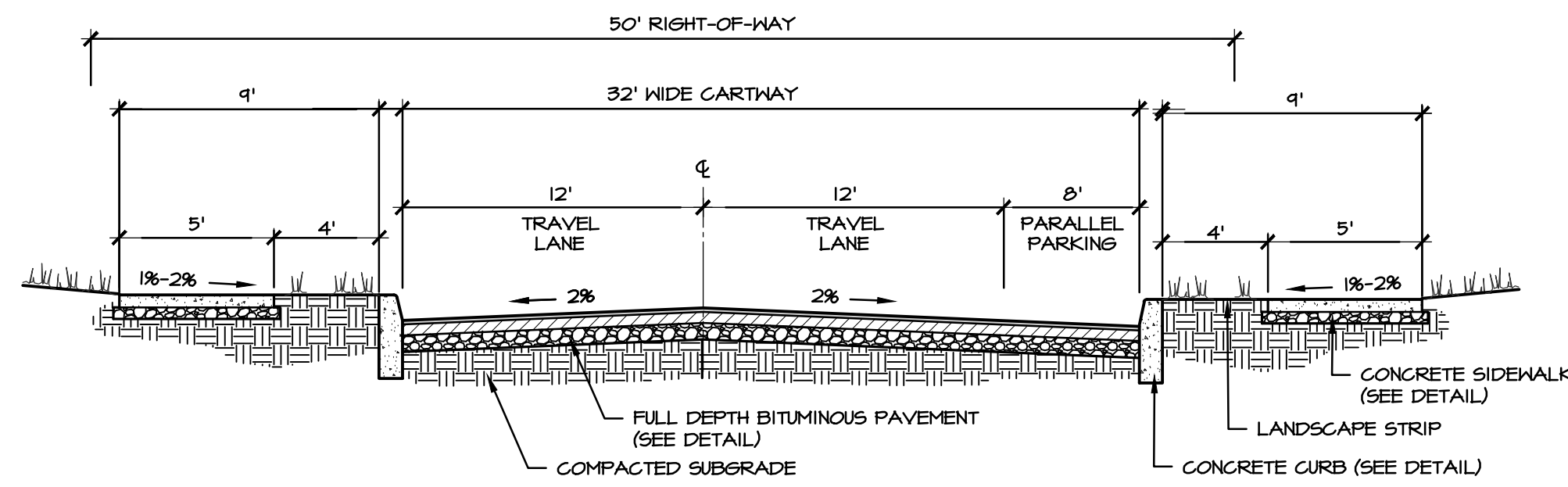
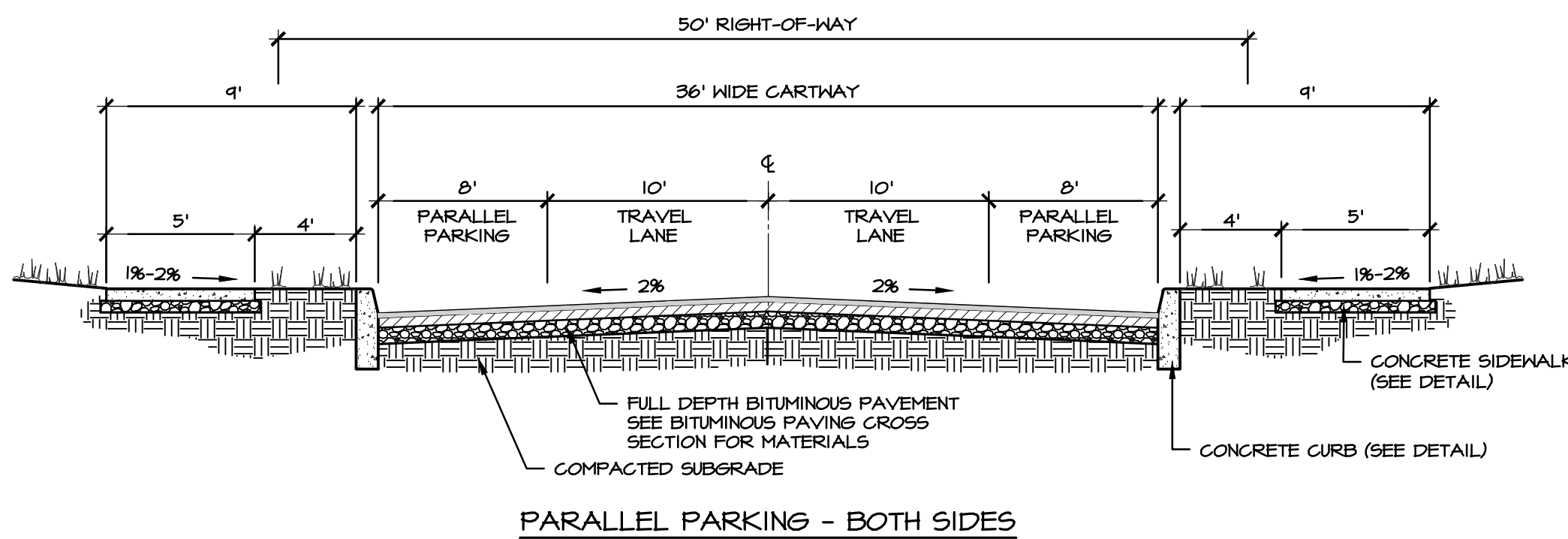


NO PARALLEL PARKING

NOTES: 1. ALL STREETS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE PENNDOT MANUAL FORM 408 STANDARDS.

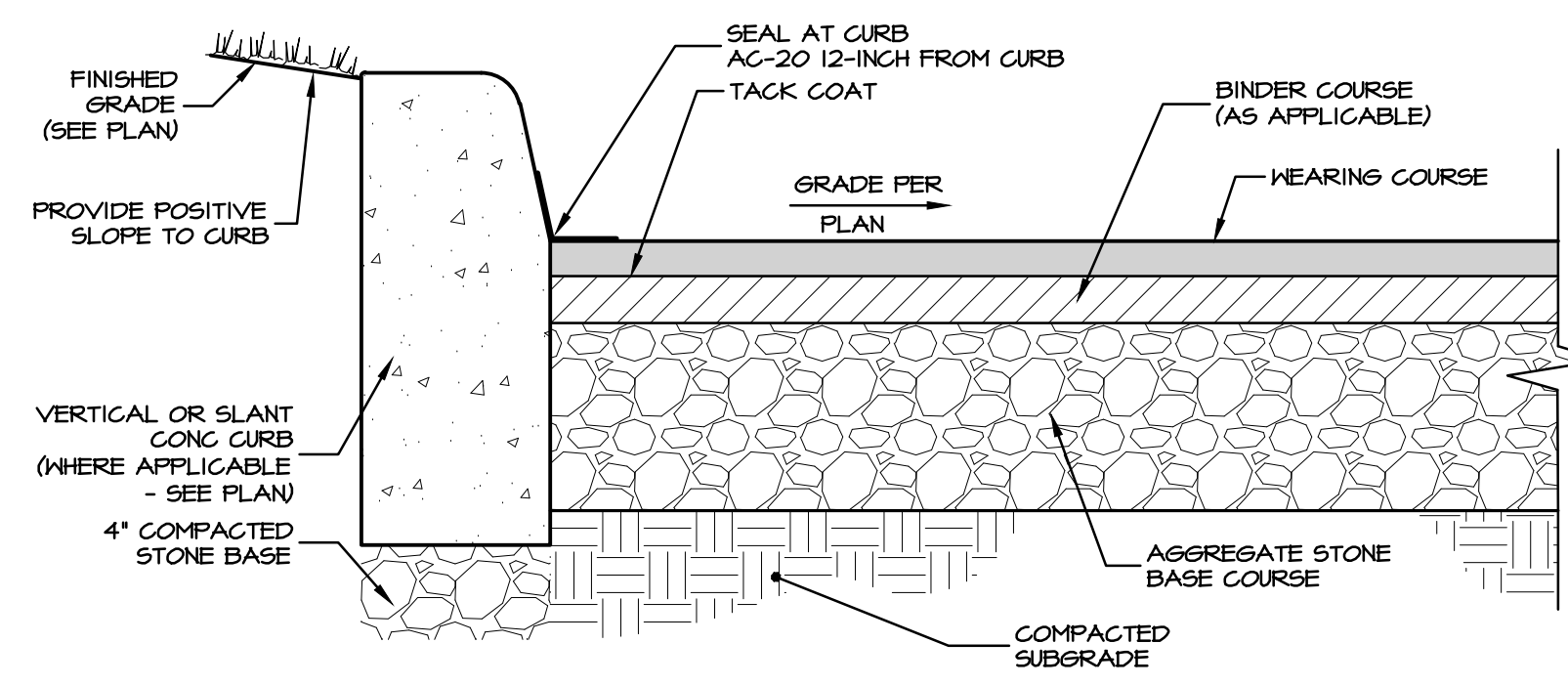


PARALLEL PARKING - ONE SIDE



PARALLEL PARKING - BOTH SIDES

A TYPICAL STREET CROSS-SECTIONS  
NO SCALE



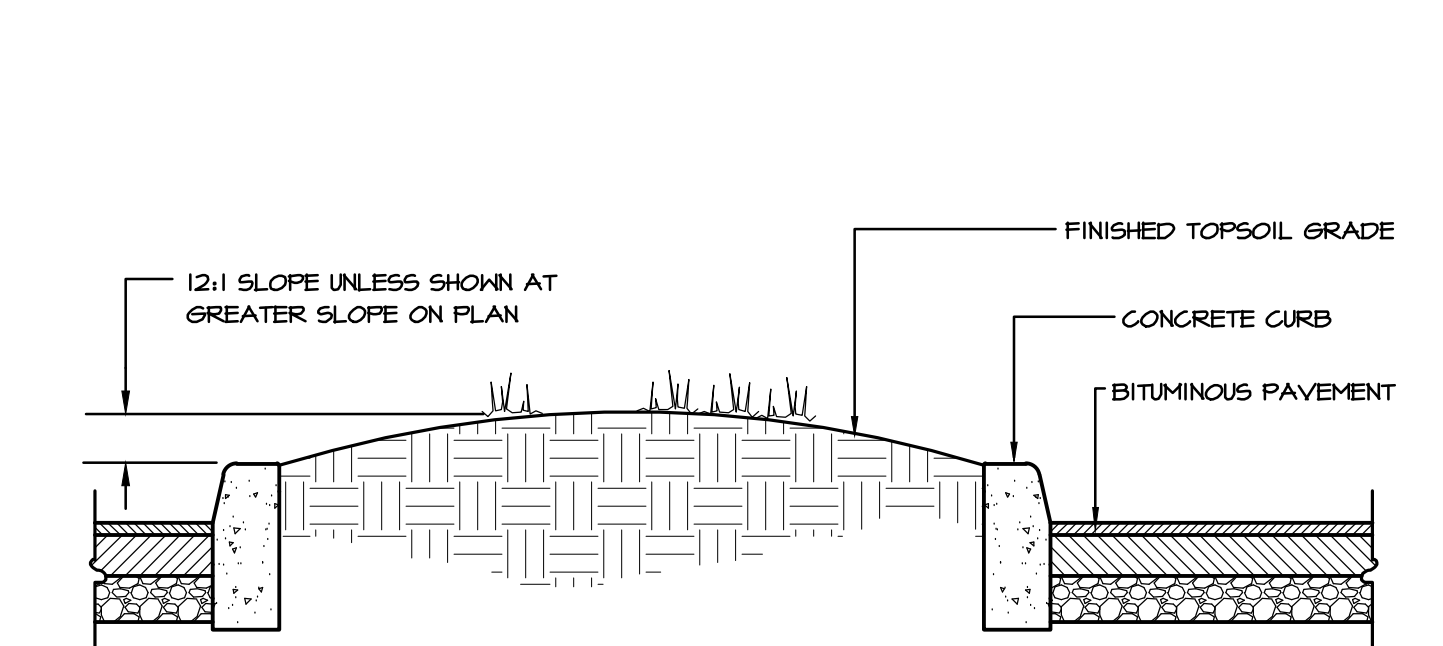
B BITUMINOUS PAVING SECTION / SCHEDULE  
NO SCALE

SYM	WEARING COURSE		BINDER COURSE		AGGREGATE BASE COURSE		LOCATION
	TYPE	COMPACTED THICKNESS	TYPE	COMPACTED THICKNESS	TYPE	COMPACTED THICKNESS	
A	SUPERPAVE ASPHALT DESIGN, HMA WEARING COURSE, PG 64-22, 0.3 TO 0.0 MILLION ESAL'S, 9.5 MM, SRL-H	1.5"	SUPERPAVE ASPHALT DESIGN, HMA BINDER COURSE, PG 64-22, 0.3 TO 0.0 MILLION ESAL'S, 25 MM MIX, 50 GRATIONS	4"	2A MODIFIED	8"	LOCAL DEDICATED STREET
B	SUPERPAVE ASPHALT DESIGN, HMA WEARING COURSE, PG 64-22, 0.3 TO 0.0 MILLION ESAL'S, 9.5 MM, SRL-L	1.5"	SUPERPAVE ASPHALT DESIGN, HMA BINDER COURSE, PG 64-22, 0.3 TO 0.0 MILLION ESAL'S, 25 MM MIX, 50 GRATIONS	3"	2A MODIFIED	8"	ACCESS DRIVES & PARKING AREAS

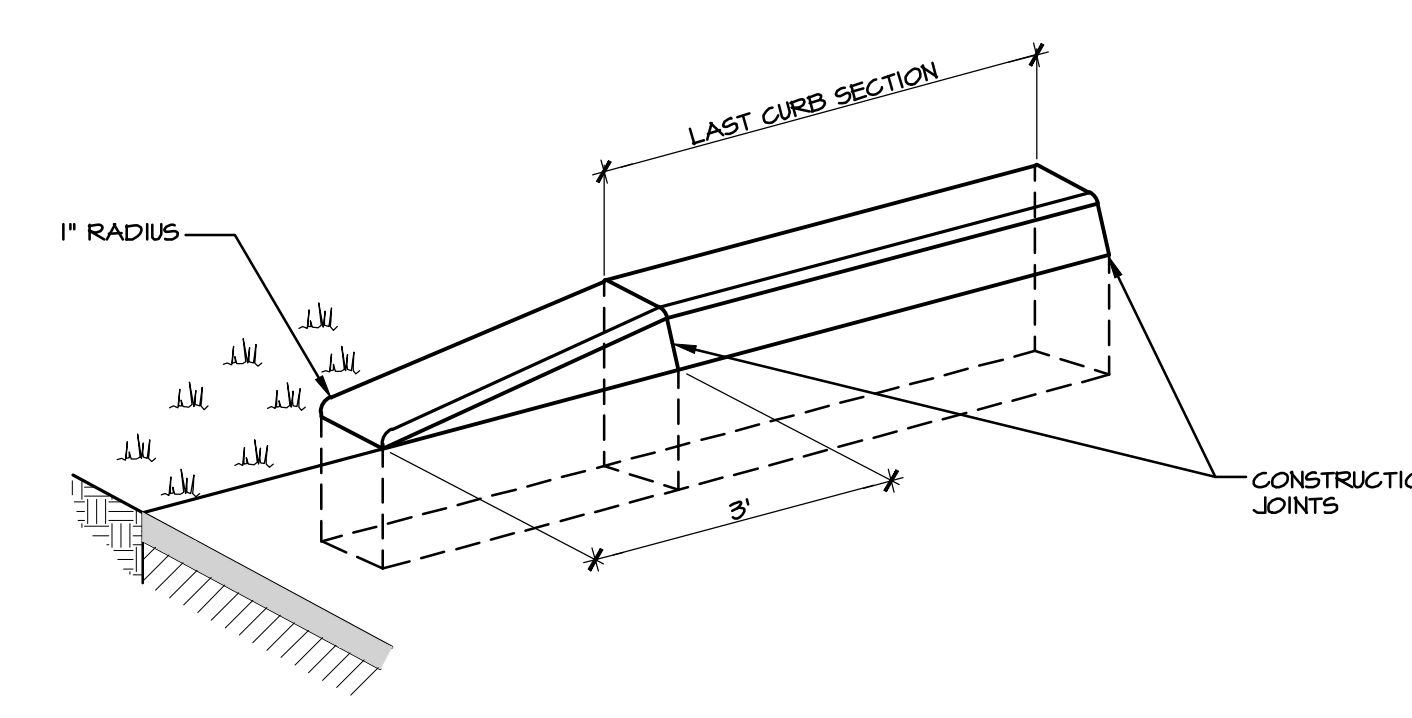
D TYPICAL CURB END DETAIL  
NO SCALE

1. BITUMINOUS PAVING MATERIALS ARE LISTED PER PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, PUBLICATION 408 STANDARDS, LATEST REVISIONS.
2. RECLAIMED AGGREGATE MATERIAL SHALL MEET THE REQUIREMENTS OF PA DOT PUBLICATION 408, SECTION 103.1, TABLE A, OR 103.2, TABLE B.
3. IT IS RECOMMENDED THAT THE PAVEMENT SECTION AND OTHER DESIGN CONSIDERATIONS SUCH AS PAVEMENT BASE DRAIN BE DESIGNED BY A GEOTECHNICAL PROFESSIONAL BASED UPON FIELD TESTING OF SOIL SUBGRADE CONDITIONS ANTICIPATED PAVEMENT LOADINGS, INCLUDING CONSTRUCTION TRAFFIC, AND OTHER APPROPRIATE DESIGN FACTORS. THE PAVEMENT SECTION SPECIFIED ON THIS DETAIL IS PROVIDED WITHOUT A GEOTECHNICAL PROFESSIONAL AND REPRESENTS A STANDARD PAVEMENT SECTION THAT DOES NOT CONSIDER THESE FACTORS.\*
4. THE SUITABILITY OF THE PAVEMENT SUBGRADE SHALL BE INSPECTED AND APPROVED BY GEOTECHNICAL PROFESSIONAL PRIOR TO INSTALLATION OF PAVING SECTION. IF SUBGRADE IS DETERMINED UNSUITABLE BASED UPON COMPACTION, SOIL TYPE, ETC., APPROPRIATE STABILIZATION MEASURES AS RECOMMENDED BY THE GEOTECHNICAL PROFESSIONAL SHALL BE IMPLEMENTED.
5. IF ANY PRECIPITATION OCCURS BEFORE STONE SUBBASE INSTALLATION, PAVEMENT SUBGRADE SHALL MUST BE RE-INSPECTED AND APPROVED TO CONFIRM SUITABILITY.
6. SPECIFIC PAVING CRITERIA AS CONTAINED WITHIN PENNDOT PUBLICATION 408 AS IT RELATES TO APPROVED AMBIENT TEMPERATURE FOR PAVING INSTALLATION SHALL BE FOLLOWED.
7. ALL AREAS ADJACENT TO CURB, INLETS, MANHOLE COVERS, ETC. ARE TO BE SEALED 12-INCHES WIDE WITH AC-20.

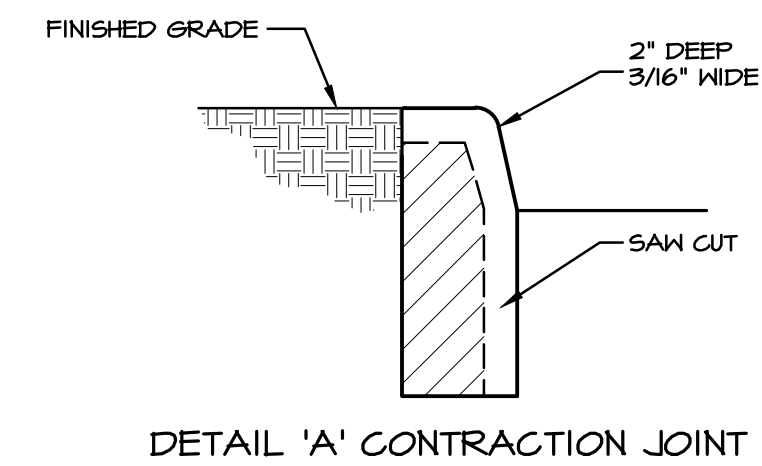
C BITUMINOUS DRIVEWAY SECTION  
NO SCALE



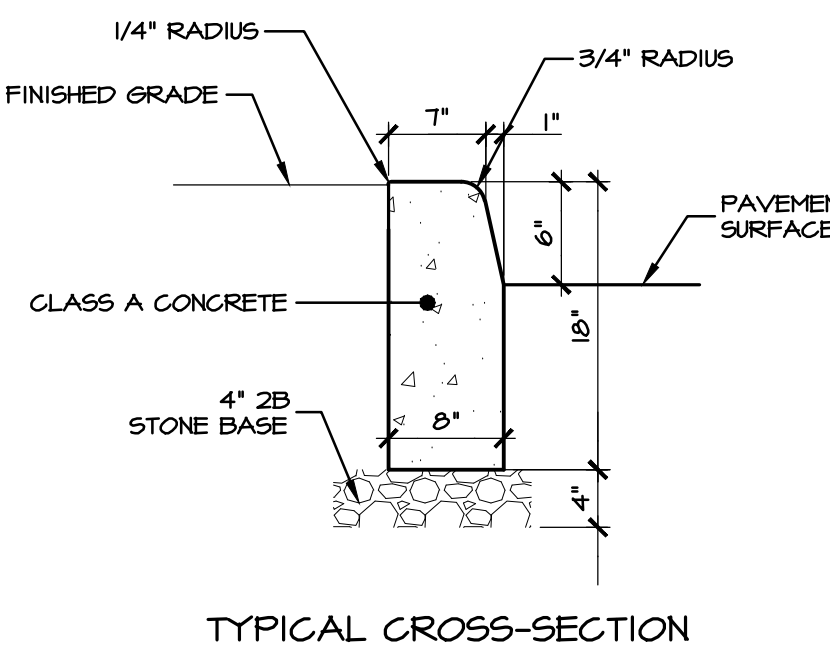
F PARKING ISLAND MOUNDING  
NO SCALE



- NOTES:
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PADOT PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONC CURB.
  2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
  3. INSTALL EXPANSION MATERIAL AT INTERVALS NOT TO EXCEED 100 FEET. EXPANSION MATERIAL SHALL BE 1" THICK PREMOULDED, NON-EXTRUDING, RESILIENT BITUMINOUS JOINT FIBER. INSTALL EXPANSION MATERIAL ADJACENT TO ALL INLETS AND OTHER STRUCTURES.
  4. PROVIDE REVEAL AS INDICATED ON PLAN.
  5. SEAL PAVEMENT JOINT AT CURB LINE WITH EMULSIFIED ASPHALT.



DETAIL 'A' CONTRACTION JOINT



TYPICAL CROSS-SECTION

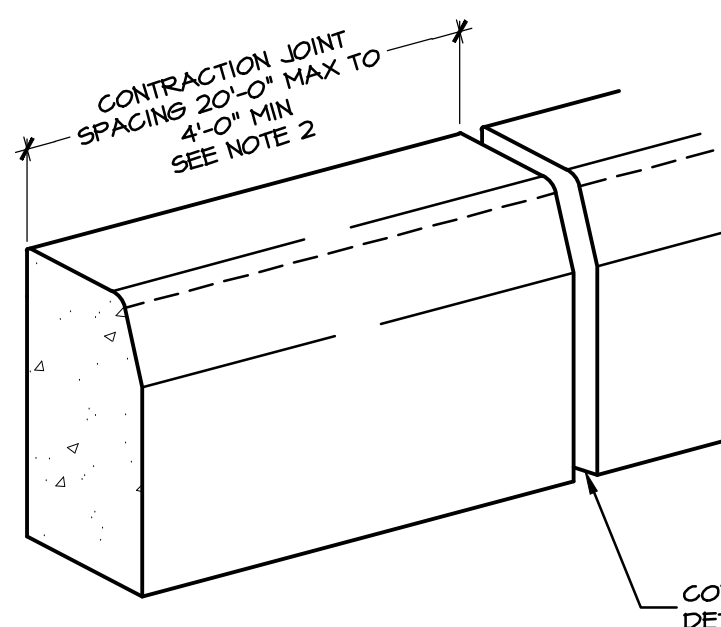
G PADOT TYPE CONCRETE VERTICAL CURB  
NO SCALE

PAV-002

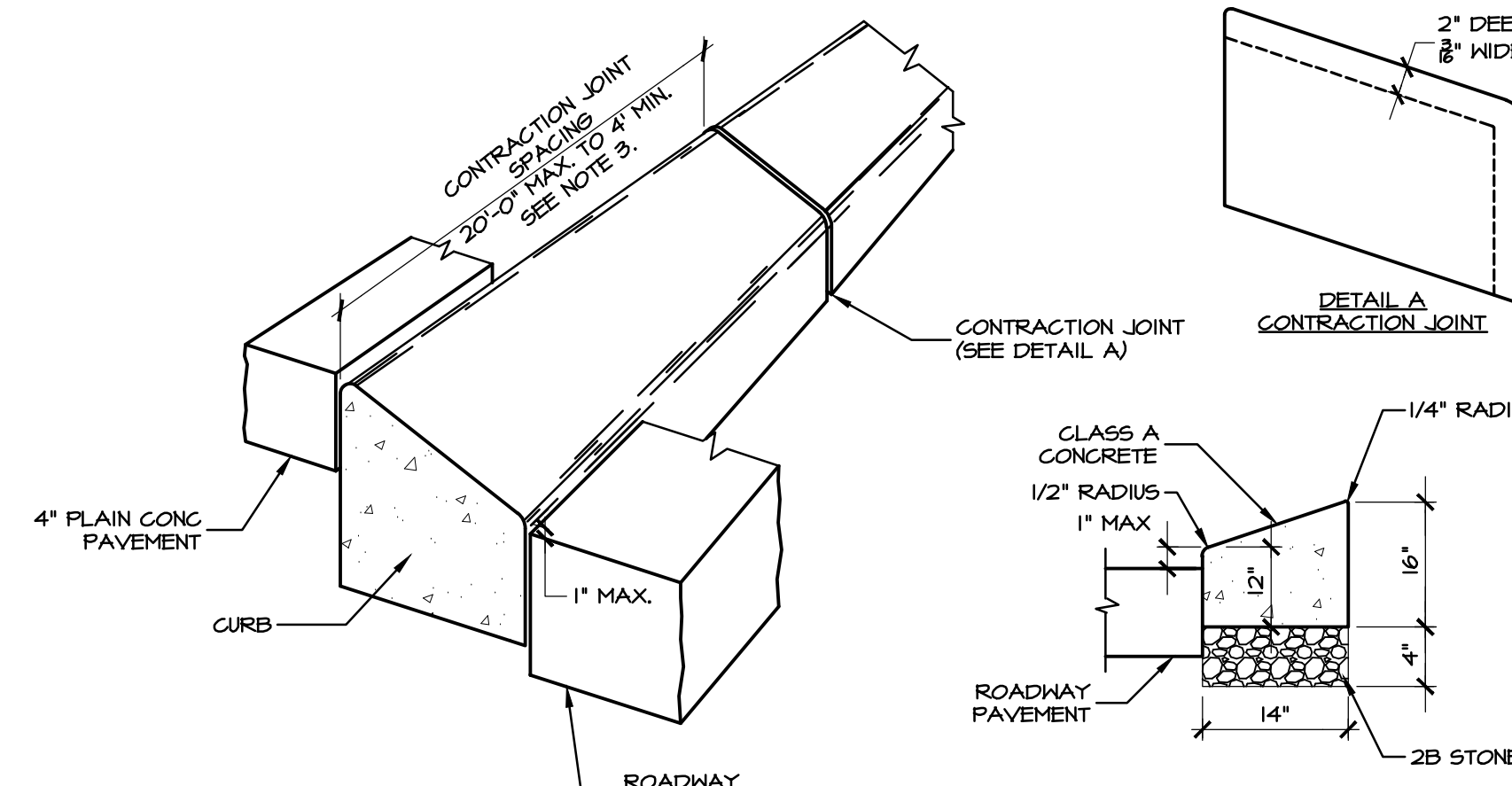
H SLANT CURB DETAIL  
NO SCALE

E SAWCUT/BITUMINOUS PAVING JOINT  
NO SCALE

PAV-001



CONTRACTION JOINT (SEE DETAIL 'A' ABOVE)



DETAIL 'A' CONTRACTION JOINT

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 633
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS AND SEAL AS SPECIFIED IN SECTION 501.3(n), PUB 408
3. INSTALL EXPANSION MATERIAL AT INTERVALS NOT TO EXCEED 100 FEET. EXPANSION MATERIAL SHALL BE 1" THICK PREMOULDED, NON-EXTRUDING, RESILIENT BITUMINOUS JOINT FIBER. INSTALL EXPANSION MATERIAL ADJACENT TO ALL INLETS AND OTHER STRUCTURES.
4. PROVIDE ELONGATED ISLANDS NOT LESS THAN 4'-0" WIDE AND 20'-0" LONG, EXCEPT IN SPECIAL CASES WHERE SPACE IS SEVERELY LIMITED.

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

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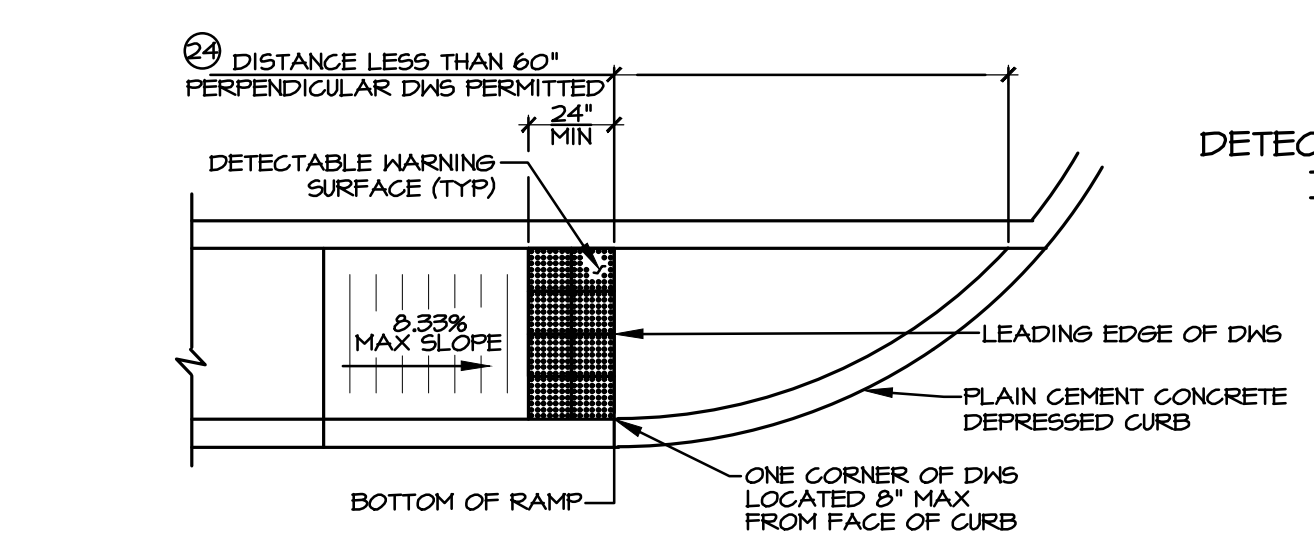
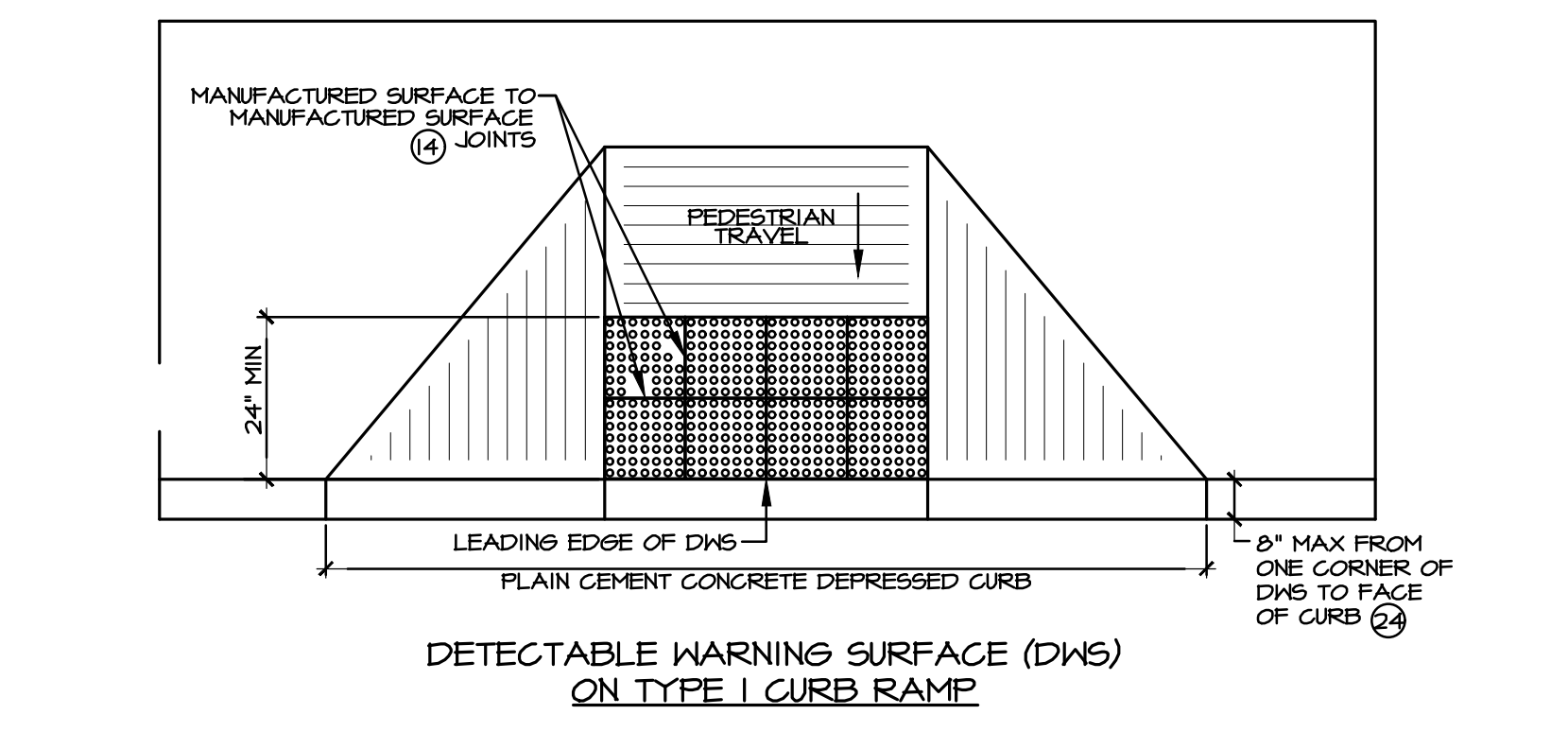
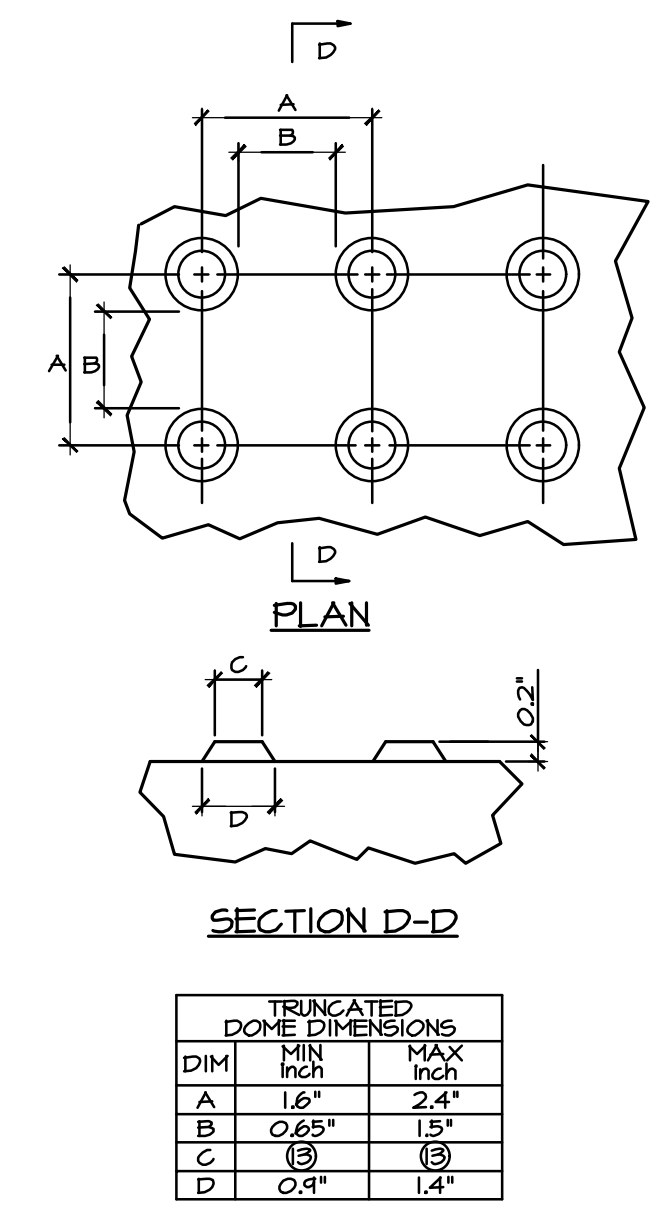
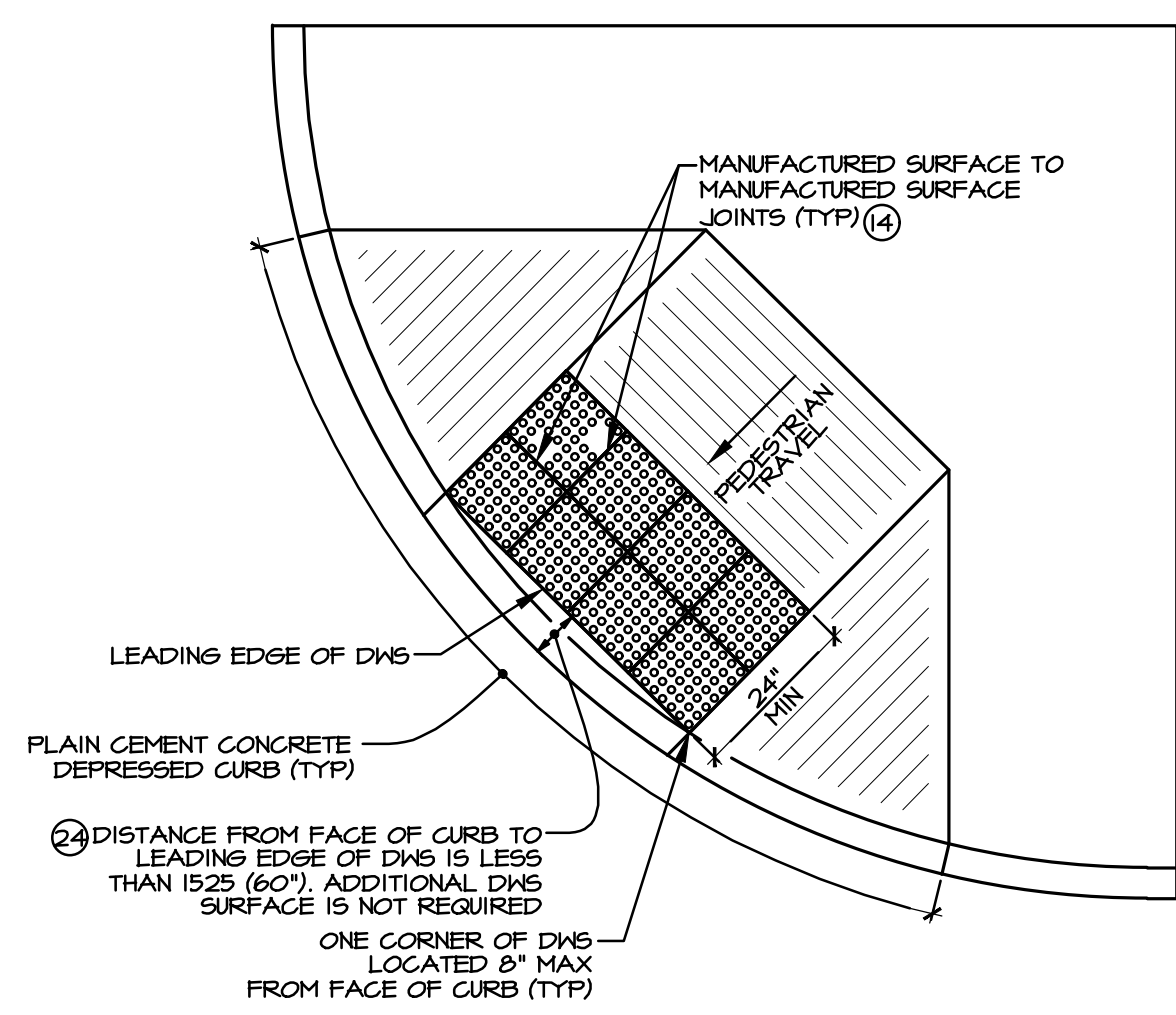
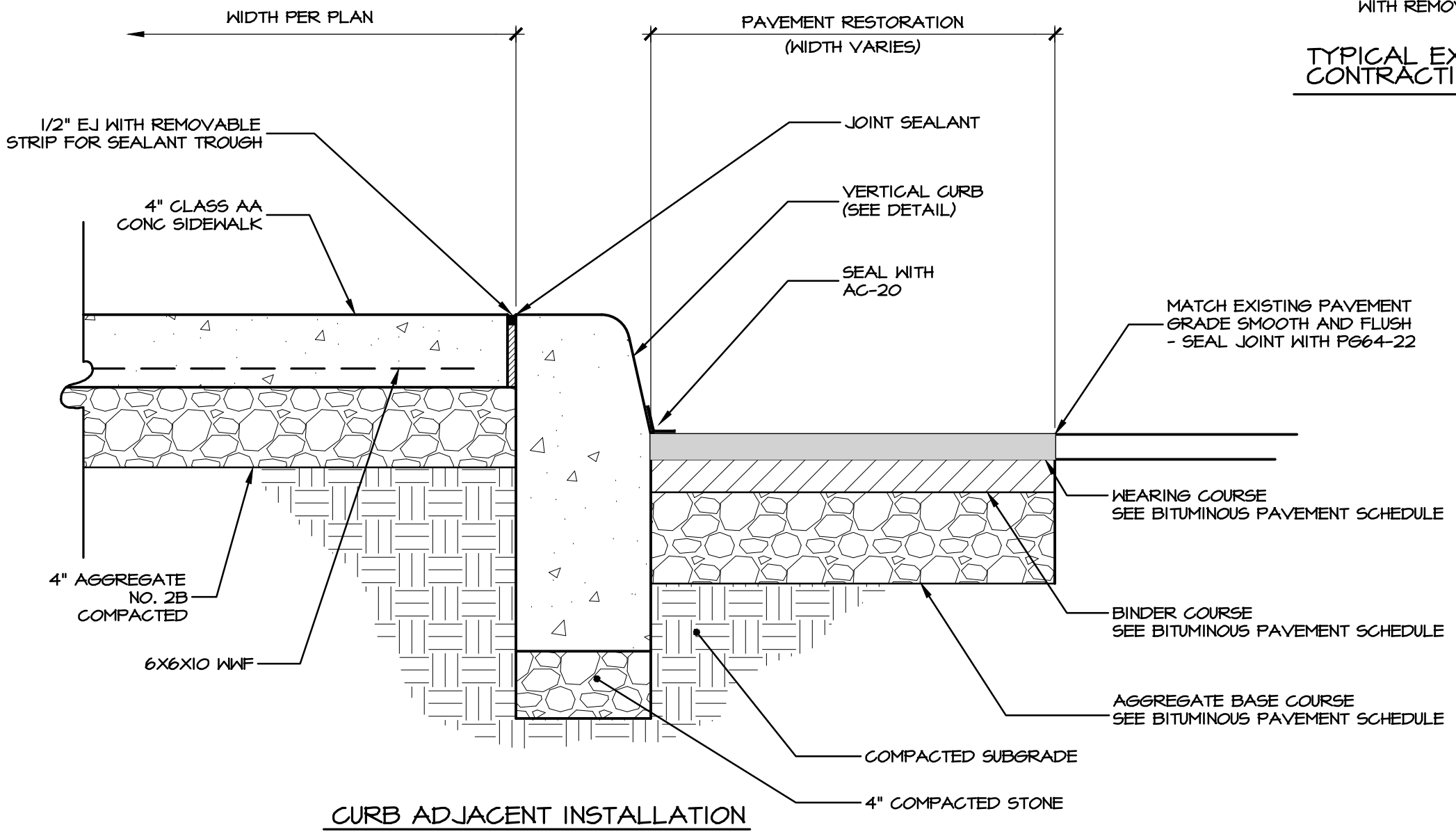
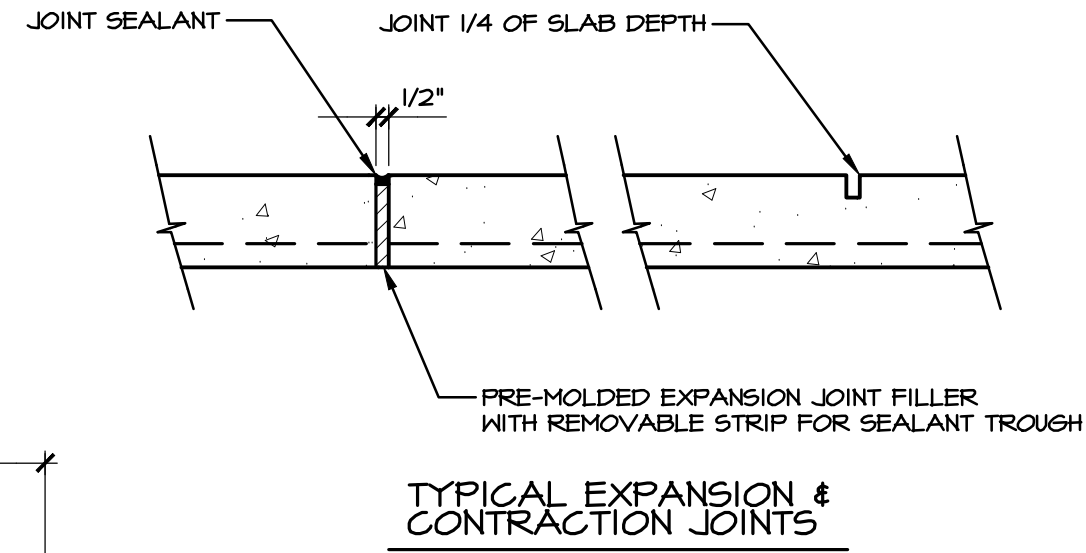
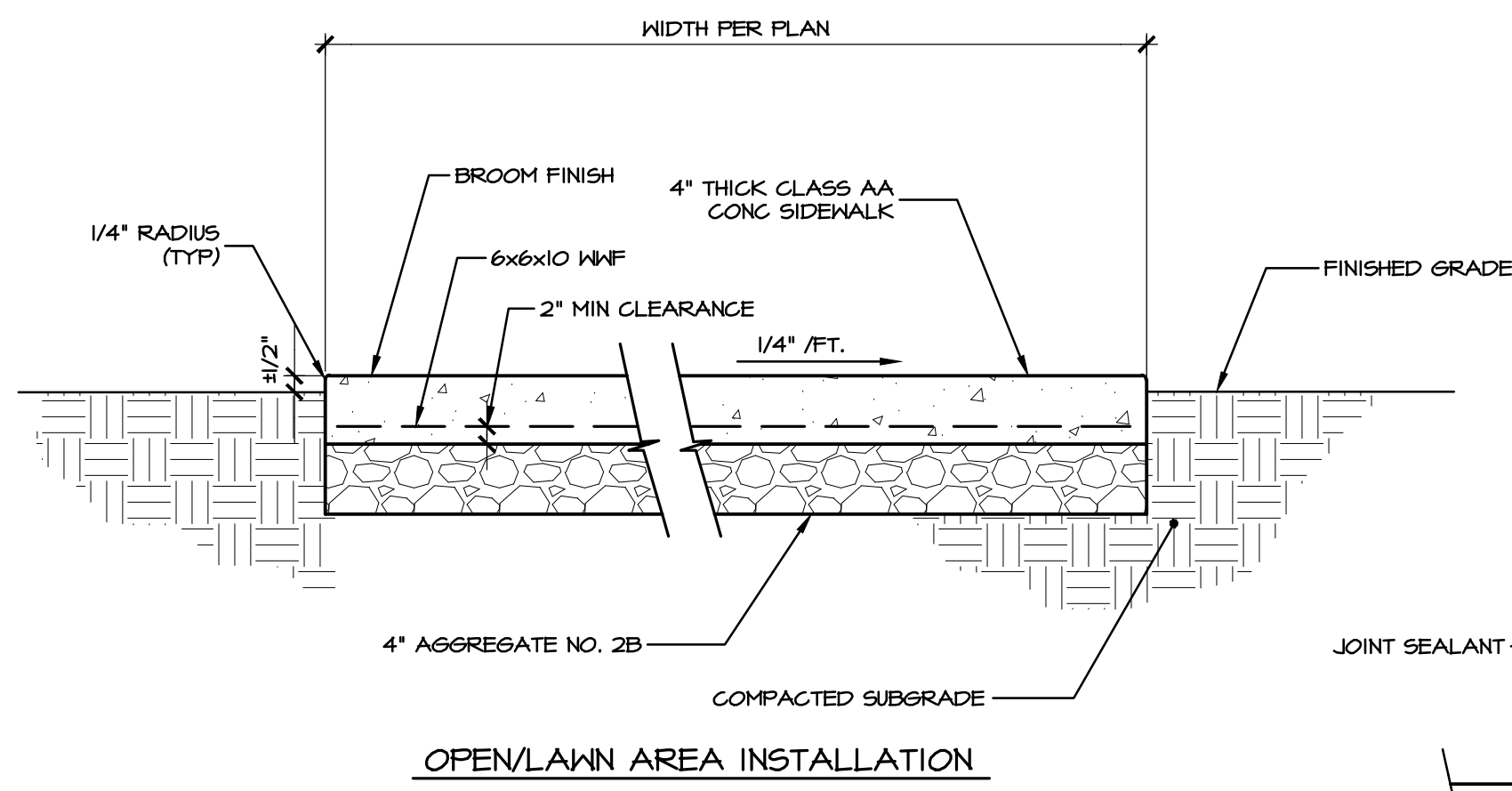
743 S. BROAD ST.  
LITITZ, PA 17543  
(717) 626-7271  
elagroup.com

REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT  
TYLER E. HILL

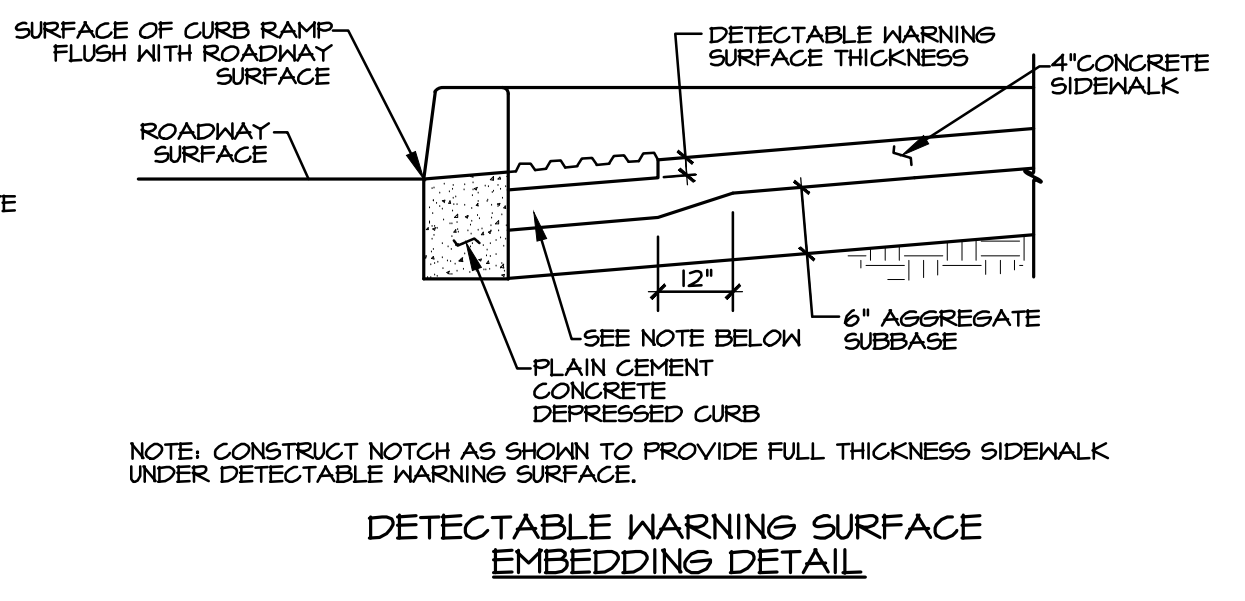
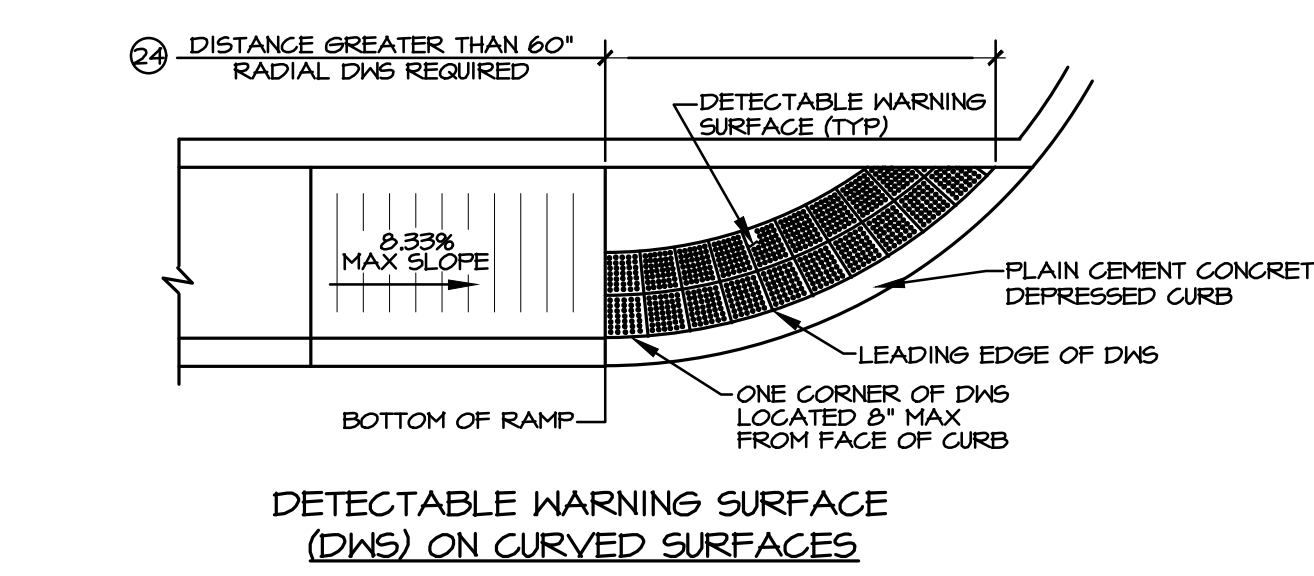
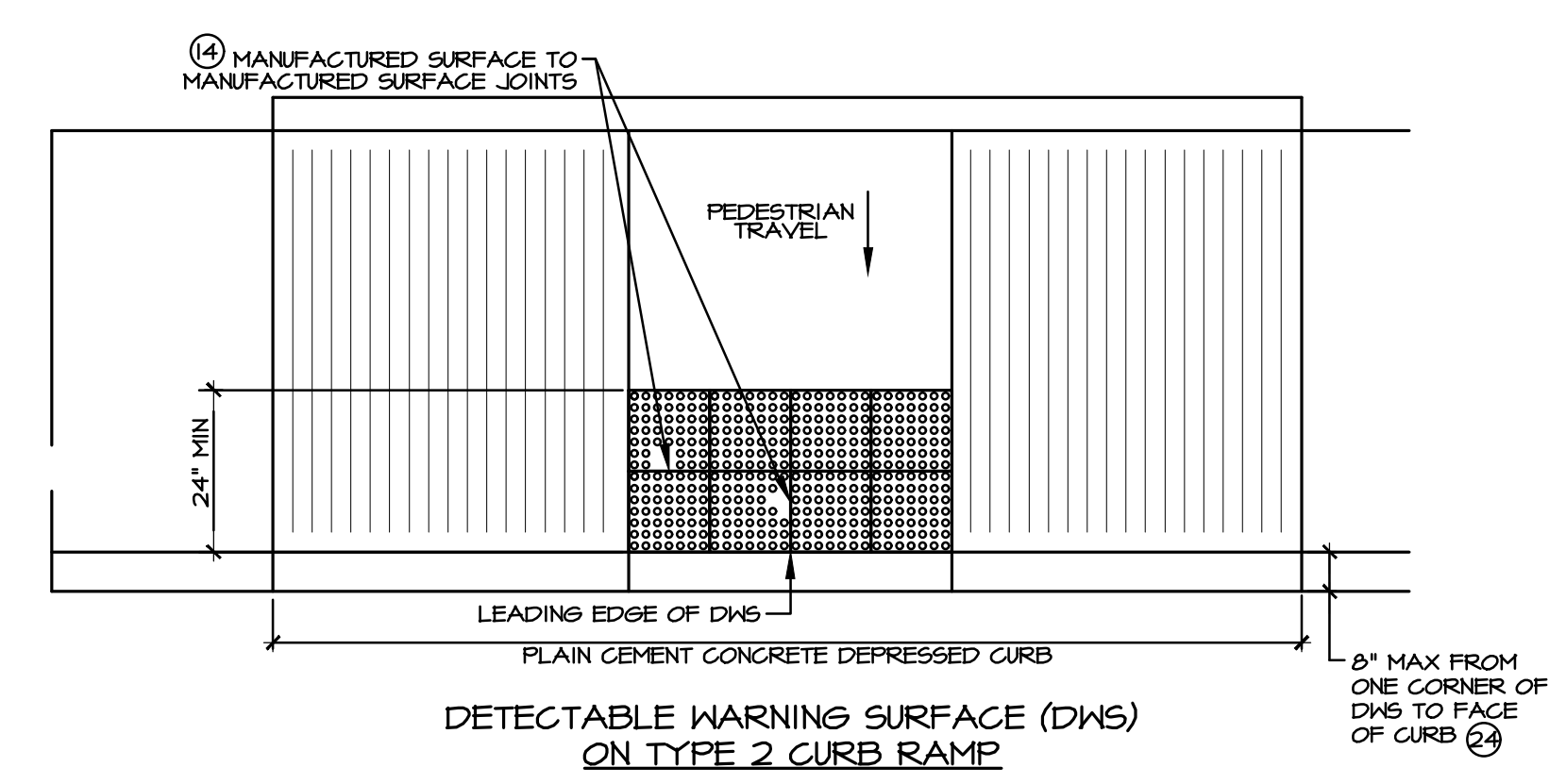
PRELIMINARY PLAN  
SUBJECT:  
**SITE DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	1" = XX'

DRAWING NO.  
**57 of 86**



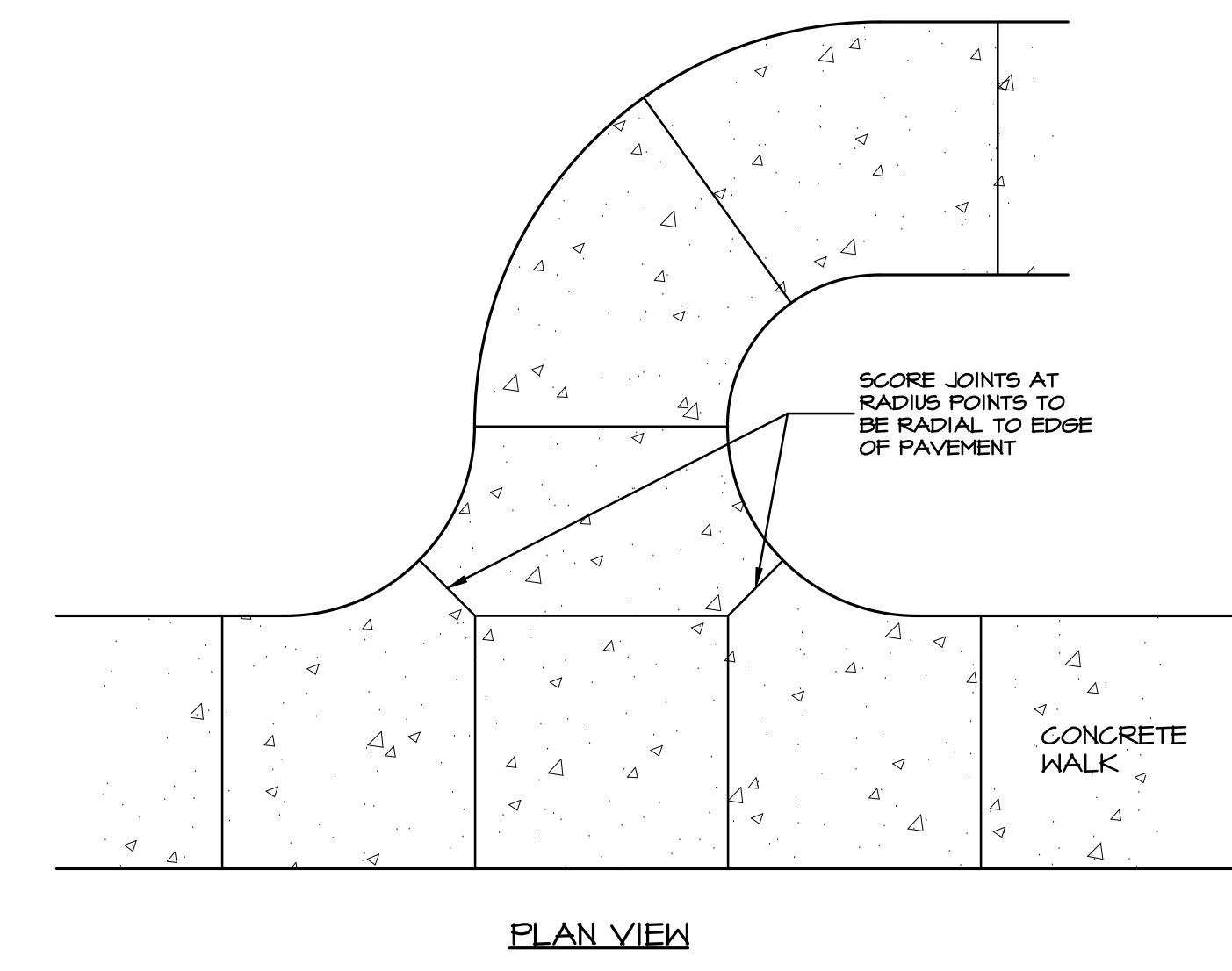
DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAILS



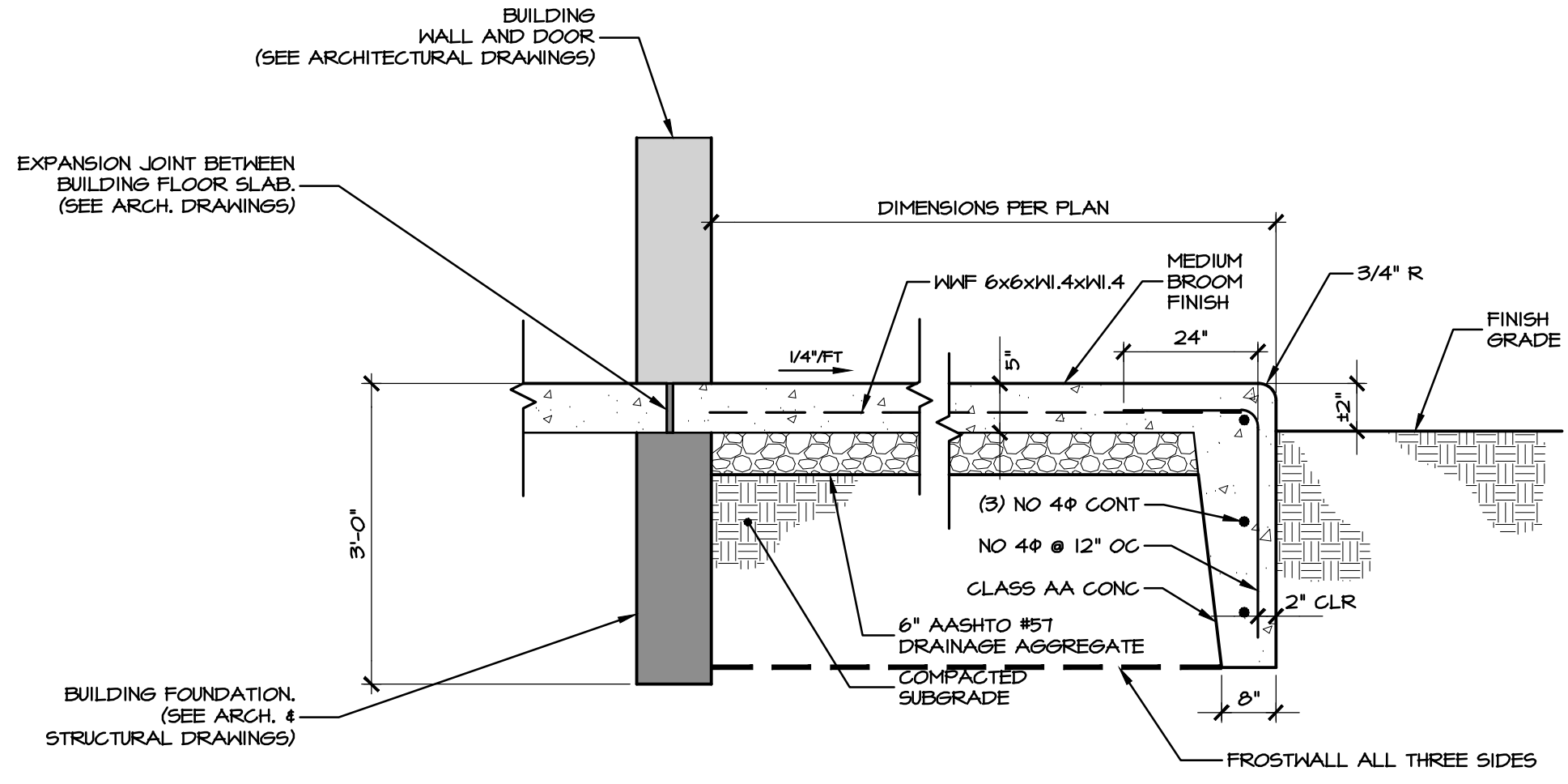
- ⑬ THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.
- ⑭ CONSTRUCTION JOINTS ARE SHOWN TO DEPICT A 90 DEGREE GRID, ACTUAL SIZE AND SHAPE MAY VARY.
- ⑮ ONE CORNER OF THE DWS MUST BE WITHIN 8" OF THE FACE OF CURB, NO OTHER POINT ON THE LEADING EDGE OF THE DWS MAY BE MORE THAN 60" AWAY FROM THE FACE OF CURB.

