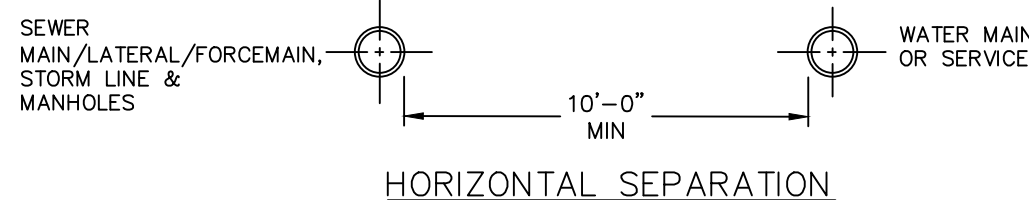
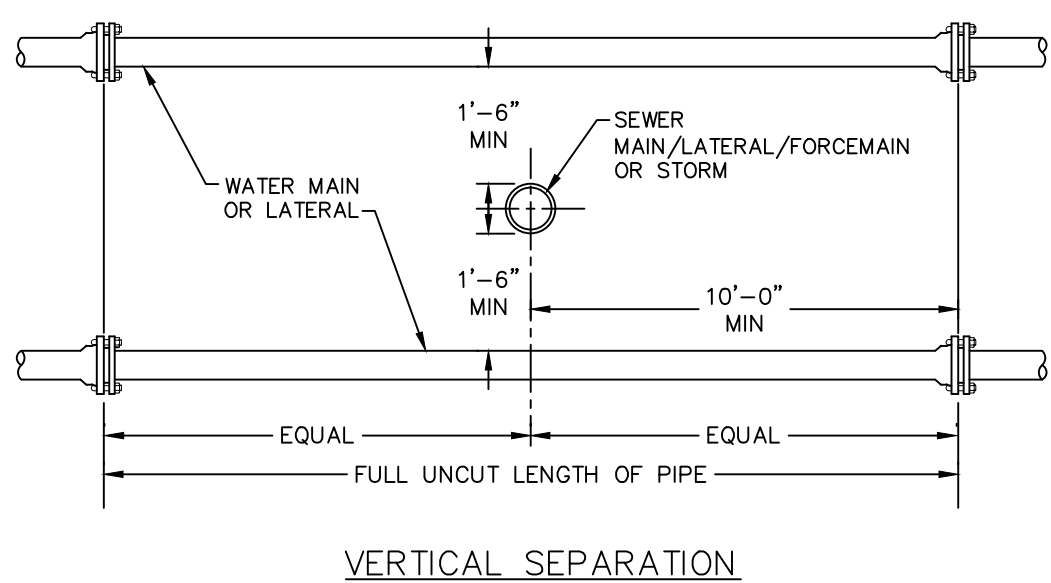


NOTES:

- EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
- SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
- IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

