

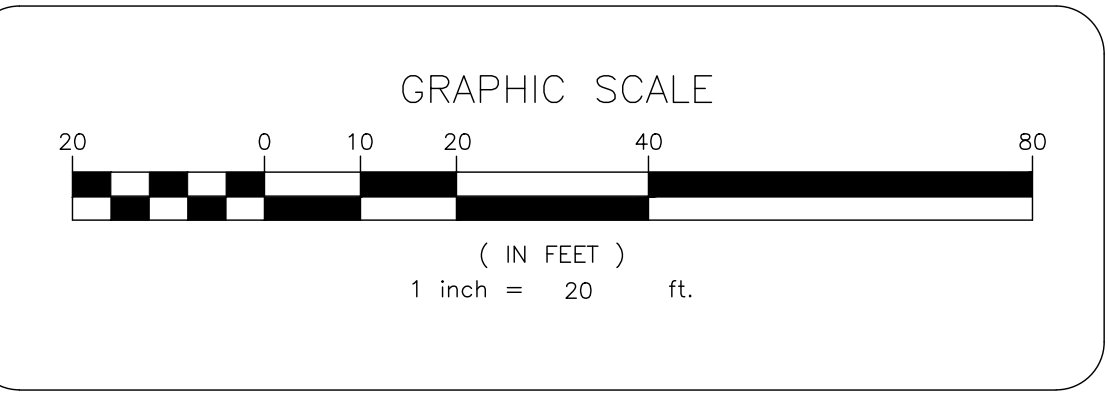
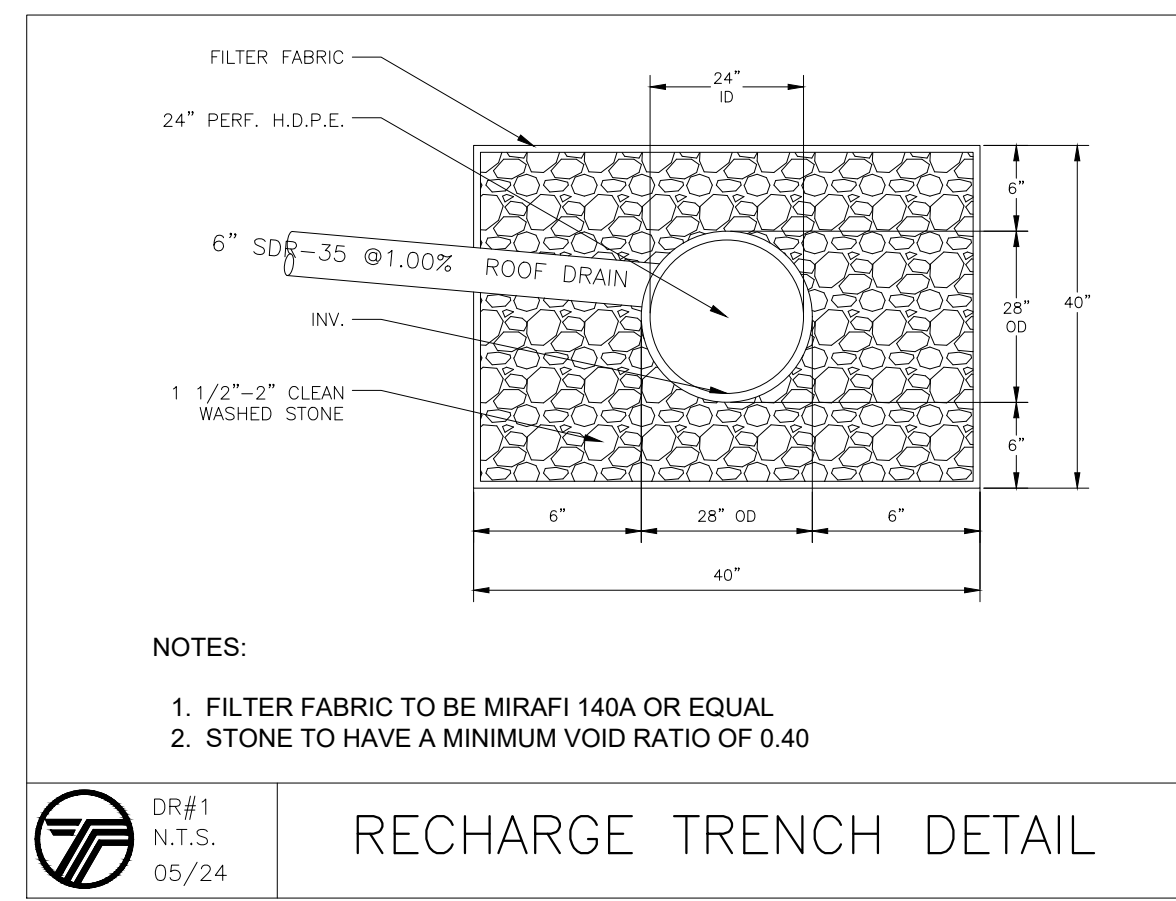
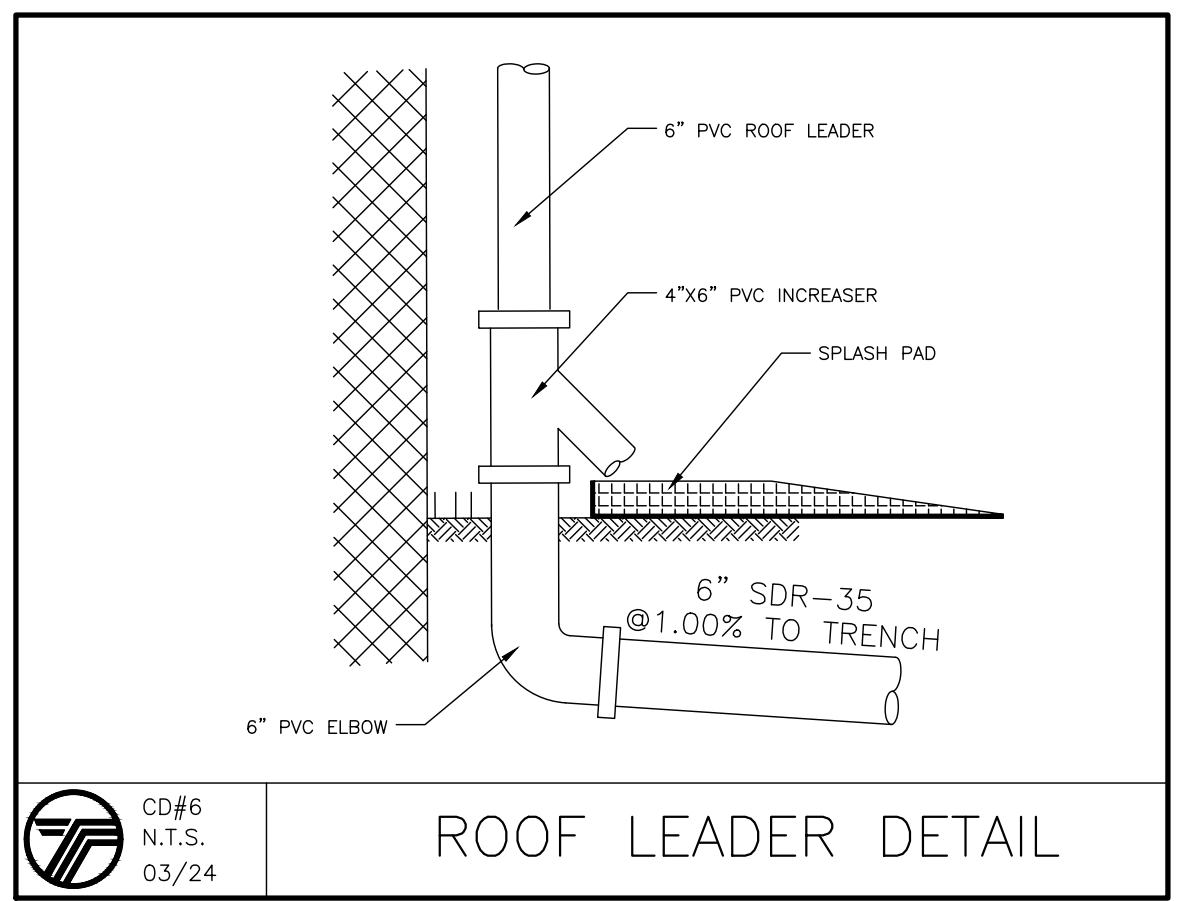
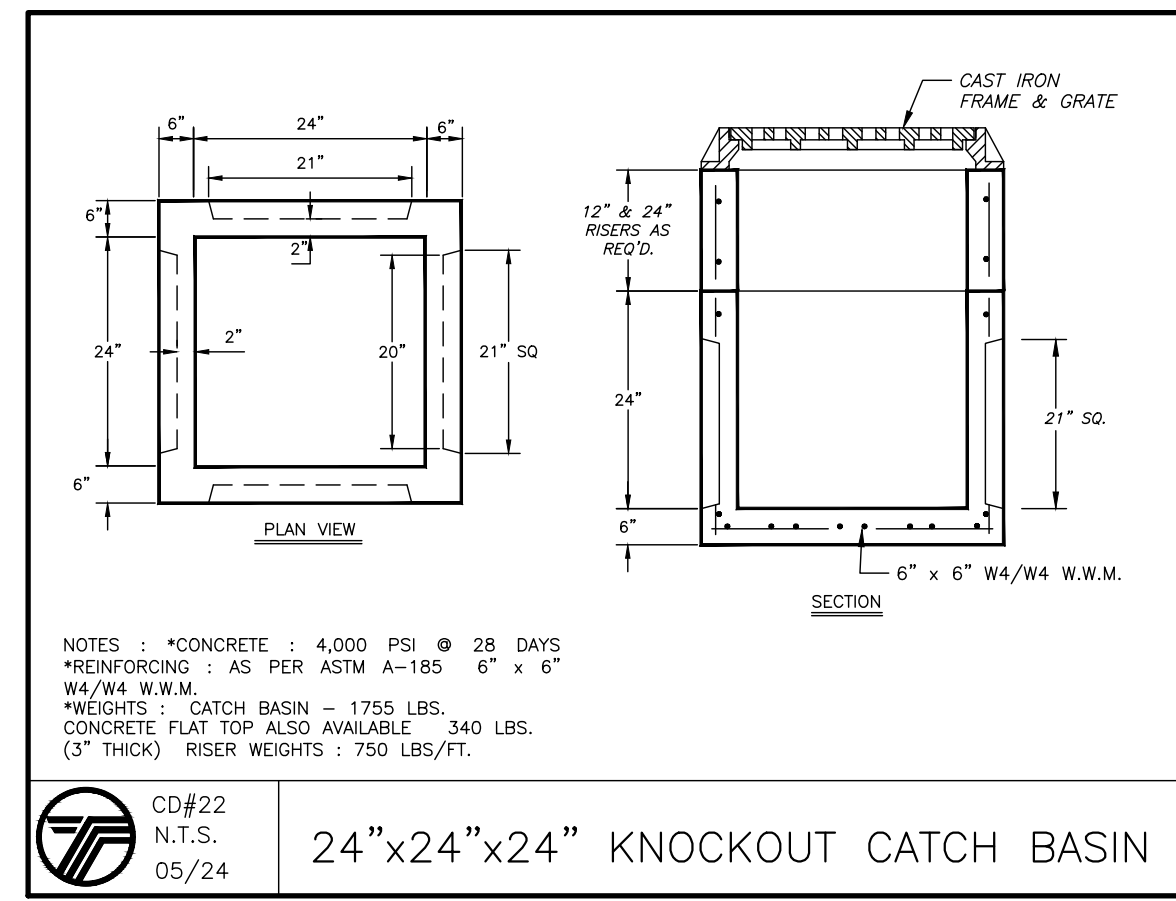
**LEGEND:**

