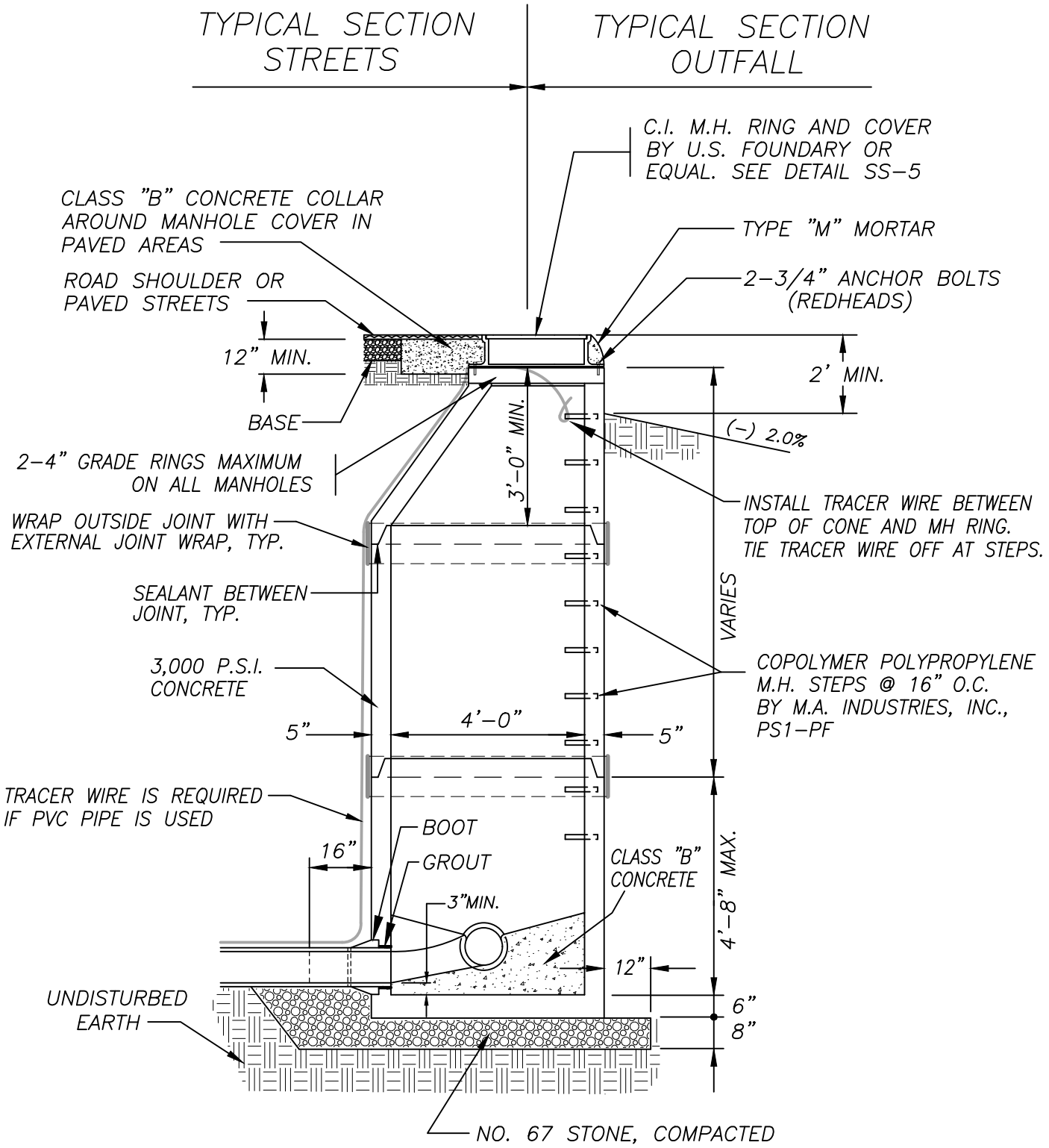


NOTES:

1. MANHOLES ARE TO BE AS MFG. N.C. PRODUCTS OR APPROVED EQUAL.
2. GROUT ALL JOINTS FROM INSIDE.

SS-1

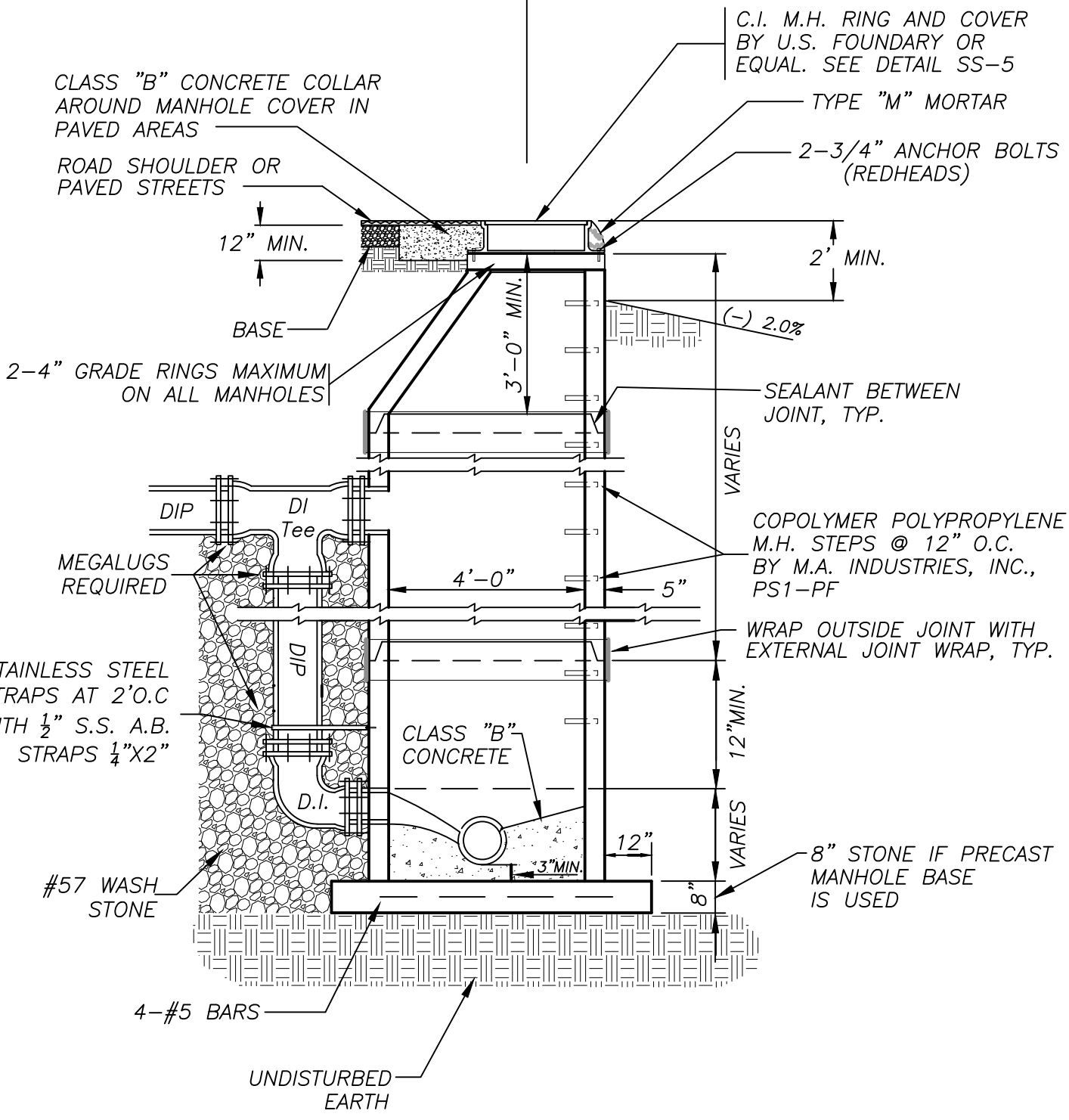
CITY OF MEBANE STANDARD

STANDARD PRECAST MANHOLE

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF

TYPICAL SECTION STREETS

TYPICAL SECTION OUTFALL



NOTES:

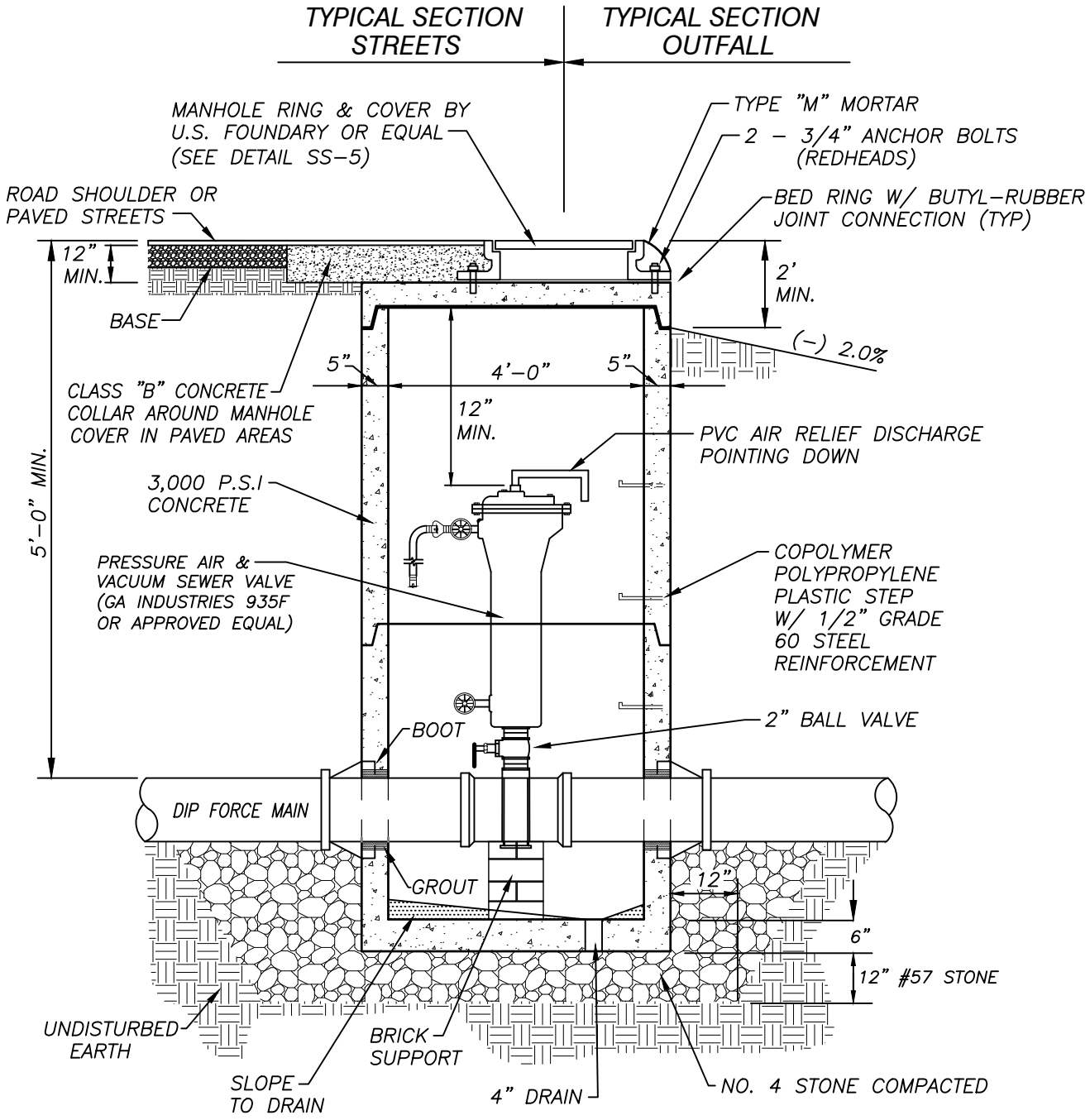
1. MANHOLES ARE TO BE AS MFG. N.C. PRODUCTS OR APPROVED EQUAL.
2. GROUT ALL JOINTS FROM INSIDE.

SS-2

CITY OF MEBANE STANDARD

STANDARD PRECAST DROP MANHOLE

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



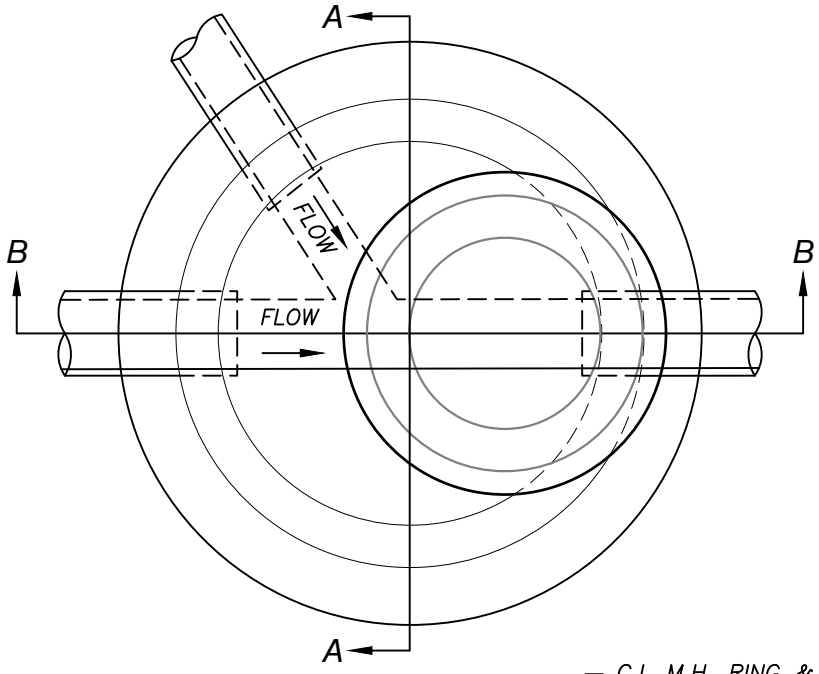
NOTES:
1. MANHOLES ARE TO BE AS MFG. N.C. PRODUCTS OR APPROVED EQUAL.
2. GROUT ALL JOINTS FROM INSIDE.