A CONCRETE SIDEWALK DETAIL  
NO SCALE

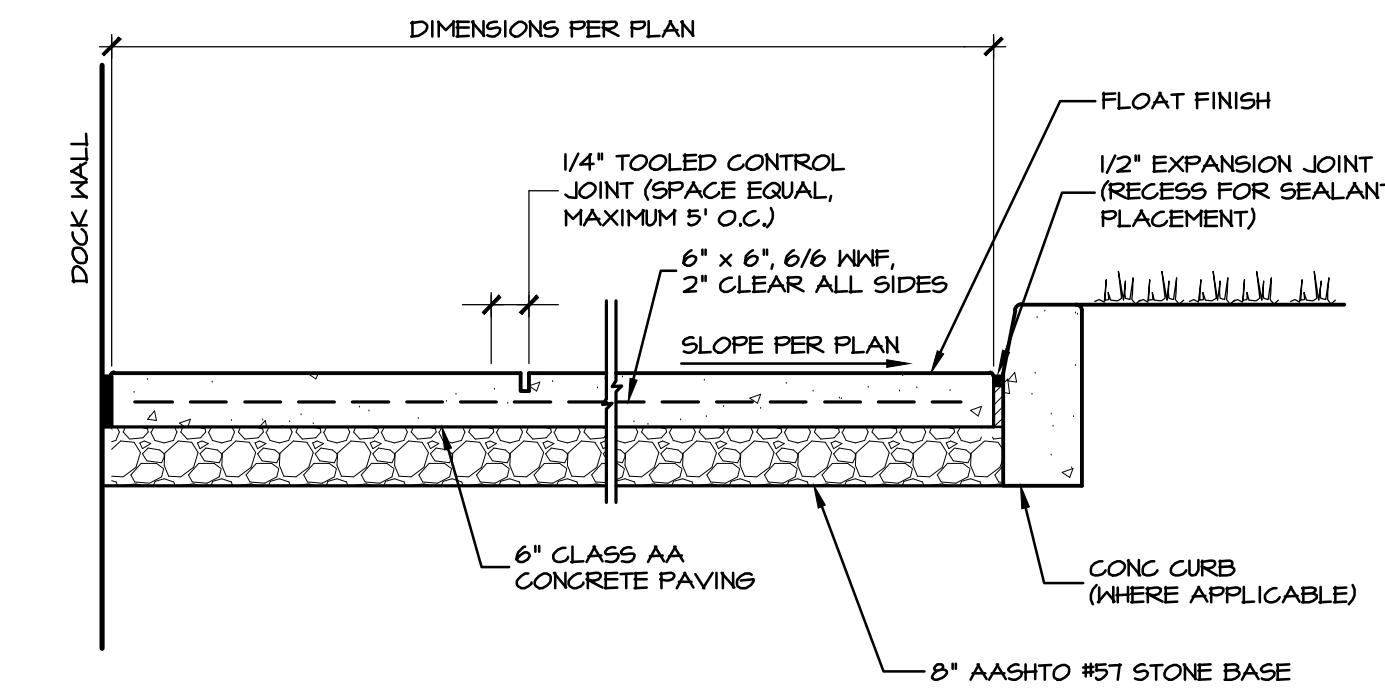
B CURB RAMPS AND SIDEWALKS DETAIL  
NO SCALE



C RADIAL SCORING JOINT  
NO SCALE



D FROST WALL AT DOOR  
NO SCALE



E DUMPSTER PAD PAVEMENT SECTION  
NO SCALE

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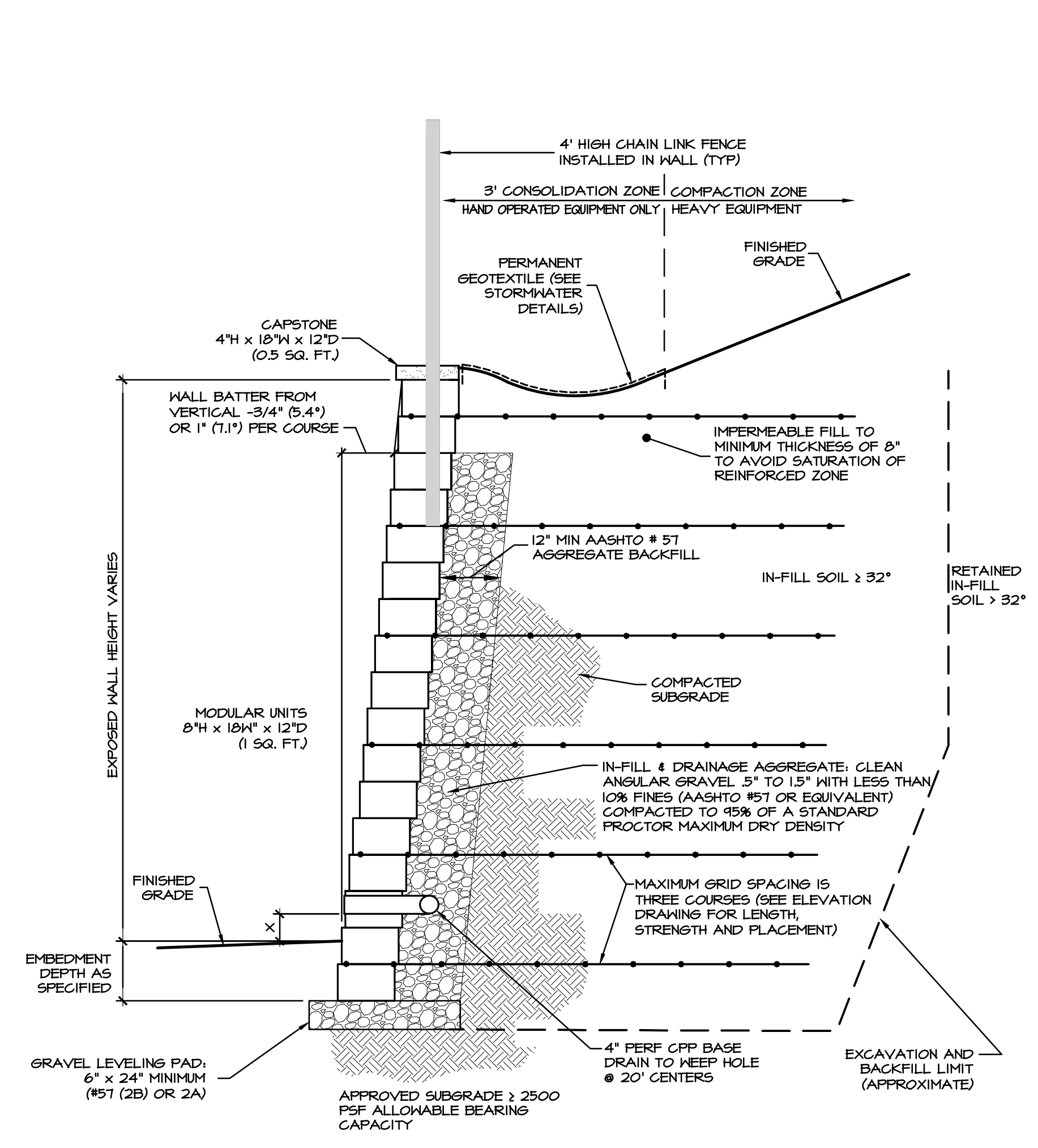
REGISTERED PROFESSIONAL  
LANDSCAPE ARCHITECT  
PENNSYLVANIA  
TYLER E. HILL  
REGISTERED PROFESSIONAL  
ENGINEER  
PENNSYLVANIA

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

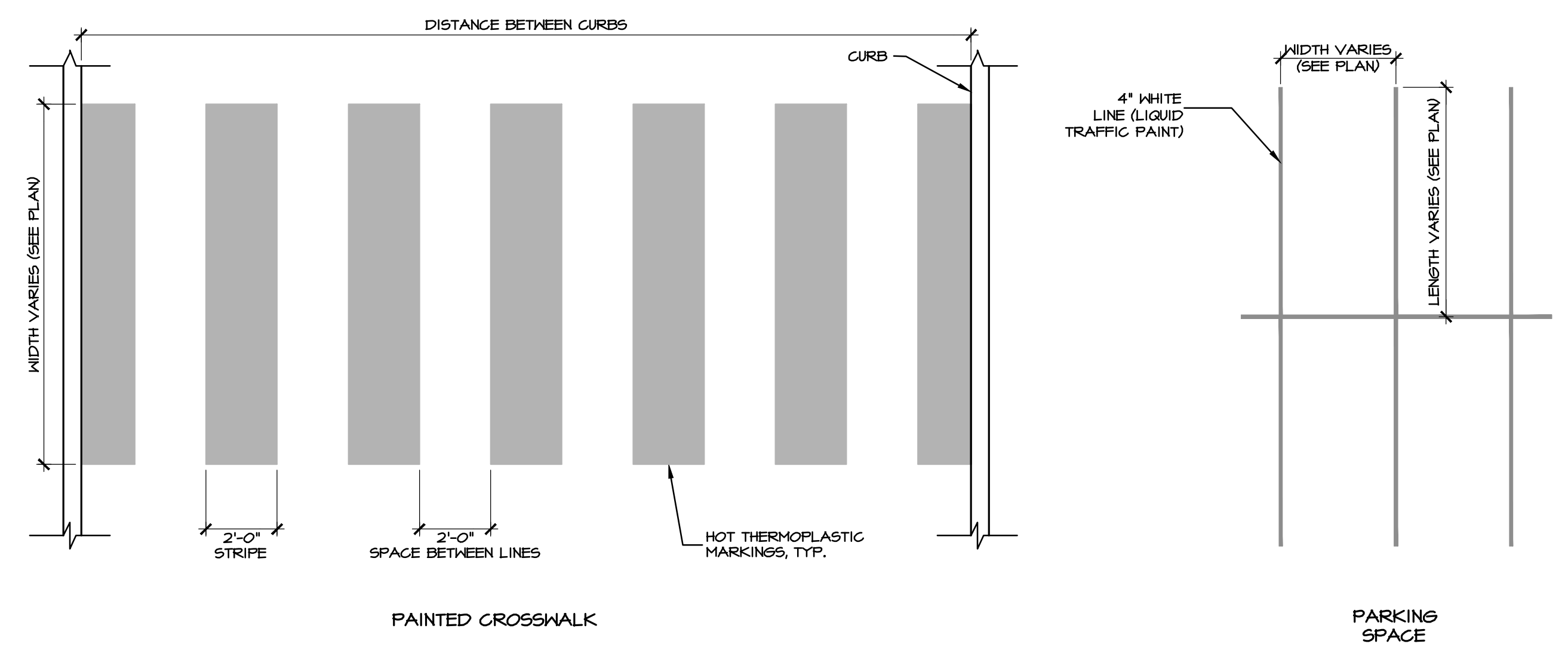
MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	1" = XX'

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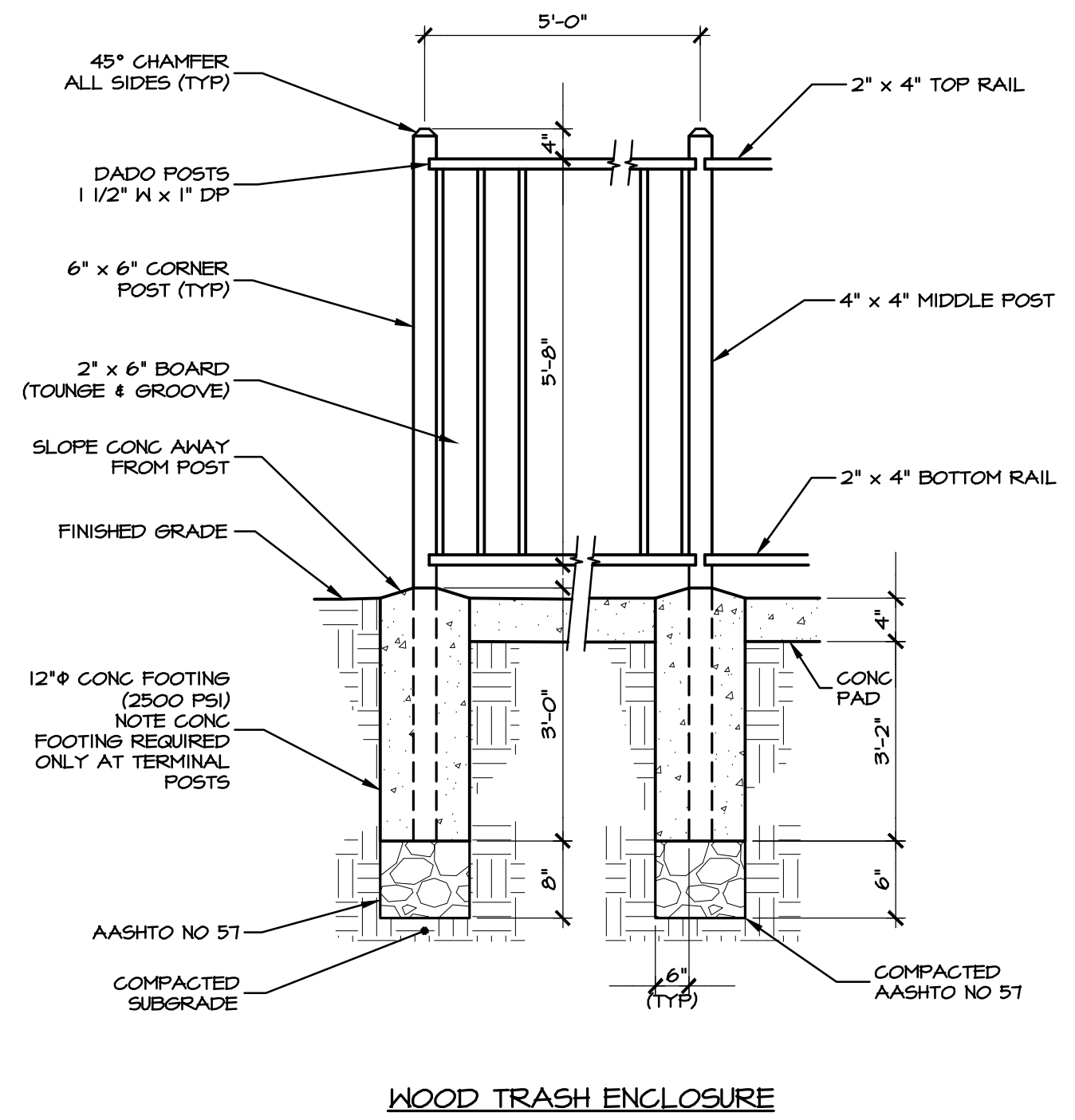
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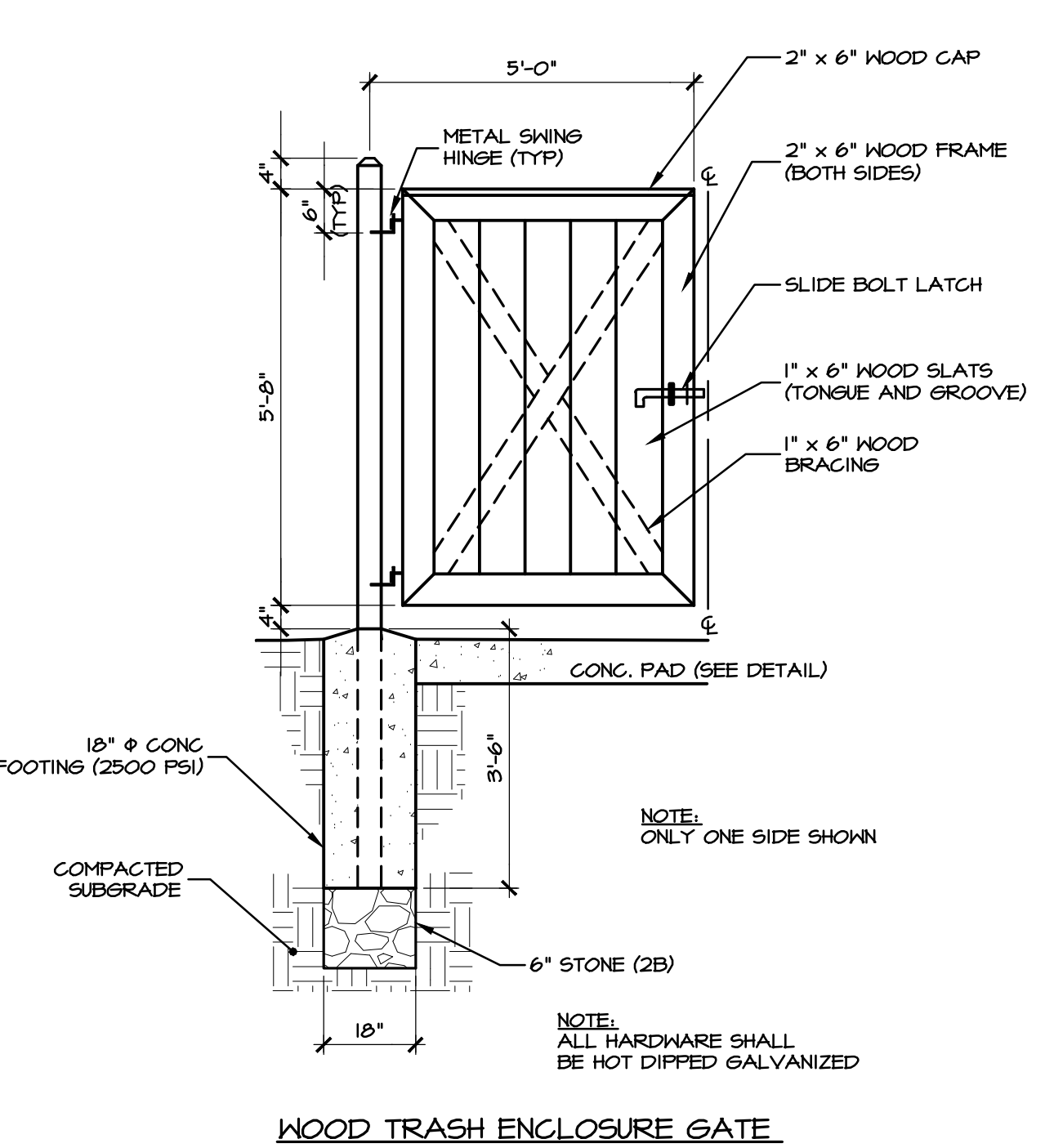
**(A) TYPICAL SEGMENTAL RETAINING WALL SECTION**  
NO SCALE  
HWL-201



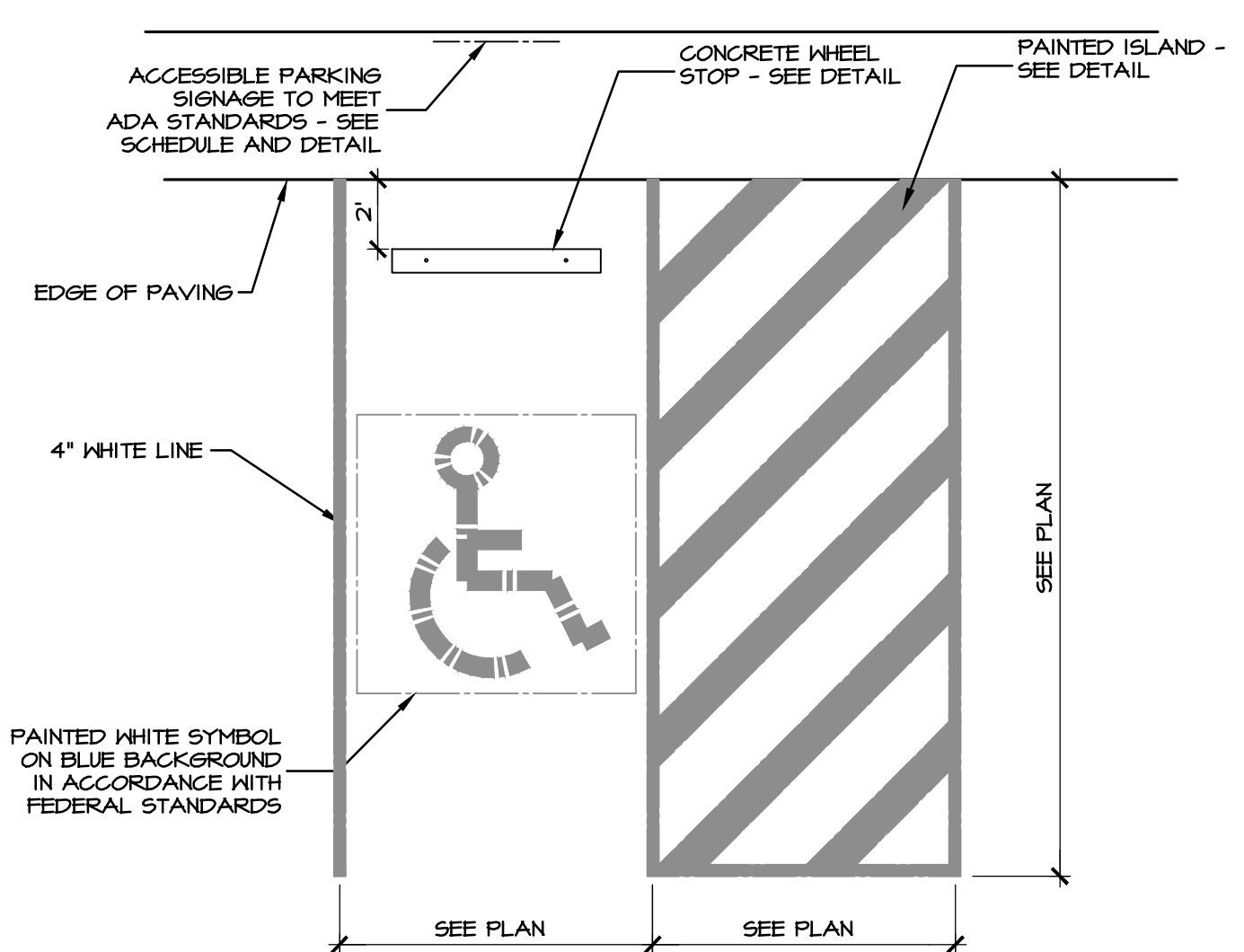
**(B) PAVEMENT MARKING DETAIL**  
NO SCALE



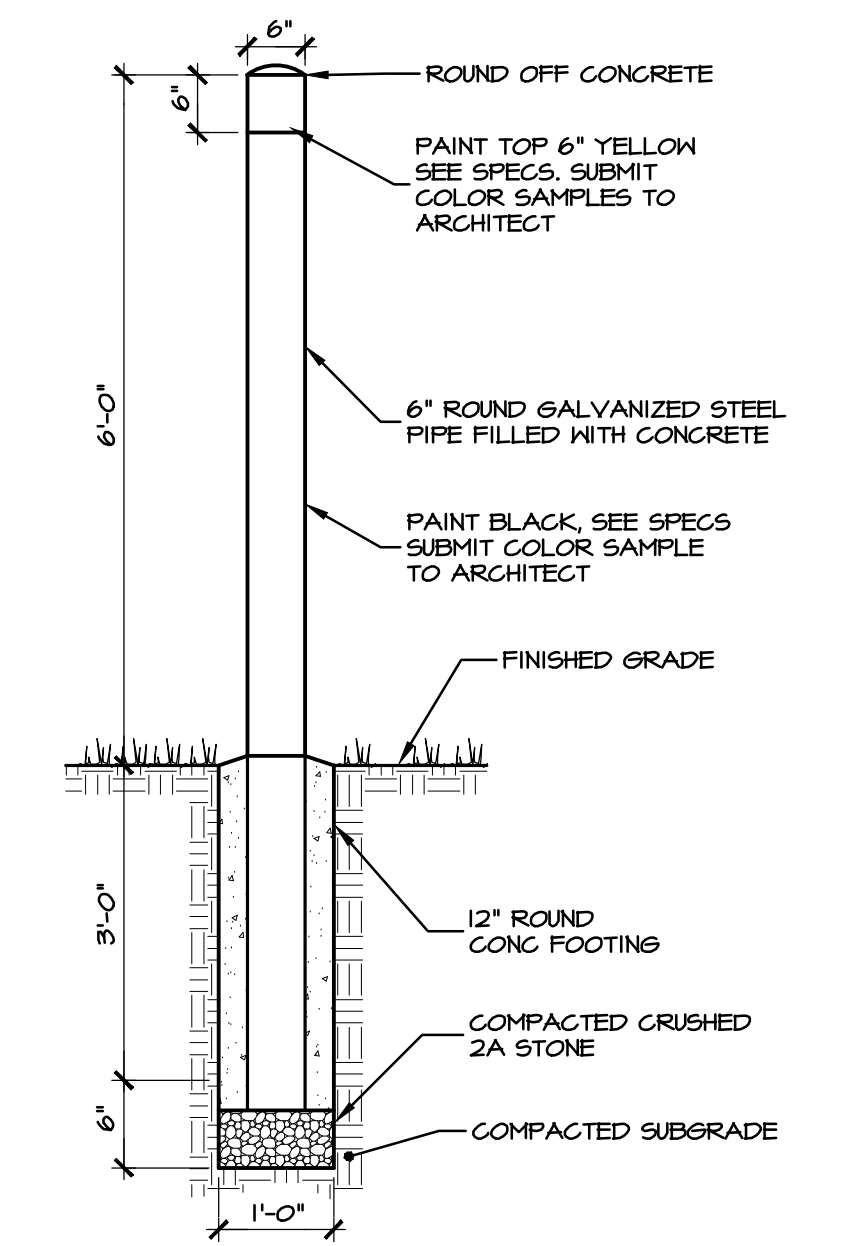
**(C) WOOD TRASH ENCLOSURE DETAIL**  
NO SCALE  
FEN-202



**(D) WOOD TRASH ENCLOSURE GATE**  
NOTE: ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED



**(E) ADA PARKING SPACE**  
NO SCALE  
PAV-203



**(F) TYPICAL METAL BOLLARD**  
NO SCALE  
BUR-001

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1. -	-	-
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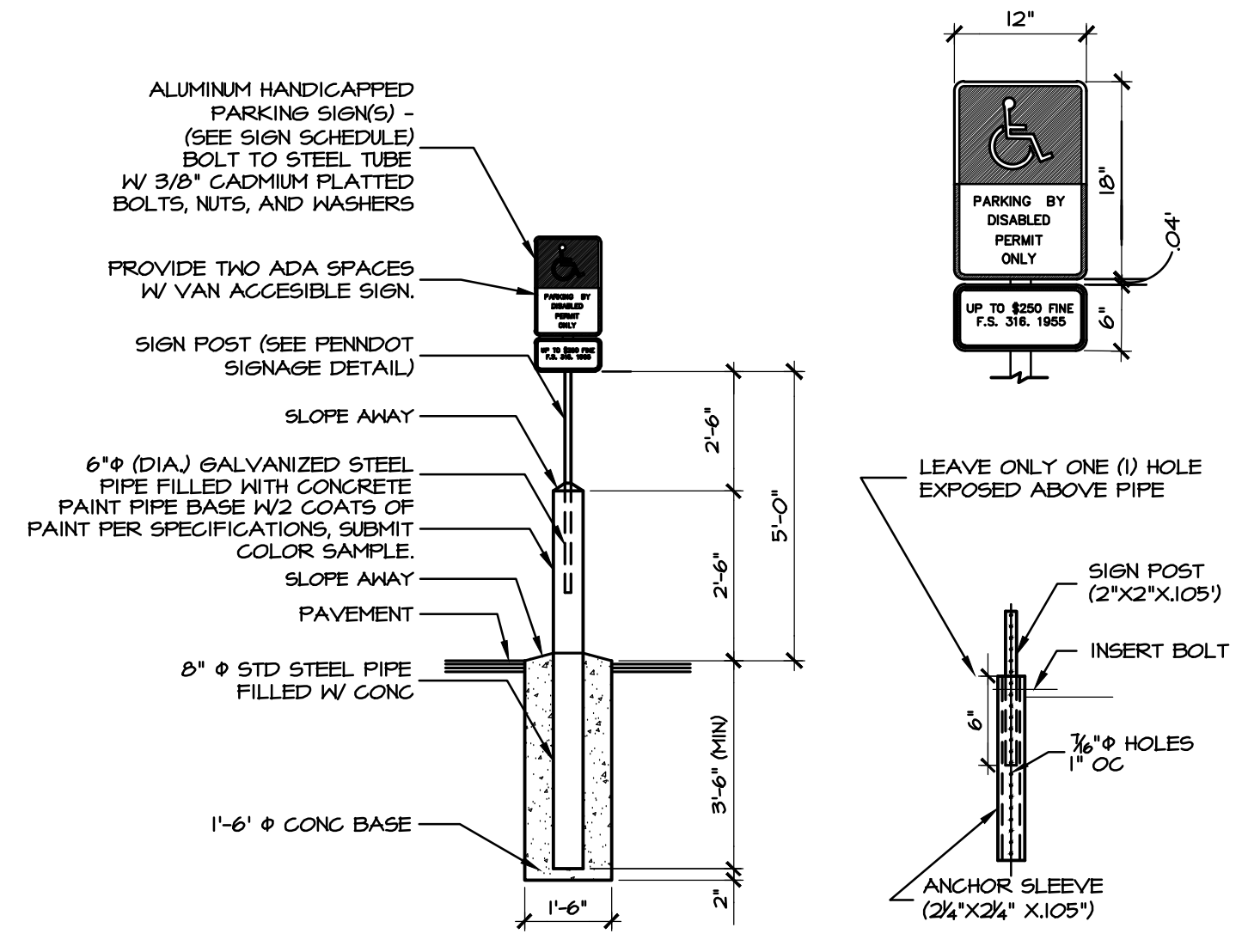
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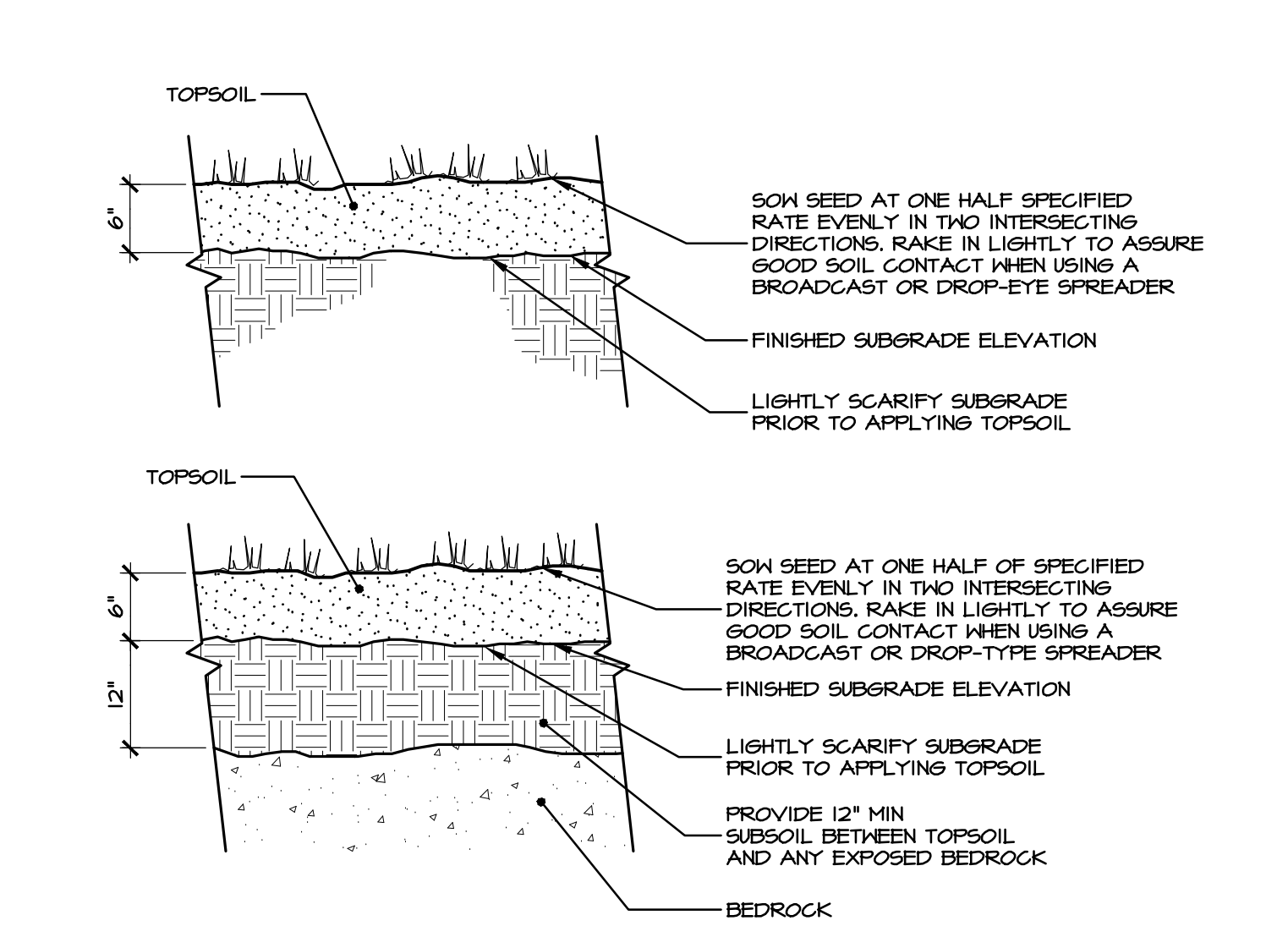
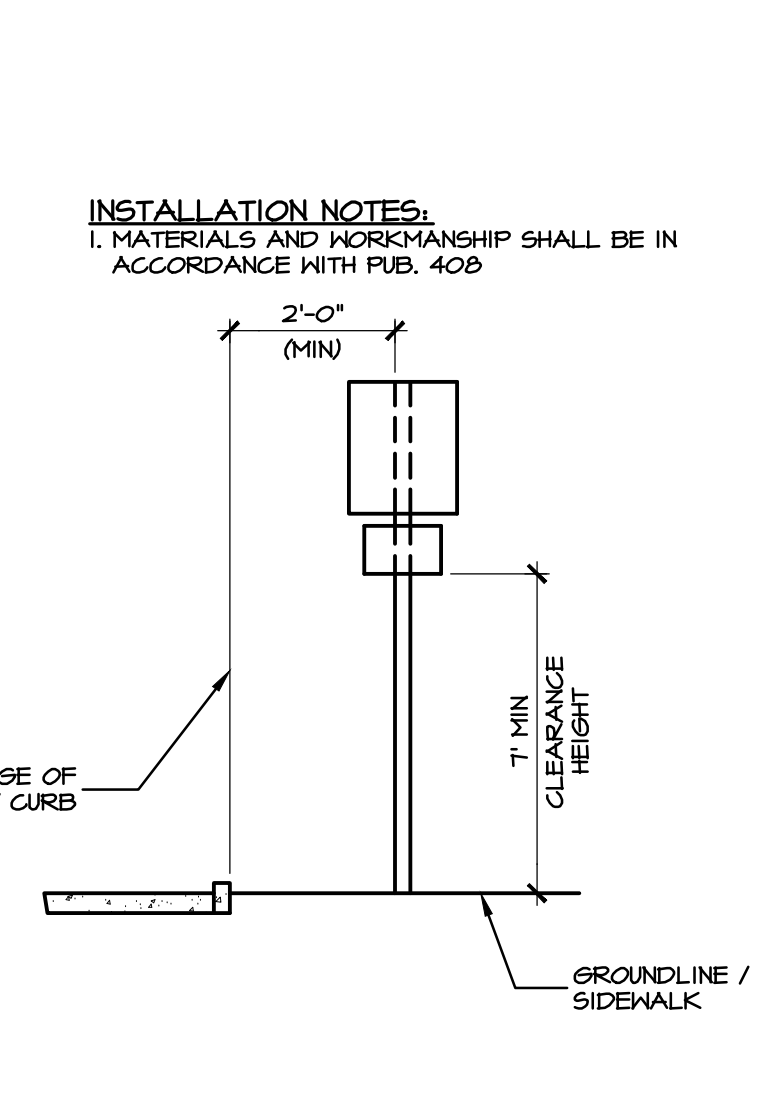
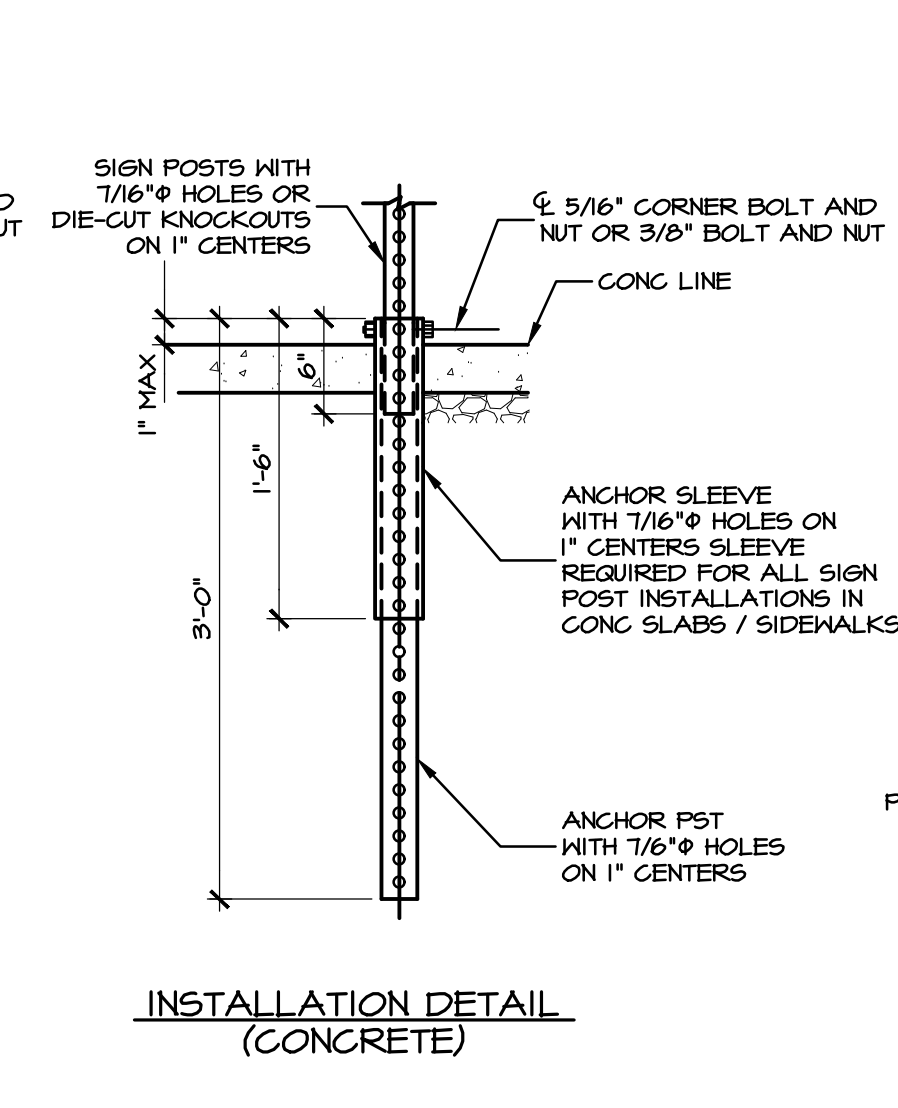
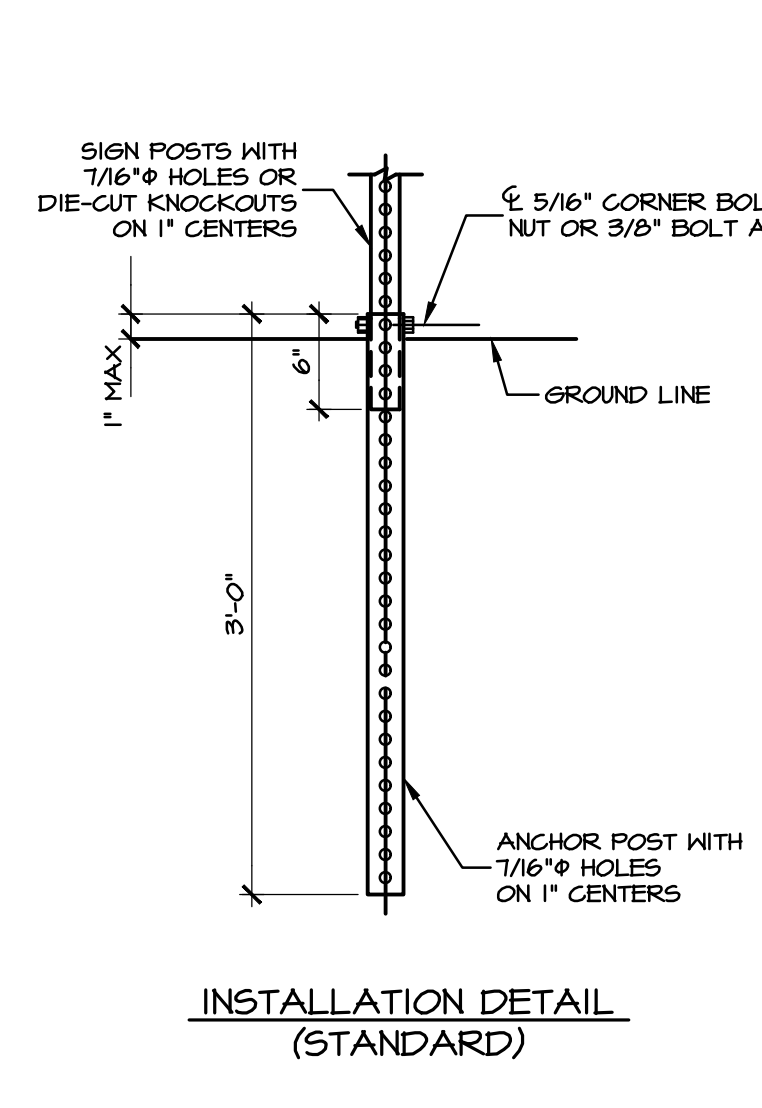
REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
PENNSYLVANIA

**PRELIMINARY PLAN**  
SUBJECT:  
**SITE DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	1" = XX'



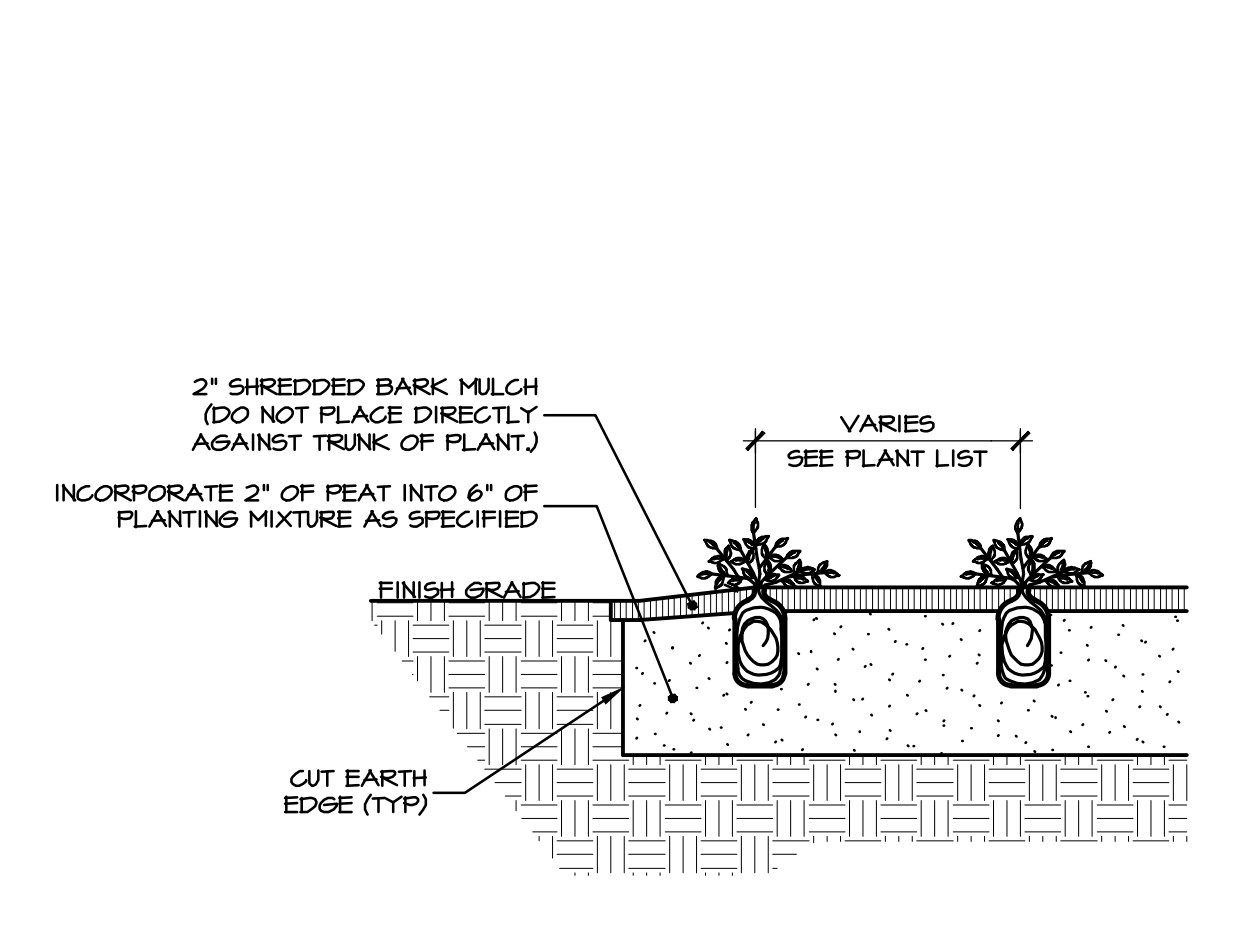
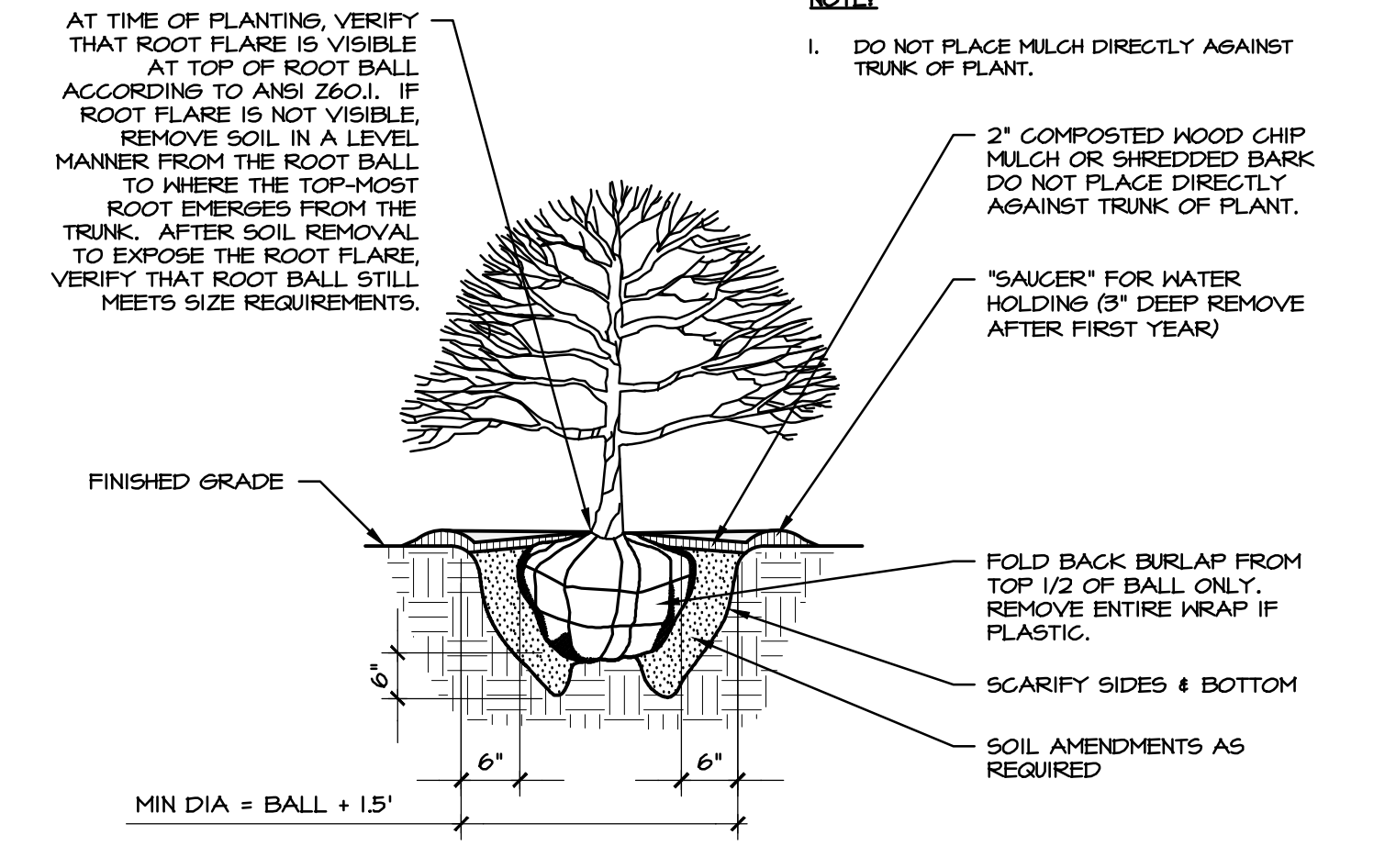
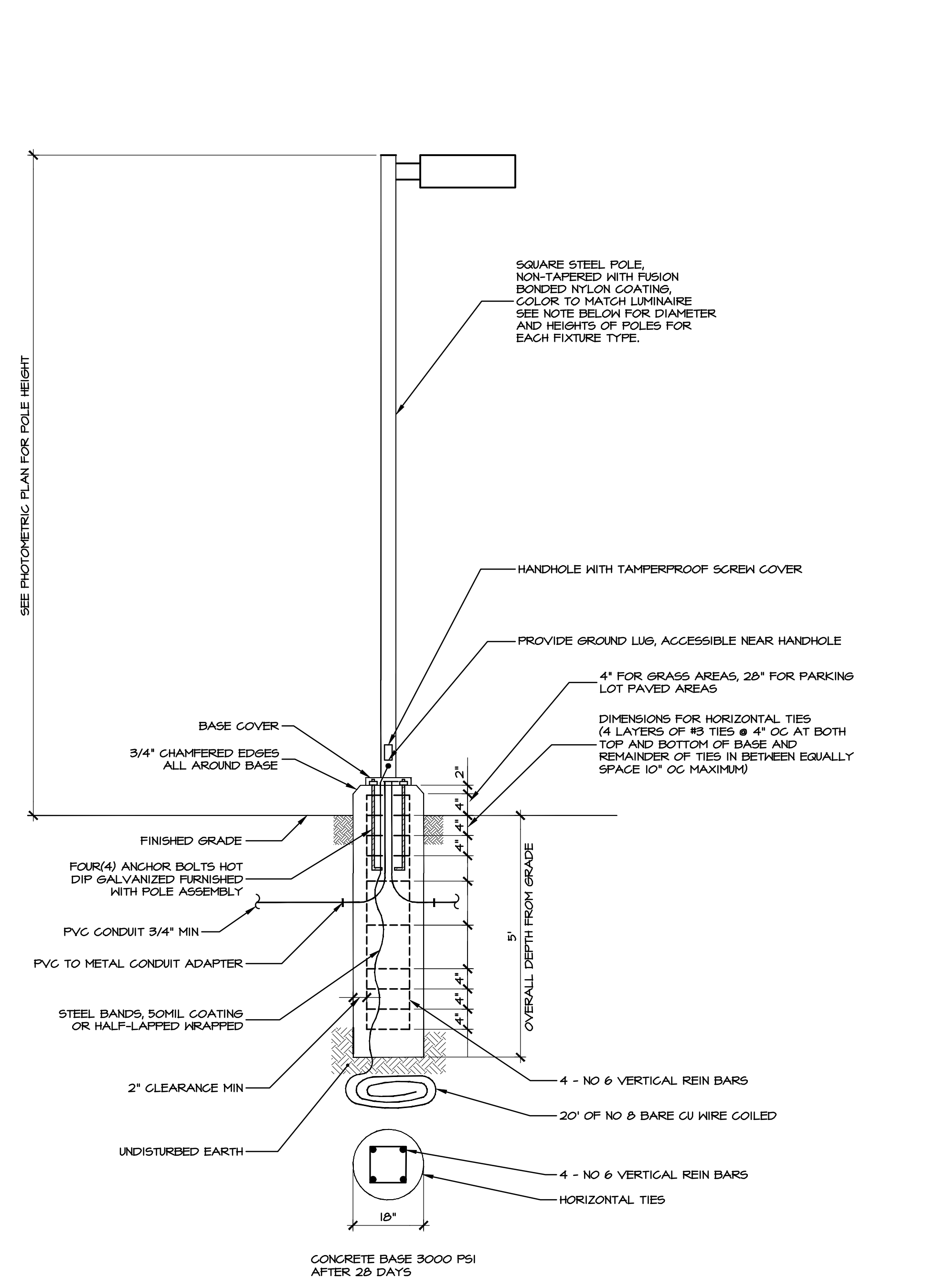
- NOTES:**
- ALL LETTERS ARE 1" SERIES 'C' PER 2003 MUTCD.
  - TOP PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
  - BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
  - FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
  - CONTRACTOR SHALL VERIFY FINE AMOUNT AND ORDINANCE NUMBER.
  - ONE (1) SIGN REQUIRED FOR EACH ACCESSIBLE PARKING SPACE.
  - INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
  - SIGN MAY BE MOUNTED ON BUILDING/MALL, AT PROPER HEIGHT, IF ALIGNED WITHIN 12" OF CENTER OF PARKING SPACE.



**A** HANDICAPPED PARKING SIGN IN PARKING AREA  
NO SCALE

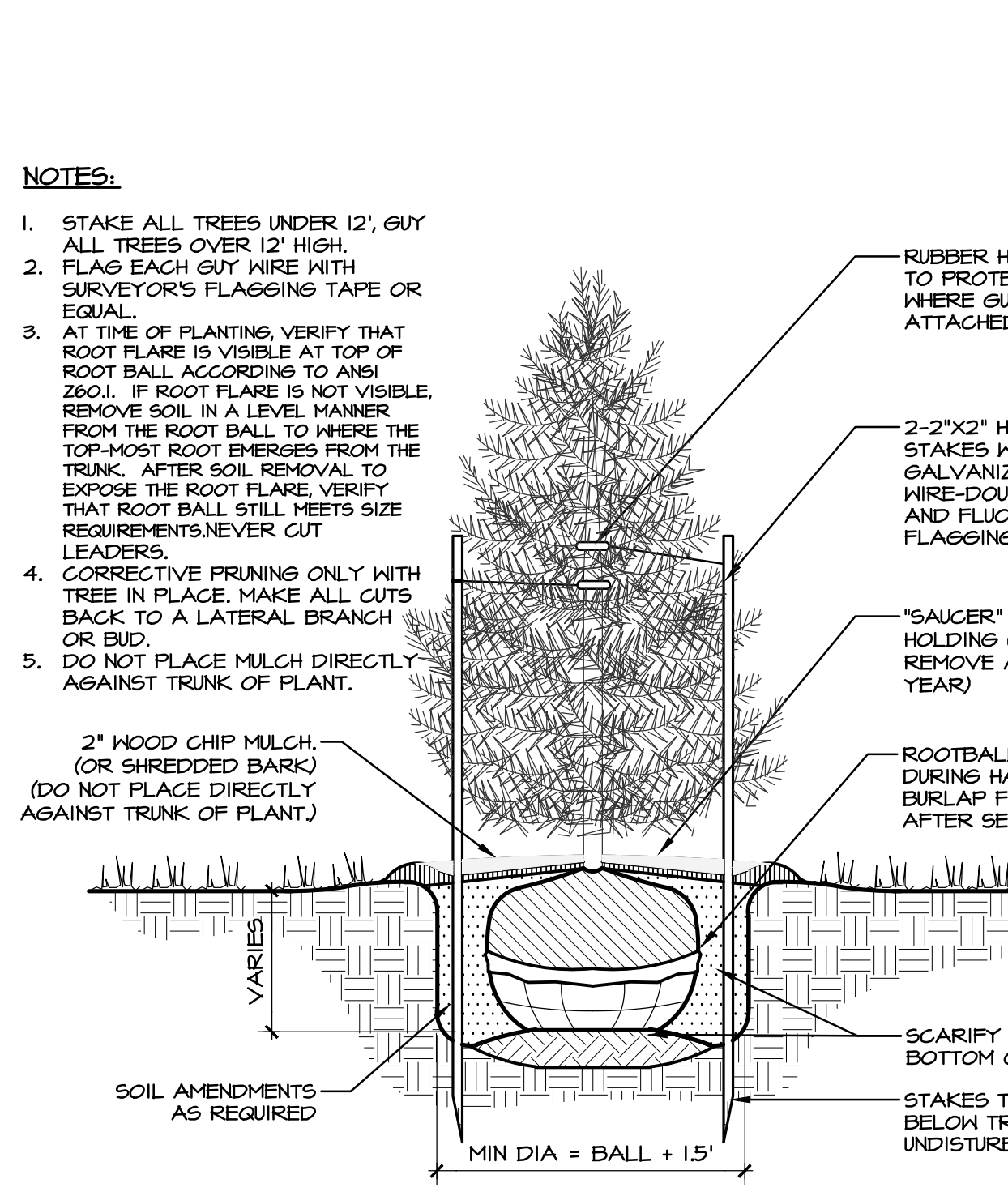
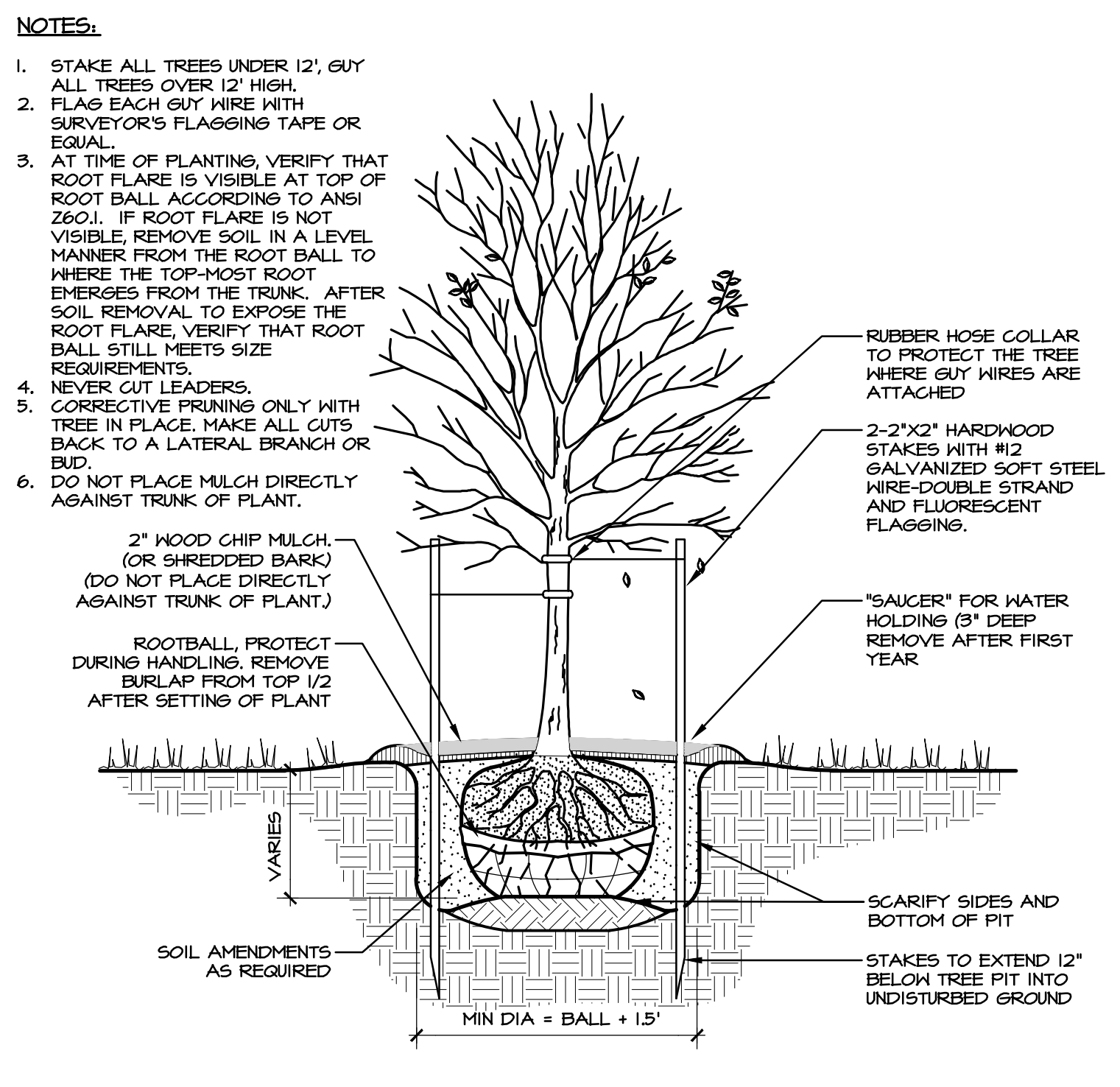
**B** TRAFFIC SIGNAGE  
NO SCALE

**C** LAWN PLANTING DETAIL  
NO SCALE



**D** SHRUB PLANTING DETAIL  
NO SCALE

**E** GROUND COVER/PERENNIAL PLANTING  
NO SCALE



**G** DECIDUOUS TREE PLANTING DETAIL  
NO SCALE

**H** EVERGREEN TREE PLANTING DETAIL  
NO SCALE

**F** TYPICAL SITE LIGHT  
NO SCALE

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

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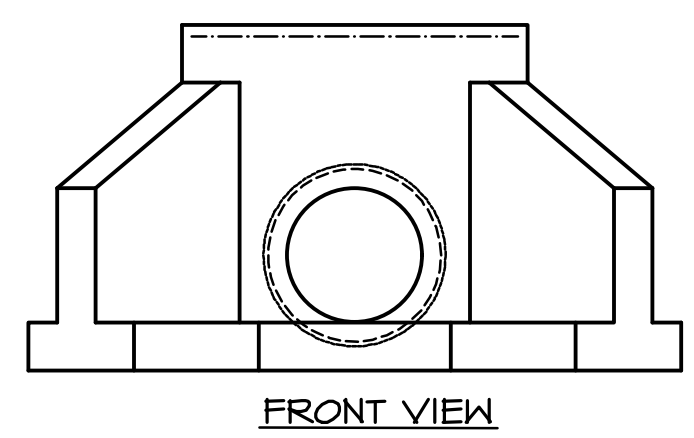
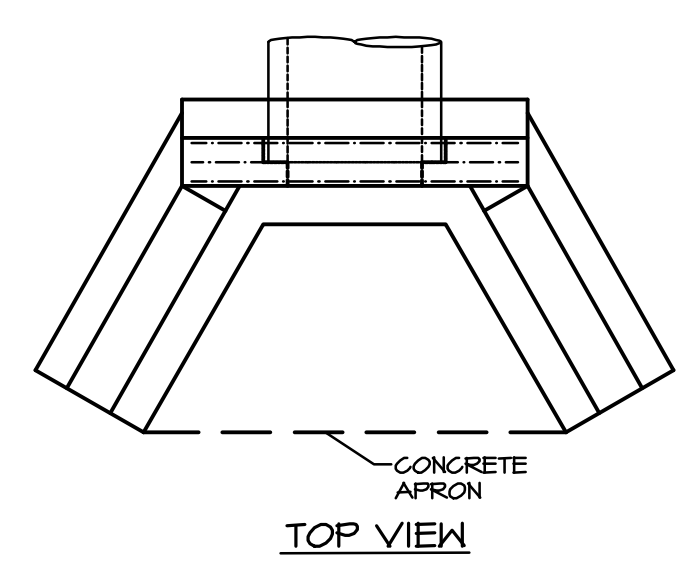
PROFESSIONAL SEAL  
TYLER E. HILL  
REGISTERED PROFESSIONAL ENGINEER  
NO. PE000561

**PRELIMINARY PLAN**  
SUBJECT:  
**SITE DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	1" = XX'

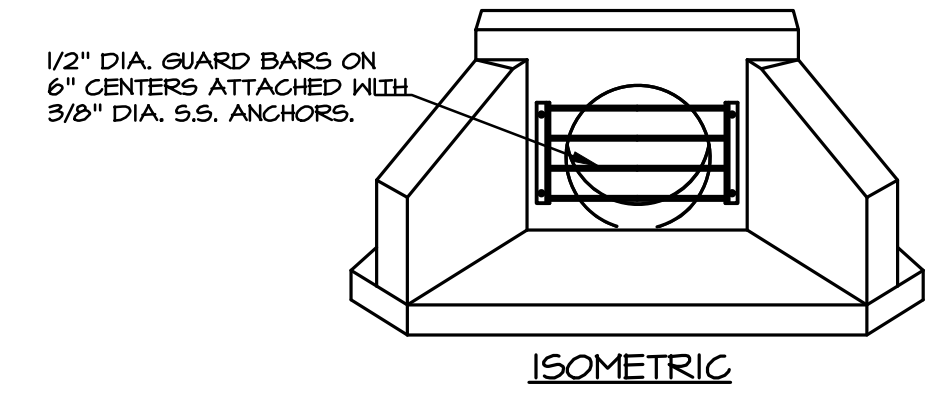
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DRAWING: C:\Users\Wrasmyer\Documents\Development\Project Files\CAD Data\Land Development\DETAILS.dwg - PLOTTED: Oct 07, 2024 12:57 pm



- NOTES:**
1. ALL ENDWALLS SHALL BE PRECAST IN ACCORDANCE WITH PADOT PUBLICATION 40B, SECTION T14, CLASS AA & IN ACCORDANCE WITH PADOT PUBLICATION T2, RC-31 STANDARD, AS AMENDED.
  2. ALL CONCRETE SHALL CONFORM TO PADOT PUBLICATION 40B, SECTION T04, CLASS AA.
  3. REINFORCING STEEL SHALL CONFORM TO PADOT PUBLICATION 40B, SECTION T04, AND PUBLICATION T2, RC-31 STANDARD.
  4. EXPOSED EDGES SHALL BE CHAMFERED 1".
  5. PROVIDE PIPE OPENING SIZE IN PRECAST UNITS TO ACCOMMODATE PIPE SIZE, MATERIAL, AND ALIGNMENT.
  6. PROVIDE CONCRETE APRON UNLESS OTHERWISE SPECIFIED.
  7. GROUT OPENINGS AROUND PIPE CONNECTION TO THE STRUCTURE TO PROVIDE A WATERTIGHT JOINT AND CONNECTION USING A NON-SHRINK GROUT ON THE INSIDE AND OUTSIDE OF THE STRUCTURE.