**RL** PROPOSED 6" PVC ROOF LEADER PER STORM DRAIN DETAILS.

**RECHARGE NOTES:**

- RECHARGE TRENCHES ARE TO BE LOCATED A MINIMUM OF 8 FEET FROM THE FOUNDATION WITH AN INVERT 1 FOOT LOWER THAN THE BASEMENT FLOOR
- THE SYSTEM COLLECTS AND RECHARGES THE CLEAN RUNOFF FROM THE ROOF. IN THE EVENT THAT THE SYSTEM FAILS AND NO LONGER RECHARGES WATER, THE SYSTEM WILL OVERFLOW OUT OF THE WYE FITTING IN THE ROOF LEADER. RUNOFF WILL THEN FLOW ACROSS THE LAWN AREA WHICH IS STABILIZED WITH GRASS OR OTHER GROUND COVER. THERE SHOULD BE NO CATASTROPHIC FAILURE THAT WOULD CAUSE DAMAGING EROSION DURING NORMAL STORM EVENTS.

RUNOFF CALCULATIONS (LOT 1): 3,595.67 SF (PROPOSED COVERAGE)	RUNOFF CALCULATIONS (LOT 2): 3,983.39 SF (PROPOSED COVERAGE)
0.50 INCH/ 2 HOUR STORM	0.50 INCH/ 2 HOUR STORM
3,595.67 SF X 0.50 IN X 1 FT/12 INCHES = 149.82 CF REQUIRED	3,983.39 SF X 0.50 IN X 1 FT/12 INCHES = 165.97 CF REQUIRED
RECHARGE TRENCH VOL = 6.32 CF/LF	RECHARGE TRENCH VOL = 6.32 CF/LF
149.82/6.32 = 23.71 LF REQUIRED	165.97/6.32 = 26.26 LF REQUIRED
25 LF OF TRENCH PROPOSED X 6.32 CF/LF = 158 CF PROVIDED	30 LF OF TRENCH PROPOSED X 6.32 CF/LF = 189.60 CF PROVIDED



PREPARED FOR  
**DrawME**  
 Designing Group

NO.	REVISION	DATE	DR/CK

**JOSIP MEDIC, PE**

379 BROOKFIELD DR.  
 JACKSON, NJ 08527  
 LIC. 103757  
 NY 845-666-0155  
 NJ 732-523-2289  
 E-MAIL INFO@TERRANVC.COM

JOSIP MEDIC, P.E. LIC. 103757 DATE **09/18/2024**

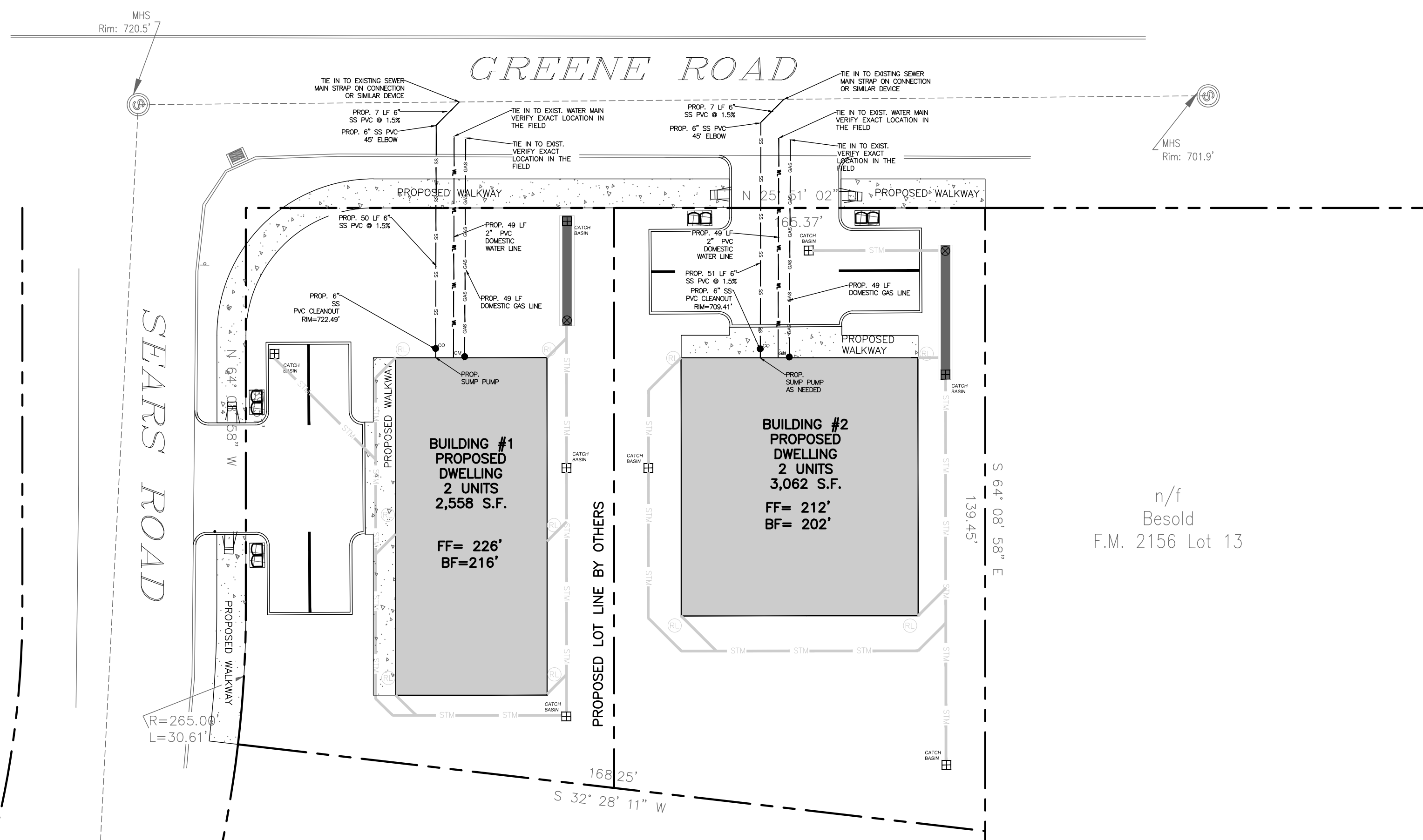
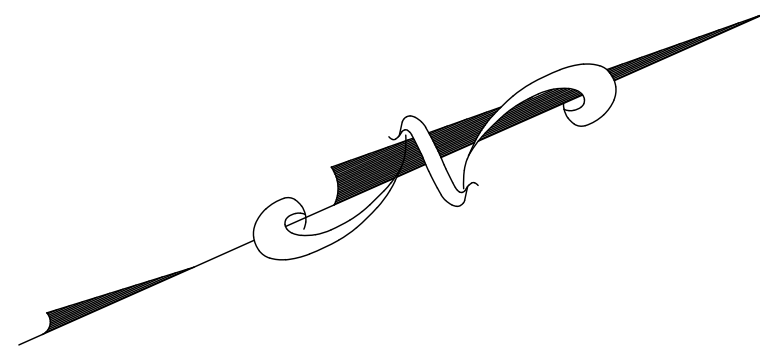
**DRAINAGE PLAN**