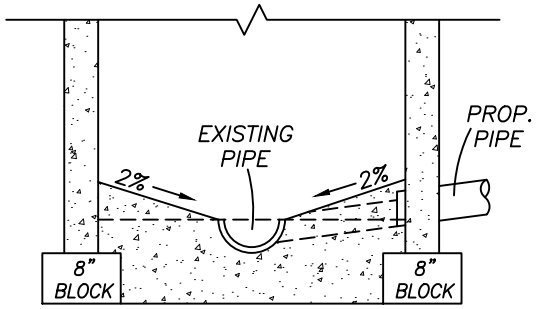
SS-3

CITY OF MEBANE STANDARD

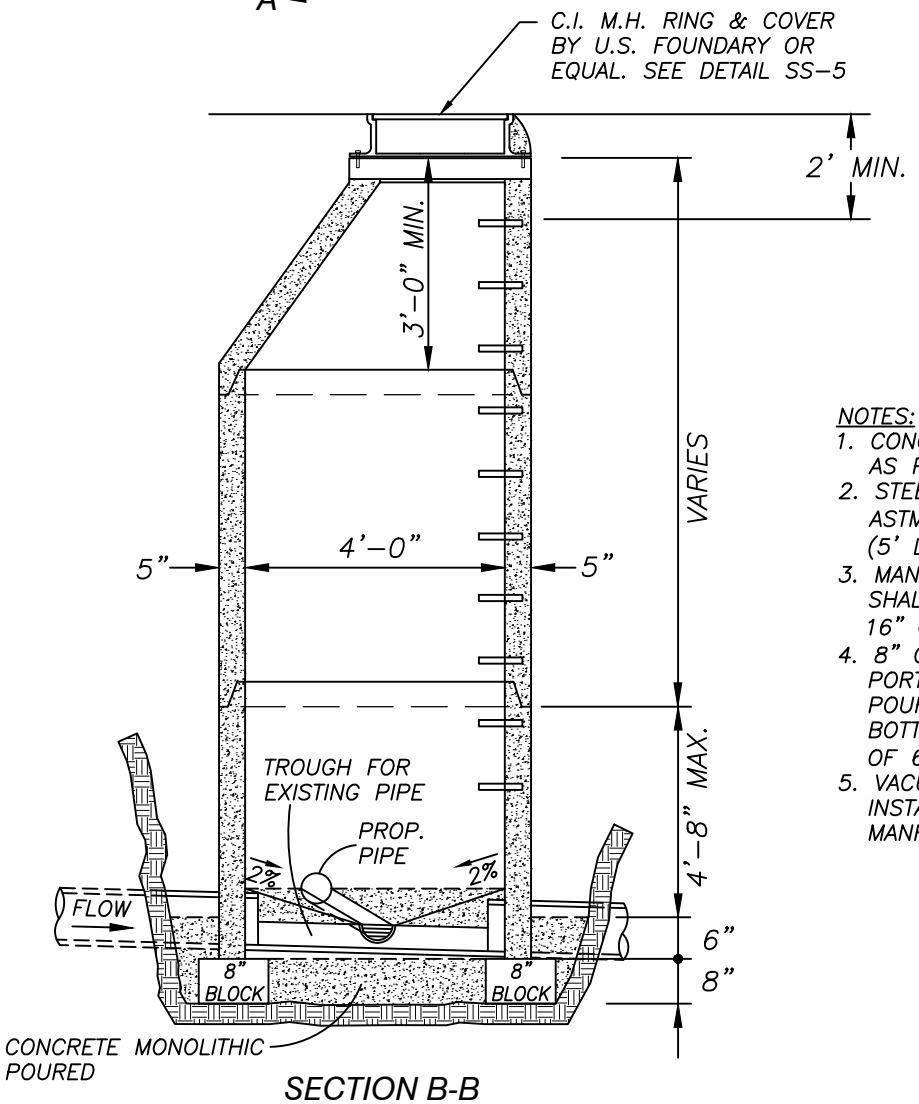
SEWER AIR RELIEF MANHOLE WITH FLAT SLAB TOP

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF





SECTION A-A



SECTION B-B

NOTES:

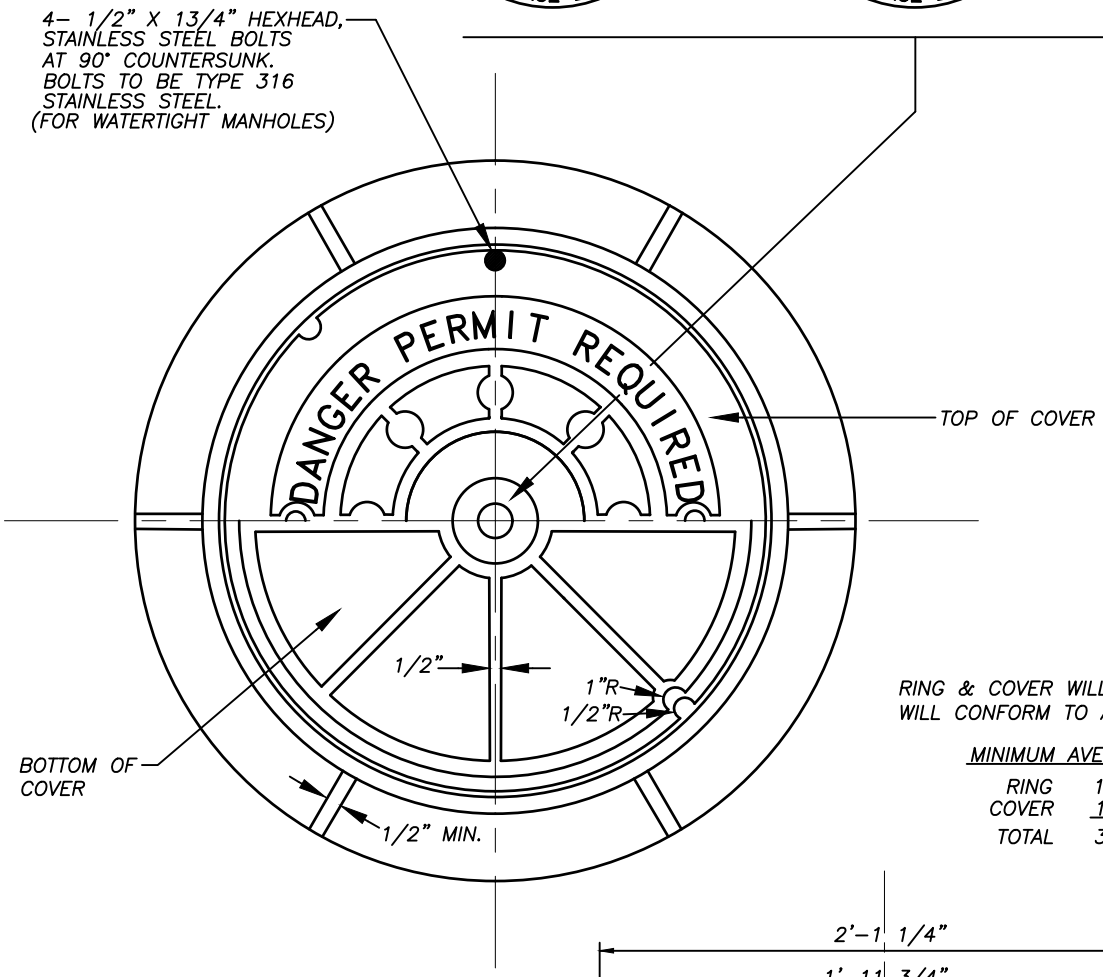
1. CONCRETE SHALL BE 3,000 PSI AS PER ASTM–478.
2. STEEL REINFORCING SHALL MEET ASTM–185 (4' DIA.) OR ASTM–478 (5' DIA.).
3. MANHOLES OVER 3'–6" IN DEPTH SHALL BE PROVIDED WITH STEPS 16" ON CENTERS.
4. 8" CONCRETE UNDER MANHOLE PORTIONS OF THE INVERT CAN BE POURED AT THE SAME TIME. BOTTOM SHOULD EXTEND A MIN. OF 6" BEYOND MANHOLE BASE.
5. VACUUM TEST REQUIRED ON ALL INSTALLATIONS PRIOR TO PUTTING MANHOLE INTO SERVICE.

SS-4

CITY OF MEBANE STANDARD

ECCENTRIC PRECAST BOTTOMLESS MANHOLE OVER EXISTING SANITARY SEWER (DOGHOUSE MANHOLE)

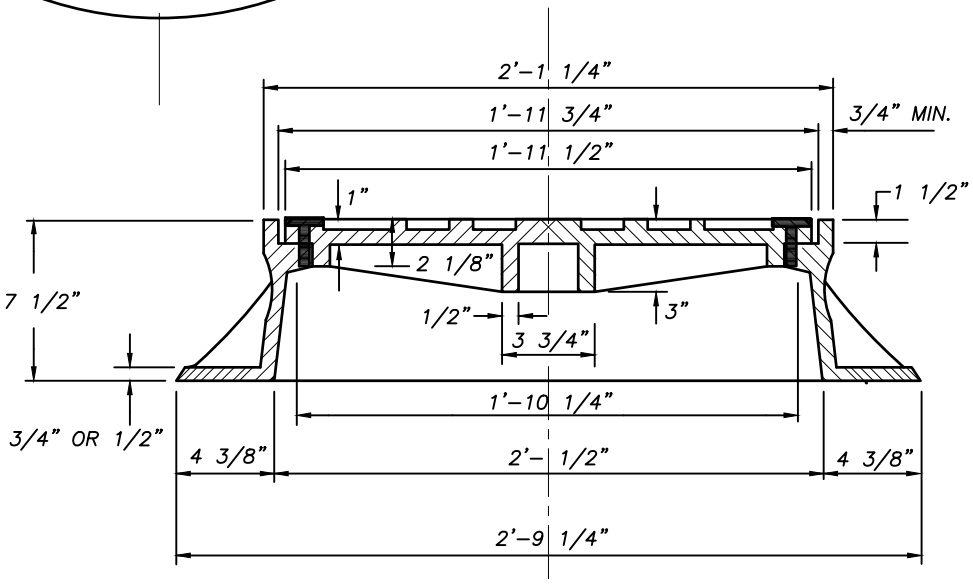
SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



RING & COVER WILL BE MACHINED AND WILL CONFORM TO ASTM A48, CLASS 30B

MINIMUM AVERAGE WEIGHTS

RING	190 LBS.
COVER	120 LBS.
TOTAL	310 LBS.