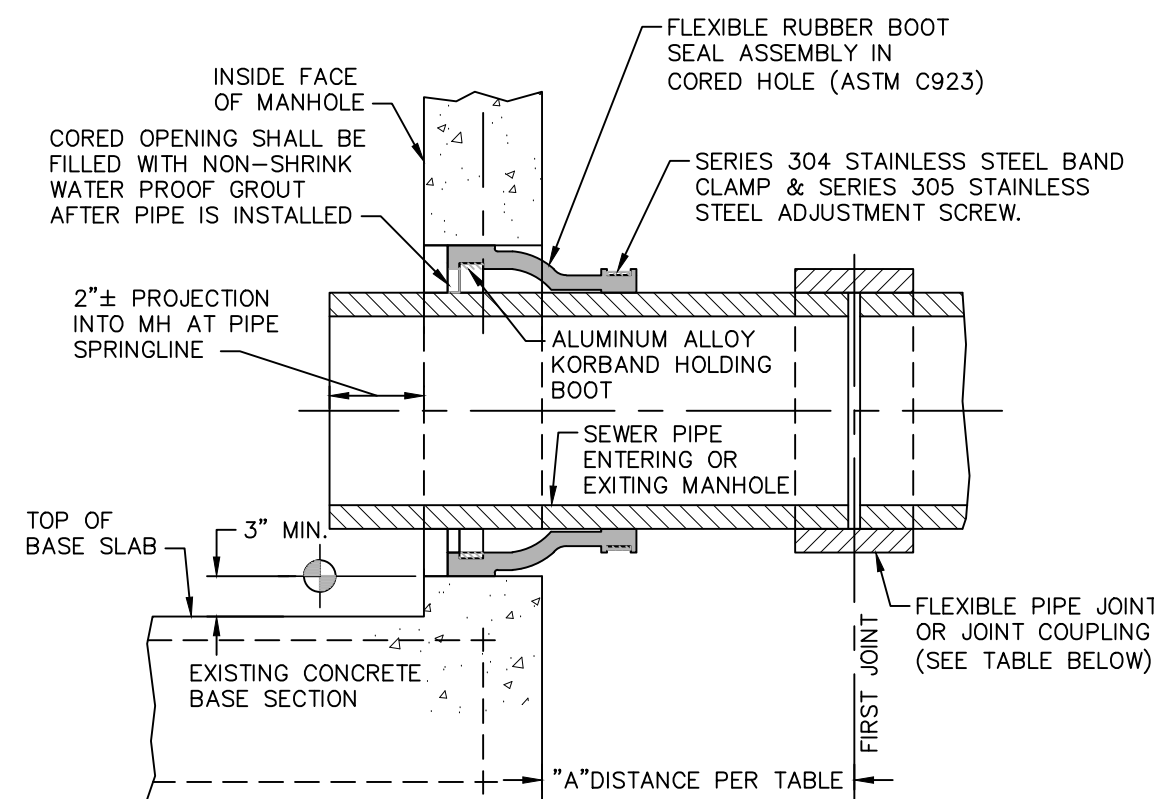
WATER SERVICE LINE TRENCH DETAIL NOT TO SCALE



NOTE:

- NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCLOSURE OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL NOT TO SCALE