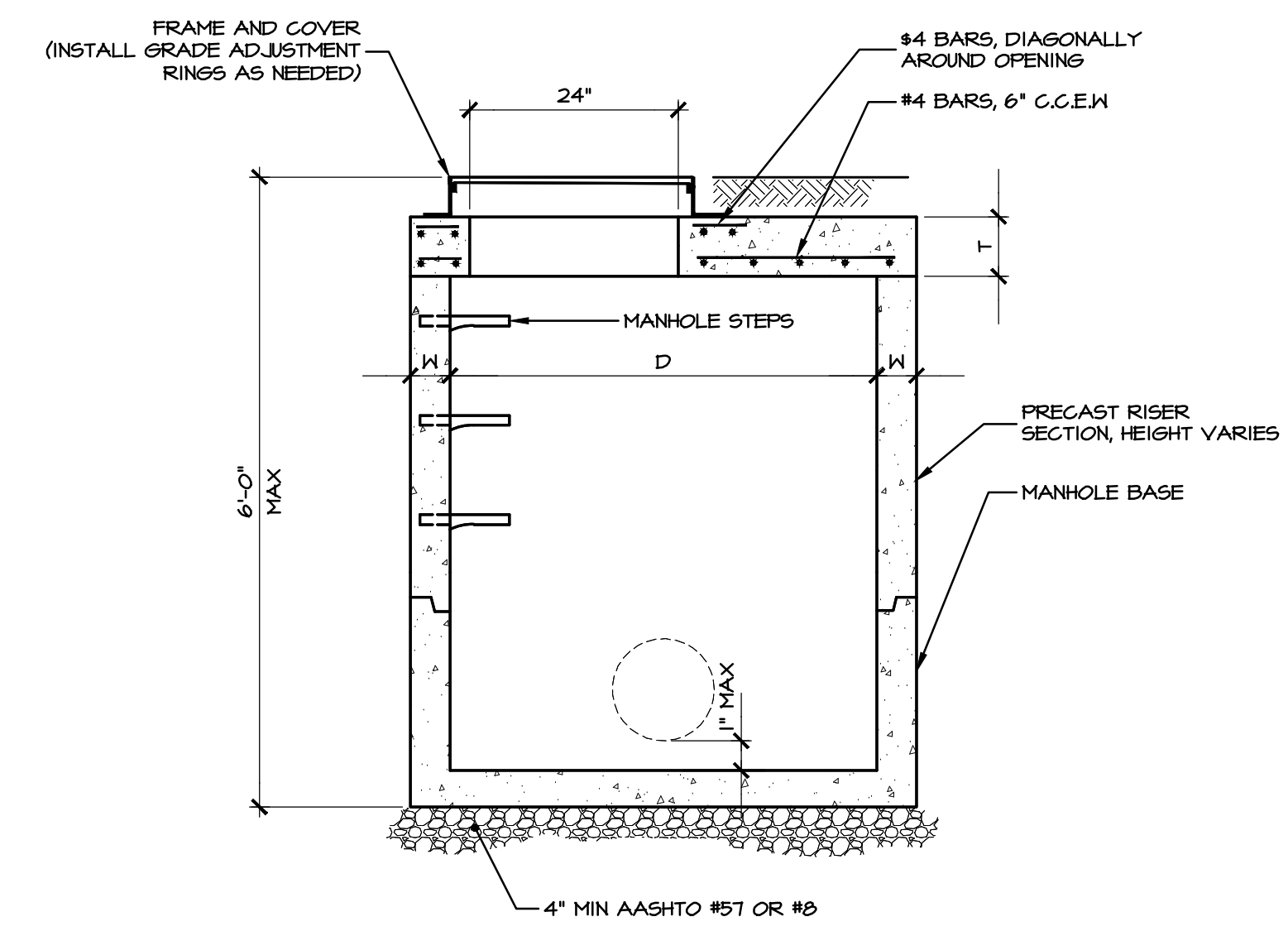
(TYPE 'DW' & 'D' ENDWALLS ONLY)



- NOTES:**
1. MATERIAL TO BE GALVANIZED STEEL WRIST INHIBITOR OR STAINLESS STEEL.
  2. IF STEEL IS UTILIZED, THE UNIT SHALL BE FABRICATED, CLEANED AND THEN HOT DIP GALVANIZED AFTER FABRICATION.
  3. DIMENSION APPROPRIATELY FOR HEADWALL UTILIZED.
  4. TRASH RACK BASED ON MONARCH PRODUCTS, INC. TRASH RACK (717-498-1185).

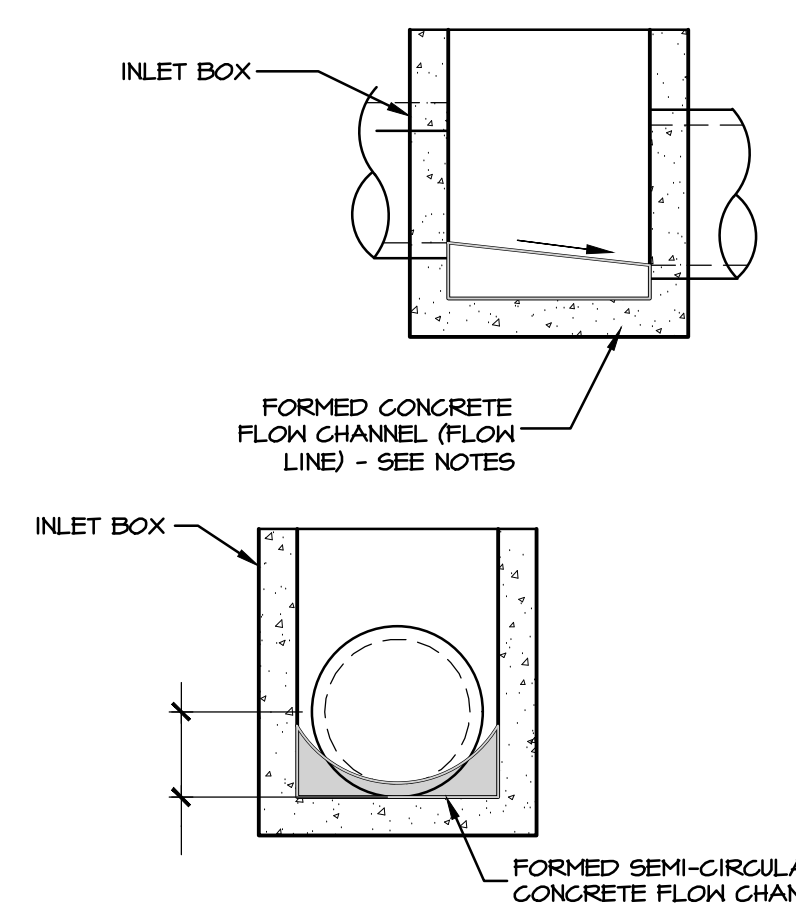
**A** PRECAST TYPE 'DW' ENDWALL  
NO SCALE

**B** TRASH RACK DETAIL  
NO SCALE



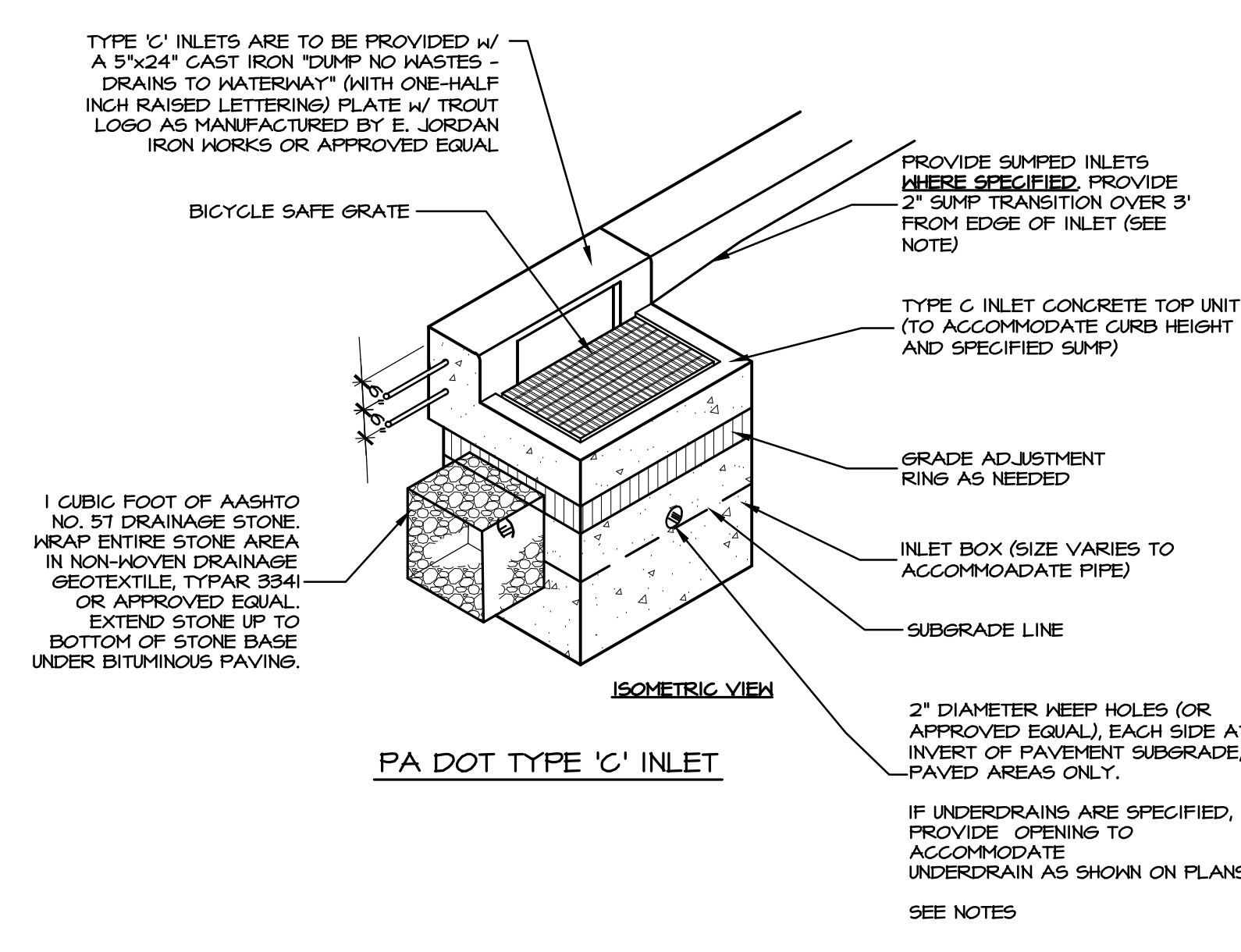
D	W	T
4'-0"	5"	6"
5'-0"	6"	8"
6'-0"	7"	8"

**C** SHALLOW MANHOLE DETAIL - STORM SEWER  
NO SCALE

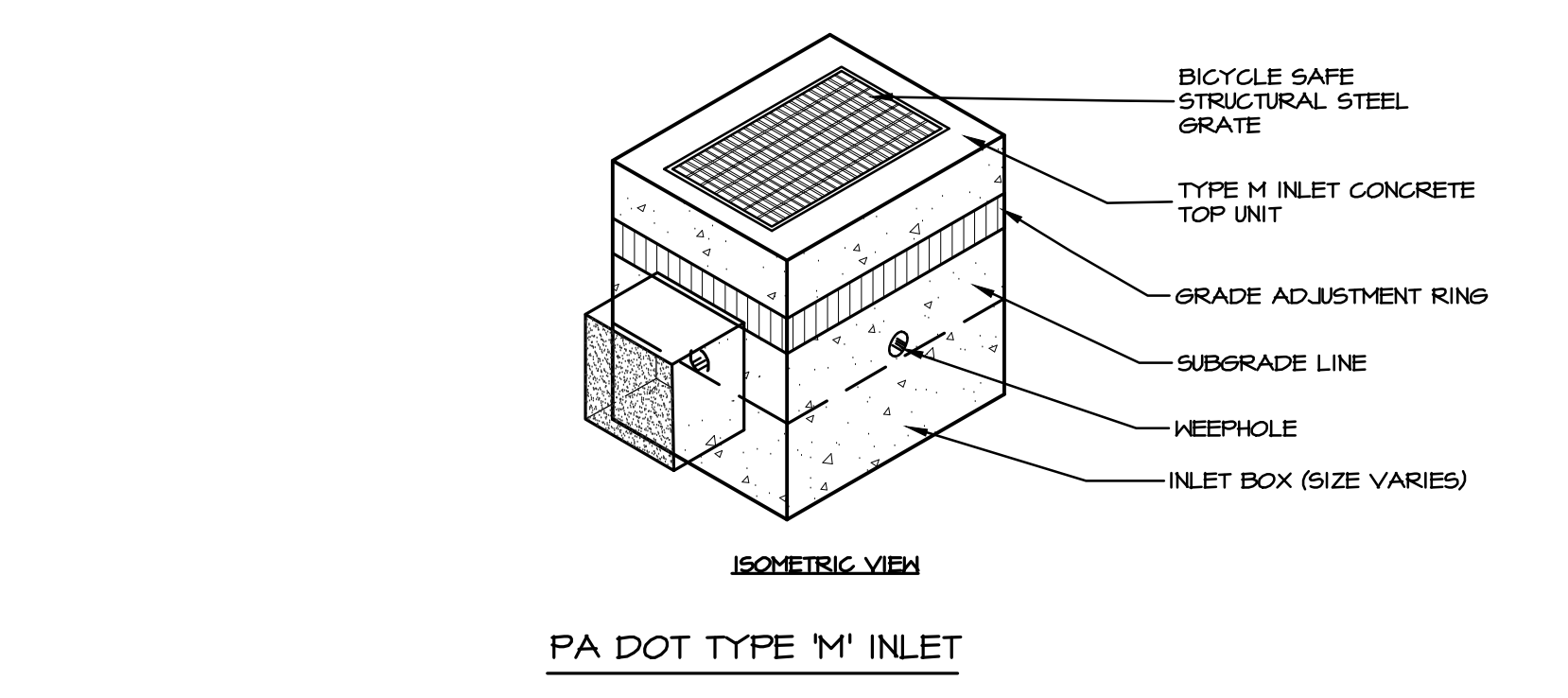


- NOTES:**
1. FORMED FLOW CHANNEL TO HAVE SEMICIRCULAR GEOMETRY AND BE CONSTRUCTED TO PROVIDE SELF-CLEANING OF INLET.
  2. CONTRACTOR SHALL PROVIDE A SMOOTH, UNIFORM ELEVATION CHANGE FROM THE INVERT IN TO THE INVERT OUT ALONG THE FLOW CHANNEL FOR ALL STRUCTURES, IN ACCORDANCE WITH THE ELEVATIONS AS IDENTIFIED ON THE STORM WATER PROFILES SHEETS.
  3. FLOW CHANNEL TO BE CONSTRUCTED WITH CONCRETE (3000 PSI) OR OTHER SUITABLE COUNTY APPROVED MATERIAL.
  4. ALL UNDERGROUND STORMWATER PIPING, OTHER THAN THOSE SPECIFICALLY INTENDED FOR GROUNDWATER COLLECTION, SHALL BE CONSTRUCTED WITH WATERTIGHT JOINTS AND CONNECTIONS.

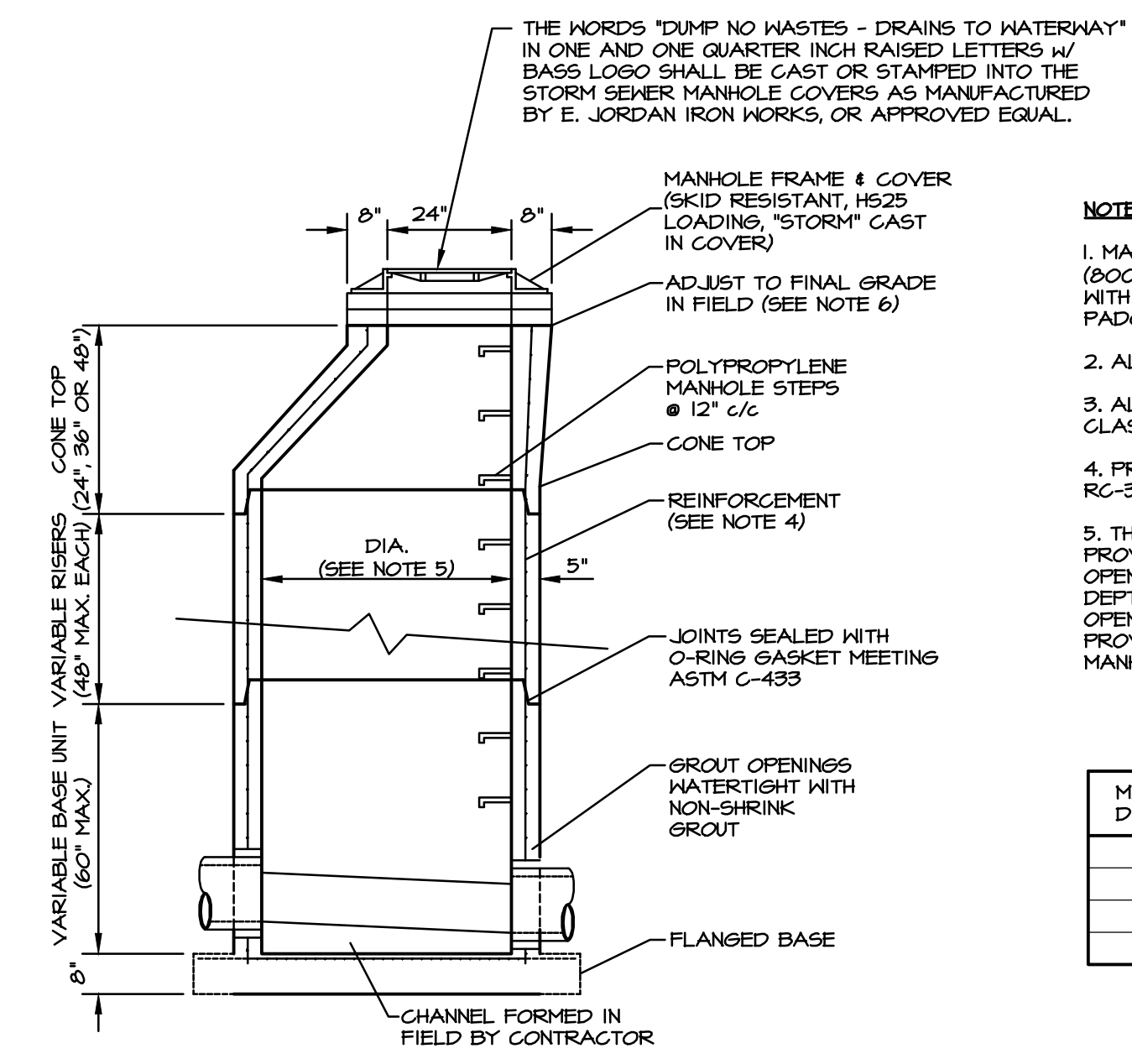
**D** CATCH BASIN FLOW CHANNEL  
NO SCALE



- INLET NOTES:**
1. MATERIAL AND CONSTRUCTION BASED UPON PENNDOT STANDARDS AND SPECIFICATIONS. ALL CONSTRUCTION SHALL BE IN GENERAL ACCORDANCE WITH PA DOT PUBLICATION 40B, SECTION 605 & APPLICABLE PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION PERTAINING TO INLET STRUCTURES.
  2. THIS DETAIL DEPICTS THE SHAPE AND DIMENSIONS REQUIRED FOR UNIFORMITY AND COMPATIBILITY. IT IS NOT INTENDED TO SHOW THE DETAILS REQUIRED FOR MANUFACTURING AND HANDLING. ONLY THOSE ITEMS WHICH ARE SUPPLIED BY AN APPROVED MANUFACTURER AS LISTED IN PA BULLETIN NO 15 WILL BE PERMITTED.
  3. INLETS WITHIN THE PENNDOT RIGHT OF WAY SHALL BE IN ACCORDANCE WITH PENNDOT ROADWAY CONSTRUCTION STANDARDS, LATEST REVISION, AND AS PER APPROVED PENNDOT HIGHWAY OCCUPANCY PERMIT PLANS.
  4. INLETS WITHIN A MUNICIPAL ROADWAY RIGHT OF WAY SHALL BE APPROVED BY THE MUNICIPALITY PRIOR TO CONSTRUCTION.
  5. CONTRACTOR SHALL VERIFY INLET BOX SIZING BASED ON PIPE SIZES, MATERIAL AND ALIGNMENT PRIOR TO ORDERING PRE-CAST STRUCTURES.
  6. CONCRETE TOP UNITS WHICH SEAT THE GRATE DIRECTLY WITHIN THE UNIT SHALL UTILIZE 1-1/4" X 1-1/4" ANGLES EMBEDDED IN THE CONCRETE AS A BEARING AREA FOR THE GRATE.
  7. WHENEVER AN INLET IS REQUIRED WITHIN A MOUNTABLE CURB SECTION, A TYPE M INLET WILL BE LOCATED ADJACENT TO THE BACK EDGE OF THE CURB AND WILL BE FLUSH WITH THE PAVEMENT SURFACE. SEE PA DOT RG-65 FOR INSTALLATION DETAILS.
  8. THE SELECTION OF COMPONENTS TO ACHIEVE A SPECIFIED INLET TYPE IS THE CONTRACTOR'S RESPONSIBILITY.
  9. PIPES SHALL BE LOCATED AS REQUIRED.
  10. WEEP HOLES SHALL BE INSTALLED IN INLET BOXES WITHIN PAVED AREAS TO PERMIT DRAINAGE OF THE PAVEMENT SUBBASE, UNLESS OTHERWISE APPROVED.
  11. USE PRE-CAST CONCRETE GRADE ADJUSTMENT RINGS FOR FINAL GRADE. BRICKS, BLOCKS, MORTAR, ETC. ARE NOT PERMITTED AS GRADE ADJUSTMENTS.
  12. INLET BOX SHALL BE PRE-CAST CONCRETE, UNLESS OTHERWISE SPECIFIED OR APPROVED.
  13. ALL ON-SITE INLETS SHALL HAVE TOP UNITS TO MATCH CURB REVEAL AND SPECIFIED SUMP.
  14. INLETS THAT ARE FIVE FEET OR GREATER IN DEPTH SHALL HAVE POLYPROPYLENE ENCASED MANHOLE STEPS INSTALLED.
  15. ALL DRAINAGE STRUCTURES SHALL HAVE POURED-IN-PLACE CONCRETE CHANNEL BOTTOM, UNLESS OTHERWISE NOTED (SUCH AS SNOTS, WATER QUALITY INLETS, DESIGNATED SEDIMENT STORAGE, ETC.) ON THE PLANS.
  16. PROVIDE PRECAST OPENING IN THE INLET BOX FOR ALL ROOF LEADER DRAINAGE CONNECTIONS, UNLESS OTHERWISE APPROVED. PROVIDE OPENINGS TO THE INLET BOX AT THE REQUIRED ELEVATIONS AND LOCATION. ALL CONNECTIONS SHALL BE WATERTIGHT.
  17. PROVIDE PRE-CAST OPENINGS IN THE INLET BOX TO ACCOMMODATE ROADWAY, PARKING, AND BUILDING UNDERDRAINS WHERE SPECIFIED ON THE PLANS.
  18. A 2" SUMP ON TYPE 'C' INLETS SHALL BE PROVIDED ONLY WHERE NOTED ON THE STORMWATER PIPE PROFILES. THE 2" SUMP TRANSITION ALONG CURB BUTTER LINE SHALL BE ADJUSTED ACCORDINGLY FOR FIELD CONDITIONS, ADA REQUIREMENTS, AND/OR AS SPECIFIED/DETAILED ON THE PLANS.
  19. FINAL INLET TOP OF GRATE ELEVATION SHALL BE ADJUSTED TO ACCOUNT FOR SPECIFIED ROAD GRADE.
  20. GROUT OPENINGS AROUND PIPE CONNECTIONS TO PROVIDE A WATERTIGHT JOINT. USE NON-SHRINK GROUT ON INSIDE & OUTSIDE OF STRUCTURE.
  21. ALL JOINTS ADJACENT TO BITUMINOUS PAVING SHALL BE SEALED WITH P664-22.
  22. PROVIDE 2'x6' INLET BOXES, DOUBLE 2'x4' BOXES, ETC. WHERE NOTED ON THE PLAN.
  23. CONSULT THE PLANS FOR ANY SPECIFIC SUMP REQUIREMENTS. FOR TYPE 'M' INLETS LOCATED IN A SAG CONDITION.
  24. CONCRETE INLETS WITHIN STINSON DR. SHALL HAVE A MINIMUM OF TWO COURSES OF BRICK MASONRY OR GRADE RINGS TO BRING THE GRATE OR COVER TO PROPER ELEVATION. IF BRICK IS USED, EVERY THIRD VERTICAL JOINT SHALL BE LEFT OPEN. IF GRADE RINGS ARE USED, THE HORIZONTAL JOINTS SHALL BE LEFT OPEN TO FACILITATE DRAINAGE OF THE BASE COURSE. GEOTEXTILE FABRIC SHALL BE WRAPPED AROUND THE OUTSIDE OF THE BRICK MASONRY OR GRADE RINGS TO PREVENT THE WASHING OF FINES INTO THE STRUCTURE.

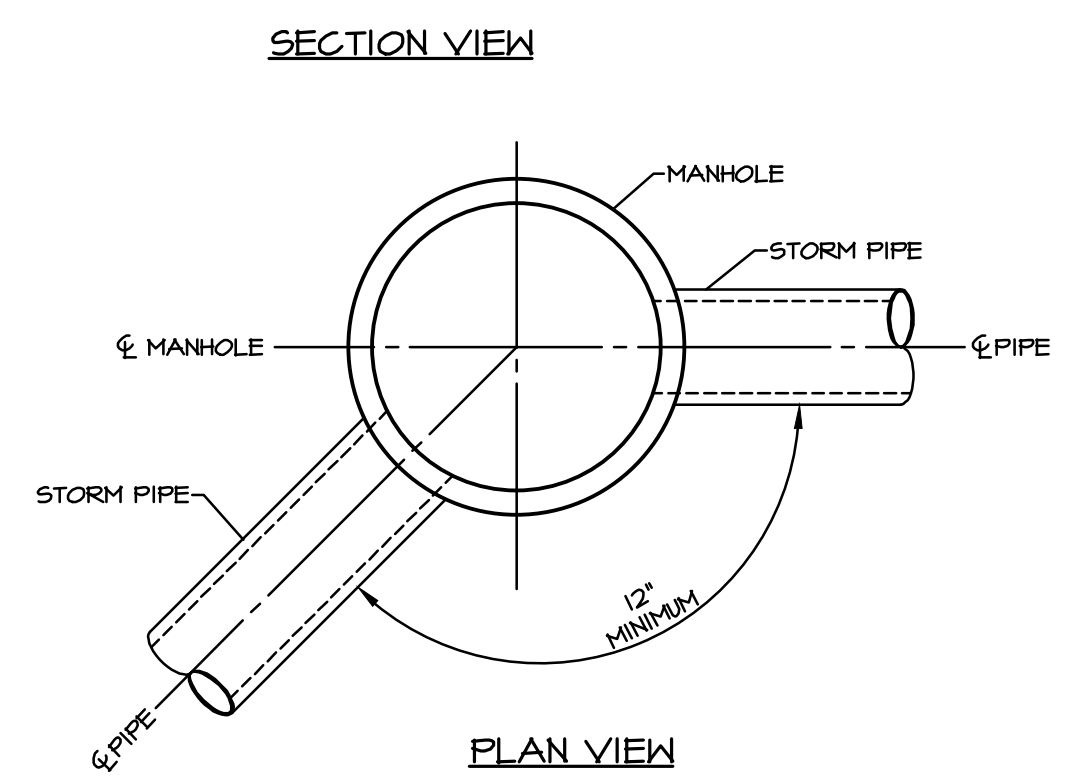


**E** PA DOT TYPE STORMWATER INLETS (TYPE 'C' & 'M')  
NO SCALE



- THE WORDS 'DUMP NO WASTES - DRAINS TO WATERWAY' IN ONE AND ONE QUARTER INCH RAISED LETTERS W/ BASS LOGO SHALL BE CAST OR STAMPED INTO THE STORM SEWER MANHOLE COVERS AS MANUFACTURED BY E. JORDAN IRON WORKS, OR APPROVED EQUAL.**
- NOTES:**
1. MANHOLE BASED UPON TERRE HILL CONCRETE PRODUCTS, TERRE HILL, PA (800-242-1504). USE ONLY PADOT MANHOLES CONSTRUCTED IN ACCORDANCE WITH PADOT PUBLICATION T2, RC-34 STANDARD, WHERE PERFORMING WORK IN PADOT RIGHTS-OF-WAY.
  2. ALL PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM-C478.
  3. ALL CONCRETE SHALL CONFORM TO PADOT PUBLICATION 40B, SECTION T14, CLASS AA.
  4. PROVIDE REINFORCEMENT IN ACCORDANCE WITH PADOT PUBLICATION T2, RC-34 STANDARD.
  5. THE DIAMETER OF THE MANHOLES PROVIDED SHALL BE BASED UPON PROVIDING A MINIMUM OF 12-INCHES OF HORIZONTAL SEPARATION BETWEEN OPENINGS LOCATED AT THE SAME DEPTH. PIPES NOT LOCATED AT THE SAME DEPTH MUST BE LOCATED VERTICALLY AT LEAST ONE TIMES THE MAXIMUM OPENING DIAMETER APART WHERE THE HORIZONTAL SEPARATION IS NOT PROVIDED. IN ALL CASES, THE MAXIMUM PIPE SIZE AND OPENING IN PRECAST MANHOLES SHALL BE AS FOLLOWS:

MANHOLE DIA.	MAXIMUM PIPE SIZE	MAXIMUM OPENING
4'-0"	30"	38"
5'-0"	42"	50"
6'-0"	54"	62"
8'-0"	72"	80"



**F** PRECAST STORM SEWER MANHOLE  
NO SCALE

REVISIONS PER:	DATE:	BY:
1.	-	-
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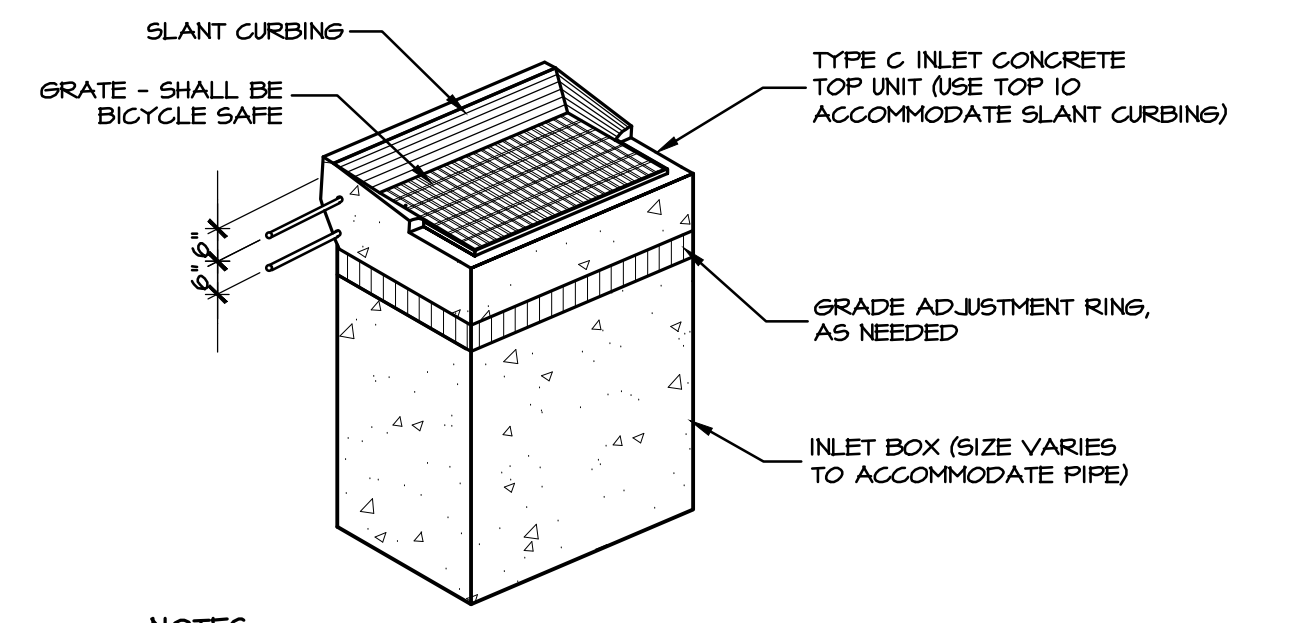
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REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
PENNSYLVANIA  
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT  
TYLER E. HILL  
PENNSYLVANIA

**PRELIMINARY PLAN**  
SUBJECT:  
**STORMWATER DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

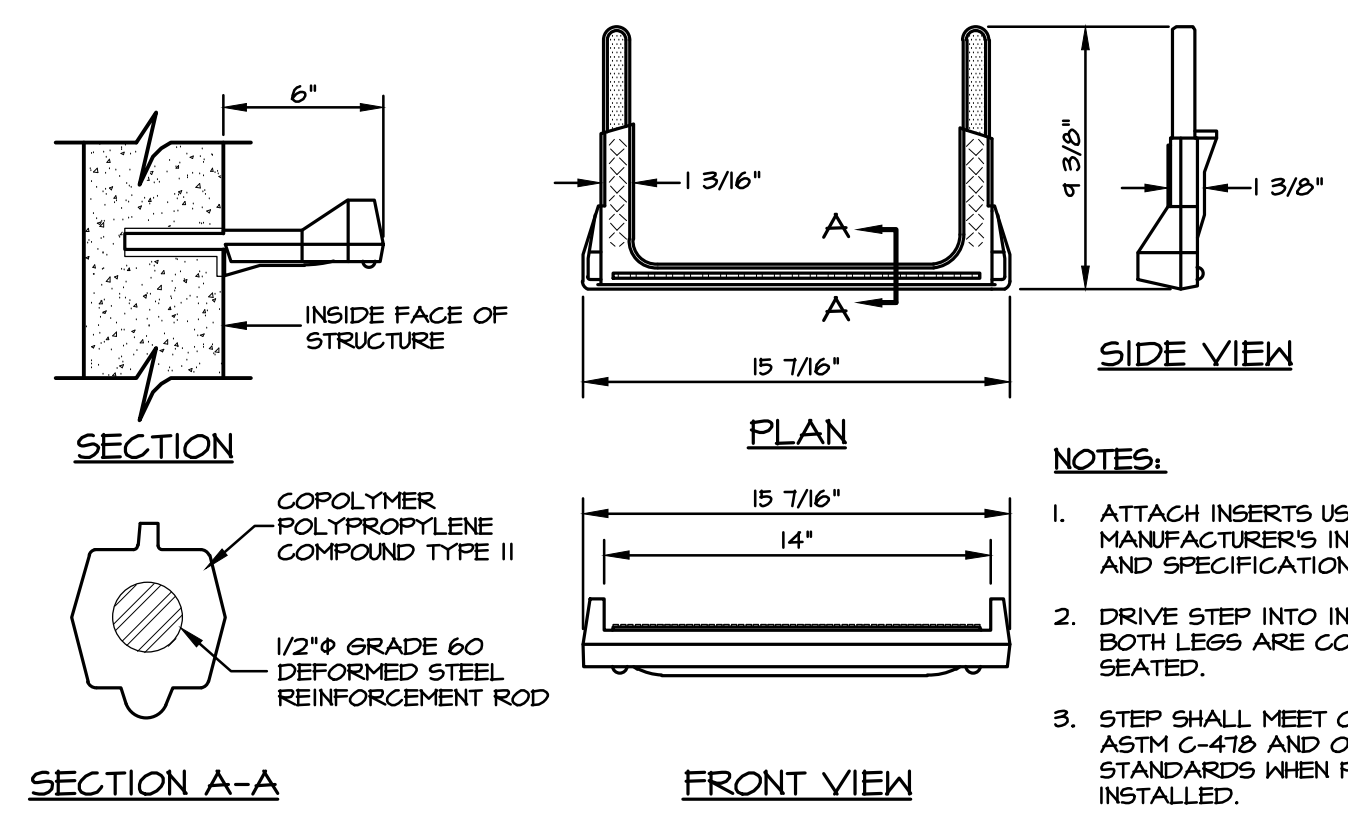
MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

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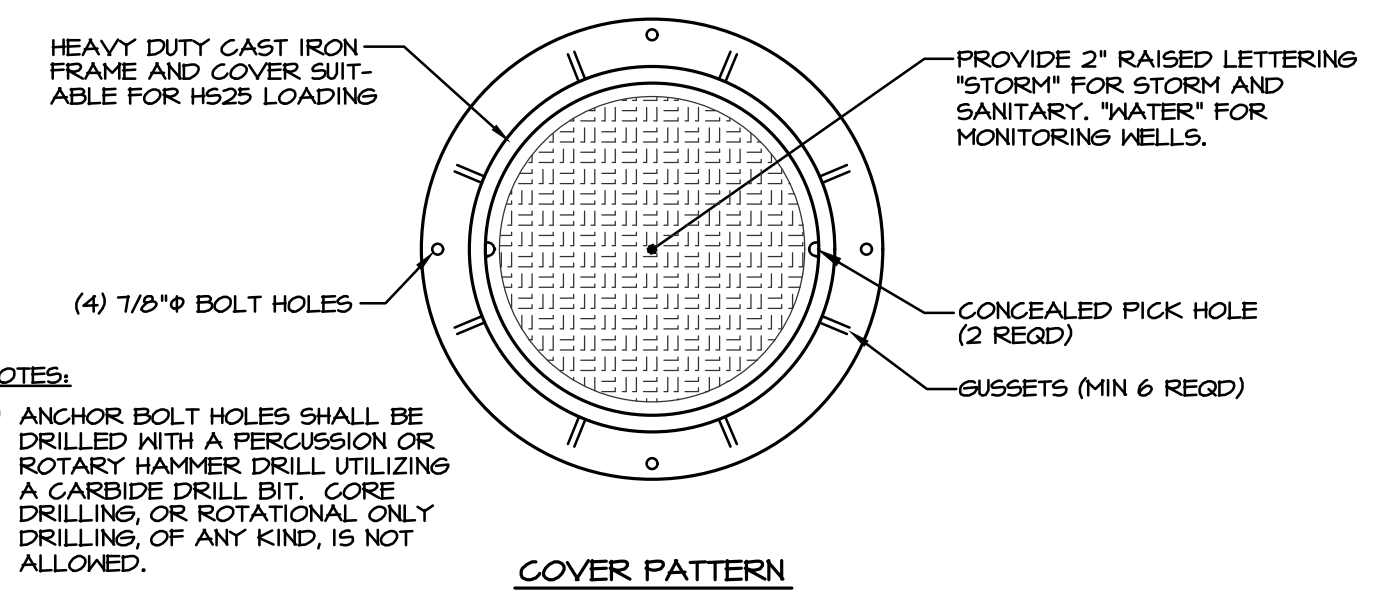
- NOTES:**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PA DOT PUBLICATION 40B, SECTION 605 & STANDARDS FOR ROADWAY CONST., RC-34. CONTRACTOR SHALL VERIFY INLET BOX SIZING BASED ON PIPE SIZES & ALIGNMENT PRIOR TO ORDERING PRECAST STRUCTURES.
  - ALL DRAINAGE STRUCTURES SHALL HAVE POURED-IN-PLACE CONCRETE CHANNEL BOTTOMS.

**C TYPE 'C' INLET (SLANT CURBING)**  
NO SCALE INL-006

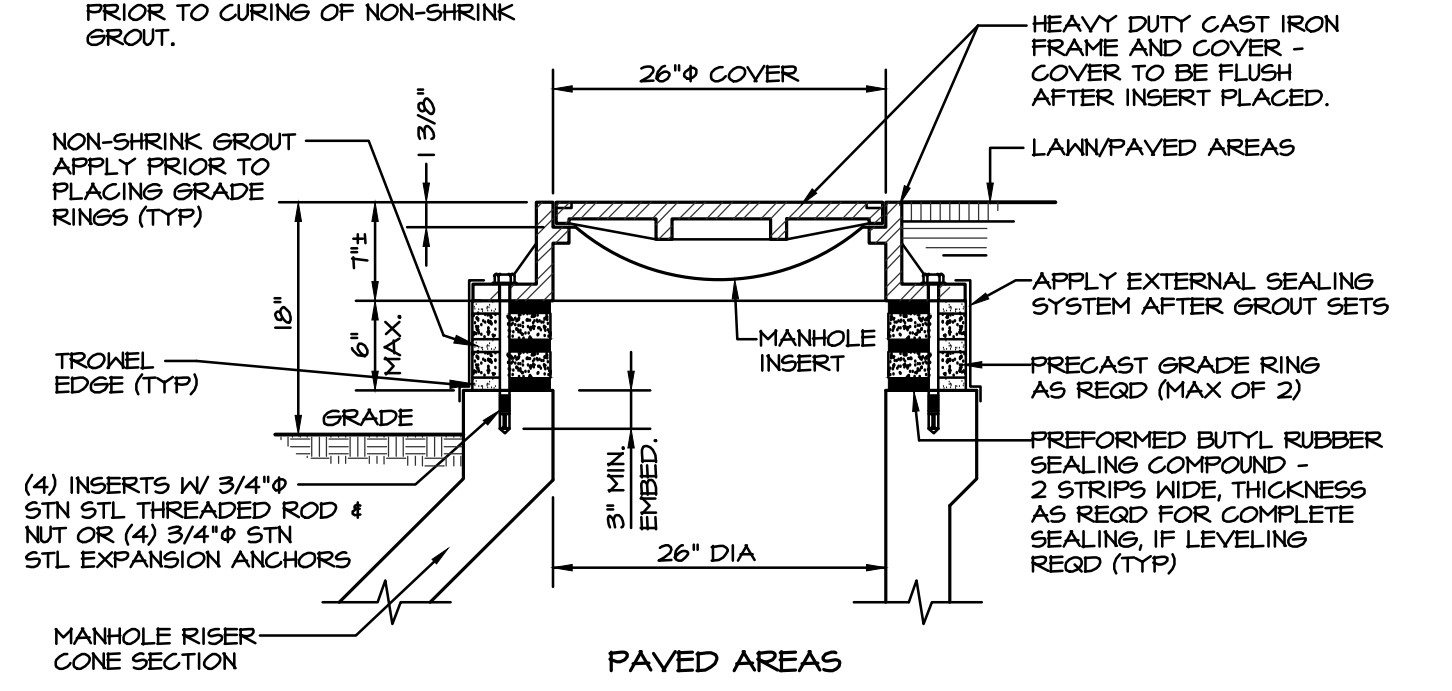


- NOTES:**
- ATTACH INSERTS USING MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS.
  - DRIVE STEP INTO INSERTS UNTIL BOTH LEGS ARE COMPLETELY SEATED.
  - STEP SHALL MEET OR EXCEED ASTM C-418 AND OSHA STANDARDS WHEN PROPERLY INSTALLED.
  - STEPS TO BE ALIGNED VERTICALLY AND NOT MORE THAN 12" ON CENTER.

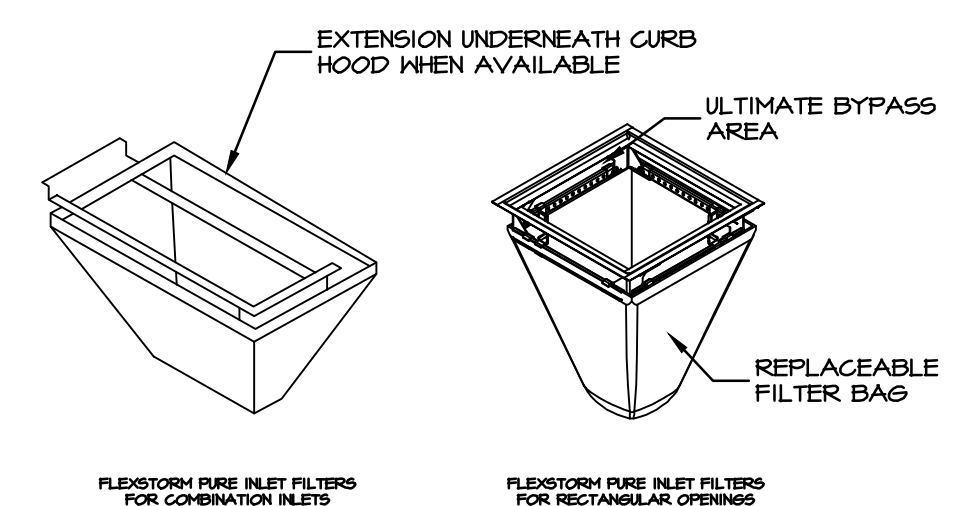
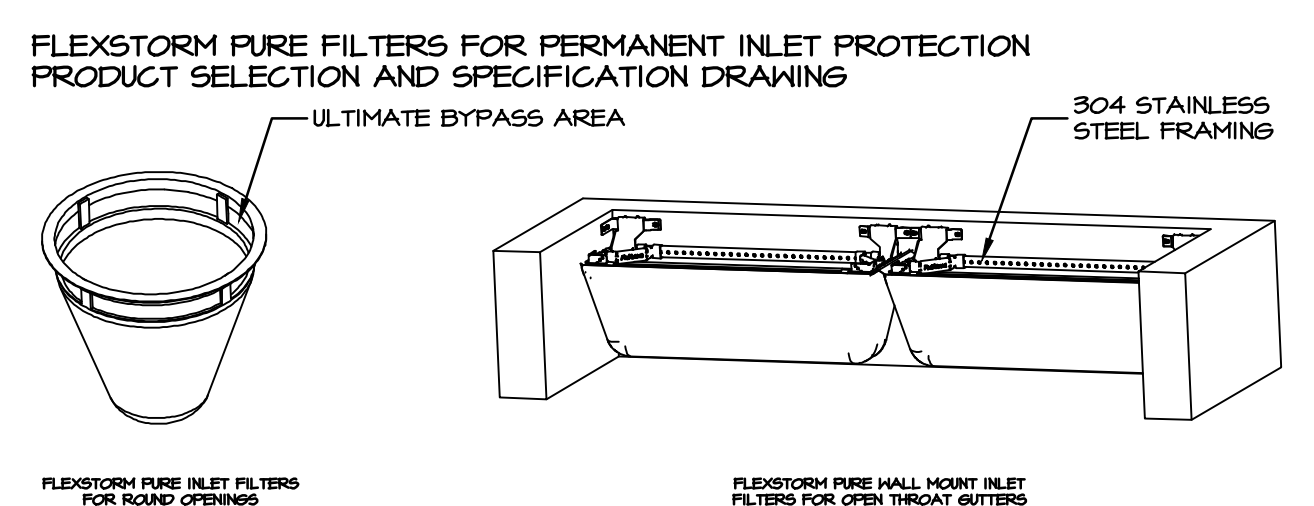
**D MANHOLE/INLET STEP DETAIL**  
NO SCALE INL-105



- NOTES:**
- ANCHOR BOLT HOLES SHALL BE DRILLED WITH A PERCUSSION OR ROTARY HAMMER DRILL UTILIZING A CARBIDE DRILL BIT. CORE DRILLING OR ROTATIONAL ONLY DRILLING OF ANY KIND IS NOT ALLOWED.
  - FRAME ANCHORS SHALL BE TIGHTENED PRIOR TO CURING OF NON-SHRINK GROUT.



**E STANDARD MANHOLE FRAME & COVER**  
NO SCALE MAN-005



FOR ROUND OPENINGS WITH GRATES	HIGH-MID BYPASS FLOW RATES (GPM)*
DROP THRU OPENING SIZE DIA.	BASED ON NOMINAL FRAME SIZE WITH HIGH-MID BYPASS FLOW GAP
SMALL: 10.0" - 18.0"	6.5/HR
MEDIUM: 18.0" - 24.0"	2.1
LARGE: 24.0" - 36.0"	5.8

FOR OPEN THROAT CURB INLETS - MOUNTED TO WALL BENEATH CURB OPENING	FLEXSTORM FPM
UP TO 4" CURB OPENING (1 FILTER)	6.5/HR
BETWEEN 4" AND 8" CURB OPENING (2 FILTERS)	6.5/HR
BETWEEN 8" AND 12" CURB OPENING (3 FILTERS)	6.5/HR
BETWEEN 12" AND 18" CURB OPENING (4 FILTERS)	6.5/HR

FOR RECTANGULAR OPENINGS WITH GRATES	HIGH-MID BYPASS FLOW RATES (GPM)*
DROP THRU OPENING SIZE DIA.	BASED ON NOMINAL FRAME SIZE WITH HIGH-MID BYPASS FLOW GAP
SMALL: 12" x 12" UP TO 18" x 18" (OR 64" MAX PERIMETER)	6.5/HR
MEDIUM: 18" x 18" UP TO 24" x 24" (OR 80" MAX PERIMETER)	6.5/HR
LARGE: 24" x 24" UP TO 30" x 30" (OR 100" MAX PERIMETER)	6.5/HR
XL: 30" x 30" UP TO 48" x 48" (OR 144" MAX PERIMETER) TYP. 2 PC SET	6.5/HR

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL BAG / FRAME SIZE	SOLETS STORAGE (GPM)	FILTERED FLOW RATE AT 50% MAX (GPM)	PC OIL RETENTION (G)	PC OIL RETENTION (G)	PC OIL RETENTION (G)
SMALL	1.6	1.2	0.8	71	81
MEDIUM	2.1	1.1	1.2	18	204
LARGE	3.8	2.1	1.8	178	262
XL	4.2	3.6	2.4	2.6	511

CREATE YOUR OWN FLEXSTORM PART NUMBER BY COMBINING FRAME DIA AND BAG DIA

1. IDENTIFY YOUR FLEXSTORM FRAME PART NUMBER FROM TABLES ABOVE

2. SELECT YOUR BAG PART NUMBER BASED ON APPLICATION NEEDS

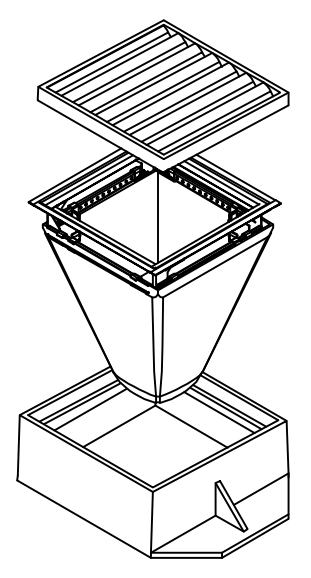
FLEXSTORM FILTER BAGS	(22" DEPTH) STD BAG FPM	(22" DEPTH) SHORT BAG FPM	CLEAN WATER FLOW RATE (GPM/HR, FT)	MIN. A.G.S. (SS SEVED)
FX: STANDARD HYDRO BAG	FX	FX-S	200	40
FPM: HOVEN W/ NYLOPLAST	FPM	FPM-S	200	40
FPO: HOVEN W/ OIL BOOM	FPO	FPO-S	200	40
PC: POOL CONSTRUCTION BAG	PC	PC-S	181	140
PCP: PC BAG W/ NYLOPLAST	PCP	PCP-S	181	140
LL: LITTER AND LEAF BAG	LL	LL-S	145	85
IL: DOT NON-HOVEN BAG	IL	IL-S	145	70

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

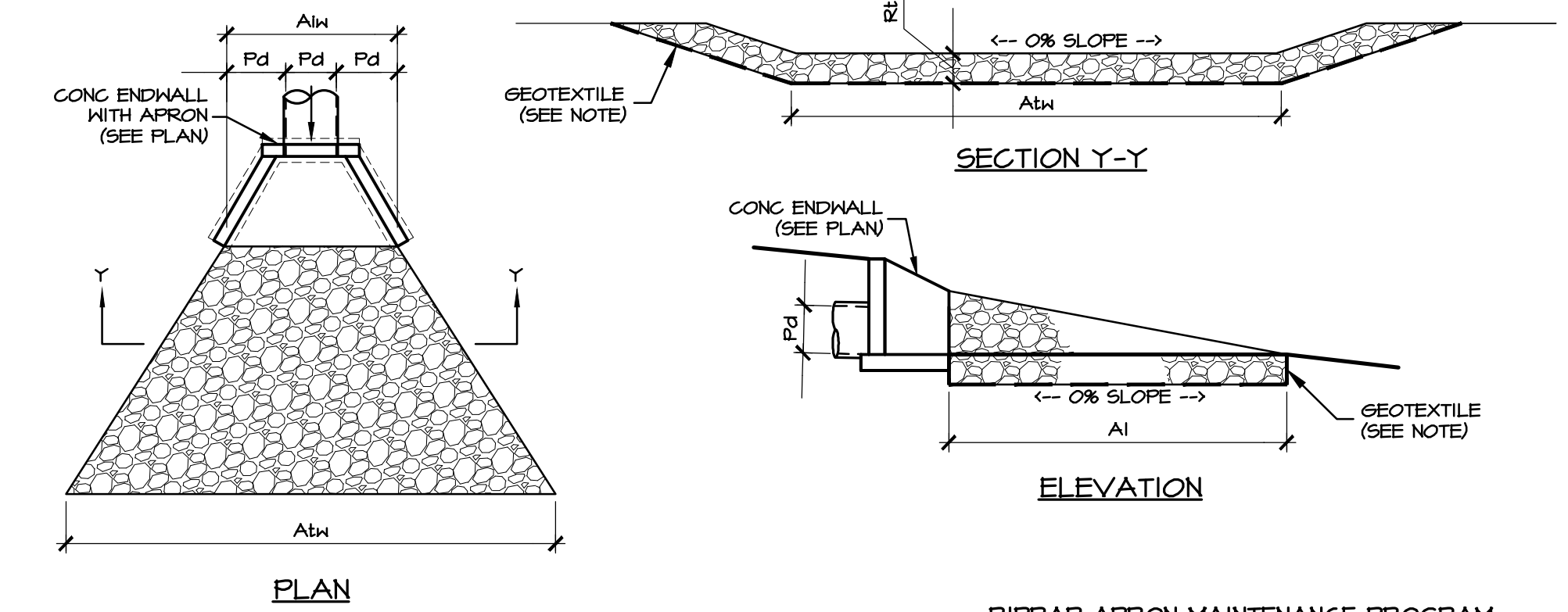
FRAME FPM FROM STEP 1. FILTER BAG FPM FROM STEP 2.

- NOTES:**
- ALL FRAMING IS CONSTRUCTED OF 304 STAINLESS STEEL FOR 25 YEAR SERVICE LIFE RATING.
  - TOTAL BYPASS CAPACITY: BYPASS CAPACITY WILL VARY WITH EACH SIZE DRAINAGE STRUCTURE. FLEXSTORM DESIGNS FRAMING BYPASS TO MEET OR EXCEED THE DESIGN FLOW OF THE PARTICULAR DRAINAGE STRUCTURE.
  - UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
  - FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT [WWW.INLETFILTERS.COM](http://WWW.INLETFILTERS.COM)

- NOTES:**
- REMOVE GRATE.
  - DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE.
  - REPLACE GRATE.



**F FLEXSTORM INLET FILTERS FOR NYLOPLAST DRAIN BASINS**  
NO SCALE



- NOTES:**
- ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
  - RIPRAP APRONS SHOULD BE CONSTRUCTED AT OR NEAR ZERO GRADE FROM BACK TO FRONT AND SIDE TO SIDE. WHERE APRONS ARE CONSTRUCTED WITH A GRADIENT BACK TO FRONT, THE ROCK SIZE AND/OR APRON LENGTH SHOULD BE ADJUSTED UPWARDS TO COMPENSATE. IN NO CASE SHOULD RIPRAP APRONS BE CONSTRUCTED WITH A BACK TO FRONT GRADIENT EXCEEDING 5%.
  - INSTALL CLASS 2 GEOTEXTILE MATERIAL BETWEEN RIPRAP AND SUBGRADE.
  - USE THIS CONFIGURATION FOR ALL RIPRAP PLACEMENT AT OUTLET STRUCTURES UNLESS OTHERWISE NOTED.

OUTLET NO.	PIPE DIA. (IN)	RIPRAP		APRON		
		SIZE (R-)	THICKNESS Rt (IN)	LENGTH Ai (FT)	INITIAL WIDTH AiW (FT)	TERMINAL WIDTH Atw (FT)

\* FOR ENDWALLS DISCHARGING TO BASINS WHERE TEMPORARY SEDIMENT BASIN BOTTOM ELEVATION IS ABOVE FINAL GRADE ELEVATION, INSTALL AN ADDITIONAL 12" OF RIP-RAP ABOVE SURFACE TO BE GENERALLY FLUSH WITH OUTLET ELEVATION.