DESIGN BY: TB  
 DRAWN BY: OA  
 CHECKED BY: JM

**14 GREENE RD**  
 14 GREENE ROAD, VILLAGE OF SOUTH BLOOMING GROVE.  
 ORANGE COUNTY, NEW YORK 10950  
 SBL 216-2-14

DRAWING NUMBER: **04** OF **07**  
 SCALE: 1"=20'  
 FILE NO.: 24229  
 DATE: 09/18/2024





**2.25 SEWERS NEAR WATER MAINS**

ALL SANITARY SEWER MAINS, LATERALS AND APPURTANCES (INCLUDING MANHOLES) SHALL BE LAID AT LEAST TEN FEET (10'), HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN OR WATER MAIN. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN FEET (10'), A SANITARY SEWER MAY BE LAID CLOSER THAN TEN FEET (10') TO A STORM OR WATER MAIN, PROVIDED THAT THE MAIN IS LAID IN A SEPARATE TRENCH, OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE WATER MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN INCHES (18") ABOVE THE TOP OF THE SANITARY SEWER AS APPROVED BY THE LOCAL DEPT. OF HEALTH. WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND/OR VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND SANITARY SEWER MUST BE CONSTRUCTED OF PUSH-ON (DUCTILE IRON TYTON PIPE AND FITTINGS WITH FIELD LOK 35 GASKETS (AS MFG BY US PIPE AND FOUNDATION COMPANY, OR APPROVED EQUAL) OR MECHANICAL JOINT CAST IRON PIPE, CLASS 52 DUCTILE IRON PIPE, AND MUST BE HYDROSTATICALLY PRESSURE-TESTED TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING. THE SEWER MAIN AND LATERAL PIPE MUST BE HYDROSTATICALLY TESTED TO A MINIMUM OF 50 PSI IN ACCORDANCE WITH AN ACCEPTABLE TESTING PROCEDURE ADOPTED FOR THE PIPE MATERIAL.

WHENEVER WATER MAINS MUST CROSS HOUSE SEWERS, STORM DRAINS, OR SANITARY SEWERS, THE WATER MAIN SHOULD BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS EIGHTEEN INCHES (18") ABOVE THE TOP OF THE SEWER. THIS VERTICAL SEPARATION SHOULD BE MAINTAINED FOR THE PORTION OF THE WATER MAIN LOCATED WITHIN TEN FEET (10') HORIZONTALLY OF ANY SEWER OR DRAIN IT CROSSES, SAID TEN FEET (10') TO BE MEASURED HORIZONTALLY FROM THE OPPOSING OUTSIDE DIAMETER FACES OF THE WATER MAIN TO THE DRAIN OR SEWER.

WHERE CONDITIONS PREVENT THE MINIMUM VERTICAL SEPARATION SET FORTH ABOVE FROM BEING MAINTAINED, OR WHEN IT IS NECESSARY FOR THE WATER MAIN TO PASS UNDER A SEWER OR DRAIN, THE WATER MAIN MUST BE LAID WITH SLIP-ON OR MECHANICAL JOINT CLASS 52 DIP. PIPE MUST BE EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE HORIZONTAL DISTANCE FROM THE OPPOSING OUTSIDE DIAMETER FACES OF THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN FEET (10').

