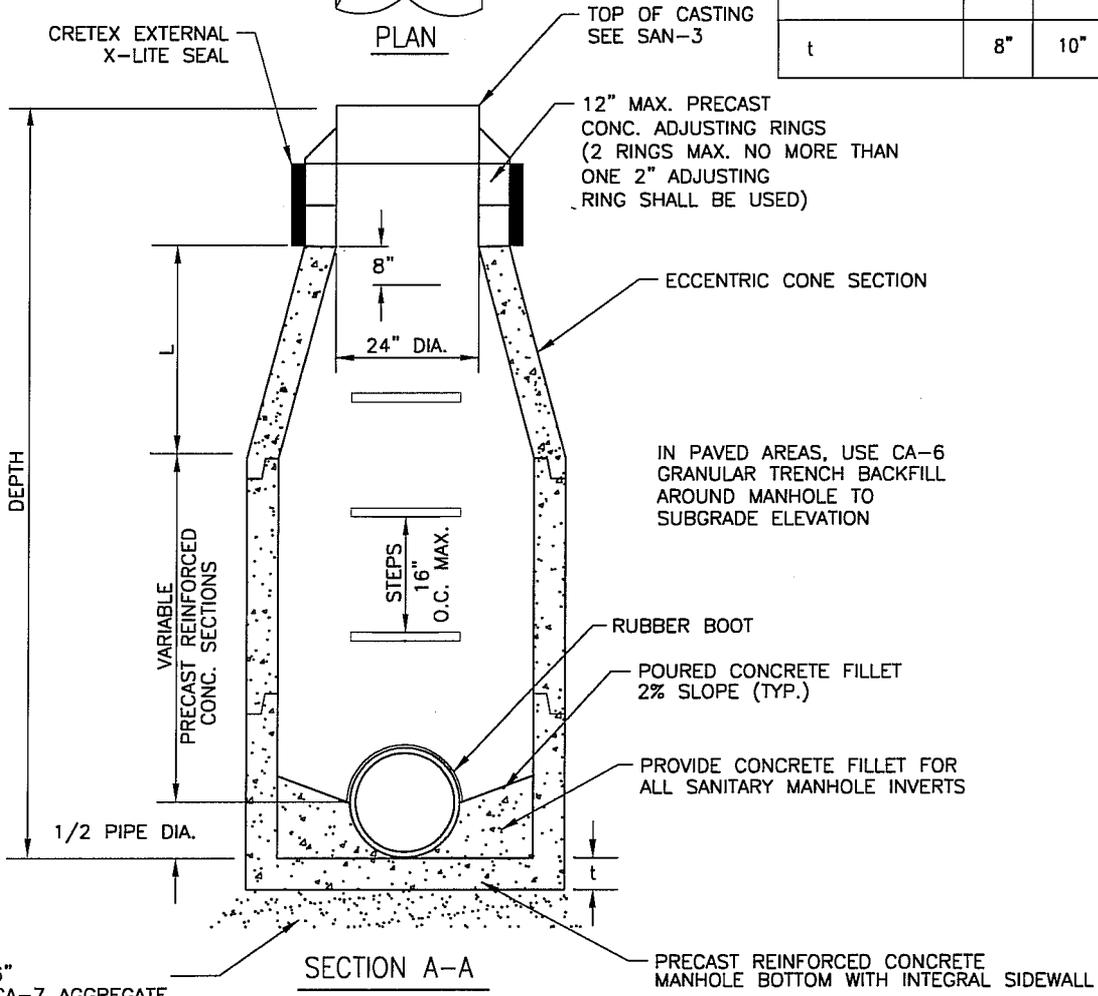


Inside M.H. Dia.	48"	60"
Pipe Dia.	≤21"	>21"
Wall Thickness	5"	6"
Ecc. Cone Sec.(L)	2'-6"	3'-9"

MANHOLE DEPTH	≤12'	>12'
t	8"	10"



NOTE:

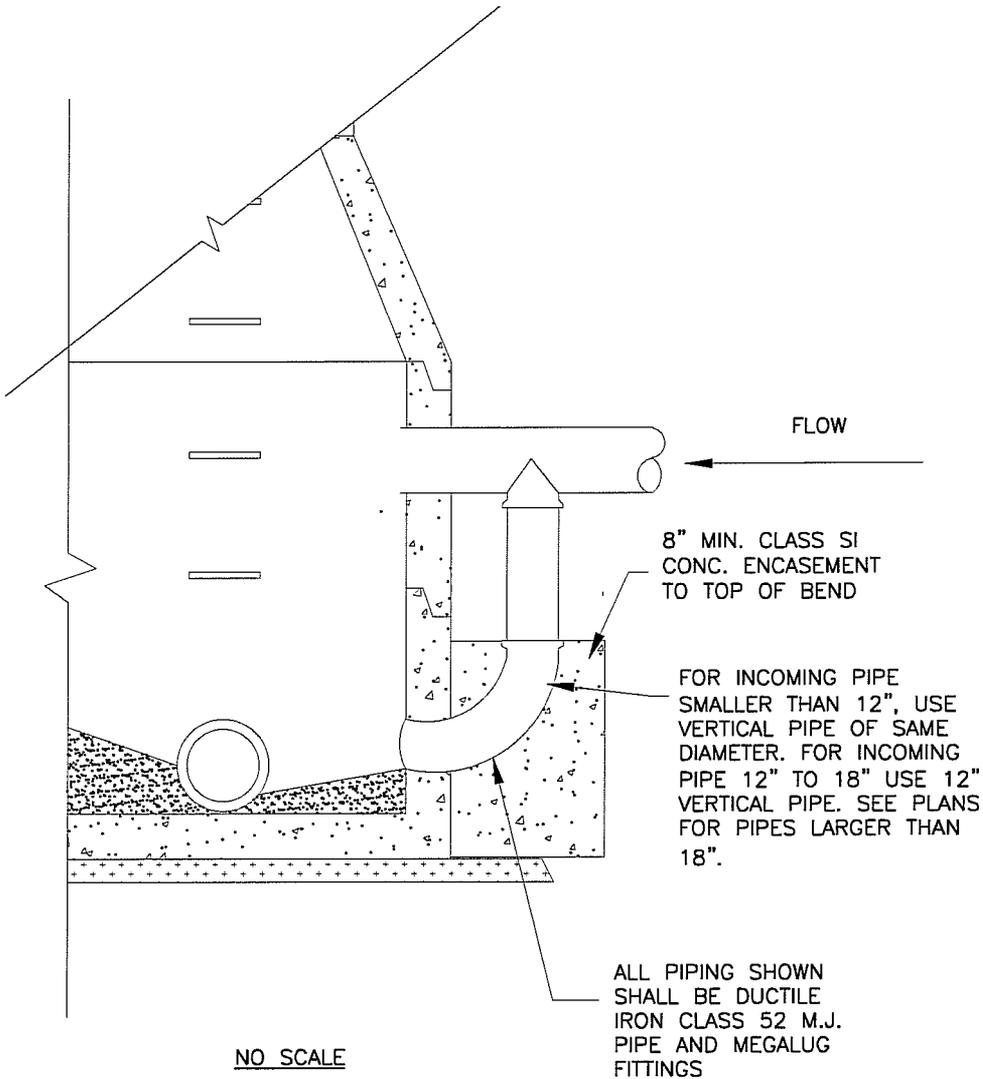
1. SANITARY MANHOLES SHALL HAVE WATERSTOP GASKETS CAST TO STRUCTURES AT ALL PIPE PENETRATIONS. (SEE MANHOLE PIPE CONNECTION DETAIL)
2. SANITARY MANHOLES SHALL HAVE CRETEX EXTERNAL CHIMNEY SEALS.
3. SANITARY MANHOLES SHALL HAVE INTEGRAL BASES.
4. INTERIOR JOINTS SHALL BE "BUTTERED" WITH NON-SHRINK GROUT.
5. SANITARY MANHOLES SHALL HAVE A WALL THICKNESS OF 6" FOR 5' DIAMETER STRUCTURES AND 7" FOR 6' DIAMETER STRUCTURES
6. SANITARY MANHOLES SHALL PASS VACUUM-TESTING PER ASTM C-1244.
7. SEE CASTING INSTALLATION AND ADJUSTING DETAIL FOR CASTING REQUIREMENTS.

VILLAGE OF OAK LAWN
 STANDARD DETAIL
 SANITARY SEWER MANHOLE

DATE: DEC 2009



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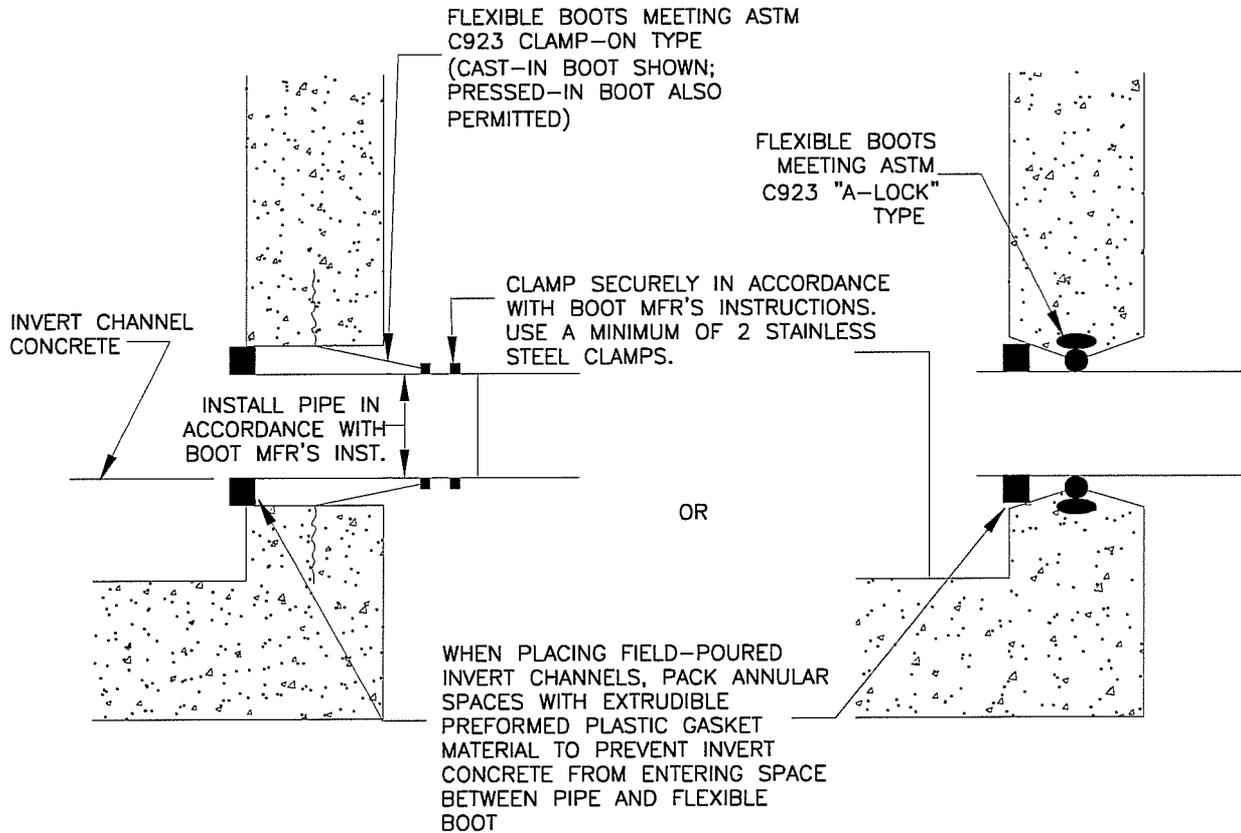
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VILLAGE OF OAK LAWN
STANDARD DETAIL