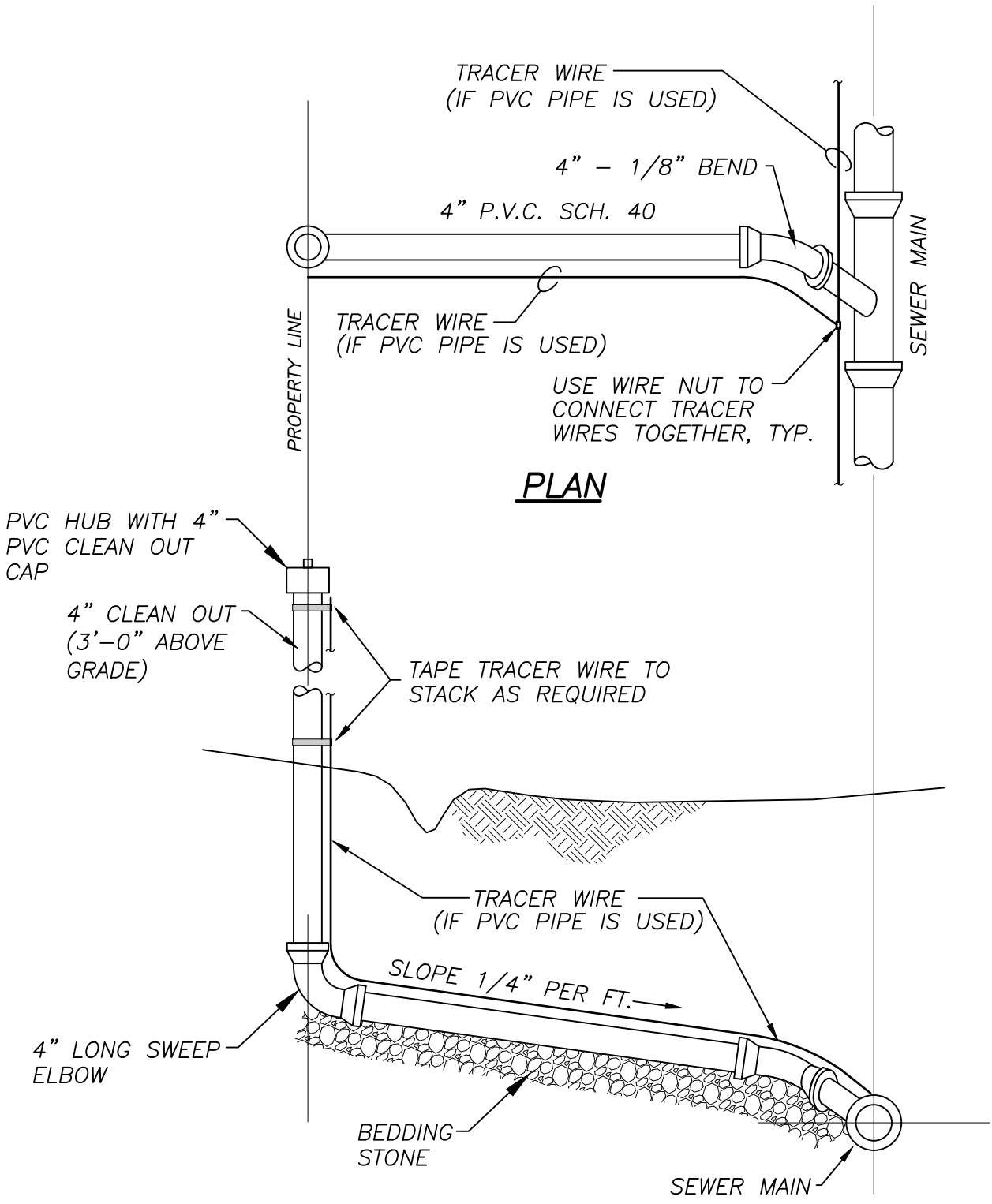


SS-5

CITY OF MEBANE STANDARD

MANHOLE RING & COVER

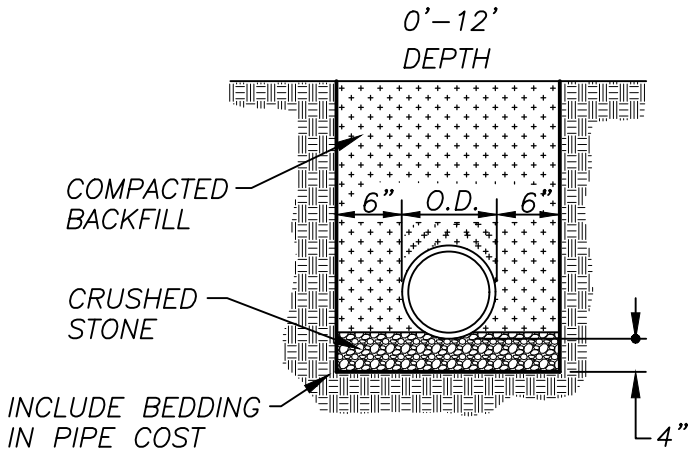
SCALE:	DATE:	DRAWN BY:
N.T.S.	7/1/21	WDF



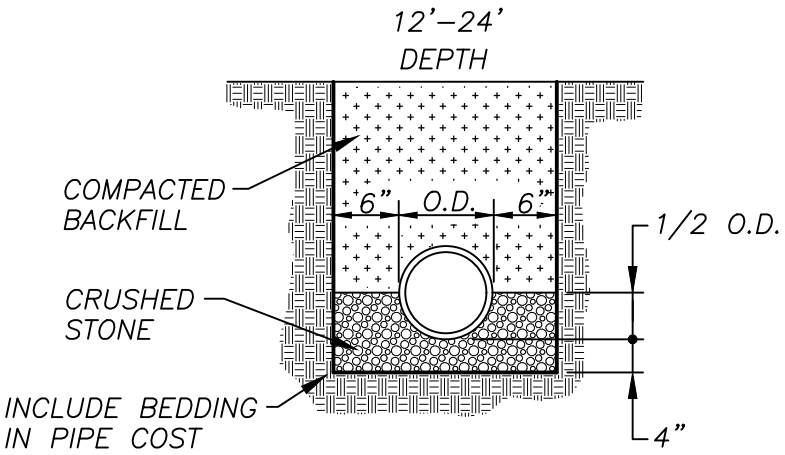
NOTE: PLUMBER TO CONNECT TO STUB–OUT/STACK AND LOWER CLEAN–OUT CAP TO GROUND LEVEL

SS-6

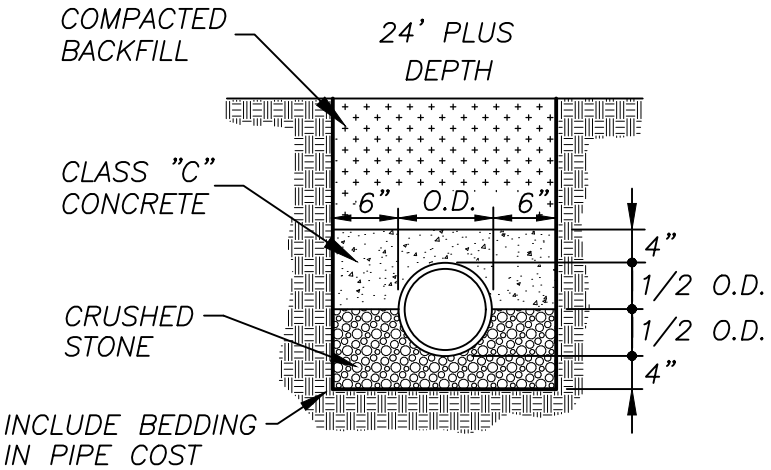
CITY OF MEBANE STANDARD	SEWER SERVICE CONNECTION		
	SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



CLASS "C" BEDDING



CLASS "B" BEDDING



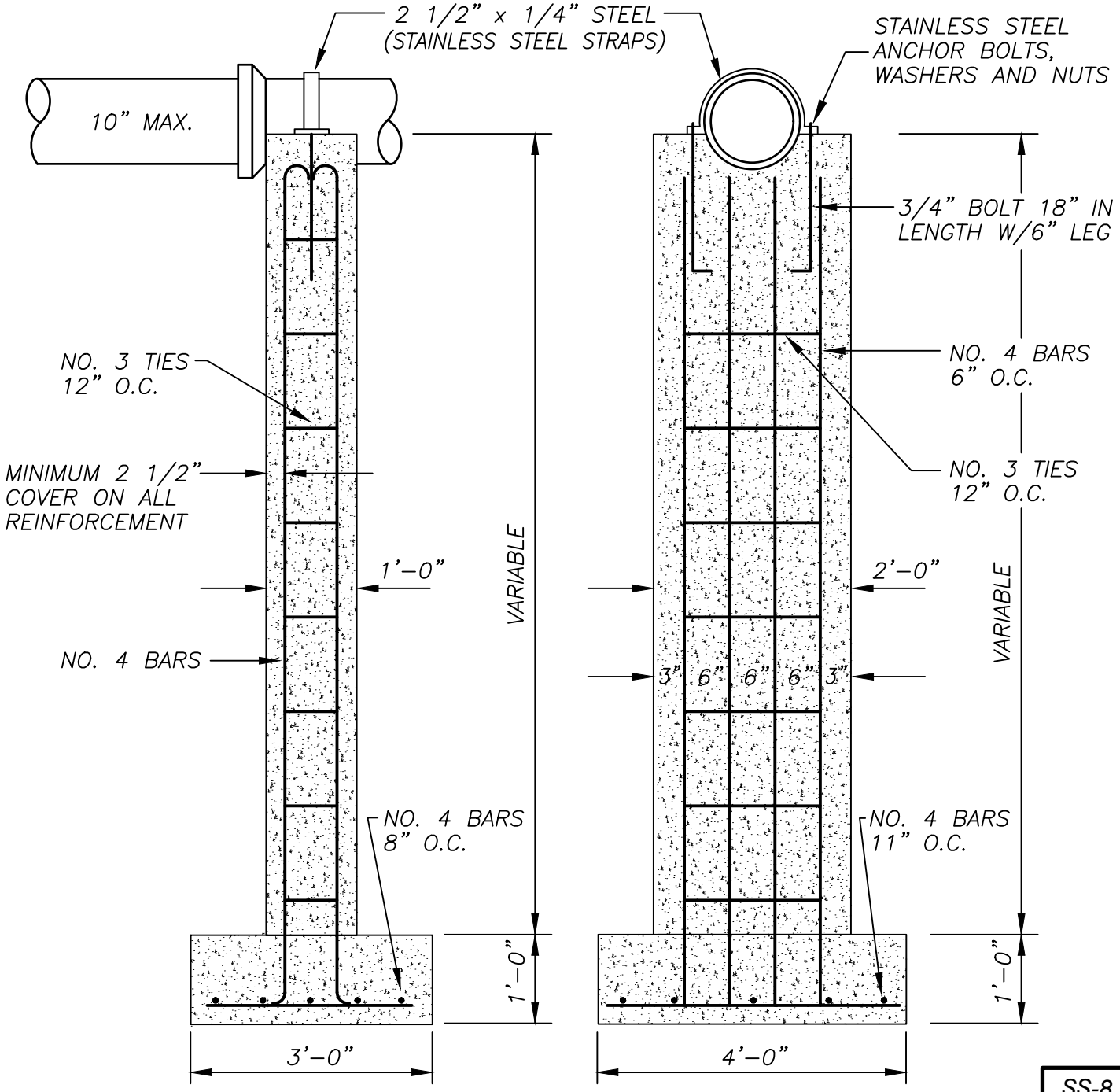
CLASS "A" BEDDING

SS-7

CITY OF MEBANE STANDARD	SANITARY SEWER BEDDING		
	SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF

NOTES:

1. REBAR BENDS NOT TO BE BENT BY HEAT.
2. ALL CONCRETE TO BE AIR ENTRAINED CLASS 'A'.
3. PROVIDE 1/8" TO 1/2" NEOPRENE PAD BETWEEN PIPE AND CONCRETE.
4. ALL HARDWARE TO BE STAINLESS STEEL.
5. FOUNDATION SOIL SHALL HAVE A MINIMUM SOIL BEARING PRESSURE OF 2000 PSI TO BE FIELD VERIFIED BY GEOTECHNICAL ENGINEER.
6. WHERE SHALLOW ROCK IS FOUND TO EXIST, PIN FOOTING TO ROCK BY DRILLING & EPOXYING DOWELS INTO THE ROCK.
7. ALL PIPE THAT IS TO BE SUPPORTED ON A PIER SHALL BE FLANGED DIP. INCLUDE PROVISIONS FOR EXPANSION AS DIRECTED BY ENGINEER.
8. ALL PIERS SHALL BE DESIGNED AND SUBMITTED (ALONG WITH DOCUMENTATION SHOWING DESIGN PARAMETERS, ASSUMPTIONS, AND SAFETY FACTORS USED TO RESIST THE FORCES ACTING ON THE PIER/PIPE SYSTEM) AS PART OF THE PLAN REVIEW PROCESS. ALL PIER DESIGNS MUST BE SIGNED AND SEALED BY A REGISTERED NORTH CAROLINA PROFESSIONAL ENGINEER.
9. LOCATION OF ALL JOINTS TO BE DETERMINED BY THE DESIGN ENGINEER. A DETAIL OF THE ENTIRE PIER SYSTEM PROFILE SHALL BE INCLUDED IN THE DESIGN SUBMITTAL AS PART OF THE PLAN REVIEW PROCESS.