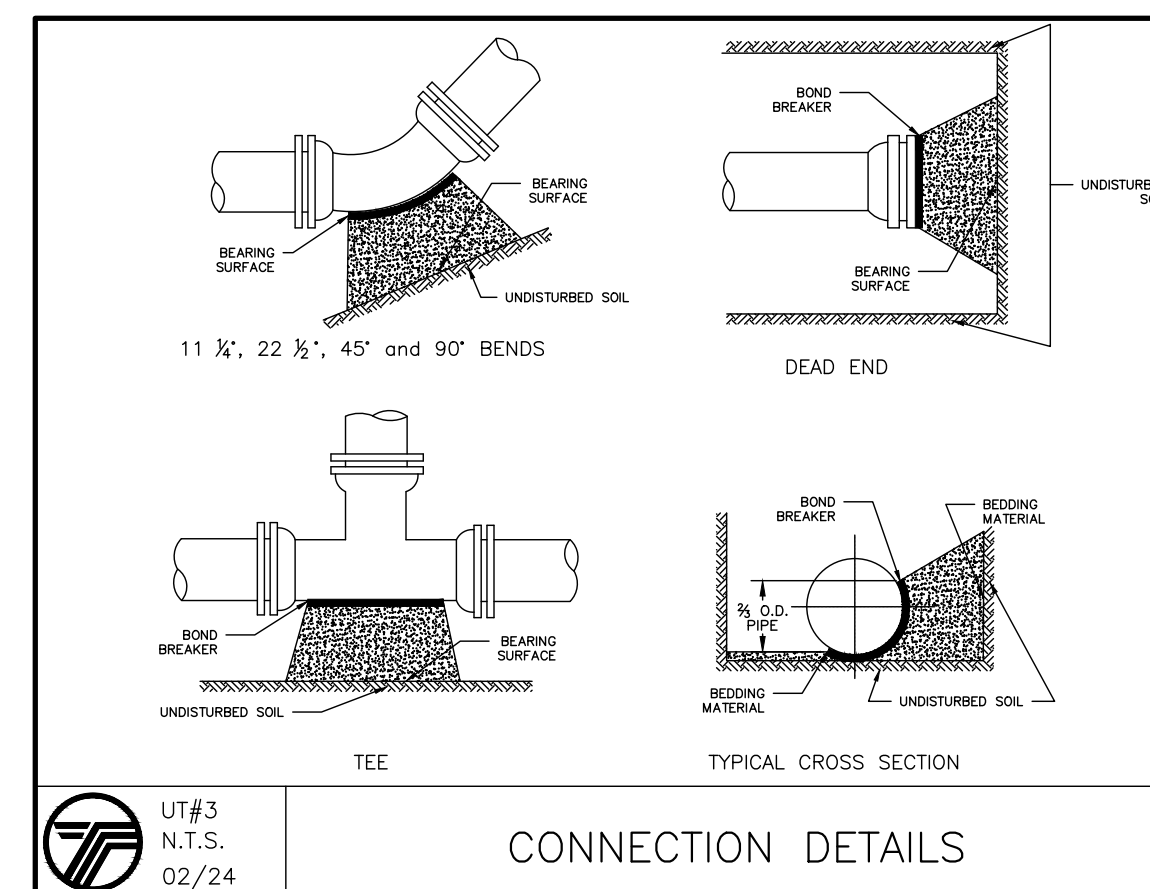
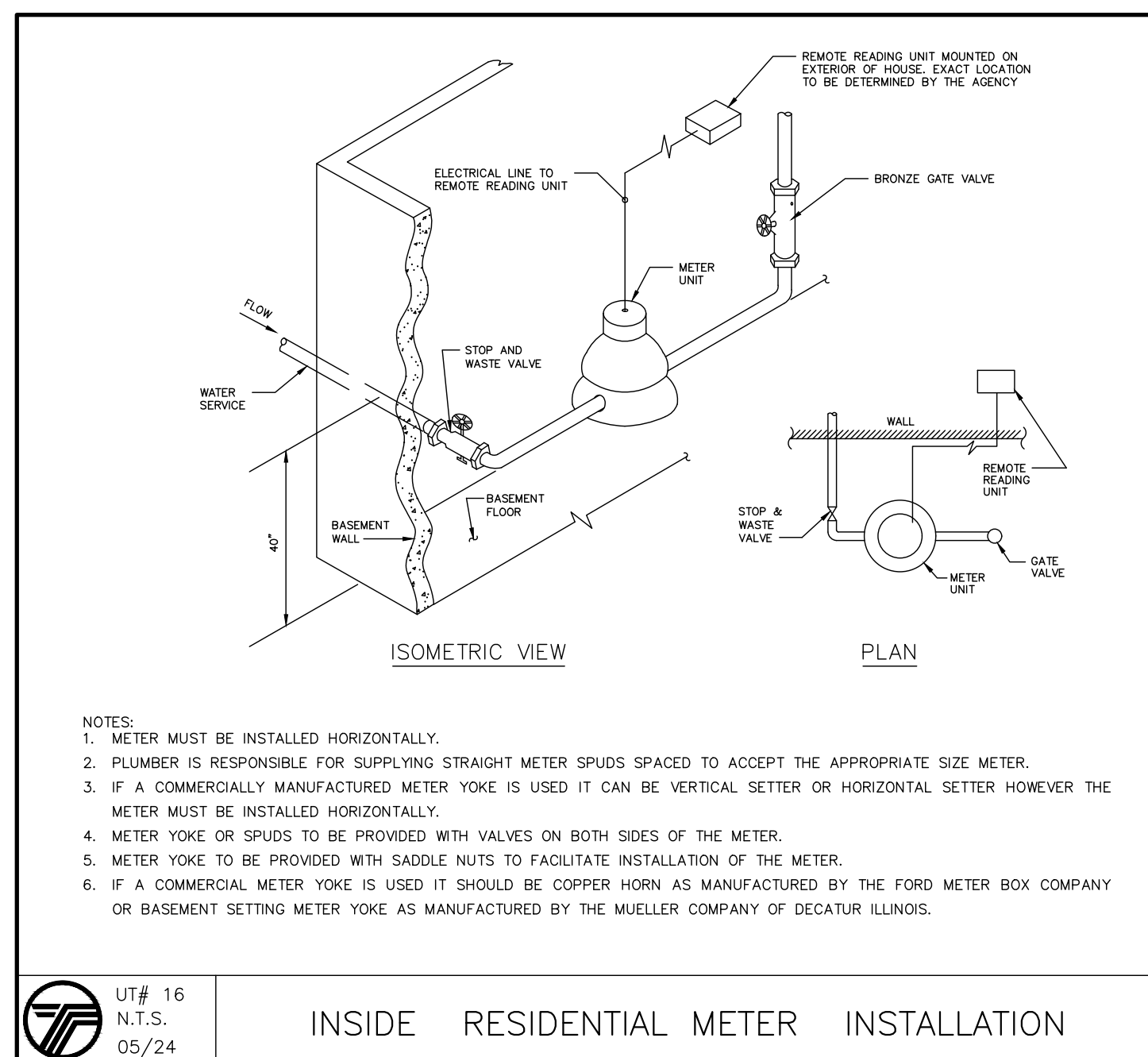
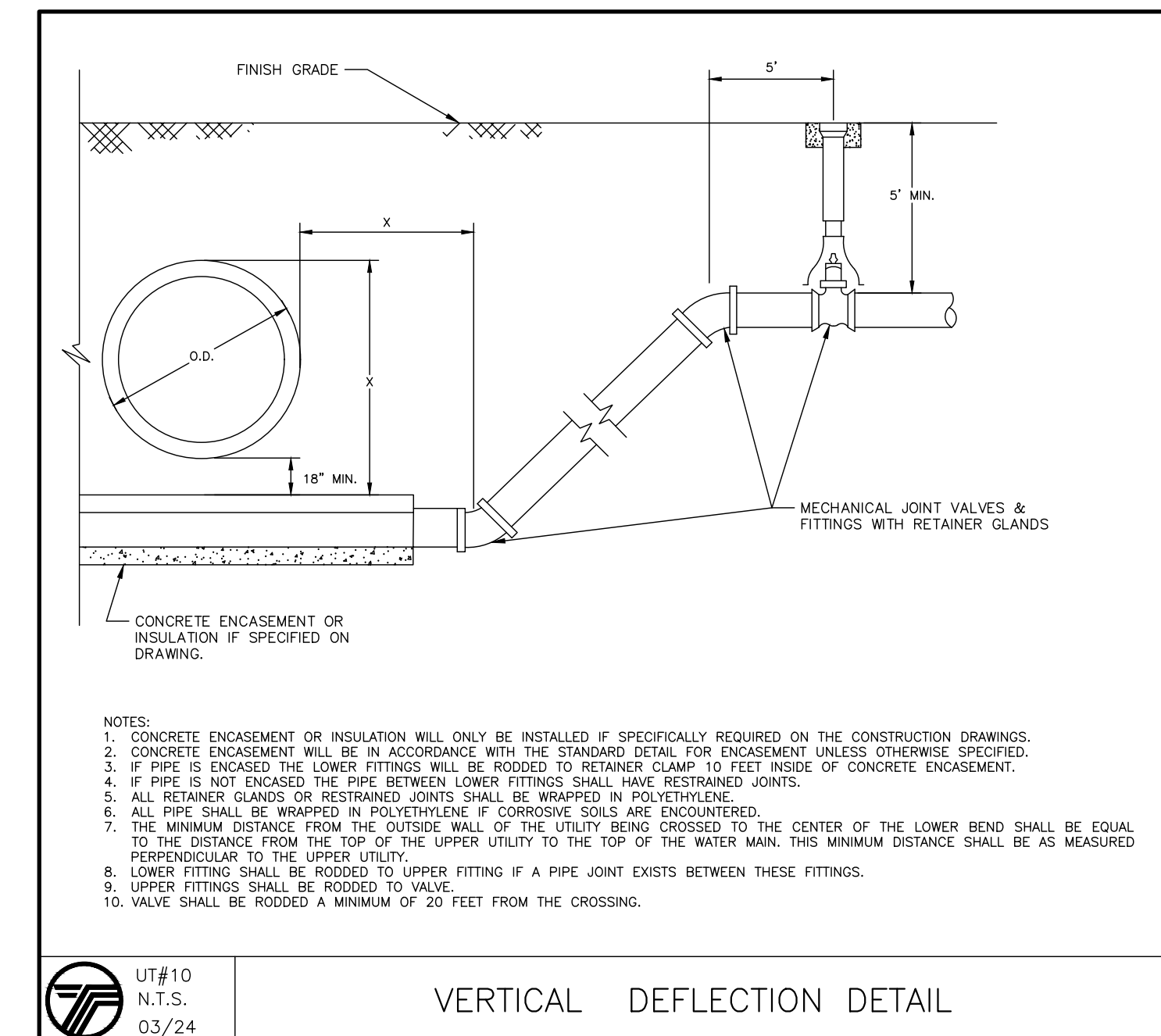
IN MAKING SUCH CROSSING, IT IS REQUIRED TO CENTER A LENGTH OF WATER MAIN PIPE UNDER THE SEWER TO BE CROSSED SO THAT THE JOINTS WILL BE EQUI-DISTANT FROM THE SEWER AND AS REMOTE THEREFROM AS POSSIBLE.

WHERE A WATER MAIN MUST CROSS UNDER A SEWER, A VERTICAL SEPARATION OF EIGHTEEN INCHES (18") BETWEEN THE BOTTOM OF THE SEWER AND THE TOP OF THE WATER MAIN MUST BE MAINTAINED, WITH ADEQUATE SUPPORT FOR THE LARGER-SIZED SEWER LINES TO PREVENT THEM FROM SETTLING ON AND BREAKING THE WATER MAIN.

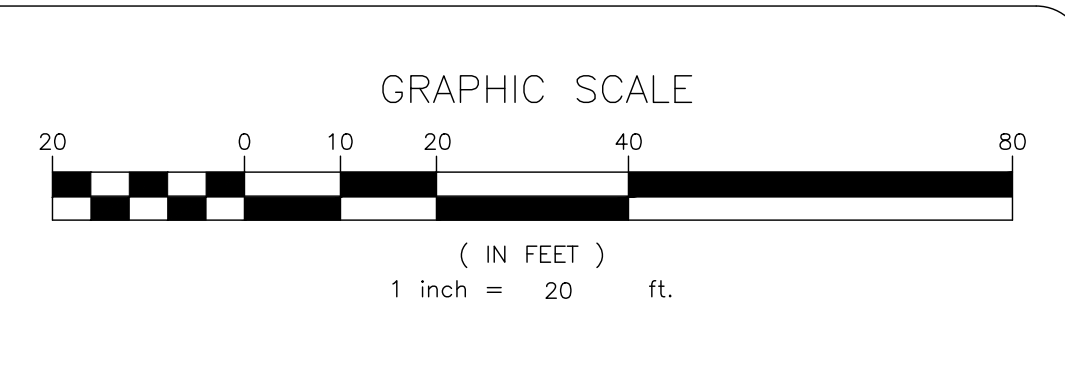
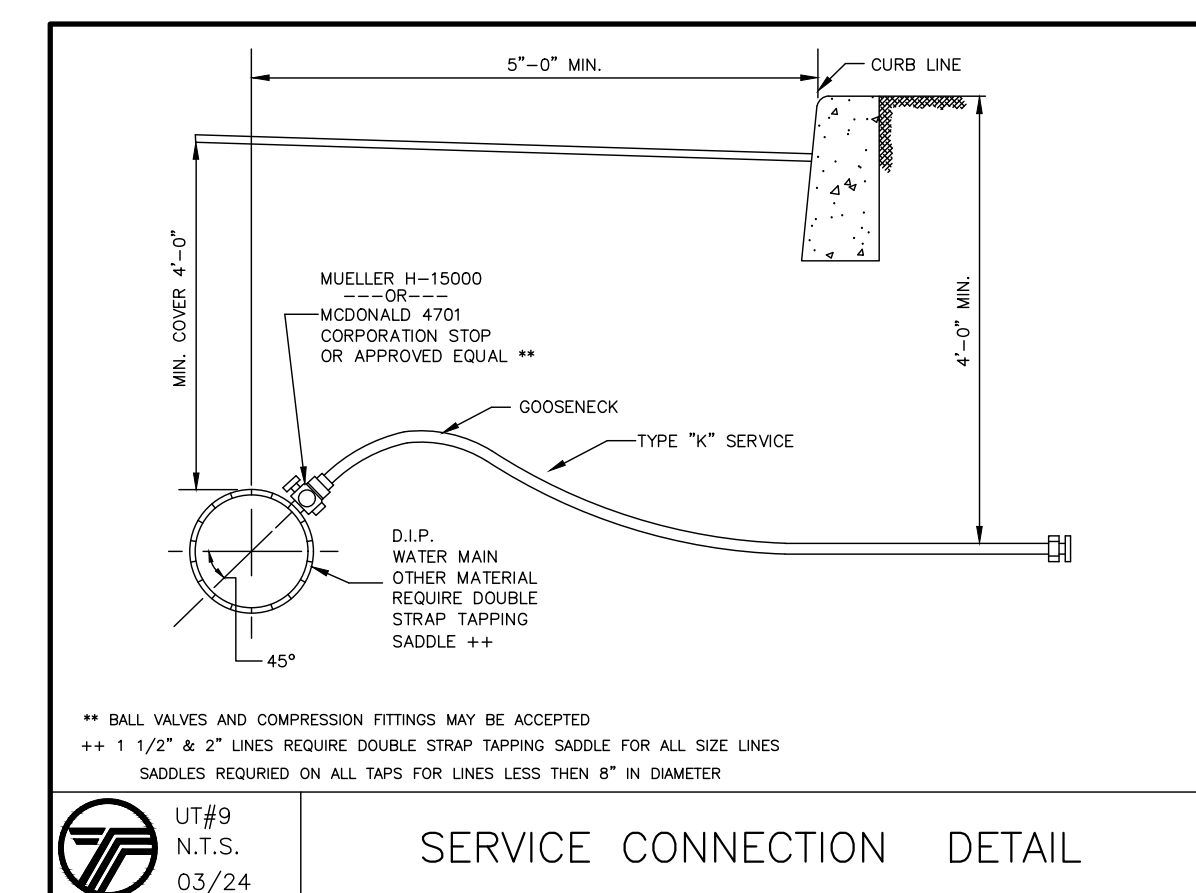
PIPE SIZE	MINIMUM BEARING SURFACE AREA (FT <sup>2</sup> )				
	B	E	N	D	S
6"	1.0	1.5	2.5	4.5	3.5
8"	1.0	2.5	4.5	8.0	5.5
10"	2.0	3.5	7.0	12.5	9.0
12"	2.5	5.0	9.5	17.5	12.5
16"	4.5	8.5	17.0	31.0	22.5
18"	5.5	11.0	21.5	39.5	28.5
20"	7.0	13.5	27.0	49.0	35.0
24"	10.0	19.5	38.5	70.5	50.0

