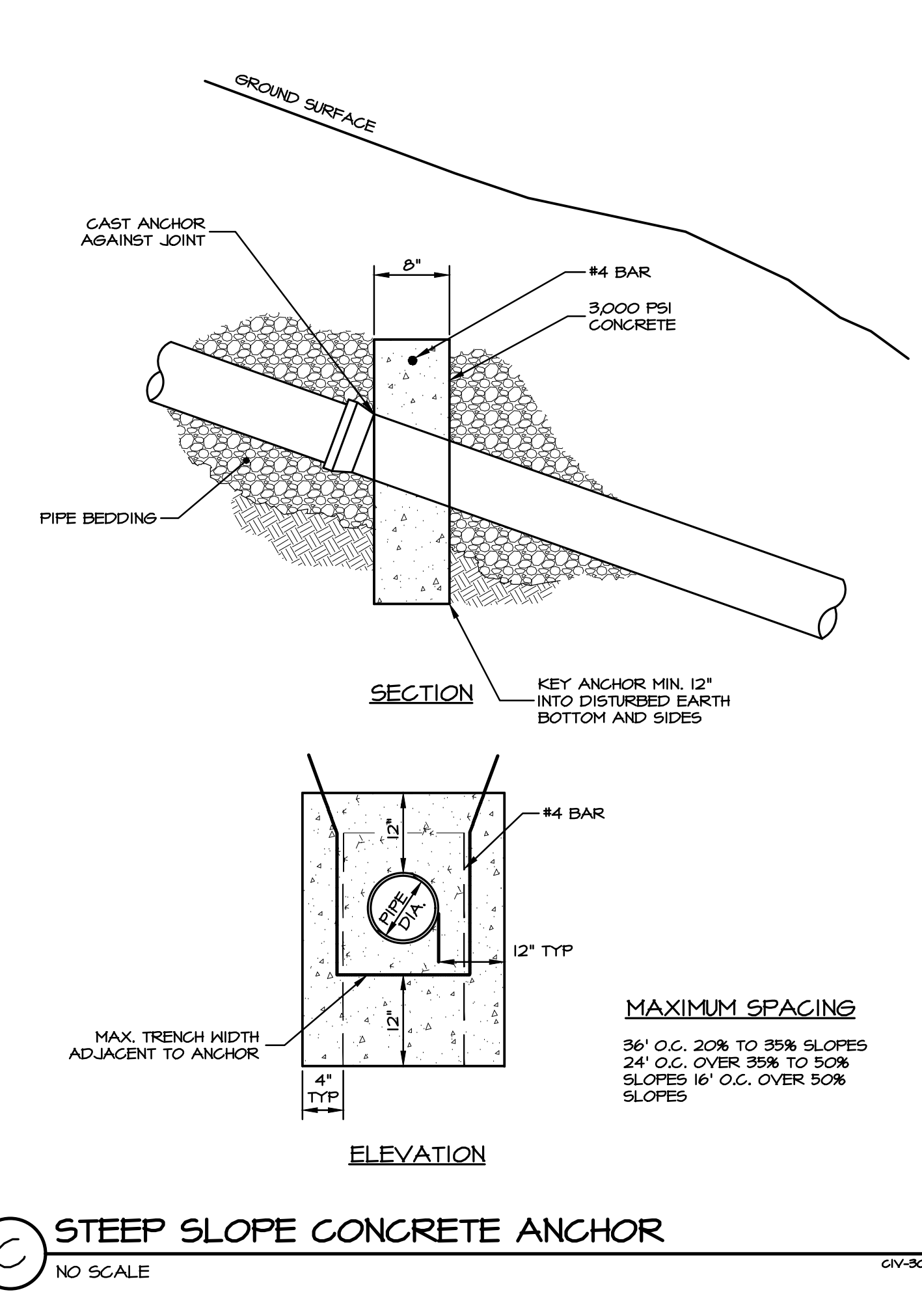
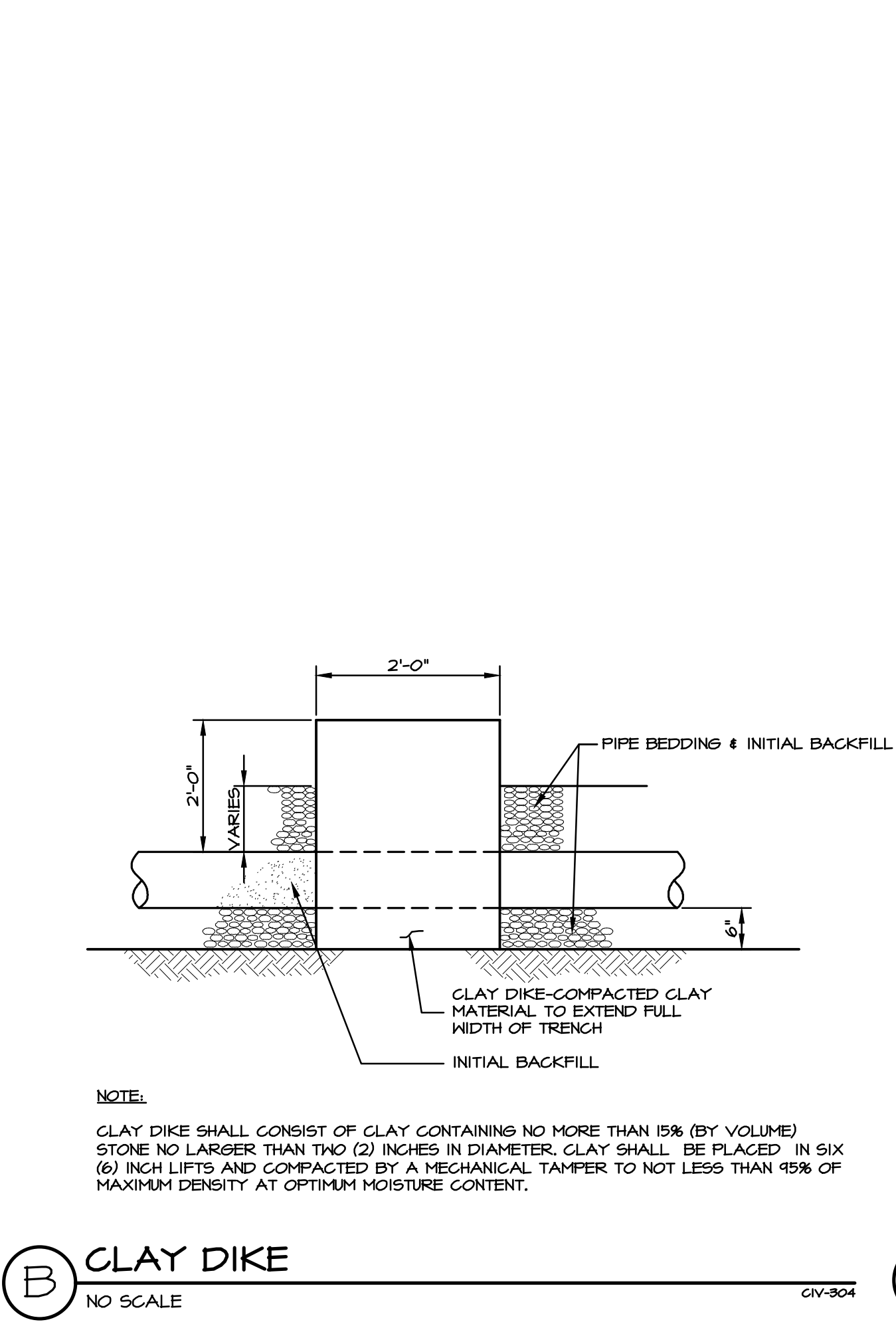
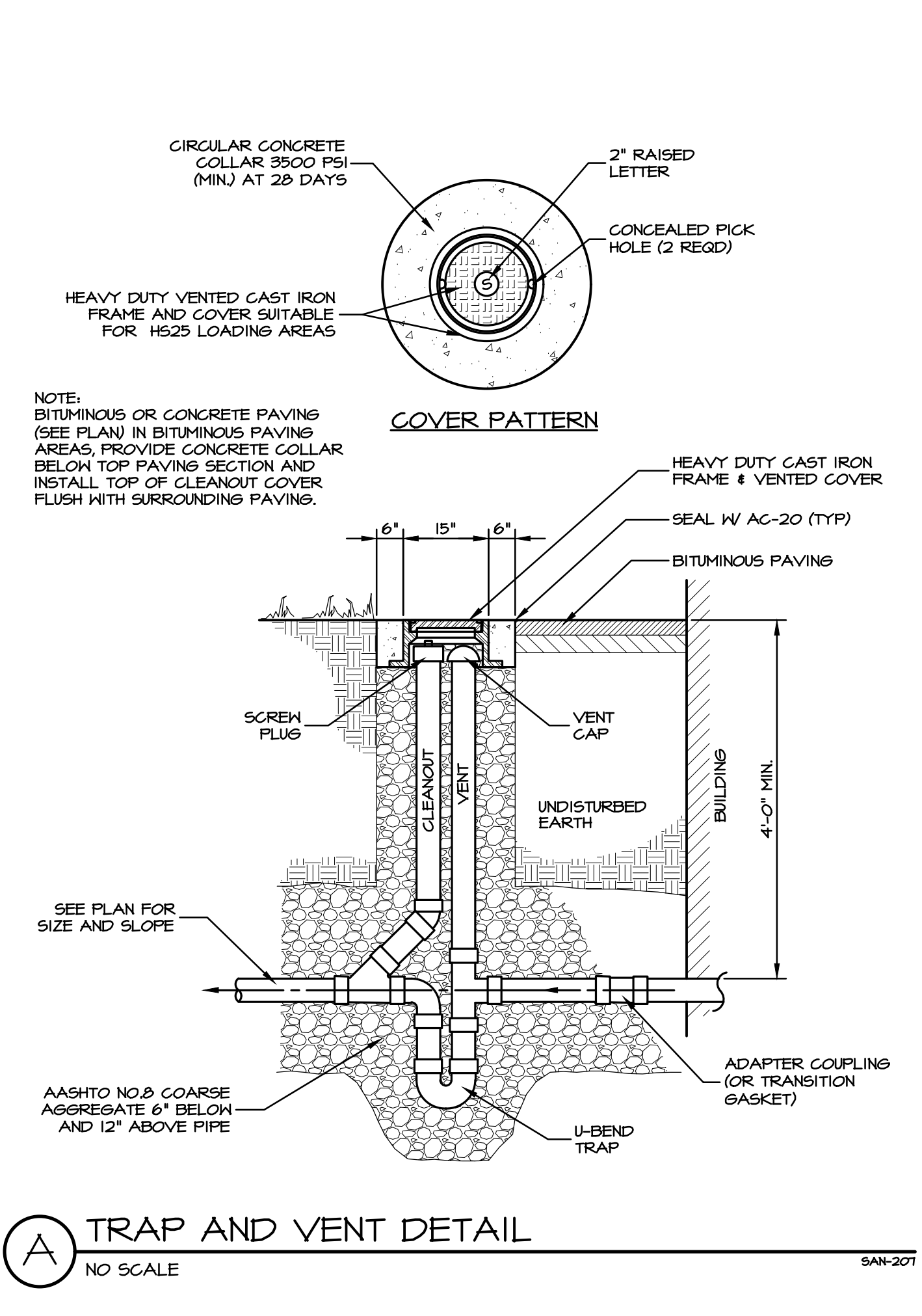
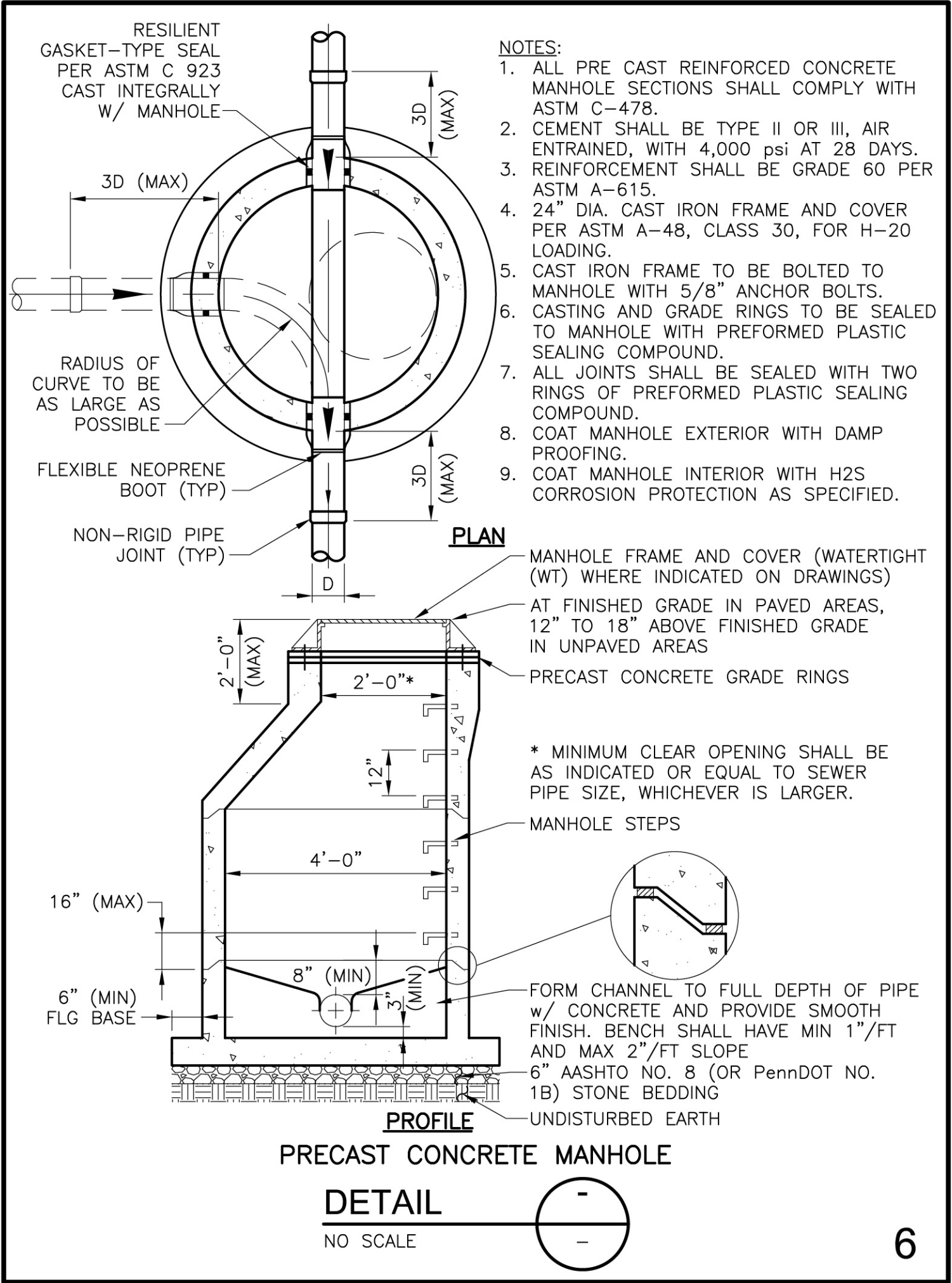