SS-8

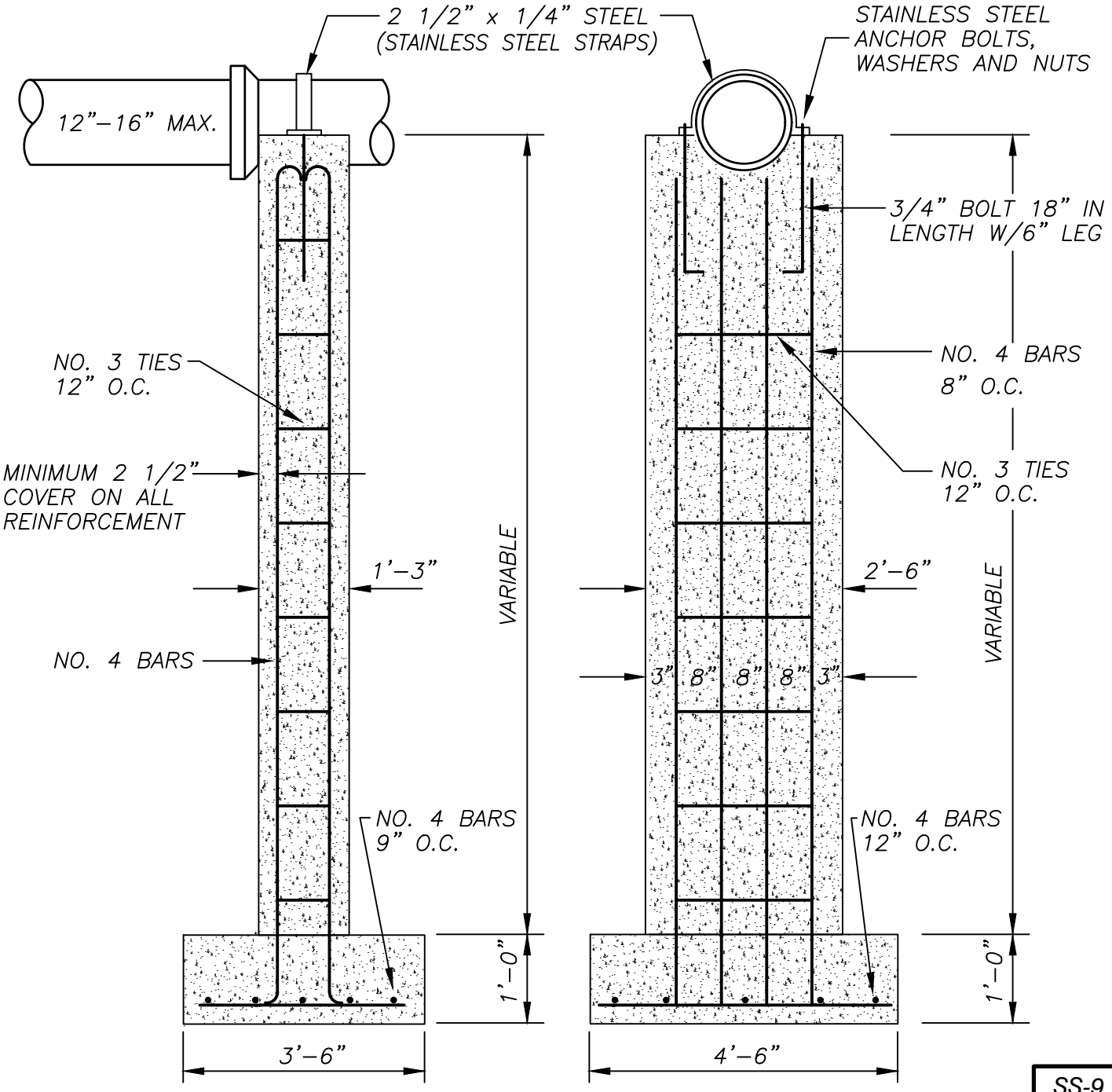
CITY OF MEBANE STANDARD

CONCRETE PIER

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF

NOTES:

1. REBAR BENDS NOT TO BE BENT BY HEAT.
2. ALL CONCRETE TO BE AIR ENTRAINED CLASS 'A'.
3. PROVIDE 1/8" TO 1/2" NEOPRENE PAD BETWEEN PIPE AND CONCRETE.
4. ALL HARDWARE TO BE STAINLESS STEEL.
5. FOUNDATION SOIL SHALL HAVE A MINIMUM SOIL BEARING PRESSURE OF 2000 PSI TO BE FIELD VERIFIED BY GEOTECHNICAL ENGINEER.
6. WHERE SHALLOW ROCK IS FOUND TO EXIST, PIN FOOTING TO ROCK BY DRILLING & EPOXYING DOWELS INTO THE ROCK.
7. ALL PIPE THAT IS TO BE SUPPORTED ON A PIER SHALL BE FLANGED DIP. INCLUDE PROVISIONS FOR EXPANSION AS DIRECTED BY ENGINEER.
8. ALL PIERS SHALL BE DESIGNED AND SUBMITTED (ALONG WITH DOCUMENTATION SHOWING DESIGN PARAMETERS, ASSUMPTIONS, AND SAFETY FACTORS USED TO RESIST THE FORCES ACTING ON THE PIER/PIPE SYSTEM) AS PART OF THE PLAN REVIEW PROCESS. ALL PIER DESIGNS MUST BE SIGNED AND SEALED BY A REGISTERED NORTH CAROLINA PROFESSIONAL ENGINEER.
9. LOCATION OF ALL JOINTS TO BE DETERMINED BY THE DESIGN ENGINEER. A DETAIL OF THE ENTIRE PIER SYSTEM PROFILE SHALL BE INCLUDED IN THE DESIGN SUBMITTAL AS PART OF THE PLAN REVIEW PROCESS.

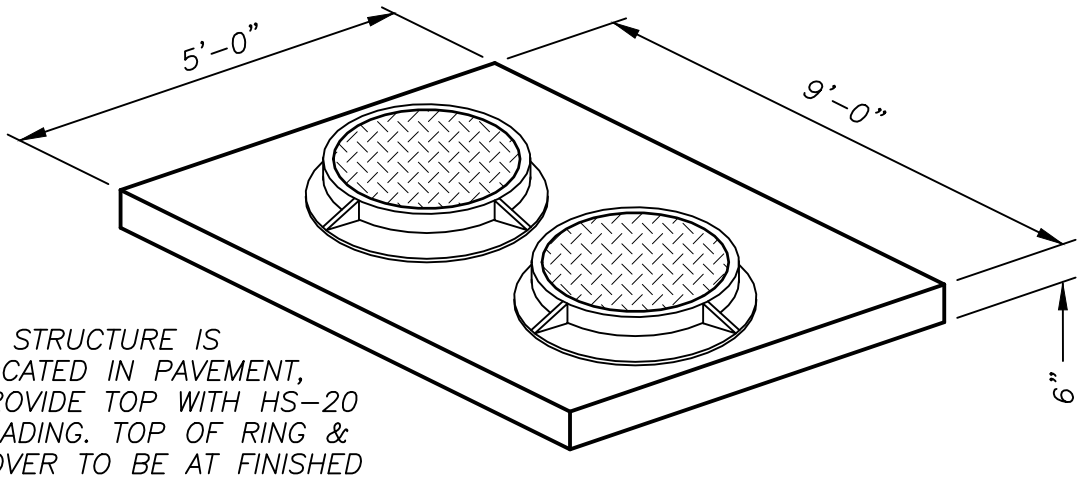


SS-9

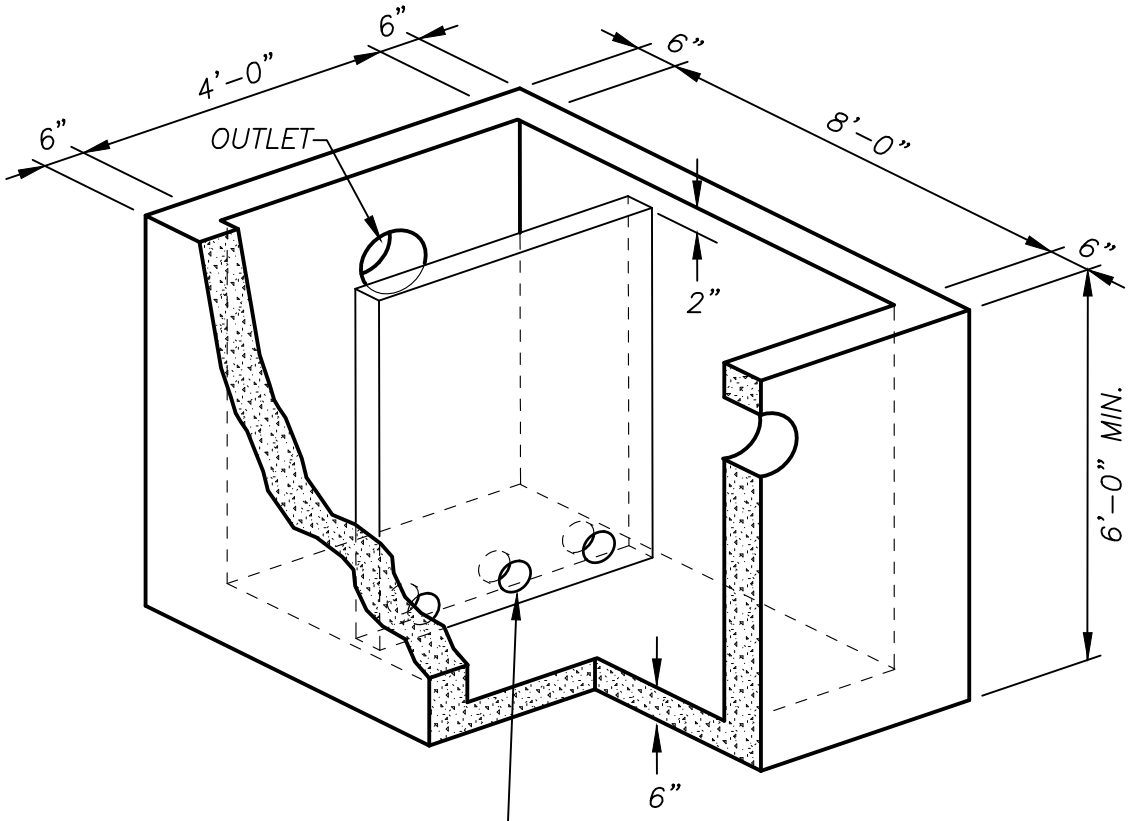
CITY OF MEBANE STANDARD

CONCRETE PIER

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



NOTE : IF STRUCTURE IS LOCATED IN PAVEMENT, PROVIDE TOP WITH HS-20 LOADING. TOP OF RING & COVER TO BE AT FINISHED GRADE.



CONCRETE BAFFLE WITH 3-4" HOLES IN BOTTOM

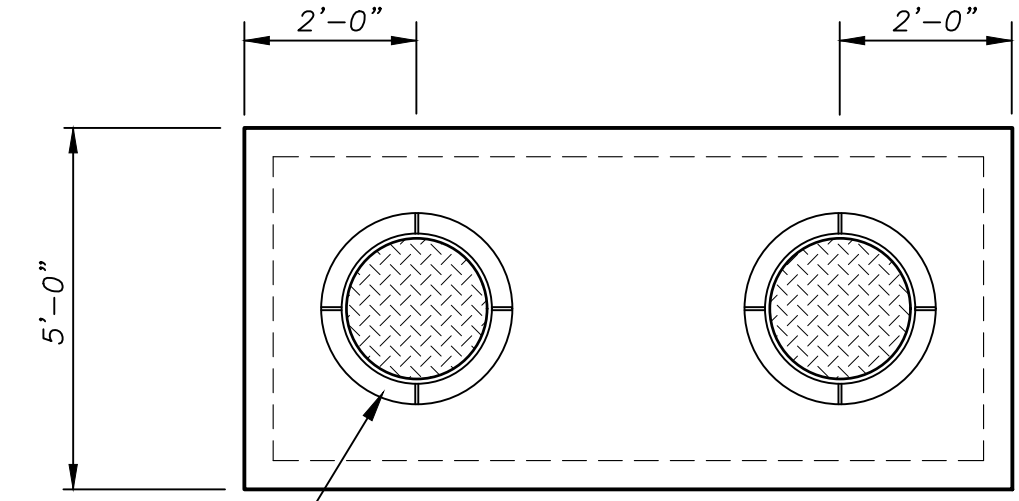
NOTE : PROVIDE REINFORCING AS APPROPRIATE FOR LOCATION.

SS-10

CITY OF MEBANE STANDARD

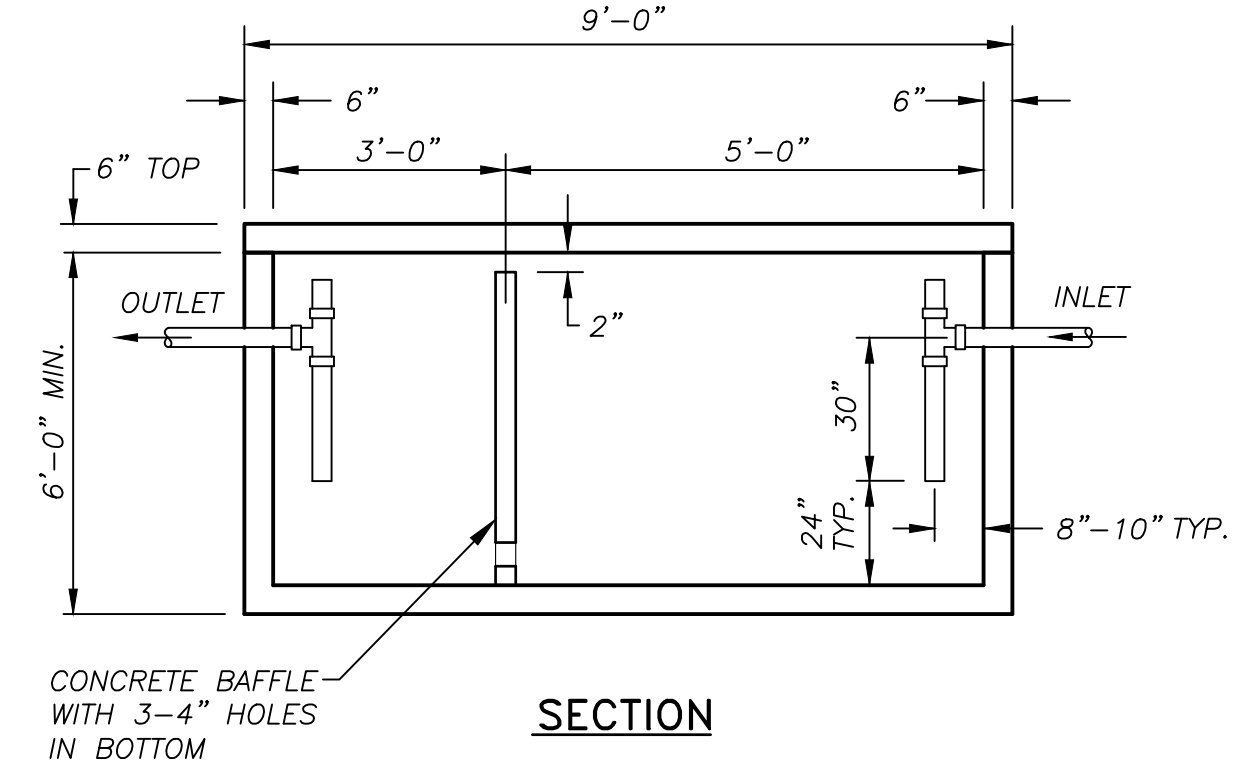
1,000 GALLON GREASE TRAP

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



PLAN

NOTE: IF STRUCTURE IS LOCATED IN PAVEMENT, PROVIDE TOP WITH HS–20 LOADING. TOP OF RING & COVER TO BE AT FINISHED GRADE.