NOTES:  
 1. ON 16" AND LARGER TRANSMISSION MAINS BENDS SHALL BE BOTH RODED AND THRUST BLOCKED.  
 2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.  
 3. BASED ON 150 PSI INTERNAL PIPE PRESSURE PLUS WATER HAMMER = 100PSI.  
 4. SOIL BEARING CAPACITY = 3,000 LB./SQ. FT.  
 5. 16" AND LARGER WATER HAMMER = 110 PSI.  
 6. ALL 90 DEGREE BENDS SHALL BE RODED AND THRUST BLOCKED.  
 7. NA = NOT APPLICABLE.

UT#11  
03/24  
**CONCRETE THRUST BLOCK DETAIL**



LEGEND:  
 WM WATER METER  
 GM GAS METER  
 CO CLEAN-OUT  
 (LATERAL SEWER CONNECTION)



PREPARED FOR  
**DrawME**  
Design Group

NO.	REVISION	DATE	DR/CK

**JOSIP MEDIC, PE**

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JACKSON, NJ 08527  
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JOSIP MEDIC, P.E. LIC. 103757 DATE **09/18/2024**

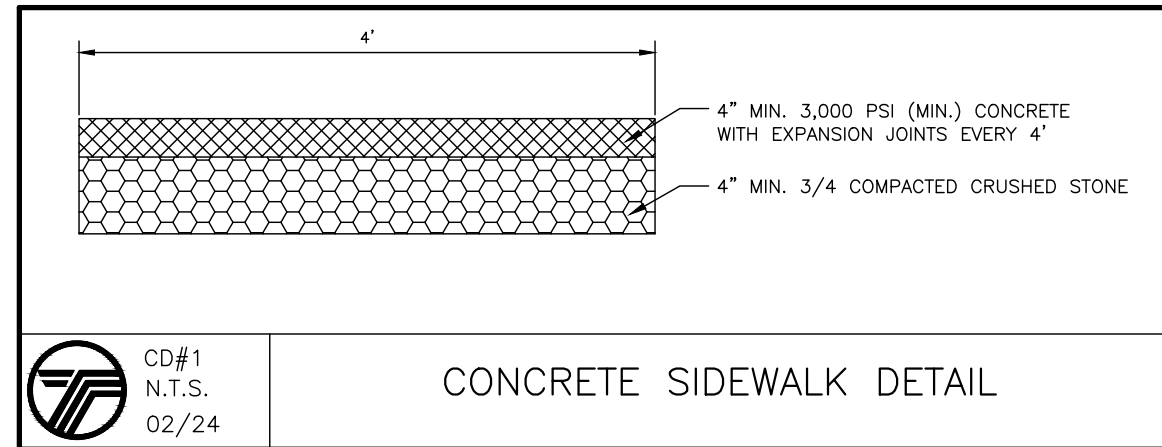
**UTILITY PLAN**

DESIGN BY: TB	DRAWN BY: GA	CHECKED BY: JM
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**14 GREENE RD**  
14 GREENE ROAD, VILLAGE OF SOUTH BLOOMING GROVE.  
ORANGE COUNTY, NEW YORK 10950  
SBL 216-2-14

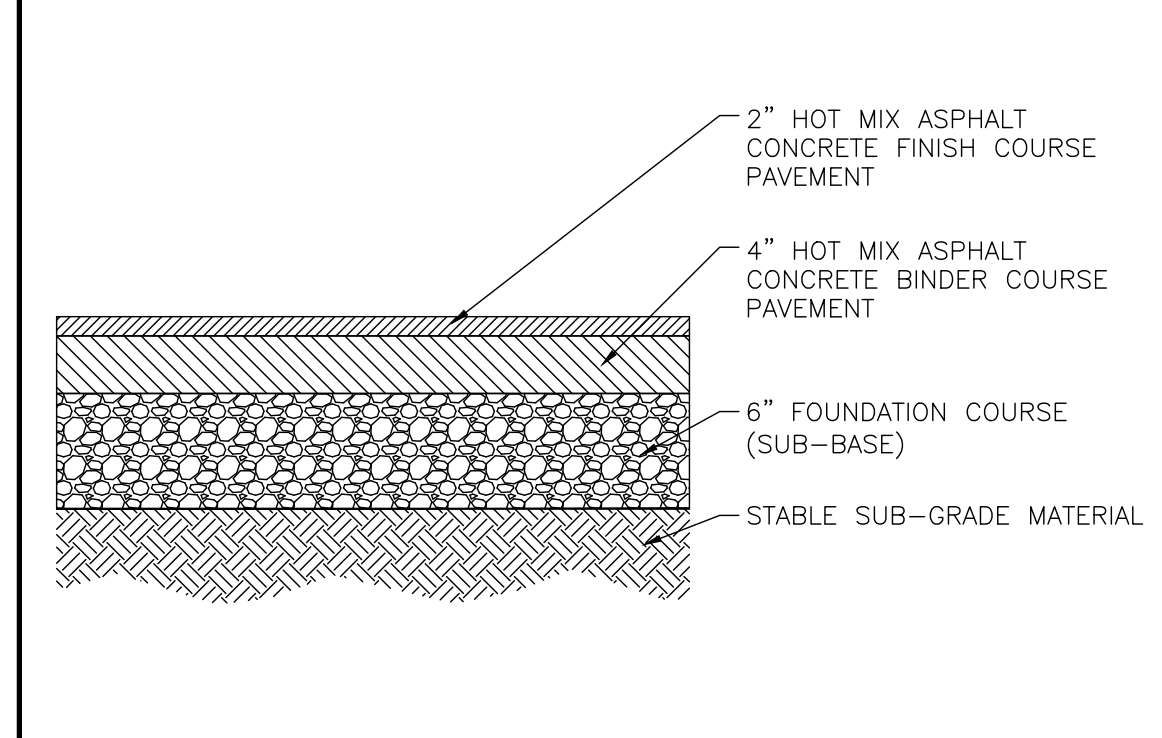
DRAWING NUMBER: <b>05 OF 07</b>	SCALE: 1"=20'	FILE NO.: 24229	DATE: 09/18/2024
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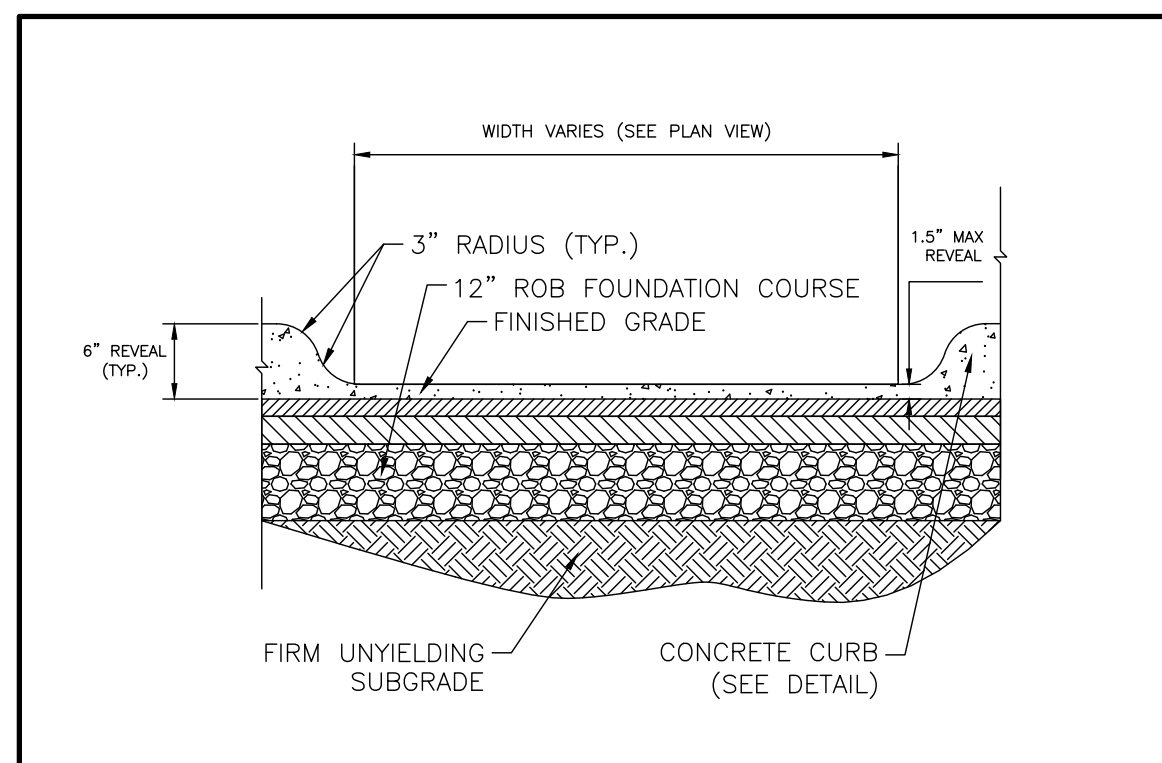
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N.T.S.  
02/24