DROP CONNECTION

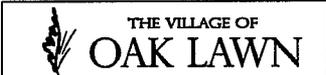
DATE: DEC 2009

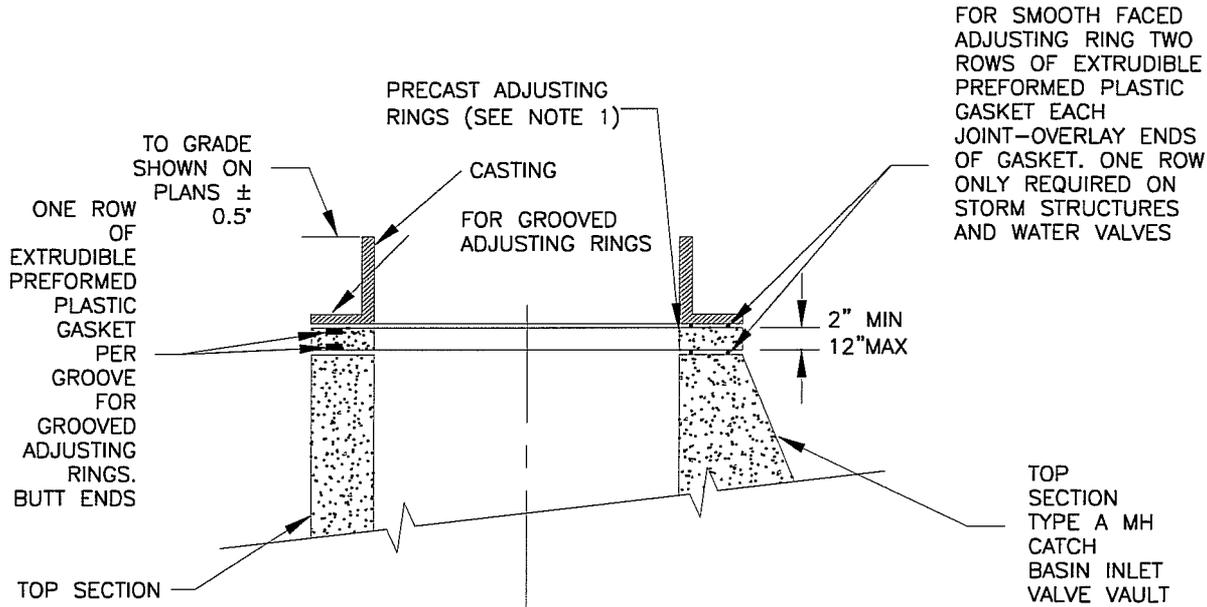




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VILLAGE OF OAK LAWN
 STANDARD DETAIL
 SANITARY MANHOLE PIPE
 CONNECTION
 DATE: DEC 2009





NO SCALE

NOTES:

- 1. THERE SHALL BE A MAXIMUM OF 2 ADJUSTING RINGS WITH A MAXIMUM TOTAL HEIGHT OF 12".
- 2. ALL STRUCTURES IN CURB AND GUTTER OR PAVED AREAS SHALL USE PREFORMED RUBBER OR PRECAST CONCRETE ADJUSTING RINGS.
- 3. IF THE CASTING MUST BE INSTALLED ON A SLOPE, PREFORMED RUBBER TAPERED RINGS MAY BE USED.
- 4. THE FOLLOWING CASTING, OR APPROVED EQUAL, SHALL BE UTILIZED AS INDICATED:

- A. SANITARY MANHOLES: EAST JORDAN IRON WORKS #1050, EX HD WATERTIGHT LID WITH CONCEALED PICKHOLE, O-RING GASKETS, AND "OAK LAWN" AND "SANITARY" CAST IN LID.
- B. WATER VALVE VAULTS: EAST JORDAN IRON WORKS #1050, EX HD WATERTIGHT LID WITH CONCEALED PICKHOLE, O-RING GASKETS, AND "OAK LAWN" AND "WATER" CAST IN LID.
- C. STORM MANHOLES: EAST JORDAN IRON WORKS #1050, EX HD LID WITH CONCEALED PICKHOLE, AND "OAK LAWN" AND "STORM" CAST IN LID, FOR LIDS INDICATED AS "SOLID" ON PLANS. FOR LIDS INDICATED AS "OPEN" ON PLANS, USE THE SAME CASTING, BUT WITH A TYPE M1 RADIAL FLAT GRATE.
- D. DRAINAGE STRUCTURES IN AREAS WITH UNPAVED SURFACES: EAST JORDAN IRON WORKS 6527.
- E. DRAINAGE STRUCTURES IN MOUNTABLE CURB AND GUTTER: EAST JORDAN IRON WORKS #7171 WITH TYPE M1 GRATE.
- F. DRAINAGE STRUCTURES IN BARRIER CURB AND GUTTER: EAST JORDAN IRON WORKS #7210 WITH TYPE M2 GRATE.