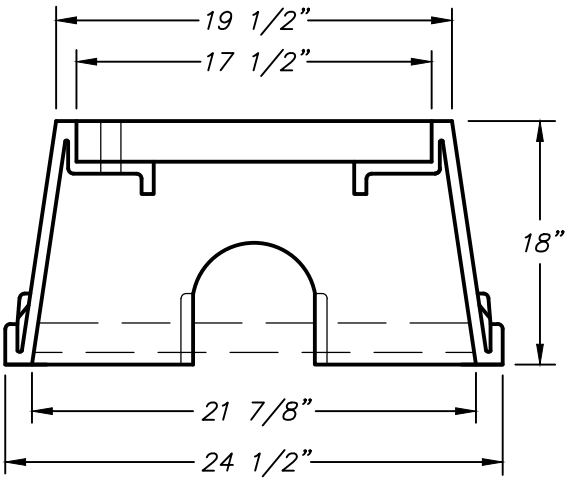


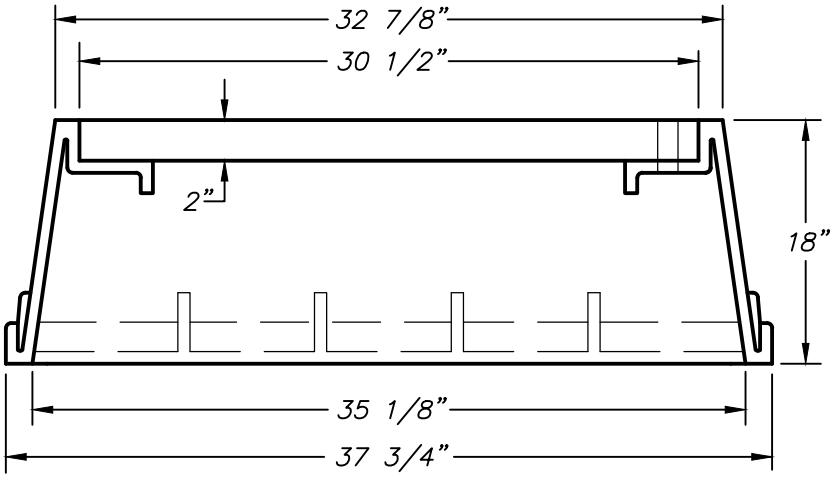
SECTION

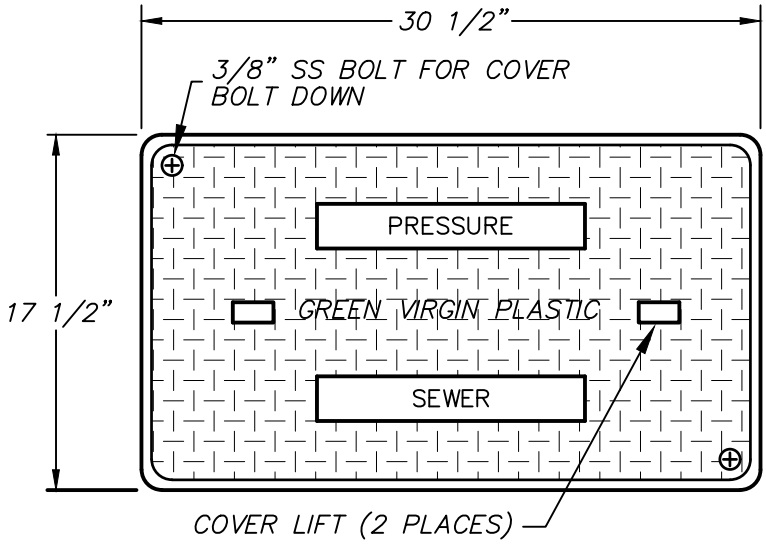
NOTE: PROVIDE REINFORCING AS APPROPRIATE FOR LOCATION.

SS-11

CITY OF MEBANE STANDARD	1,000 GALLON GREASE TRAP		
	SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF







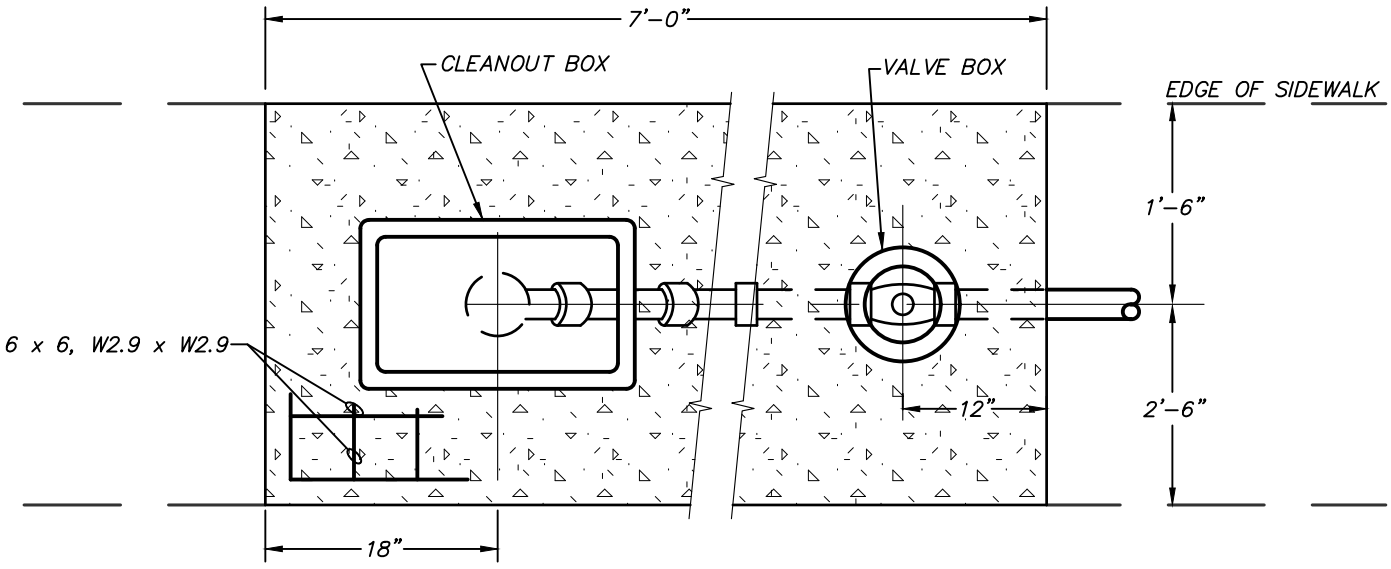
PLAN VIEW

SS-12

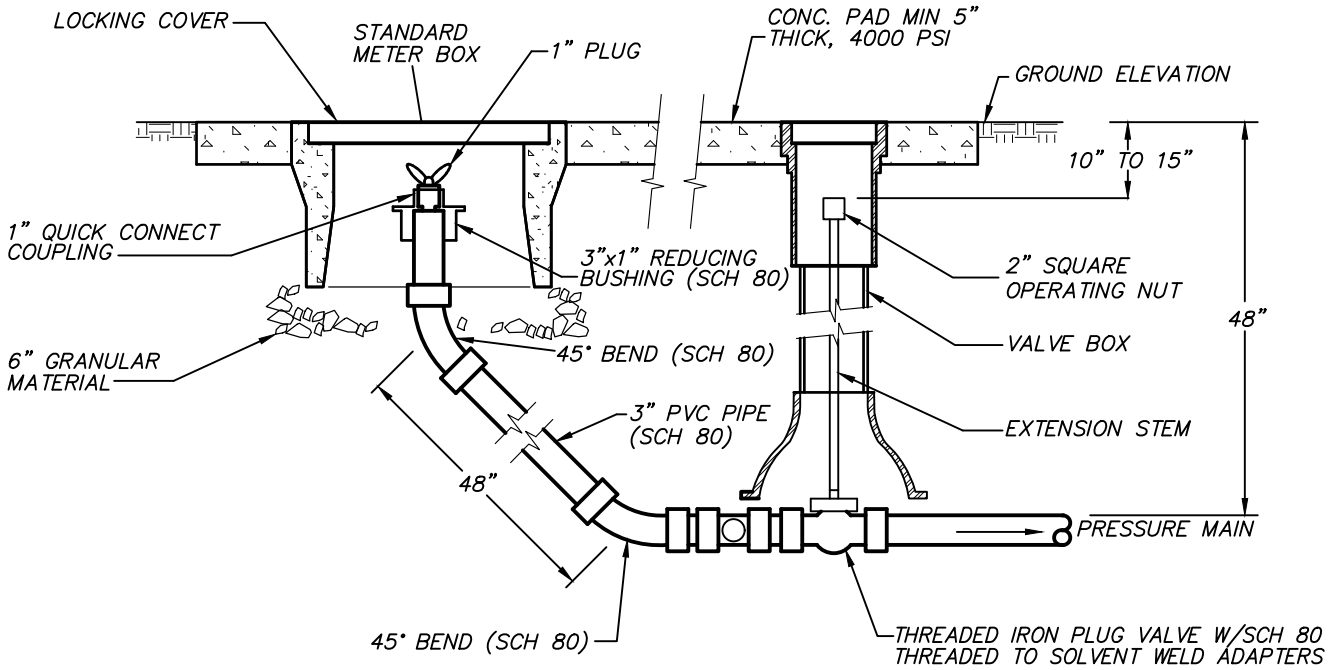
CITY OF MEBANE STANDARD

STANDARD PRESSURE SEWER METER BOX

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



PLAN VIEW



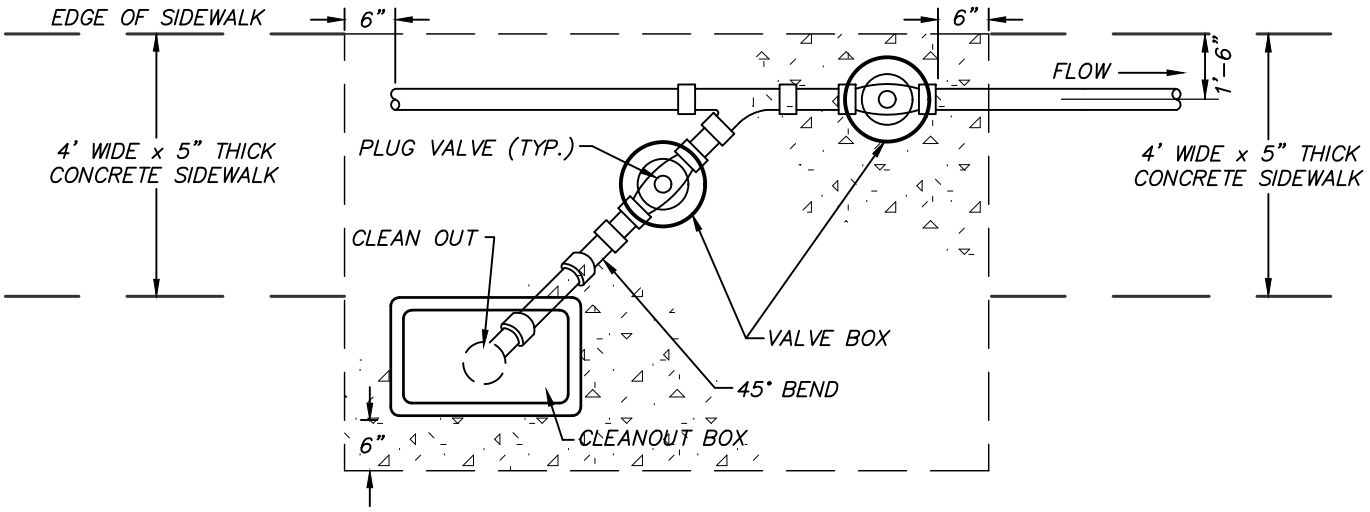
ELEVATION "A-A"