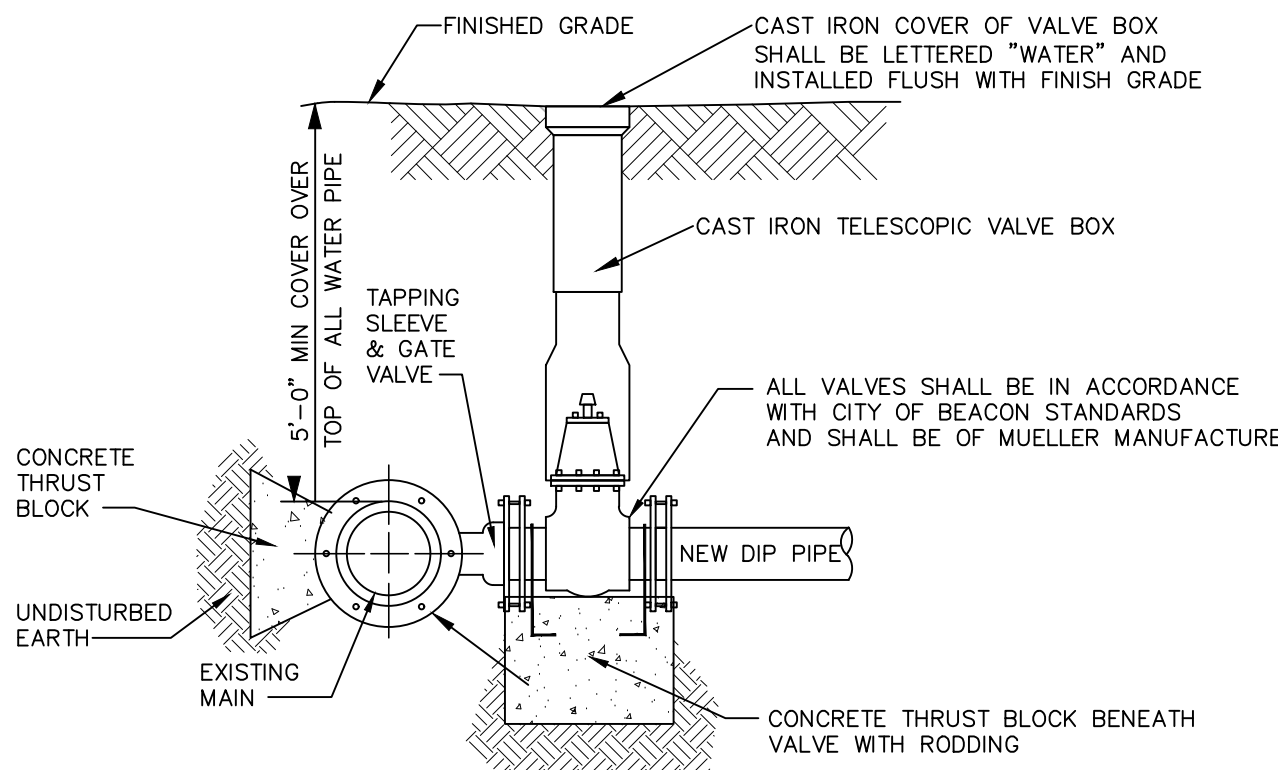
FLEXIBLE JOINT REQUIREMENTS

SEWER PIPE TYPE	FLEXIBLE JOINT TYPE IN & OUT	"A" DISTANCE (FEET)
DUCTILE IRON	STD RUBBER GASKET PIPE JOINT ONLY	10' MAX
PVC	STD RUBBER GASKET PIPE JOINT ONLY	3' MAX

NOTE:

REFERENCE MANHOLE DETAIL(S) FOR REQUIRED INVERT CHANNEL CONFIGURATION.

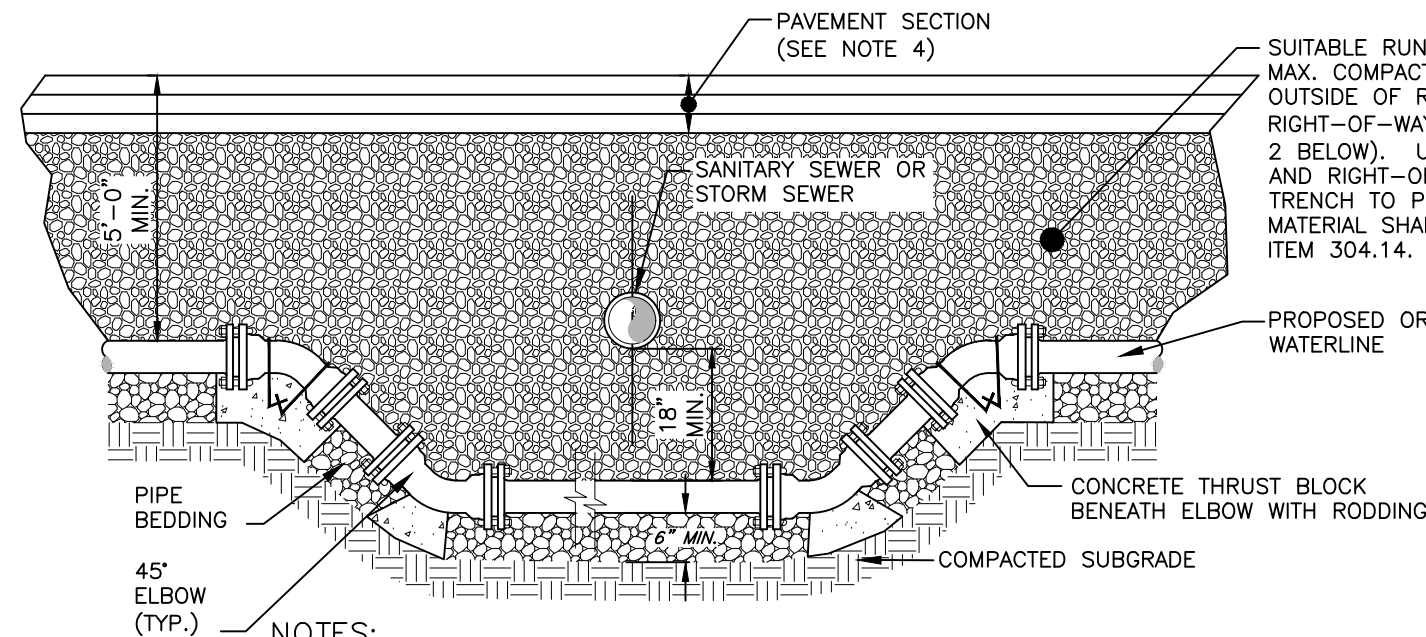
CORED HOLE AND INSERTED BOOT DETAIL NOT TO SCALE



NOTES:

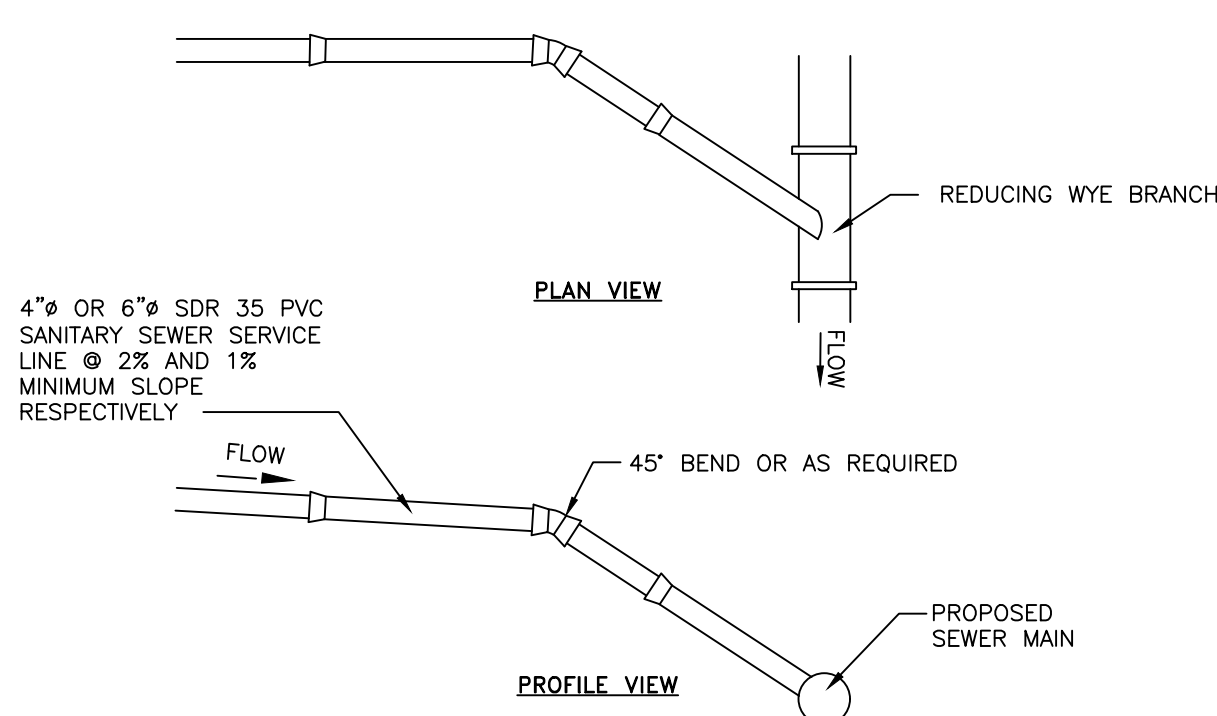
- ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
- ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
- TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

TAPPING SLEEVE DETAIL NOT TO SCALE



- WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CANNOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM THE SEWER AS POSSIBLE.
- SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
- THE RELOCATED WATER MAIN/SERVICE LINE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA, NYSDOH AND DCOH STANDARDS.
- PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAIL.
- ALL REPLACED WATERMAIN SHALL BE 12" CLASS 52 DUCTILE IRON.