**G RIPRAP APRON DETAIL (W/ ENDWALL)**  
NO SCALE

REVISIONS PER:	DATE:	BY:
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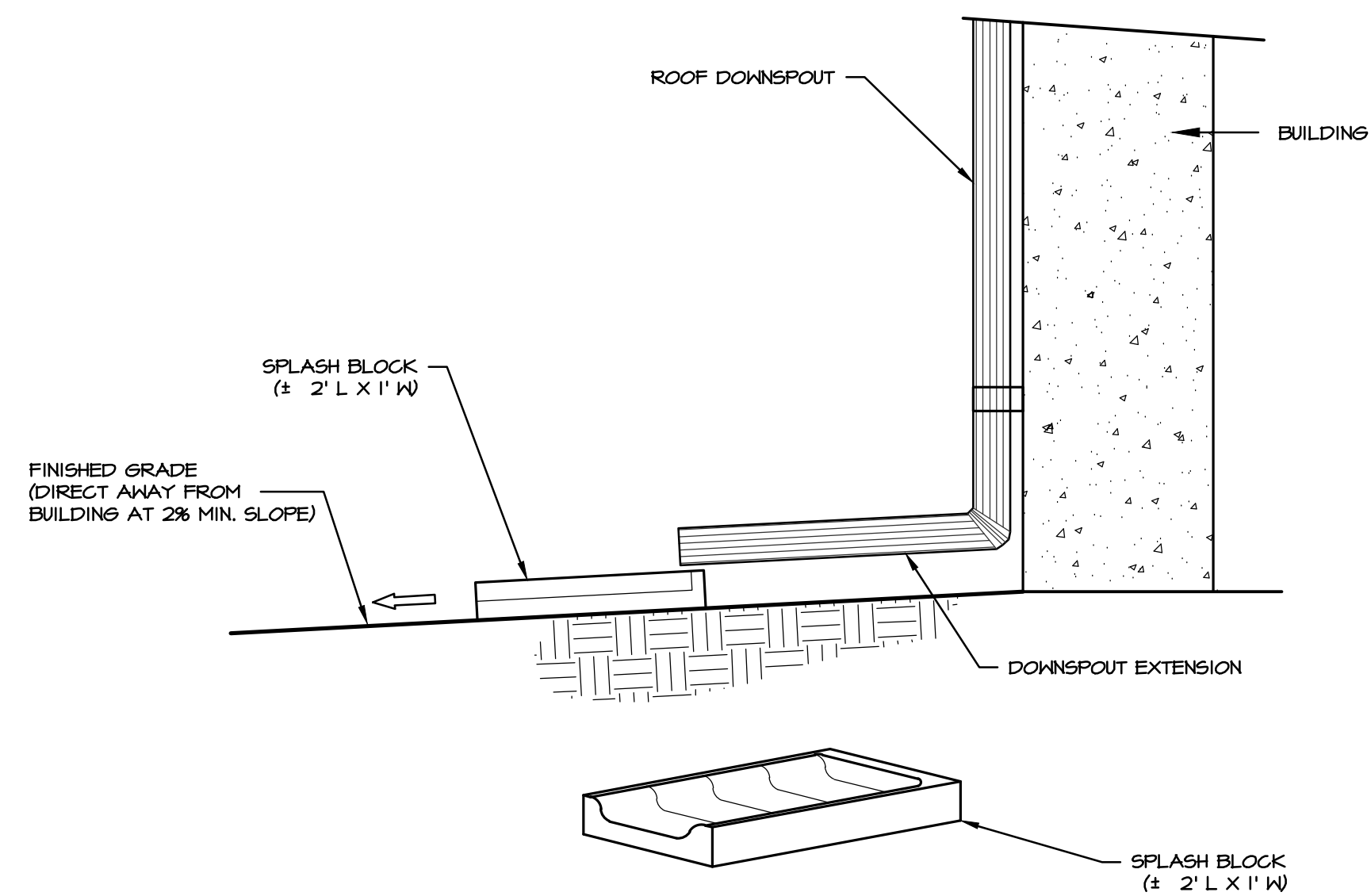
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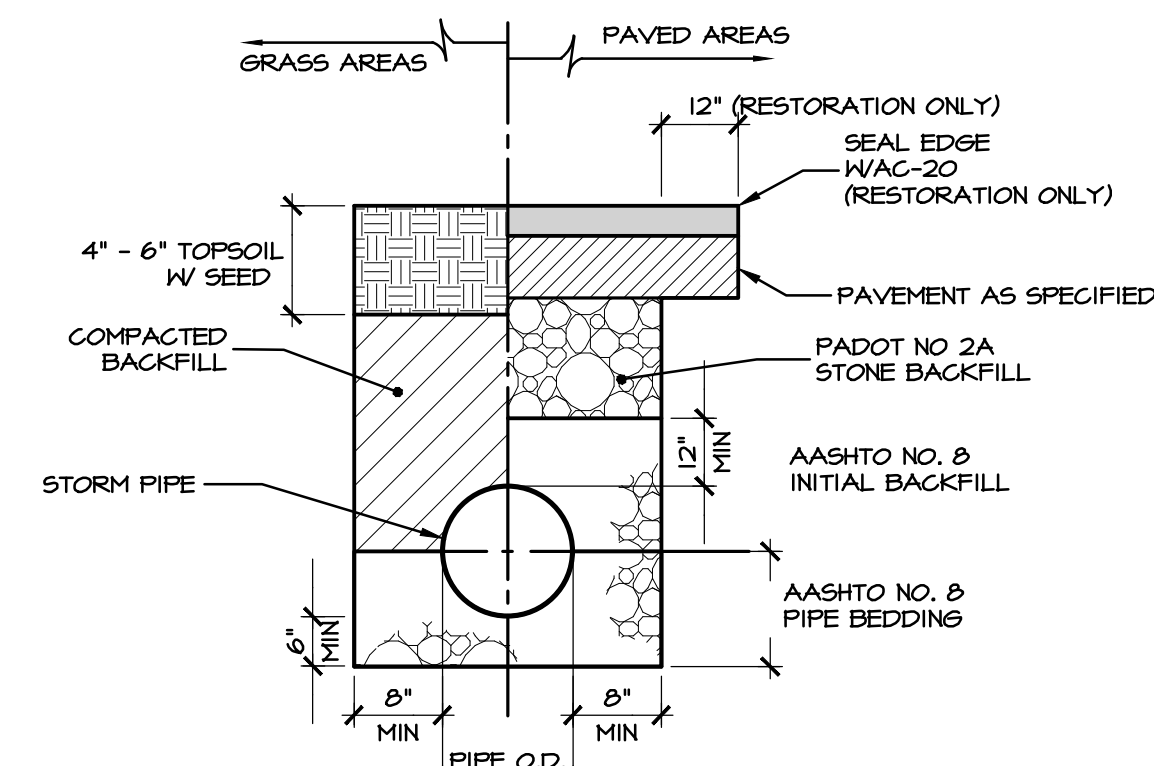
REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT  
MICHAEL J. GIBSON

**PRELIMINARY PLAN**  
SUBJECT:  
**STORMWATER DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

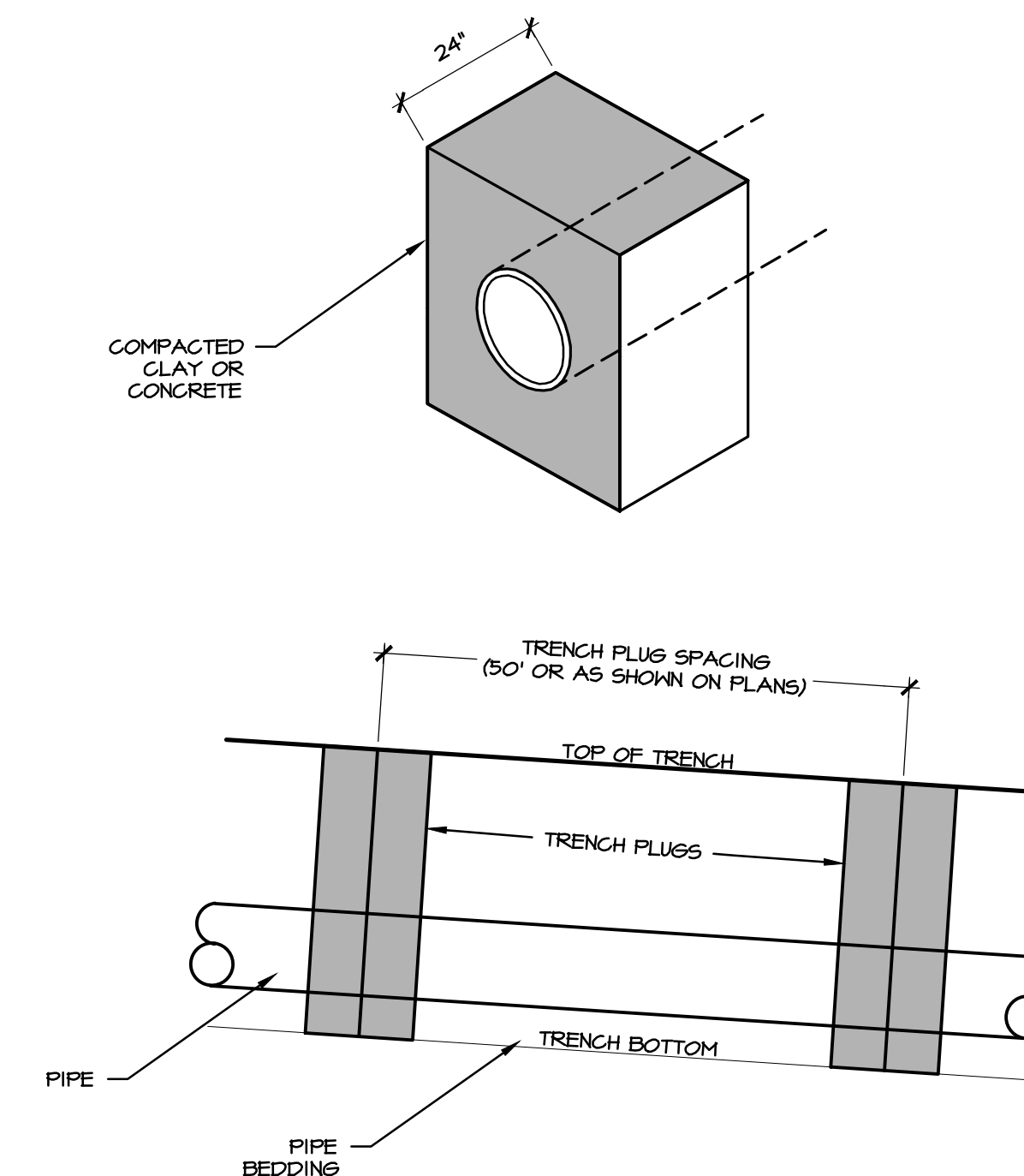


**A** TYPICAL DOWNSPOUT W/ SPLASH BLOCK DETAIL  
NO SCALE

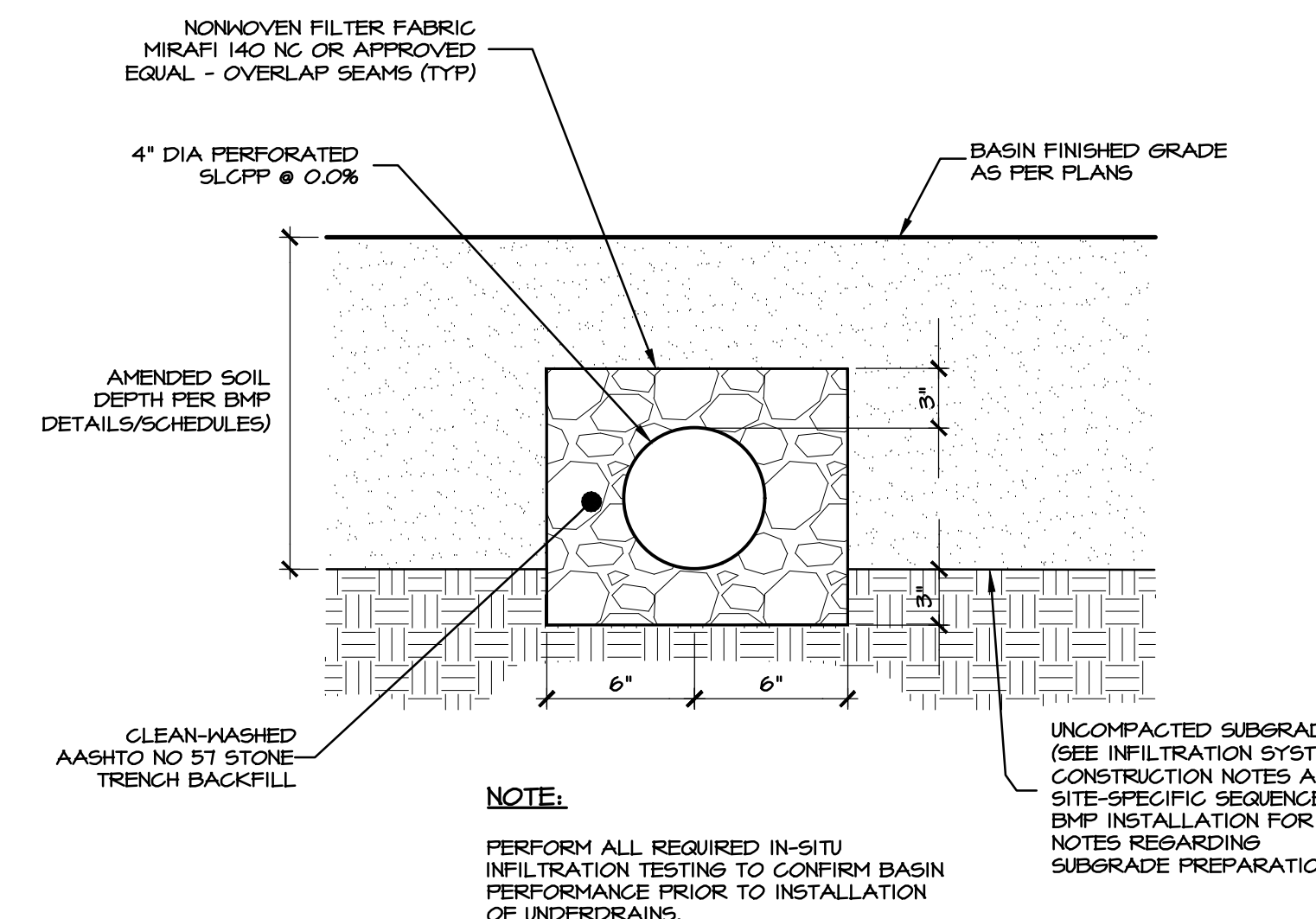
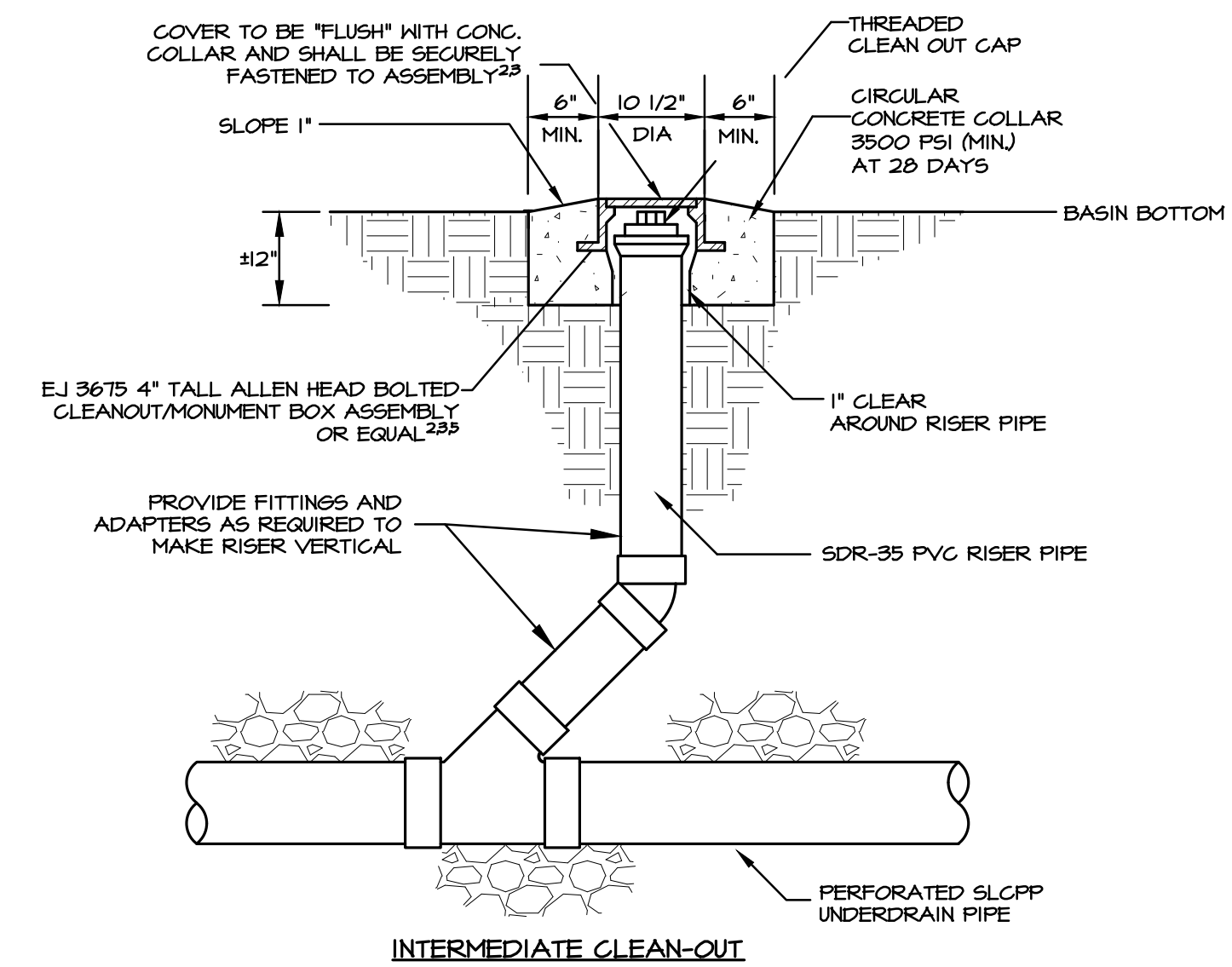


- NOTES:**
- THIS DETAIL IS NOT TO BE USED FOR PIPES CONNECTED TO OUTLET STRUCTURES OR INTENDED TO CONVEY RUNOFF FROM STORMWATER MANAGEMENT FACILITIES.
  - STORMWATER FACILITY OUTLET PIPES SHALL BE LAID AND BACKFILLED WITH COMPACTED SOILS FROM THE SITE.

**B** STORM PIPE TRENCH DETAIL  
NO SCALE

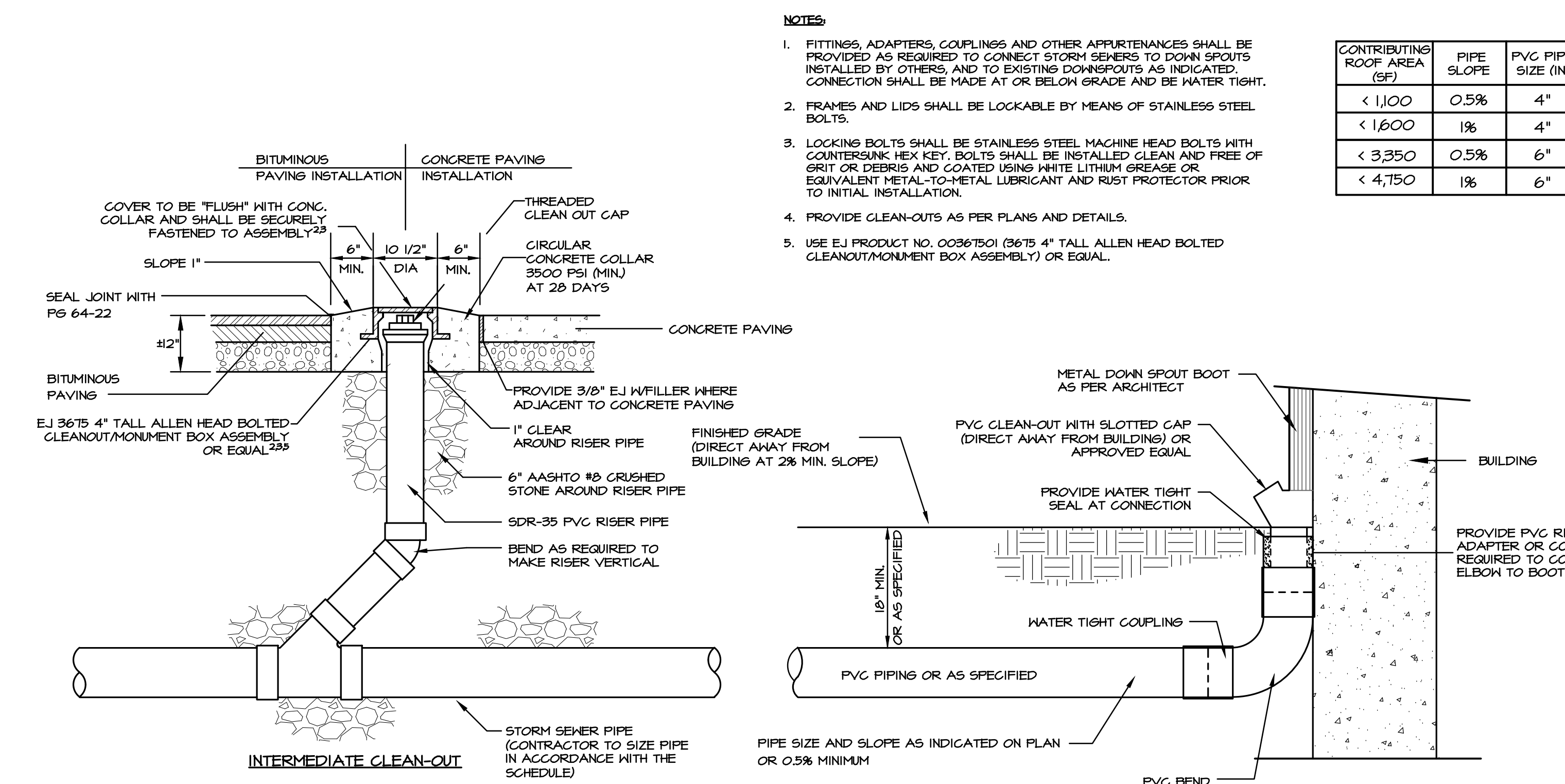


**D** TRENCH PLUG DETAIL  
NO SCALE



- NOTES:**
- FITTINGS, ADAPTERS, COUPLINGS AND OTHER APPURTENANCES SHALL BE PROVIDED AS REQUIRED TO CONNECT STORM SEWERS TO DOWN SPOUTS INSTALLED BY OTHERS, AND TO EXISTING DOWNSPOUTS AS INDICATED. CONNECTION SHALL BE MADE AT OR BELOW GRADE AND BE WATER TIGHT.
  - FRAMES AND LIDS SHALL BE LOCKABLE BY MEANS OF STAINLESS STEEL BOLTS.
  - LOCKING BOLTS SHALL BE STAINLESS STEEL MACHINE HEAD BOLTS WITH COUNTERSUNK HEX KEY. BOLTS SHALL BE INSTALLED CLEAN AND FREE OF GRIT OR DEBRIS AND COATED USING WHITE LITHIUM GREASE OR EQUIVALENT METAL-TO-METAL LUBRICANT AND RUST PROTECTOR PRIOR TO INITIAL INSTALLATION.
  - PROVIDE CLEAN-OUTS AS PER PLANS AND DETAILS.
  - USE EJ PRODUCT NO. 00367501 (3675 4" TALL ALLEN HEAD BOLTED CLEANOUT/MONUMENT BOX ASSEMBLY) OR EQUAL.

**G** STORMWATER BASIN UNDERDRAIN SYSTEM DETAIL  
NO SCALE



**E** TYPICAL CONNECTION TO DOWNSPOUT WITH INTERMEDIATE CLEANOUT  
NO SCALE

CONTRIBUTING ROOF AREA (SF)	PIPE SLOPE	PVC PIPE SIZE (IN)
< 1,100	0.5%	4"
< 1,600	1%	4"
< 3,350	0.5%	6"
< 4,750	1%	6"

- NOTES:**
- FITTINGS, ADAPTERS, COUPLINGS AND OTHER APPURTENANCES SHALL BE PROVIDED AS REQUIRED TO CONNECT STORM SEWERS TO DOWN SPOUTS INSTALLED BY OTHERS, AND TO EXISTING DOWNSPOUTS AS INDICATED. CONNECTION SHALL BE MADE AT OR BELOW GRADE AND BE WATER TIGHT.
  - FRAMES AND LIDS SHALL BE LOCKABLE BY MEANS OF STAINLESS STEEL BOLTS.
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  - PROVIDE CLEAN-OUTS AS PER PLANS AND DETAILS.
  - USE EJ PRODUCT NO. 00367501 (3675 4" TALL ALLEN HEAD BOLTED CLEANOUT/MONUMENT BOX ASSEMBLY) OR EQUAL.

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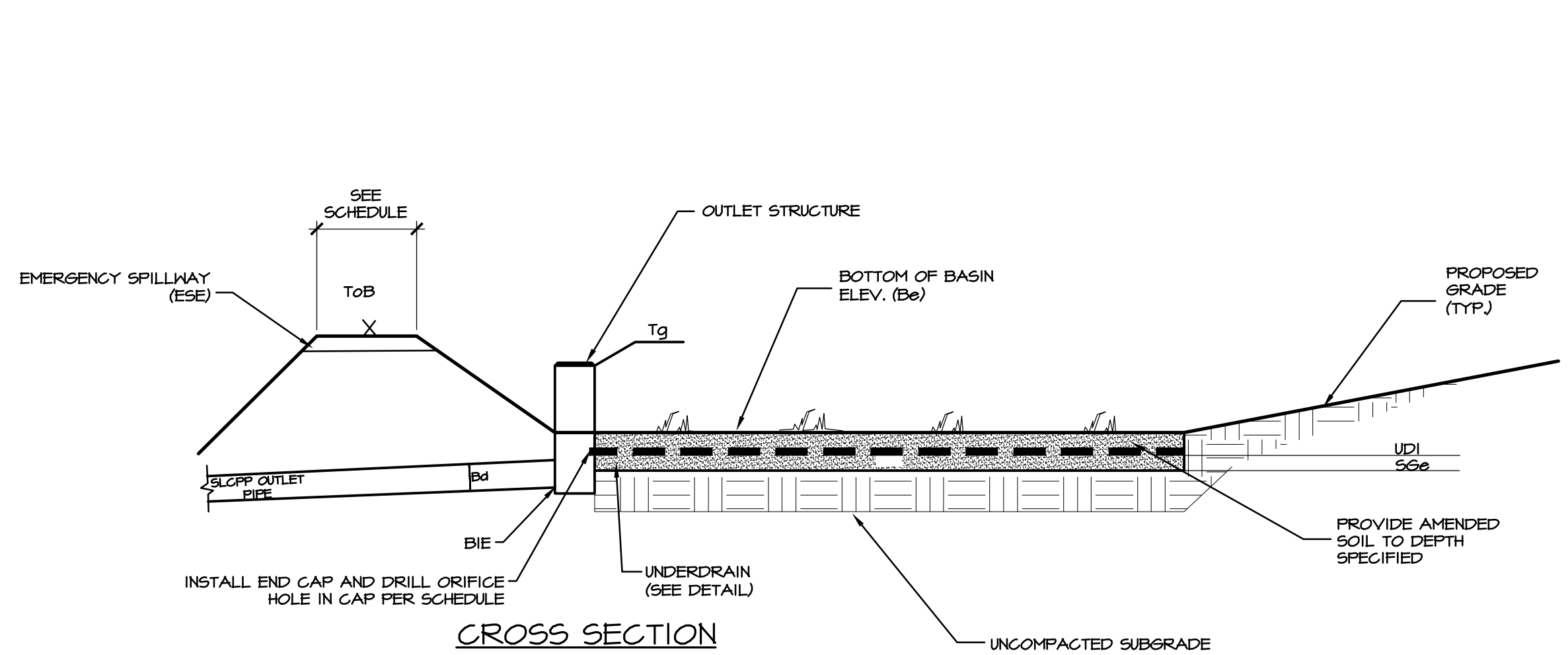
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MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

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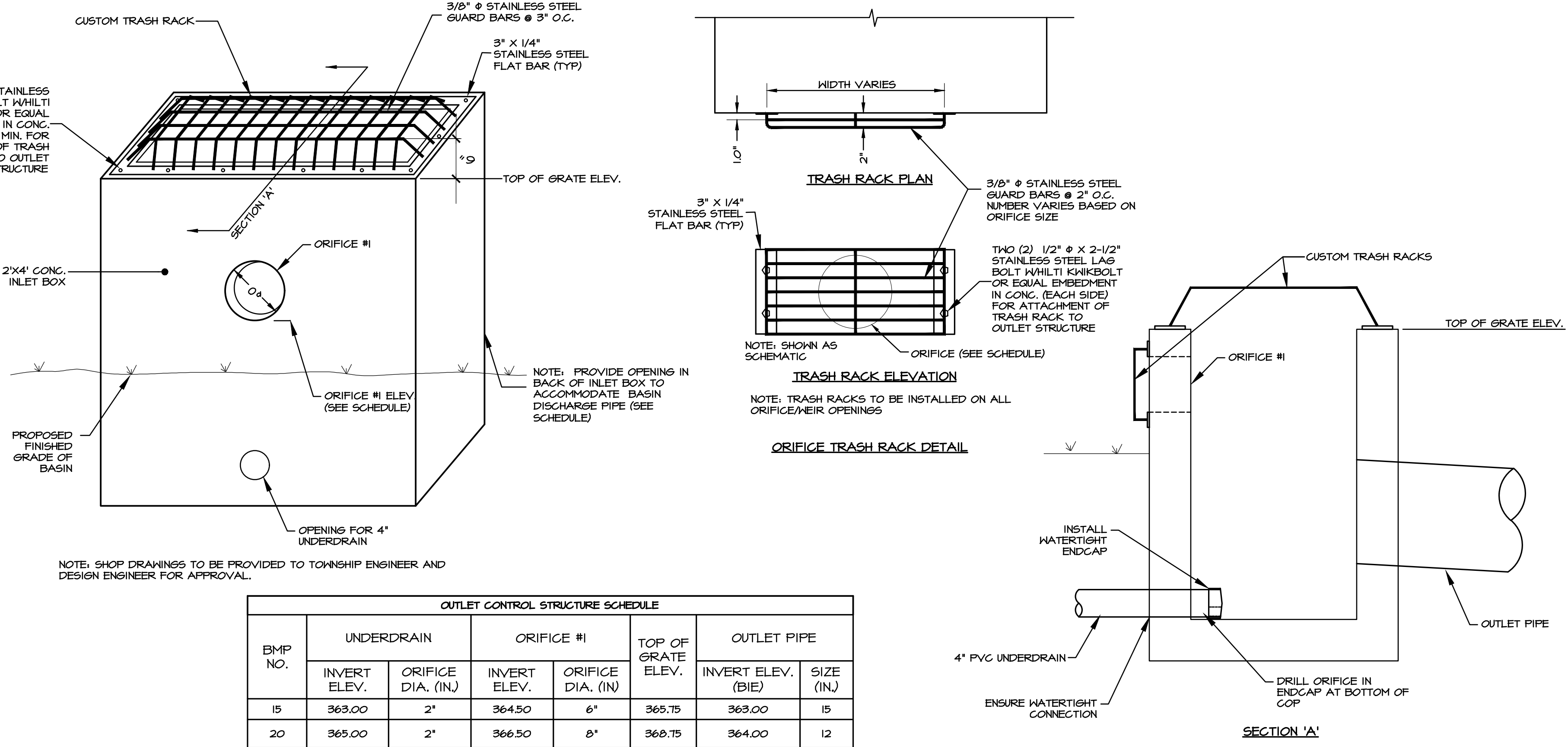
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- NOTE:**
1. BASIN DISCHARGE PIPE TO BE PROVIDED WITH WATER TIGHT JOINTS. ALL CONNECTIONS TO STORM STRUCTURES SHALL BE WATER TIGHT. BACKFILL TRENCH WITH COMPACTED ONSITE MATERIAL.
  2. STRIP AND REMOVE ALL TOPSOIL AND ORGANIC MATTER FROM THE SUBGRADE OF THE BASIN EMBANKMENT AREA.
  3. FINAL INTERIOR/EXTERIOR SIDE SLOPES SHALL NOT EXCEED A 3H:1V SLOPE. SEE APPROVED GRADING PLAN.

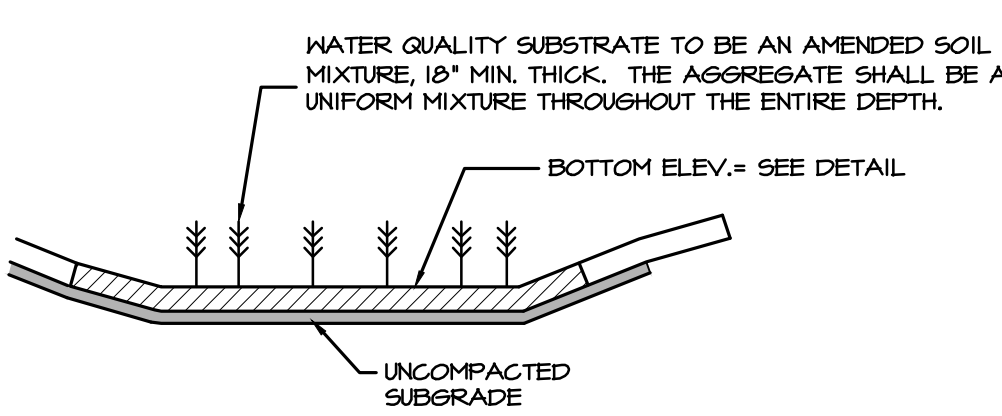
BIO-RETENTION BASIN W/ MRC DESIGN SCHEDULE								OUTLET STRUCTURE			OUTLET PIPE	
BMP NO.	BOTTOM ELEV. (Be)	SUBGRADE ELEV. (Sge)	UNDERDRAIN INVERT (UDI)	UNDERDRAIN ORIFICE DIA. (IN.)	TOP OF BERM (ToB)	BERM WIDTH (FT)	EMERGENCY SPILLWAY (ESE)	TYPE	TOP OF GRATE	INVERT ELEV.	SIZE	
									(Tg)	(BIE)	(IN.)	
15	364.00	362.00	363.00	2'	367.50	5	366.25	2'x4' CONG. INLET	365.75	363.00	15	
20	366.00	364.00	365.00	2'	370.50	5	369.25	2'x4' CONG. INLET	368.75	364.00	12	
23	382.00	380.00	381.00	2'	386.00	5	384.75	2'x4' CONG. INLET	384.00	381.00	12	
26	393.50	391.50	392.50	2'	397.00	5	396.00	2'x4' CONG. INLET	395.25	392.00	12	

**A** TYPICAL BIO-RETENTION BASIN CROSS-SECTION DETAIL  
NO SCALE



OUTLET CONTROL STRUCTURE SCHEDULE						
BMP NO.	UNDERDRAIN		ORIFICE #1		TOP OF GRATE ELEV.	OUTLET PIPE
	INVERT ELEV.	ORIFICE DIA. (IN.)	INVERT ELEV.	ORIFICE DIA. (IN.)		INVERT ELEV. (BIE) SIZE (IN.)
15	363.00	2"	364.50	6"	365.75	363.00 15
20	365.00	2"	366.50	8"	368.75	364.00 12
23	381.00	2"	382.50	6"	384.00	381.00 12
26	392.50	2"	394.00	6"	395.25	392.00 12

**B** TYPICAL OUTLET STRUCTURE DETAIL FOR BIO-RETENTION BASIN  
NOT TO SCALE



**AMENDED SOIL MIXTURE NOTES**

1. WATER QUALITY SUBSTRATES AND ASSOCIATED SOILS SHALL BE SELECTED TO ENSURE CONVEYANCE AND PERMEABILITY (MIN. 1"/HR, MAX 6"/HR) TO THE PROPOSED UNDERDRAIN OR SUBGRADE.
2. IN-PLACE INFILTRATION TESTS OF THE AMENDED SOIL IS REQUIRED IN ALL INFILTRATION BMP'S WHERE AMENDED SOILS ARE PROPOSED. A MINIMUM OF TWO TESTS PER BASIN SHALL BE PERFORMED UTILIZING ACCEPTABLE METHODS AS DESCRIBED IN THE PADEP BMP MANUAL IN ORDER TO CONFIRM THAT ACCEPTABLE INFILTRATION RATES HAVE BEEN ACHIEVED.
3. CLAY SOILS OR OTHER COHESIVES THAT PREVENT INFILTRATION SHALL NOT BE PERMITTED.
4. ALL SOIL TO BE UTILIZED IN THE AMENDED SOIL MIXTURE SHALL BE TESTED AND VERIFIED TO CONTAIN A MAXIMUM OF 5% CLAY CONTENT, OR A PERCENTAGE APPROVED BY THE TESTING AGENCY TO ENSURE PROPER PERMEABILITY.
5. ALL SOILS SHALL BE TESTED AND VERIFIED NOT TO CONTAIN ANY CONTAMINANTS OR OBJECTIONABLE MATERIALS THAT WOULD COMPROMISE THE INTENT OF WATER QUALITY.
6. THE LEAF BASED COMPOST SHALL BE PROVIDED WITH A MATERIAL CERTIFICATION FROM THE SUPPLIER FOR APPROVAL PRIOR TO INSTALLATION. NO BIO-SOLIDS OR OTHER SUCH CONTAMINANTS ARE PERMITTED.

**TYPICAL AMENDED SOIL MIXTURE**

- 10% FINE COMPOST
- 10% MASONRY SAND
- 80% TOPSOIL

**FINE COMPOST FOR BMP SOIL:**

- 75% BY VOLUME RECYCLED PLANT WASTE
  - 25% MAX. OTHER APPROVED ORGANIC WASTE (NO POST-CONSUMER FOOD WASTE, MANURE OR BIO-SOLIDS)\*
- \*SOIL SAMPLE MUST BE APPROVED BY DESIGN AND MUNICIPAL ENGINEERS PRIOR TO PLACEMENT. CONTRACTOR TO VERIFY NO POST-CONSUMER FEED WASTE OR SOLIDS USED IN PREPARATION OF SOILS.

**SOIL INSTALLATION & COMPACTION NOTES FOR BMP:**

1. CONTRACTOR TO SELECT EQUIPMENT TO MINIMIZE COMPACTION OF THE REQUIRED AMENDED SOILS WITHIN THE BMP AREA.
2. THE AMENDED SOIL MIXTURE SHALL BE FULLY AND PROPERLY BLENDED TO PROVIDE A UNIFORM HOMOGENEOUS MIXTURE.
3. PLACE AMENDED SOIL MIXTURE AT 12" MAX. LIFTS. PRESOAK LIFTS WITH LIGHT WATERING TO ENCOURAGE NATURAL COMPACTION OR IF CONSTRUCTION SCHEDULE PERMITS, ALLOW FOR NATURAL SETTLEMENT WITH THE HELP OF RAIN EVENT TO PRESOAK THE SOIL MEDIUM.
4. IF NATURAL SETTLEMENT IS ANTICIPATED, THE CONTRACTOR SHALL BACKFILL AN APPROPRIATE AMOUNT ABOVE THE SPECIFIED BMP BOTTOM INVERT TO ACCOUNT FOR SUCH.

**C** BMP AMENDED SOIL/SEEDING NOTES  
NOT TO SCALE

**SEEDING NOTES AND RECOMMENDATIONS FOR BMP BASINS**

1. TO PREVENT SEED MIGRATION IN RAIN EVENTS, HYDROSEEDING OR AN APPROVED METHOD SHALL BE EMPLOYED TO THE BASIN BOTTOM ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
2. SUCH HYDROSEEDING SHALL INCORPORATE AN APPROPRIATE MIXTURE OF SEED, MULCH, AND TACKIFIER CONSISTANT TO WATER TO FORM A THICK SLURRY. THIS SLURRY IS APPLIED WITH PRESSURE TO PREPARED SOIL SURFACE FOR BETTER SEED GERMINATION AND PLANT DEVELOPMENT, WHILE PREVENTING EROSION.
3. SUPPLEMENTAL WATERING MAY BE NECESSARY IF PLANTING DURING PERIODS OF DRY WEATHER.
4. IN ANTICIPATED AREAS OF EROSION FROM STORMWATER INFILTRATION, A JUTE MATTING OR EQUAL APPROVED EROSION CONTROL LINING SHALL BE INSTALLED ALONG THE BASIN BOTTOM TO PROVIDE A SOIL STABILIZER AND ASSIST WITH PROPER GERMINATION OF THE BMP SEED MIX.
5. WHERE A PERMANENT LINING IS SPECIFIED WITHIN THE BMP SEEDING LIMITS, A THIN LAYER OF TOP SOIL SHALL BE PROVIDED OVER THE LINING PRIOR TO SEEDING TO ALLOW FOR A GERMINATION OF THE SEED MIX.

**SEEDING SPECIFICATION**

1. IT IS THE INTENT OF THE SEEDING TO ESTABLISH A MEADOW GRASS BOTTOM OF THE BMP BASINS). MEADOW BOTTOMS ARE NOT TO BE MOVED OTHER THAN RECOMMENDED SEMI-ANNUAL MAINTENANCE.
2. THE BASIN BOTTOMS, ONCE PLANTED, MUST BE MAINTAINED TO PERMANENTLY ESTABLISH THE REQUIRED VEGETATION. MAINTENANCE MUST INCLUDE WATERING, WEEDING, OVER SEEDING, RE-SEEDING AND ALL OTHER REQUIRED MAINTENANCE.
3. THE SEED MIXTURE TO BE USED IS THE FOLLOWING (OR APPROVED EQUAL) AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ASSOCIATED SITE CONDITIONS. IT IS RECOMMENDED THAT THE SEED BE HYDRO- SEEDED INTO THE AMENDED SOILS.
4. CONTRACTOR IS TO PROVIDE ERN-MX #127 SEED MIX FOR MEADOW BOTTOMS AT A RATE OF 15 LBS/AC WITH AN ADDITION OF 4 LBS/ACRE (0.1 LB/1000 SQ FT) OF PANICUM ANCEPS (BEAKED PANIGRASS) MD ECOTYPE INTO THE ERN-MX-127. AS SPECIFIED BY ERNST SEED.

**MAINTENANCE/ESTABLISHMENT**

1. REGULAR MAINTENANCE OF THE FACILITY FOR THE FIRST 1-3 YEARS IS CRITICAL TO THE ESTABLISHMENT OF DESIRED SPECIES AND DENSE VEGETATION, WHICH IS CRITICAL IN MAINTAINING A WELL DRAINED SOIL, AND SHALL BE OVERSEEN BY A QUALIFIED LANDSCAPING PROFESSIONAL.
2. CRITICAL MAINTENANCE DURING THE ESTABLISHMENT PERIOD MAY INCLUDE WATERING, VECTOR CONTROL, ADDITIONAL SEEDING/RE-SEEDING, SEMI-ANNUAL MOWING, ETC.
3. AMENDED SOILS AND SEEDING SHOULD ONLY BE PLACED/PLANTED DURING TIMES OF THE YEAR WHERE GERMINATION IS FEASIBLE (SPRING/EARLY FALL), AS DEEMED APPROPRIATE BY A QUALIFIED LANDSCAPING PROFESSIONAL.

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REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT

**PRELIMINARY PLAN**  
SUBJECT:  
**STORMWATER DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

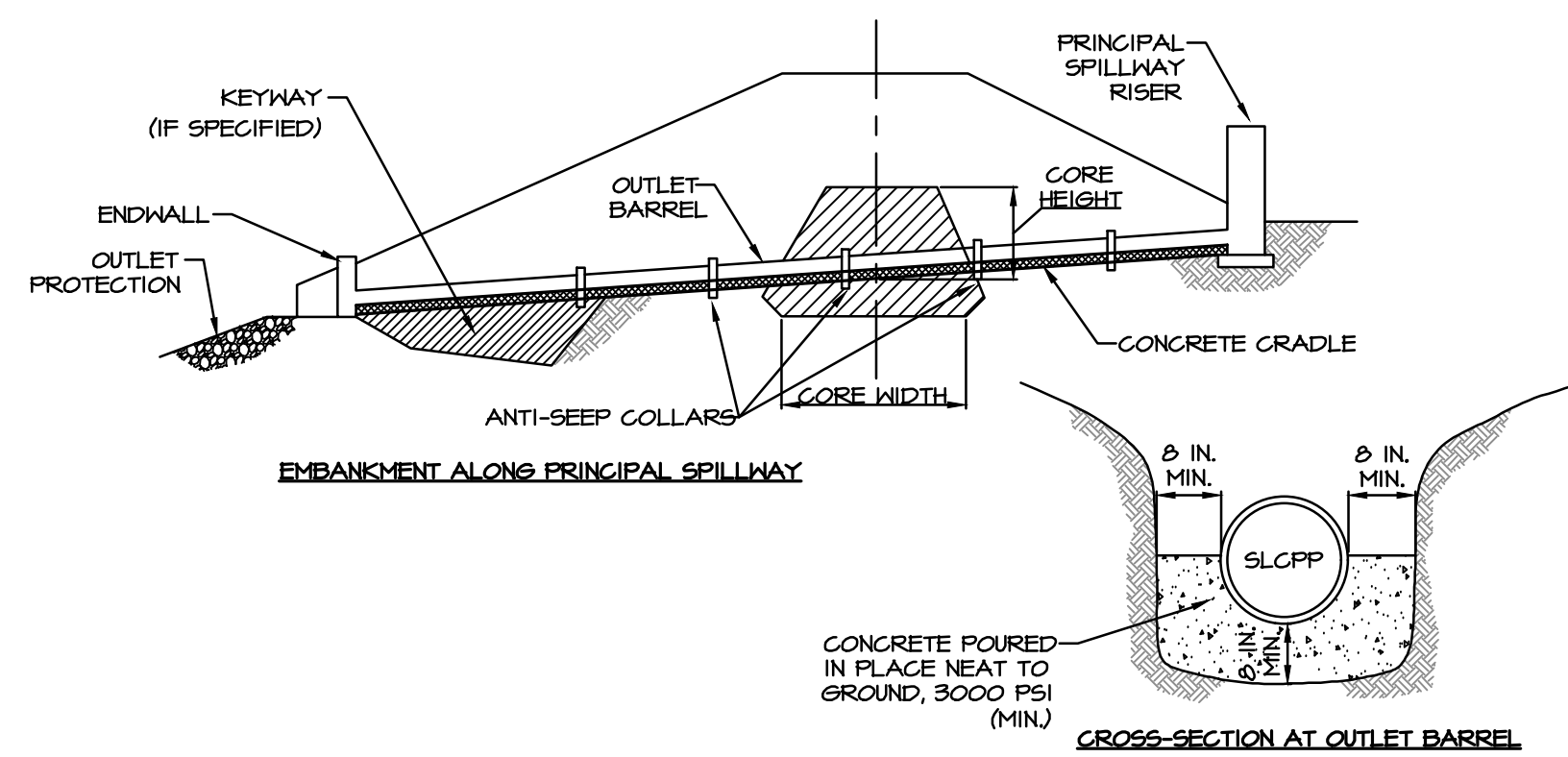
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DESIGNER:	BDG	PROJECT NO.:	1212-004
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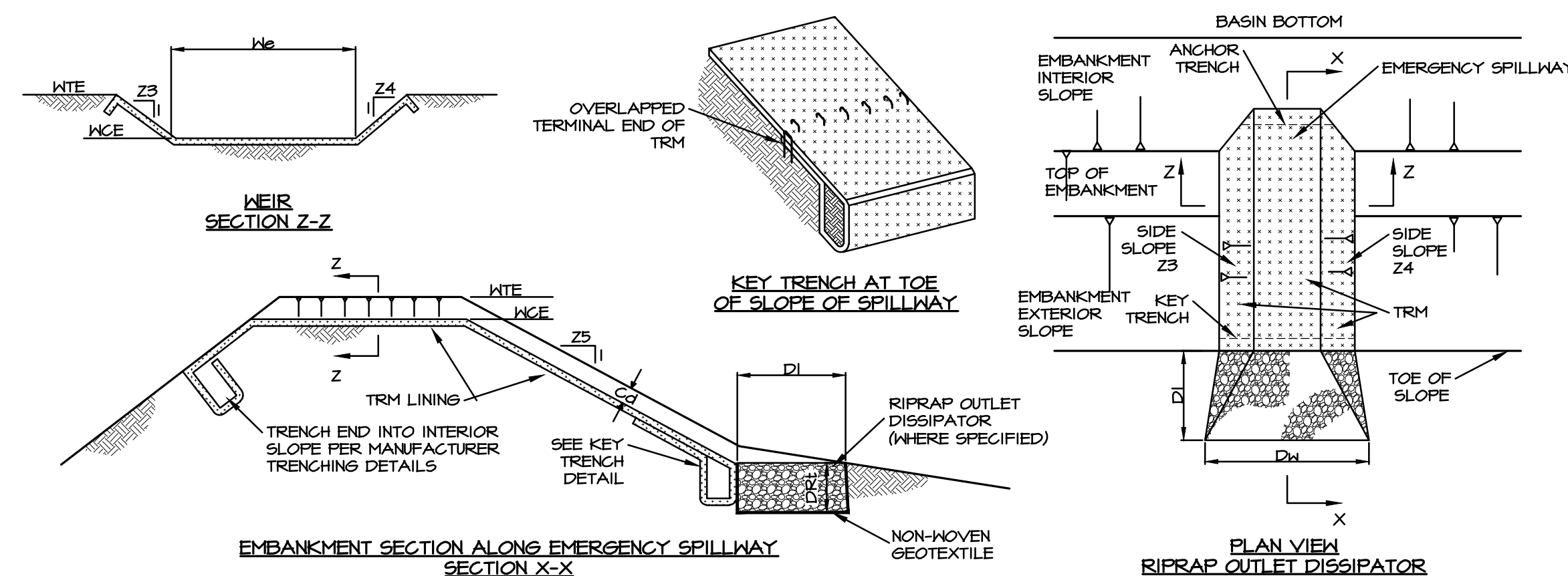


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**C CONCRETE CRADLE FOR BASIN OR TRAP OUTLET BARREL**

NO SCALE



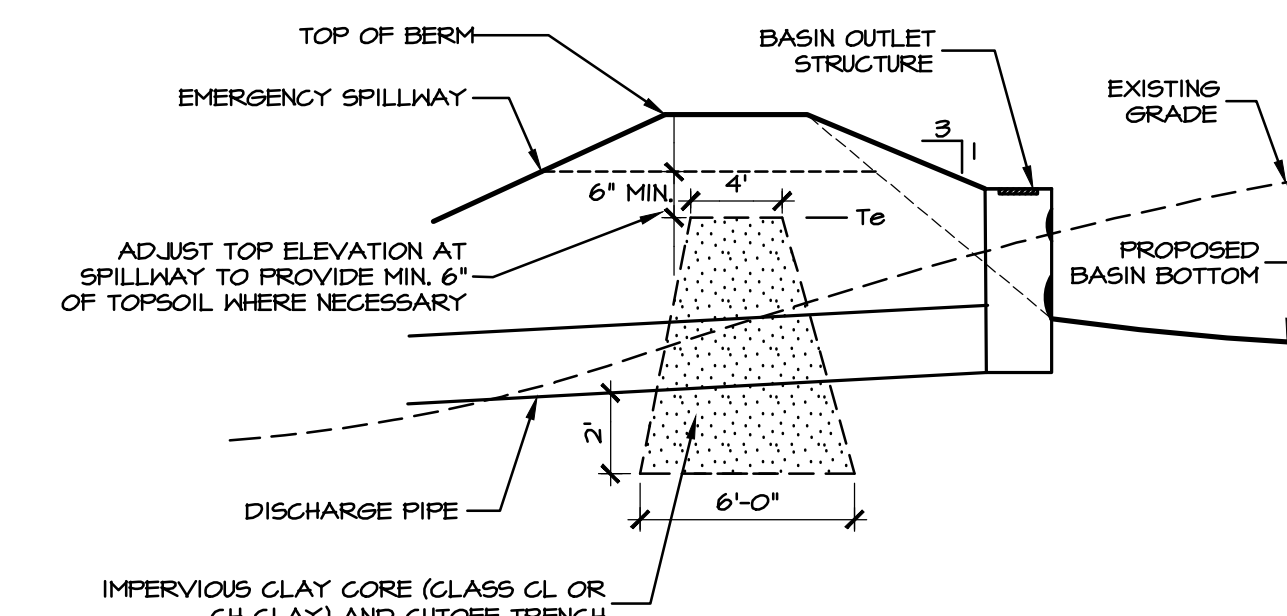
**D BASIN EMERGENCY SPILLWAY WITH TRM LINING**

NO SCALE

BMP NO.	EMERGENCY SPILLWAY DESIGN SCHEDULE												
	WEIR		PERM. CREST ELEV. WCE (FT)		LINING		CHANNEL		DISSIPATOR				
	Z3 (FT)	Z4 (FT)	TOP ELEV. WTE (FT)	PERM. CREST ELEV. WCE (FT)	WIDTH WE (FT)	TRM/LINING TYPE	STAPLE PATTERN	Z5 (FT)	DEPTH Cd (FT)	LENGTH D1 (FT)	WIDTH Dw (FT)	RIPRAP SIZE (R-)	RIPRAP THICKNESS DRL (IN)
15	4	4	367.50	366.25	20	NAS 575	D	N/A	N/A	N/A	N/A	N/A	N/A
20	4	4	370.50	369.25	20	NAS 575	D	N/A	N/A	N/A	N/A	N/A	N/A
23	4	4	366.00	364.75	20	NAS 575	D	N/A	N/A	N/A	N/A	N/A	N/A
26	4	4	347.00	346.00	20	NAS 575	D	N/A	N/A	N/A	N/A	N/A	N/A

**NOTES:**

- RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.
- THE USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.
- HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.
- DISPLACED LINER WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.
- LINE ENTIRE LENGTH & WIDTH OF SPILLWAY W/ SPECIFIED EROSION CONTROL MATTING & EXTEND TO TOE OF SLOPE OF OUTSIDE EMBANKMENT

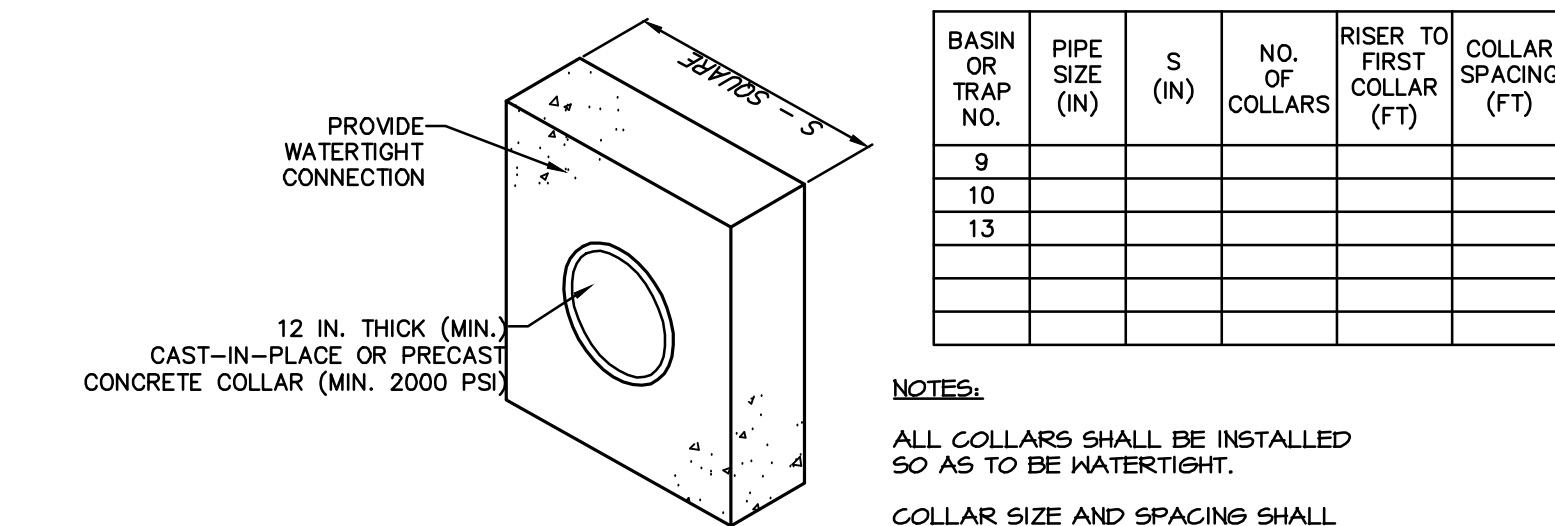


**NOTE:**

- BERM MATERIAL & COMPACTION SHALL BE IN ACCORDANCE WITH PADOT SPECIFICATION PUBLIC ACTION 408, SECTION 206.
- BASIN DISCHARGE PIPE TO BE PROVIDED WITH WATER TIGHT JOINTS. ALL CONNECTIONS TO STORM STRUCTURES SHALL BE WATER TIGHT. BACKFILL TRENCH WITH COMPACTED ONSITE MATERIAL.
- STRIP AND REMOVE ALL TOPSOIL AND ORGANIC MATTER FROM THE SUBGRADE OF THE BASIN EMBANKMENT AREA.
- A GEOTECHNICAL PROFESSIONAL SHALL APPROVE THE EMBANKMENT SUBGRADE PRIOR TO FILL PLACEMENT.

**B CLAY CORE / KEY TRENCH DETAIL AND SCHEDULE**

NO SCALE



**NOTES:**

- ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.  
COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

**D CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS**

NO TO SCALE

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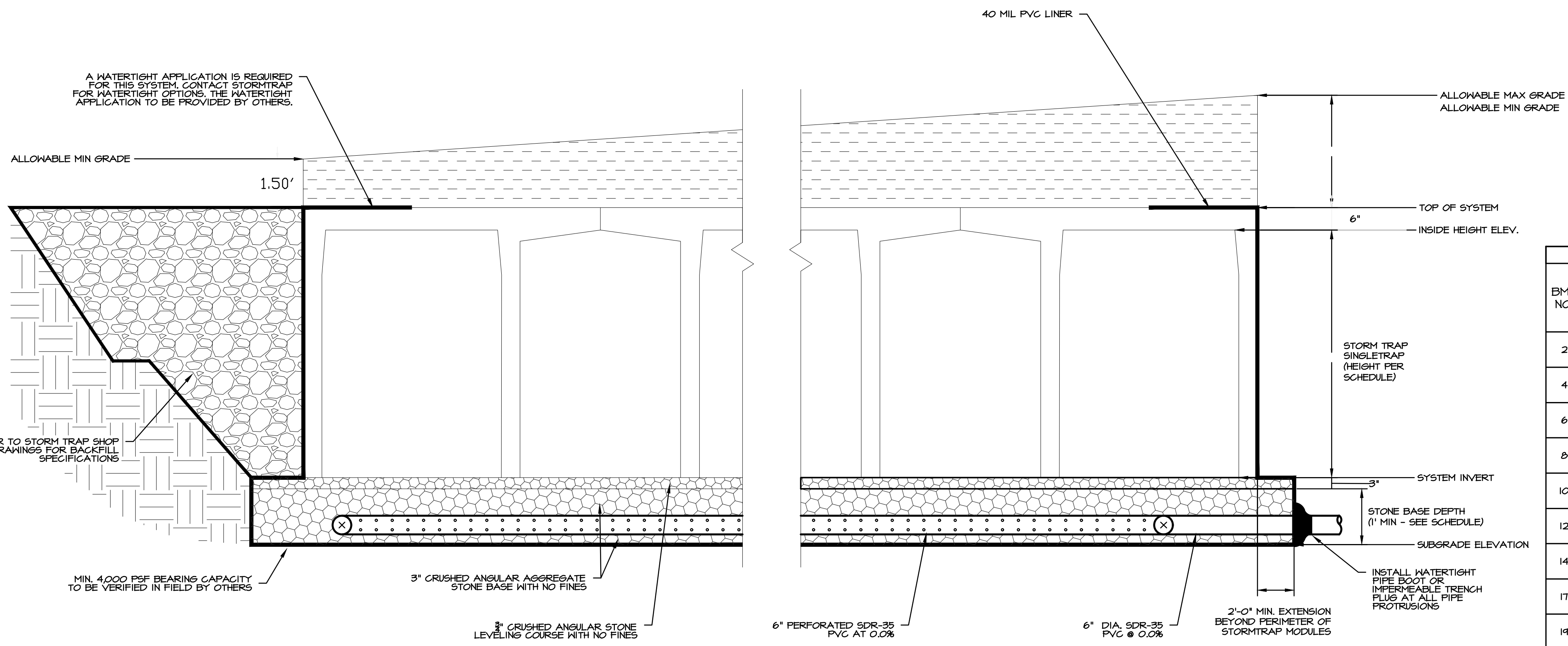
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TYLER E. HILL

**PRELIMINARY PLAN**  
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FOR  
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MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
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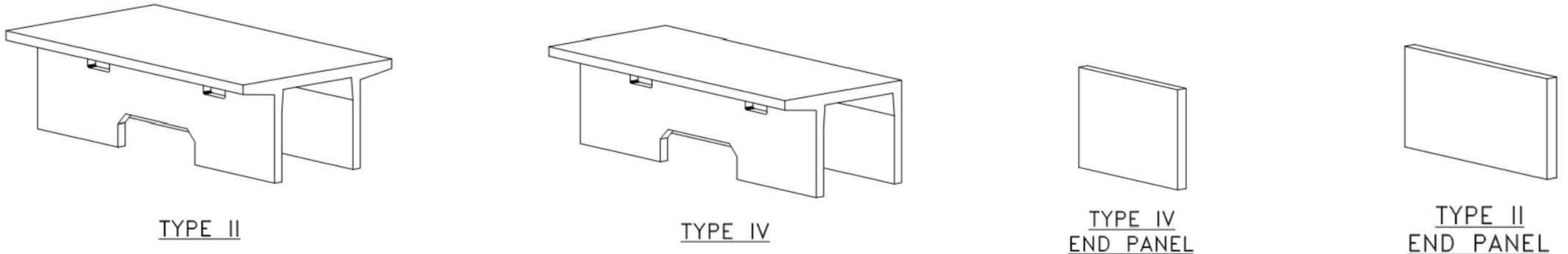


**SITE SPECIFIC DESIGN CRITERIA**

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PREPARED BY STORMTRAP TO THE ENGINEER OF RECORD AND MUNICIPALITY FOR APPROVAL PRIOR TO CONSTRUCTION. THE STORMTRAP DETAILS PROVIDED IN THIS PLAN SET ARE PROVIDED AS A BASIS OF DESIGN AND SHALL NOT BE USED FOR CONSTRUCTION.
3. COVER RANGE: MIN. 15' MAX. 55' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
4. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
5. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM. IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.
6. SYSTEM DESIGN INTENT IS TO CONTAIN WATER AND / OR PREVENT GROUNDWATER MIGRATION INTO THE SYSTEM AND WILL NOT BE SUBJECT TO LEAKAGE TESTING. A THIRD PARTY WATER PROOFING SOLUTION IS REQUIRED FOR SEALING OF SYSTEM / MODULE JOINTS AND SEAMS. SOLUTION TO BE PROVIDED AND INSTALLED BY CONTRACTOR IN ACCORDANCE WITH THIRD PARTY WATER-PROOFING SUPPLIER'S PRODUCT SPECIFICATIONS.

BMP NO.	STORAGE VOLUME (CF)			SUBGRADE ELEVATION (FT)	STONE BASE DEPTH	UNDERDRAIN INVERT ELEV. (FT)	SYSTEM INVERT ELEV. (FT)	SINGLE TRAP HEIGHT (FT)	INSIDE HEIGHT ELEV. (FT)	TOP OF SYSTEM (FT)	MIN. COVER ELEV. (FT)	MAX. COVER ELEV. (FT)
	STONE BASE STORAGE	SYSTEM STORAGE	TOTAL STORAGE									
2	1,996	17,764	19,760	401.00	1'-0"	341.25	402.00	4'-0"	406.00	406.50	408.50	411.00
4	2,578	22,941	25,519	395.50	1'-0"	345.75	396.50	4'-0"	400.50	401.00	403.75	406.50
6	2,281	20,353	22,640	396.00	1'-0"	346.25	397.00	4'-0"	401.00	401.50	402.50	405.00
8	2,578	22,941	25,519	393.50	1'-0"	343.75	394.50	4'-0"	398.50	399.00	402.75	406.00
10	2,281	20,353	22,640	393.00	1'-0"	343.25	394.00	4'-0"	398.00	398.50	400.00	405.00
12	2,281	20,353	22,640	393.00	1'-0"	343.25	394.00	4'-0"	398.00	398.50	400.00	405.00
14	2,012	8,104	10,116	364.00	1'-0"	364.25	365.00	4'-0"	369.00	369.50	371.00	374.00
17	1,601	14,247	15,848	370.50	1'-0"	370.75	371.50	4'-0"	375.50	376	377.75	381.25
19	3,108	27,661	30,769	365.50	1'-0"	365.75	366.50	4'-0"	370.50	371.00	372.50	377.50
22	2,354	20,454	23,308	381.75	1'-0"	382.00	382.75	4'-0"	386.75	387.25	388.50	392.00
25	1,647	14,660	16,307	393.00	1'-0"	393.25	394.00	4'-0"	398.00	398.50	400.00	404.00

**A** TYPICAL STORM TRAP 4'-0" SINGLETRAP CROSS SECTION DETAIL AND DESIGN SCHEDULE (REFER TO MANUFACTURER'S SHOP DRAWINGS FOR CONSTRUCTION)  
NO SCALE



- NOTES**
1. OPENING LOCATIONS AND SHAPES MAY VARY.
  2. SP - INDICATES A MODULE WITH MODIFICATIONS.
  3. P - INDICATES A MODULE WITH A PANEL ATTACHMENT.
  4. ROCKET WINDOW OPENINGS ARE OPTIONAL.
  5. REFER TO MANUFACTURER SHOP DRAWINGS FOR INSTALLATION INFORMATION/SPECIFICATIONS.