CONCRETE SIDEWALK DETAIL



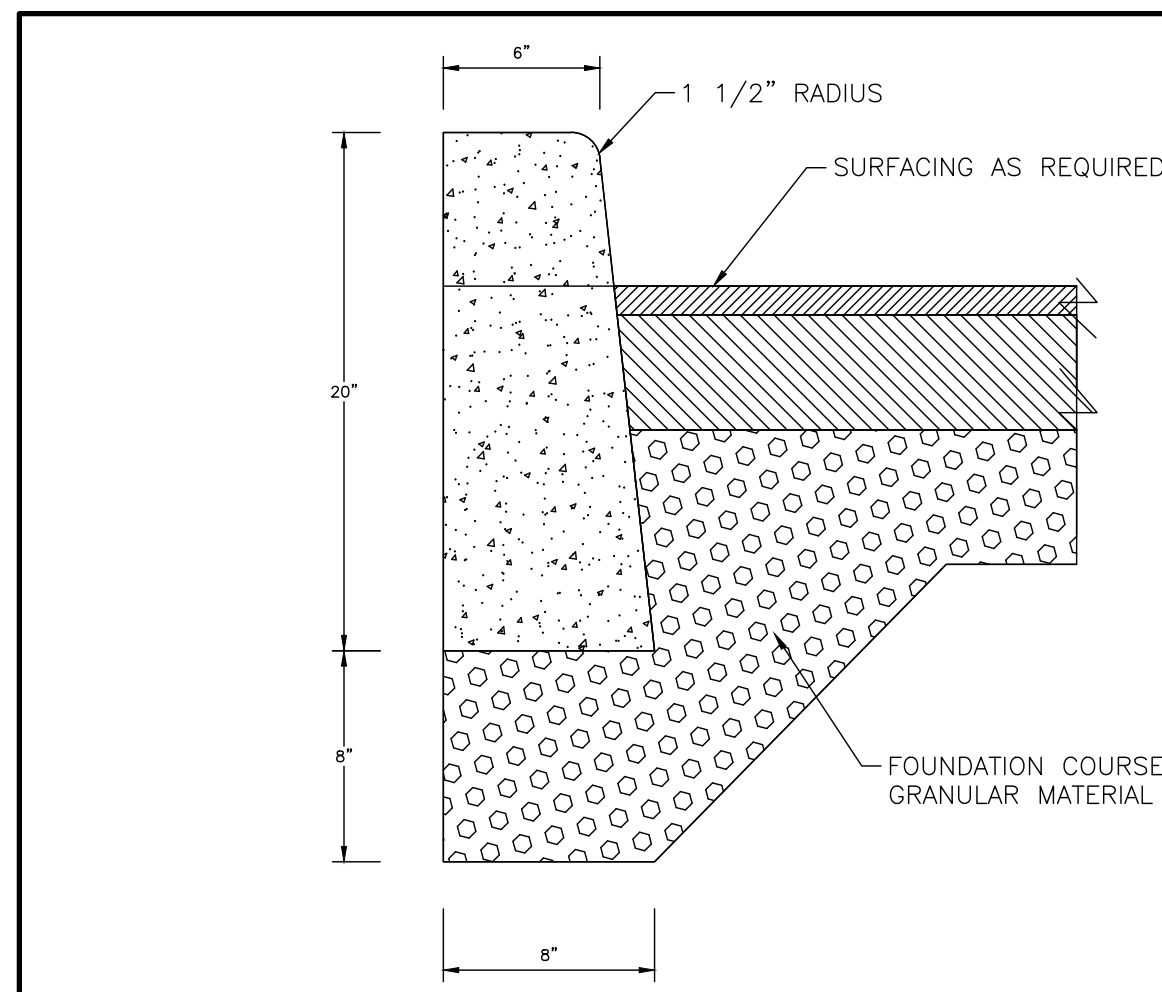
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02/24

ASPHALTIC CONCRETE PAVEMENT DETAIL



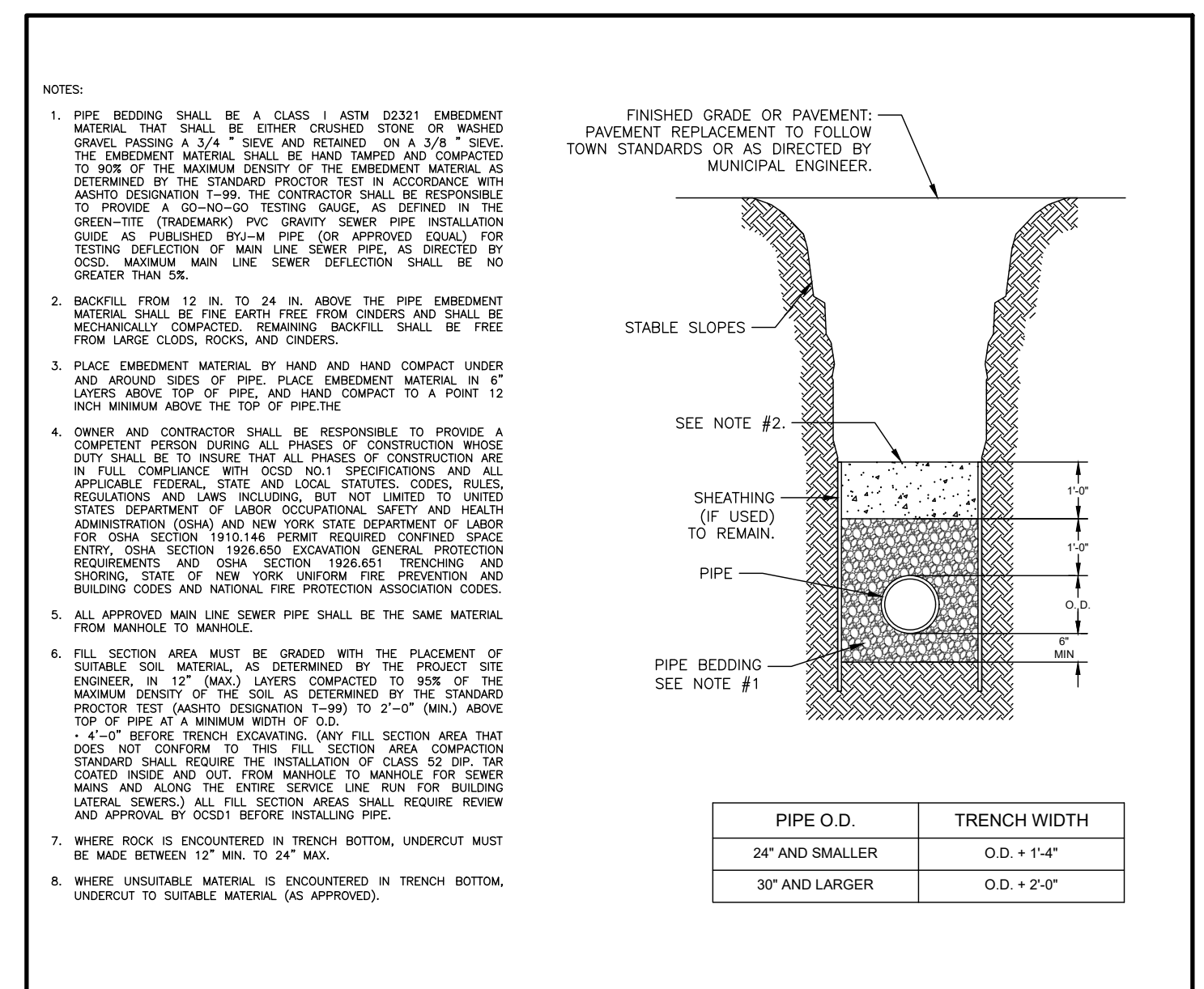
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N.T.S.  
02/24