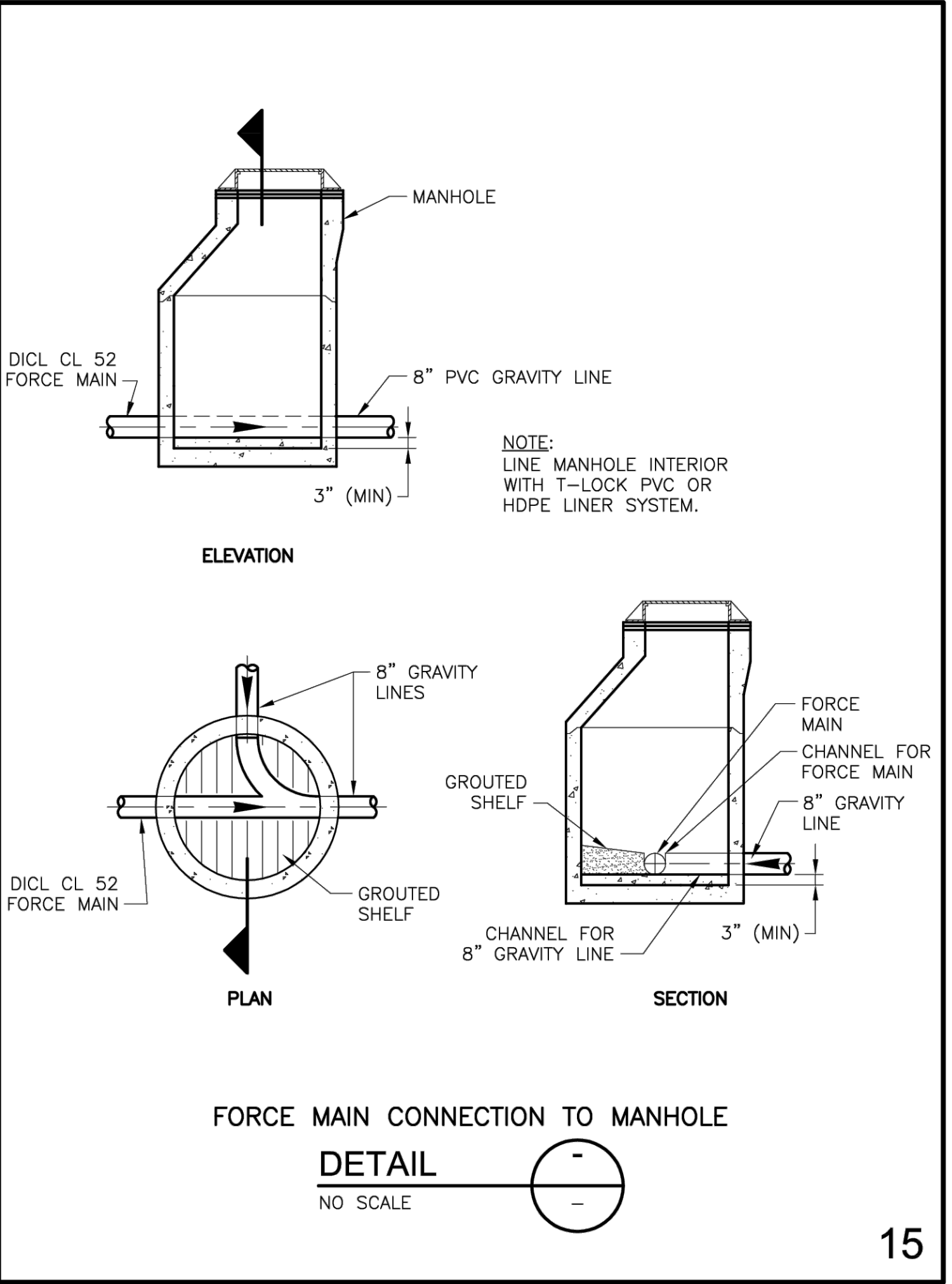
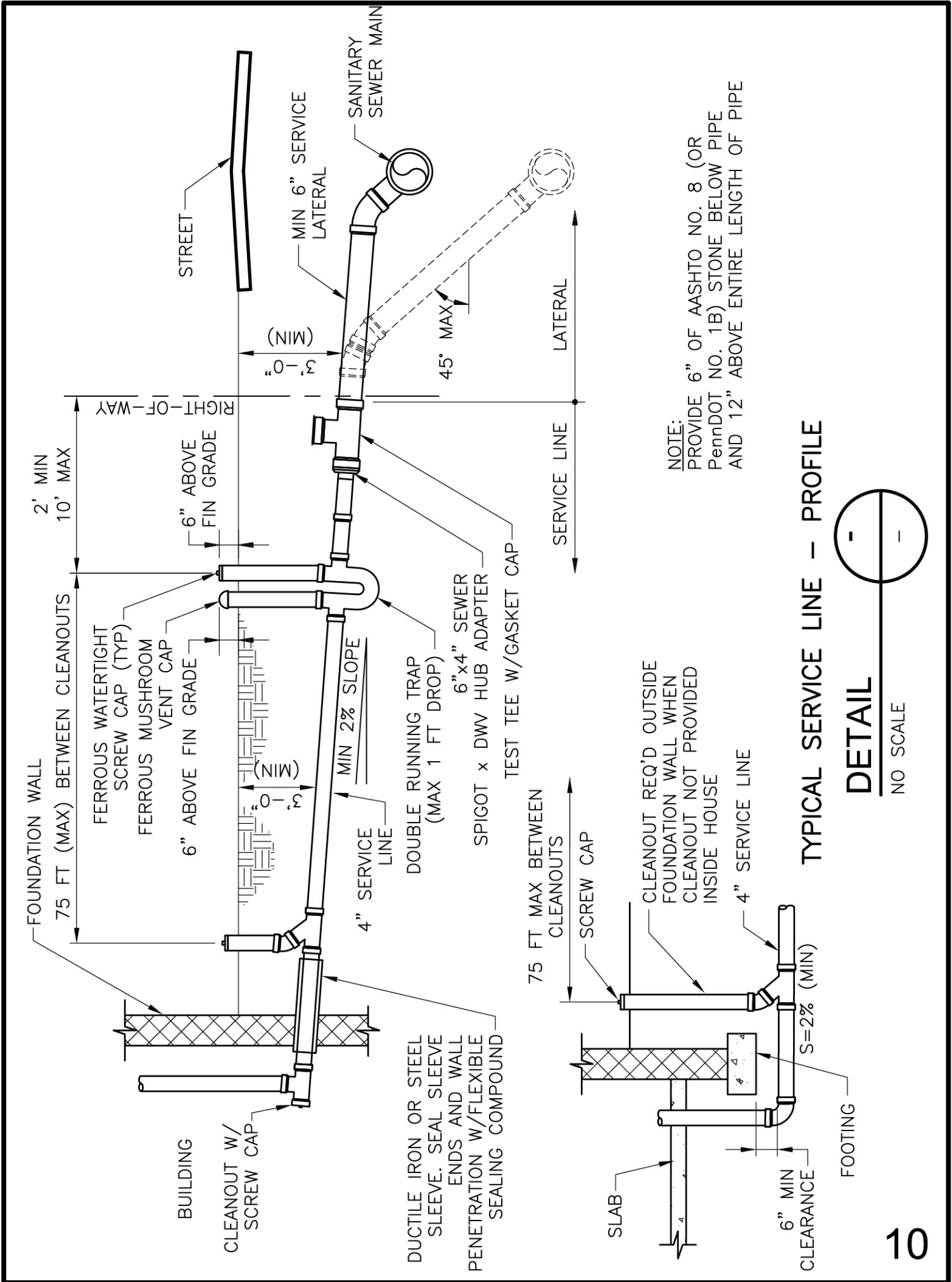
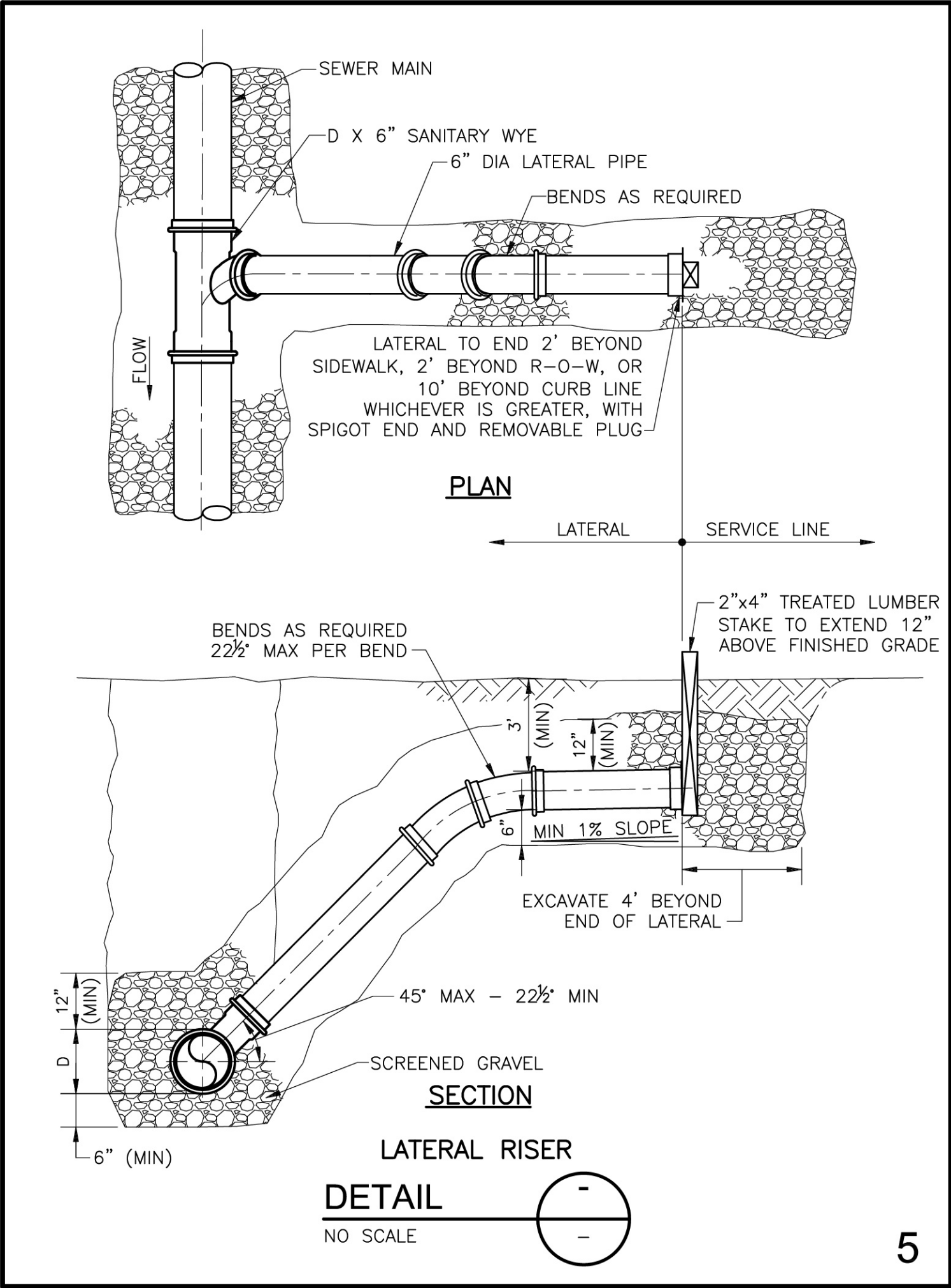
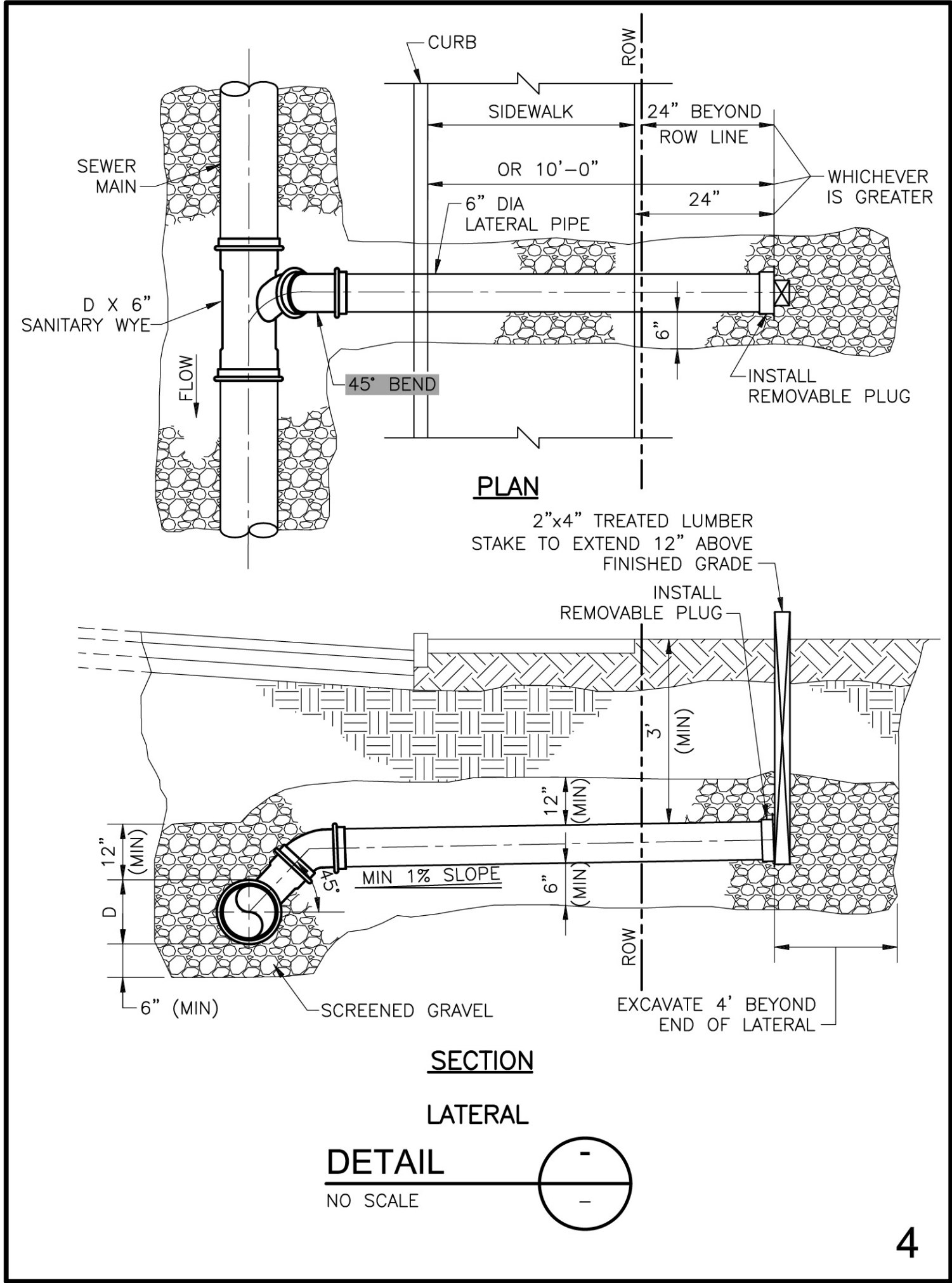