**B** STORM TRAP 4'-0" SINGLETRAP MODULE TYPES  
NO SCALE

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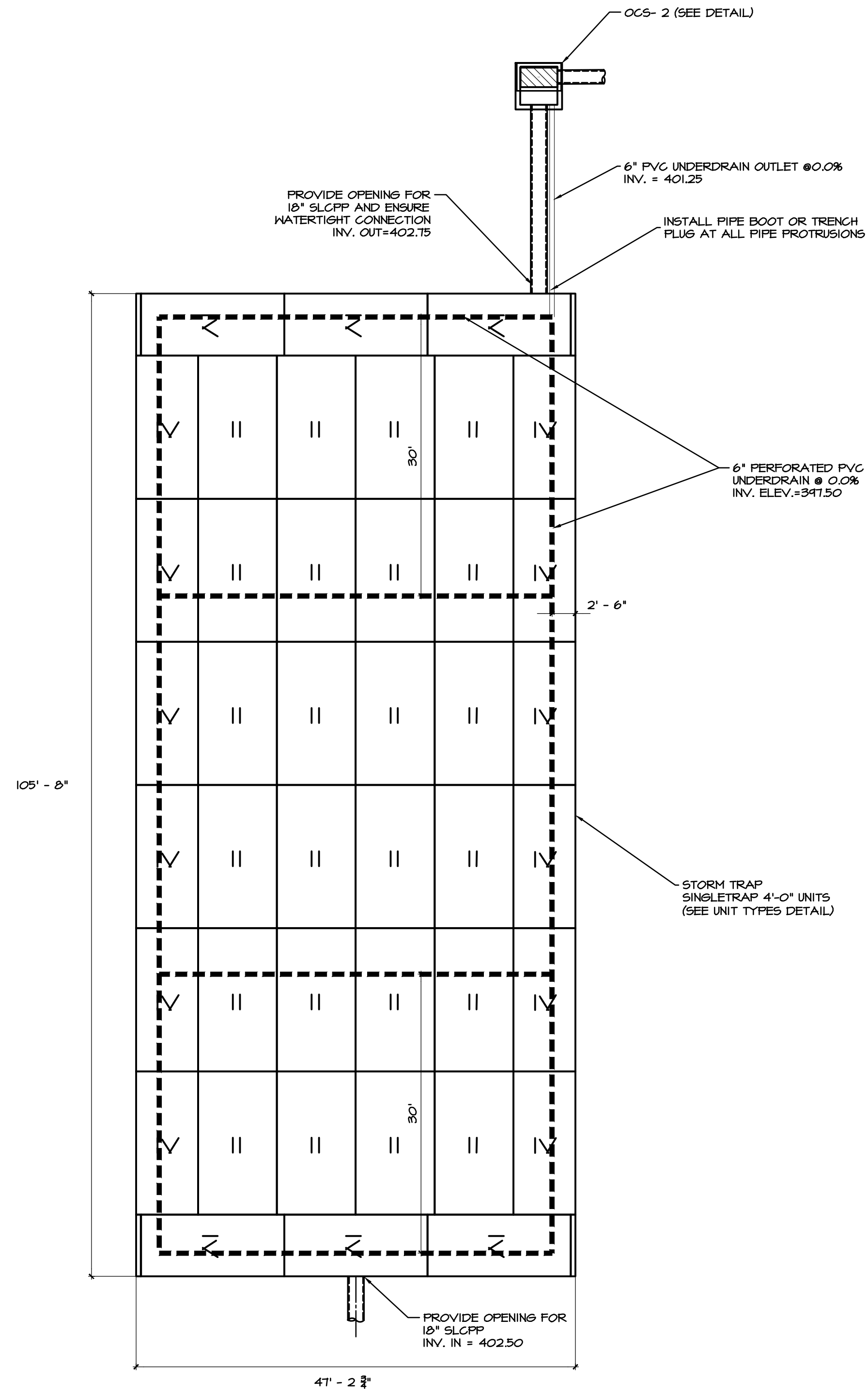
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PENNSYLVANIA

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CLIENT:  
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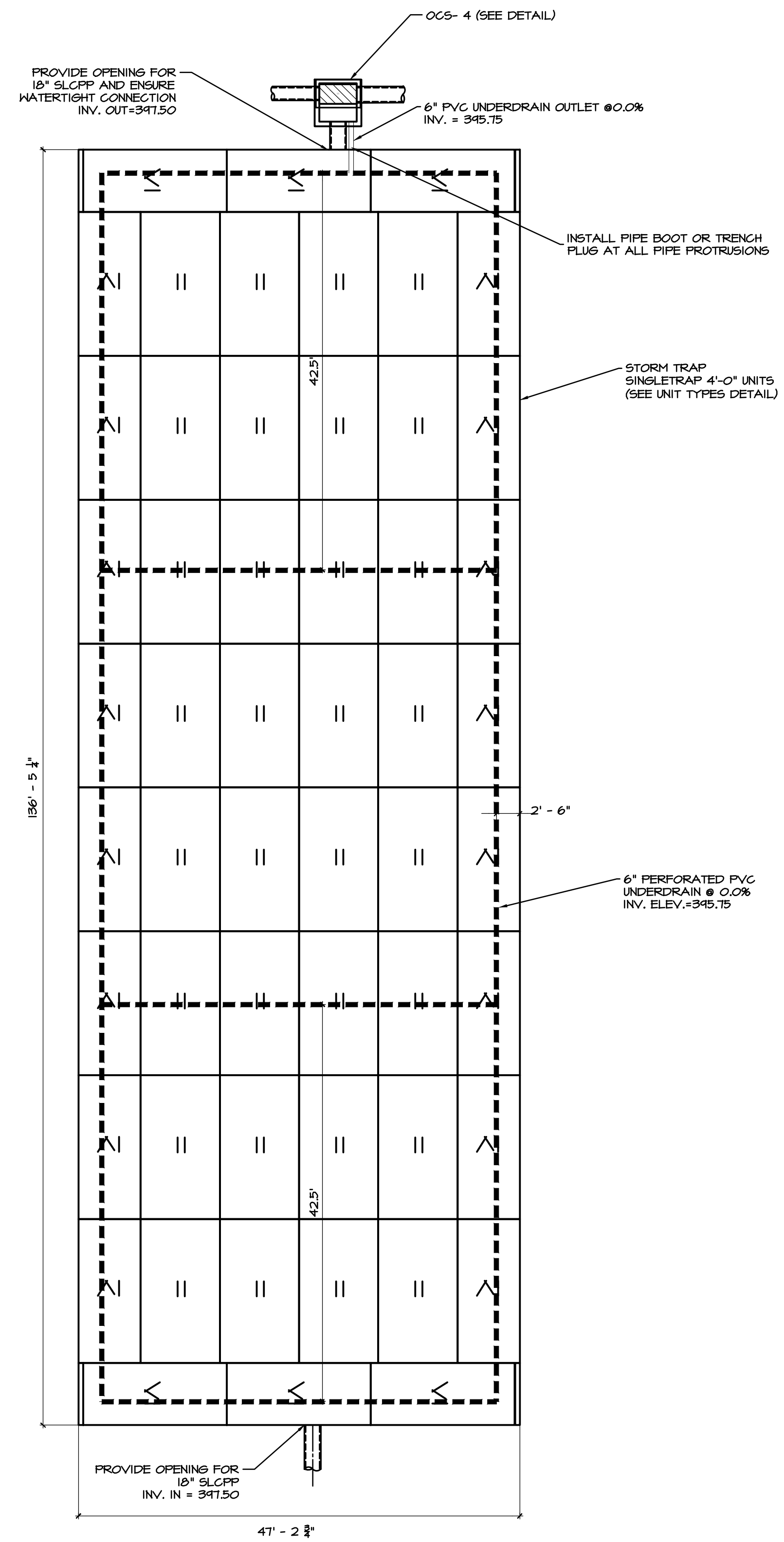
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**A** BMP 2 LAYOUT DETAIL  
1" = 10'



**B** BMP 4 LAYOUT DETAIL  
1" = 10'

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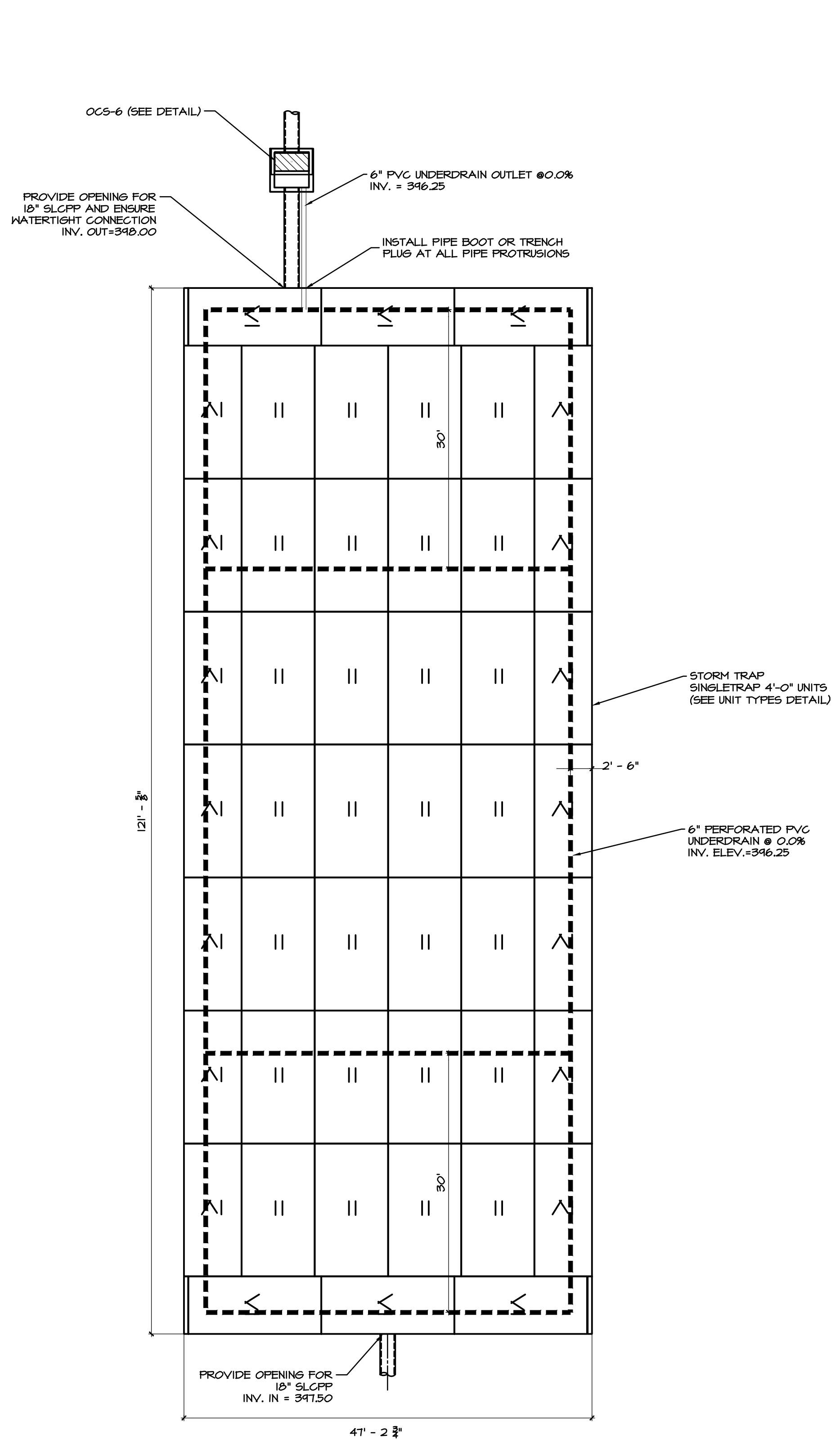
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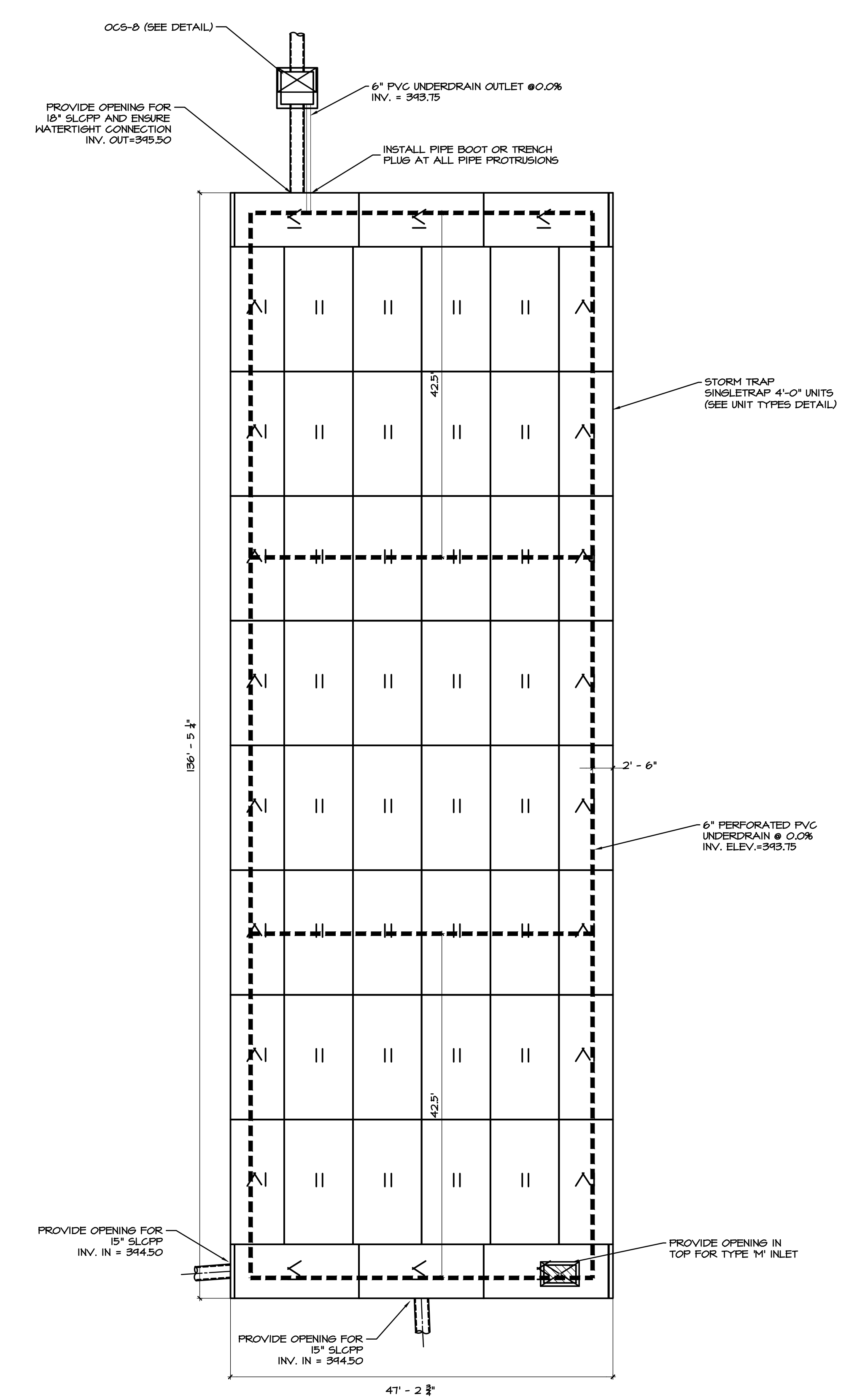
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**A** BMP 6 LAYOUT DETAIL  
1" = 10'



**B** BMP 8 LAYOUT DETAIL  
1" = 10'

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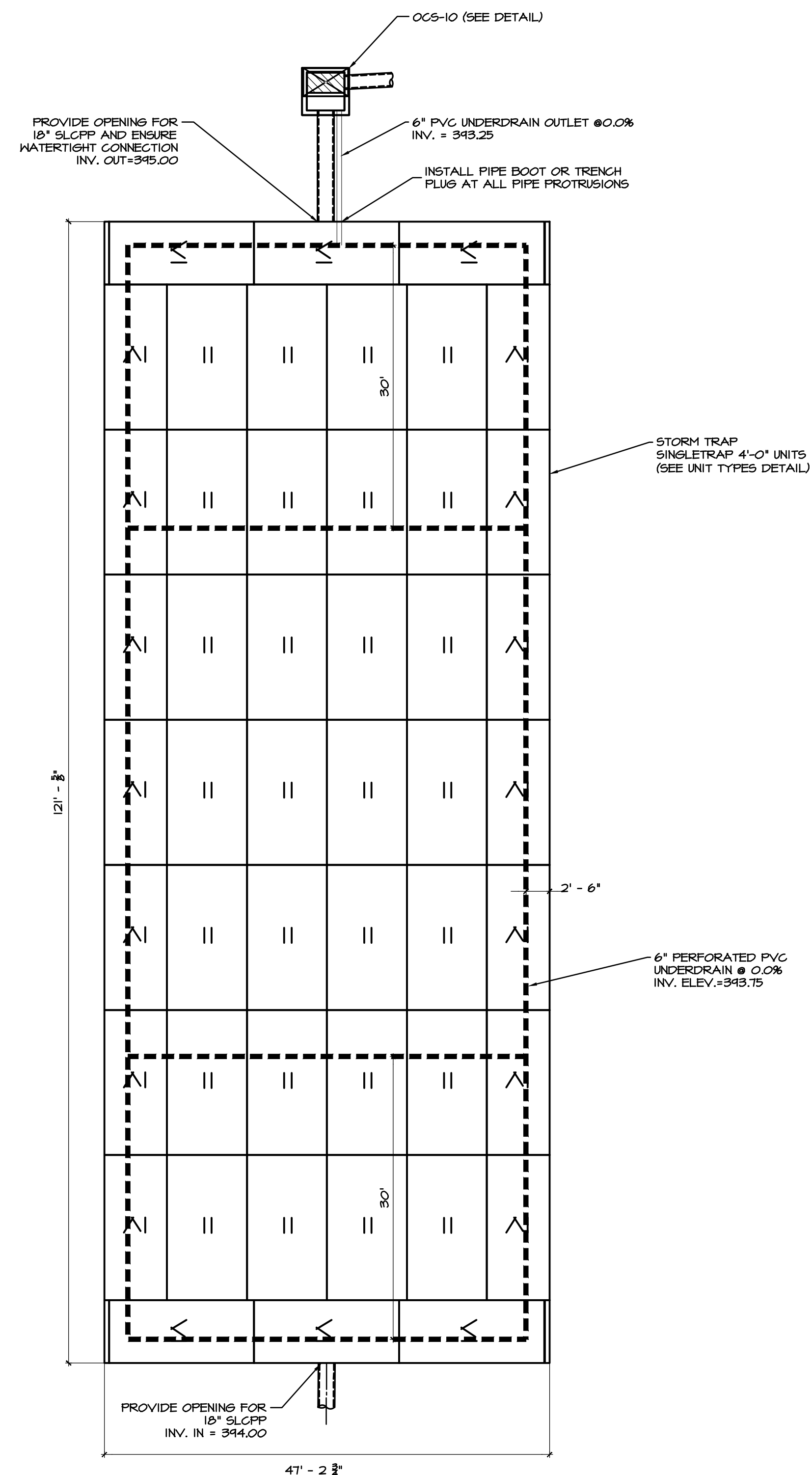
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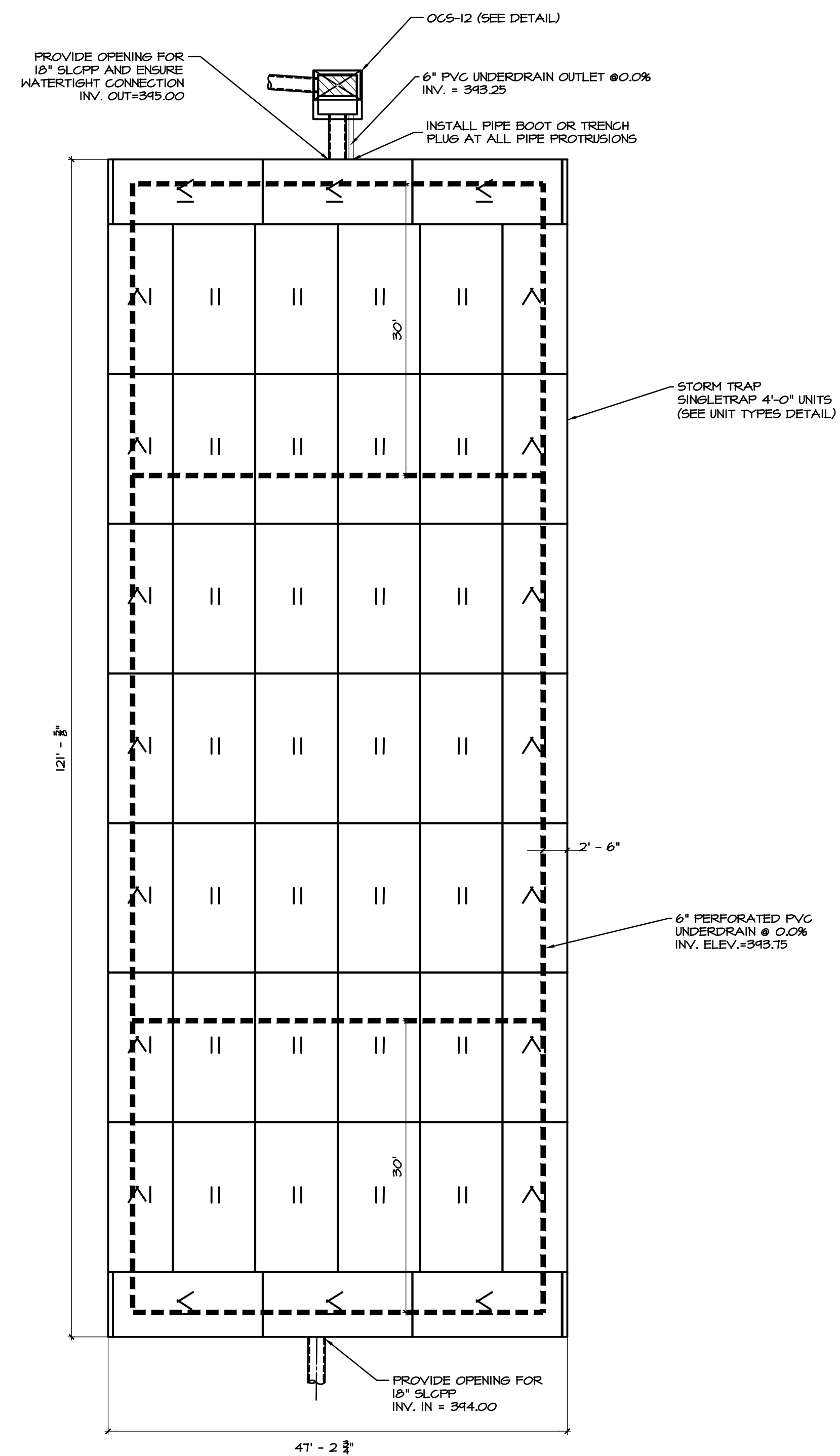
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**A** BMP 10 LAYOUT DETAIL  
1" = 10'



**B** BMP 12 LAYOUT DETAIL  
1" = 10'

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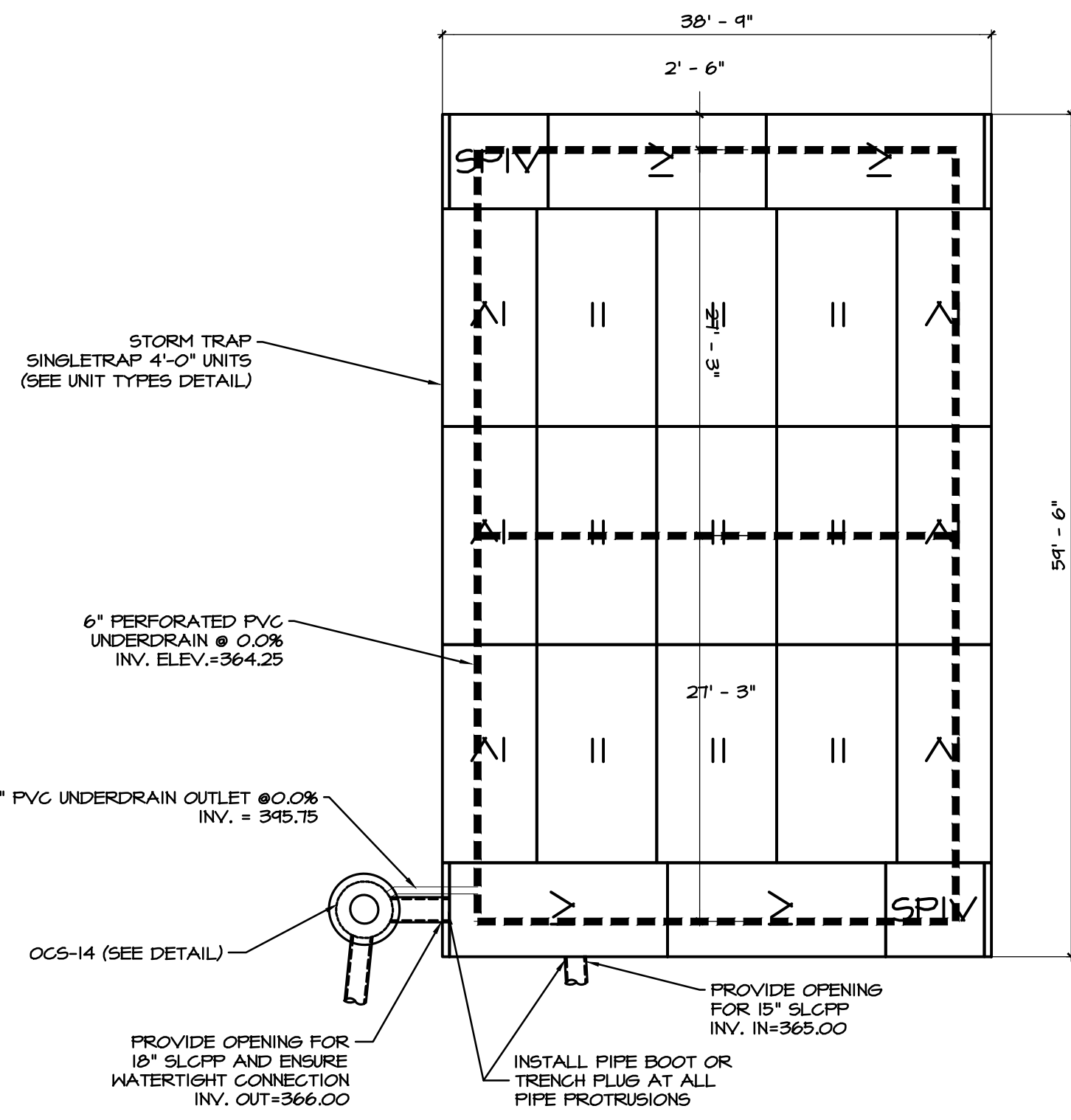
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TYLER E. HILL  
No. PC00080

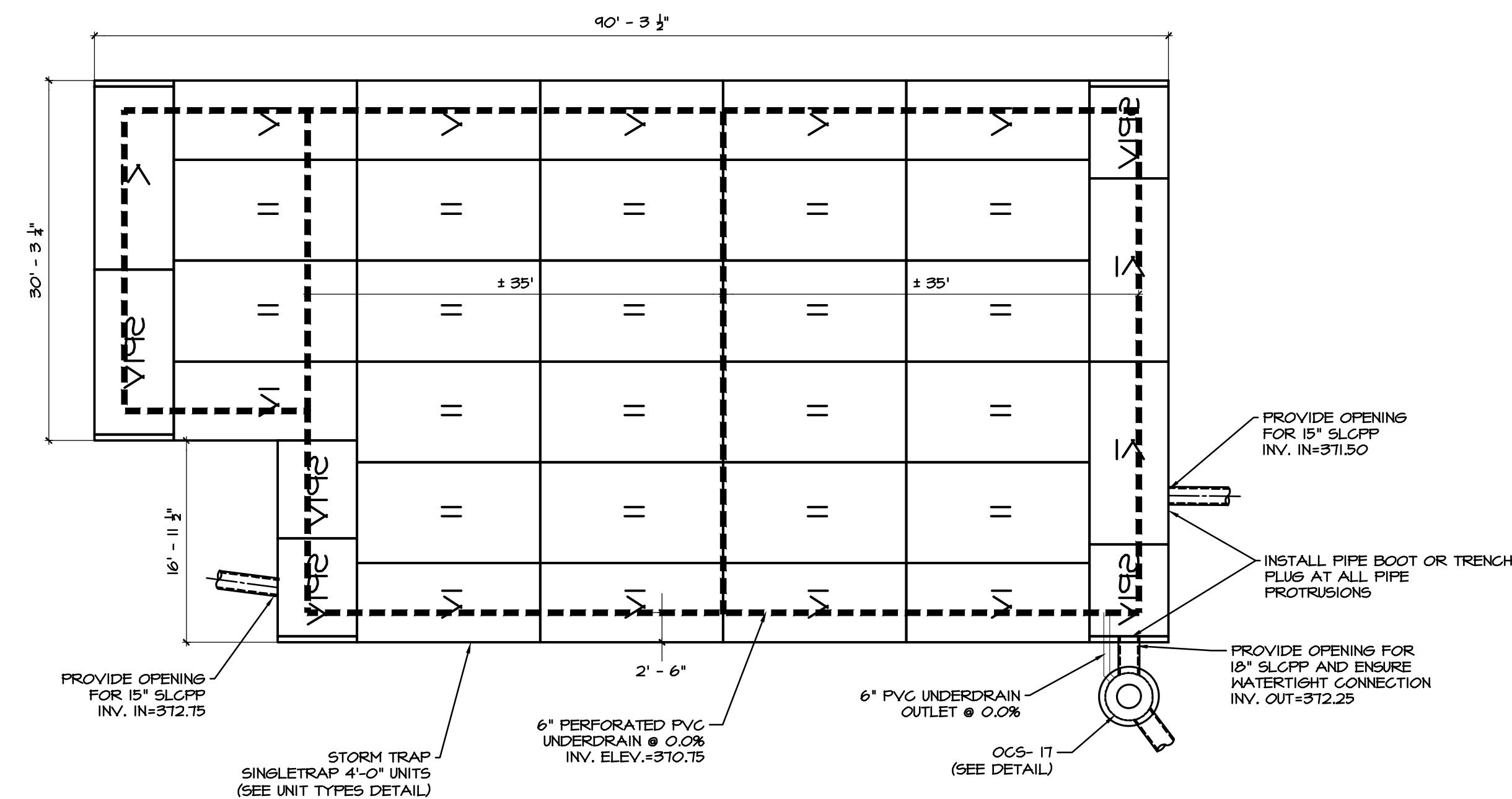
**PRELIMINARY PLAN**  
SUBJECT:  
**STORMWATER DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

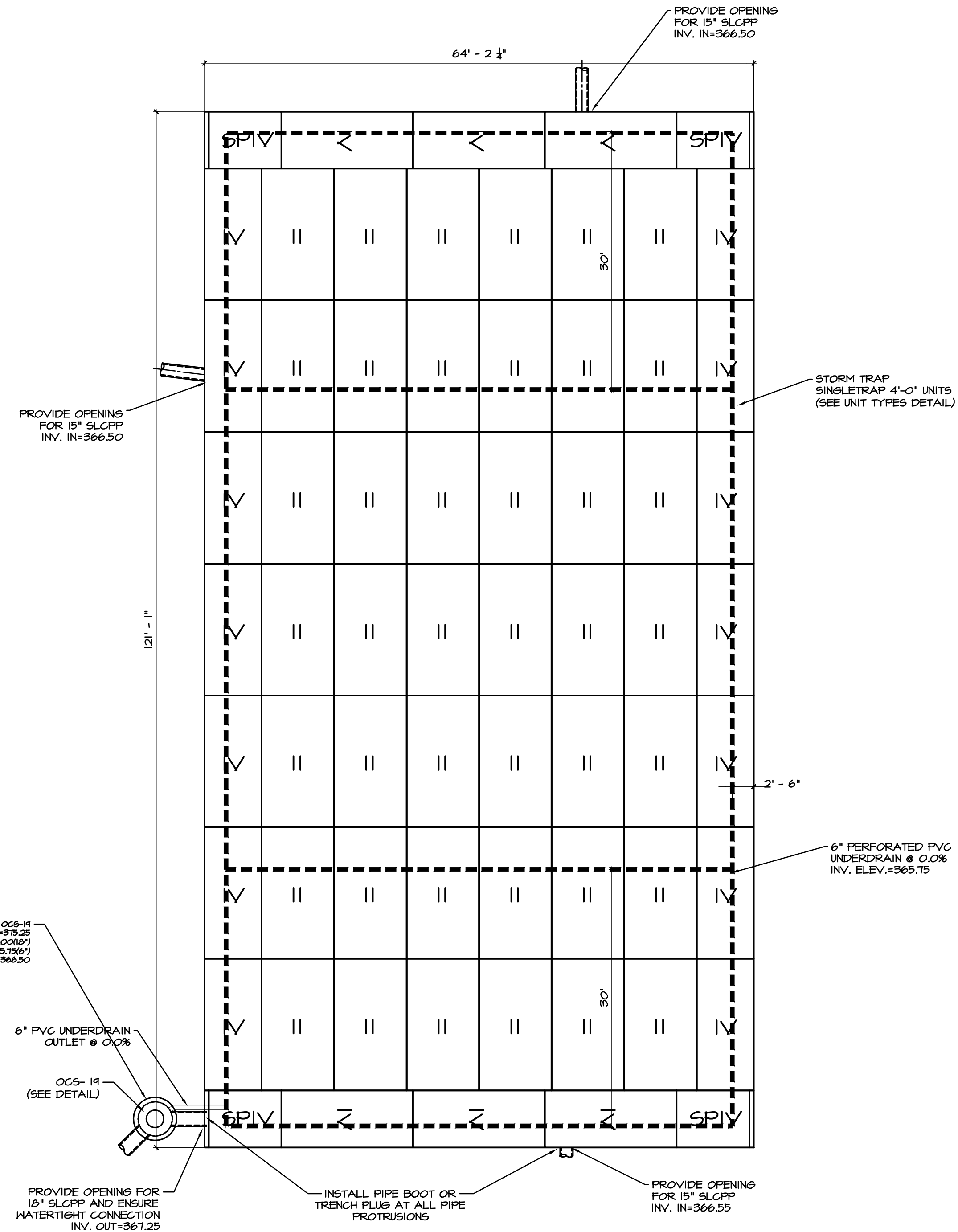
DRAWING NO.  
**69 of 86**



**A** BMP 14 LAYOUT DETAIL  
1" = 10'



**B** BMP 17 LAYOUT DETAIL  
1" = 10'



**C** BMP 19 LAYOUT DETAIL  
1" = 10'

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REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT

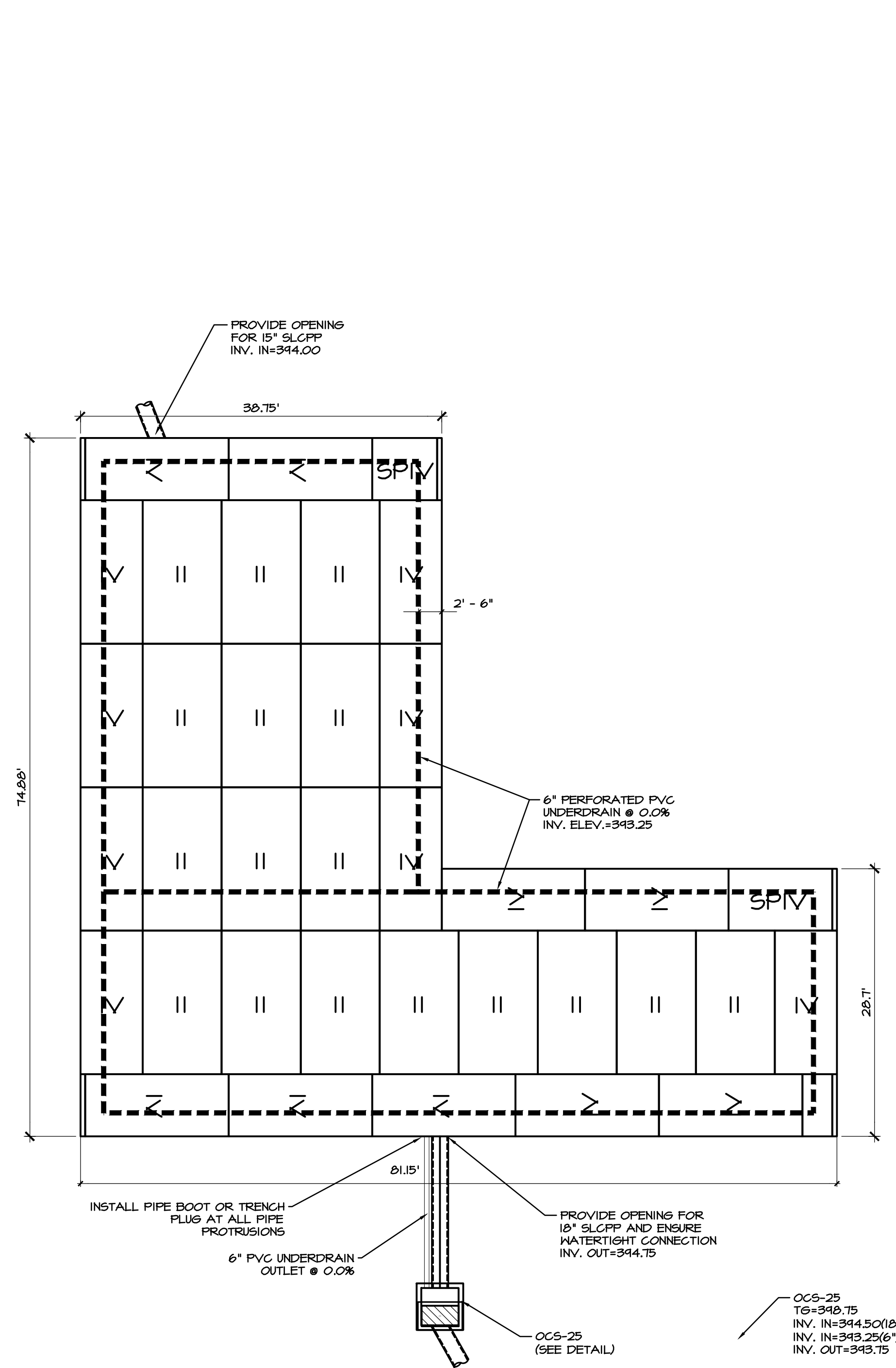
**PRELIMINARY PLAN**  
SUBJECT:  
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FOR  
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MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
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MANAGER:	BDG	DATE:	OCTOBER 7, 2024
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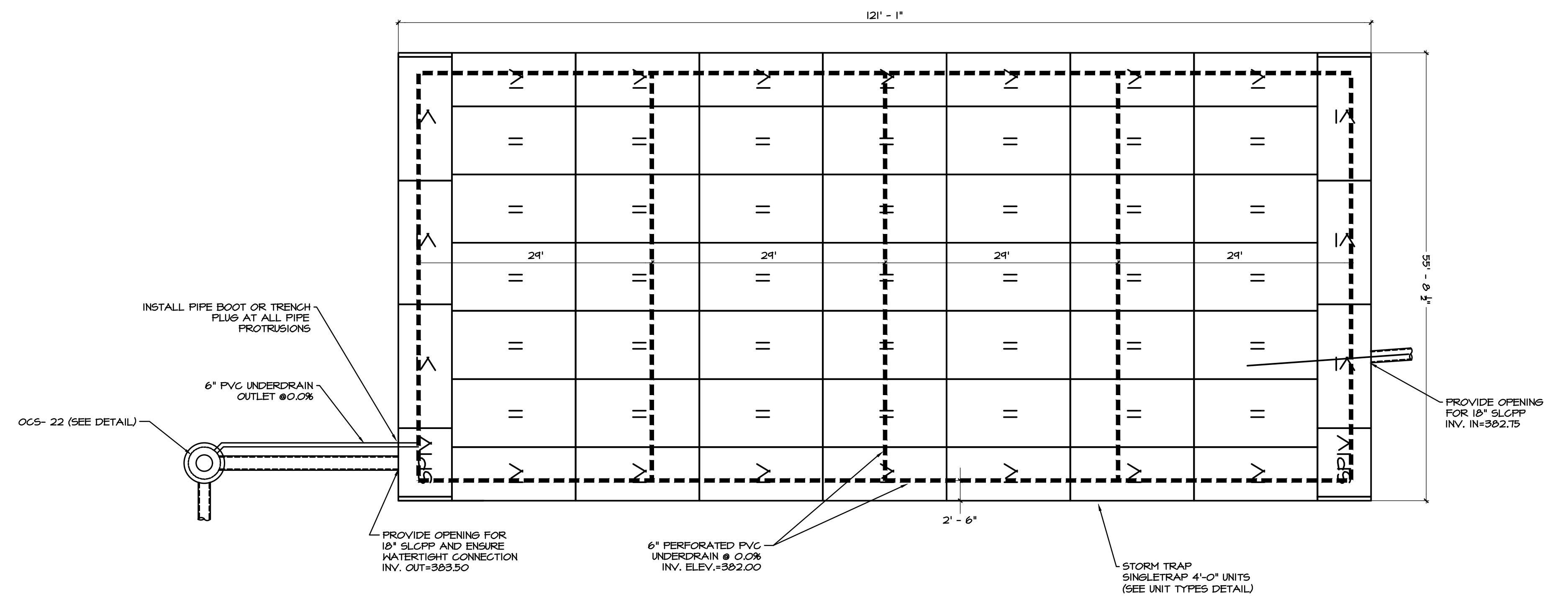
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**70 of 86**

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**(A) BMP 25 LAYOUT DETAIL**  
1" = 10'



**(B) BMP 22 LAYOUT DETAIL**  
1" = 10'

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LANDSCAPE ARCHITECT  
TYLER E. HILL  
NO. PC200802

PENNSYLVANIA  
REGISTERED PROFESSIONAL  
ENGINEER  
TYLER E. HILL  
NO. PC000850

PRELIMINARY PLAN

SUBJECT:  
**STORMWATER DETAILS**

FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

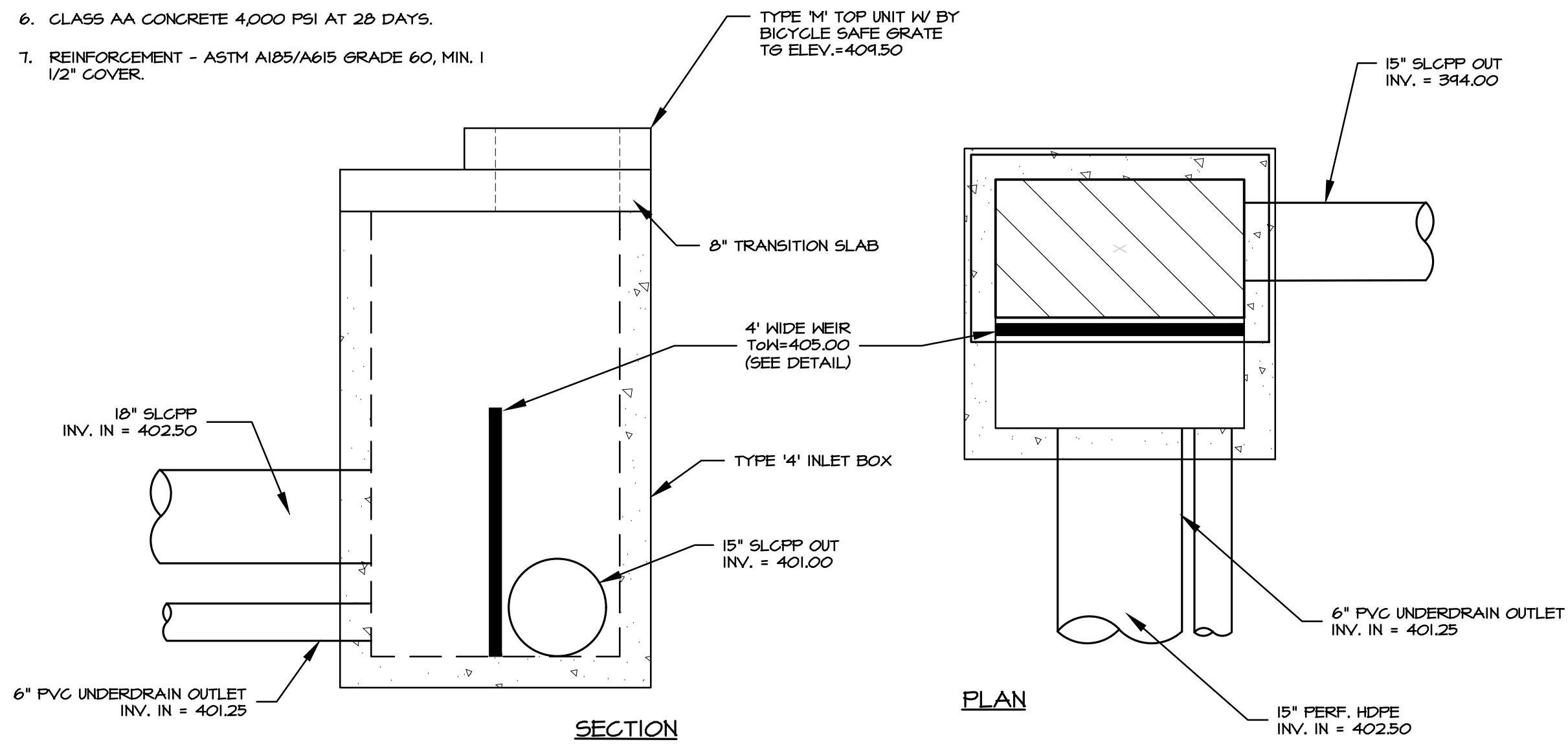
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

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**NOTES:**

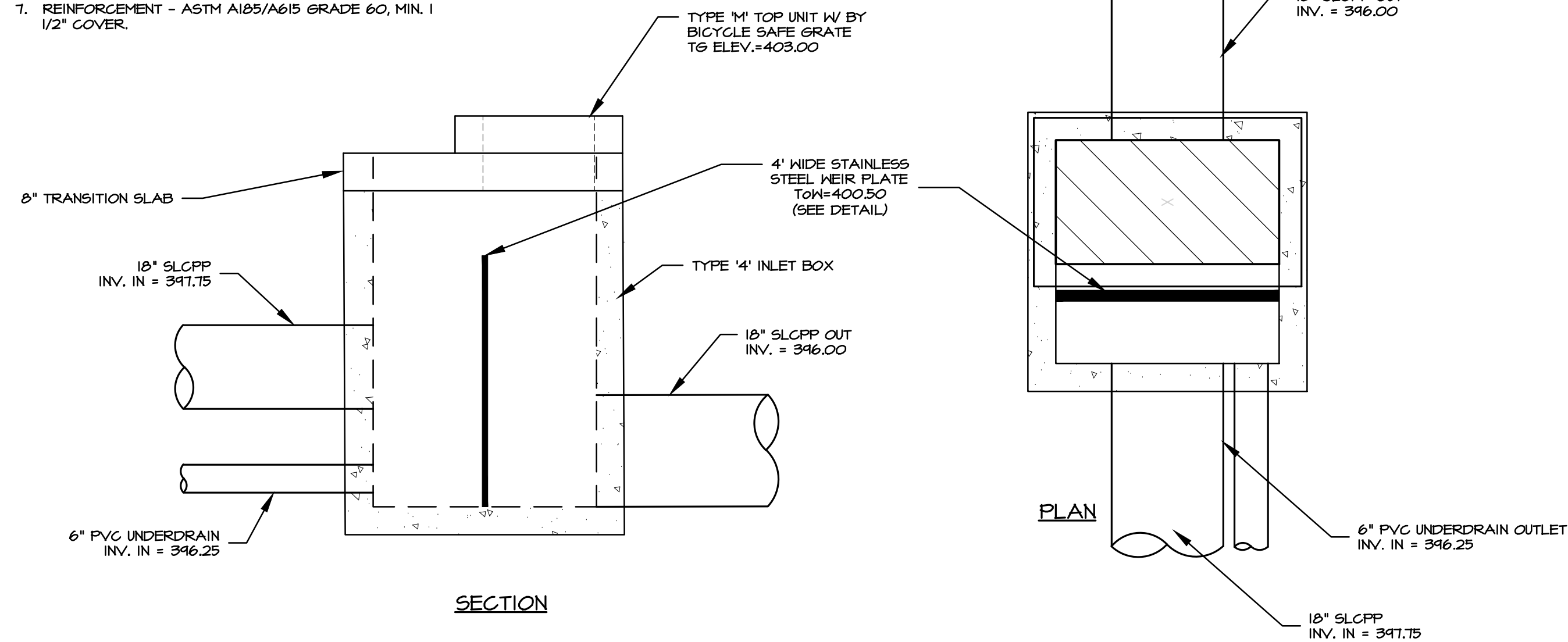
1. ALL CONNECTIONS TO OUTLET STRUCTURE MUST BE WATERTIGHT.
2. CONTRACTOR SHALL VERIFY BOX SIZING BASED ON PIPE SIZES & ALIGNMENT PRIOR TO ORDERING STRUCTURES.
3. STRUCTURES SHALL BE PRE-CAST.
4. DRAINAGE STRUCTURES THAT ARE FIVE FOOT OR GREATER IN DEPTH SHALL HAVE POLYPROPYLENE ENCASED MANHOLE STEPS INSTALLED PER CURRENT STANDARDS.
5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 408.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.



**A** OCS 2 DETAIL  
1/2" = 1'

**NOTES:**

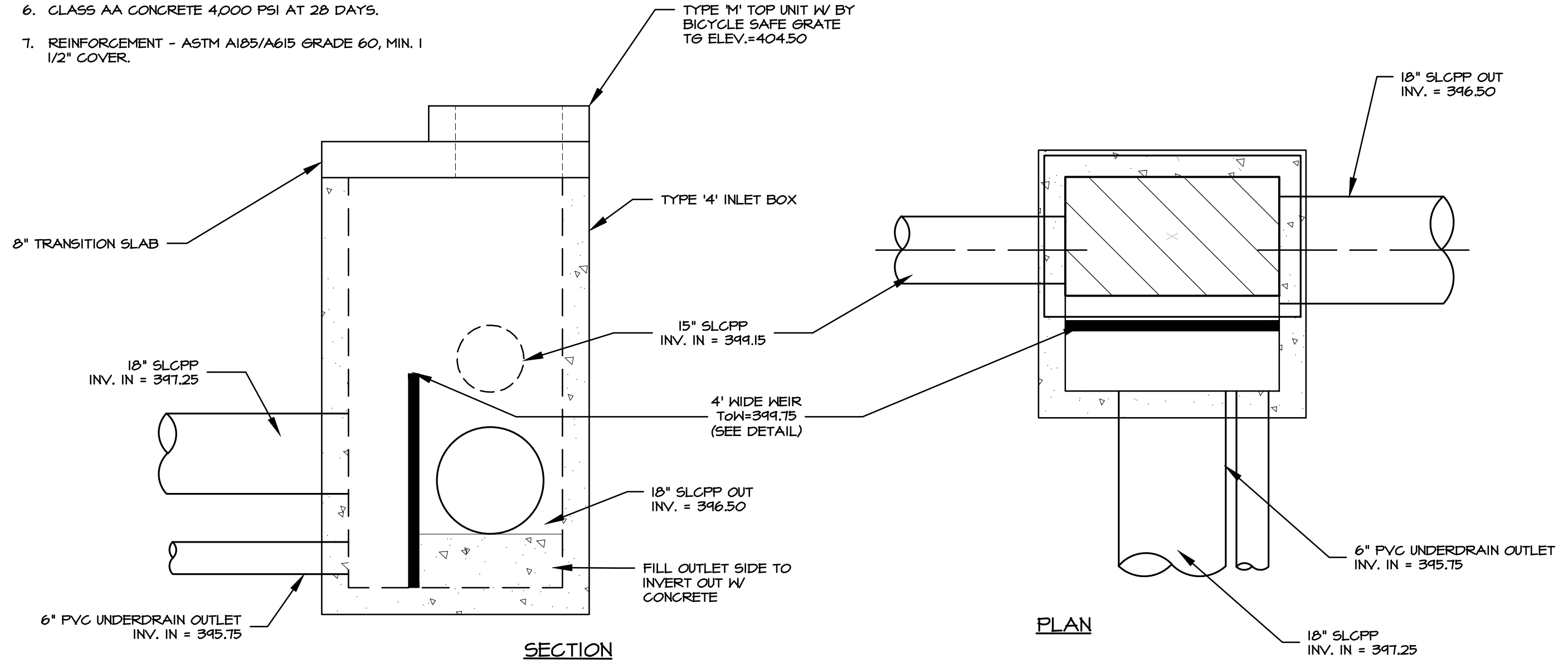
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5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 408.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.



**C** OCS 6 DETAIL  
1/2" = 1'

**NOTES:**

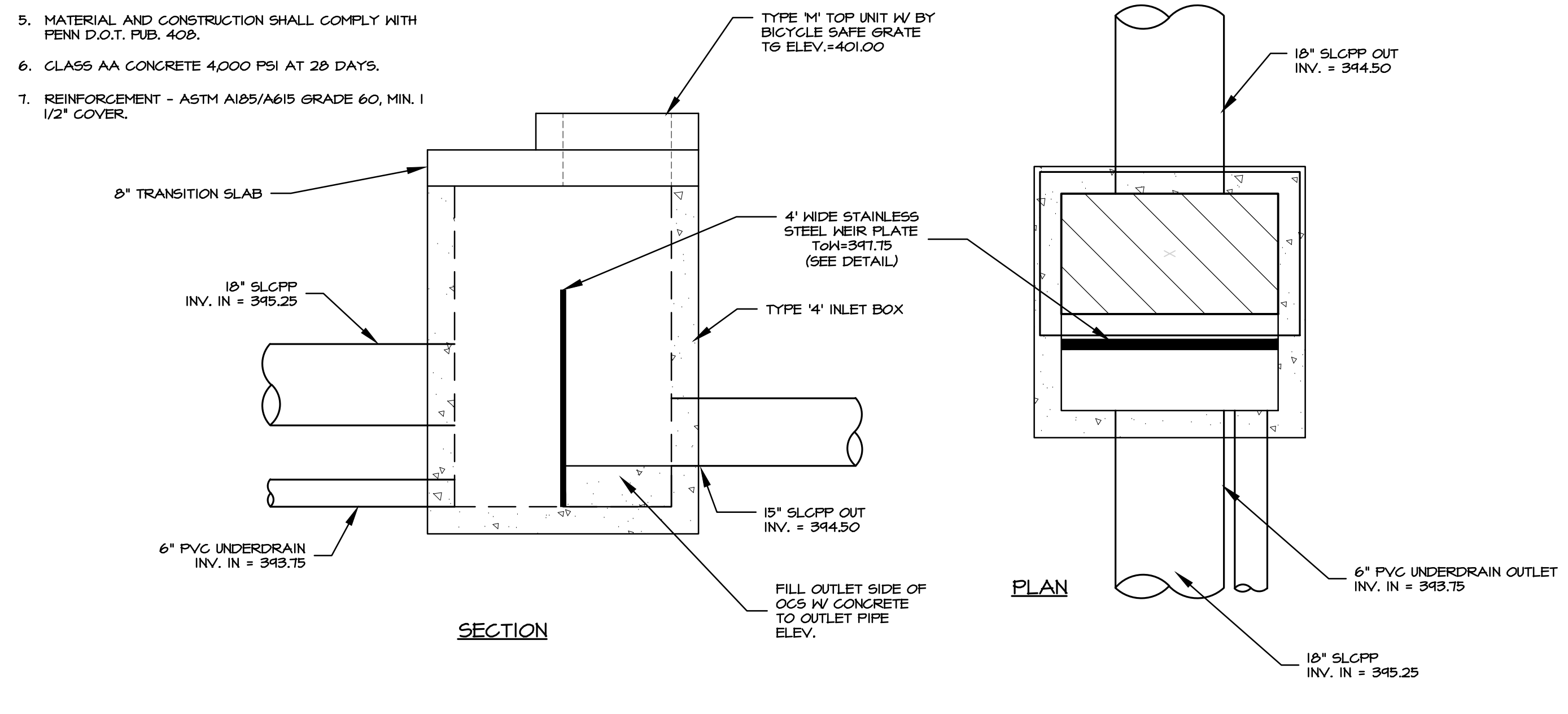
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5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 408.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.



**B** OCS 4 DETAIL  
1/2" = 1'

**NOTES:**

1. ALL CONNECTIONS TO OUTLET STRUCTURE MUST BE WATERTIGHT.
2. CONTRACTOR SHALL VERIFY BOX SIZING BASED ON PIPE SIZES & ALIGNMENT PRIOR TO ORDERING STRUCTURES.
3. STRUCTURES SHALL BE PRE-CAST.
4. DRAINAGE STRUCTURES THAT ARE FIVE FOOT OR GREATER IN DEPTH SHALL HAVE POLYPROPYLENE ENCASED MANHOLE STEPS INSTALLED PER CURRENT STANDARDS.
5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 408.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.



**D** OCS 8 DETAIL  
1/2" = 1'

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REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
PENNSYLVANIA

**PRELIMINARY PLAN**  
SUBJECT:  
**STORMWATER DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
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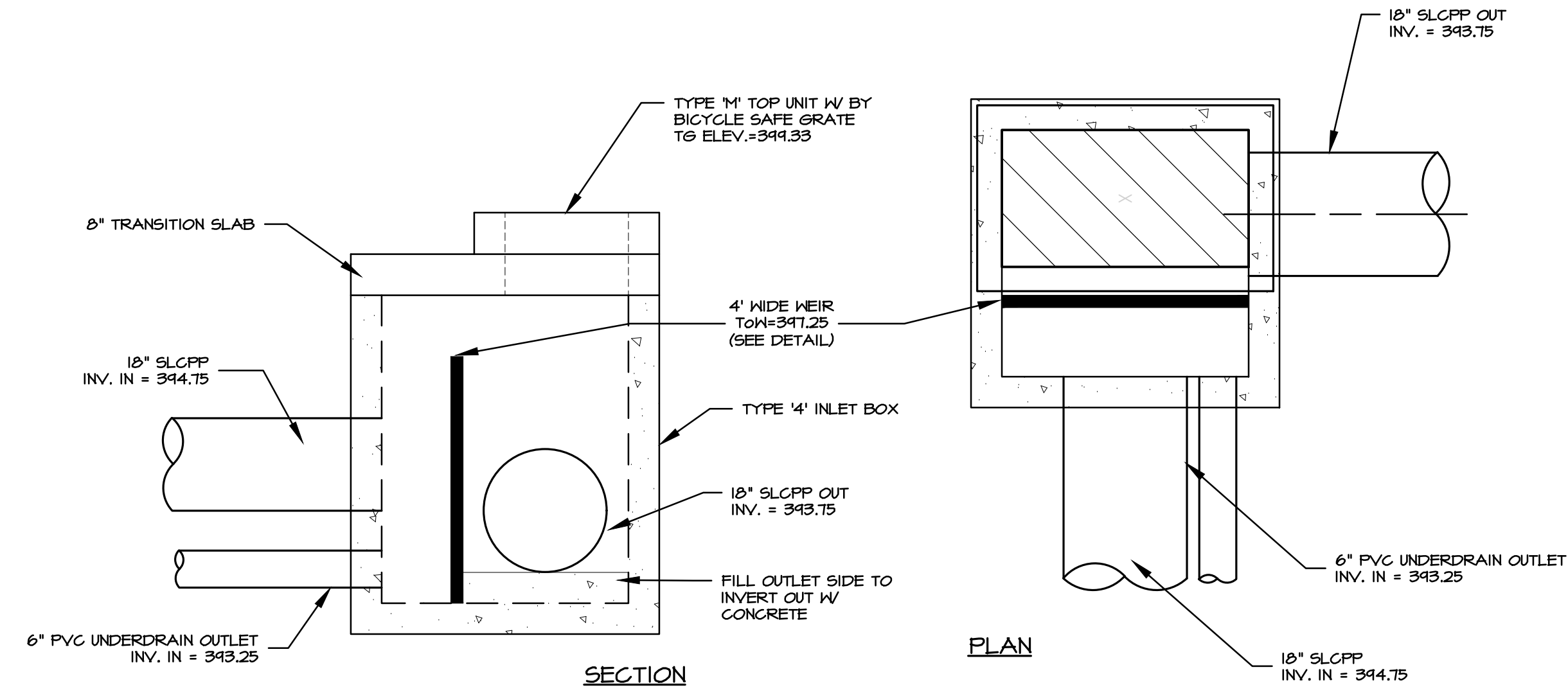
MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

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**NOTES:**

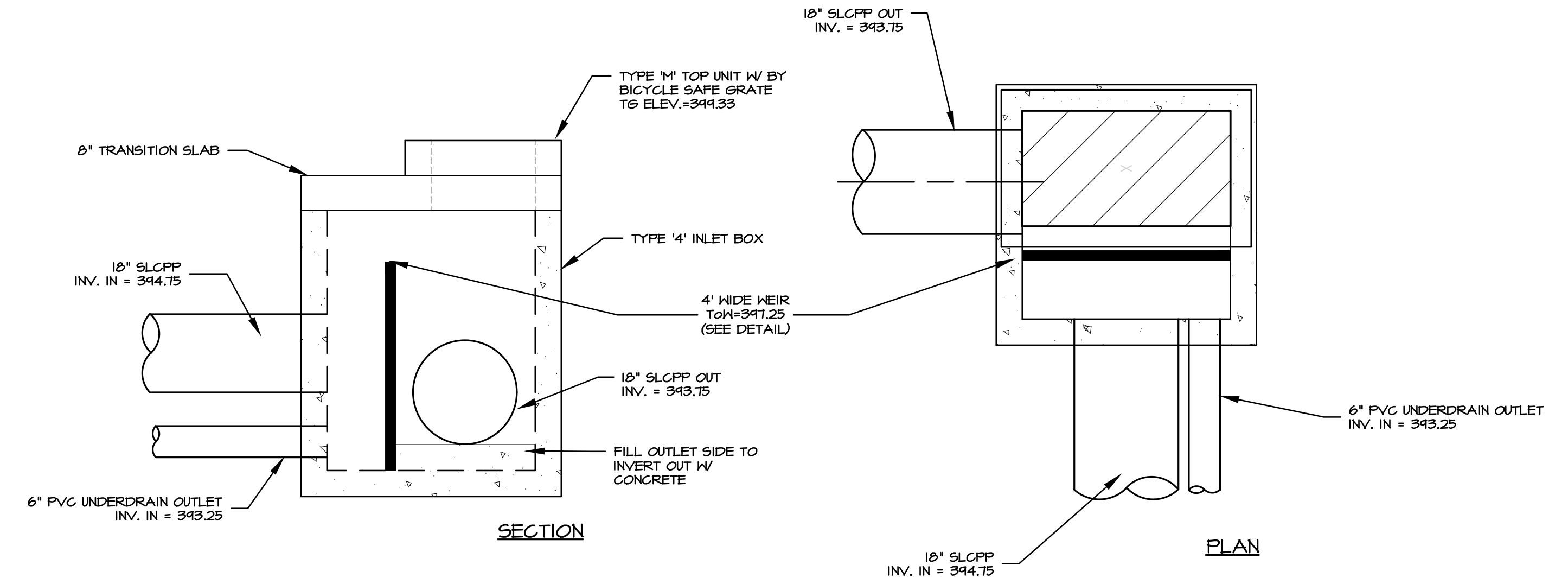
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5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 40B.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A105/A615 GRADE 60, MIN. 1 1/2" COVER.



**A** OCS 10 DETAIL  
1/2" = 1'

**NOTES:**

1. ALL CONNECTIONS TO OUTLET STRUCTURE MUST BE WATERTIGHT.
2. CONTRACTOR SHALL VERIFY BOX SIZING BASED ON PIPE SIZES & ALIGNMENT PRIOR TO ORDERING STRUCTURES.
3. STRUCTURES SHALL BE PRE-CAST.
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5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 40B.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A105/A615 GRADE 60, MIN. 1 1/2" COVER.