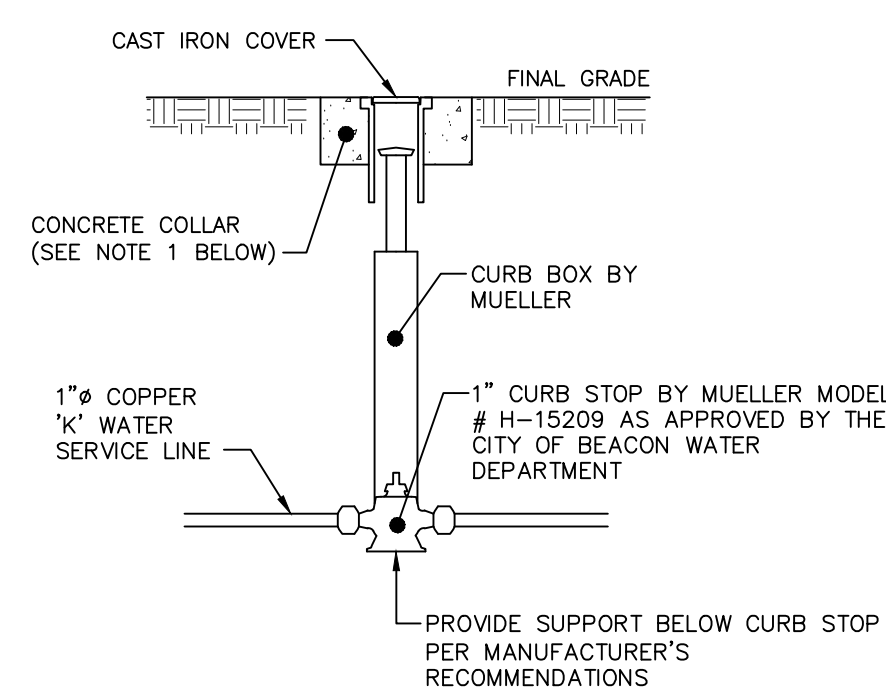
WATER LINE OFFSET DETAIL NOT TO SCALE



NOTES:

- EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
- SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