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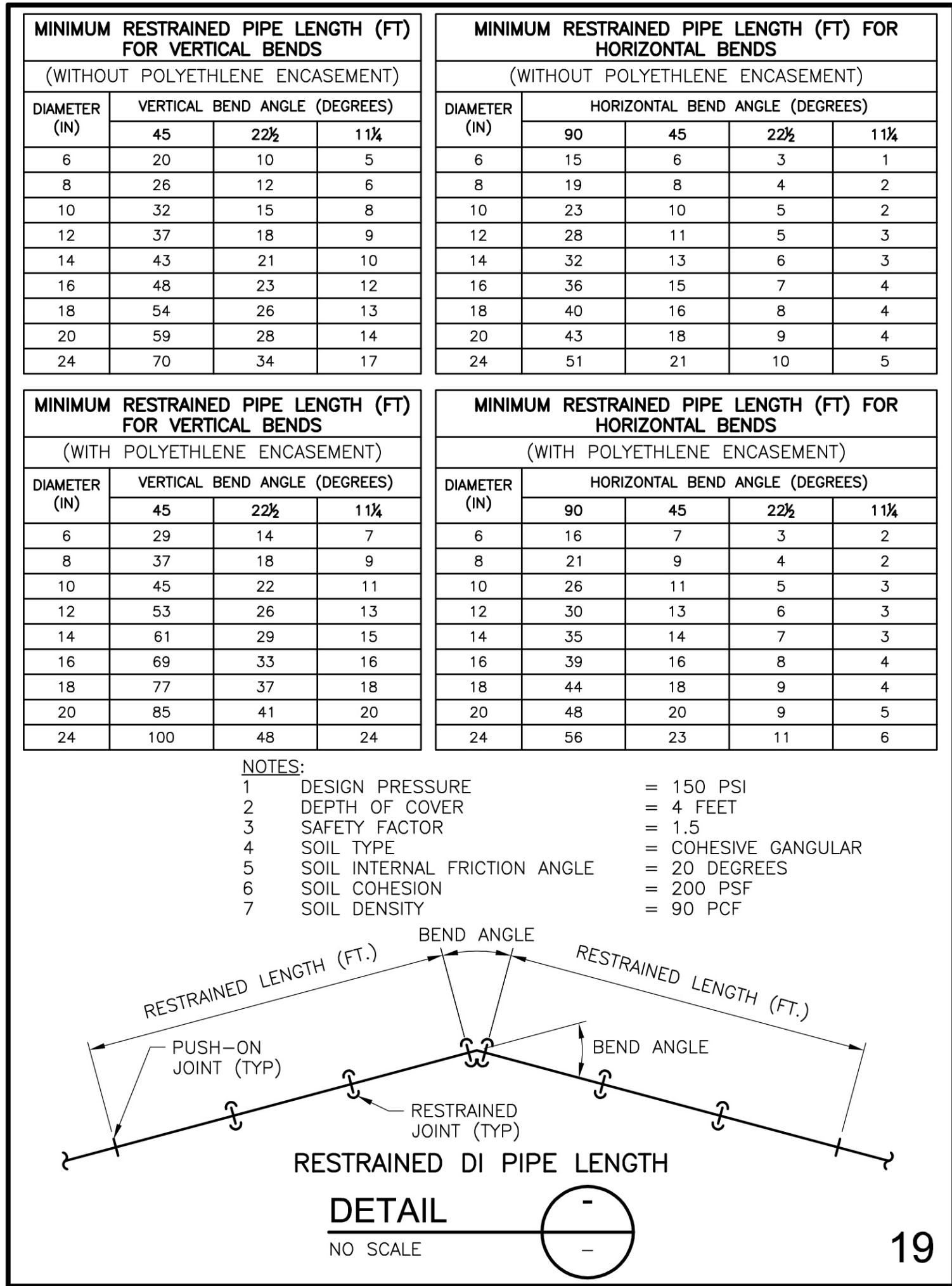
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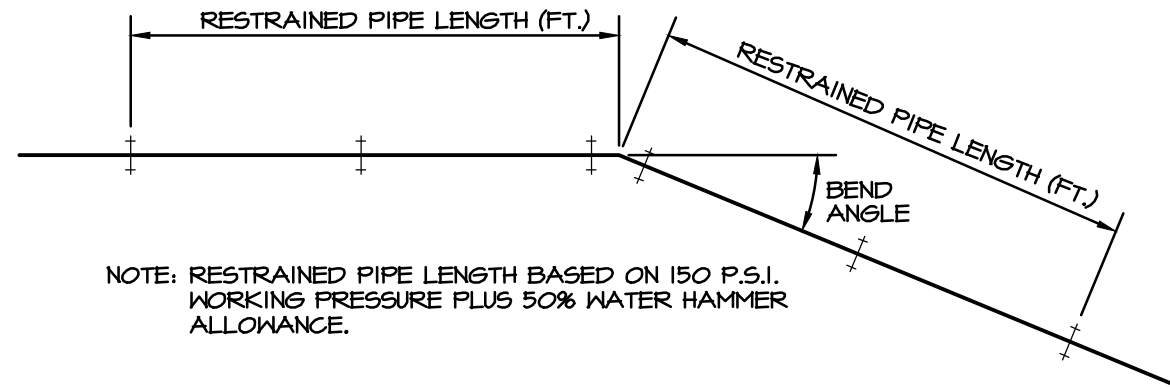
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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