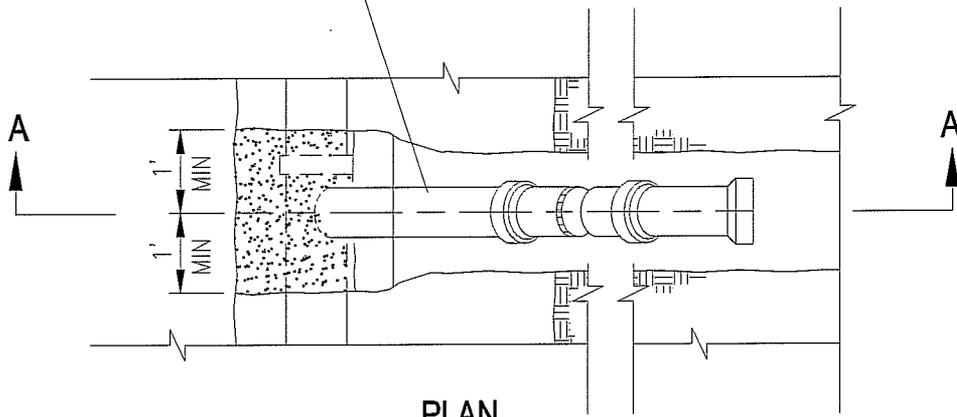
VILLAGE OF OAK LAWN
STANDARD DETAIL

CASTING INSTALLATION
AND ADJUSTING
DATE: DEC 2009



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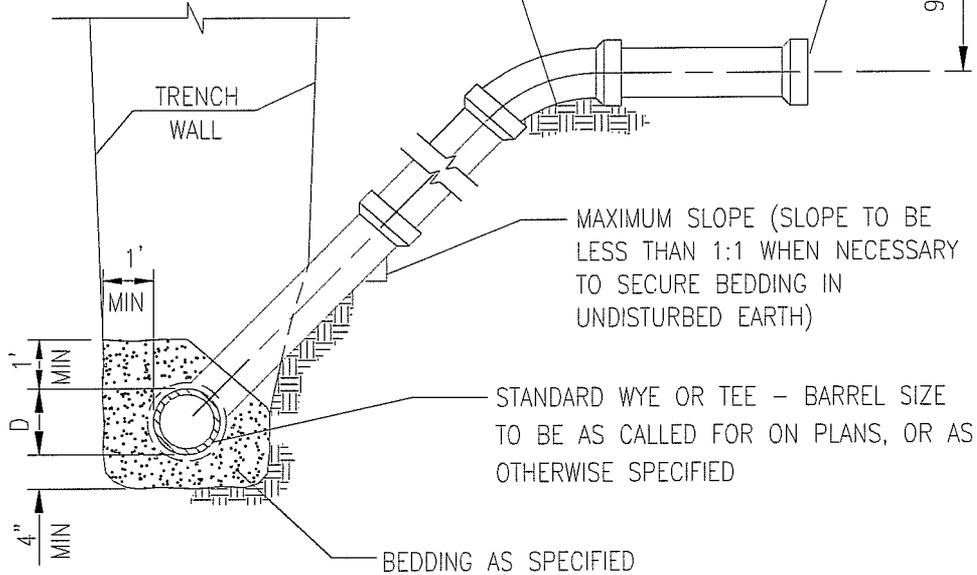
6" DIAMETER PVC SDR-26 PIPE CONFORMING TO ASTM D3034 WITH JOINTS CONFORMING TO ASTM D3212