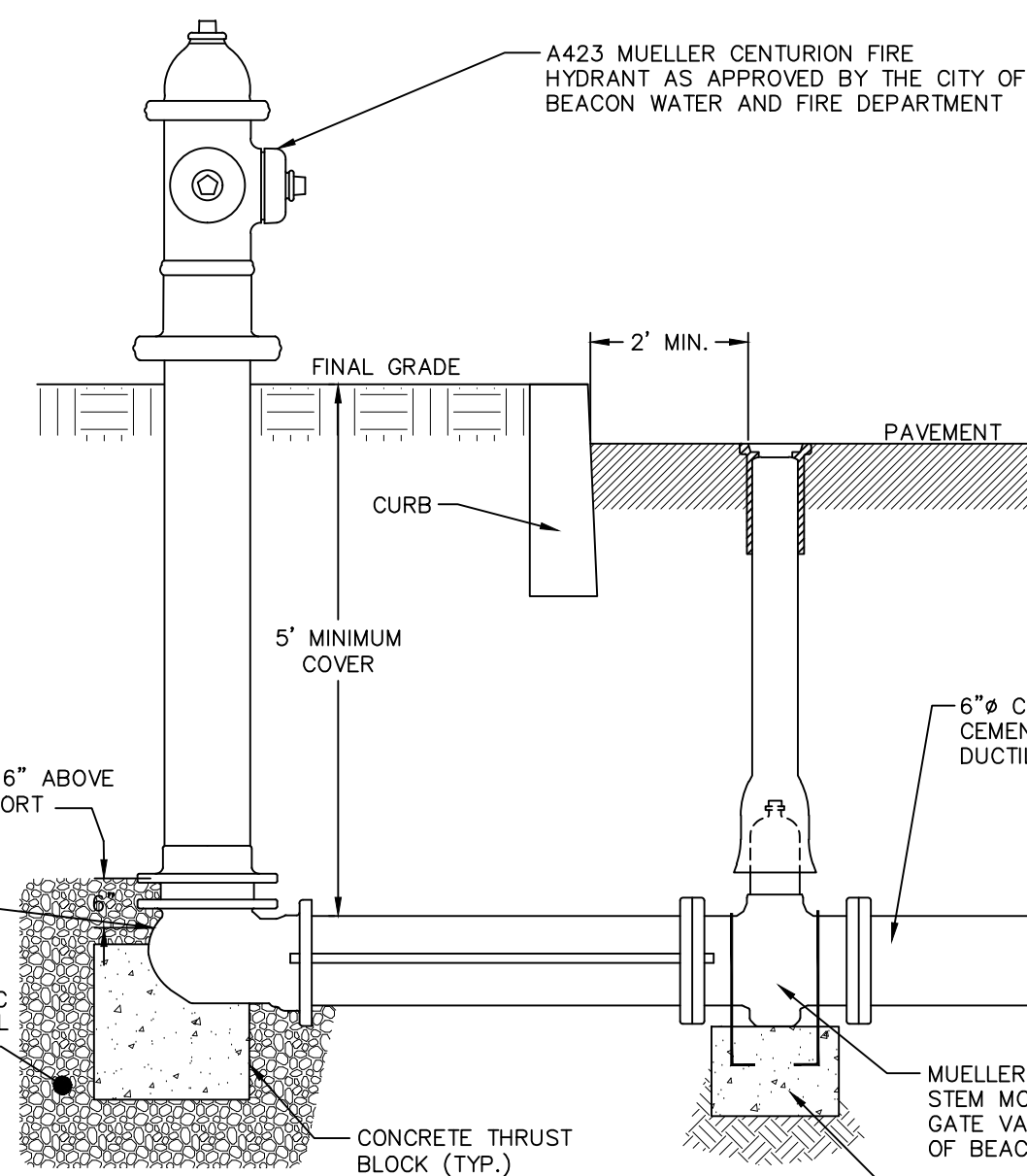
SANITARY SEWER SERVICE CONNECTION DETAIL NOT TO SCALE



NOTES:

- CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
- CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
- AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

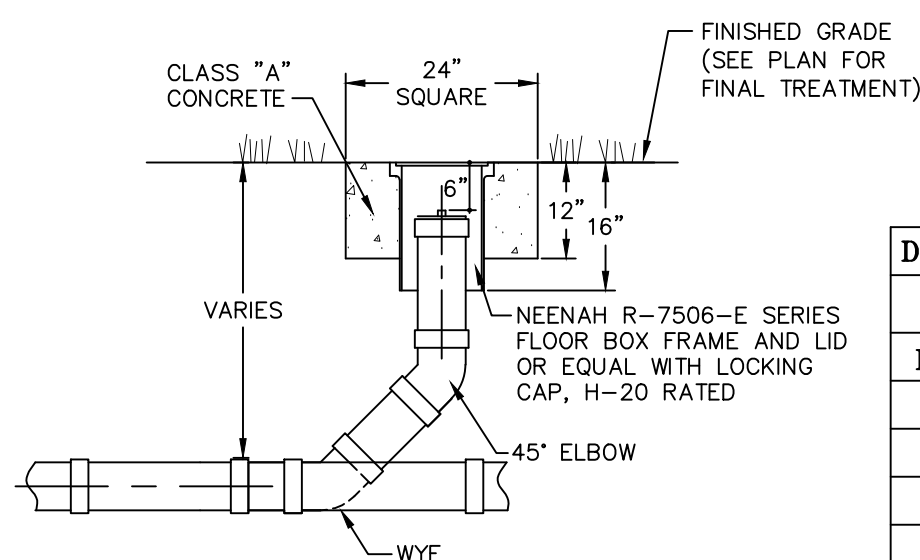
WATER SHUT-OFF VALVE DETAIL NOT TO SCALE