CURB CUT DETAIL



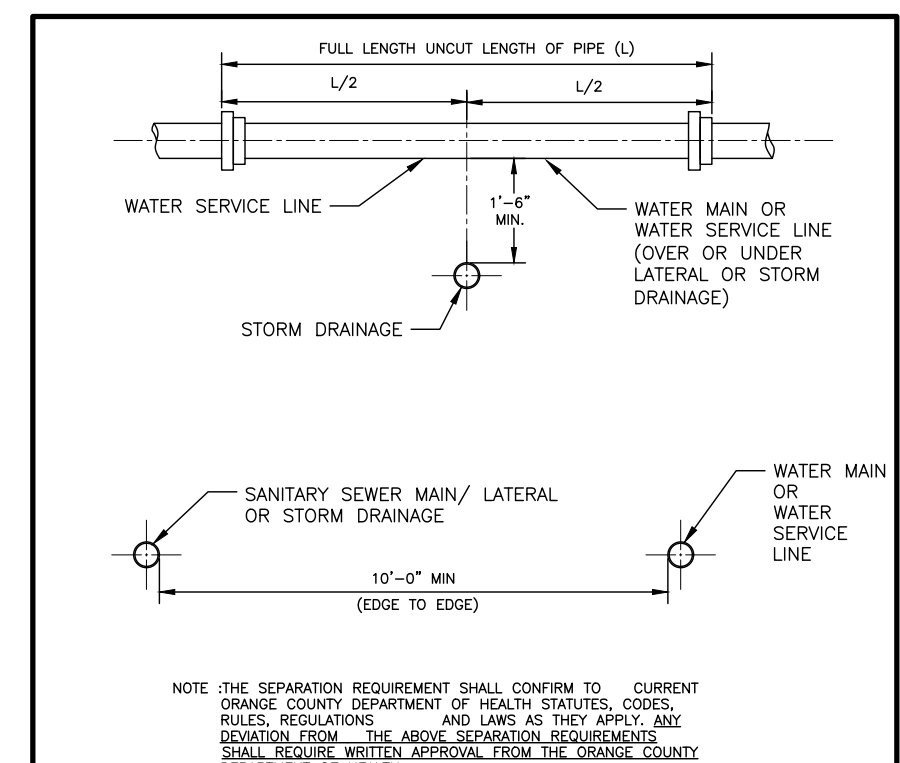
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02/24

CONCRETE CURB DETAIL



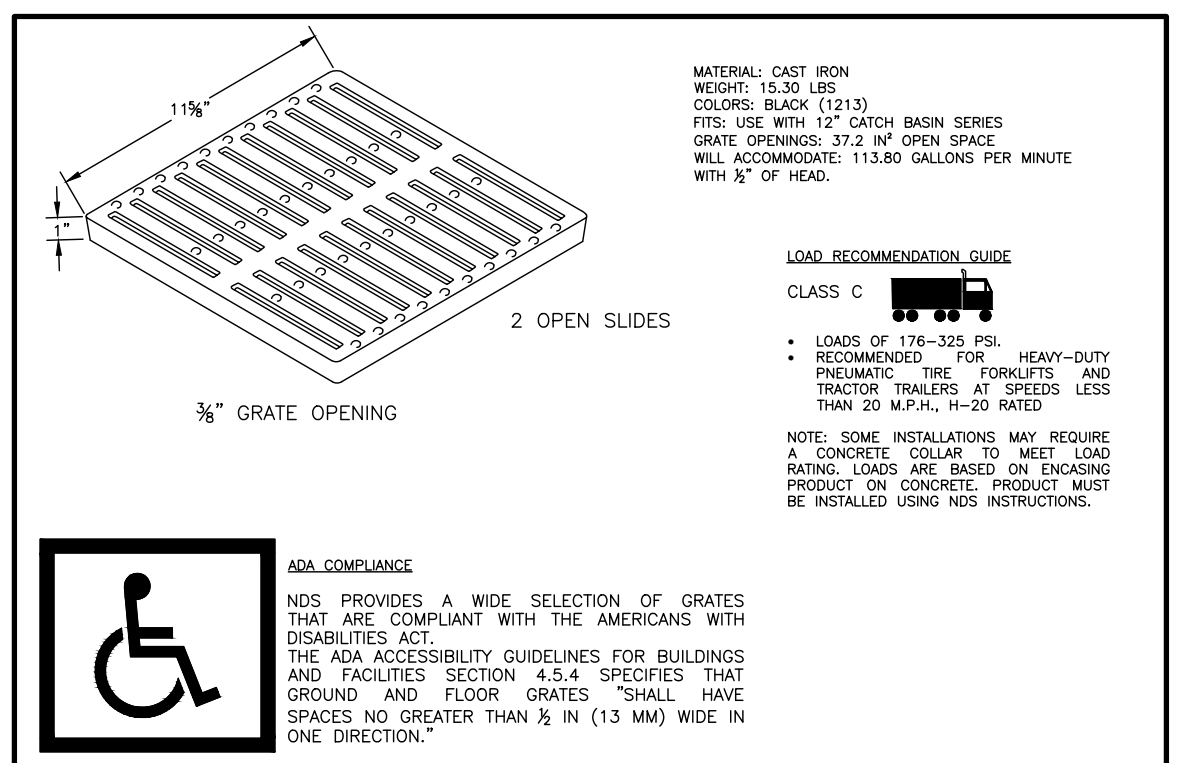
UT #4  
N.T.S.  
02/23

TYPICAL TRENCH DETAIL (SANITARY SEWER)