**B** OCS 12 DETAIL  
1/2" = 1'

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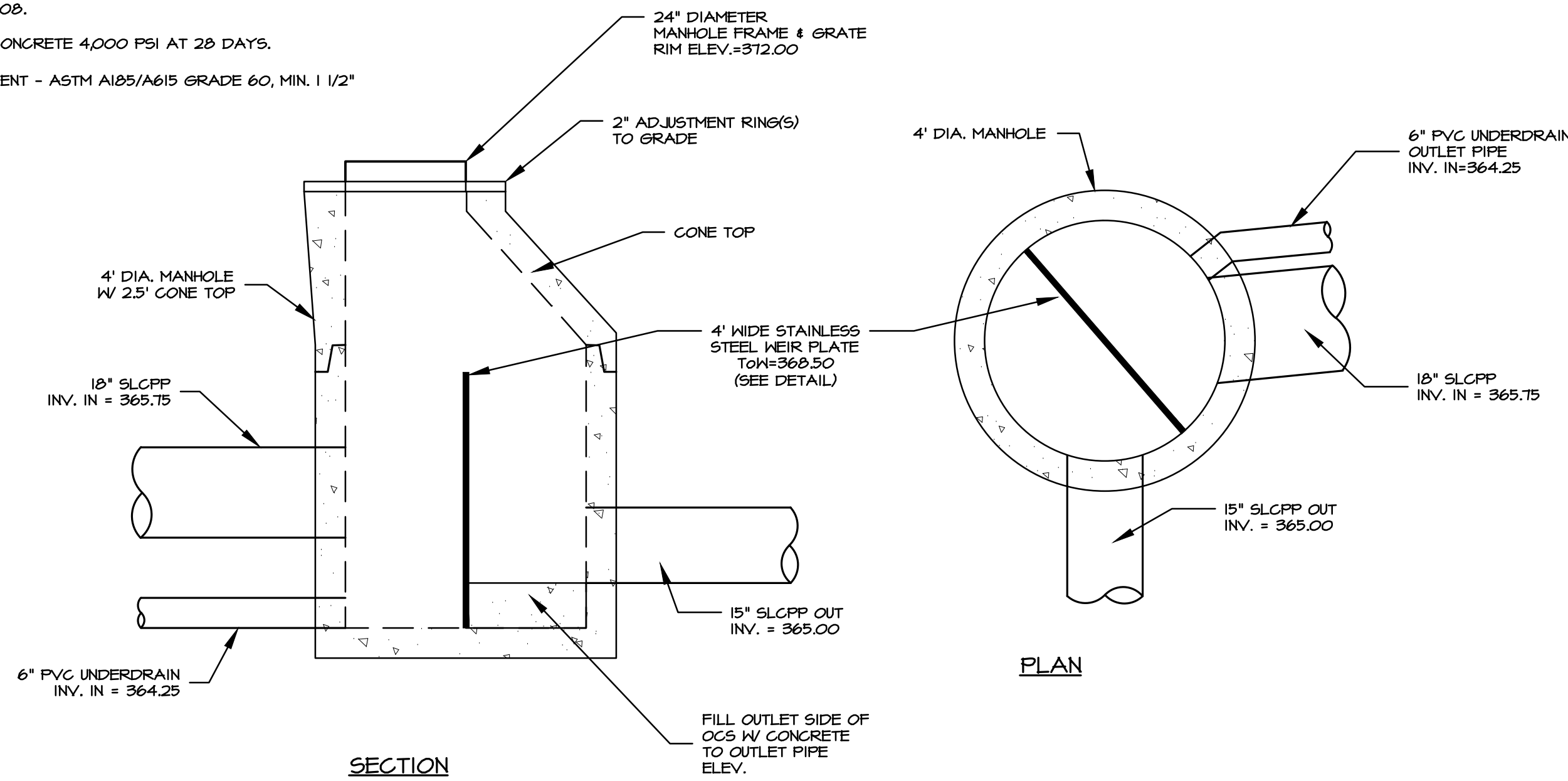
**PRELIMINARY PLAN**  
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FOR  
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CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

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**73 of 86**

**NOTES:**

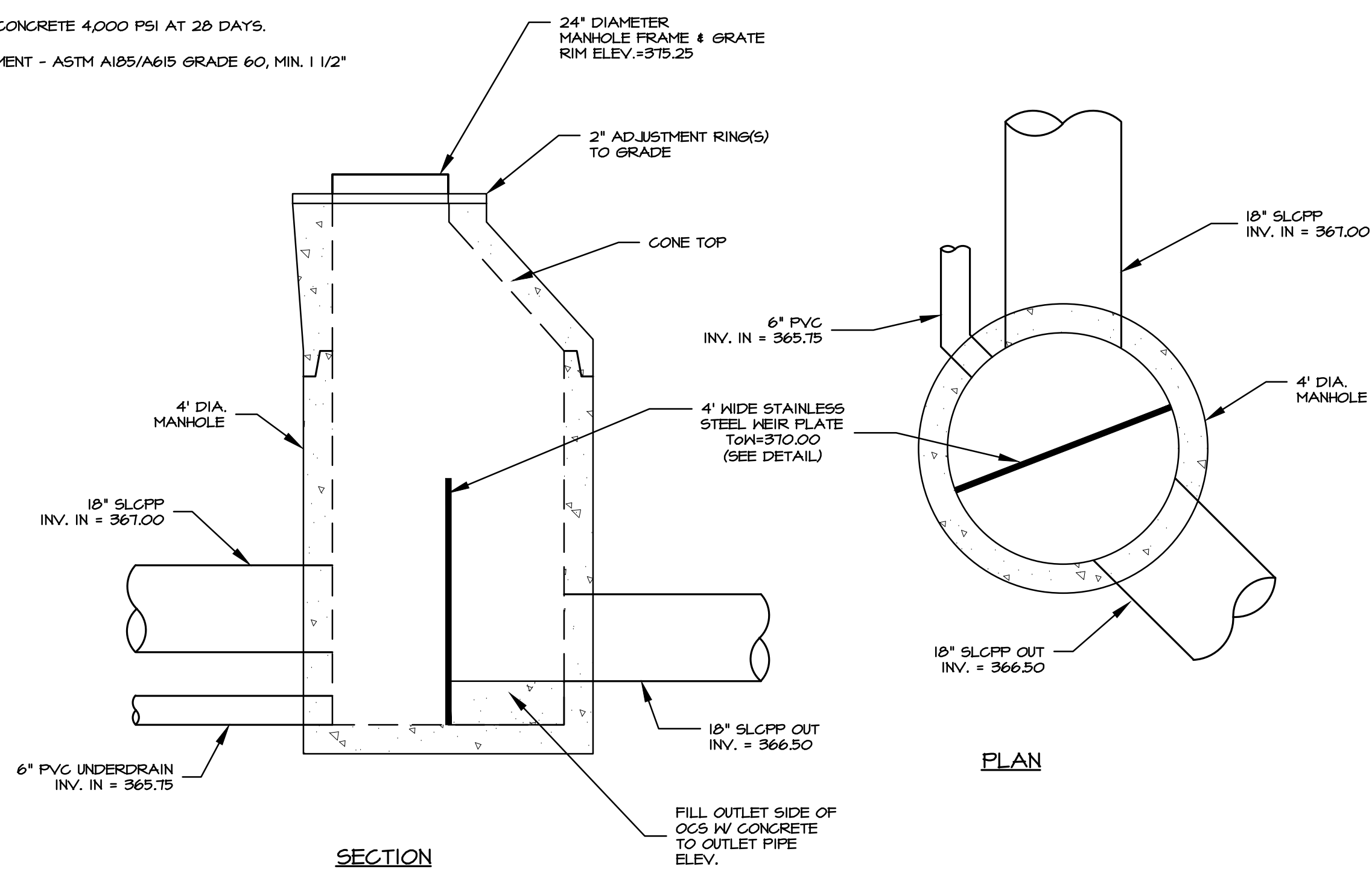
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5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 40B.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.



**A OCS 14 DETAIL**  
1/2" = 1'

**NOTES:**

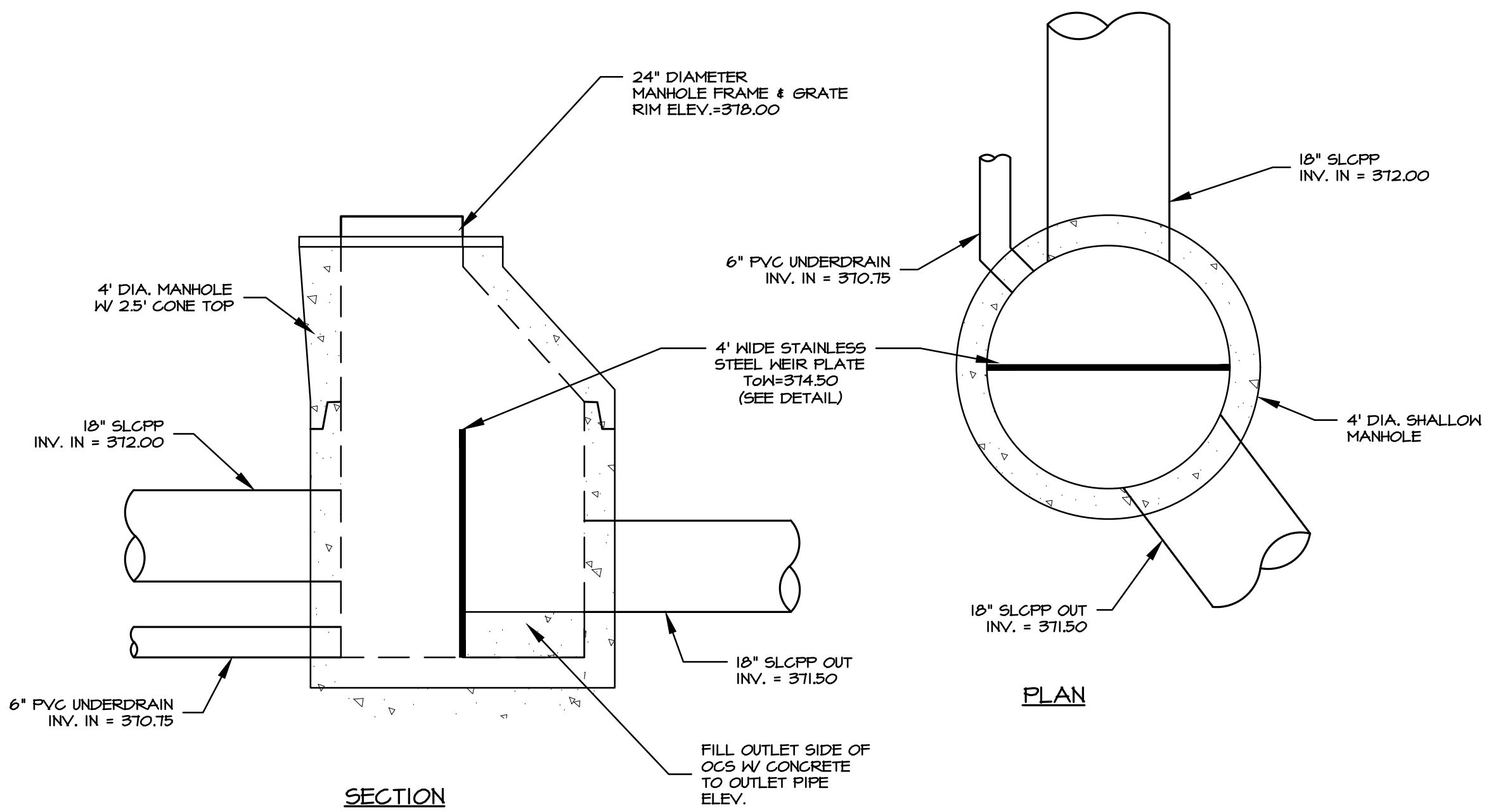
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5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 40B.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.



**C OCS 19 DETAIL**  
1/2" = 1'

**NOTES:**

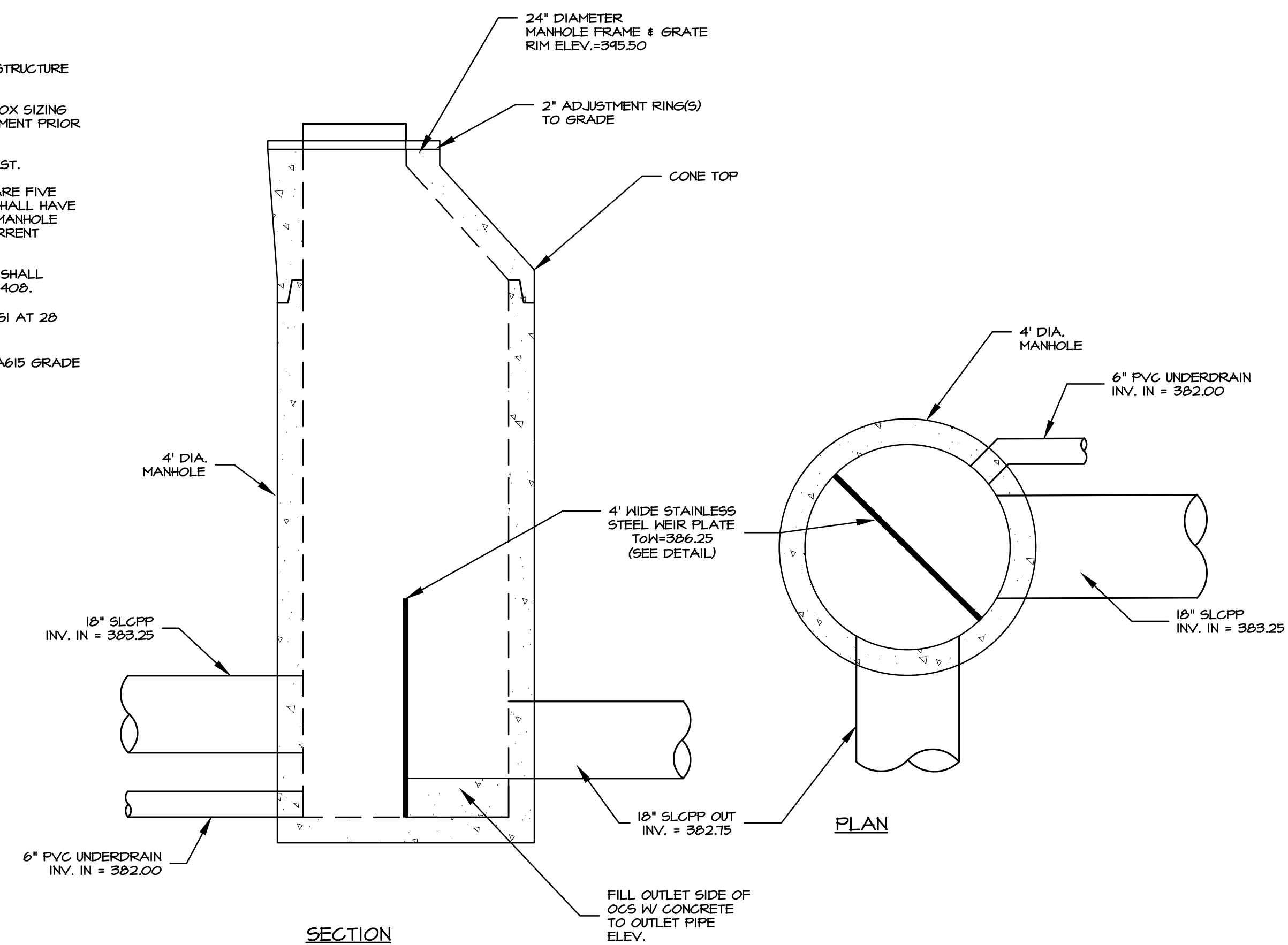
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3. STRUCTURES SHALL BE PRE-CAST.
4. DRAINAGE STRUCTURES THAT ARE FIVE FOOT OR GREATER IN DEPTH SHALL HAVE POLYPROPYLENE ENCASED MANHOLE STEPS INSTALLED PER CURRENT STANDARDS.
5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 40B.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.



**B OCS 17 DETAIL**  
1/2" = 1'

**NOTES:**

1. ALL CONNECTIONS TO OUTLET STRUCTURE MUST BE WATERTIGHT.
2. CONTRACTOR SHALL VERIFY BOX SIZING BASED ON PIPE SIZES & ALIGNMENT PRIOR TO ORDERING STRUCTURES.
3. STRUCTURES SHALL BE PRE-CAST.
4. DRAINAGE STRUCTURES THAT ARE FIVE FOOT OR GREATER IN DEPTH SHALL HAVE POLYPROPYLENE ENCASED MANHOLE STEPS INSTALLED PER CURRENT STANDARDS.
5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 40B.
6. CLASS AA CONCRETE 4,000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A185/A615 GRADE 60, MIN. 1 1/2" COVER.

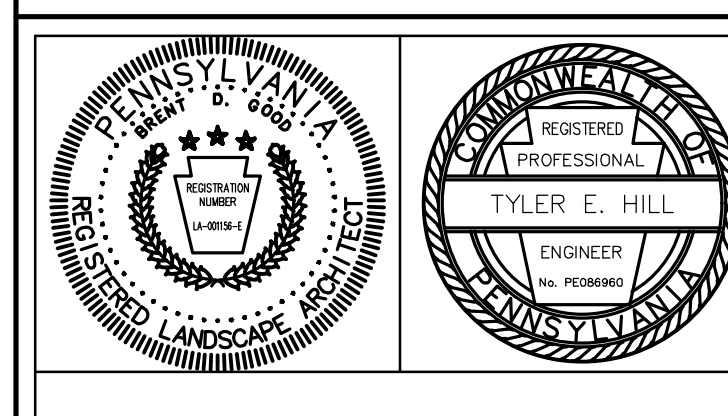


**D OCS 22 DETAIL**  
1/2" = 1'

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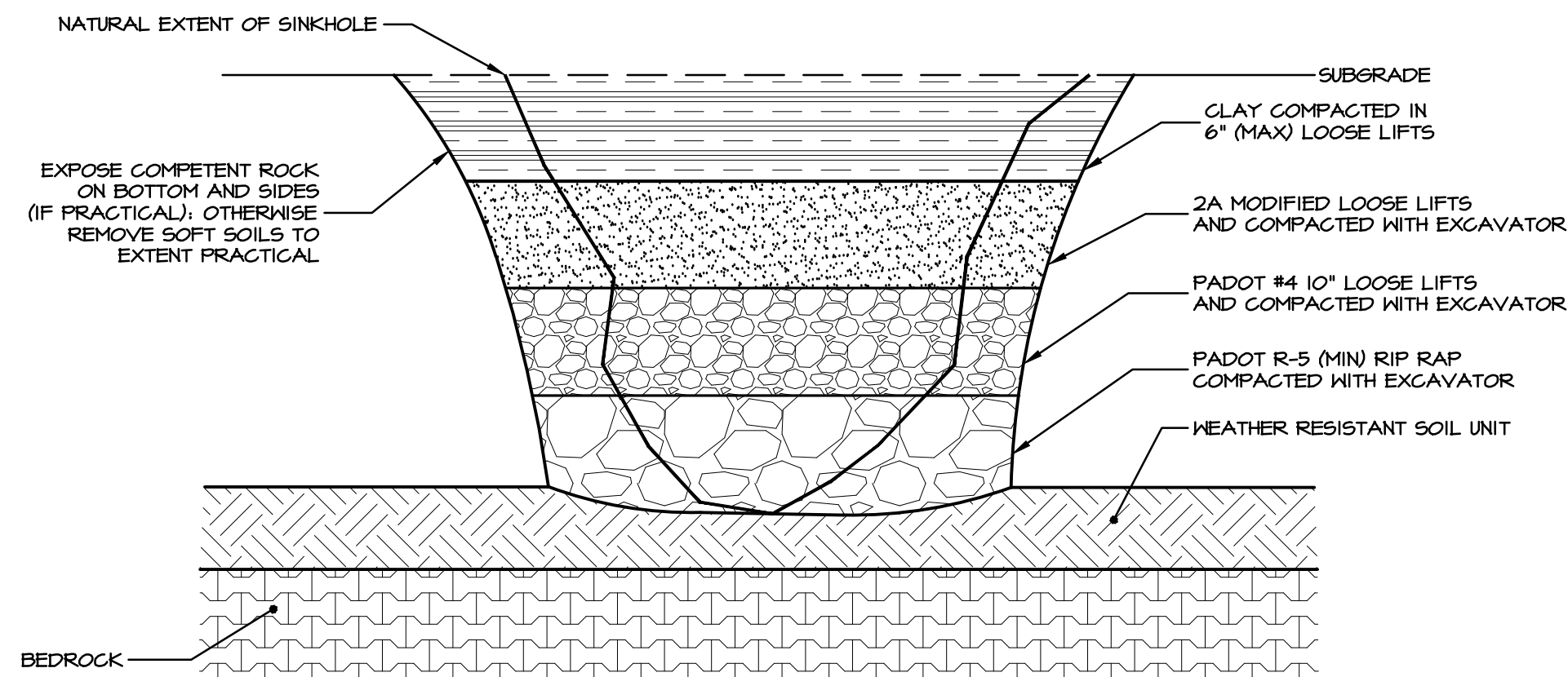
**PRELIMINARY PLAN**  
SUBJECT:  
**STORMWATER DETAILS**  
FOR  
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CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

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**74 of 86**

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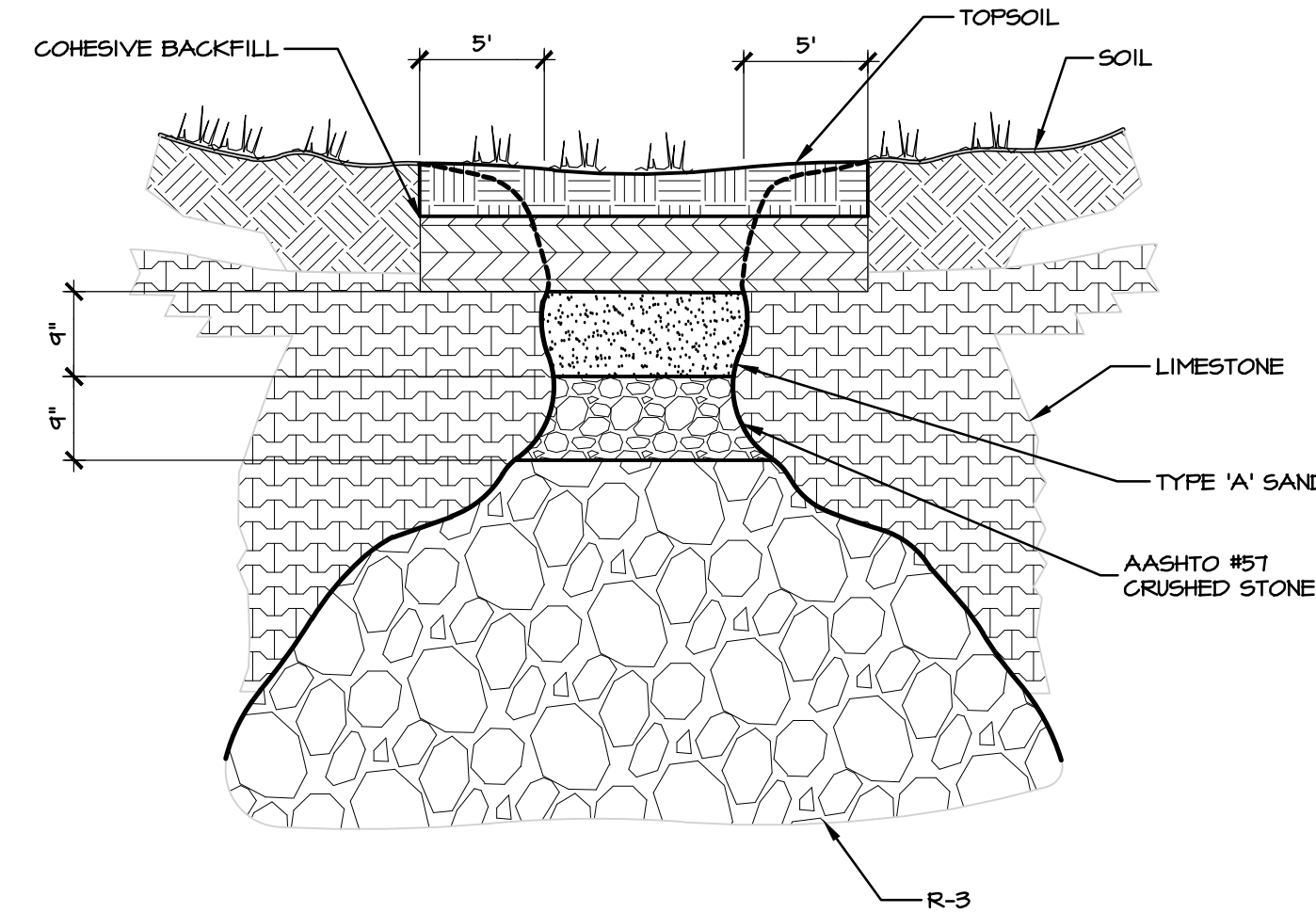
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**NOTES:**

1. SINKHOLE MITIGATION MEASURES SHOULD BE APPROVED BY A PA LICENSED GEOLOGIST OR ENGINEER PRIOR TO IMPLEMENTATION
2. EXAMPLE MITIGATION PRESENTED FOR SINKHOLES NOT NEAR SURFACE STRUCTURES AND/OR STRUCTURAL SUPPORT.
3. THICKNESS OF BACKFILL MATERIAL WILL VARY BASED ON SITE CONDITIONS. IT IS SUGGESTED THAT A PA LICENSED GEOLOGIST BE CONSULTED PRIOR TO MITIGATION

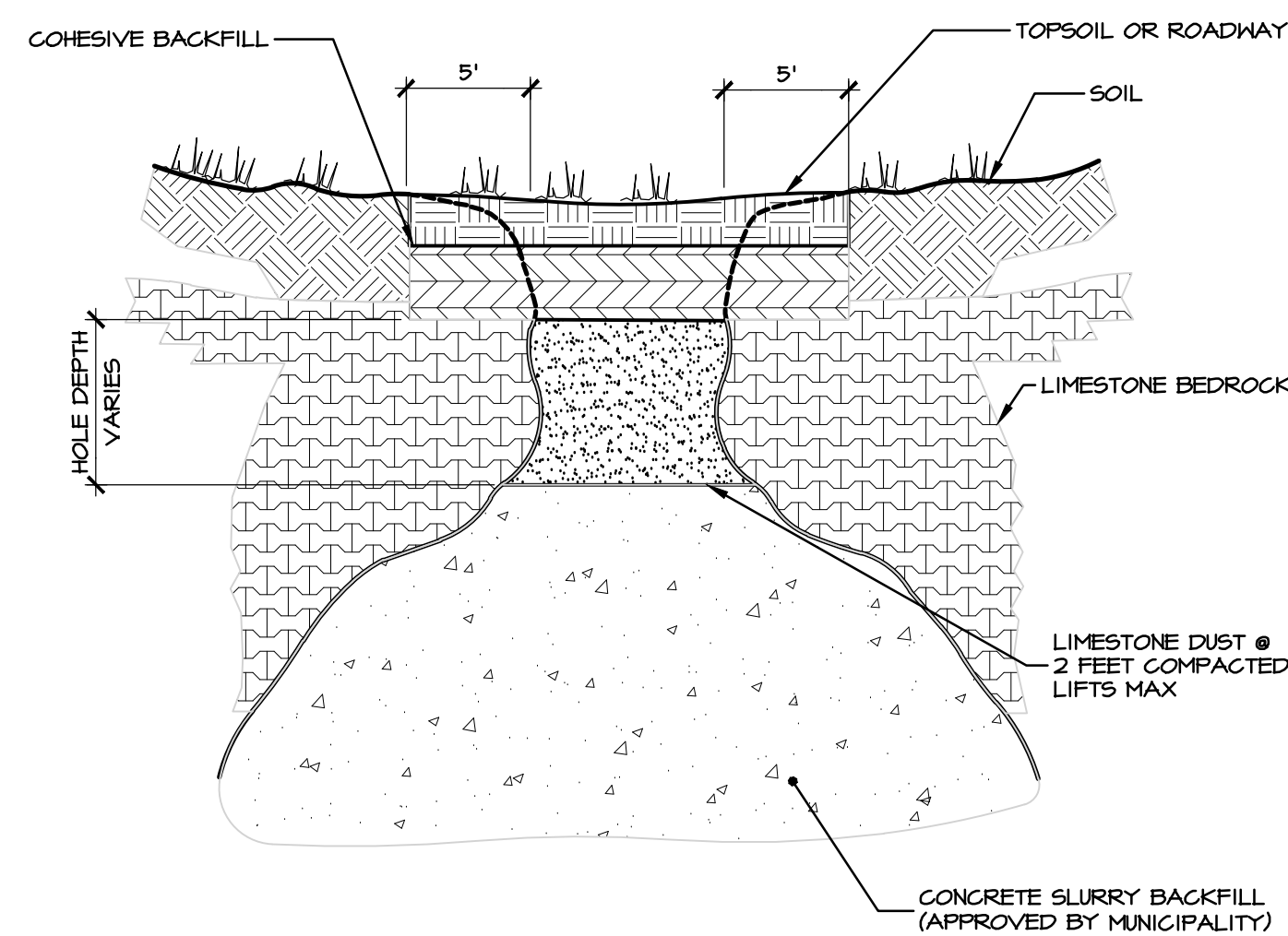
**A** SINKHOLE REPAIR DETAIL - NO THROAT ENCOUNTERED  
NO SCALE



**NOTES:**

1. STRIP ALL SOFT OR UNSUITABLE MATERIALS EXTENDING HORIZONTALLY 5 FEET BEYOND THE PERIMETER OF THE EXISTING SINKHOLE TO A DEPTH OF COMPETENT BEDROCK OR TO 3 FEET BELOW PLAN SUBGRADE, WHICHEVER IS LESS.
2. FILL SINKHOLE WITH R-3 ROCK TO 10 INCHES BELOW THE LEVEL OF THE STRIPPED SURFACE. USE LARGER ROCK IF NECESSARY TO FILL VOIDS. FILL THE REMAINING 10 INCHES WITH AASHTO #57 CRUSHED STONE AND 9 INCHES OF THE TYPE 'A' SAND AS SHOWN. COMPACT TO AN UNYIELDING CONDITION.
3. FILL AREA WITH CONTROLLED MATERIAL TO PLAN SUBGRADE, AND REPLACE TOPSOIL.
4. HEAVY CONSTRUCTION EQUIPMENT SHALL NOT TRAVERSE THE CORRECTED AREA.
5. THE MUNICIPALITY AND/OR MUNICIPALITY ENGINEER SHALL BE CONTACTED PRIOR TO ANY SINKHOLE REPAIR.

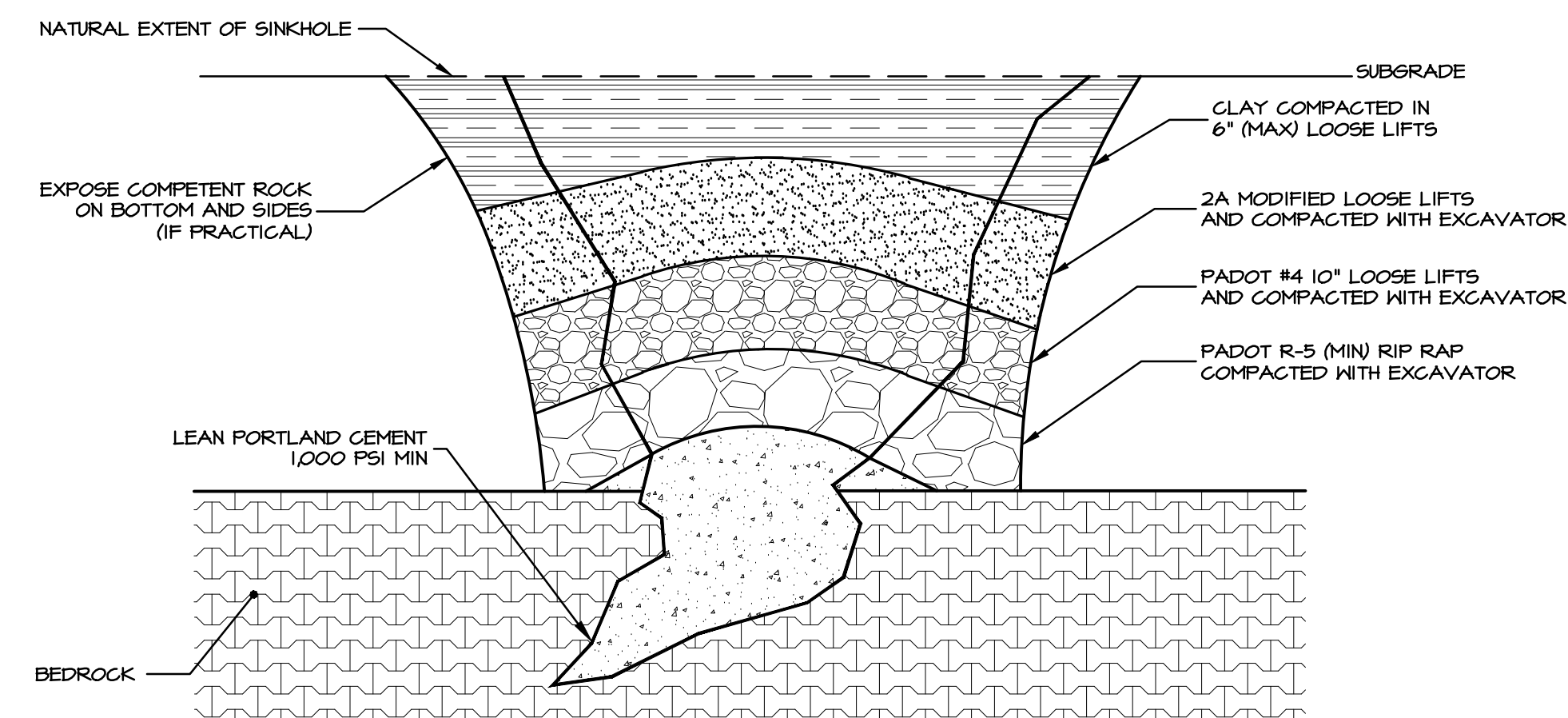
**B** 'ROCK FILL' SINKHOLE REPAIR DETAIL  
NO SCALE



**SINKHOLE REPAIR NOTES:**

1. ANY SINKHOLE ENCOUNTERED PRECEDING, OR DURING SITE DEVELOPMENT ON ANY AREA THAT IS INTENDED TO BE OFFERED TO THE CITY FOR DEDICATION (BE IT FOR SANITARY SEWER EASEMENT, STREET RIGHT-OF-WAY, STORM SEWER EASEMENT, OR ANY OTHER PUBLIC USE) SHALL BE REPAIRED USING THE FOLLOWING METHODS:
  - A. REMOVE ALL UNSUITABLE SOIL IN THE LOCATION OF THE SINKHOLE IN ORDER TO LOCATE AN OPENING (SINKHOLE "THROAT") IN THE BEDROCK, IF POSSIBLE.
  - B. "THROAT" SHOULD BE FLUSHED WITH WATER TO CLEAR. OPENINGS, TO BE IMMEDIATELY FILLED WITH A FLOWABLE FILL OR CONCRETE SLURRY UNTIL MATERIAL BACKS UP IN TO EXCAVATED HOLE. ALLOW CONCRETE TO SETUP FOR THIRTY-FOUR HOURS.
  - C. FILL HOLE WITH LIMESTONE "DUST", COMPACTED IN LIFTS OF TWO FEET MAXIMUM DEPTH.
  - D. REPLACE SUBSOIL IMMEDIATELY BELOW SURFACE AND RESTORE SURFACE AS PER INTENDED USE, I.E., GRASSSED AREA, ROADWAY, DRIVEWAY, ETC.
2. THE DEVELOPER SHALL NOTIFY THE MUNICIPALITY IF ANY SINKHOLES ARE ENCOUNTERED DURING DEVELOPMENT, AND SHALL PROVIDE THE MUNICIPALITY WITH A DESCRIPTION AND LOCATION OF ANY SINKHOLE REPAIR.

**C** 'CONCRETE FILL' SINKHOLE REPAIR DETAIL  
NO SCALE



**NOTES:**

1. SINKHOLE MITIGATION MEASURES SHOULD BE APPROVED BY A PA LICENSED GEOLOGIST OR ENGINEER PRIOR TO IMPLEMENTATION
2. EXAMPLE MITIGATION PRESENTED FOR SINKHOLES NOT NEAR SURFACE STRUCTURES AND/OR STRUCTURAL SUPPORT.
3. THICKNESS OF BACKFILL MATERIAL WILL VARY BASED ON SITE CONDITIONS. IT IS SUGGESTED THAT A PA LICENSED GEOLOGIST BE CONSULTED PRIOR TO MITIGATION

**D** SINKHOLE REPAIR DETAIL - THROAT ENCOUNTERED  
NO SCALE

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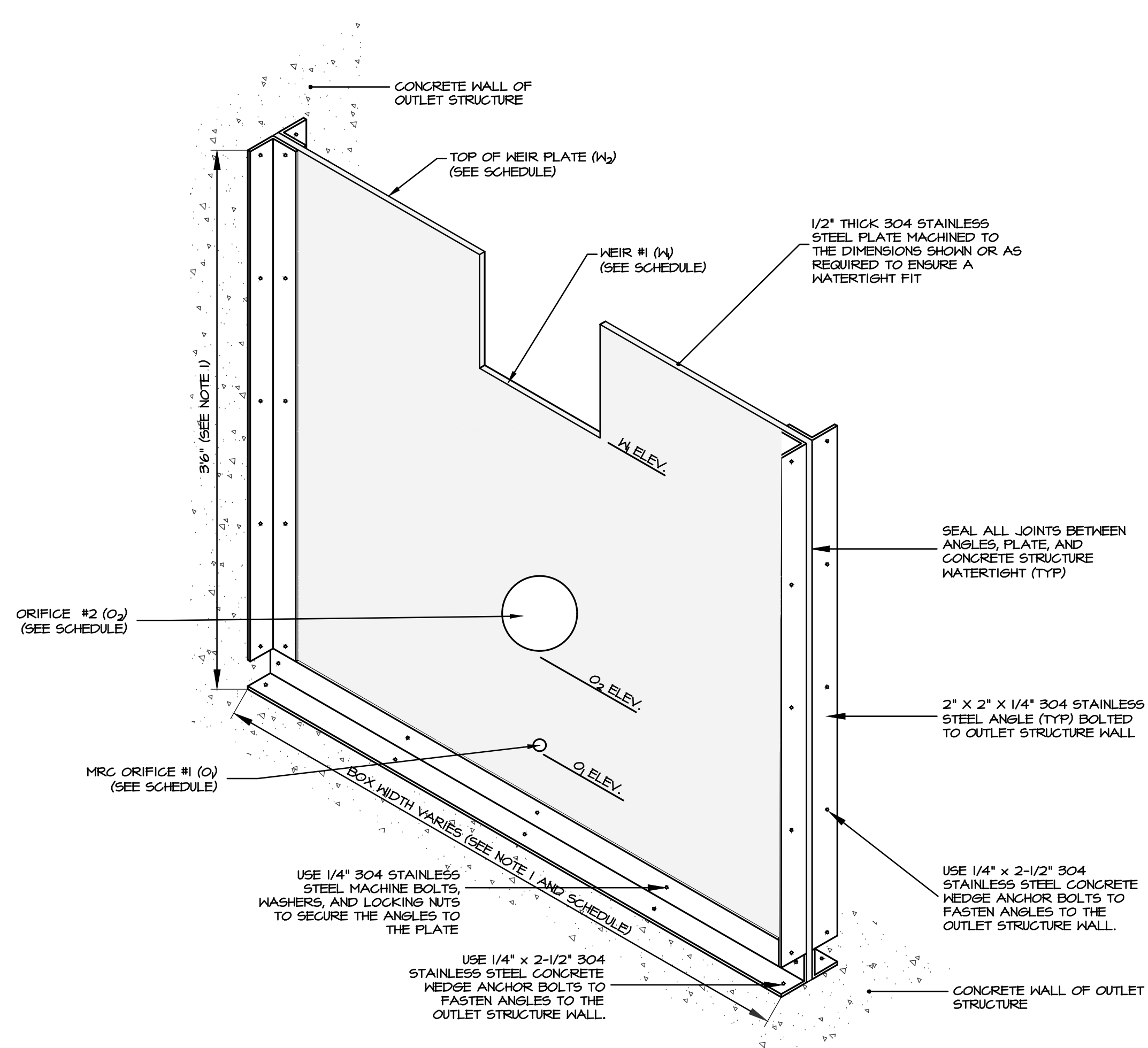
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DRAWN BY:	BLM	SCALE:	AS NOTED

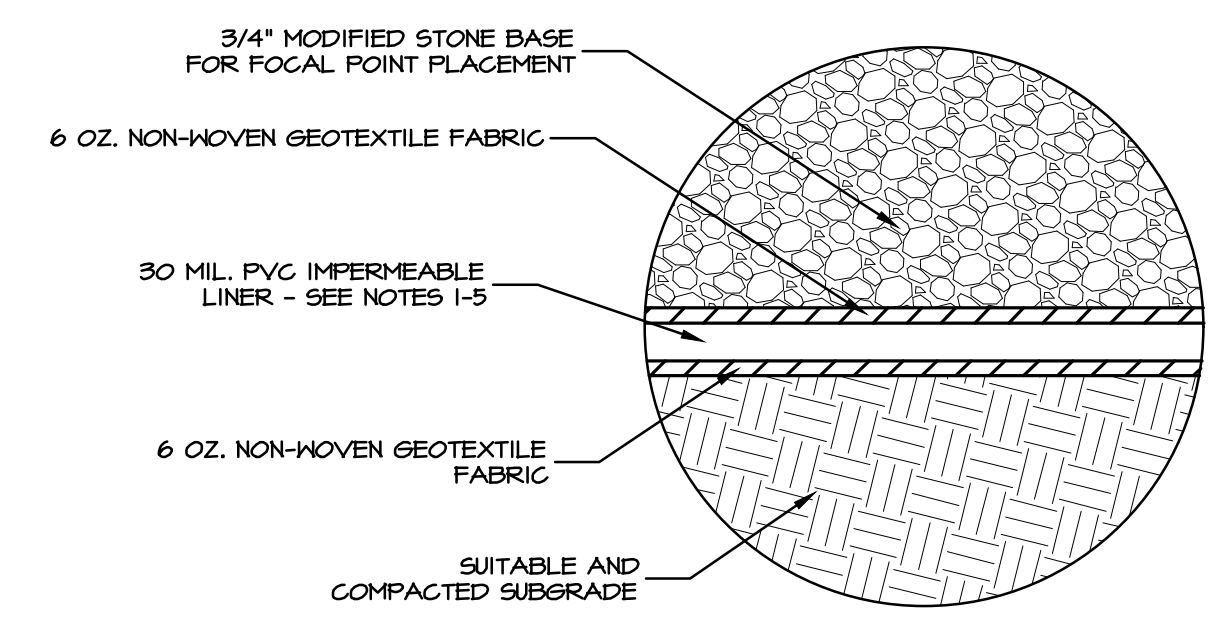
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**75 of 86**

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**LINER NOTES:**

1. THE PREPARATION OF SUBGRADE AND PLACEMENT OF THE PVC LINER SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE GEOTECHNICAL PROFESSIONAL ON RECORD.
2. SUBGRADE PREPARATION SHALL INCLUDE REMOVAL OF LARGE ROCKS (6") AND OTHER DELETERIOUS MATERIALS SUCH AS ROOTS, AND CONSTRUCTION RUBBLE, AS DIRECTED BY THE GEOTECHNICAL PROFESSIONAL OVERSEEING INSTALLATION. OVER EXCAVATE AS NECESSARY AND BACKFILL WITH SUITABLE FILL MATERIALS AND COMPACT.
3. PRIOR TO PLACEMENT, CONTRACTOR SHALL REFER TO MANUFACTURER SPECIFICATIONS FOR ALL MATERIAL SPECIFICATIONS, AS WELL AS SUBGRADE REQUIREMENTS.
4. THE PVC LINER SHALL BE A MANUFACTURED SINGLE SHEET OF PVC OR IF INSTALLED USING MULTIPLE SHEETS, SHALL BE FIELD WELDED BY A QUALIFIED PROFESSIONAL.
5. ALL PIPE BOOTS/PROTRUSIONS SHALL BE WELDED AND WATERTIGHT.



**(B) PVC LINER DETAIL**

NO SCALE

**NOTES:**

1. ALL CONNECTIONS TO OUTLET STRUCTURE MUST BE WATERTIGHT.
2. CONTRACTOR SHALL VERIFY BOX SIZING BASED ON PIPE SIZES & ALIGNMENT PRIOR TO ORDERING STRUCTURES.
3. STRUCTURES SHALL BE PRE-CAST.
4. DRAINAGE STRUCTURES THAT ARE FIVE FOOT OR GREATER IN DEPTH SHALL HAVE POLYPROPYLENE ENCASED MANHOLE STEPS INSTALLED PER CURRENT STANDARDS.
5. MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN D.O.T. PUB. 40B.
6. CLASS AA CONCRETE 4000 PSI AT 28 DAYS.
7. REINFORCEMENT - ASTM A105/A615 GRADE 60, MIN. 1 1/2" COVER.

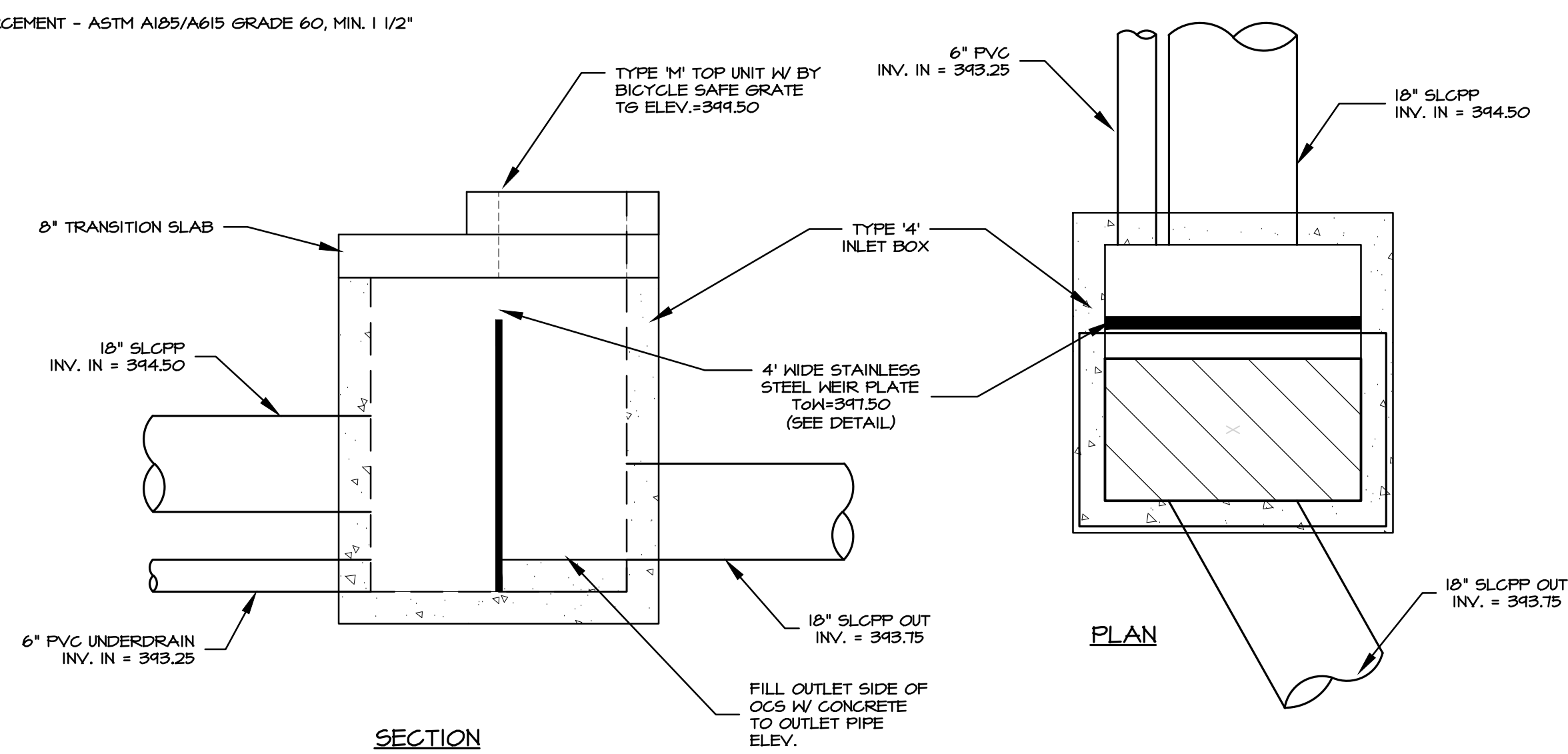
**NOTES:**

1. ACTUAL DIMENSIONS TO CORRESPOND WITH THE INTERIOR DIMENSIONS OF THE PRECAST OUTLET STRUCTURE (CONTRACTOR TO VERIFY IN FIELD PRIOR TO FABRICATION OF THE VARIOUS ORIFICE/WEIR PLATE COMPONENTS).
2. FABRICATOR TO PROVIDE SHOP DRAWINGS WITH DIMENSIONS AND MATERIALS LIST.
3. AS AN ALTERNATIVE CONTRACTOR MAY SUBSTITUTE STEEL WEIR PLATE WITH 6" THICK PRECAST OR CAST-IN PLACE CONCRETE WEIR.

BMP NO.	STRUCTURE ID	STRUCTURE TYPE	MRC ORIFICE (O <sub>1</sub> )		ORIFICE #2 (O <sub>2</sub> )		WEIR #1 (W)		TOP OF WEIR PLATE (M <sub>2</sub> )	
			DIA. (IN.)	ELEV. (FT)	DIA. (IN.)	ELEV. (FT)	WIDTH (IN.)	ELEV. (FT)	WIDTH (FT)	ELEV. (FT)
2	OCS-2	TYPE 4 BOX	7 1/8"	402.00	6"	403.00	12"	404.00	4'	405.00
4	OCS-4	TYPE 4 BOX	1"	346.50	N/A	N/A	12"	347.50	4'	344.50
6	OCS-6	TYPE 4 BOX	1"	347.00	6"	348.00	9"	349.00	4'	400.50
8	OCS-8	TYPE 4 BOX	1"	344.50	N/A	N/A	12"	346.50	4'	347.75
10	OCS-10	TYPE 4 BOX	1"	344.00	8"	345.00	12"	346.50	4'	347.25
12	OCS-12	TYPE 4 BOX	1"	344.00	8"	345.00	12"	346.50	4'	347.25
14	OCS-14	4' DIA. MANHOLE	3 3/4"	365.00	6"	366.50	12"	367.50	4'	368.50
17	OCS-17	4' DIA. MANHOLE	7 1/8"	371.50	6"	372.25	12"	373.75	4'	374.50
19	OCS-19	4' DIA. MANHOLE	1-3/8"	366.50	8"	367.25	12"	368.75	4'	370.00
22	OCS-22	4' DIA. MANHOLE	1"	382.75	8"	383.50	12"	385.00	4'	386.25
25	OCS-25	TYPE 4 BOX	1"	344.00	6"	344.75	12"	345.75	4'	347.50

**(A) MRC BMP 2 ORIFICE/WEIR PLATE DETAIL**

NO SCALE



**(C) OCS 25 DETAIL**

1" = 2'

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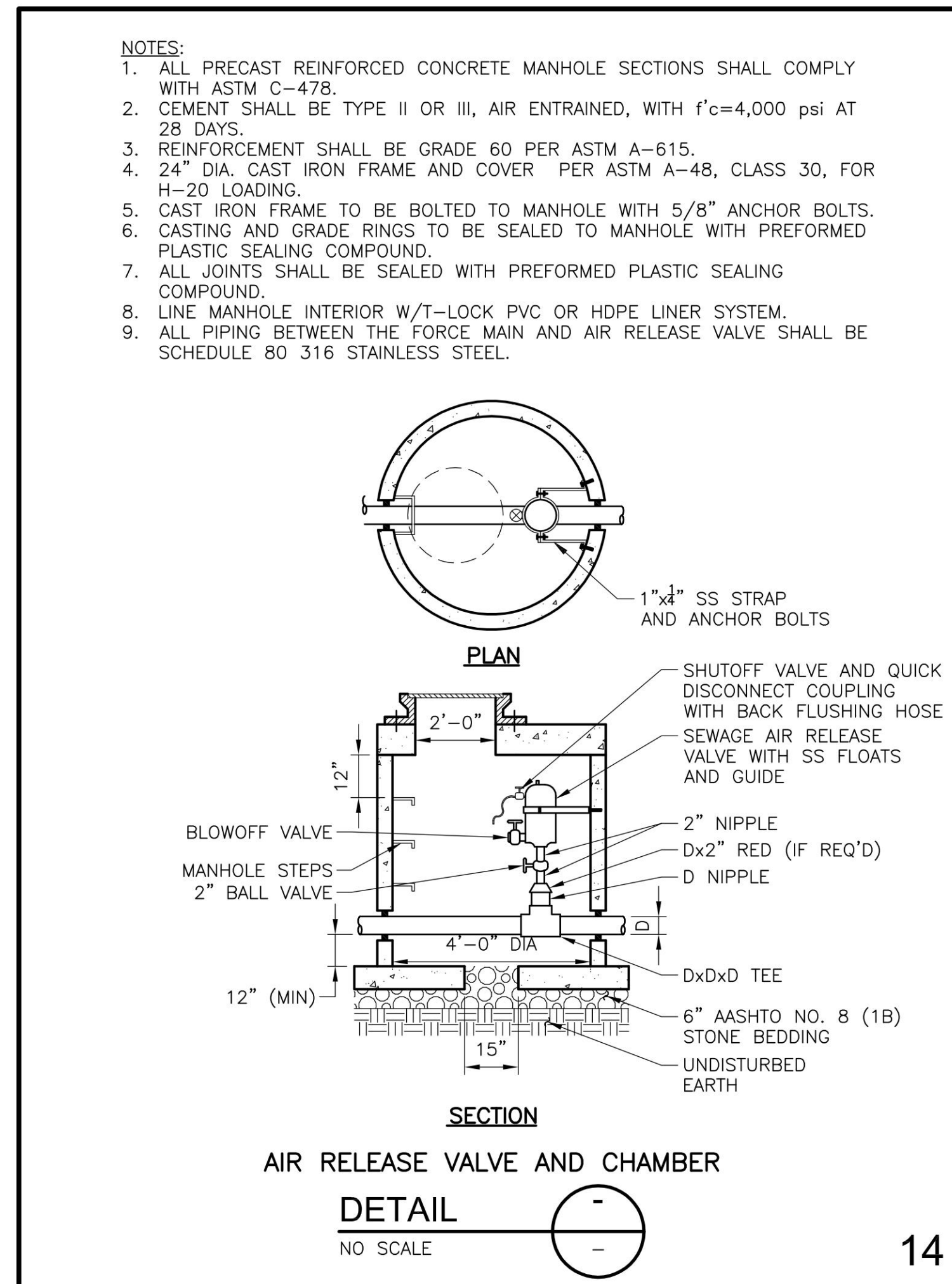
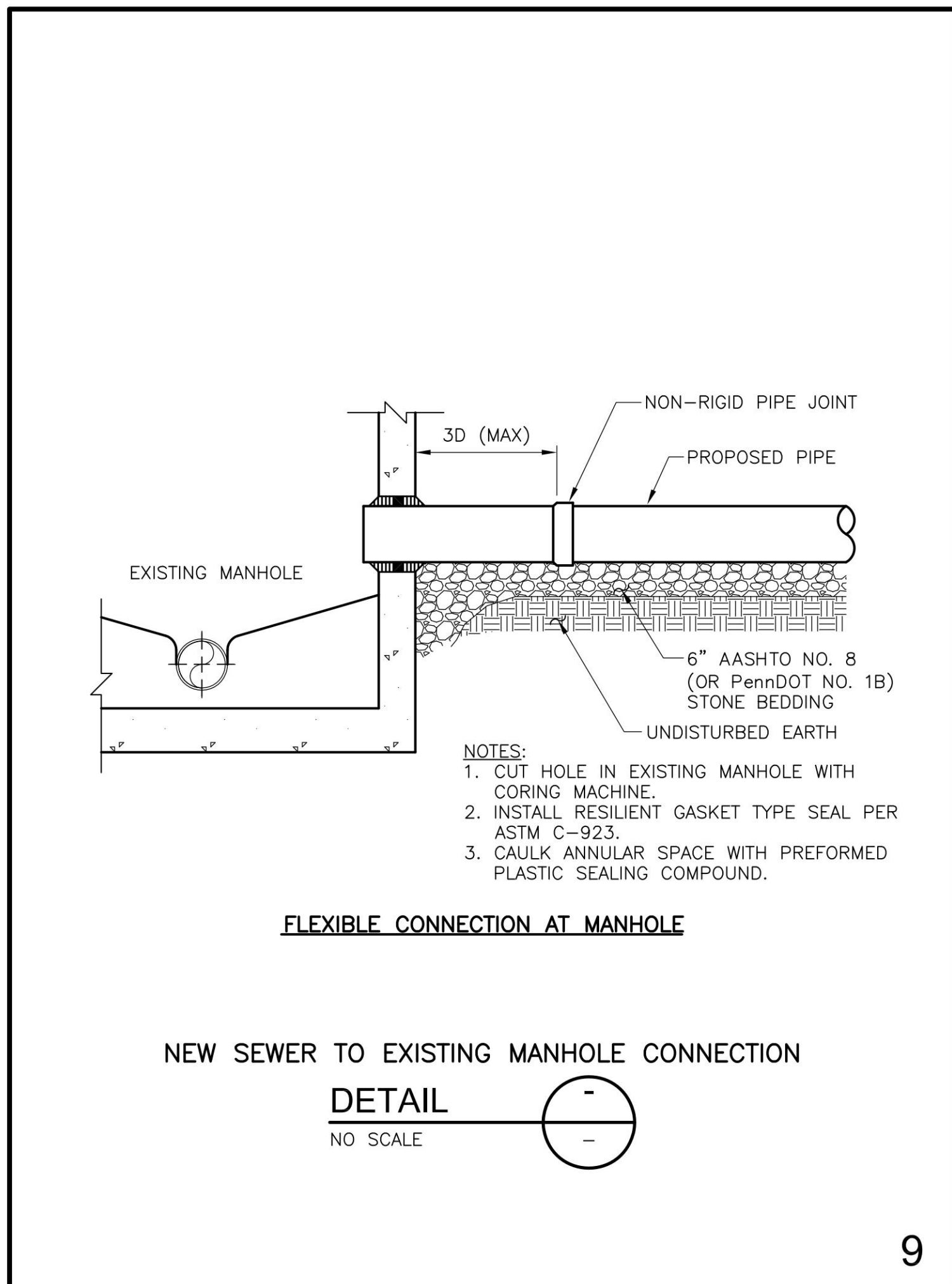
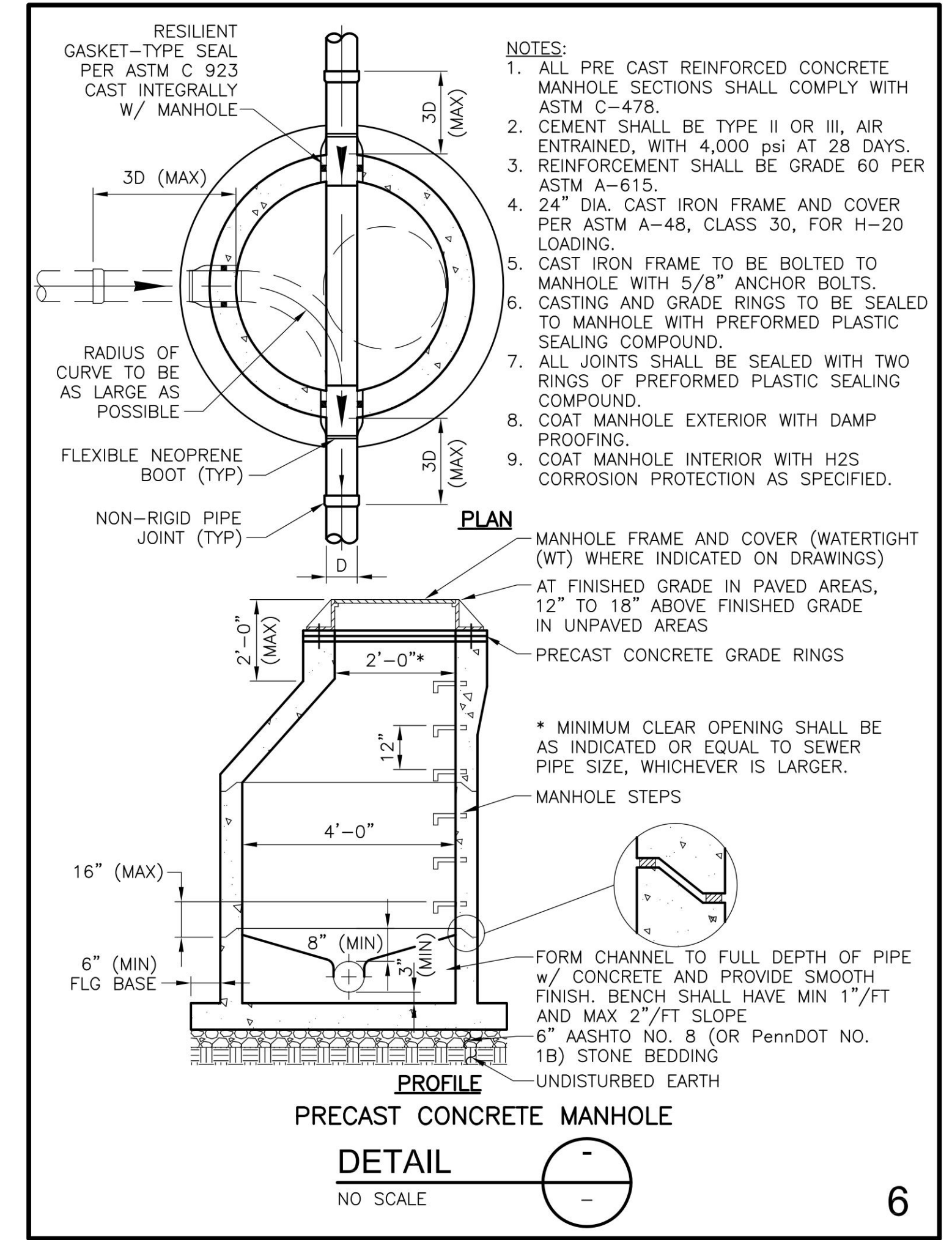
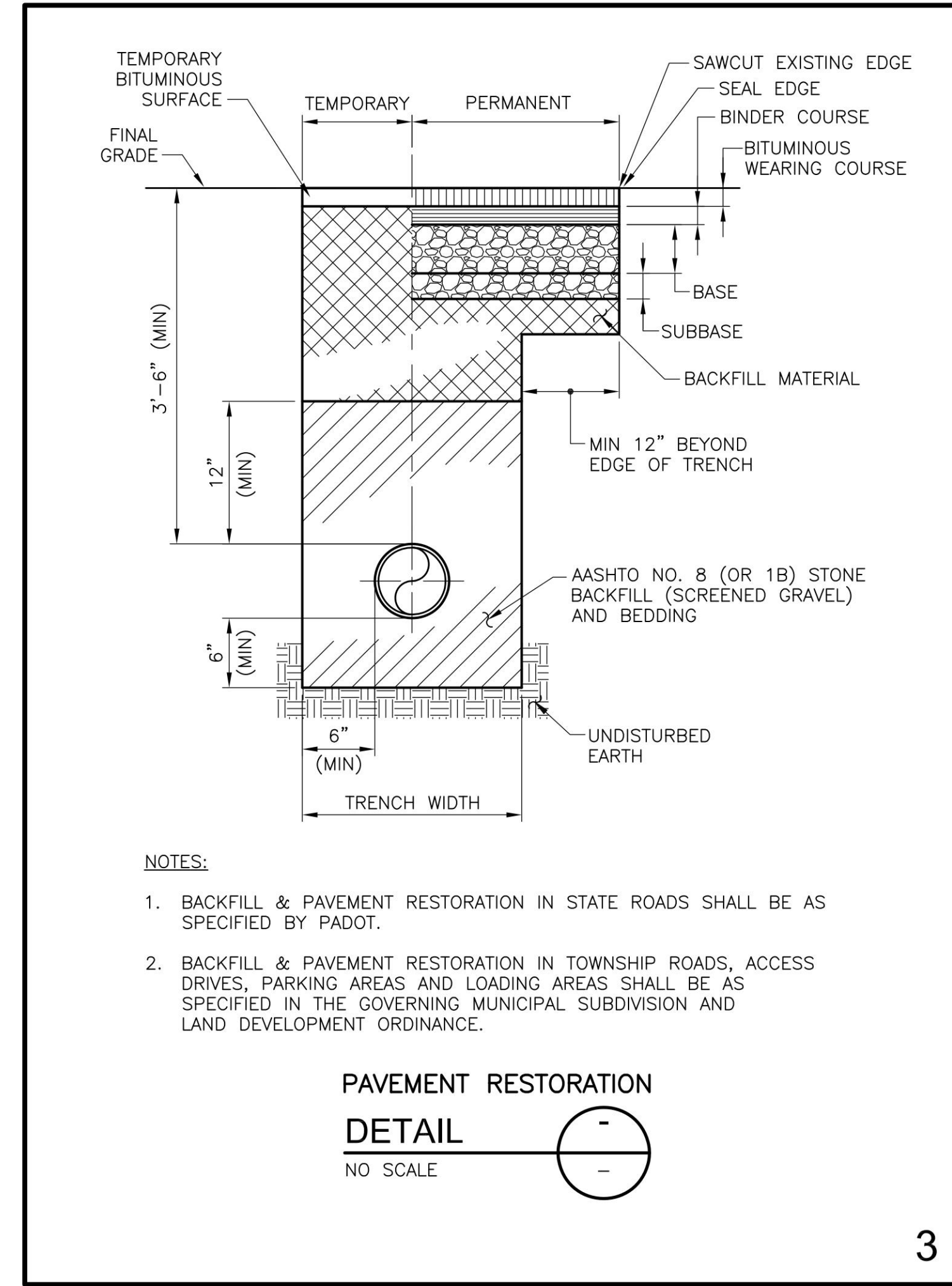
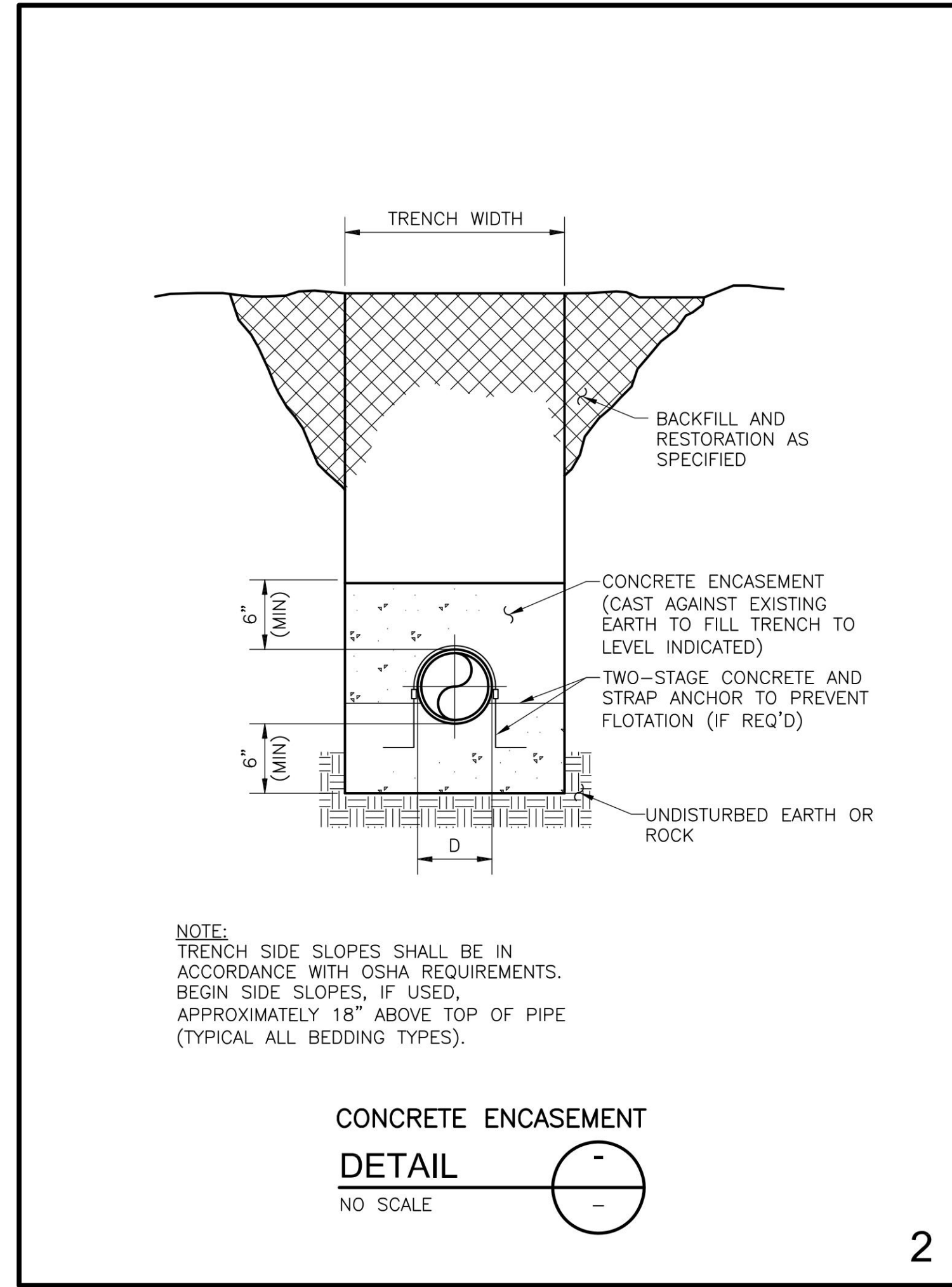
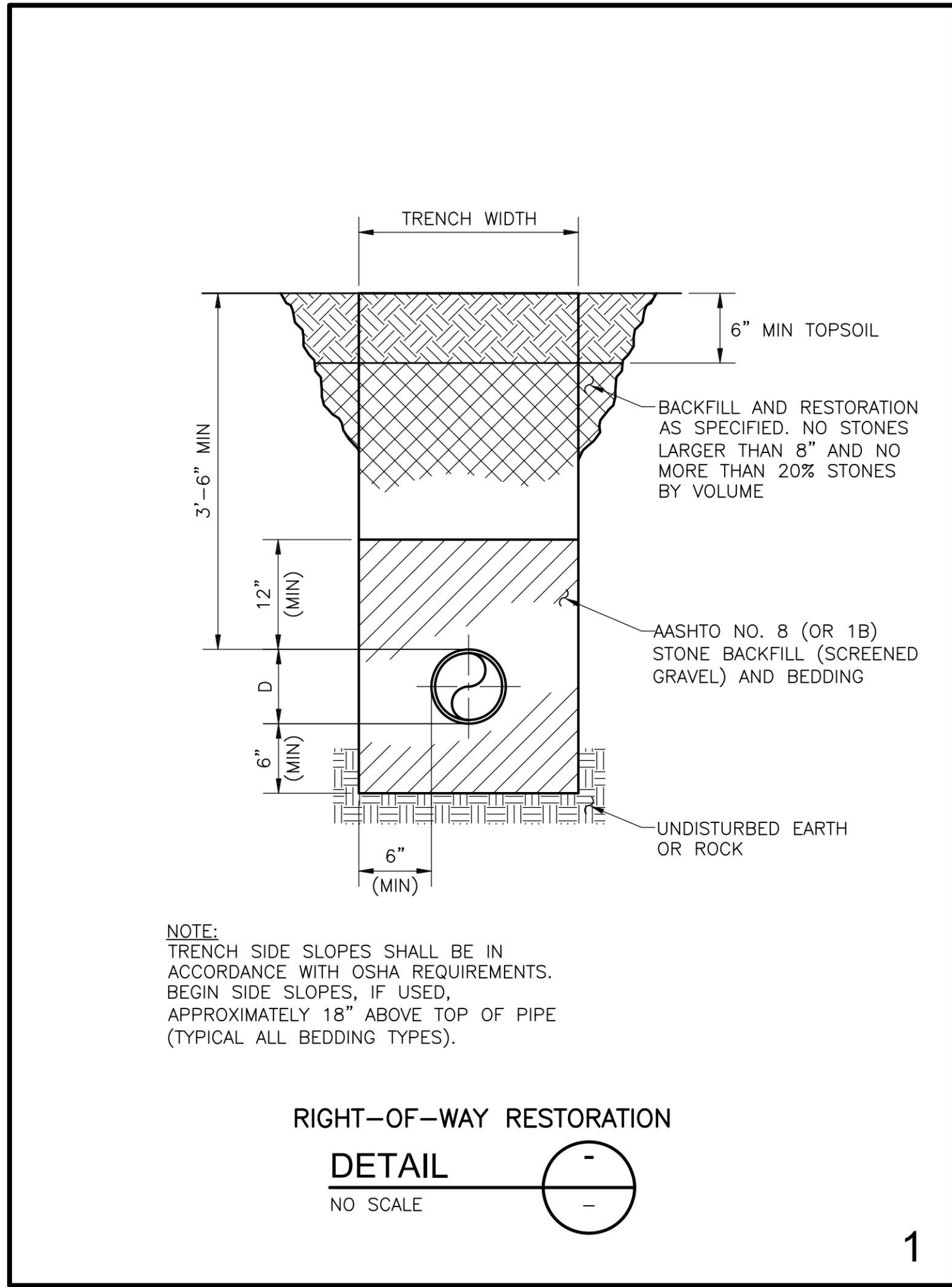
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**PRELIMINARY PLAN**  
SUBJECT:  
**STORMWATER DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	AS NOTED

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**THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS**

NOMINAL PIPE SIZE (INCHES)	SECTION PLAN			SECTION ELEVATION		
	MAXIMUM PIPE OD (INCHES)	REQUIRED BEARING AREA (SQ FT)	DEGREE	MAXIMUM PIPE OD (INCHES)	REQUIRED BEARING AREA (SQ FT)	DEGREE
4	4.80	2.9	2.0	1.6	1.1	0.8
8	9.05	10	7	6	4	3
12	13.20	22	15	12	8	6
18	19.50	48	34	26	17	13
20	21.60	58	41	32	21	16
24	25.80	83	59	45	30	23

**THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS**

NOTES:  
 1. MAXIMUM TEST PRESSURE = 1.5 x 150 PSI  
 2. MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF  
 3. BEARING AREA = A x B  
 4. C SHALL BE GREATER THAN A/2 AND B/2.

**THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS  
DETAIL**  
NO SCALE

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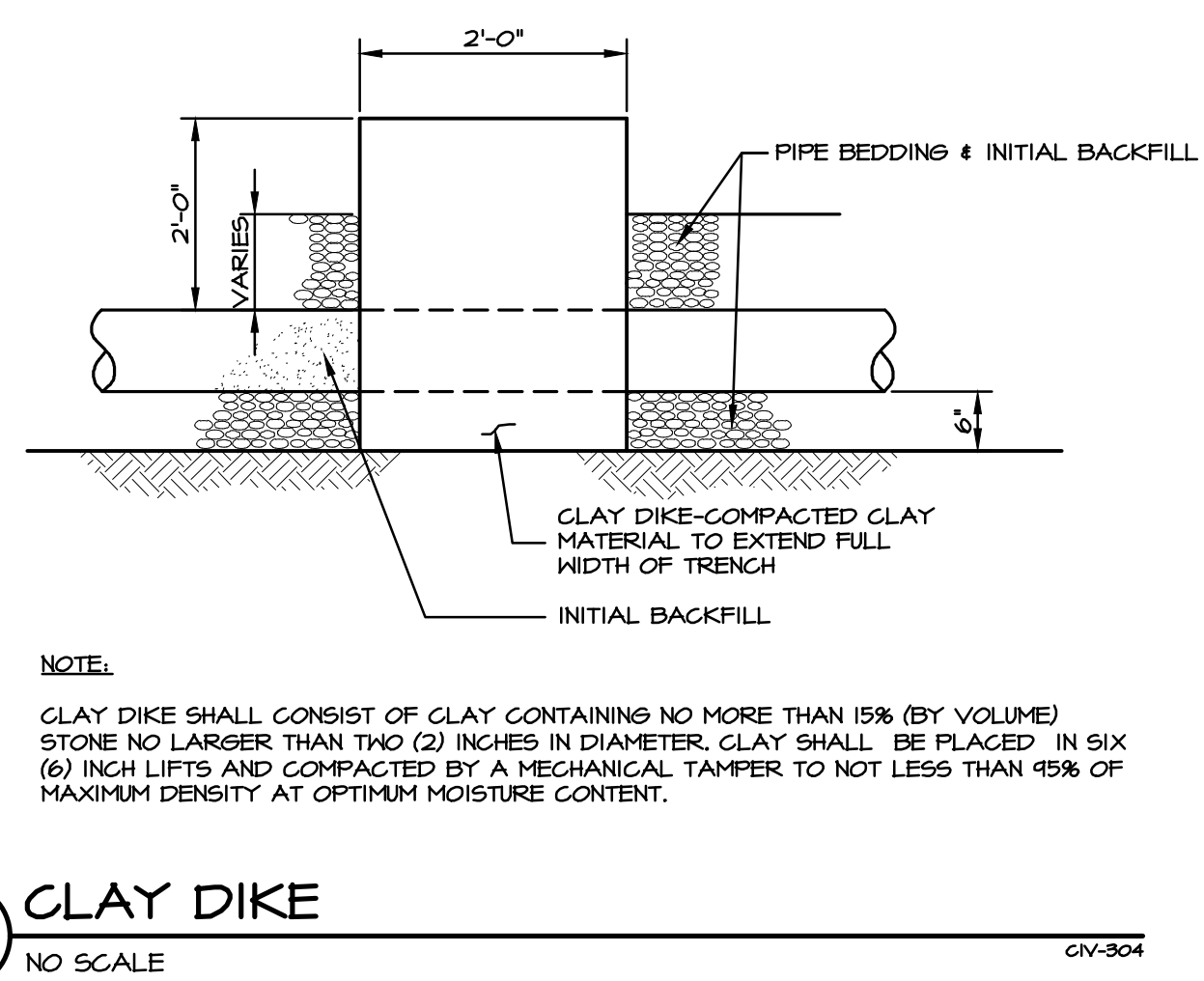
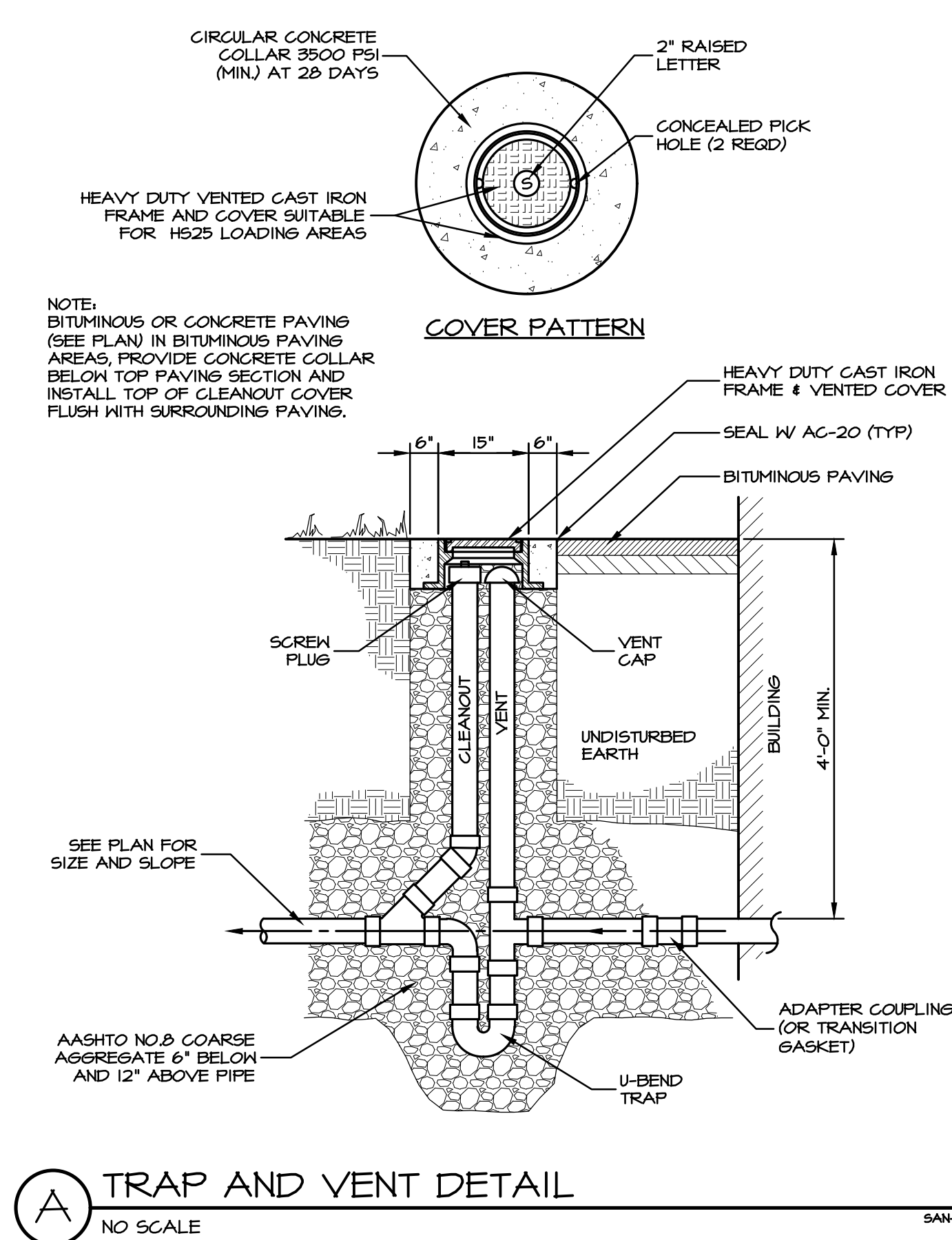
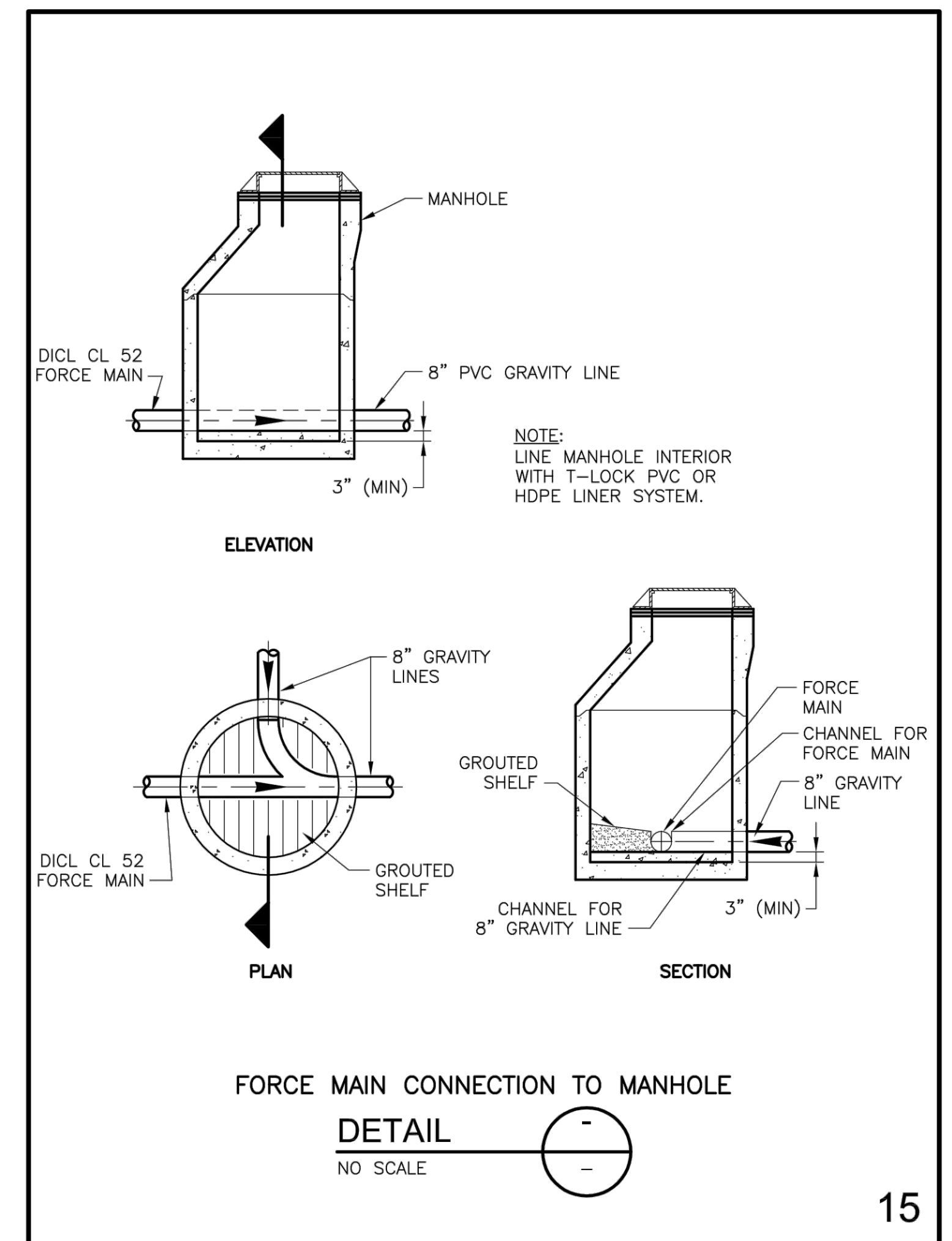
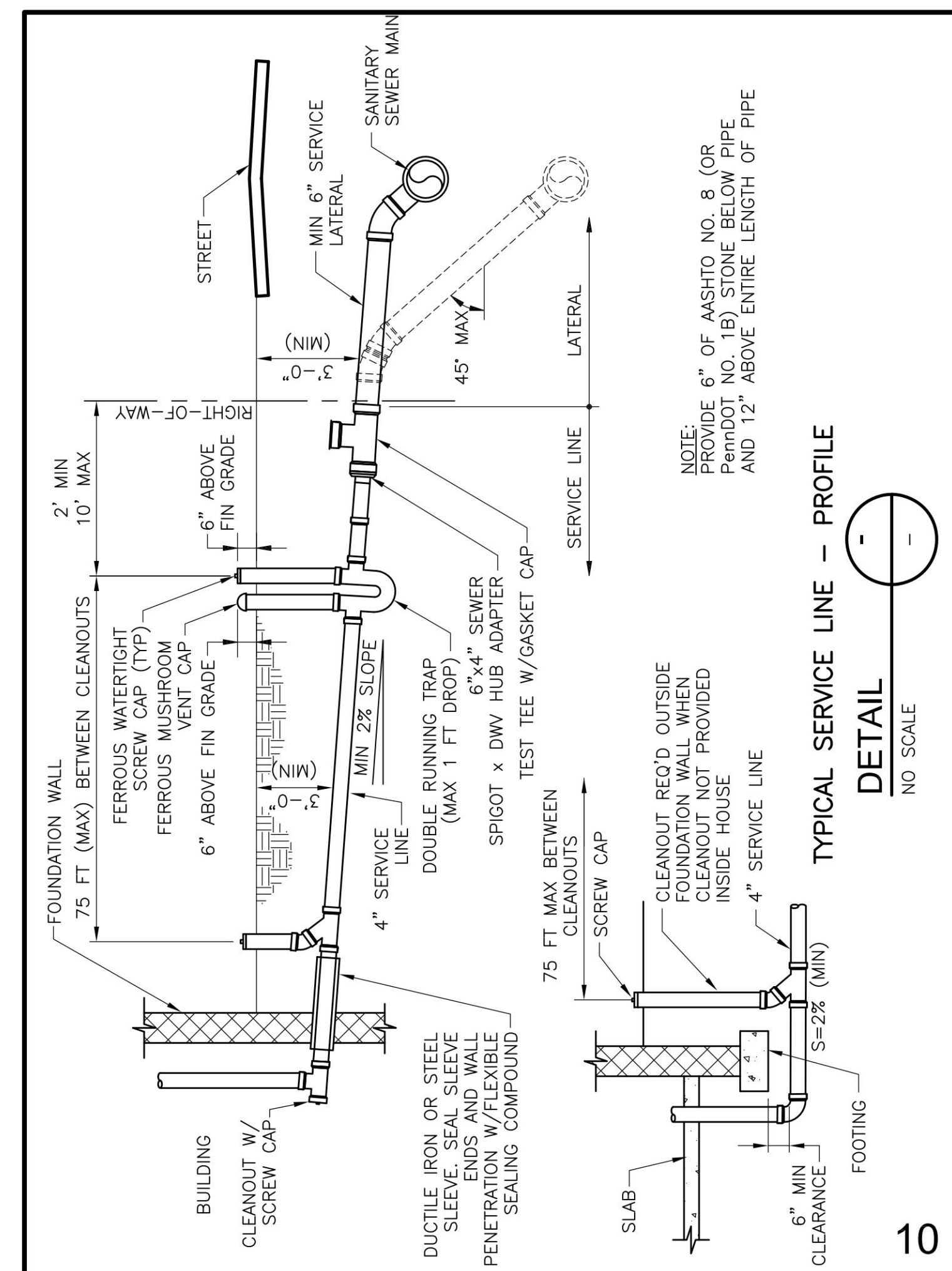
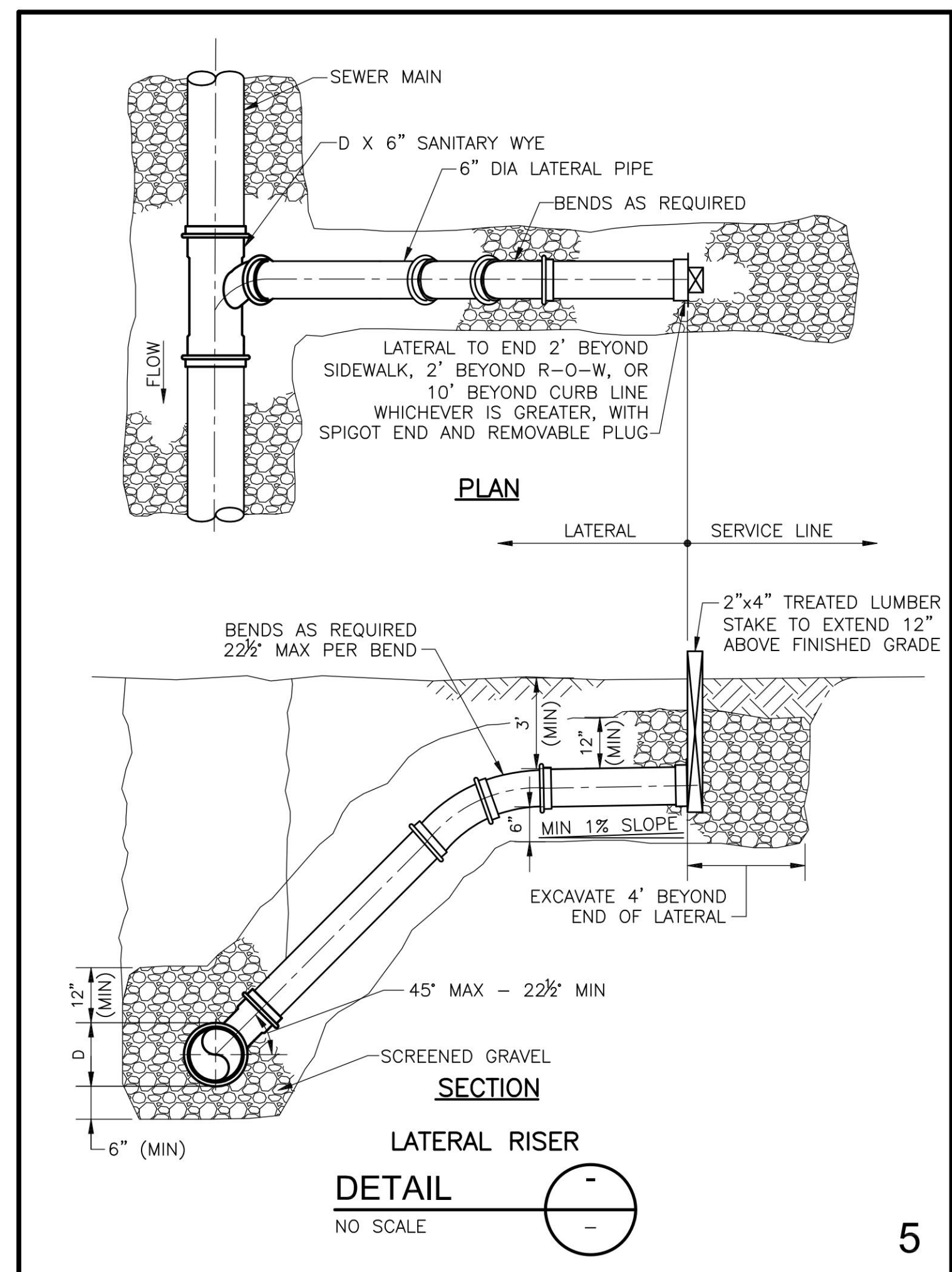
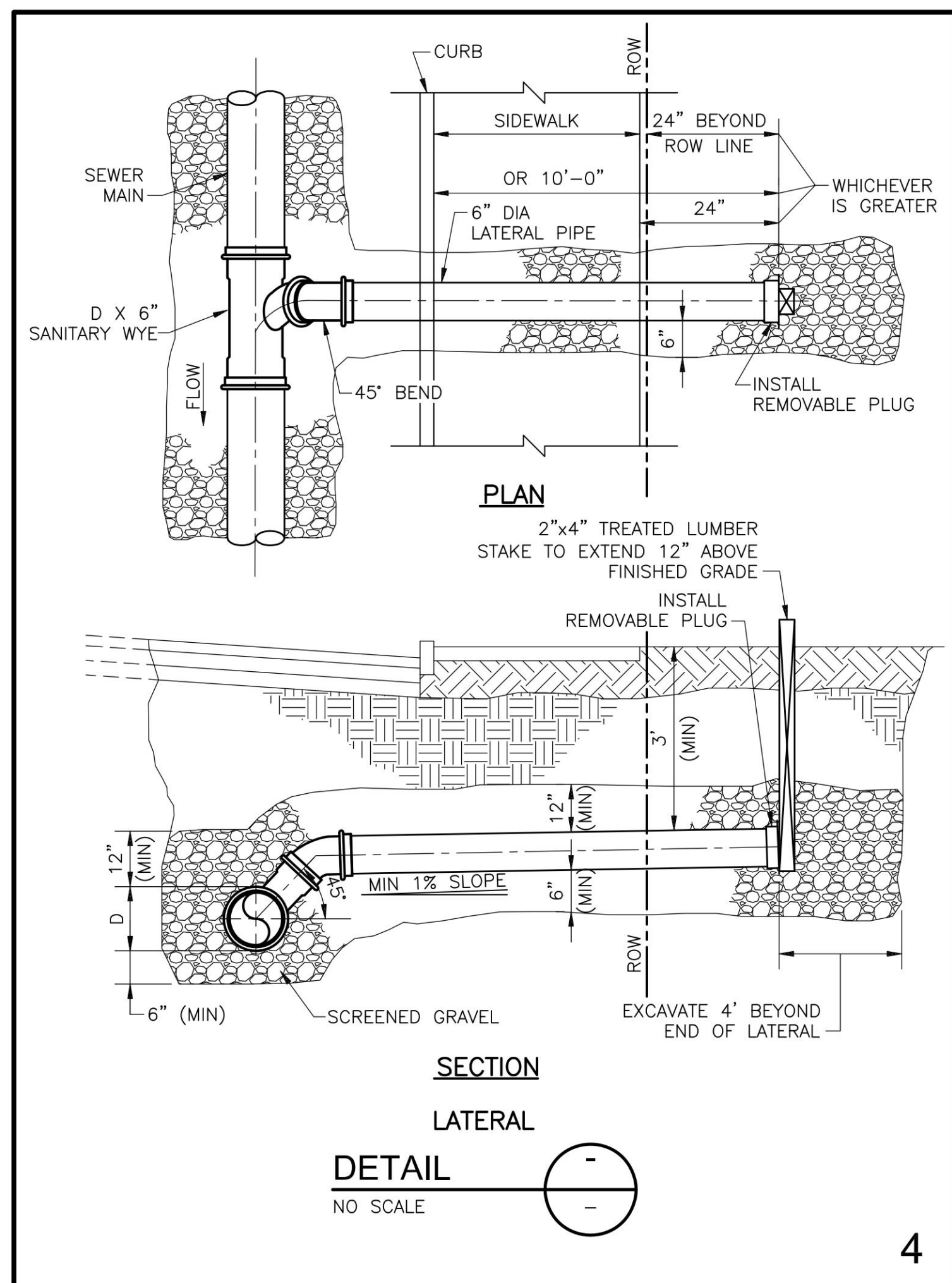
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REGISTERED PROFESSIONAL ENGINEER  
 PENNSYLVANIA  
 TYLEE E. HILL  
 ENGINEER  
 NO. PC00089

**PRELIMINARY 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:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	1" = XX'

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REGISTERED PROFESSIONAL ENGINEER  
PENNSYLVANIA  
TYLER E. HILL  
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT  
PENNSYLVANIA

**PRELIMINARY 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: OCTOBER 7, 2024  
DESIGNER: BDG PROJECT NO. 1212-004  
DRAWN BY: BLM SCALE: 1" = XX'

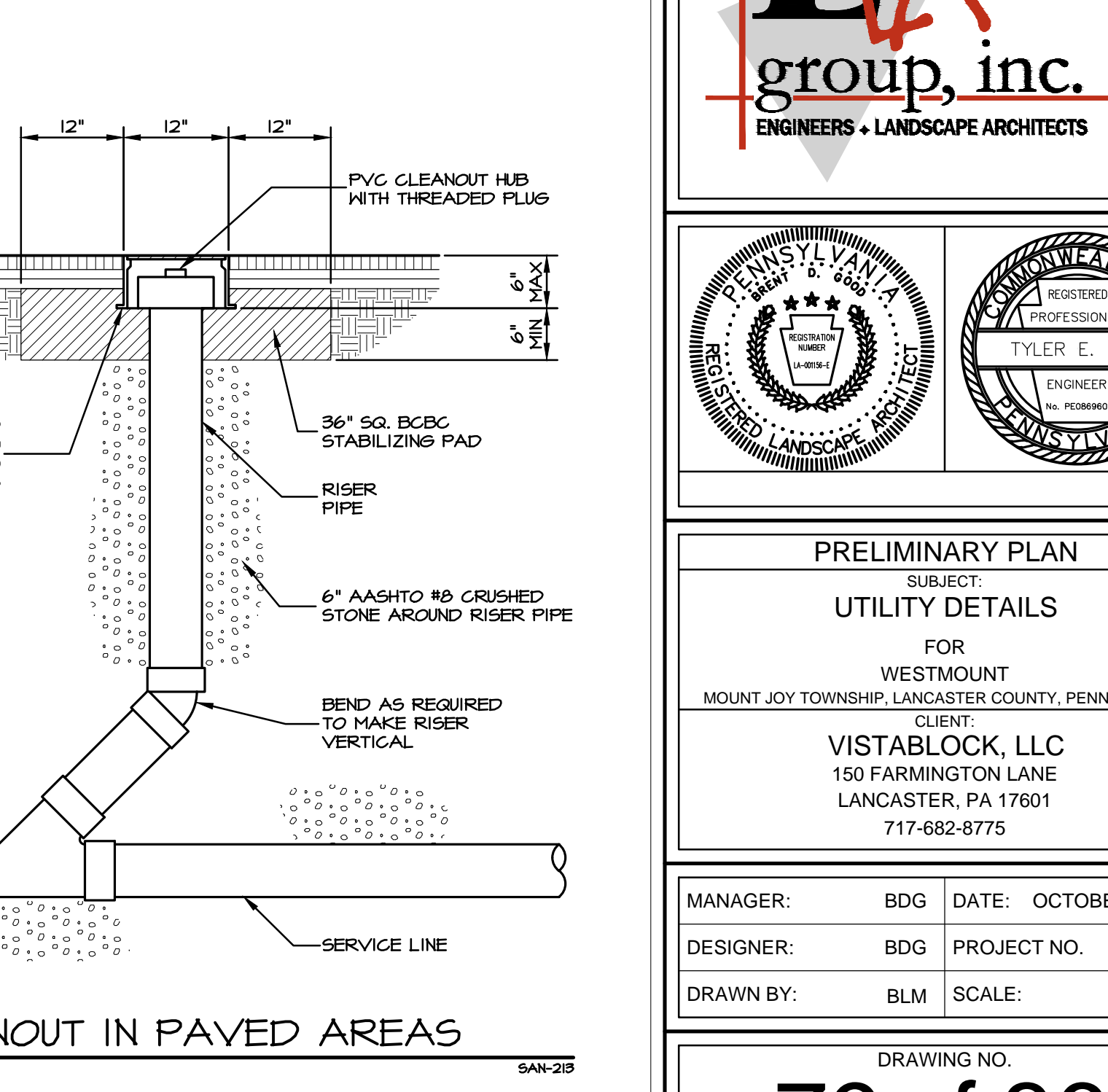
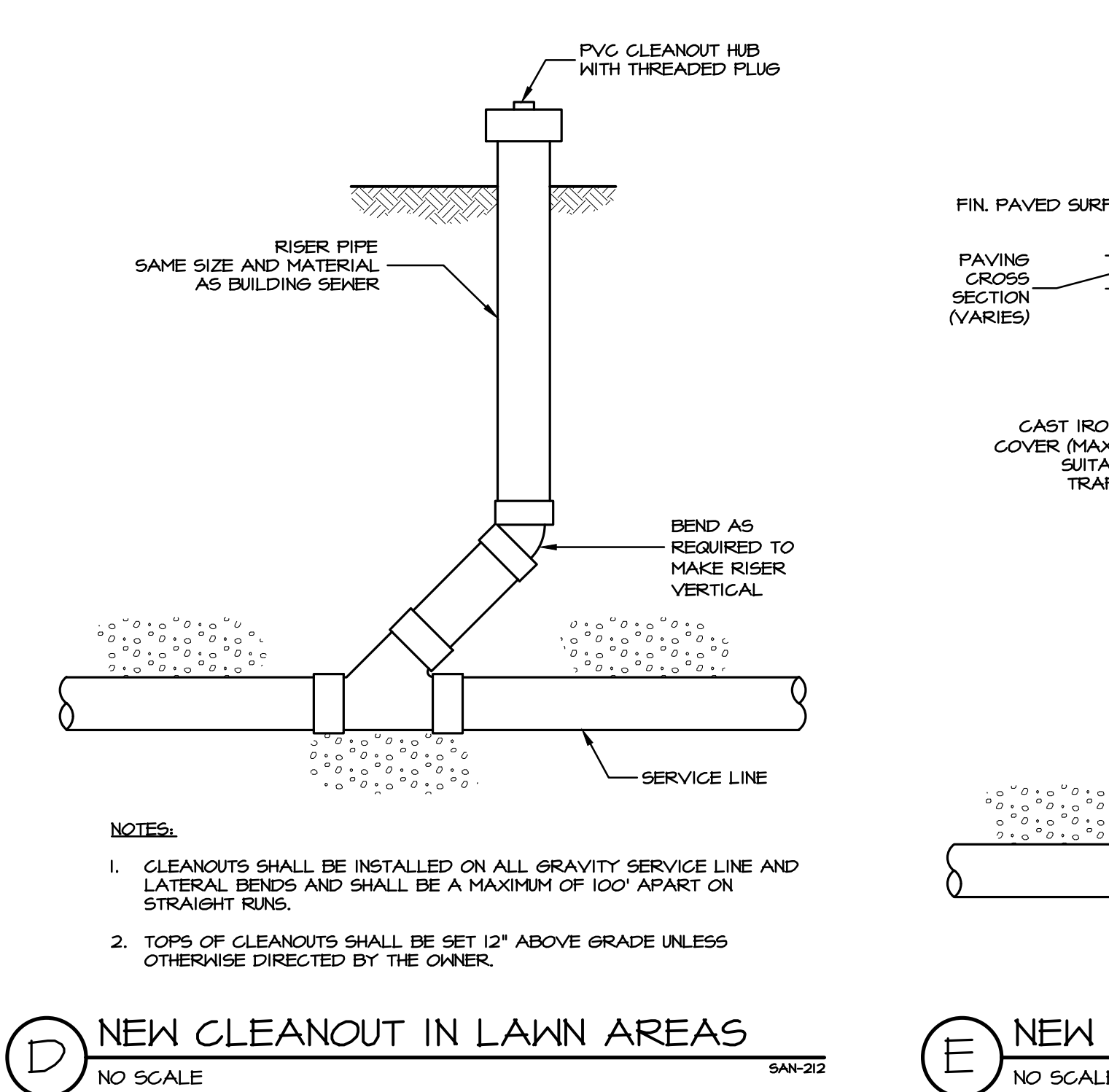
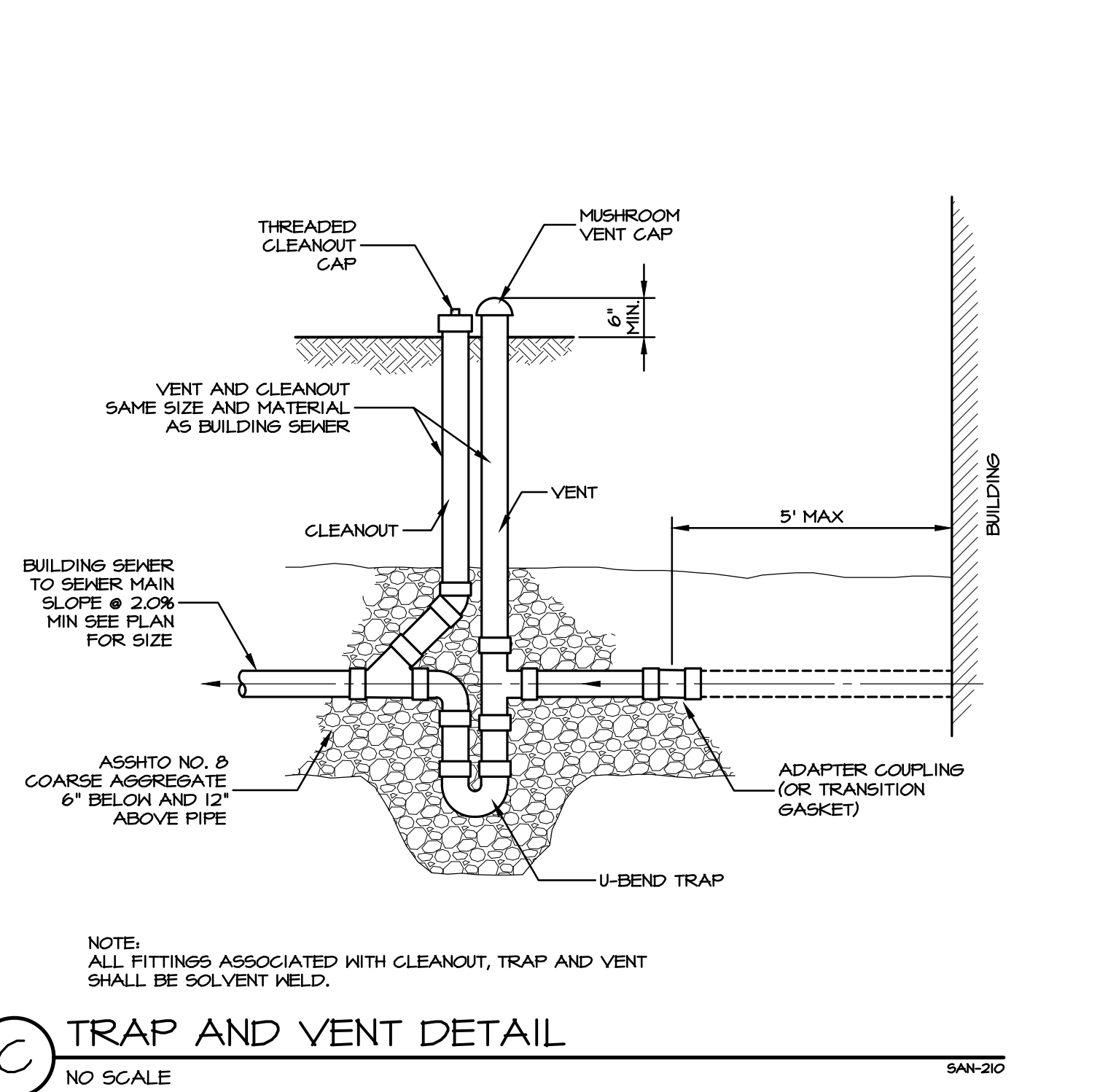
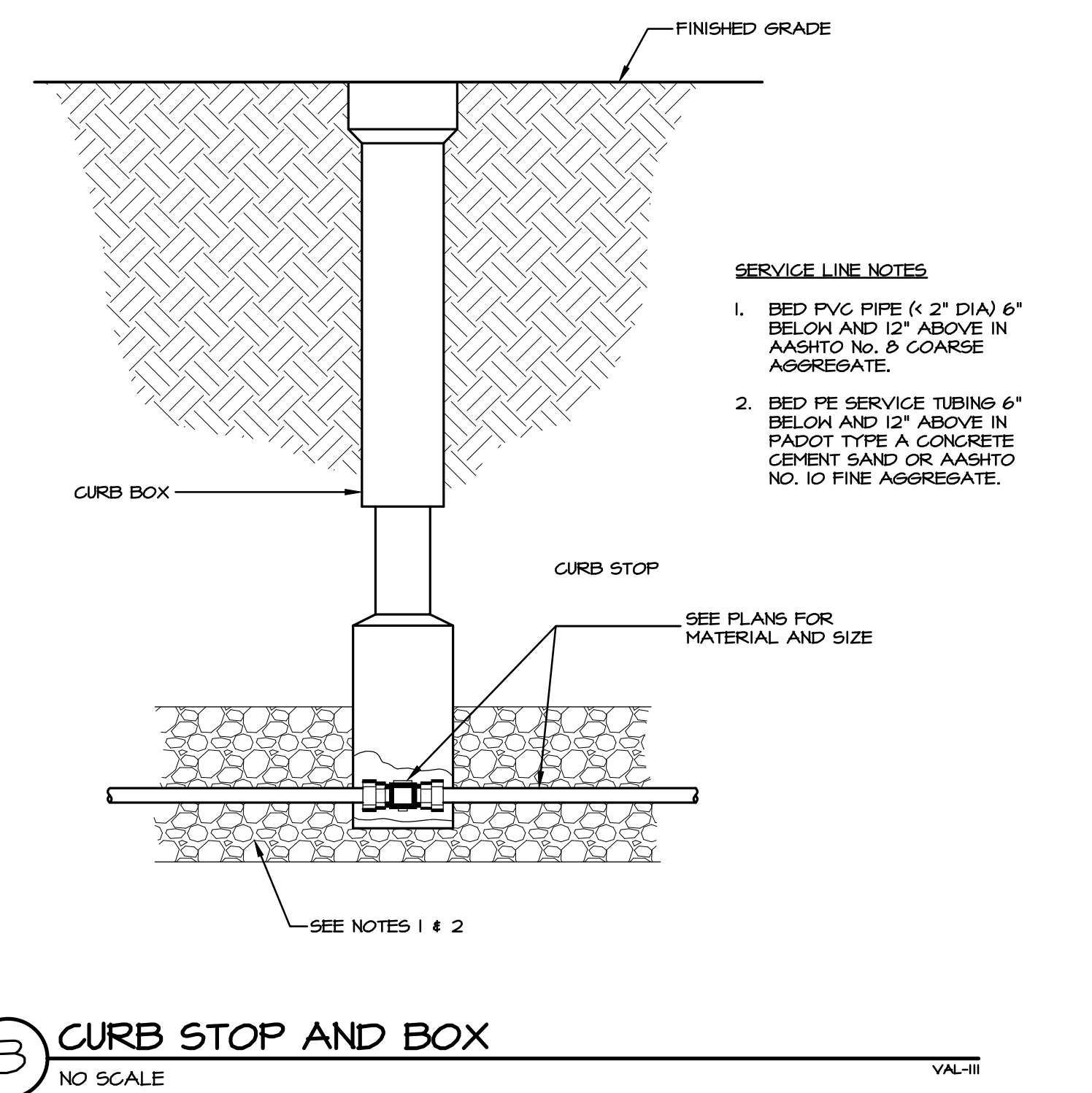
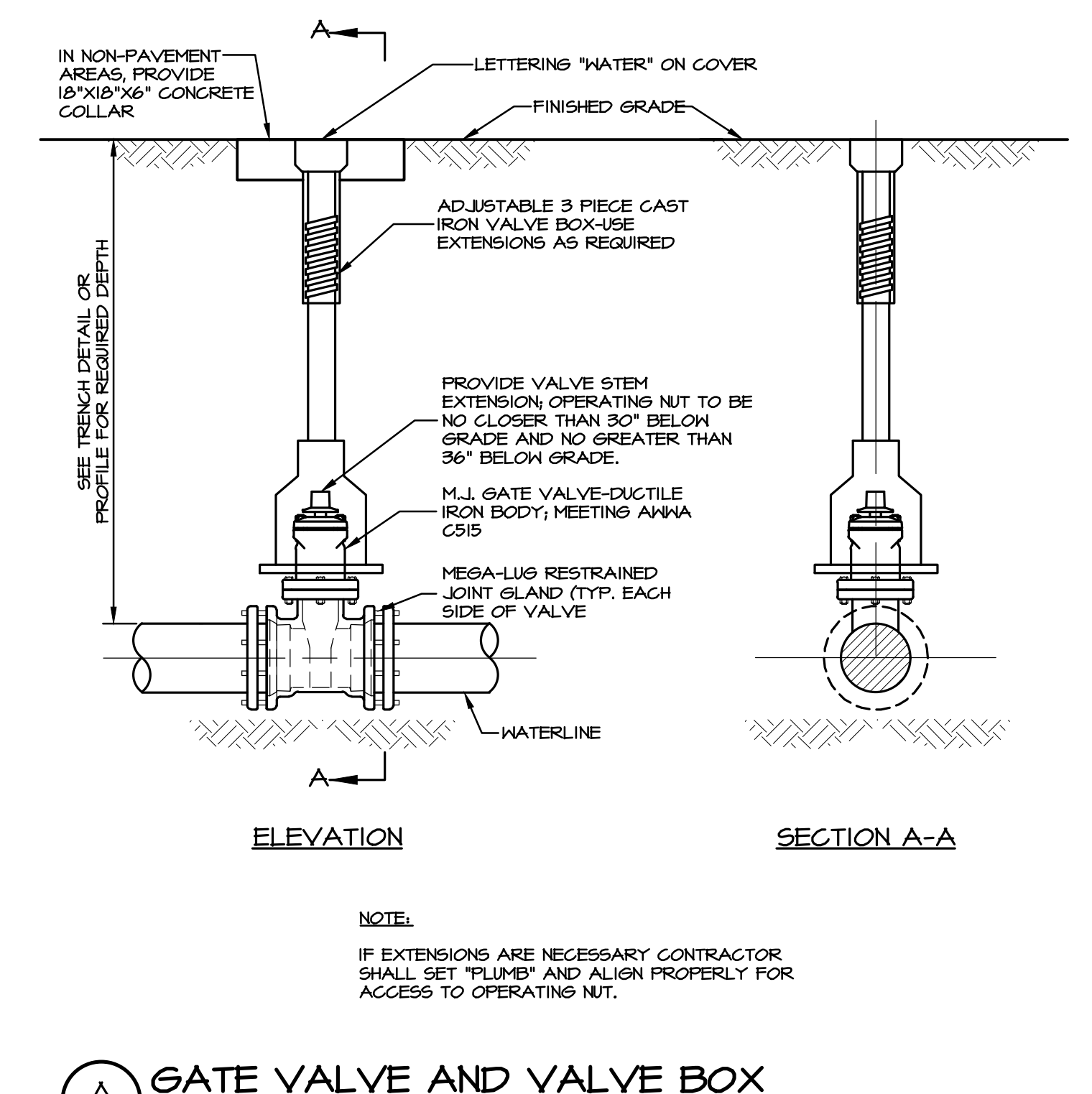
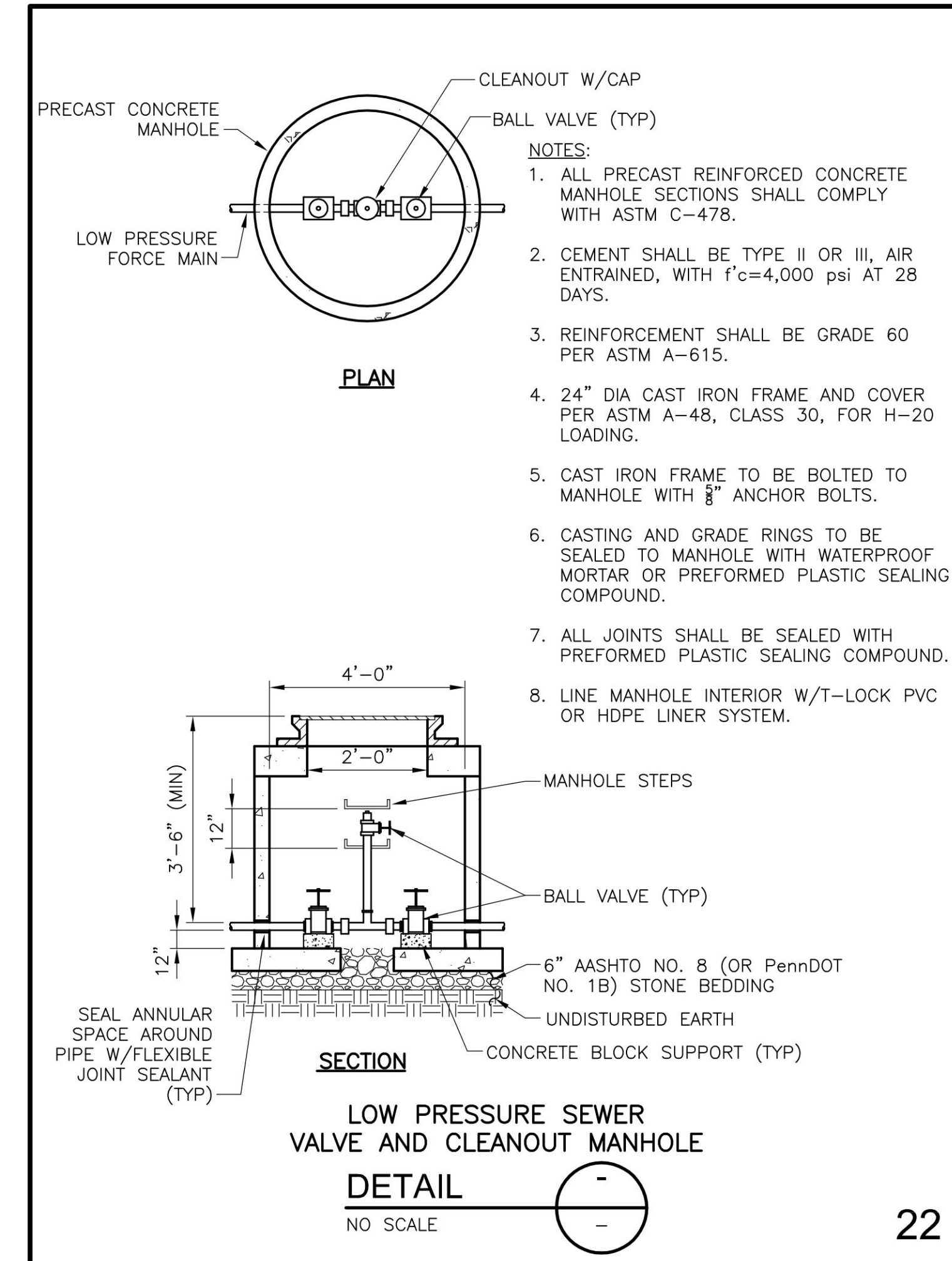
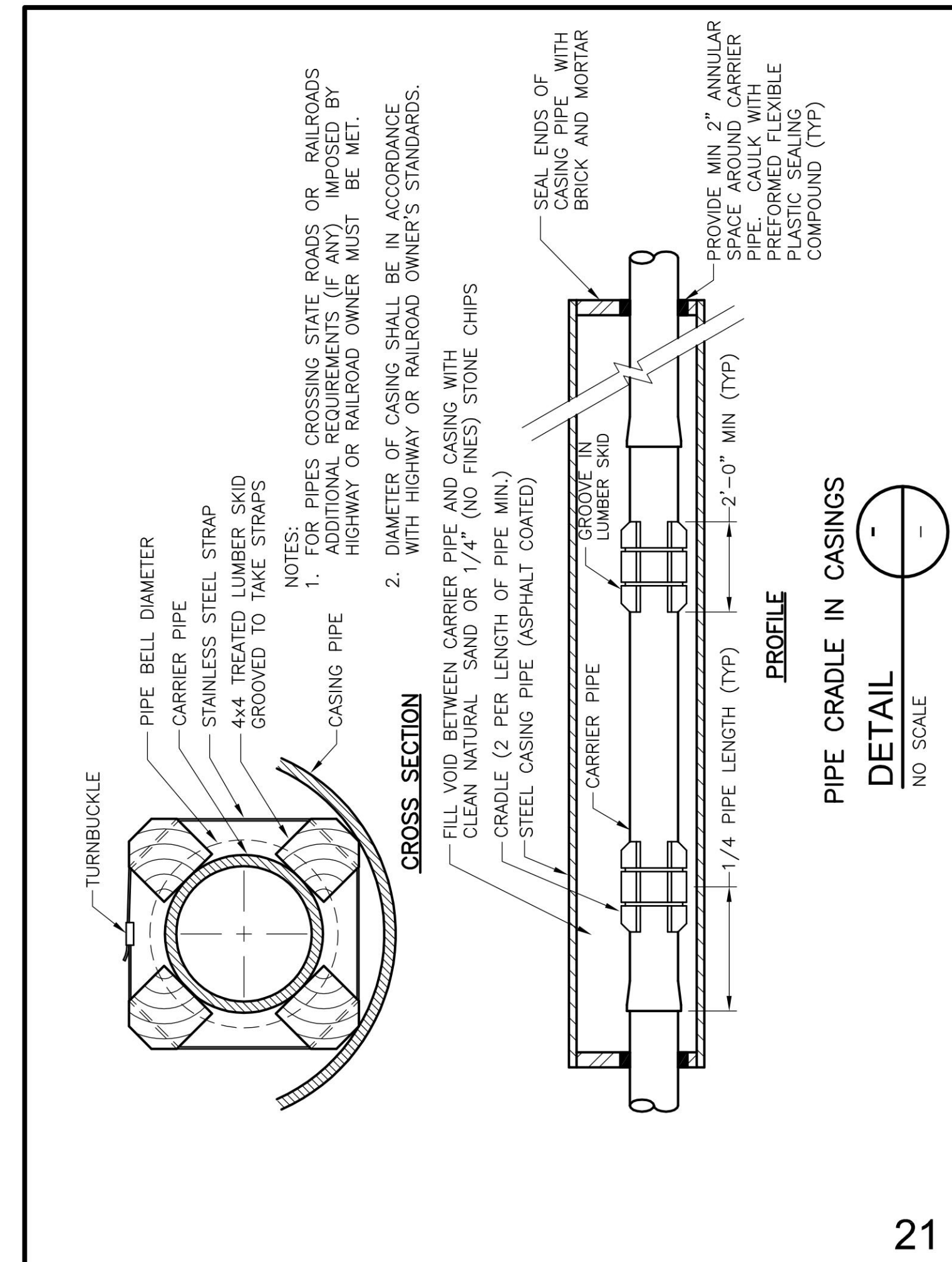
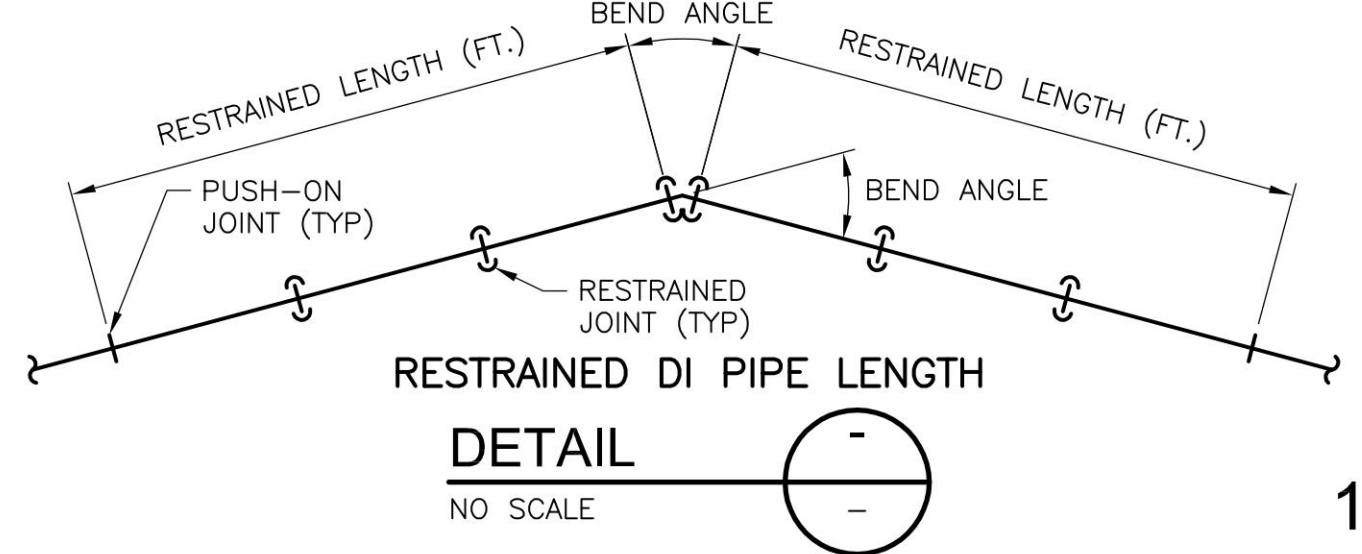
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**78 of 86**

MINIMUM RESTRAINED PIPE LENGTH (FT) FOR VERTICAL BENDS (WITHOUT POLYETHYLENE ENCASEMENT)				MINIMUM RESTRAINED PIPE LENGTH (FT) FOR HORIZONTAL BENDS (WITHOUT POLYETHYLENE ENCASEMENT)				
DIAMETER (IN)	VERTICAL BEND ANGLE (DEGREES)			HORIZONTAL BEND ANGLE (DEGREES)				
	45	22½	11½	90	45	22½	11½	
6	20	10	5	6	15	6	3	1
8	26	12	6	8	19	8	4	2
10	32	15	8	10	23	10	5	2
12	37	18	9	12	28	11	5	3
14	43	21	10	14	32	13	6	3
16	48	23	12	16	36	15	7	4
18	54	26	13	18	40	16	8	4
20	59	28	14	20	43	18	9	4
24	70	34	17	24	51	21	10	5

MINIMUM RESTRAINED PIPE LENGTH (FT) FOR VERTICAL BENDS (WITH POLYETHYLENE ENCASEMENT)				MINIMUM RESTRAINED PIPE LENGTH (FT) FOR HORIZONTAL BENDS (WITH POLYETHYLENE ENCASEMENT)				
DIAMETER (IN)	VERTICAL BEND ANGLE (DEGREES)			HORIZONTAL BEND ANGLE (DEGREES)				
	45	22½	11½	90	45	22½	11½	
6	29	14	7	6	16	7	3	2
8	37	18	9	8	21	9	4	2
10	45	22	11	10	26	11	5	3
12	53	26	13	12	30	13	6	3
14	61	29	15	14	35	14	7	3
16	69	33	16	16	39	16	8	4
18	77	37	18	18	44	18	9	4
20	85	41	20	20	48	20	9	5
24	100	48	24	24	56	23	11	6

- NOTES:
- DESIGN PRESSURE = 150 PSI
  - DEPTH OF COVER = 4 FEET
  - SAFETY FACTOR = 1.5
  - SOIL TYPE = COHESIVE GANGLAR
  - SOIL INTERNAL FRICTION ANGLE = 20 DEGREES
  - SOIL COHESION = 200 PSF
  - SOIL DENSITY = 90 PCF



