

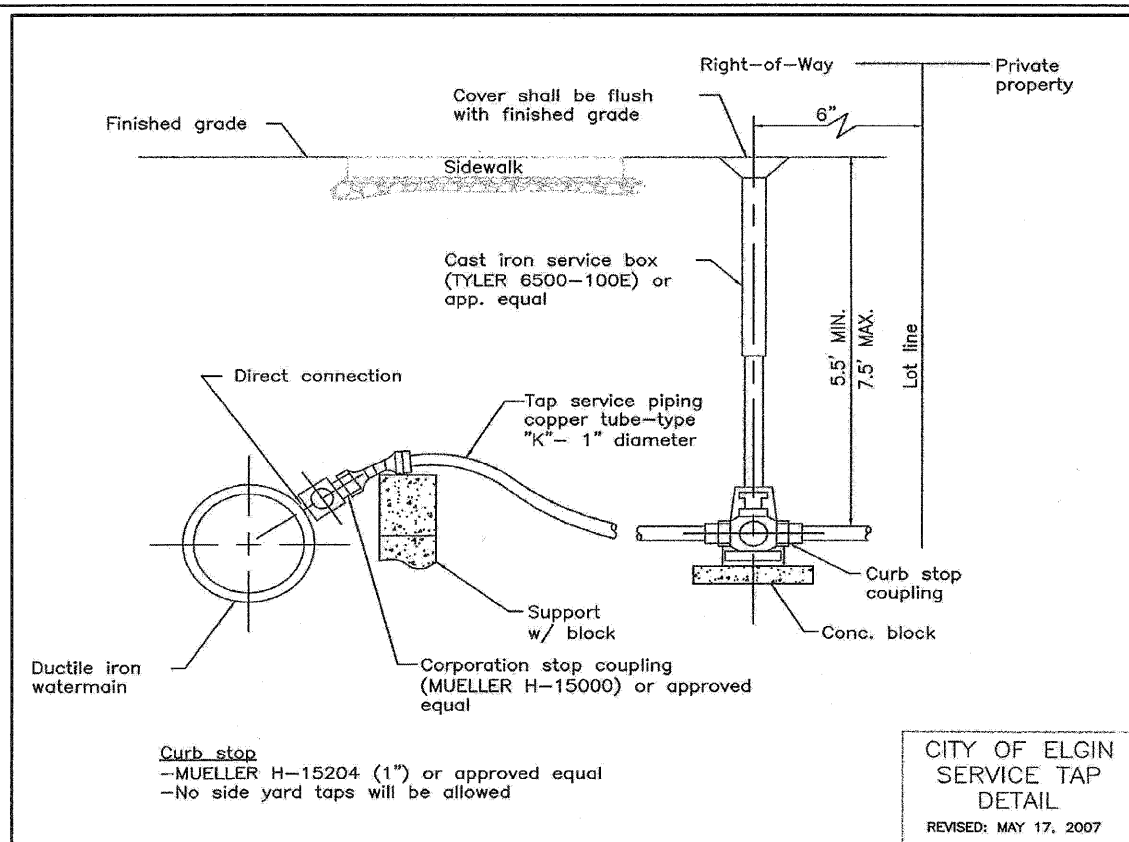
WATER MAIN ADJUSTMENT DETAIL

WATER MAIN CROSSING NOTES

WATER MAIN PIPE JOINTS LOCATED WITHIN THE CASING PIPE SHALL BE RESTRAINED AS SPECIFIED BY THE OWNER OF THE WATER MAIN

WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN

CASING PIPE SHALL BE REQUIRED WHERE PROPOSED STORM SEWER DOES NOT MEET WATER MAIN REQUIREMENTS.