SS-13

CITY OF MEBANE STANDARD

CLEANOUT AT END OF MAIN FOR PRESSURE SEWER SYSTEMS

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF

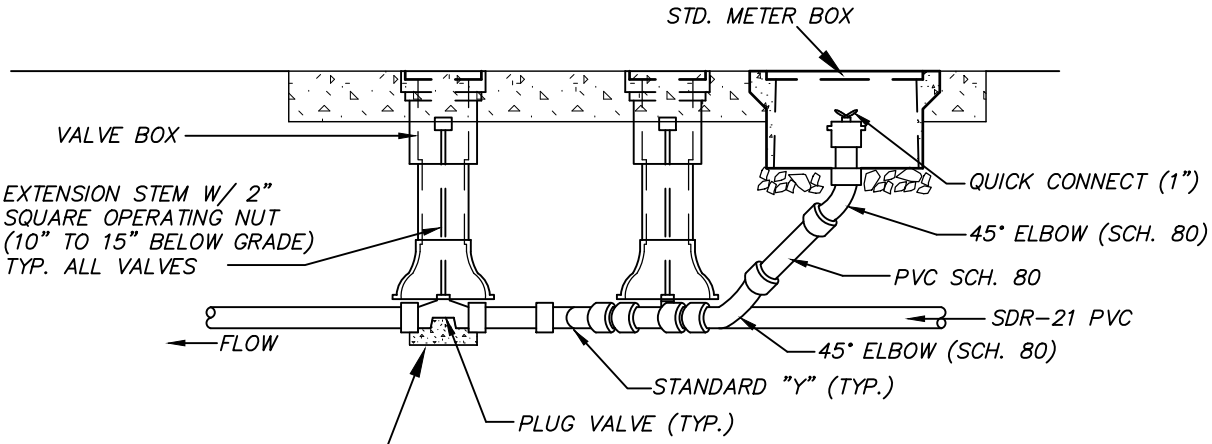


PLAN VIEW

NOTES:

CONCRETE PAD UNDER AND UP ON SIDES OF ALL VALVES TO PREVENT SETTLEMENT AND TWISTING OF VALVE.

CONCRETE PAD SHALL BE MIN. 5" THICK, 4000 PSI



ELEVATION

NOTE: CONTRACTOR SHALL LOCATE BOTTOM OF VALVE BOX SUCH THAT BOX SHALL BEAR ONTO A BRICK SUPPORT & NOT THE PIPE OR VALVE.

SS-14

CITY OF MEBANE STANDARD

MAIN LINE VALVE FOR PRESSURE SEWER SYSTEM

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF

CITY OF MEBANE
STANDARD

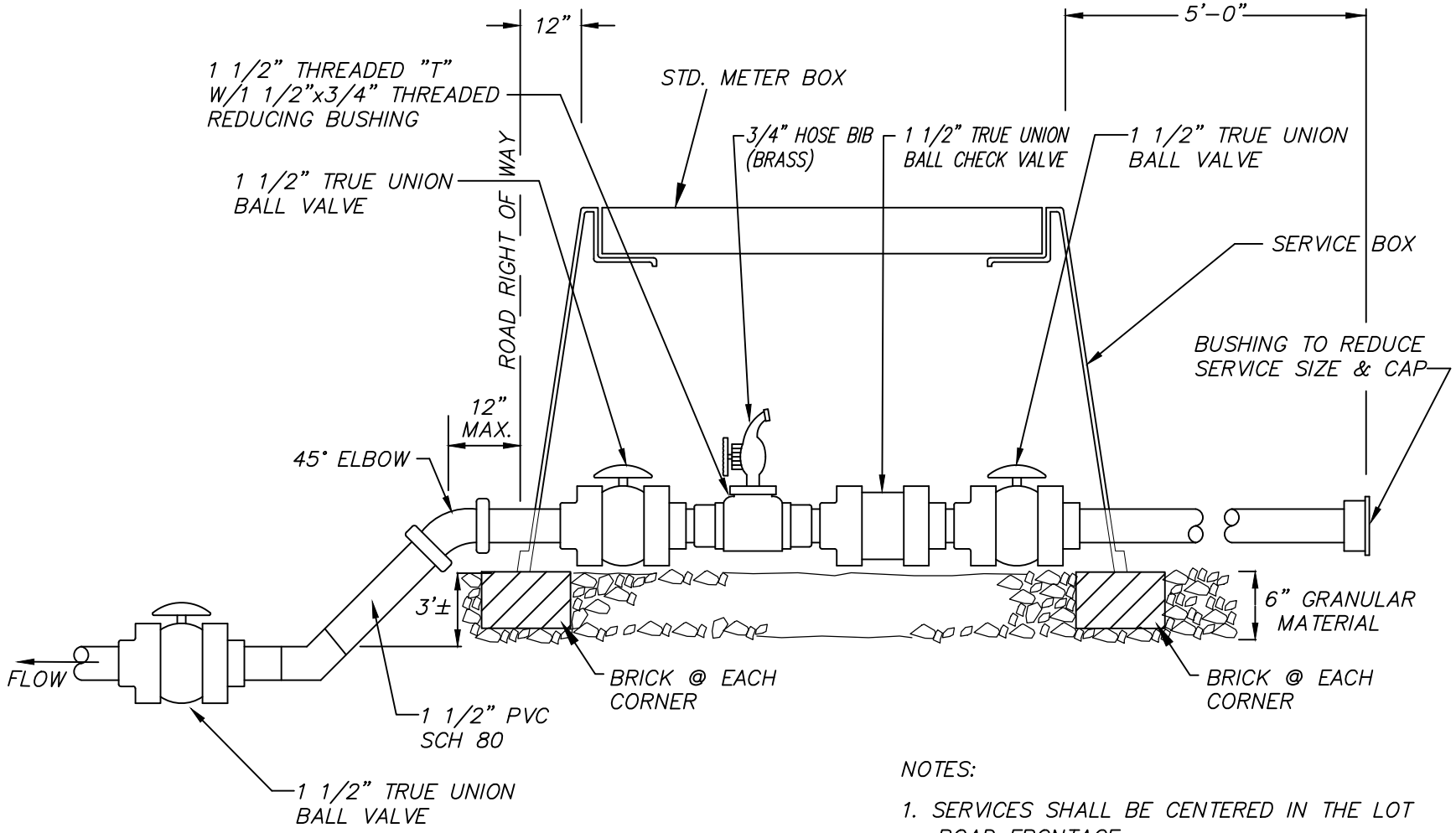
STANDARD PRESSURE SEWER SERVICE CONNECTION

SCALE: N.T.S.

DATE: 7/1/21

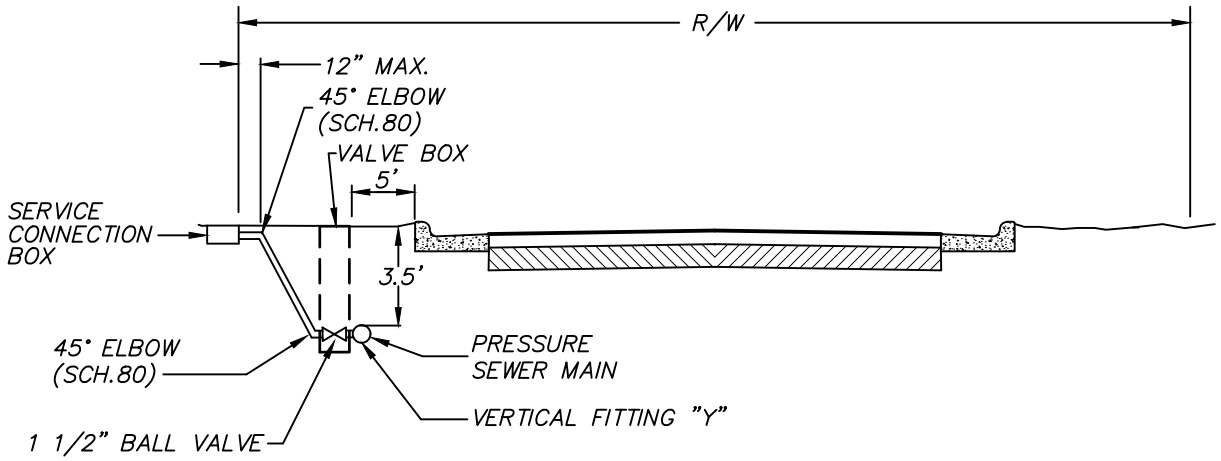
DRAWN BY: WDF

SS-15

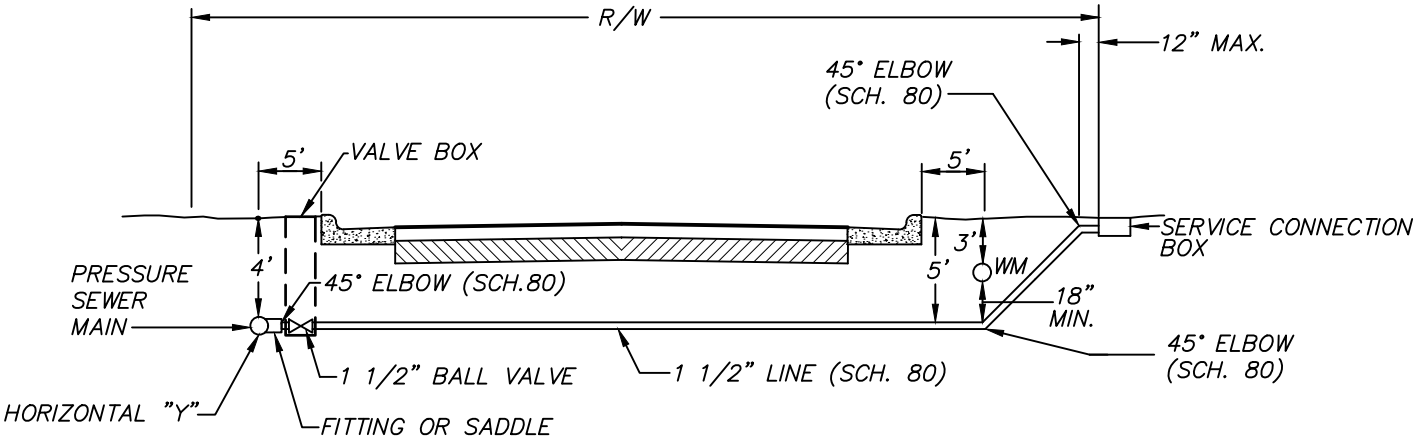


NOTES:

1. SERVICES SHALL BE CENTERED IN THE LOT ROAD FRONTAGE.
2. BOX SHALL NOT BE IN SIDEWALKS OR DRIVEWAYS.
3. TOP OF BOX SHALL BE FLUSH WITH FINISH GRADE OF LOT.



PRESSURE SEWER SHORT SIDE LATERAL SERVICE



PRESSURE SEWER LONG SIDE LATERAL SERVICE

SS-16

CITY OF MEBANE STANDARD

PRESSURE SEWER LATERAL SERVICES

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF

CITY OF MEBANE
STANDARD

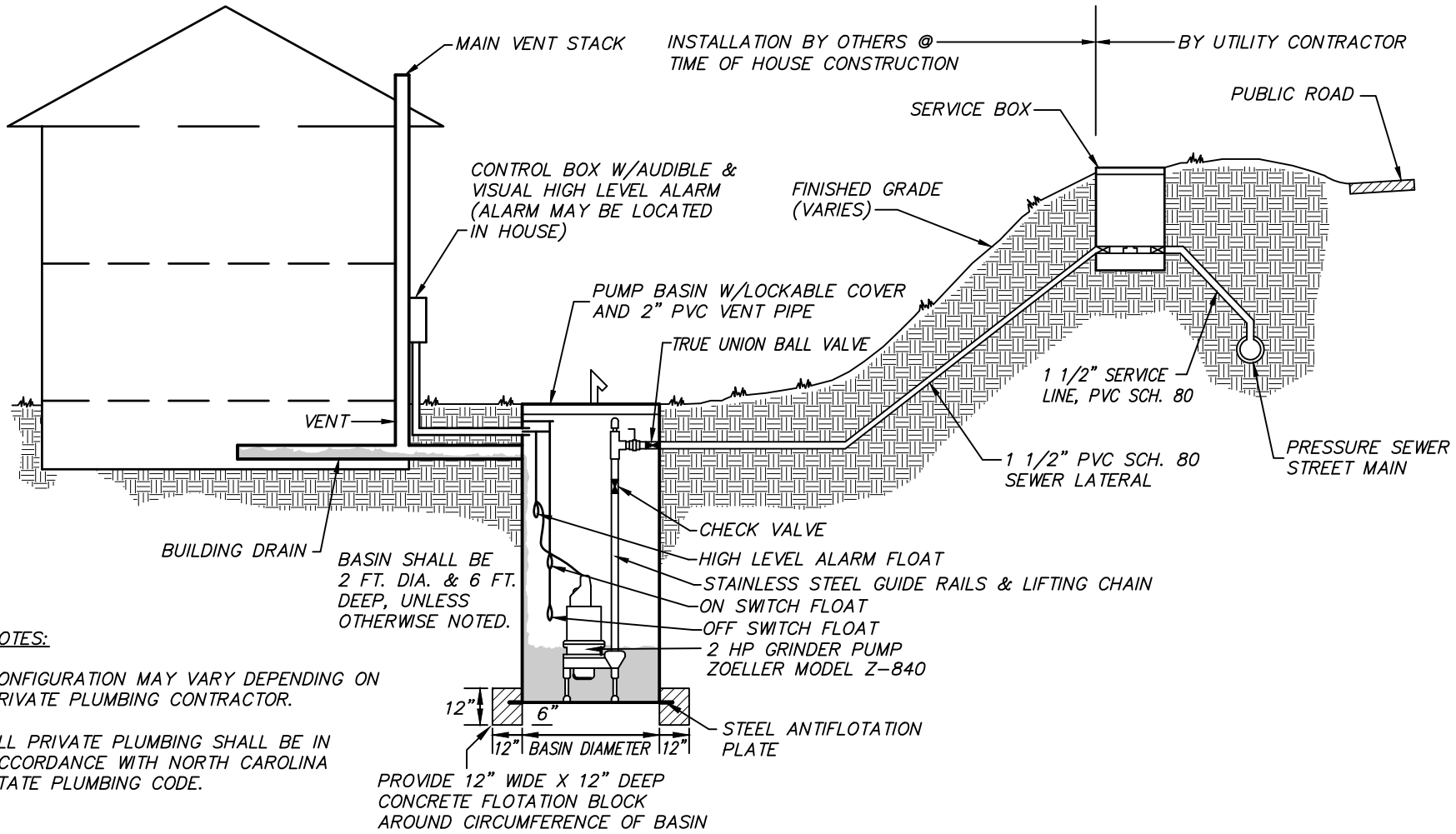
INDIVIDUAL GRINDER PUMP SYSTEM

SCALE: N.T.S.