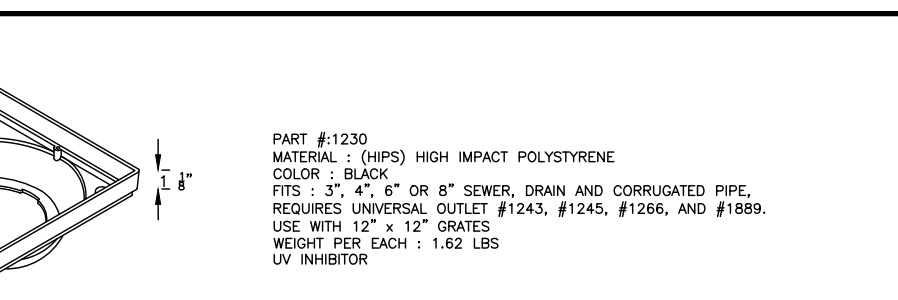
UT #5  
N.T.S.  
02/23

SANITARY SEWER/WATER/STORM DRAINAGE SEPARATION REQUIREMENTS



CD#18  
N.T.S.  
03/24

12x12 SQUARE CAST IRON GRATE



CD #17  
N.T.S.  
03/24

12" X 12" LOW PROFILE ADAPTER



UT #6  
N.T.S.  
02/23

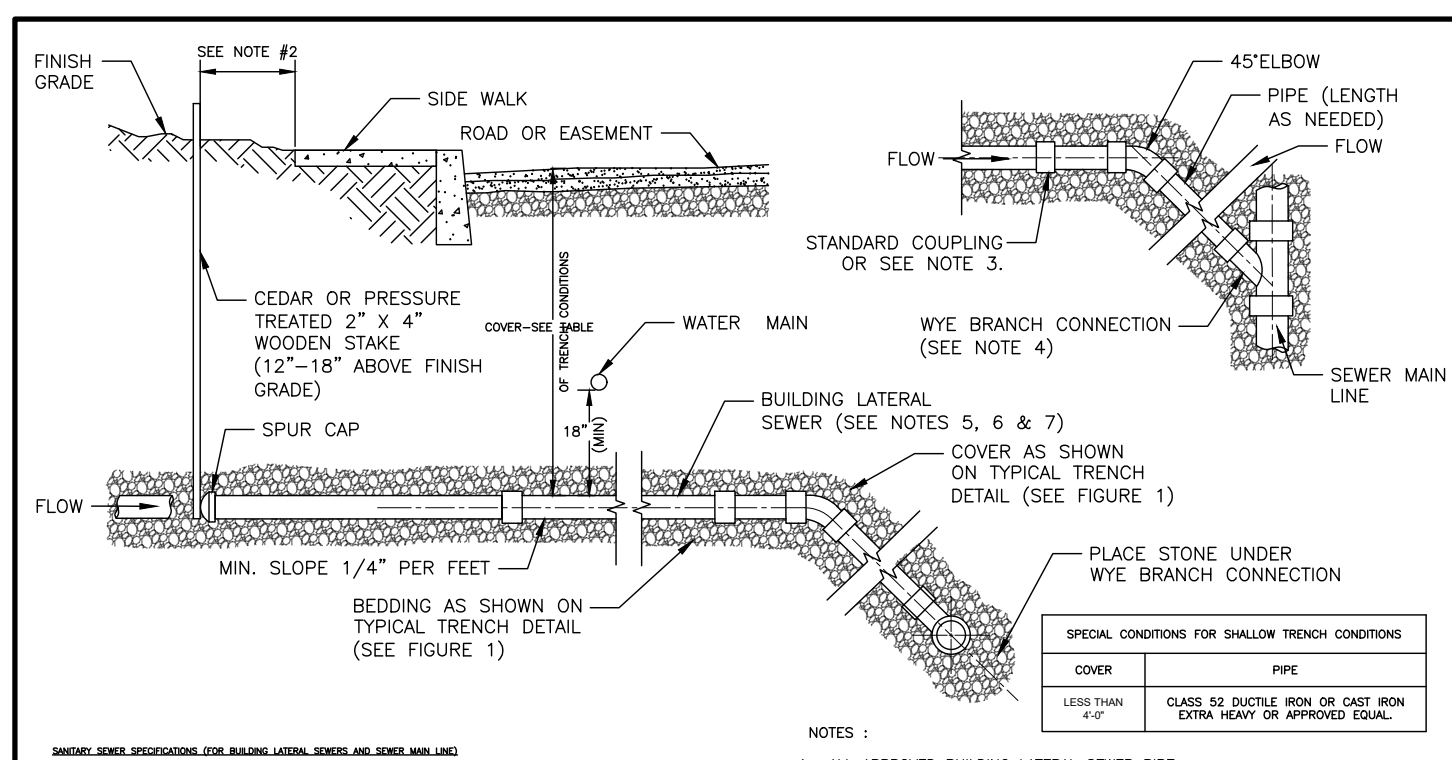
BUILDING PIPE TO BUILDING LATERAL SEWER CONNECTION

**JOSIP MEDIC, PE**

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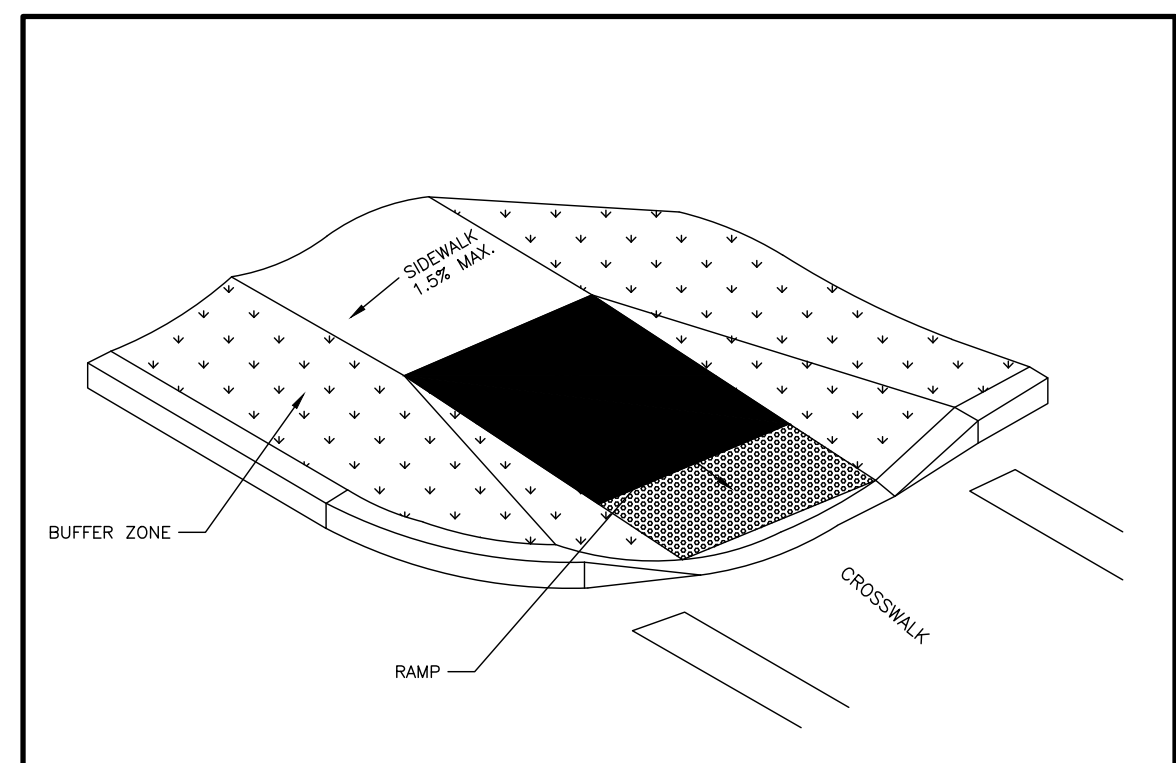
STATE OF NEW YORK PROFESSIONAL ENGINEER 103757

JOSIP MEDIC, P.E. LIC. 103757 DATE 09/18/2024



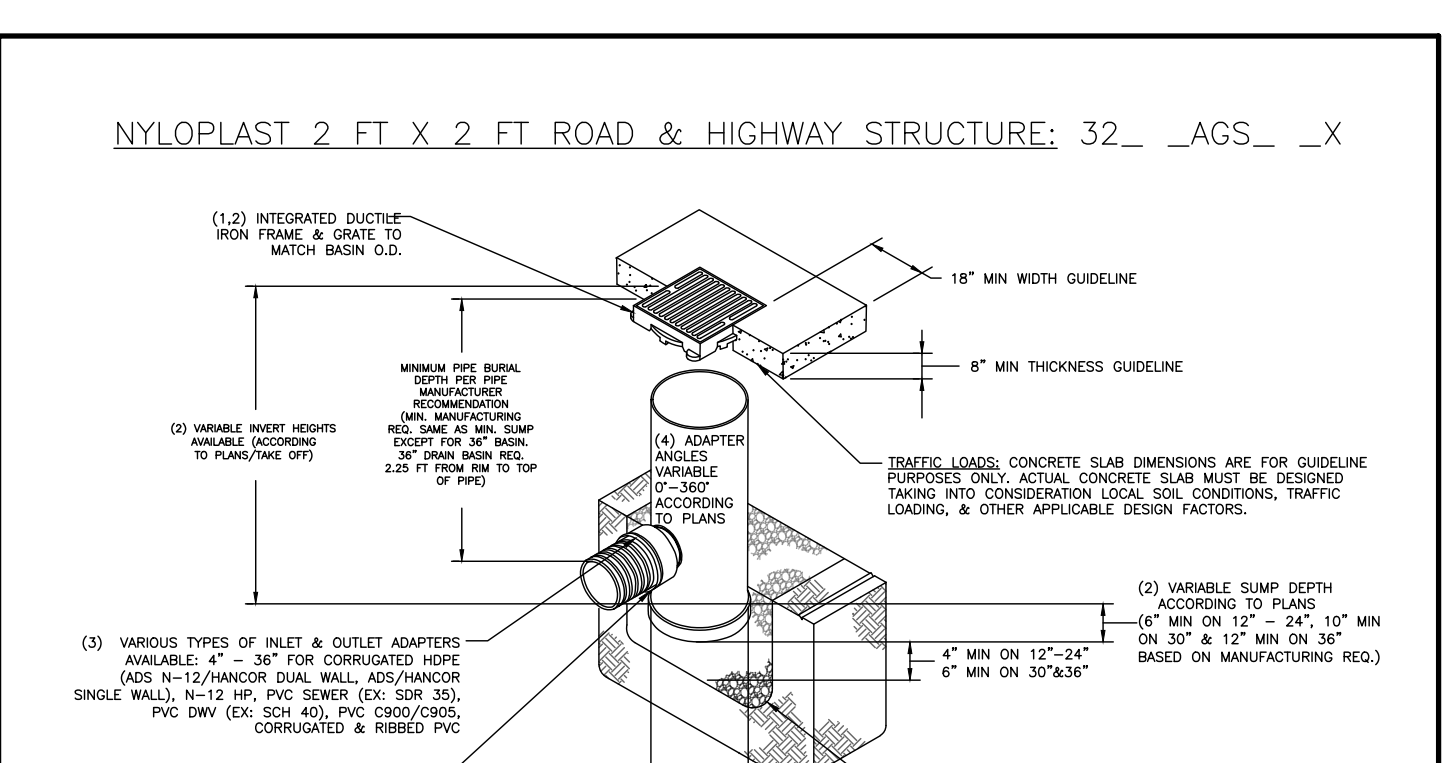
UT #7  
N.T.S.  
02/23

SANITARY SEWER CONSTRUCTION MATERIALS



CD#37  
N.T.S.  
07/24

ADA RAMP DETAIL (GRADED EARTH)



CD #14  
N.T.S.  
03/24

DRAIN BASIN WITH 2 FT X 2 FT ROAD & HIGHWAY GRATE QUICK SPEC INSTALLATION DETAIL

PREPARED FOR

**DrawME**  
Design Group

NO.	REVISION	DATE	DR/CK

**DETAIL SHEET**

DESIGN BY: TB  
DRAWN BY: GA  
CHECKED BY: JM

**14 GREENE RD**

14 GREENE ROAD, VILLAGE OF SOUTH BLOOMING GROVE. ORANGE COUNTY, NEW YORK 10950 SBL 216-2-14

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