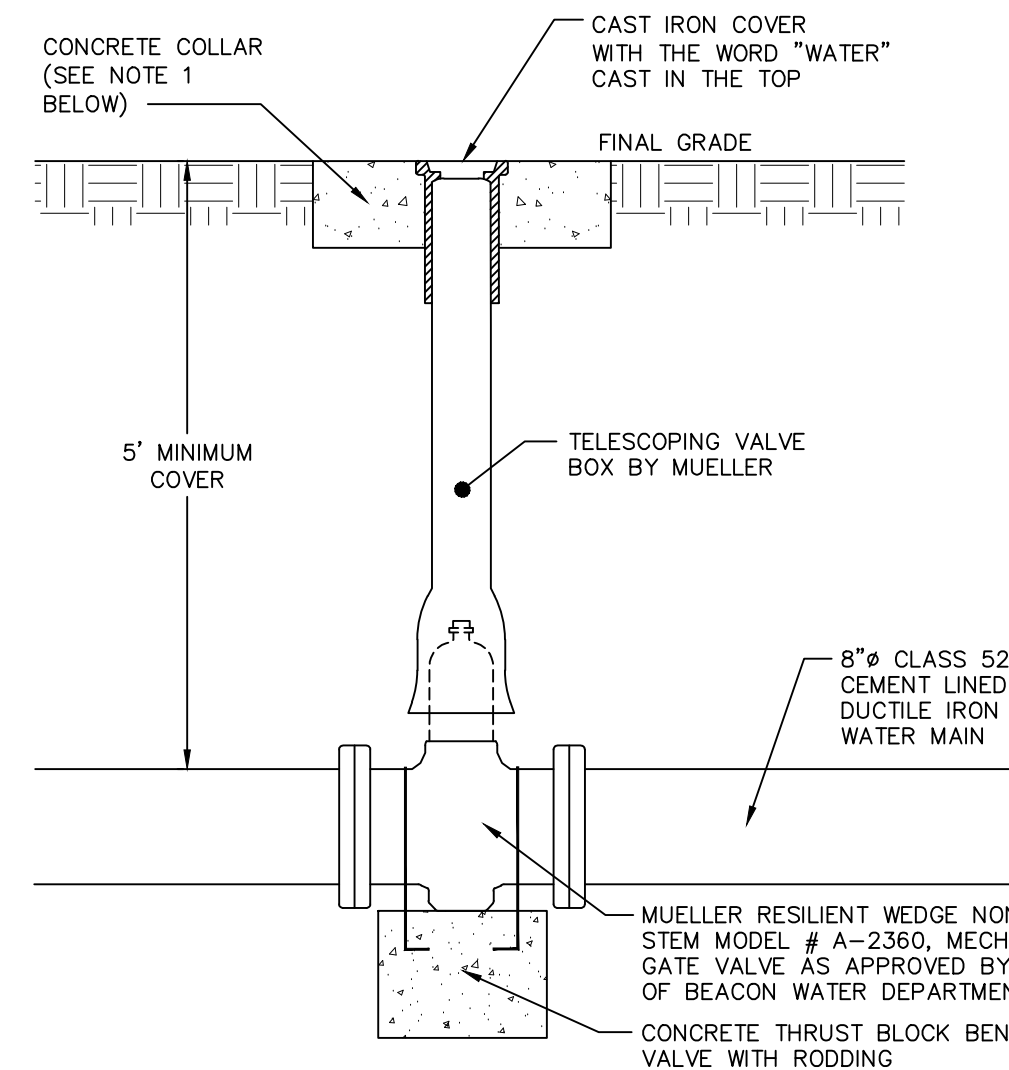
NOTES:

- THE GATE VALVE SHALL BE LOCATED THIRTY SIX (36) INCHES FROM THE HYDRANT CENTER LINE.
- 1/2" STEEL TIE RODS TO BE PROVIDED BETWEEN THE GATE VALVE AND THE HYDRANT.