DATE: 7/1/21

DRAWN BY: WDF

SS-17

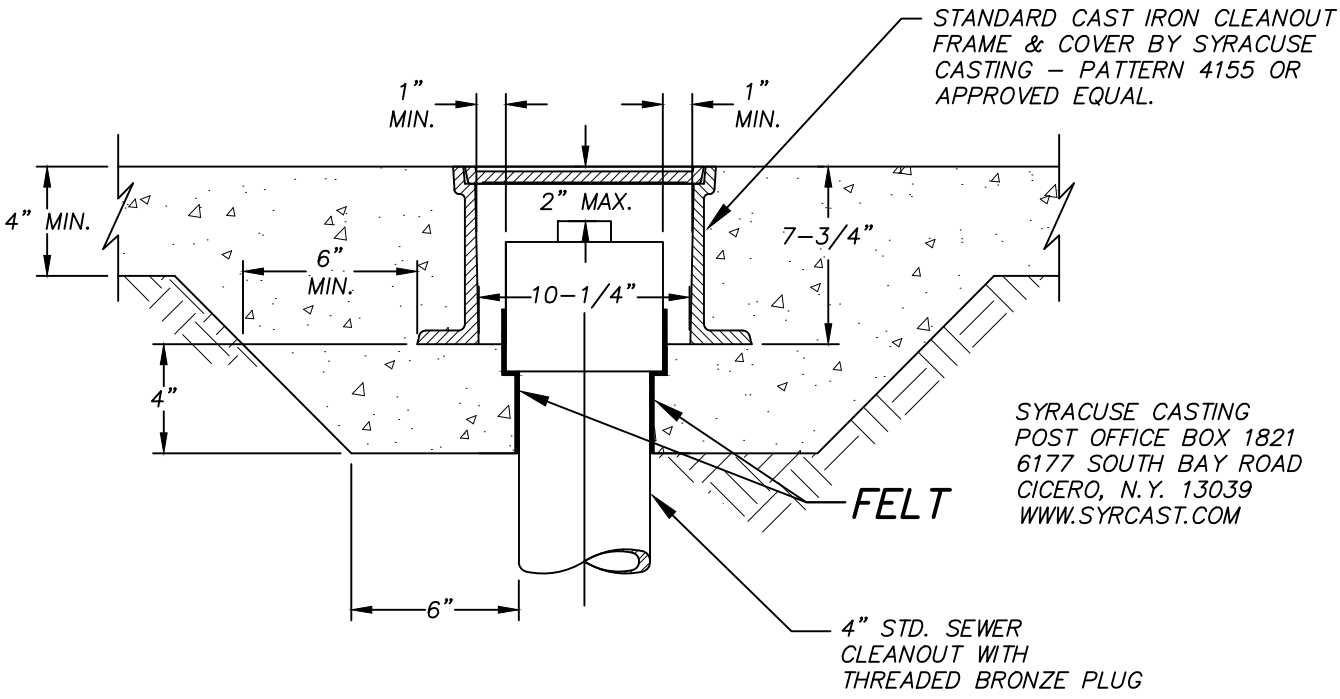


NOTES:

CONFIGURATION MAY VARY DEPENDING ON PRIVATE PLUMBING CONTRACTOR.

ALL PRIVATE PLUMBING SHALL BE IN ACCORDANCE WITH NORTH CAROLINA STATE PLUMBING CODE.

WHERE RESIDENTIAL CLEAN–OUTS OCCUR IN DRIVEWAYS IN NEW CONSTRUCTION, A CASTING SHALL BE INSTALLED TO PROTECT IT. THE CAST IRON CASTING IS TO BE A MIN. OF 2" GREATER I.D. THAN THE SIZE OF PIPE IT IS INSTALLED OVER, IT SHALL BE SET IN CONCRETE AT FINISHED GRADE. CASTING SHALL CONFORM TO THE REQUIREMENTS OF AASHTO H20–44. SEE THE FOLLOWING SKETCH FOR FURTHER DETAILS.



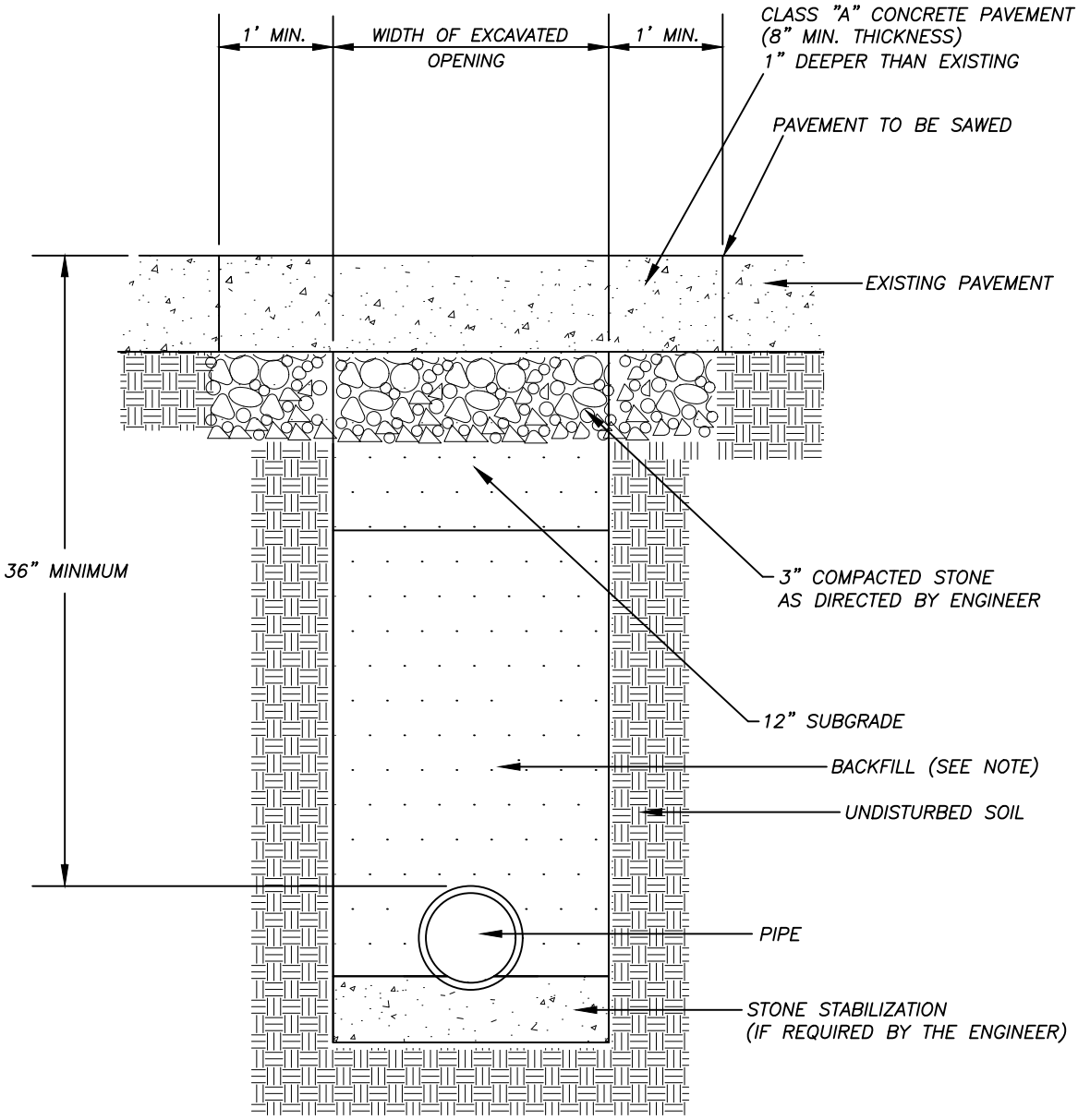
ELEVATION VIEW

SS-18

CITY OF MEBANE STANDARD

SEWER CLEANOUT IN TRAFFIC AREA

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



NOTE:
WHERE THE EDGE OF THE PATCH OR SECTION OF REMOVED PAVEMENT IS LESS THAN 10' FROM A TRANSVERSE EXPANSION OR CONTRACTION JOINT OR CRACK, THE ENTIRE SECTION OF PAVEMENT SHALL BE REMOVED UP TO THE JOINT OR CRACK AND REPLACED WITH NEW CONCRETE AND ABC STONE IN ACCORDANCE WITH THE MOST CURRENT N.C.D.O.T. STANDARD SPECIFICATIONS.

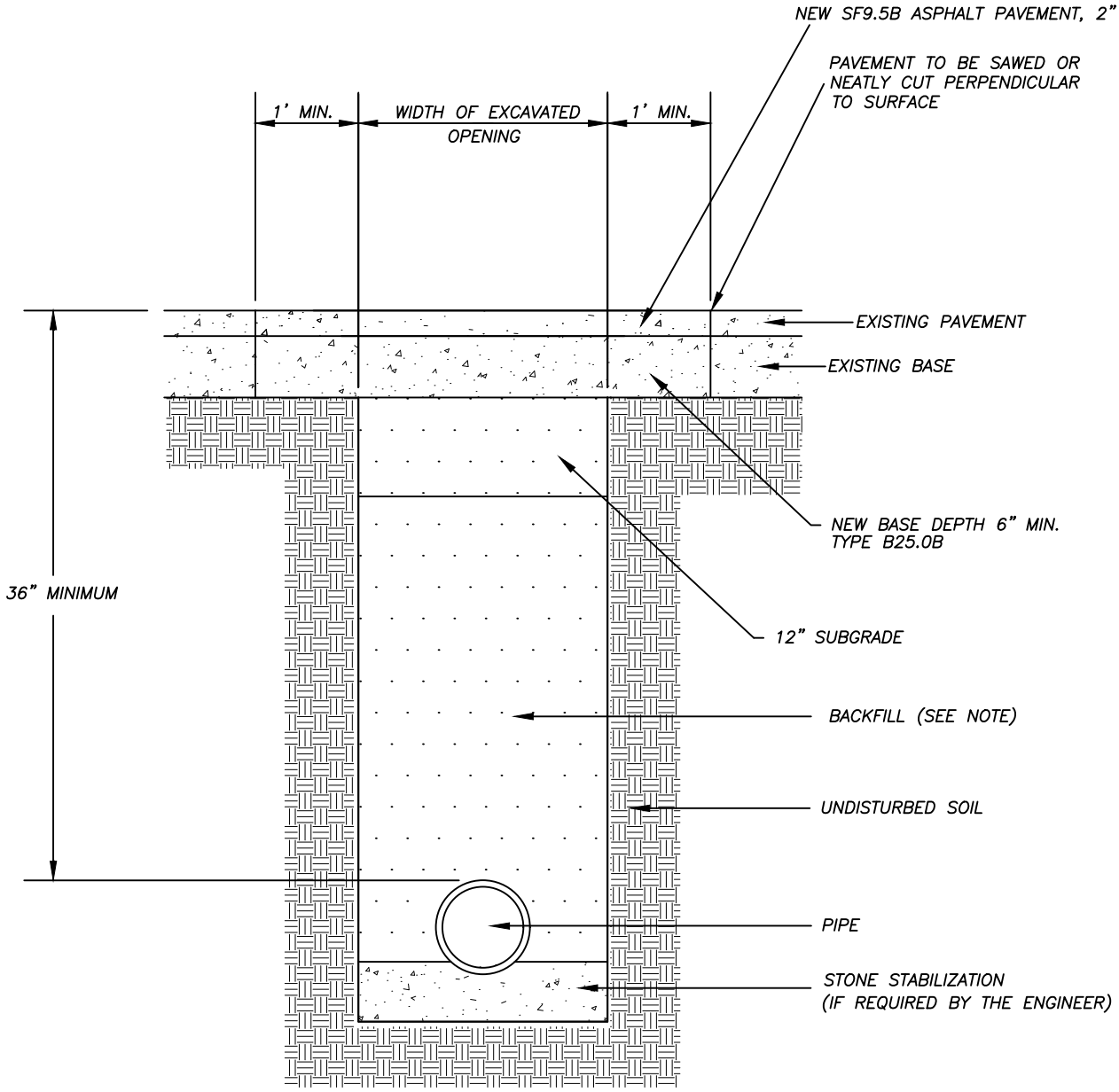
THE BACKFILL SHALL BE MADE IN 6" LAYERS AND SHALL BE COMPACTED TO AT LEAST 95% OF STANDARD DENSITY (AASHTO METHOD T-99). EACH LAYER MUST BE THOROUGHLY TAMPED BY A MECHANICAL TAMP BEFORE THE NEXT LAYER IS PLACED.