UNDISTURBED EARTH-SHAPE TO PROVIDE UNIFORM BEARING FOR 1/4 OF BARREL CIRCUMFERENCE

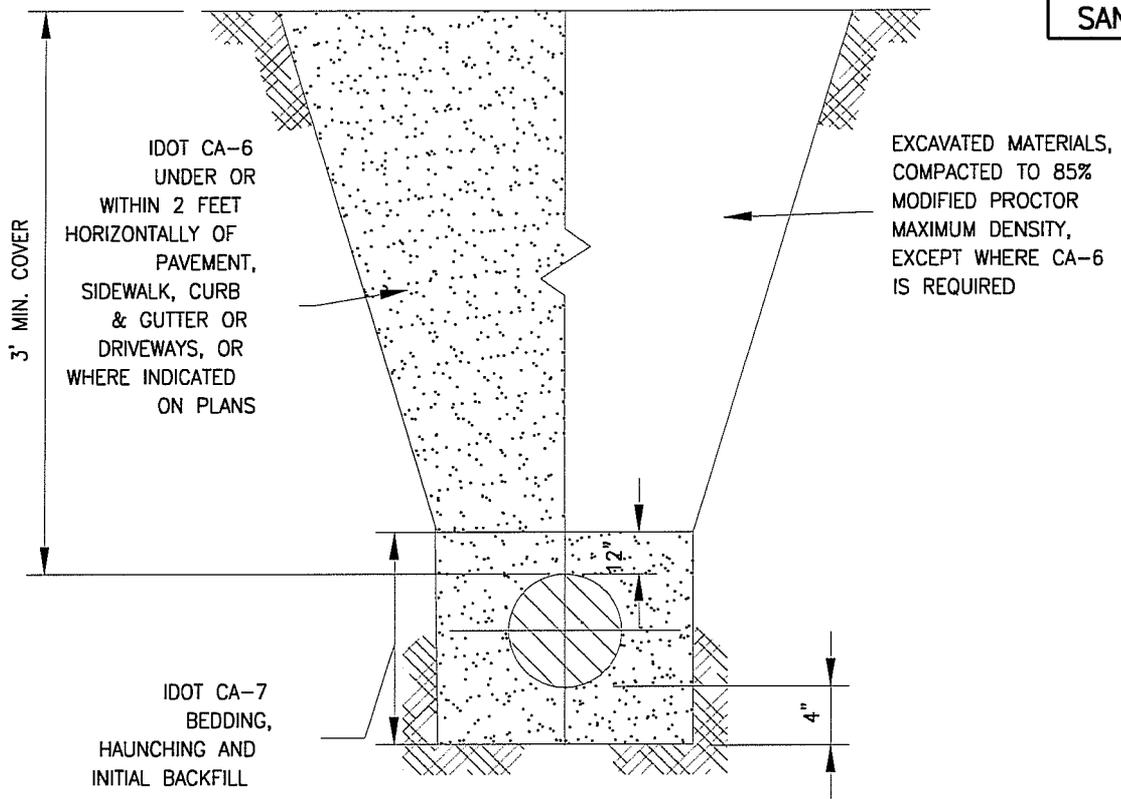
CONNECT TO EXIST. SERVICE PIPE OR PLUG

9' MAX. TO GROUND SURFACE



CITY OF OAK LAWN
STANDARD DETAIL

TYPICAL RISER FOR
SANITARY SERVICE
LATERAL
DATE: DEC 2009



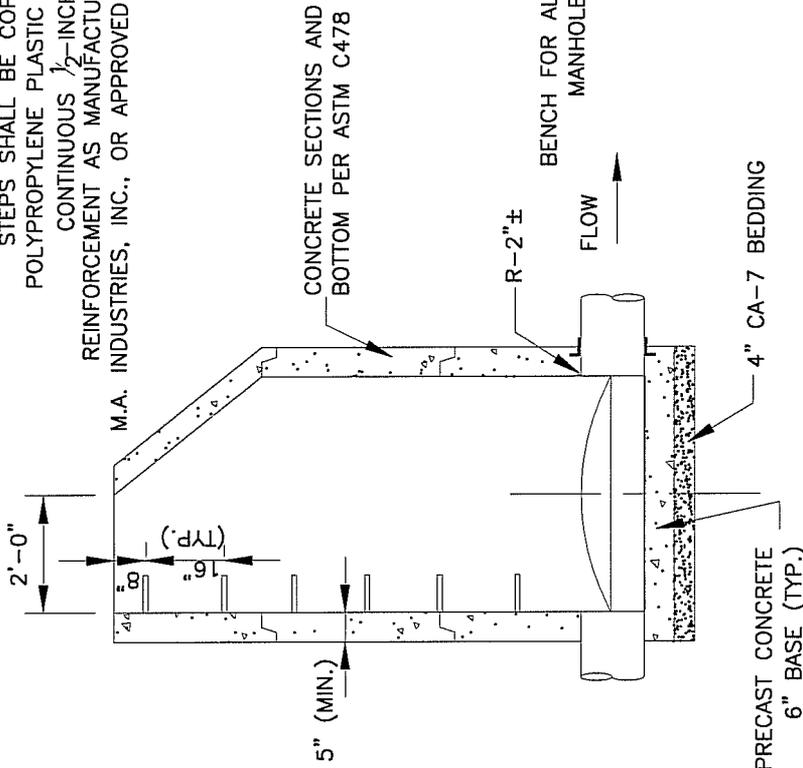
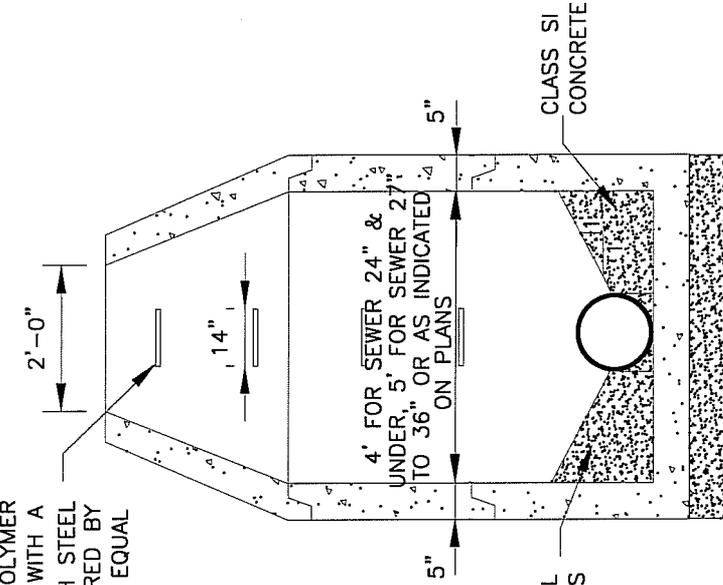
NO SCALE

NOTES:

1. GRAVITY SANITARY SEWERS WITH A DEPTH OF COVER VARYING BETWEEN 3-15 FT IN DEPTH SHALL BE CONSTRUCTED OF PVC SDR 26 PIPE CONFORMING TO ASTM D 3034 WITH FLEXIBLE ELASTOMERIC SEALS CONFORMING TO ASTM D 3212.
2. GRAVITY SANITARY SEWERS WITH A DEPTH OF COVER GREATER THAN 15 FEET IN DEPTH SHALL BE CONSTRUCTED OF PVC SDR 18 PIPE CONFORMING TO AWWA C900 WITH FLEXIBLE ELASTOMERIC SEALS CONFORMING TO ASTM D 3212.
3. SANITARY SEWER FORCEMAINS SHALL BE CONSTRUCTED OF CLASS 52 DUCTILE IRON PIPE CONFORMING TO AWWA C151 WITH CEMENT LINING WITH BITUMINOUS COATING PER AWWA C104 AND MECHANICAL OR PUSH ON JOINTS CONFORMING TO AWWA C111.
4. ALL SANITARY SEWERS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH ARTICLE 31-1.13(C) OF THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN ILLINOIS, SIXTH EDITION; AND DEFLECTION TESTED IN ACCORDANCE WITH ARTICLE 31-1.13(D) OF THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN ILLINOIS, SIXTH EDITION. DEFLECTION TESTING SHALL BE DONE NO SOONER THAN 30 DAYS AFTER THE PIPE HAS BEEN BACKFILLED. NO SOONER THAN ONE YEAR AFTER SEWERS HAVE BEEN INSTALLED, THEY SHALL BE INSPECTED BY CLOSED CIRCUIT COLOR TELEVISION TO DETERMINE IF ANY PIPE INSTALLATION DEFECTS HAVE OCCURRED, AND TO DETERMINE THE LOCATION OF SERVICES. ONE COPY OF THE VIDEOTAPE AND WRITTEN INSPECTION REPORT SHALL BE FURNISHED TO THE VILLAGE.
5. SEWER PLUGS SHALL BE INSTALLED AT DOWNSTREAM ENDS OF ALL NEW SEWERS AND LEFT IN PLACE UNTIL VILLAGE ACCEPTS SEWERS. SEWER PLUGS SHALL BE INSTALLED AT UPSTREAM ENDS OF NEW SEWERS AT THE END OF EACH DAY'S WORK.

VILLAGE OF OAK LAWN
 STANDARD DETAIL
 FOR
 SANITARY SEWER
 INSTALLATION
 DATE: DEC 2009

STEPS SHALL BE COPOLYMER
POLYPROPYLENE PLASTIC WITH A
CONTINUOUS 1/2-INCH STEEL
REINFORCEMENT AS MANUFACTURED BY
M.A. INDUSTRIES, INC., OR APPROVED EQUAL



NO SCALE

NOTE:

1. MANHOLE BARREL JOINTS SHALL BE TONGUE AND GROOVE TYPE WITH TWO ROWS OF EXTRUDIBLE PREFORMED PLASTIC GASKET MATERIAL (BUTYL ROPE).
2. INTERIOR JOINTS SHALL BE "BUTTERED" WITH NON-SHRINK GROUT.
3. STORM MANHOLES SHALL HAVE A WALL THICKNESS OF 6" FOR 5' DIAMETER STRUCTURES AND 7" FOR 6' DIAMETER STRUCTURES
4. SEE CASTING INSTALLATION AND ADJUSTING DETAIL FOR CASTING REQUIREMENTS.

VILLAGE OF OAK LAWN
STANDARD DETAIL

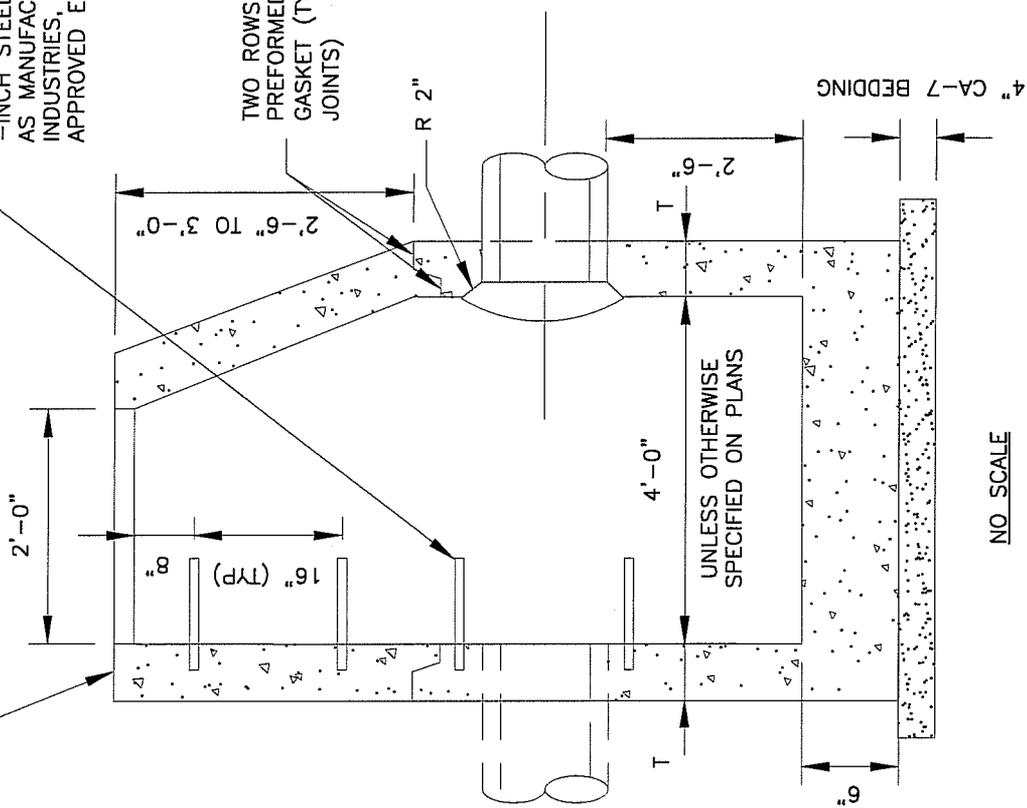
STORM MANHOLE TYPE A
DATE: DEC 2009



ROTATE CB TOP SECT. AS NECESSARY TO ACHIEVE OPTIMAL CASTING ALIGNMENT

STEPS SHALL BE COPOLYMER POLYPROPYLENE PLASTIC WITH A CONTINUOUS 1/2" -INCH STEEL REINFORCEMENT AS MANUFACTURED BY M.A. INDUSTRIES, INC., OR APPROVED EQUAL