HYDRANT DETAIL NOT TO SCALE



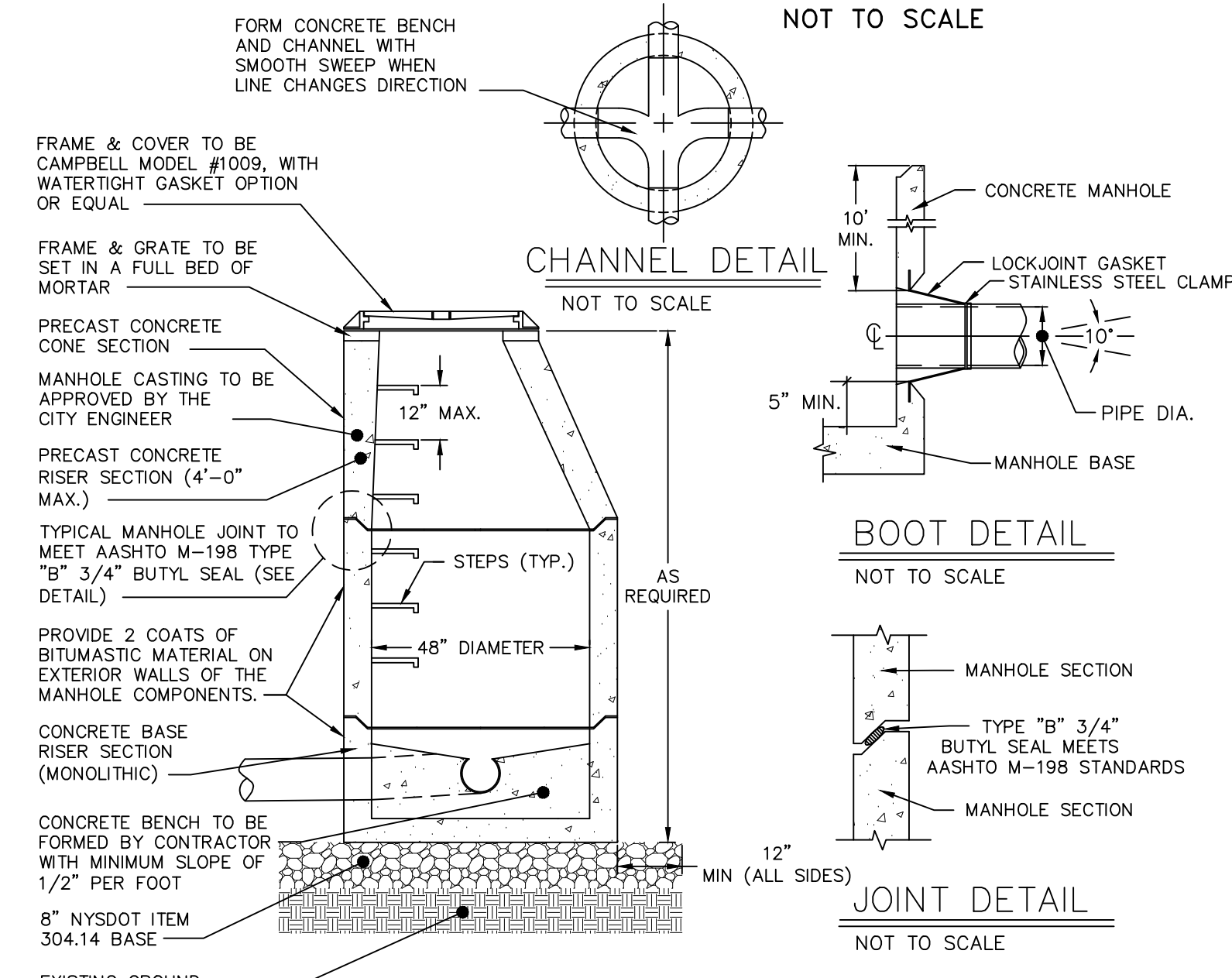
CLEANOUT DETAIL NOT TO SCALE



NOTES:

- CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

GATE VALVE DETAIL NOT TO SCALE



- PIPE CONNECTION TO BE STANDARD "LOCKJOINT" BOOT 5" OFF BASE OF MANHOLE (SEE DETAIL).
- CONCRETE STRENGTH OF MANHOLE COMPONENTS TO BE 4000 PSI @ 28 DAYS IN ACCORDANCE WITH ASTM C-478-86.
- STEEL REINFORCEMENT OF MANHOLE COMPONENTS TO MEET ASTM A615-A497 REQUIREMENTS.
- LOADING OF MANHOLE COMPONENTS TO MEET H-20 REQUIREMENTS.
- CONCRETE USED IN MANHOLE COMPONENTS TO CONTAIN 6% AIR ENTRAINMENT.
- 4' MAXIMUM FROM MANHOLE TO PIPE JOINT.

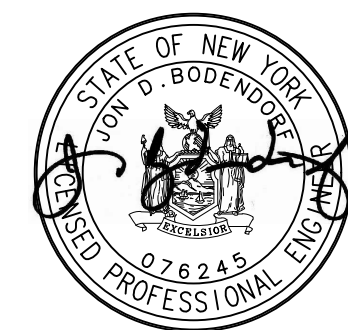
PRE-CAST CONCRETE SANITARY MANHOLE DETAIL NOT TO SCALE

CONSTRUCTION DETAILS 25 TOWNSEND STREET

25 TOWNSEND STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-03-383149
SCALE: AS SHOWN
DECEMBER 7, 2015

**HUDSON
LAND DESIGN**

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN STREET
BEACON, NEW YORK 12508
PH: 845-440-6926 F: 845-440-6637



SEAL

JON D. BODENDORF, P.E.
NYS LICENSE NO. 076245
DANIEL G. KOHLER, P.E.
NYS LICENSE NO. 082716

SHEET: 8 OF 8

DRAWN BY: JDB		CHECKED BY: MAB	JOB NO.: 2015:025
REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	02/27/18	PER PLANNING BOARD COMMENTS	CMB
2	03/27/18	PER PLANNING BOARD COMMENTS	JDB