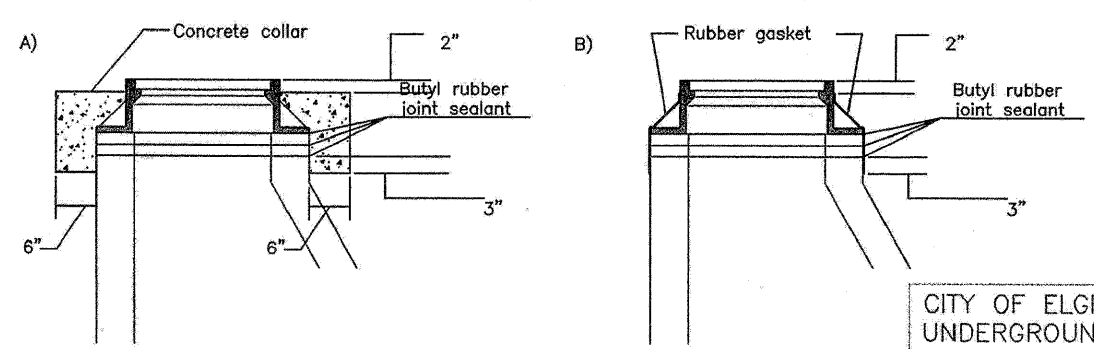


CITY OF ELGIN SERVICE TAP DETAIL
REVISED: MAY 17, 2007

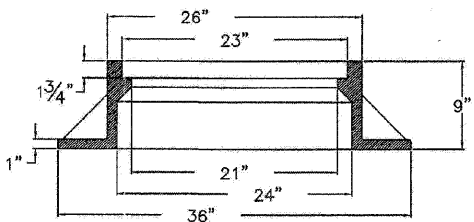
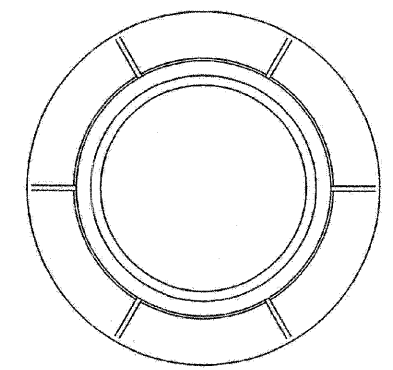
The Engineering Division of the City of Elgin Public Works Department has observed problems with the structural integrity of storm, sanitary and water structures. The adjusting ring and frames of these structures occasionally are displaced by surrounding construction operations, after the underground contractor has placed and sealed them. As a result, the displaced frames and adjusting rings lose the water tight nature of the structure, and allows sub-base material to penetrate the structure leaving an underground void that creates settlement (potholes).

For this reason we are hereby specifying the following written policy for frames and adjusting rings as part of the City of Elgin Engineering and Construction Standards.

- General
1. Adjusting rings and frames shall be aligned.
 2. Adjusting rings shall be free of any cracks, chips and damage
 3. Maximum adjusting height shall be 12" for storm and water structures and 8" for sanitary structures.
 4. Minimum number of adjusting rings shall be used.
- A) All public and private utilities in hard surface areas (right of way or easements)
5. Adjusting rings and frames shall be set in place on full mortar bed.
 6. A 6" wide concrete collar shall be installed from 3" below lowest ring to 2" below finish grade of top of frame in all water and sewer structures.
- B) All public and private utilities in landscaped areas
7. Adjusting rings and frames shall be set in place with a butyl rubber joint sealant (ez sticks, kent seal).
 8. An exterior rubber gasket shall be installed from 3" below lowest ring to 2" top of frame over all adjusting rings.

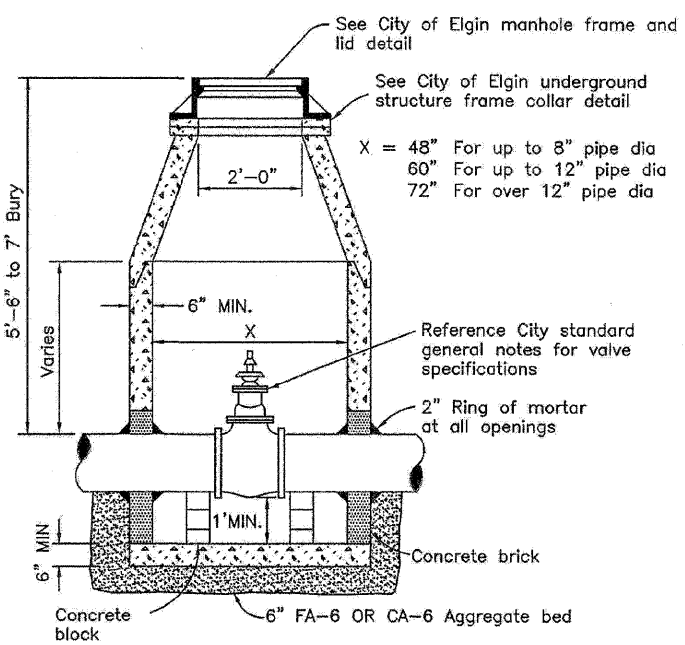


CITY OF ELGIN UNDERGROUND STRUCTURE FRAME COLLAR
REVISED: MAY 17, 2007



- NOTES:
1. Material is cast gray iron ASTM A-48, Class 35B with non-painted finish.
 2. Frame = 370 lbs. or greater.
 3. Lid = 180 lbs. or greater.
 4. Closed lids to have blind pick hole and machined horizontal bearing surface and:
 - a. Sanitary manholes to have self sealing lid or gasket sealed cover, and to have "SANITARY" stamped in lid.
 - b. Valve vaults to have "WATER" stamped in lid.
 - c. Storm manholes to have "STORM" stamped in lid.
 5. Open grate storm sewer to have "DRAINS TO RIVER" statement or fish symbol in hard casting.
 6. Common models: NEENAH R-1713 EAST JORDAN 1050Z1

CITY OF ELGIN MANHOLE FRAME AND LID DETAIL
REVISED: MAY 17, 2007



CITY OF ELGIN VALVE VAULT TYPE A DETAIL
REVISED: MAY 17, 2007

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