TWO ROWS EXTRUDIBLE PREFORMED PLASTIC GASKET (TYPICAL ALL JOINTS)



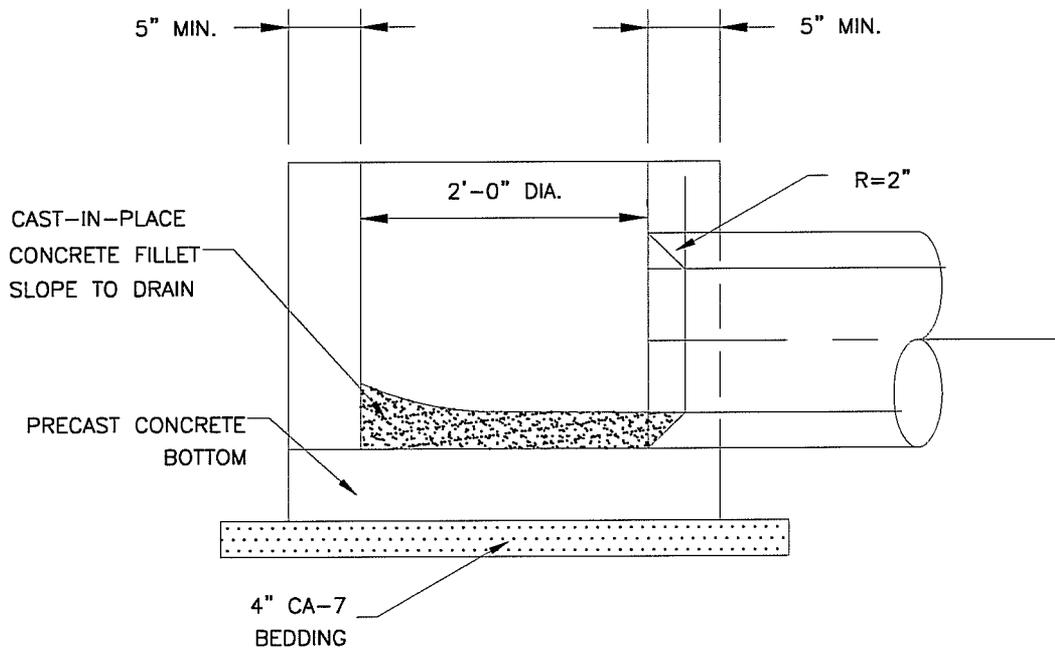
NO SCALE

- NOTES:
1. SEE CASTING INSTALLATION AND ADJUSTMENT DETAIL FOR CASTING REQUIREMENTS.
 2. INTERIOR JOINTS SHALL BE "BUTTERED" WITH NON-SHRINK GROUT.
 3. STRUCTURE SHALL COMPLY WITH ASTM C478.
 4. T = STRUCTURE INSIDE DIAMETER +1" (5" MINIMUM)

VILLAGE OF OAK LAWN
STANDARD DETAIL
CATCH BASIN TYPE A

DATE: DEC 2009





NO SCALE

NOTES:

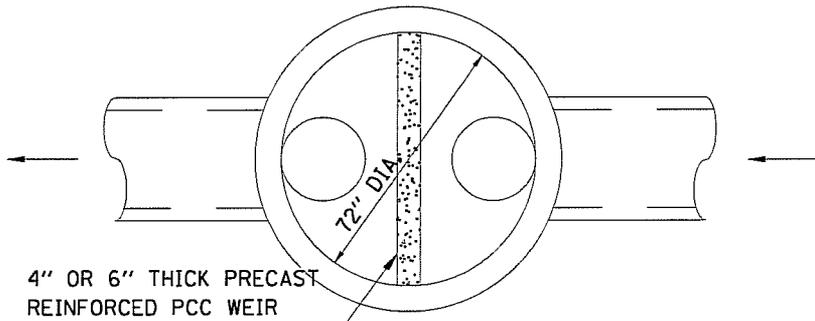
1. SEE CASTING INSTALLATION AND ADJUSTMENT DETAIL FOR CASTING REQUIREMENTS.
2. INTERIOR JOINTS SHALL BE "BUTTERED" WITH NON-SHRINK GROUT.
3. STRUCTURE SHALL COMPLY WITH ASTM C478.