FINAL PHASE 1 PLAN
SUBJECT:
UTILITY DETAILS
FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA
CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.:	1212-004
CAD DESIGNER:	TRS	SCALE:	AS NOTED





PIPE DIAMETER	HORIZONTAL ELBOW DEFLECTION ANGLE			
	90°	45°	22 1/2°	11 1/4°
3" THRU 4"	19'	8'	4'	2'
6"	27'	11'	7'	3'
8"	35'	14'	8'	4'
10"	42'	17'	8'	5'
12"	44'	20'	10'	5'

*ADD 12% TO LENGTH IF PIPE IS POLYETHYLENE ENCASED

PIPE DIAMETER	VERTICAL ELBOW DEFLECTION ANGLE		
	45°	22 1/2°	11 1/4°
3" THRU 4"	20'	10'	5'
6"	28'	14'	7'
8"	37'	18'	9'
10"	44'	21'	11'
12"	52'	25'	12'

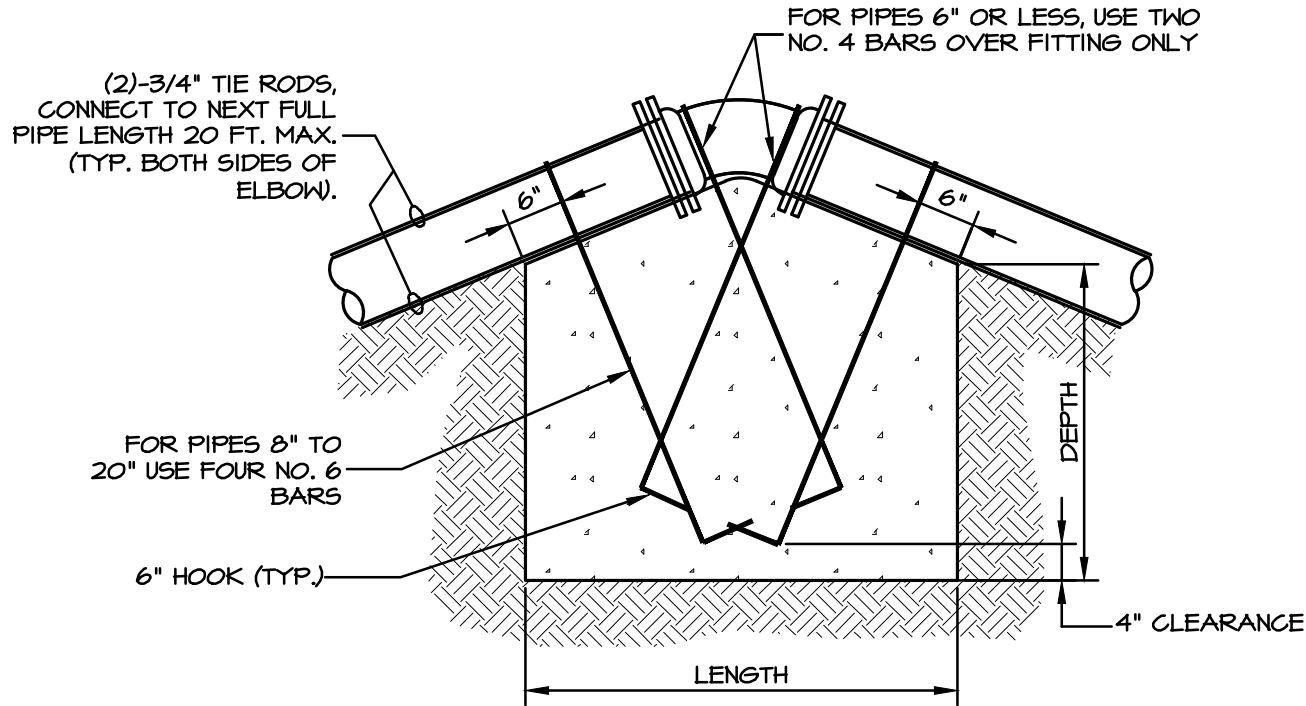
*ADD 12% TO LENGTH IF PIPE IS POLYETHYLENE ENCASED

NOTE: FOR PIPE SIZES GREATER THAN 12", SUBMIT ENGINEERING CALCULATIONS TO VERIFY PROPOSED RESTRAINED PIPE LENGTHS.

DUCTILE IRON RESTRAINED PIPE LENGTH SCHEDULE

NO SCALE

PIPE SIZES	DIMENSIONS OF CONCRETE BLOCKING								
	LENGTH			WIDTH			DEPTH		
	11 1/4°	22 1/2°	45°	11 1/4°	22 1/2°	45°	11 1/4°	22 1/2°	45°
4" AND SMALLER	2'	4'	4'	1.5'	3'	3'	1'	2'	3'
6" AND 8"	3'	4'	6'	3'	3'	3'	2'	3'	4'
10" AND 12"	4.5'	6'	8'	3'	3'	4'	3'	4.5'	5'
14" AND 16"	6'	8'	11'	3.5'	3.5'	5'	2.5'	5'	5'
18" AND 20"	7'	9'	13'	4'	5'	5.5'	4'	5'	6'



NOTES:

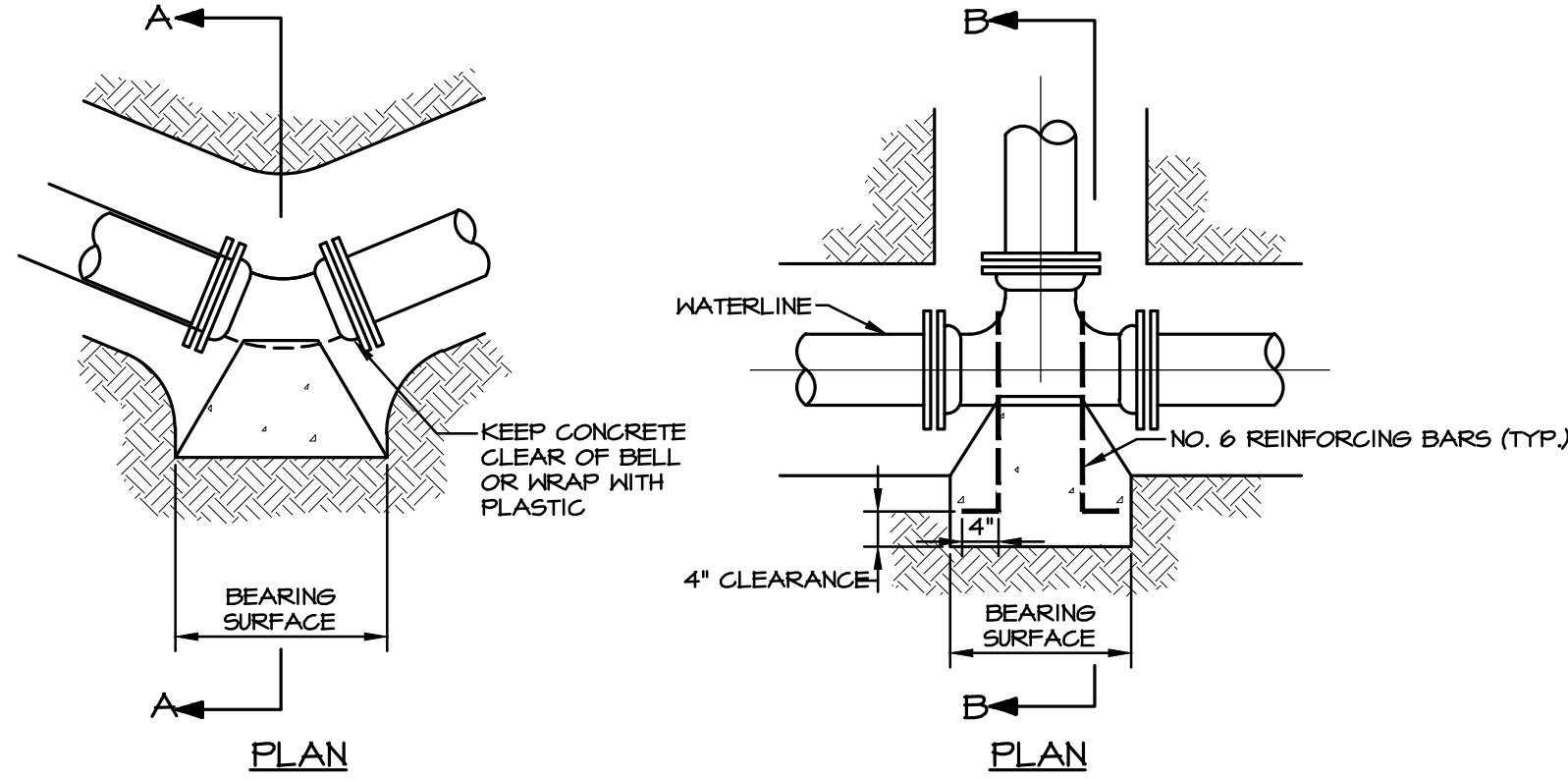
- DIMENSIONS OF CONCRETE BLOCKS VERIFIED USING AWWA M41 DUCTILE IRON PIPE AND FITTINGS. ASSUMPTIONS USED FOR CALCULATIONS WERE A WORKING PRESSURE OF 200 PSI AND A SAFETY FACTOR OF 1.5.
- IF THE OWNER AGREES, TIE RODS MAY BE ELIMINATED PROVIDED ALL JOINTS ARE MECHANICAL JOINT TYPE WITH JOINT RESTRAINT. (MEGALUG BY EBAA IRON SERIES 1100 OR APPROVED EQUAL).
- NO COUPLING OR JOINTS SHALL BE COVERED WITH CONCRETE
- REINFORCING BAR STRAPS TO BE SHAPED TO PIPE CURVATURE.
- ALL EXPOSED STEEL TO BE PAINTED WITH TWO COATS ASPHALTIC PAINT.
- CONCRETE BEARING SURFACES SHALL BE UNDISTURBED SOIL.

TYPICAL THRUST BLOCKING FOR VERTICAL UPWARD THRUSTS

NO SCALE

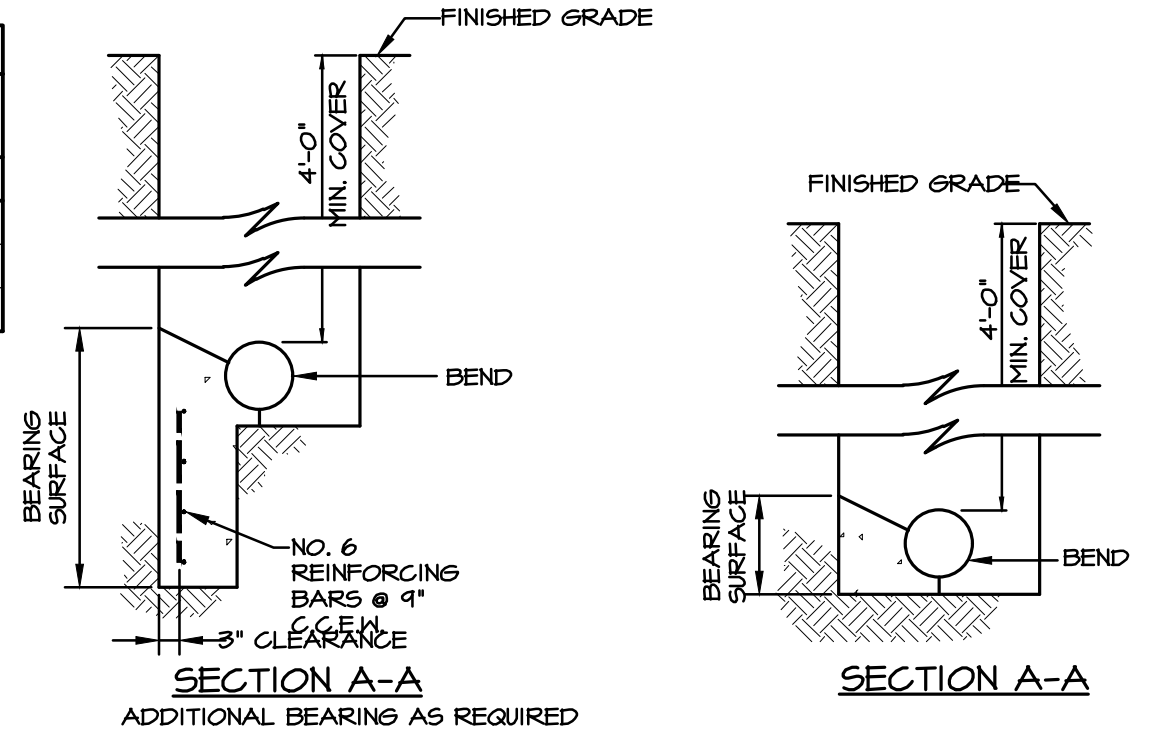
TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, PSF	4" AND LESS DEGREE BEND				6" AND 8" DEGREE BEND				10" AND 12" DEGREE BEND			
	11 1/4°	22 1/2°	45°	90°	11 1/4°	22 1/2°	45°	90°	11 1/4°	22 1/2°	45°	90°
LOOSE SAND OR MEDIUM CLAY - 2000	1.0	2.0	2.7	4.0	1.5	3.0	6.0	11.0	3.5	6.6	13.0	24.0
PACKED GRAVEL AND SAND - 4000	1.0	1.0	1.5	2.0	1.0	1.5	3.0	5.5	1.7	3.3	6.5	12.0
ROCK - 10,000	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.1	1.0	1.3	2.6	4.8

TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, PSF	14" AND 16" DEGREE BEND OR DEFLECTION				18" AND 20" DEGREE BEND OR DEFLECTION			
	11 1/4°	22 1/2°	45°	90°	11 1/4°	22 1/2°	45°	90°
LOOSE SAND OR MEDIUM CLAY - 2000	6.0	12.0	23.1	42.7	9.5	19.0	37.0	67.0
PACKED GRAVEL AND SAND - 4000	3.0	6.0	11.5	21.3	4.8	9.5	18.5	33.5
ROCK - 10,000	1.2	2.4	4.6	8.5	2.0	3.8	7.4	13.5



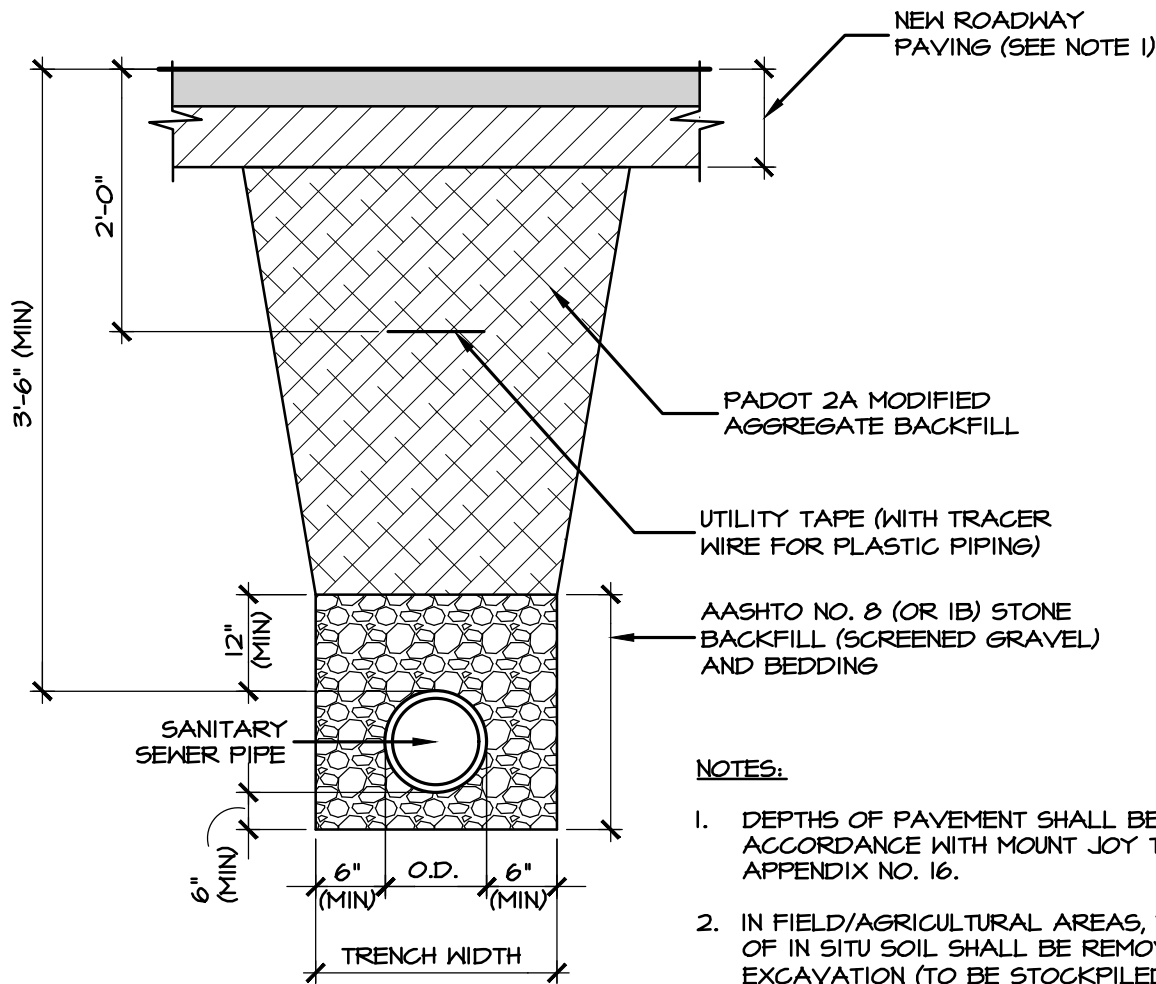
TYPICAL THRUST BLOCKING FOR HORIZONTAL AND VERTICAL DOWNWARD THRUSTS

NO SCALE



NOTES:

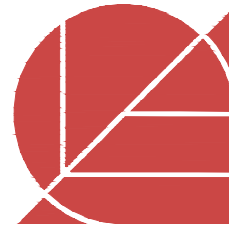
- DIMENSIONS OF CONCRETE BLOCKS CALCULATED USING AWWA MANUAL M41 DUCTILE IRON PIPE AND FITTINGS. ASSUMPTIONS USED FOR CALCULATIONS WERE A WORKING PRESSURE OF 150 PSI AND A SAFETY FACTOR OF 2.0. CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE SOIL CONDITION AND MAKE FINAL SELECTION OF BEARING AREA.
- IF THE OWNER AGREES, TIE RODS MAY BE ELIMINATED PROVIDED ALL JOINTS ARE MECHANICAL JOINT TYPE WITH JOINT RESTRAINT. (MEGALUG BY EBAA IRON SERIES 1100 OR APPROVED EQUAL).
- THRUST BLOCKING FOR TEES SHALL HAVE THE SAME BEARING AREA AS 90° BENDS OF THE PIPE SIZE OF THE OUTLET. DEAD ENDS SHALL HAVE THE SAME BEARING AS 90° BENDS.
- NO COUPLING OR JOINTS SHALL BE COVERED WITH CONCRETE.
- REINFORCING BAR STRAPS TO BE SHAPED TO PIPE CURVATURE.
- ALL EXPOSED STEEL TO BE PAINTED WITH TWO COATS ASPHALTIC PAINT.
- ALL BEARING SURFACES SHALL BE UNDISTURBED SOIL.



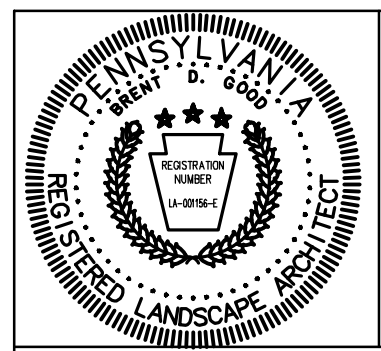
GRAVITY SANITARY SEWER TRENCHING WITHIN NEW STREETS

NO SCALE

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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

FINAL PHASE 1 PLAN

SUBJECT:
UTILITY DETAILS

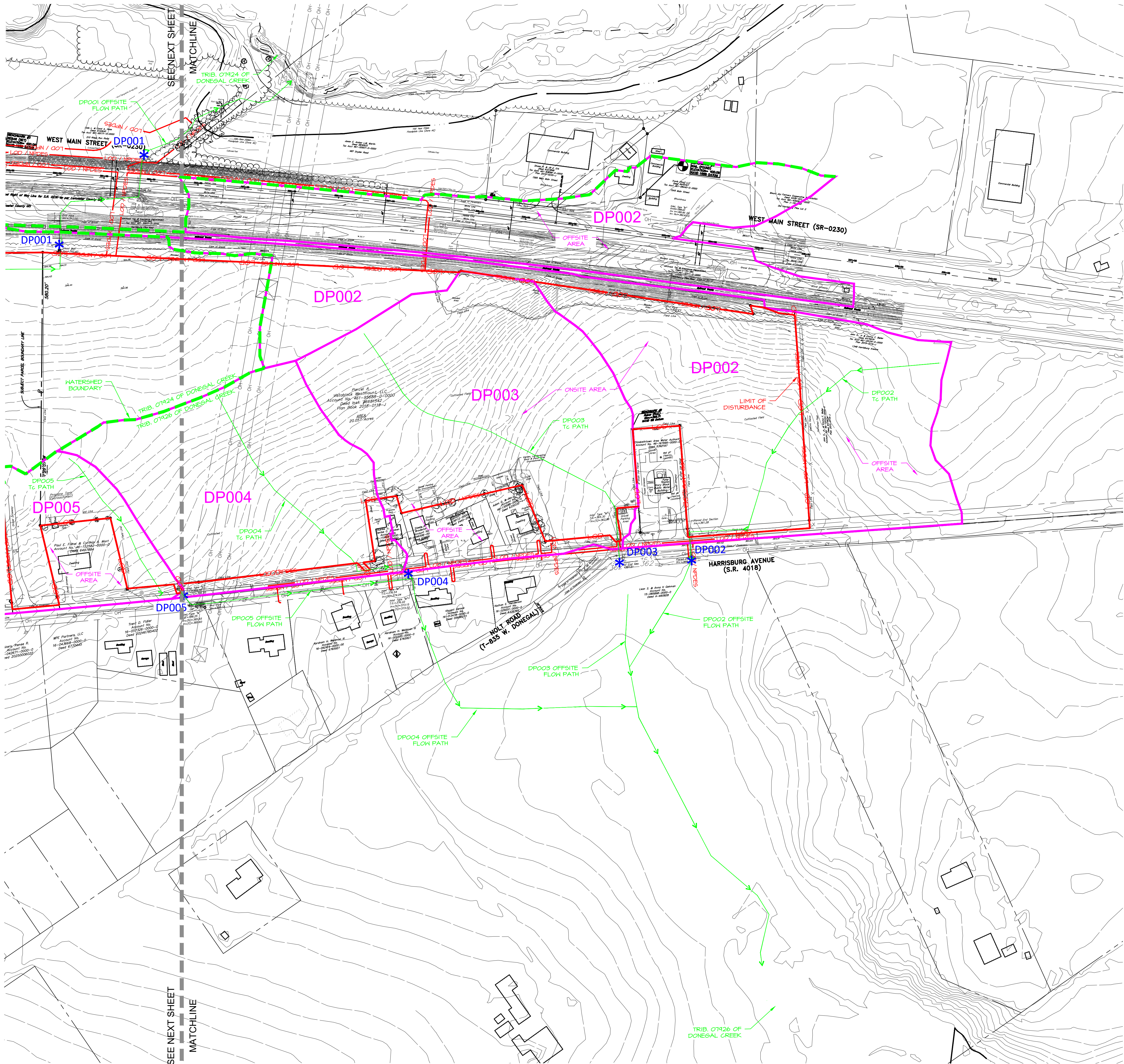
FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.:	1212-004
CAD DESIGNER:	TRS	SCALE:	AS NOTED

DRAWING NO.