SS-19

CITY OF MEBANE STANDARD

CONCRETE DRIVEWAY REPAIR DETAIL

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



NOTE:

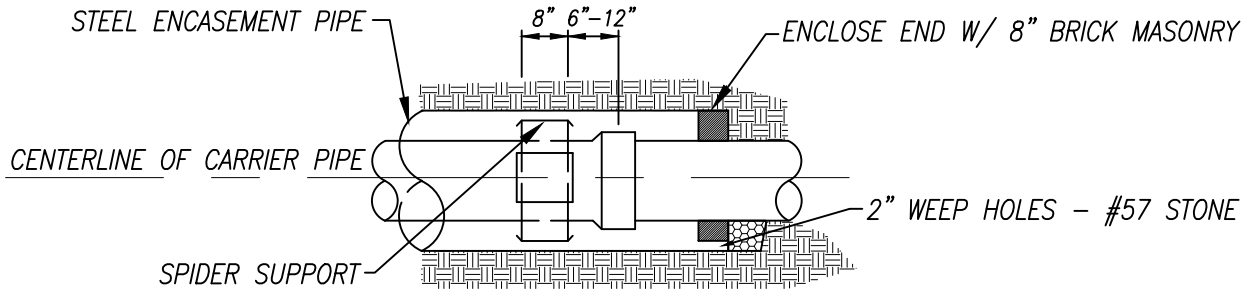
THE BACKFILL SHALL BE MADE IN 6" LAYERS AND SHALL BE COMPACTED TO AT LEAST 95% OF STANDARD DENSITY (AASHTO METHOD T-99). EACH LAYER MUST BE THOROUGHLY TAMPED BY A MECHANICAL TAMP BEFORE THE NEXT LAYER IS PLACED. ALL ASPHALT PAVEMENT REPLACED SHALL BE IN ACCORDANCE WITH THE MOST CURRENT N.C.D.O.T. STANDARD SPECIFICATIONS. BASE COURSE DENSITY AND SUBGRADE DENSITY SHALL BE 100%.

SS-20

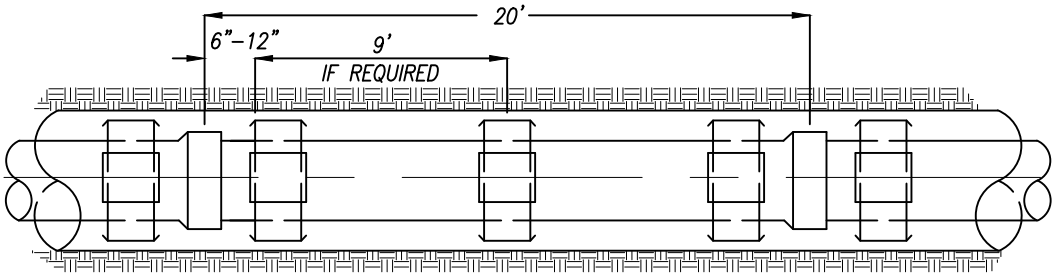
CITY OF MEBANE STANDARD

ASPHALT PAVEMENT REPAIR DETAIL

SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF



CASING END SECTION



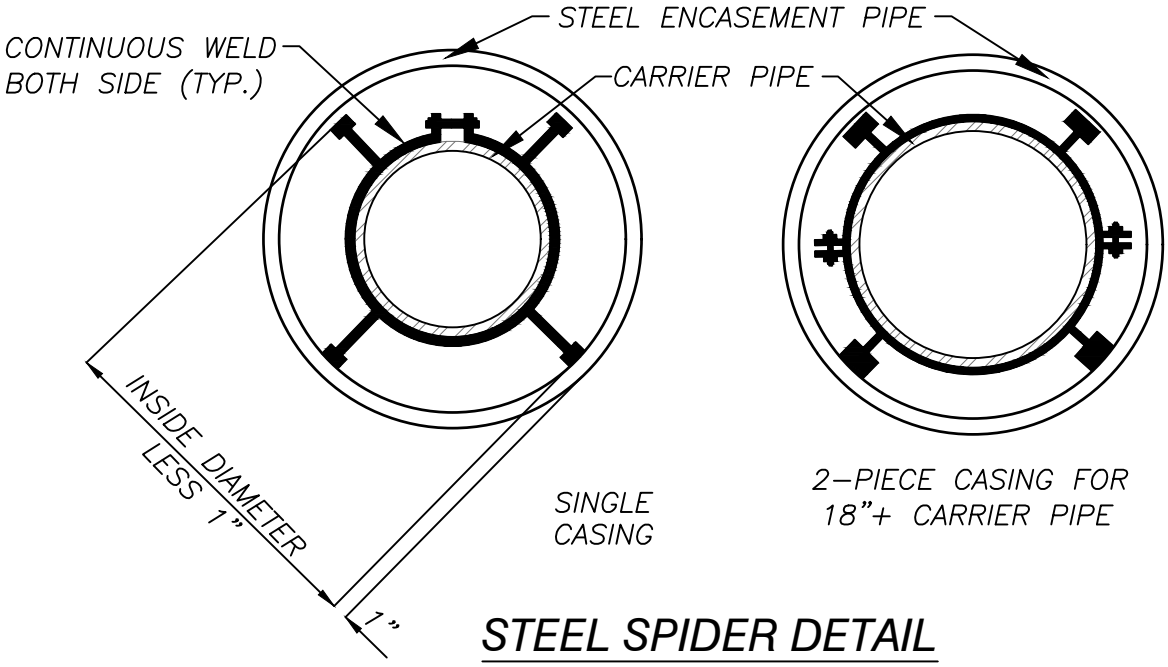
SIDE VIEW

TYPICAL SPACING FOR STEEL SPIDERS

STEEL ENCASEMENT DETAIL

NOTES:

1. NORMAL SPACING FOR SPIDERS IS 3 PER 18' LENGTH OF PIPE, ONE SUPPORT AT EACH END AND A SUPPORT AT 9' CENTER.
2. SPACERS SHALL BE STAINLESS STEEL WITH STAINLESS STEEL HARDWARE AND POLYMER SKIDS.
3. PROVIDE RUBBER WRAP BETWEEN CARRIER PIPE AND SPACER.
4. FIELD MODIFY AS REQUIRED TO PROVIDE DESIGN SLOPE IN CARRIER PIPE.
5. ALL ENCASEMENT PIPES SHALL BE FIELD SURVEYED, AND LOCATION & ELEVATIONS PROVIDED ON AS–BUILTS.



SINGLE CASING

2–PIECE CASING FOR 18"+ CARRIER PIPE

STEEL SPIDER DETAIL

SS-21

CITY OF MEBANE STANDARD	ENCASEMENT PIPE SUPPORT AND SPACERS		
	SCALE: N.T.S.	DATE: 7/1/21	DRAWN BY: WDF

CITY OF MEBANE
STANDARD

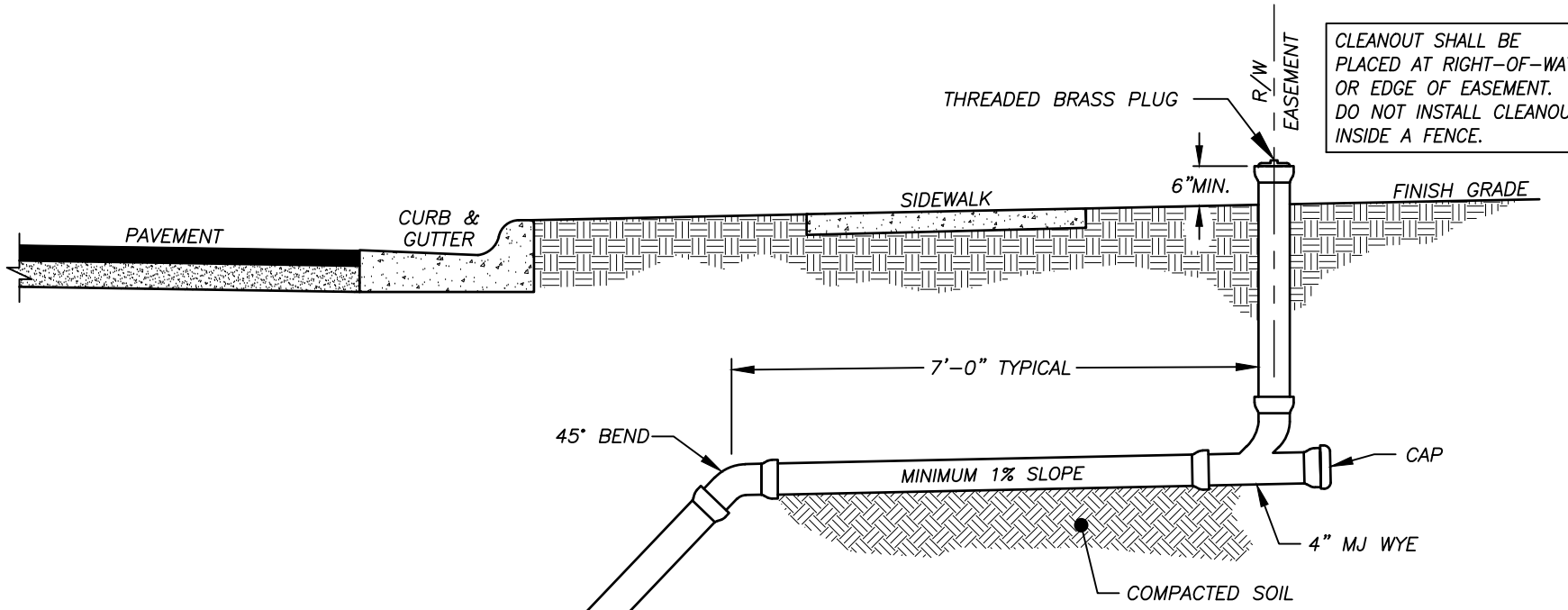
STANDARD 4" S.S. SERVICE FOR DEEP SEWER MAINS (14' & GREATER)

SCALE: N.T.S.

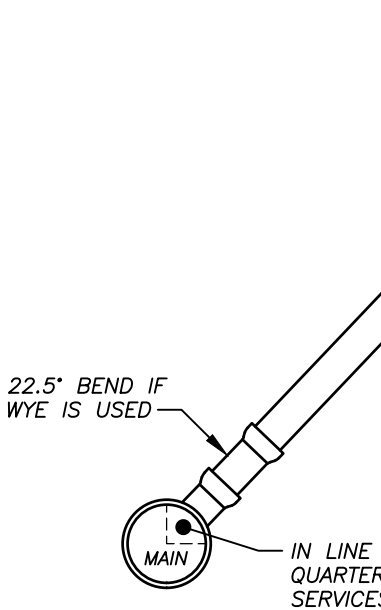
DATE: 7/1/21

DRAWN BY: WDF

SS-22



SECTION VIEW



IN LINE WYE FITTING OR APPROVED TAPPING SADDLE PROVIDED AT TOP QUARTER OF THE MAIN. IN LINE WYE IS REQUIRED FOR SANITARY SEWER SERVICES INSTALLED WITH NEW CONSTRUCTION WHEN PARCEL AND SERVICE LOCATIONS ARE KNOWN AND IDENTIFIED ON APPROVED PLANS.

NOTES:
1. ENTIRE SERVICE LINE SHALL BE 4 INCH DIP.
2. CONTRACTOR MAY BE REQUIRED TO LAY CONNECTIONS AT 1% (REGARDLESS OF DEPTH) IN ORDER TO SERVE CUSTOMER. IN THIS CASE, 45° BEND MAY NOT BE USED.
3. CONNECTIONS TO 16 INCH OUTFALLS AND GREATER MUST BE MADE INTO MANHOLE.
4. MARKING TAPE SHALL BE INSTALLED FOR ALL SERVICE CONNECTIONS FROM THE MAIN LINE TO THE CLEANOUT FOR ALL NEW CONSTRUCTION OR RETROFIT INSTALLATIONS USING OPEN TRENCH METHODS.