VILLAGE OF OAK LAWN
STANDARD DETAIL

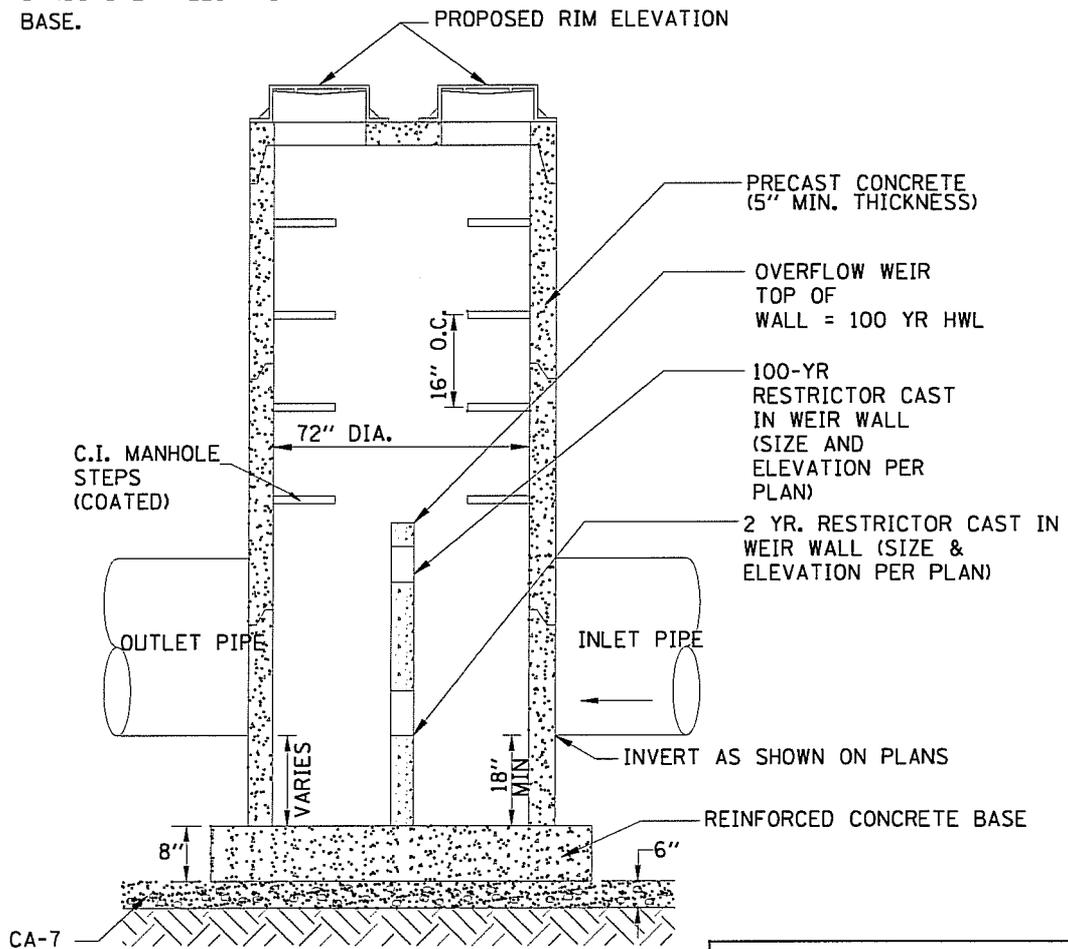
INLET

DATE: DEC 2009





4" OR 6" THICK PRECAST REINFORCED PCC WEIR WALL. A WATERTIGHT SEAL SHALL BE PROVIDED AT CONNECTION BETWEEN WEIR WALL AND STRUCTURE WALLS AND BASE.

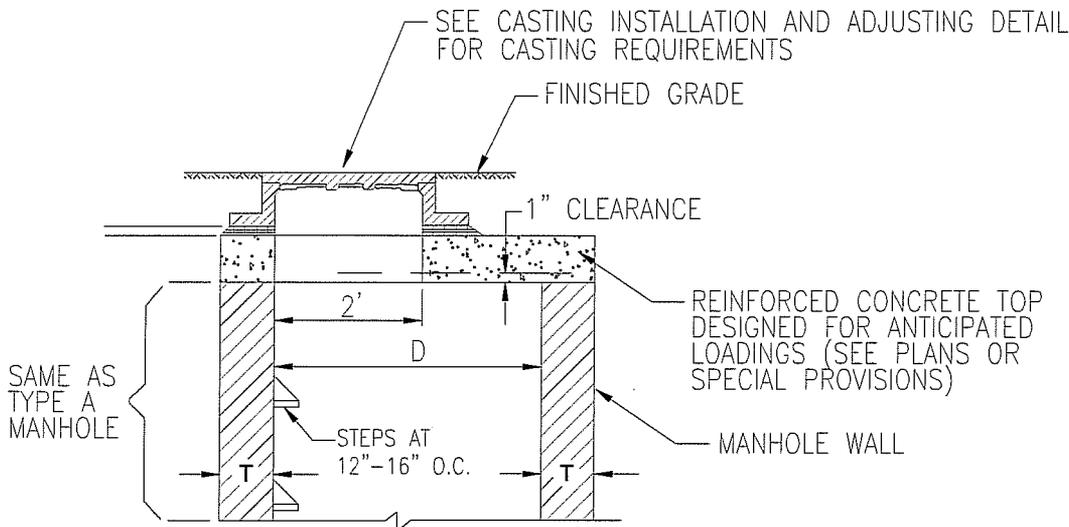
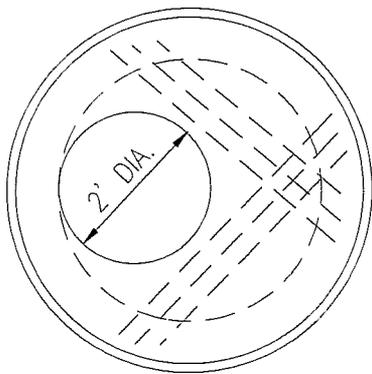


NOT TO SCALE

VILLAGE OF OAK LAWN
 STANDARD DETAIL
 DETENTION POND
 RESTRICTOR STRUCTURE
 DATE: DEC 2009



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DETAIL OF M.H. TOP TO BE USED WHERE RESTRICTED HEAD ROOM WILL NOT PERMIT TAPERED WALLS.

ALT. MATERIALS FOR WALLS	D	T (MIN.)
CAST-IN-PLACE CONCRETE.	4 FEET	6 IN
	5 FEET	6 IN
	6 FEET	6 IN

NOTE: MANHOLE STEPS WHEN REQUIRED, SHALL BE FURNISHED AND INSTALLED AS SHOWN ON THE PLANS.

**VILLAGE OF OAK LAWN
STANDARD DETAIL**

**STORM MANHOLE
TYPE "C"
DATE: DEC 2009**



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