71 of 79



EXISTING LEGEND

		ADJOINER PROPERTY LINE
		PROPERTY LINE
		RIGHT-OF-WAY LINE
		CENTERLINE
		EASEMENTS
		INDEX CONTOUR
		INTERMEDIATE CONTOUR
		SPOT ELEVATION
		CURB LINE
		EDGE OF PAVEMENT (E.O.P.)
		MIN. BLDG SETBACK LINE
		OVERHEAD ELECTRIC
		UNDERGROUND ELECTRIC
		UNDERGROUND TELEPHONE
		GAS LINE
		SANITARY SEWER LINE
		SANITARY FORCE MAIN
		WATER LINE

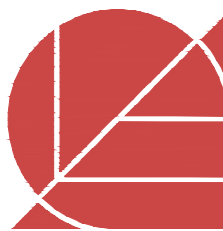
WATERSHED MAPPING LEGEND

DP001 *

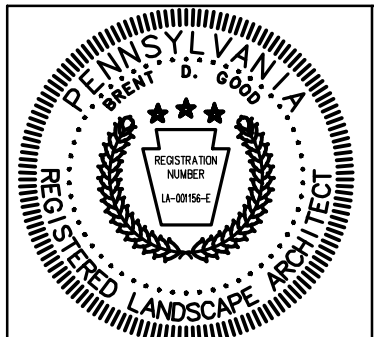
SCALE IN FEET: 1" = 100'



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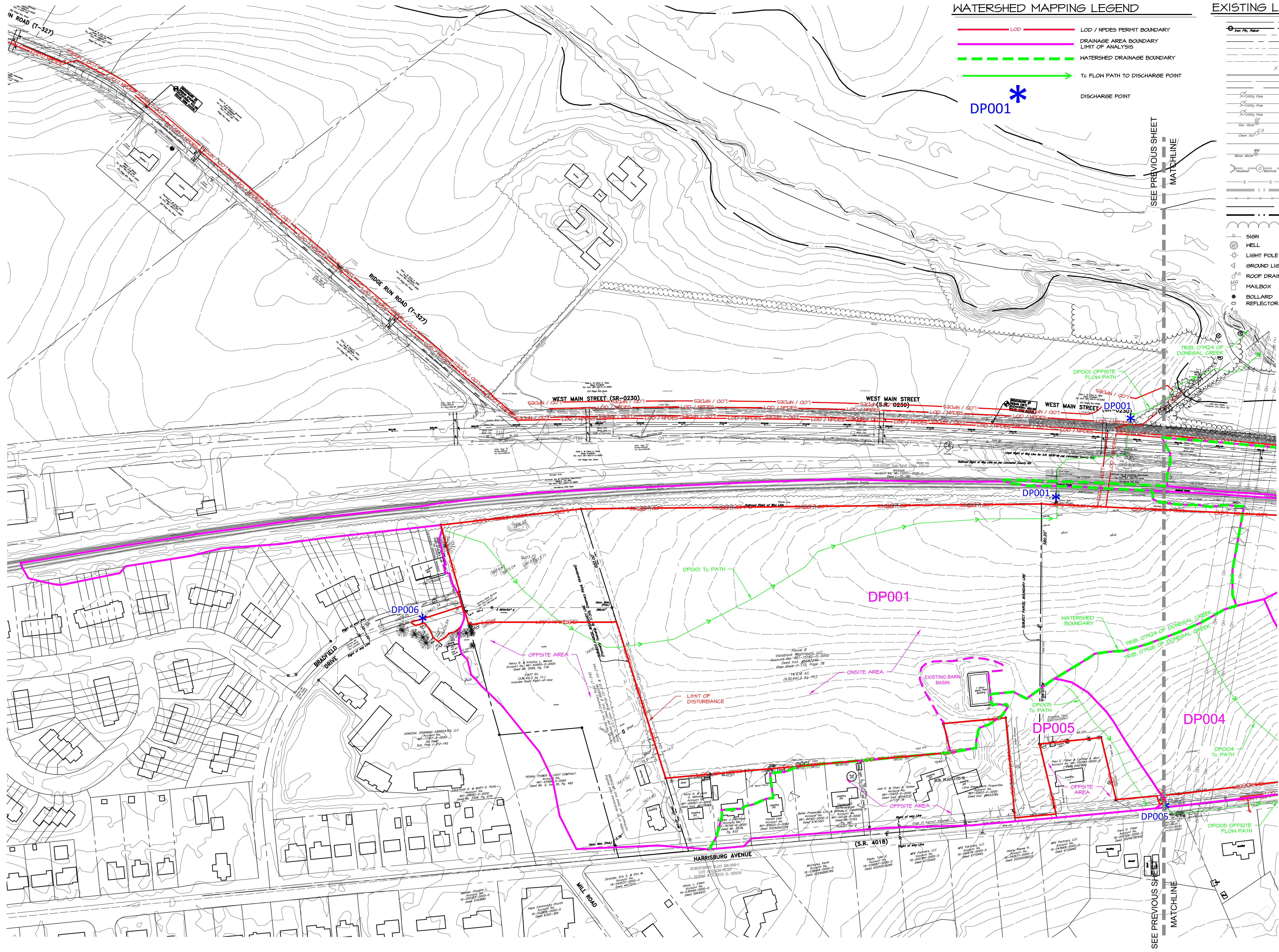


POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

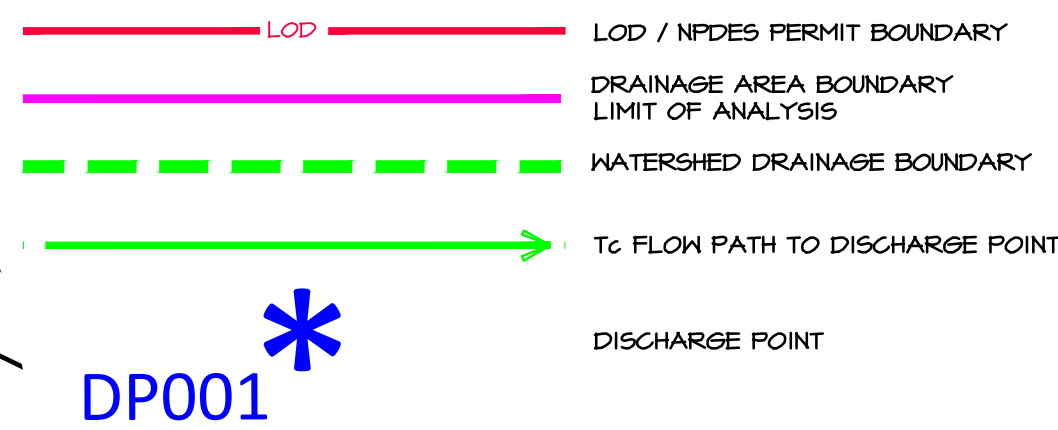
FINAL PHASE 1 PLAN
SUBJECT:
PRE CONSTRUCTION WATERSHED MAP 'A'
FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA
CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.:	1212-004
CAD DESIGNER:	TRS	SCALE:	1" = 100'

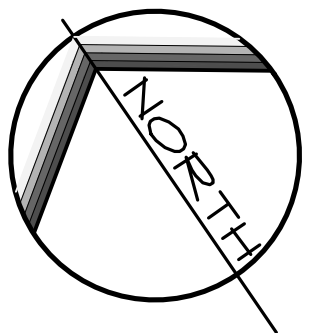
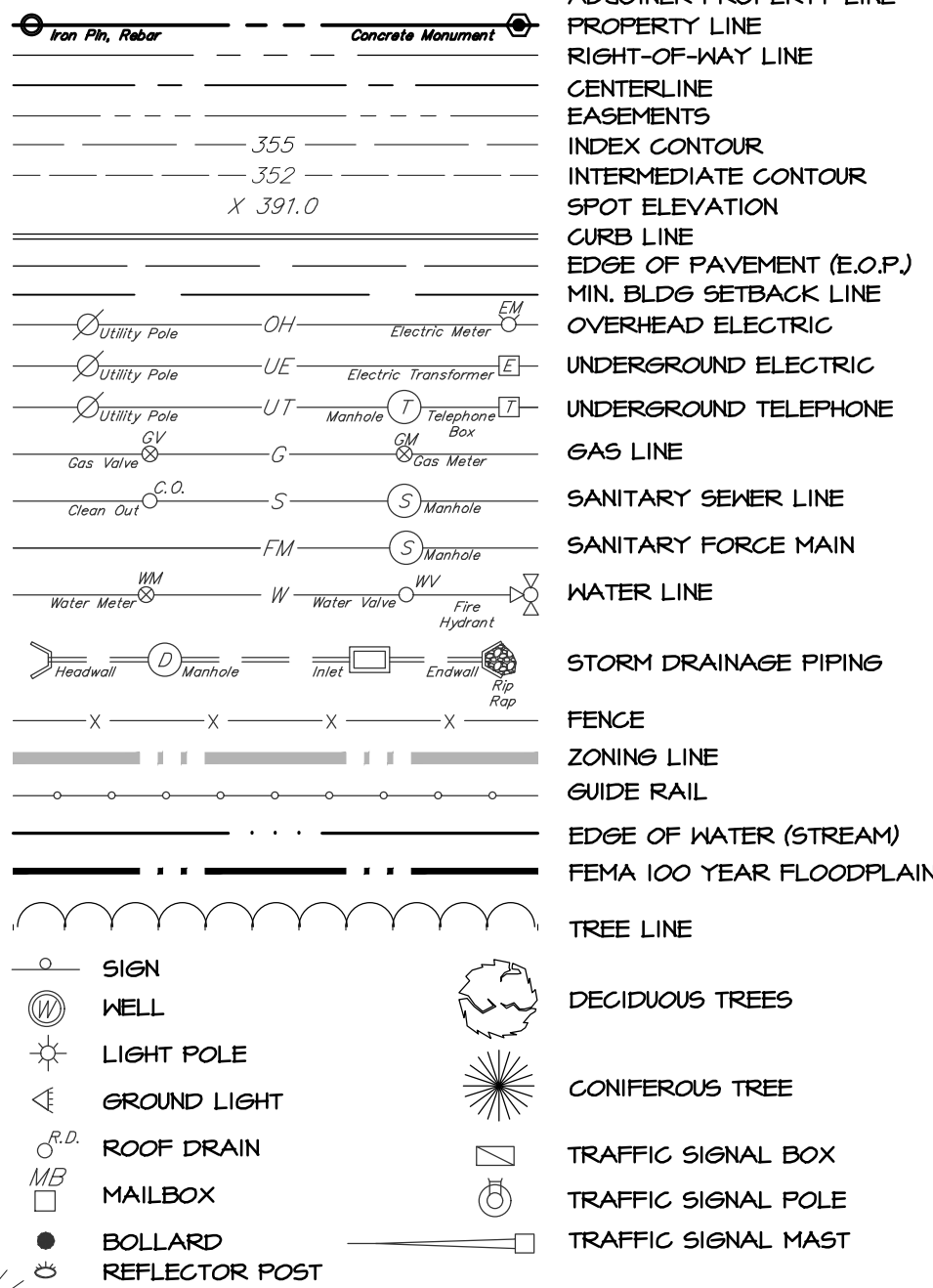
DRAWING NO.
72 of 79



WATERSHED MAPPING LEGEND



EXISTING LEGEND



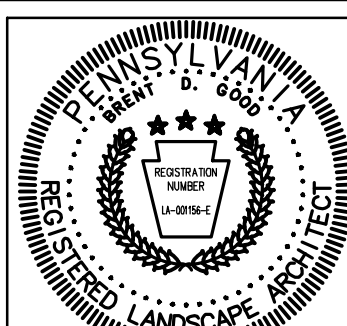
SCALE IN FEET: 1" = 100



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FINAL PHASE 1 PLAN

PRE CONSTRUCTION WATERSHED MAP 'B'

