pipe and fittings shall be installed bell end up except tee with the cut piece, if required, located just under tee.

7. Pipe openings in precast sections shall be cast in at the time of manufacture, or field cut as recommended by the manufacturer. The contractor shall furnish the manufacturer's certification that structural requirements are met with method of providing pipe openings used. Space between pipe O.D. and precast M.H. shall be 2" max. and 3/4" min. This space shall be filled and sealed from precast O.D. inward. The first 4 1/2" to 4 3/4" shall be filled with cement mortar and the last 1/2" to 1/4" sealed with Hydraulic Cement such as Water Plug as manufactured by Standard Drywall Products of Miami, Fla. or equal

8. All vitrifired clay pipe entering the M.H. shall be cut to length as required. The M.H. floor shall slope up 1" per 12" from the 0.9 diameter point of the lowest pipe, with all sidewalls vertical from the spring line up. All areas below the spring line shall be of the same radius as the incoming pipe. The M.H. inverts shall conform to the slope table below.

SLOPE = $K(\frac{V}{66})$ or 0.02 whichever is greater

V = incoming pipe velocity
G = 32.16 Ft. Per. Sec.

Degree of pipe deflection	K Values
0° to 22.5°	0.1
22.5° to 45°	0.2
45° to 67.5°	0.3
67.5° to 90°	0.4
90° to 112.5°	0.6
112.5° to 135°	1.0

NOTES continued DWG 1-603

CITY OF ELYRIA, OHIO
ENGINEERING DEPARTMENT

JUNCTION & DROP SAN. M.H.
FOR PIPE SIZES 24" & UNDER

M.M.	2-19-93	DWN. BY	W.K.F.	DATE	Jan 98	DRAWING NO.	
W.K.F.	3-24-81	CHK. BY	AK	DATE	2-2-91		
W.K.F.	3-2-81	BY		DATE			
BY	DATE	APPROVED CITY ENGINEER				1-602	
REVISIONS							

8Z-17

1998-A Replacement