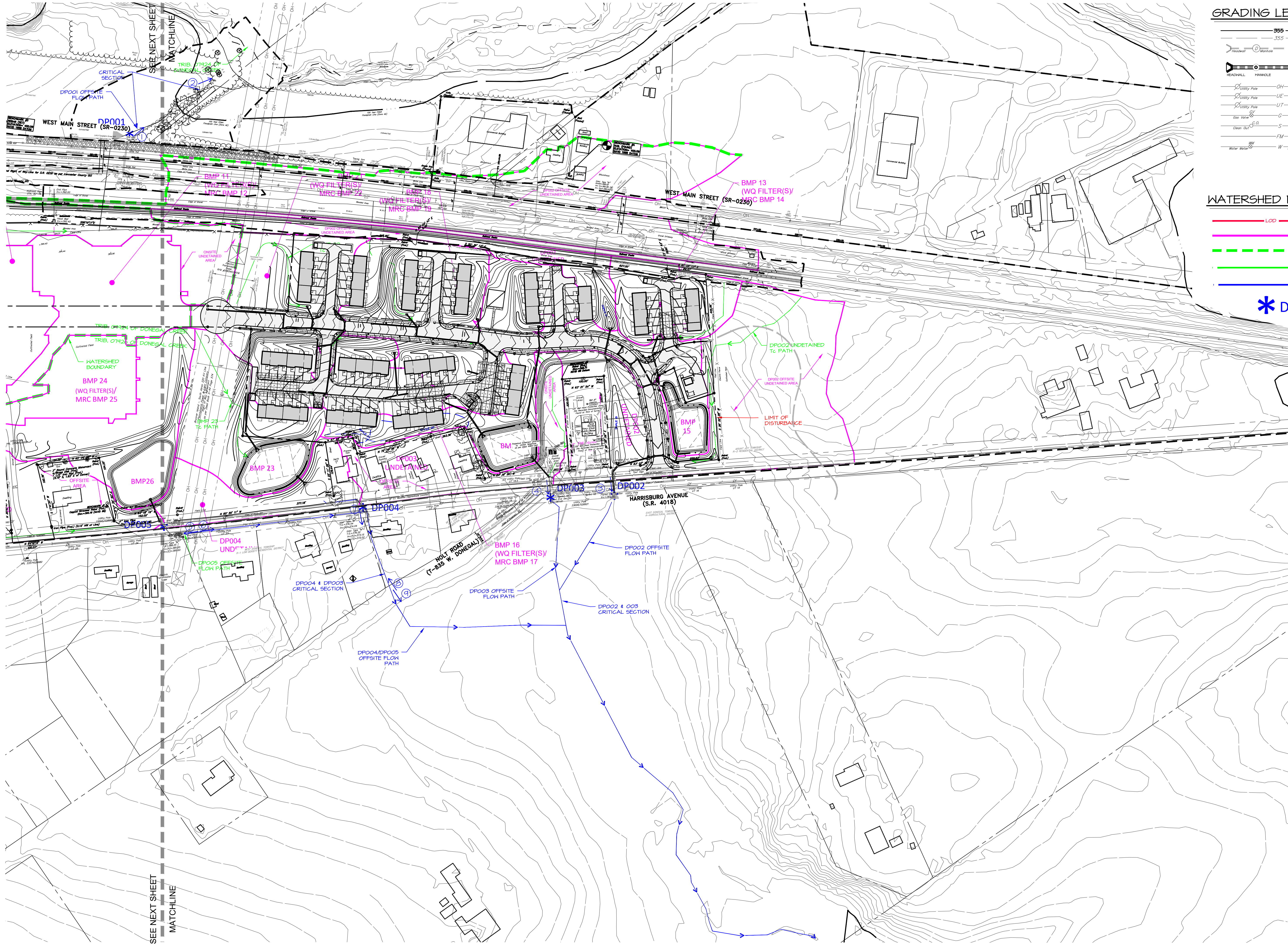
FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

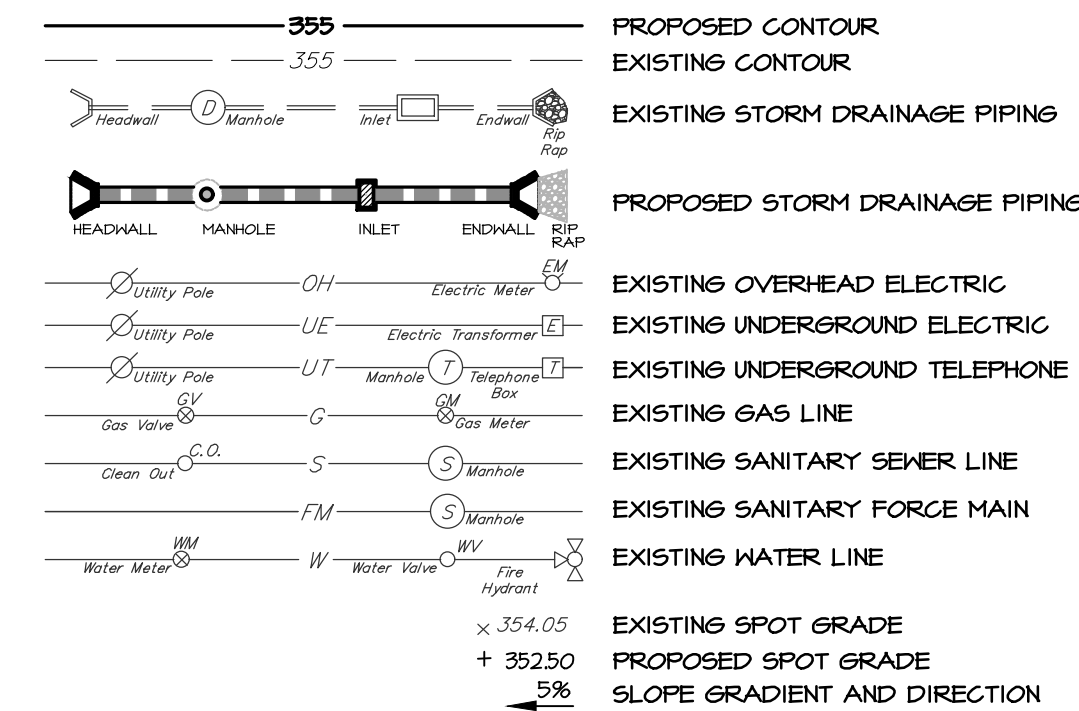
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ENGINEER:	TEH	PROJECT NO.	1212-004
CAD DESIGNER:	TRS	SCALE:	1" = 100'

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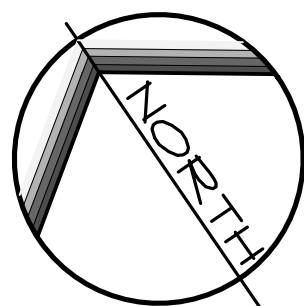
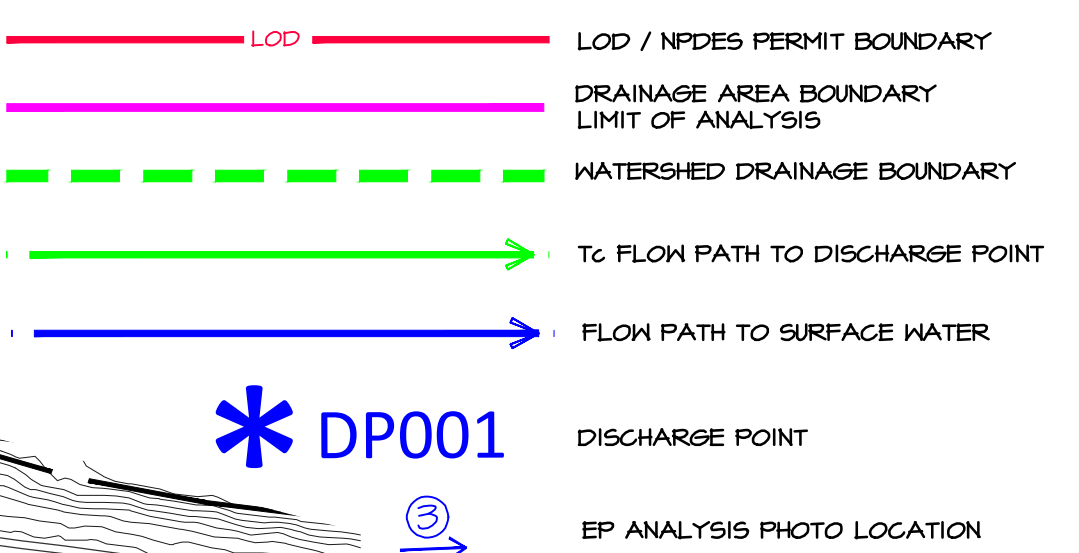
73 of 79



GRADING LEGEND



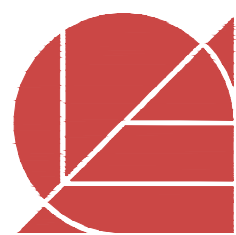
WATERSHED MAPPING LEGEND



SCALE IN FEET: 1" = 100'



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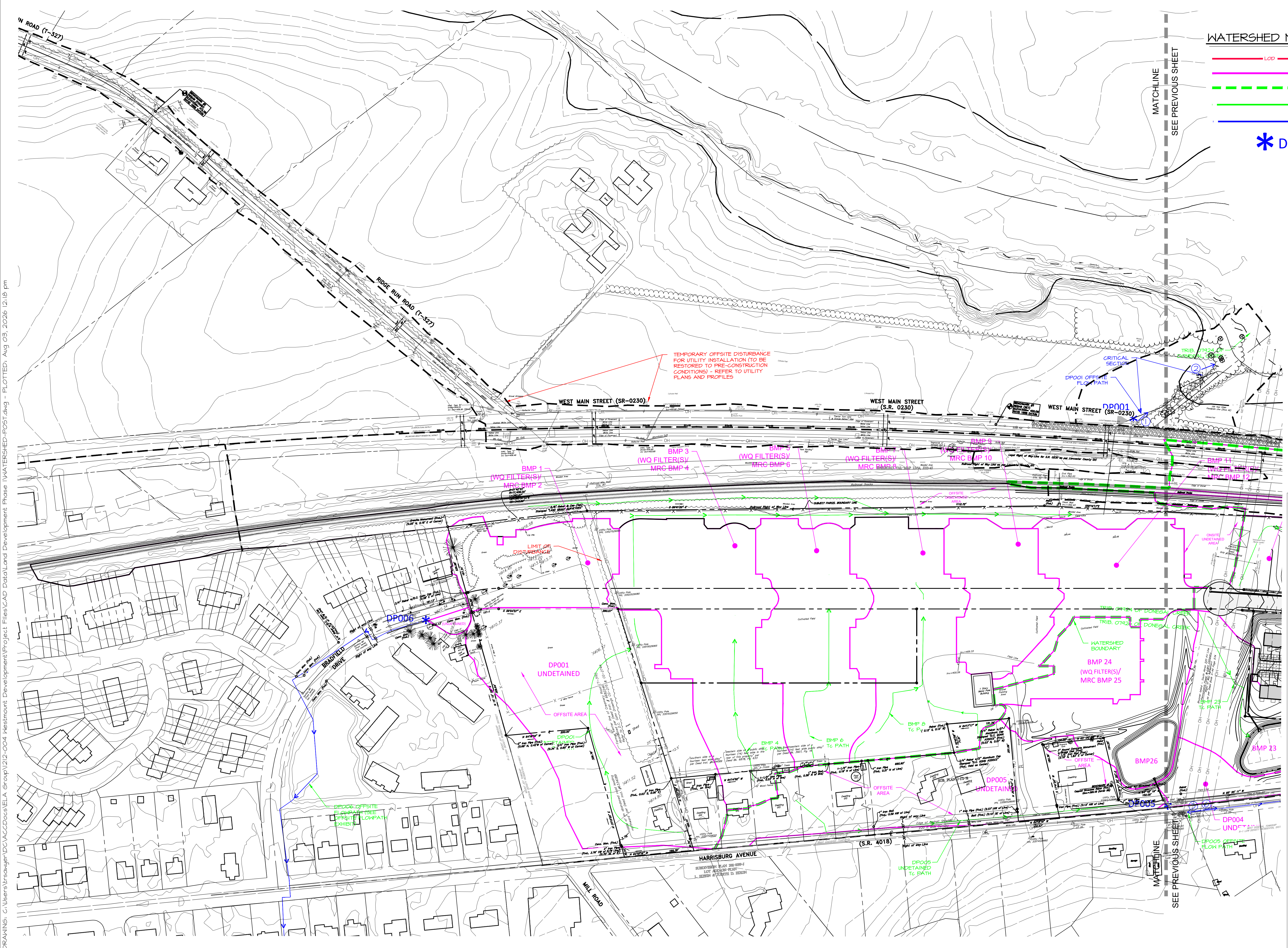
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

FINAL PHASE 1 PLAN
SUBJECT: POST CONSTRUCTION WATERSHED MAP 'A'
FOR WESTMOUNT MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA
CLIENT: VISTABLOCK, LLC 150 FARMINGTON LANE LANCASTER, PA 17601 717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.	1212-004
CAD DESIGNER:	TRS	SCALE:	1" = 100'

DRAWING NO.
74 of 79

DRAWING: c:\Users\rsrajan\Documents\ELA_Group\12-004 Westmount Development\Project Files\CAD Data\Land Development Phase 1\Watershed-POST.dwg - PLOTTED: Aug 03, 2026 12:18 pm



WATERSHED MAPPING LEGEND

- LOD / NPDES PERMIT BOUNDARY
- DRAINAGE AREA BOUNDARY LIMIT OF ANALYSIS
- WATERSHED DRAINAGE BOUNDARY
- Tc FLOW PATH TO DISCHARGE POINT
- FLOW PATH TO SURFACE WATER
- DP001 DISCHARGE POINT
- EP ANALYSIS PHOTO LOCATION

North Arrow

SCALE IN FEET: 1" = 100'

0 50 100 200 300

REVISIONS PER:	DATE:	BY:
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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

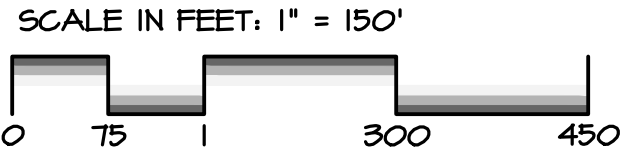
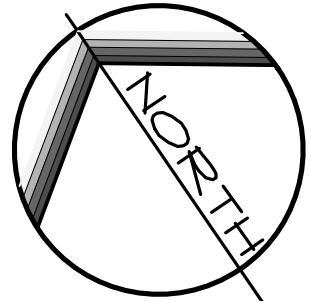
FINAL PHASE 1 PLAN
SUBJECT:
POST CONSTRUCTION WATERSHED MAP 'B'
FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA
CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.	1212-004
CAD DESIGNER:	TRS	SCALE:	1" = 150'

DRAWING NO.
75 of 79

WATERSHED MAPPING LEGEND

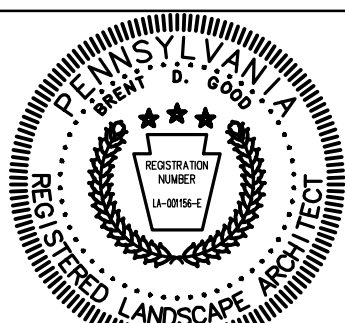
- LOD / NPDES PERMIT BOUNDARY
- DRAINAGE AREA BOUNDARY LIMIT OF ANALYSIS
- WATERSHED DRAINAGE BOUNDARY
- Tc FLOW PATH TO DISCHARGE POINT
- FLOW PATH TO SURFACE WATER
- DP001
- EP ANALYSIS PHOTO LOCATION



REVISIONS PER:	DATE:	BY:
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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

FINAL PHASE 1 PLAN

SUBJECT:
OFFSITE FLOWATH

FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.	1212-004
CAD DESIGNER:	TRS	SCALE:	1" = XX'

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76 of 79

DRAWING: c:\users\rsauyer\Documents\ELA_Group\1212-004 Westmount Development\Project Files\CAD Data\Land Development Phase 1\WATERSHED-POST.dwg - PLOTTED: Aug 03, 2026 12:18 pm

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GRADING LEGEND

	PROPOSED CONTOUR
	EXISTING CONTOUR
	EXISTING STORM DRAINAGE PIPING
	PROPOSED STORM DRAINAGE PIPING
	EXISTING OVERHEAD ELECTRIC
	EXISTING UNDERGROUND ELECTRIC
	EXISTING UNDERGROUND TELEPHONE
	EXISTING GAS LINE
	EXISTING SANITARY SEWER LINE
	EXISTING SANITARY FORCE MAIN
	EXISTING WATER LINE
	EXISTING SPOT GRADE
	PROPOSED SPOT GRADE
	SLOPE GRADIENT AND DIRECTION

WATERSHED MAPPING LEGEND

	LOD / NPDES PERMIT BOUNDARY
	DRAINAGE AREA BOUNDARY LIMIT OF ANALYSIS
	SHALE DRAINAGE AREA
	TO FLOW PATH TO DISCHARGE POINT
	FLOW PATH TO SURFACE WATER
	DISCHARGE POINT
	EP ANALYSIS PHOTO LOCATION

SCALE IN FEET: 1" = 50'

REVISIONS PER:	DATE:	BY:
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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

FINAL PHASE 1 PLAN

SUBJECT:
INLET WATERSHED MAP 'A'

FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

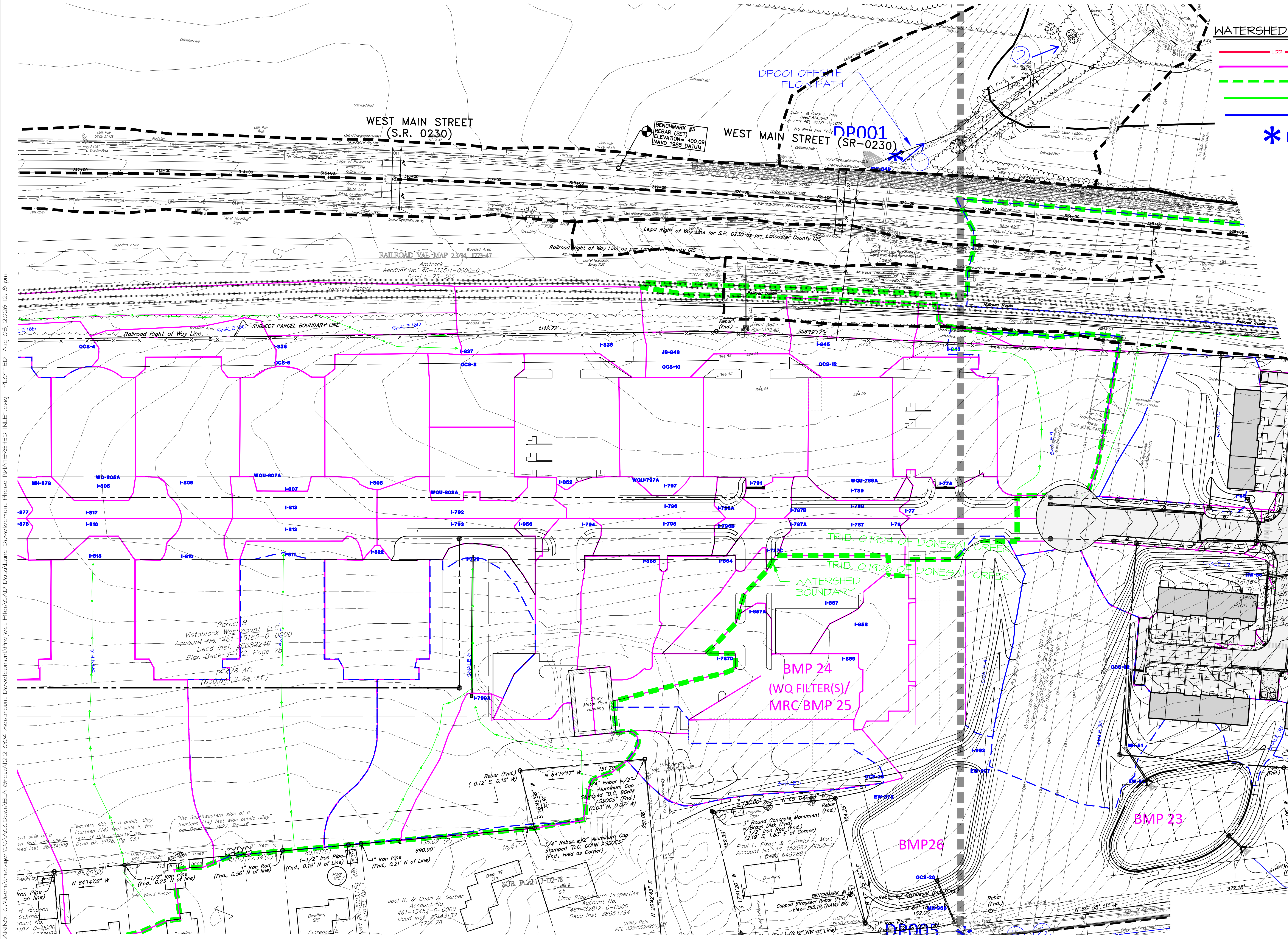
CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.:	1212-004
CAD DESIGNER:	TRS	SCALE:	1" = 50'

DRAWING NO.

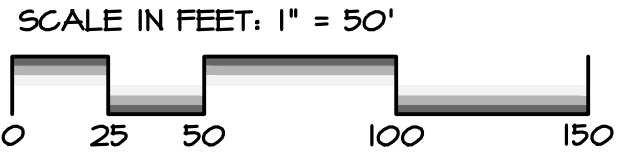
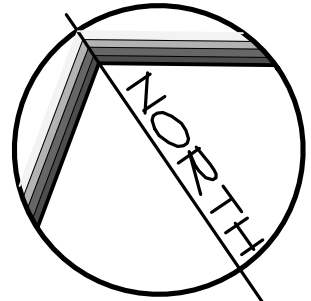
77 of 79

DRAWING: C:\Users\rsamuel\Documents\ELA_Group\12-004 Westmount Development\Project Files\CAD Data\Land Development Phase 1\WATERSHED-INLET.dwg - PLOTTED: Aug 03, 2026 12:18 pm



WATERSHED MAPPING LEGEND

- LOD / NPDES PERMIT BOUNDARY
- DRAINAGE AREA BOUNDARY LIMIT OF ANALYSIS
- WATERSHED DRAINAGE BOUNDARY
- T_c FLOW PATH TO DISCHARGE POINT
- FLOW PATH TO SURFACE WATER
- DP001 DISCHARGE POINT
- EP ANALYSIS PHOTO LOCATION



REVISIONS PER:	DATE:	BY:
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4.	-	-
5.	-	-

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ENGINEERS + LANDSCAPE ARCHITECTS
4139 Oregon Pike, Ephrata, PA 17522 717.626.7271
elagroup.com

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

FINAL PHASE 1 PLAN
SUBJECT:
INLET WATERSHED MAP 'B'
FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA
CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER: BDG DATE: AUG. 3, 2026
ENGINEER: TEH PROJECT NO. 1212-004
CAD DESIGNER: TRS SCALE: 1" = 50'

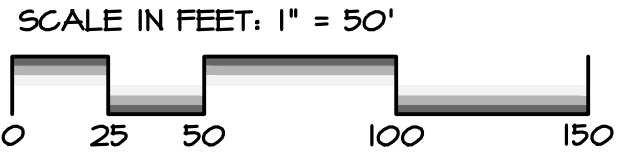
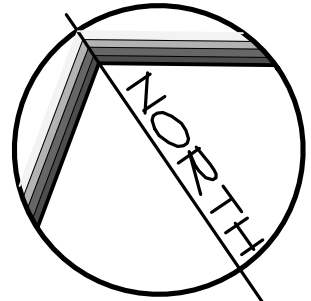
DRAWING NO.
78 of 79

DRAWING: C:\Users\rsamyer\Documents\DCVACC\Docs\ELA_Group\1212-004 Westmount Development Phase 1\Watershed-INLET.dwg - PLOTTED: Aug 03, 2026 12:18 pm



WATERSHED MAPPING LEGEND

- LOD / NPDES PERMIT BOUNDARY
- DRAINAGE AREA BOUNDARY LIMIT OF ANALYSIS
- WATERSHED DRAINAGE BOUNDARY
- T_c FLOW PATH TO DISCHARGE POINT
- FLOW PATH TO SURFACE WATER
- DP001
- EP ANALYSIS PHOTO LOCATION



REVISIONS PER:	DATE:	BY:
1. -	-	-
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

FINAL PHASE 1 PLAN
SUBJECT:
INLET WATERSHED MAP 'C'
FOR
WESTMOUNT
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA
CLIENT:
VISTABLOCK, LLC
150 FARMINGTON LANE
LANCASTER, PA 17601
717-682-8775

MANAGER:	BDG	DATE:	AUG. 3, 2026
ENGINEER:	TEH	PROJECT NO.	1212-004
CAD DESIGNER:	TRS	SCALE:	1" = 50'

DRAWING NO.
79 of 79