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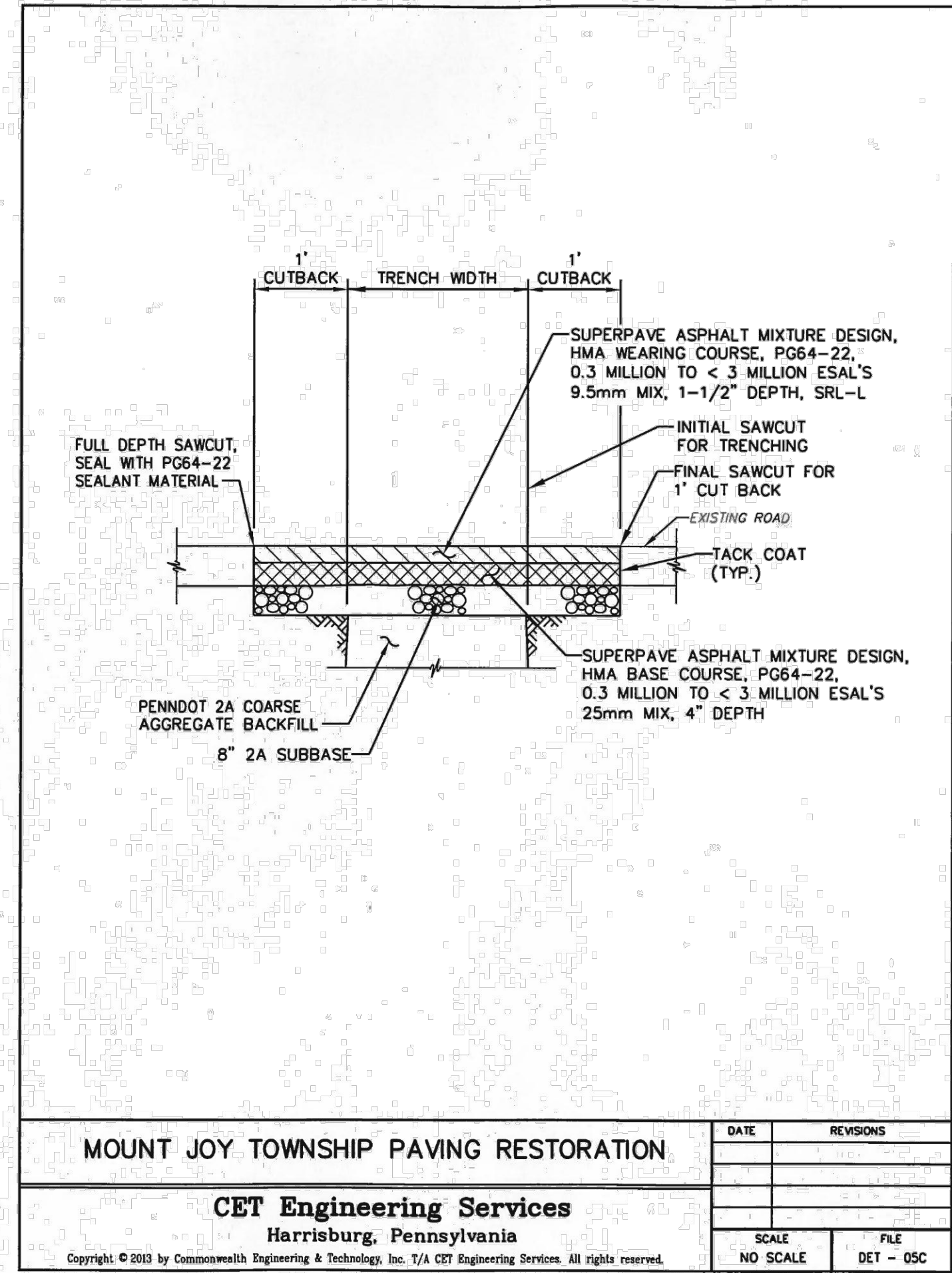
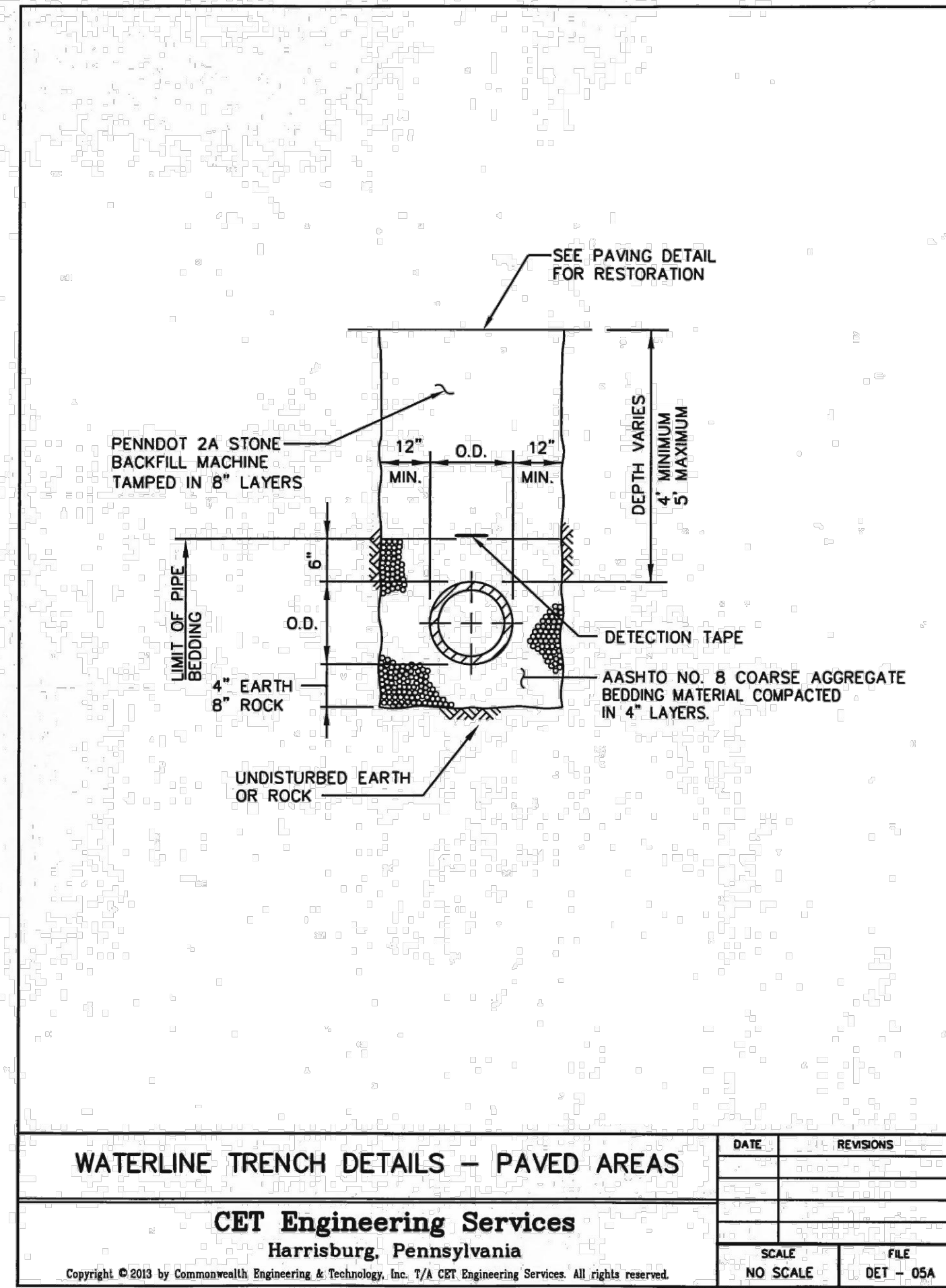
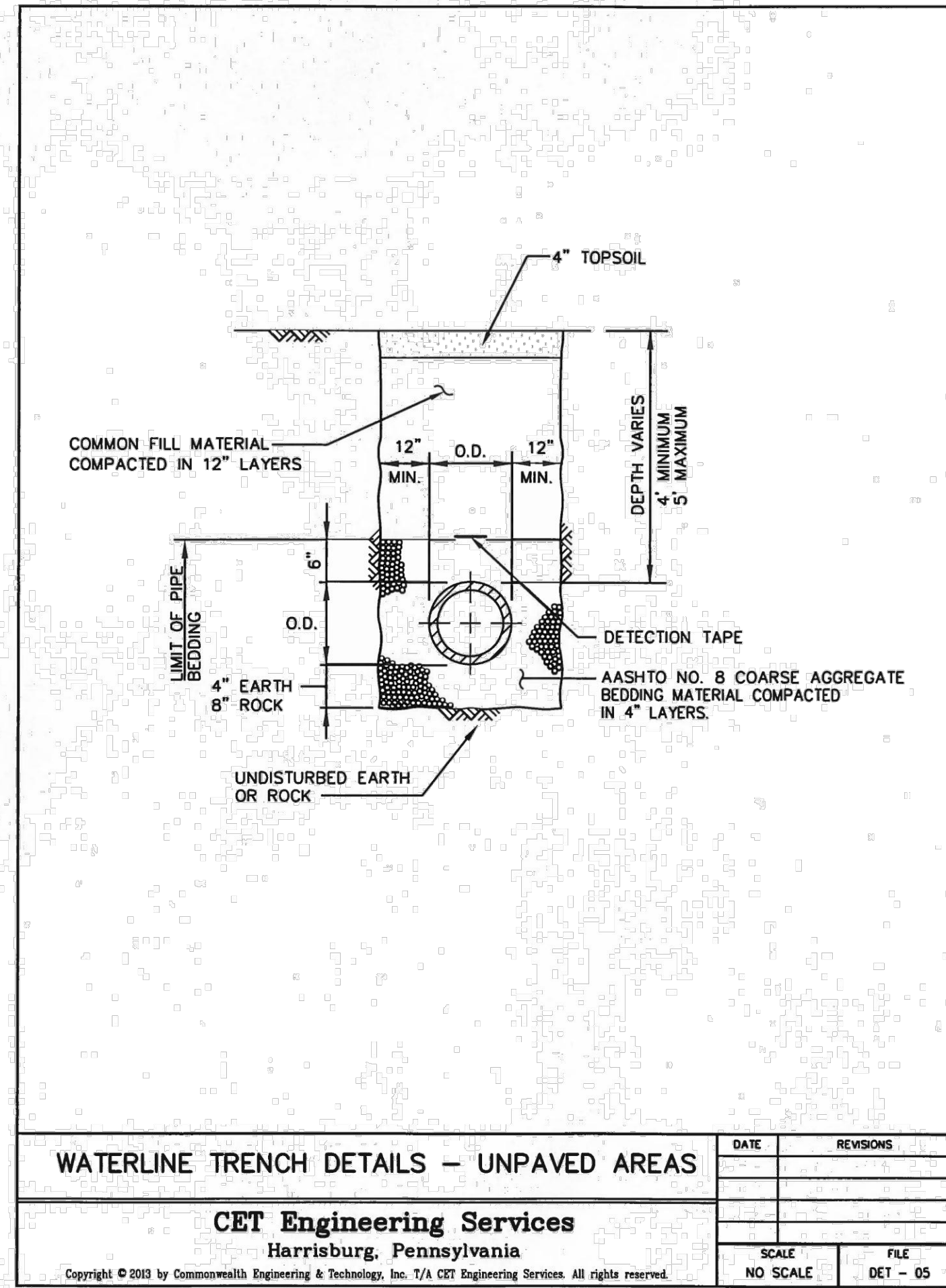
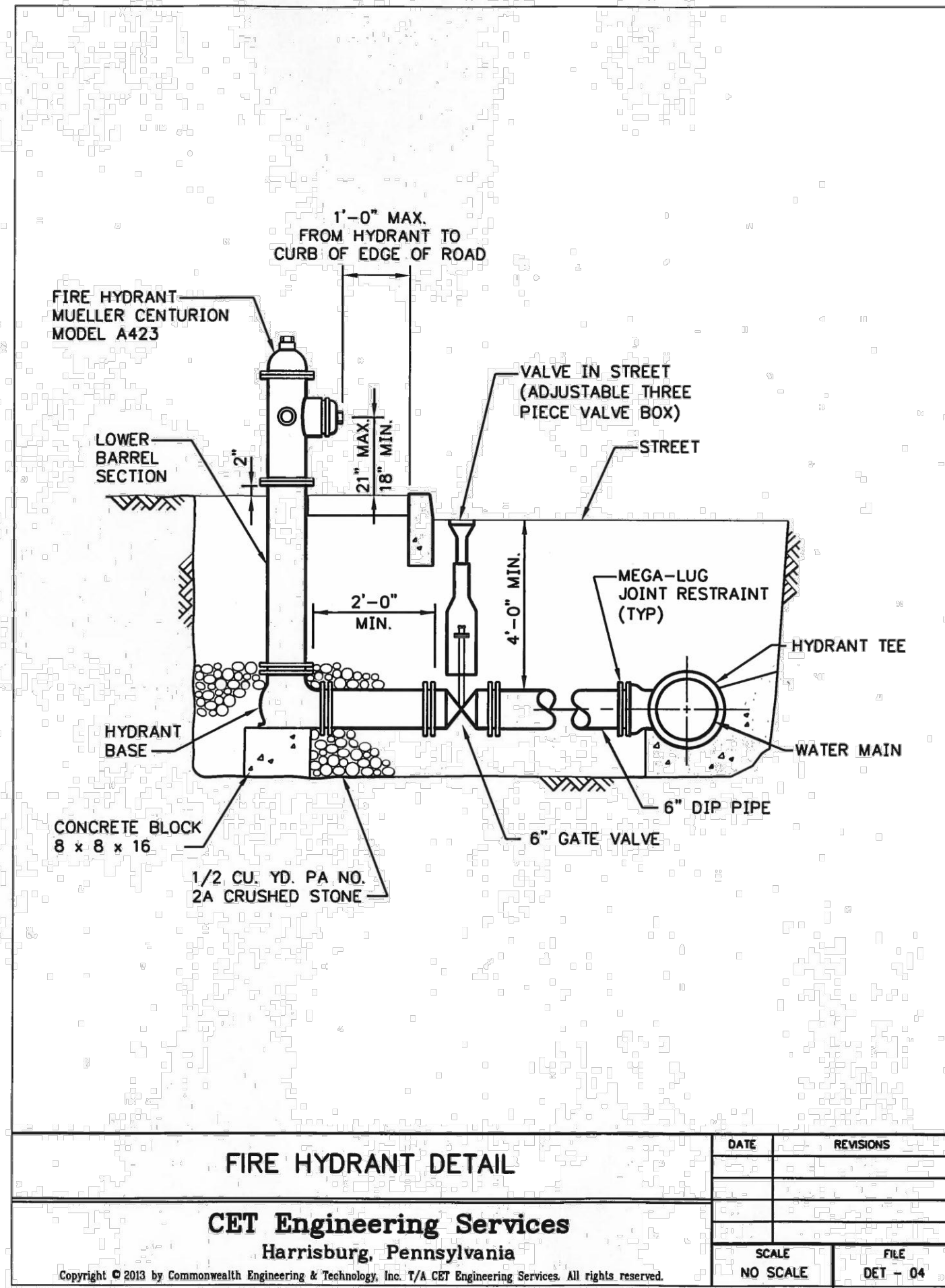
REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
No. PE000802  
PENNSYLVANIA

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

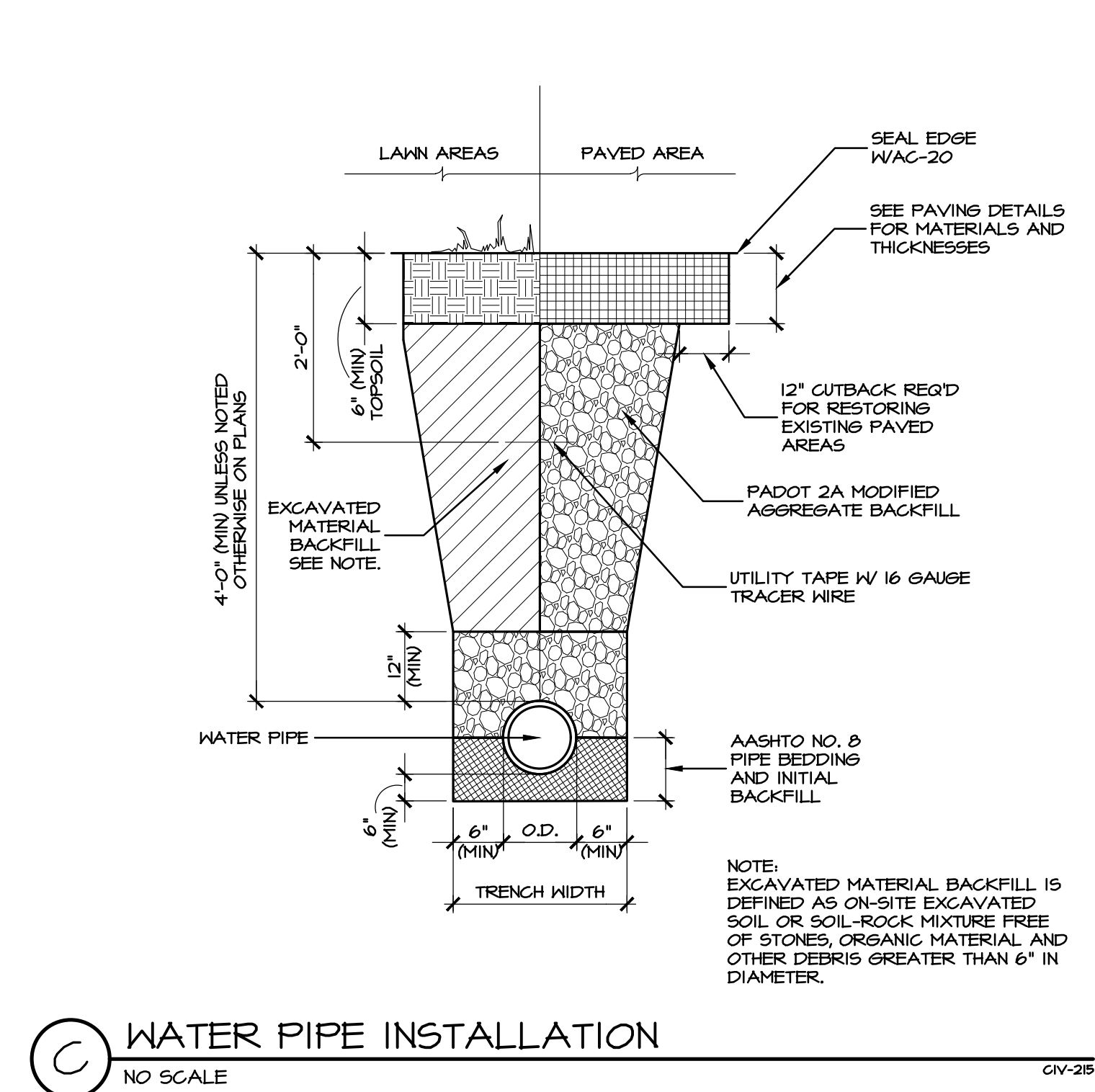
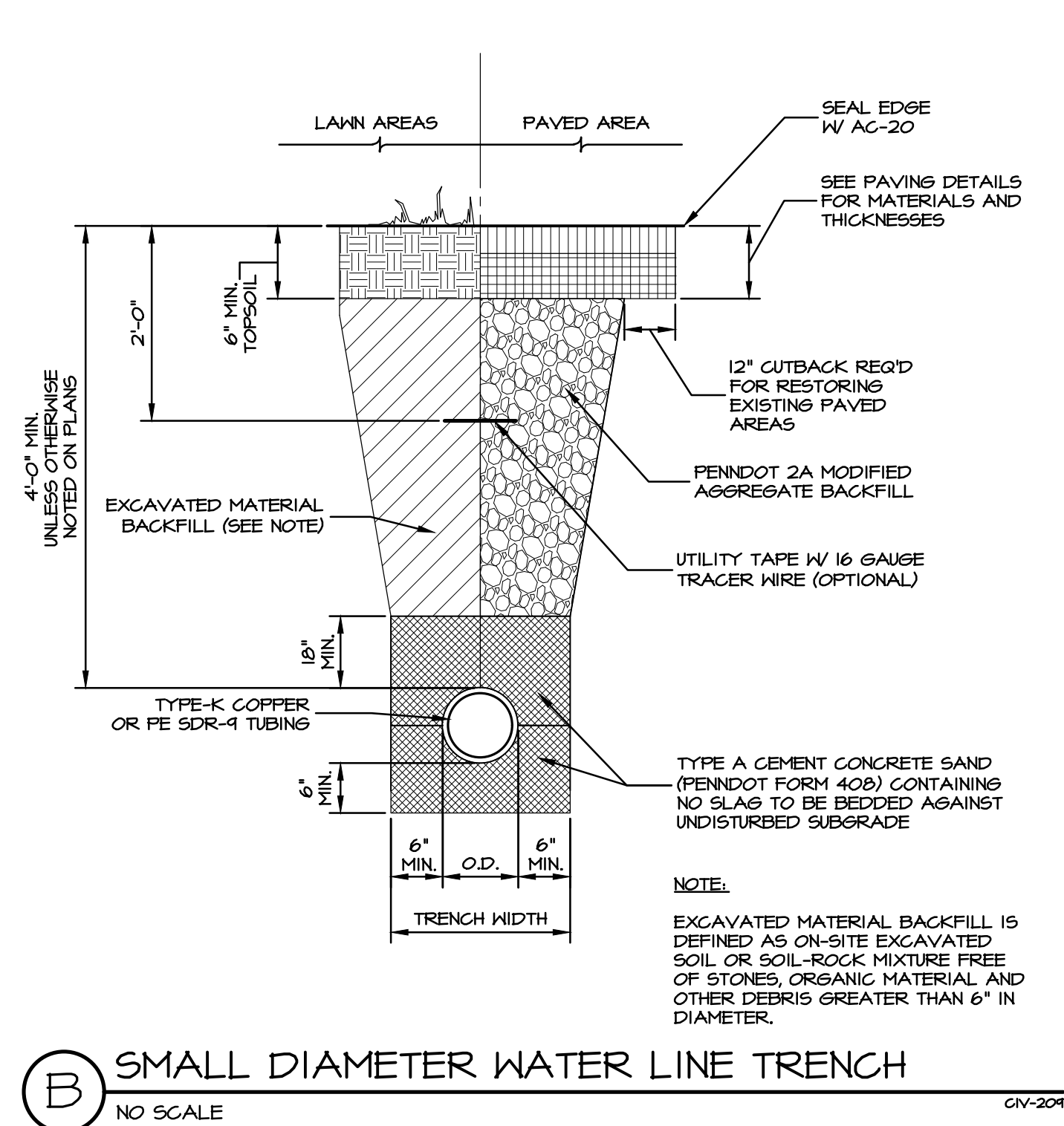
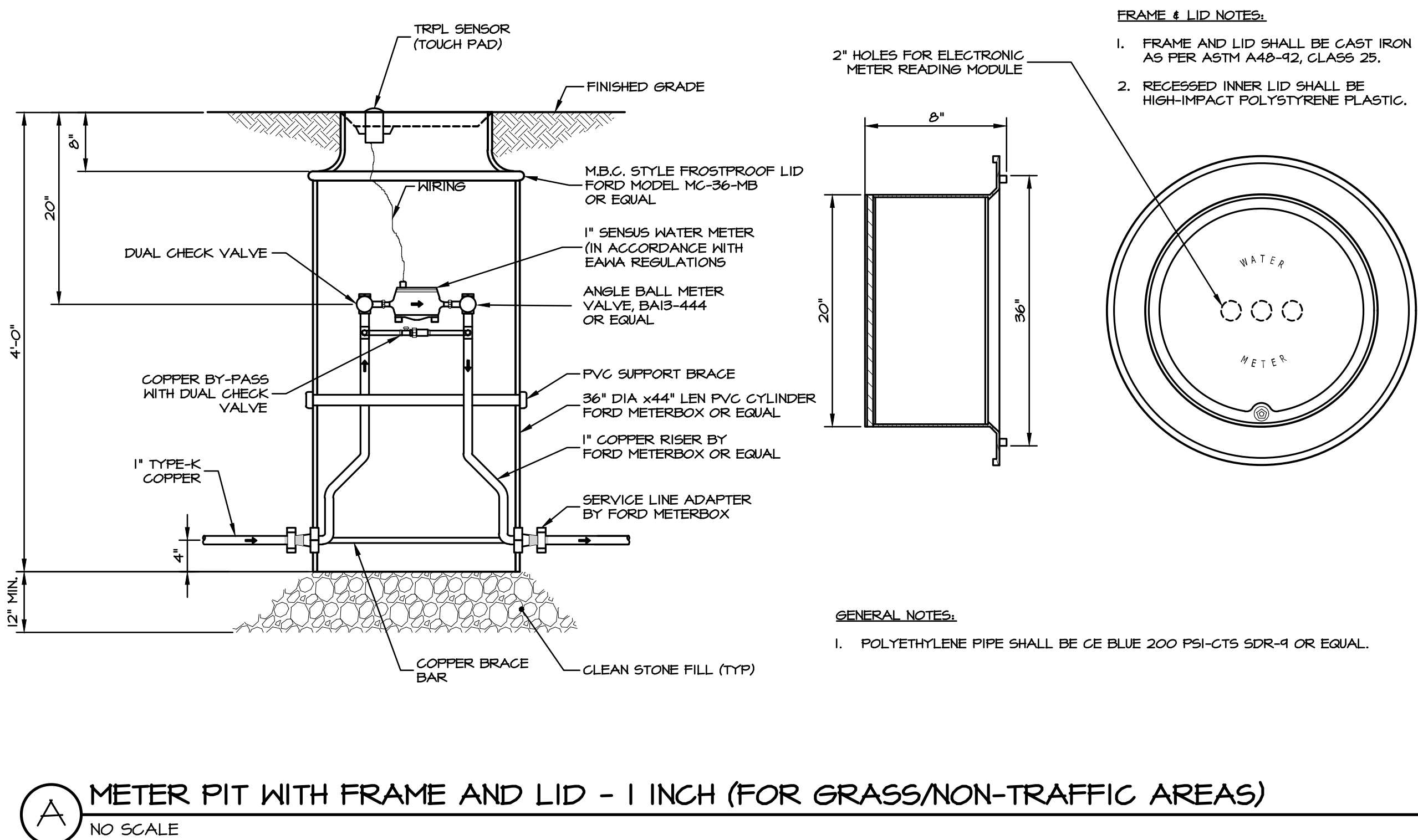
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DESIGNER:	BDG	PROJECT NO.:	1212-004
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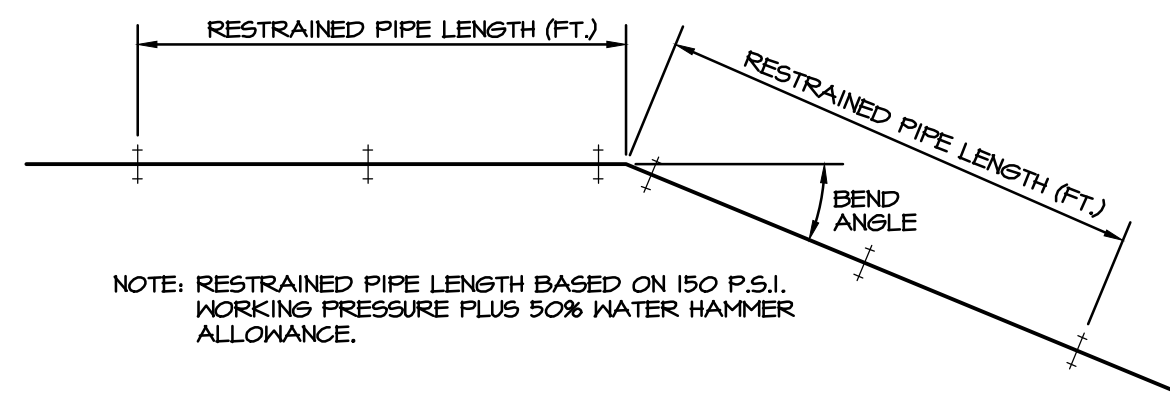
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**PRELIMINARY PLAN**  
SUBJECT:  
**UTILITY DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
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LANCASTER, PA 17601  
717-682-8775

MANAGER: BDG DATE: OCTOBER 7, 2024  
DESIGNER: BDG PROJECT NO. 1212-004  
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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

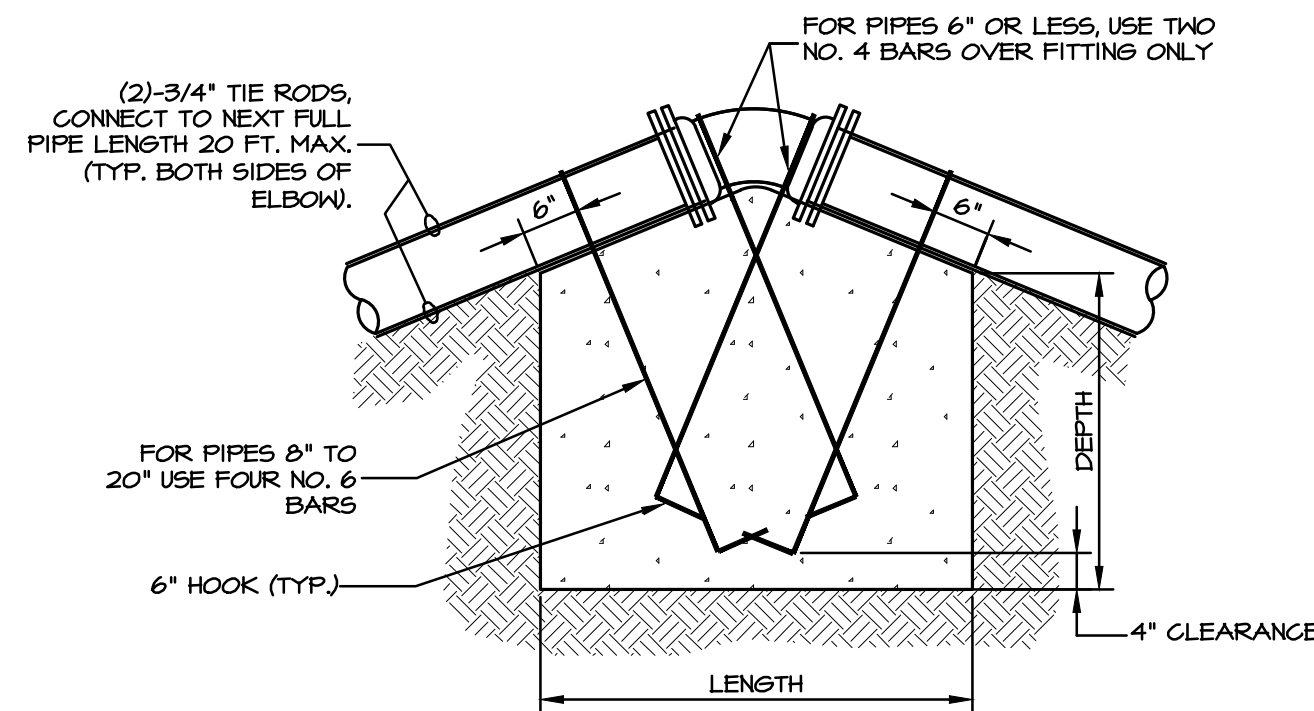
NOTE: FOR PIPE SIZES GREATER THAN 12", SUBMIT ENGINEERING CALCULATIONS TO VERIFY PROPOSED RESTRAINED PIPE LENGTHS.

**DUCTILE IRON RESTRAINED PIPE LENGTH SCHEDULE**

NO SCALE

CV-91

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 ANNA 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.

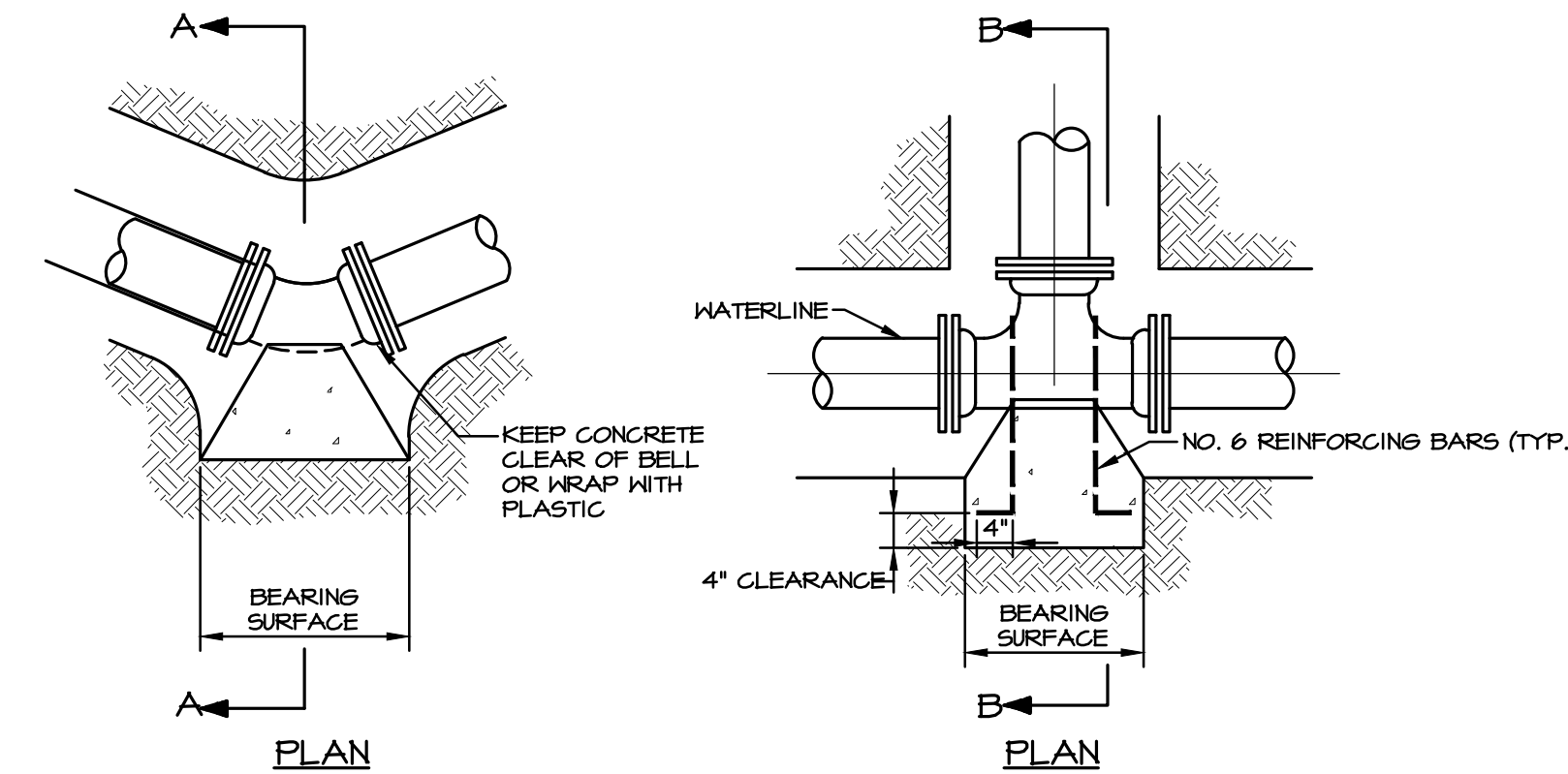
**TYPICAL THRUST BLOCKING FOR VERTICAL UPWARD THRUSTS**

NO SCALE

CV-93

TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, PSF	MINIMUM BEARING AREA REQUIRED, SQUARE FEET								
	4" AND LESS DEGREE BEND			6" AND 8" DEGREE BEND			10" AND 12" DEGREE BEND		
	11 1/4"	22 1/2"	45"	11 1/4"	22 1/2"	45"	11 1/4"	22 1/2"	45"
LOOSE SAND OR MEDIUM CLAY - 2000	1.0	2.0	2.7	4.0	1.5	3.0	6.0	11.0	3.5
PACKED GRAVEL AND SAND - 4000	1.0	1.0	1.5	2.0	1.0	1.5	3.0	5.5	1.7
ROCK - 10,000	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.1	1.0

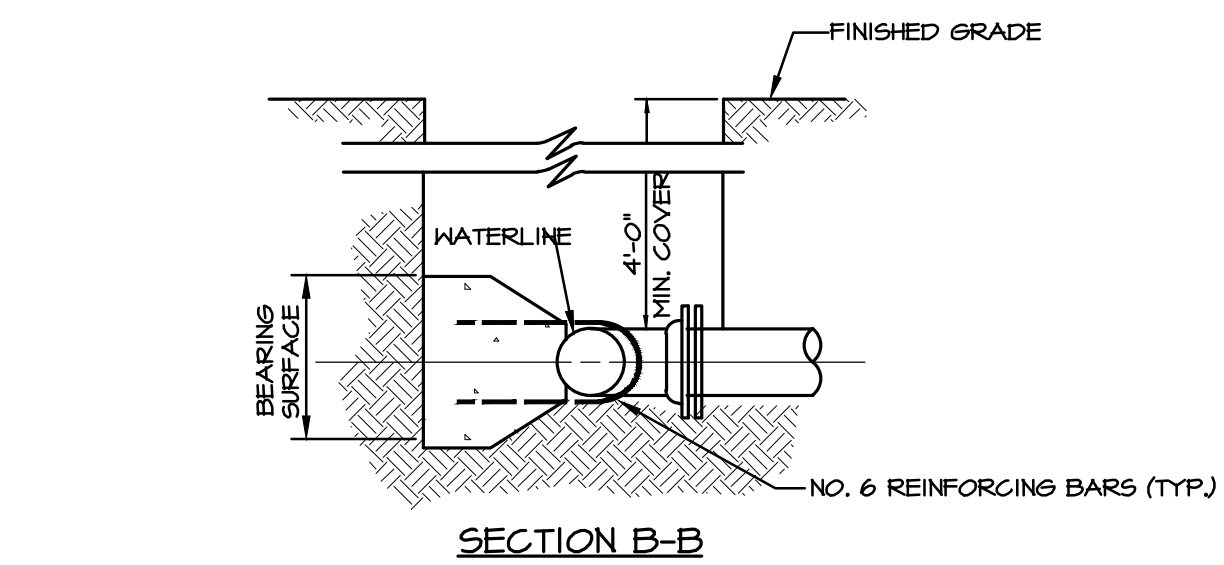
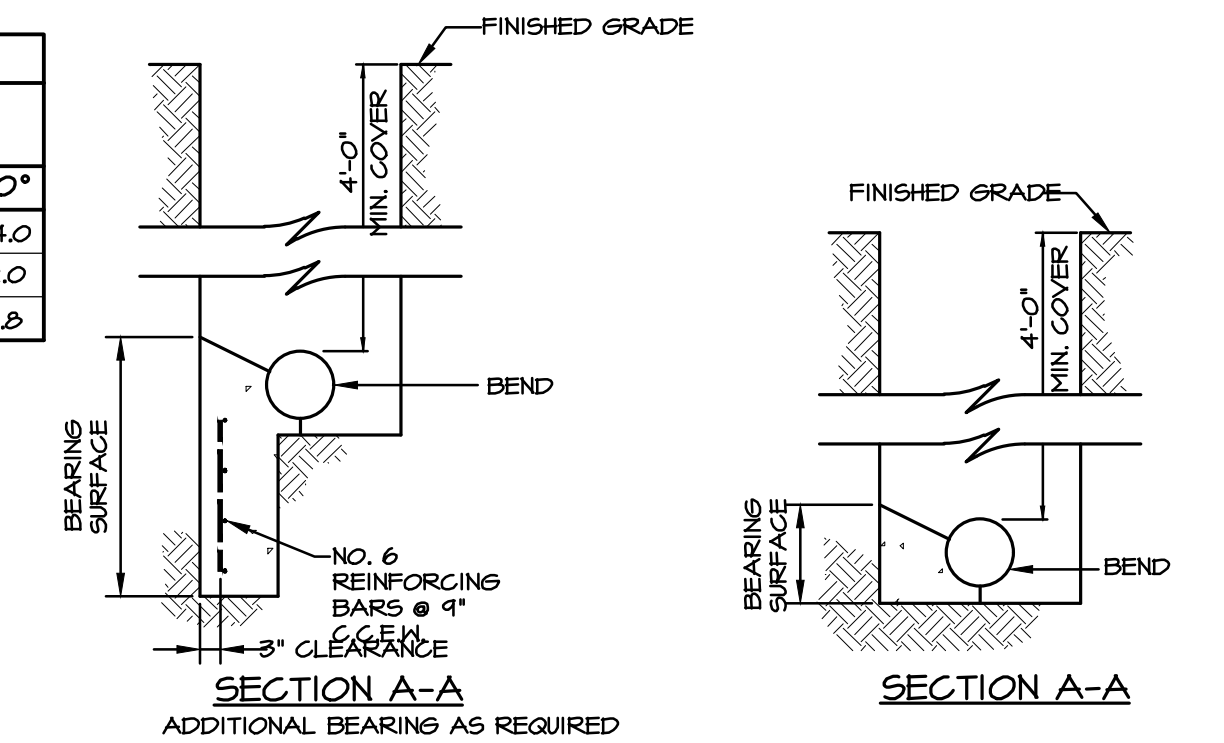
TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, PSF	MINIMUM BEARING AREA REQUIRED, SQUARE FEET								
	14" AND 16" DEGREE BEND OR DEFLECTION			18" AND 20" DEGREE BEND OR DEFLECTION					
	11 1/4"	22 1/2"	45"	11 1/4"	22 1/2"	45"	11 1/4"	22 1/2"	45"
LOOSE SAND OR MEDIUM CLAY - 2000	6.0	12.0	23.1	42.7	9.5	19.0	31.0	61.0	
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

CV-94



- NOTES:
- DIMENSIONS OF CONCRETE BLOCKS CALCULATED USING ANNA 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.

REVISIONS PER:	DATE:	BY:
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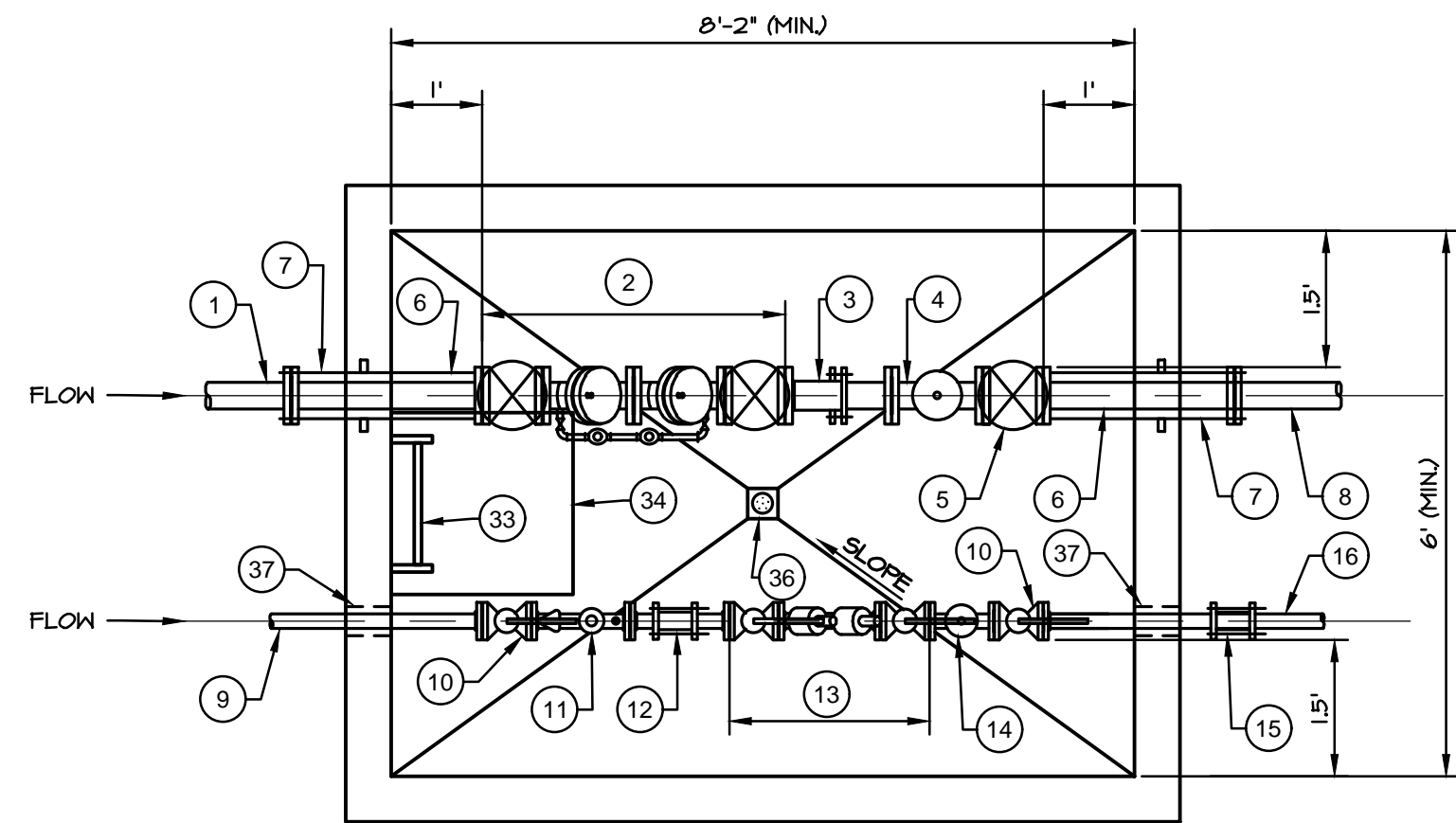
743 S. BROAD ST.  
LITITZ, PA 17543  
(717) 626-7271  
elagroup.com

REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
No. PE00880  
PENNSYLVANIA

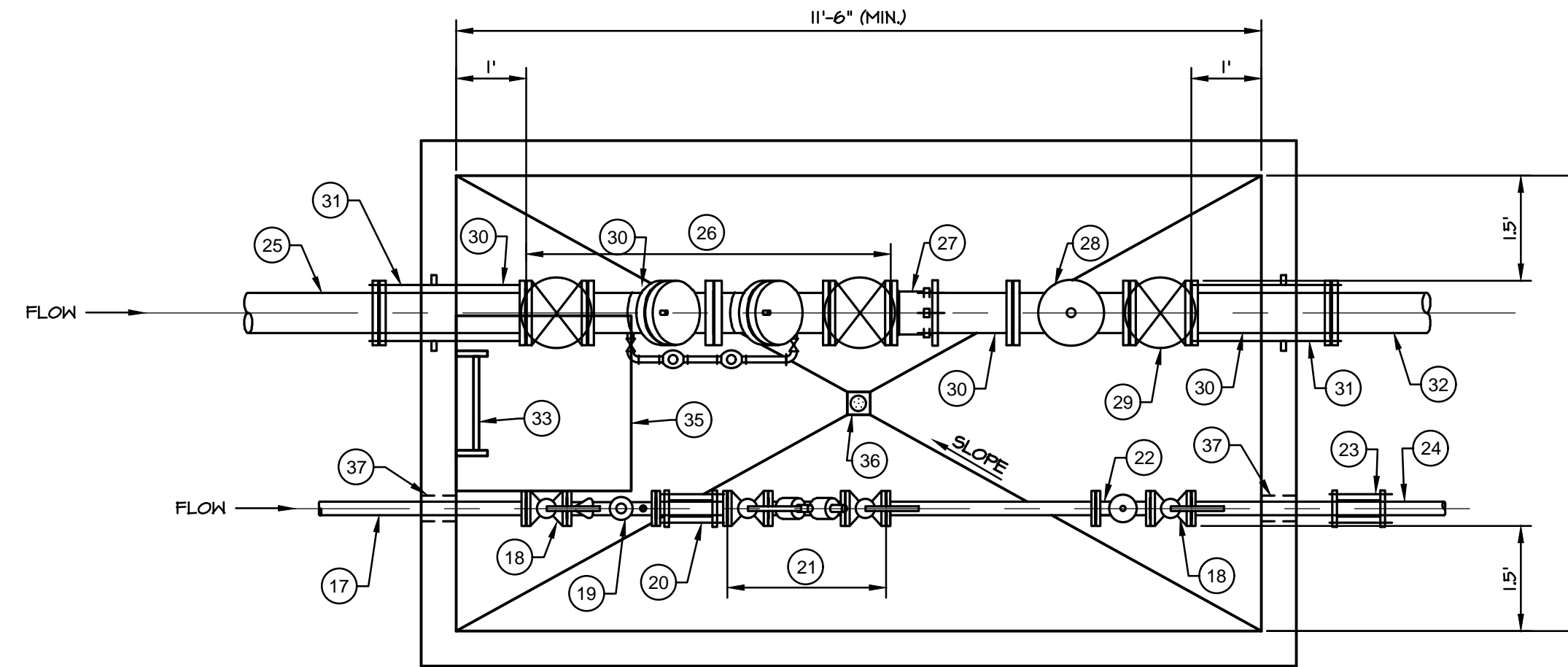
**PRELIMINARY PLAN**  
SUBJECT:  
**UTILITY DETAILS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER: BDG DATE: OCTOBER 7, 2024  
DESIGNER: BDG PROJECT NO. 1212-004  
DRAWN BY: BLM SCALE: 1" = XX'

DRAWING NO.  
**81 of 86**



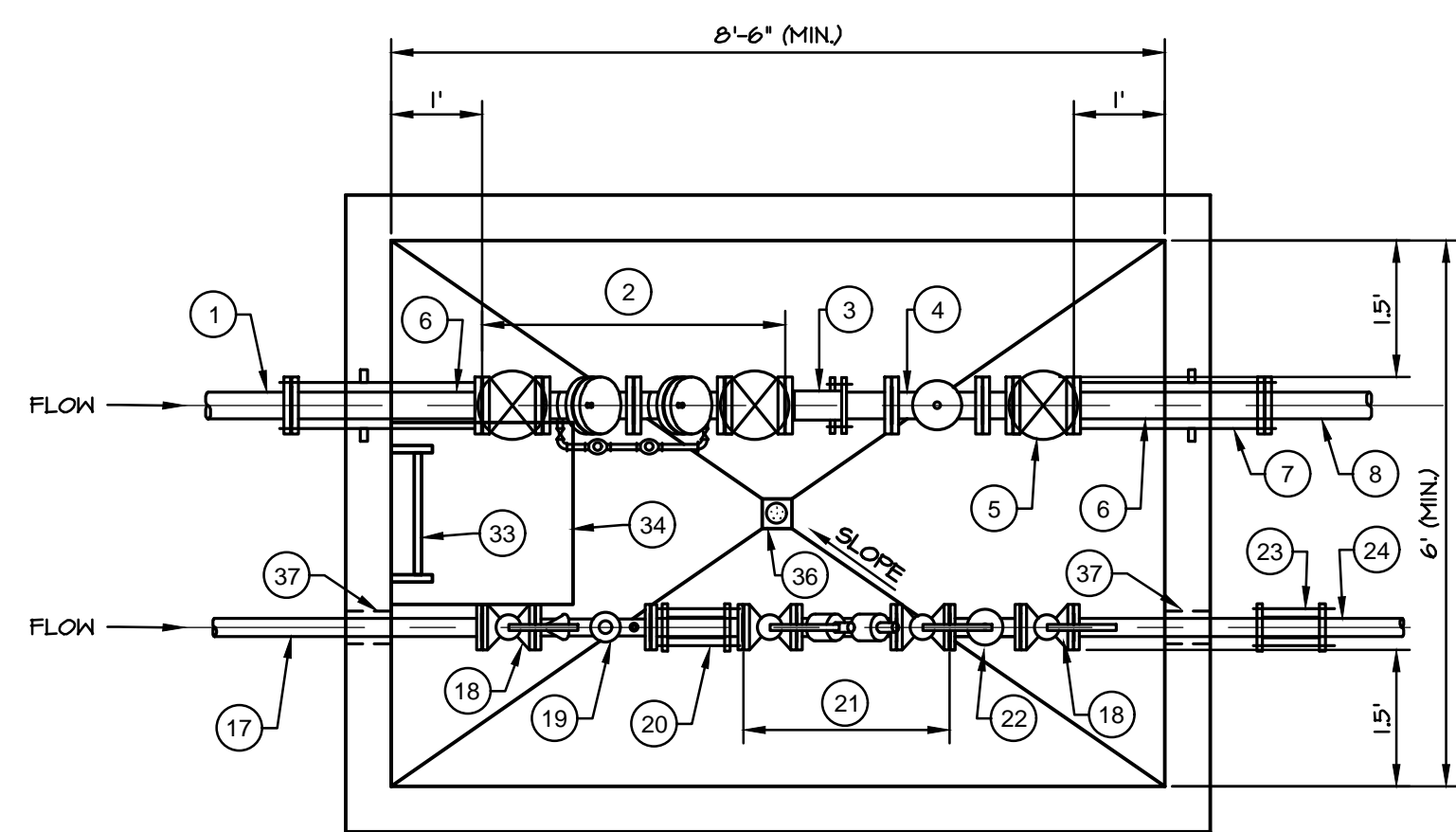
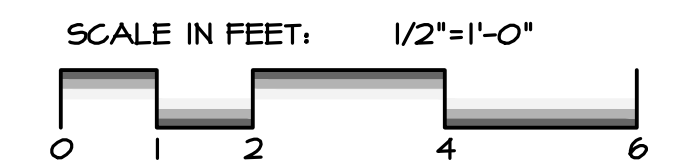
**3" FIRE AND 1.5" DOMESTIC WATER METER PIT**  
SCALE: 1/2"=1'-0"



**6" FIRE AND 2" DOMESTIC WATER METER PIT**  
SCALE: 1/2"=1'-0"

**NOTES:**

1. FLOOR DRAIN SHALL DISCHARGE TO A 3' SQUARE BY 18" DEEP STONE SUMP (AASHTO #57).
2. INTERNAL PIPING SHALL BE SUPPORTED BY STANDON MODEL S84 PIPE SUPPORTS. SUPPORTS SHALL BE PLACED EVERY 4' AND NOT BE PLACED ON WORKING/MOVING COMPONENTS OF THE INSTALLED APPURTENANCES. A MINIMUM OF TWO SUPPORTS SHALL BE PROVIDED FOR EACH LINE.
3. EXTERIOR COATINGS OF COOPERS CREEK C4-SP BITUMASTIC WATERPROOFING SHALL BE APPLIED TO ENTIRE EXTERIOR.
4. INTERIOR SHALL HAVE COATING OF COOPERS CREEK BREATHABLE WHITE ENAMEL EPOXY.
5. ALL METER PITS SHALL HAVE AT LEAST A 12" RISER FOR THE ACCESS HATCH.
6. VAULT MANUFACTURER WILL DETERMINE THE FINAL SIZE OF THE METER VAULT.
7. SPOOL PIECES MATCHING THE LENGTHS OF EACH METER DEPICTED SHALL BE PROVIDED AND SHALL BE INSTALLED PRIOR TO THE FURNISHING OF THE METER BY THE WATER AUTHORITY.
8. INSIDE HEIGHT OF METER PIT SHALL BE A MINIMUM OF 5'.

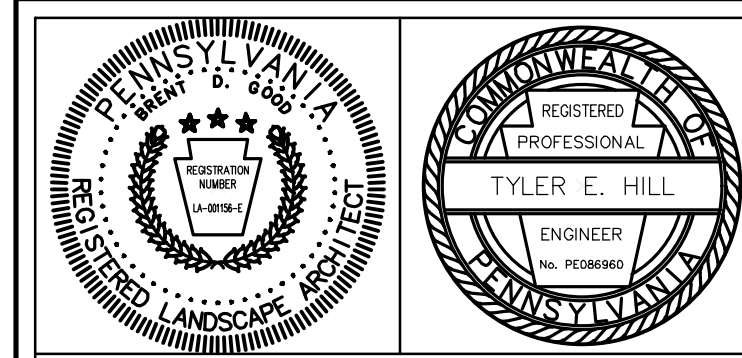


**3" FIRE AND 2" DOMESTIC WATER METER PIT**  
SCALE: 1/2"=1'-0"

ITEM NO.	DESCRIPTION	SIZE/DIMENSION	ELEVATION
1	DICL CL-52	3"	
2	WATTS T04 DCDA	3"	
3	FLANGED ADAPTER	3"	
4	PRESSURE REDUCING VALVE	3"	
5	GATE VALVE	3"	
6	DICL CL-53	3"	
7	RODDED THRU WALL OR OMNI SLEEVE WITH MEG-A-LUG JOINT RESTRAINT (CL-53 OR CL-54)	3"	
8	PE SDR-4	3"	
9	TYPE K COPPER	1.5"	
10	BALL VALVE	1.5"	
11	SENSUS OMNI G2 METER	1.5"	
12	ROMAC 511 COUPLING ON COPPER SPOOL PIECE	1.5"	
13	WATTS T19 QT DCVA	1.5"	
14	PRESSURE REDUCING VALVE	1.5"	
15	TRANSITION COUPLING	1.5"	
16	PE SDR-4	1.5"	
17	TYPE K COPPER	2"	
18	BALL VALVE	2"	
19	SENSUS OMNI G2 METER	2"	
20	ROMAC 511 COUPLING ON COPPER SPOOL PIECE	2"	

ITEM NO.	DESCRIPTION	SIZE/DIMENSION	ELEVATION
21	WATTS T19 QT DCVA	2"	
22	PRESSURE REDUCING VALVE	2"	
23	TRANSITION COUPLING	2"	
24	PE SDR-4	2"	
25	DICL CL-52	6"	
26	WATTS T04 DCDA	6"	
27	FLANGED ADAPTER	6"	
28	PRESSURE REDUCING VALVE	6"	
29	GATE VALVE	6"	
30	DICL CL-53	6"	
31	RODDED THRU WALL OR OMNI SLEEVE WITH MEG-A-LUG JOINT RESTRAINT (CL-53 OR CL-54)	6"	
32	PVC C-900 DR-18	6"	
33	ALUMINUM LADDER WITH BUILT-IN TELESCOPING SAFETY POST		
34	SQUARE ACCESS HATCH	24"x24"	
35	SQUARE ACCESS HATCH	30"x30"	
36	FLOOR DRAIN WITH 4" BACKFLOW VALVE (SEE NOTE 1)		
37	LINK SEAL		

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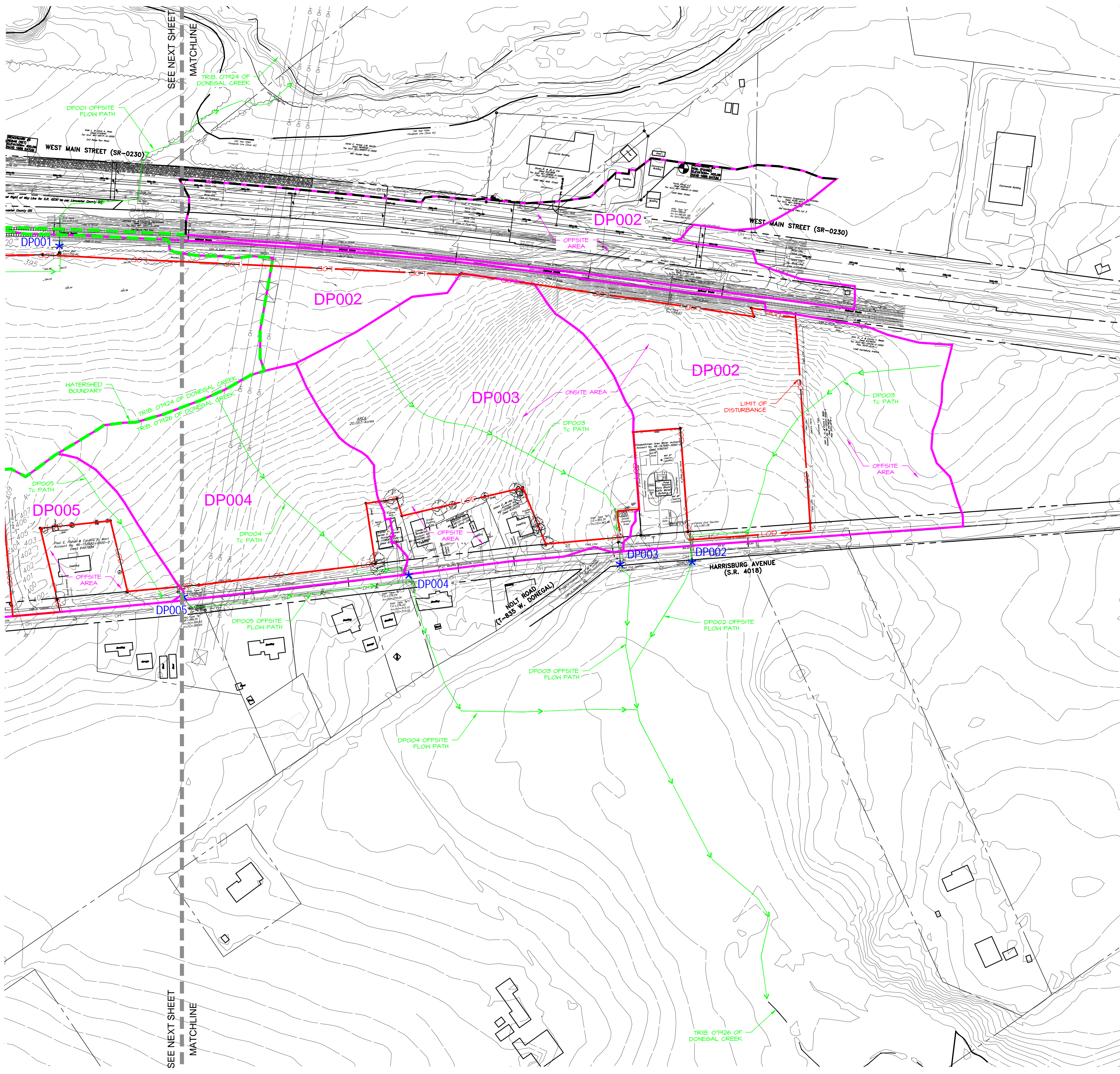


**PRELIMINARY PLAN**  
SUBJECT:  
**WATER METER PITS**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER: BDG DATE: OCTOBER 7, 2024  
DESIGNER: BDG PROJECT NO. 1212-004  
DRAWN BY: BLM SCALE: 1/2"=1'-0"

DRAWING NO.  
**82 of 86**

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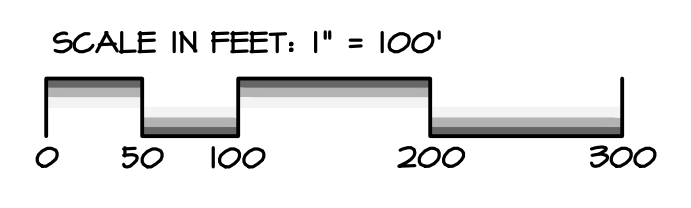


### EXISTING LEGEND

	OH	Electric Meter	ADJOINER PROPERTY LINE
	UE	Electric Transformer	PROPERTY LINE
	UT	Telephone	RIGHT-OF-WAY LINE
	G	Gas Meter	CENTERLINE
	S	Sanitary Sewer	EASEMENTS
	FM	Sanitary Sewer	INDEX CONTOUR
	W	Water Meter	INTERMEDIATE CONTOUR
	SD	Storm Drainage Piping	SPOT ELEVATION
	F	Fence	CURB LINE
	Z	Zoning Line	EDGE OF PAVEMENT (E.O.P.)
	EW	Edge of Water (Stream)	MIN. BLDG SETBACK LINE
	F100	FEMA 100 Year Floodplain	OVERHEAD ELECTRIC
	T	Tree Line	UNDERGROUND ELECTRIC
	Sign	Sign	UNDERGROUND TELEPHONE
	Well	Well	GAS LINE
	Light Pole	Light Pole	SANITARY SEWER LINE
	Ground Light	Ground Light	SANITARY FORCE MAIN
	Roof Drain	Roof Drain	WATER LINE
	Mailbox	Mailbox	STORM DRAINAGE PIPING
	Bollard	Bollard	FENCE
	Reflector Post	Reflector Post	ZONING LINE
	Deciduous Tree	Deciduous Tree	GUIDE RAIL
	Coniferous Tree	Coniferous Tree	EDGE OF WATER (STREAM)
	Traffic Signal Box	Traffic Signal Box	FEMA 100 YEAR FLOODPLAIN
	Traffic Signal Pole	Traffic Signal Pole	TREE LINE
	Traffic Signal Mast	Traffic Signal Mast	DECIDUOUS TREES

### WATERSHED MAPPING LEGEND

	LOD	LOD / NPDES PERMIT BOUNDARY / LIMIT OF ANALYSIS
	DA	DRAINAGE AREA BOUNDARY
	WB	WATERSHED DRAINAGE BOUNDARY
	TP	T <sub>c</sub> FLOW PATH TO DISCHARGE POINT
	DP	DISCHARGE POINT



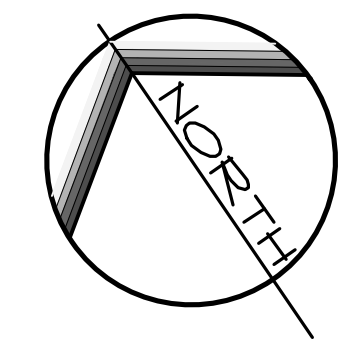
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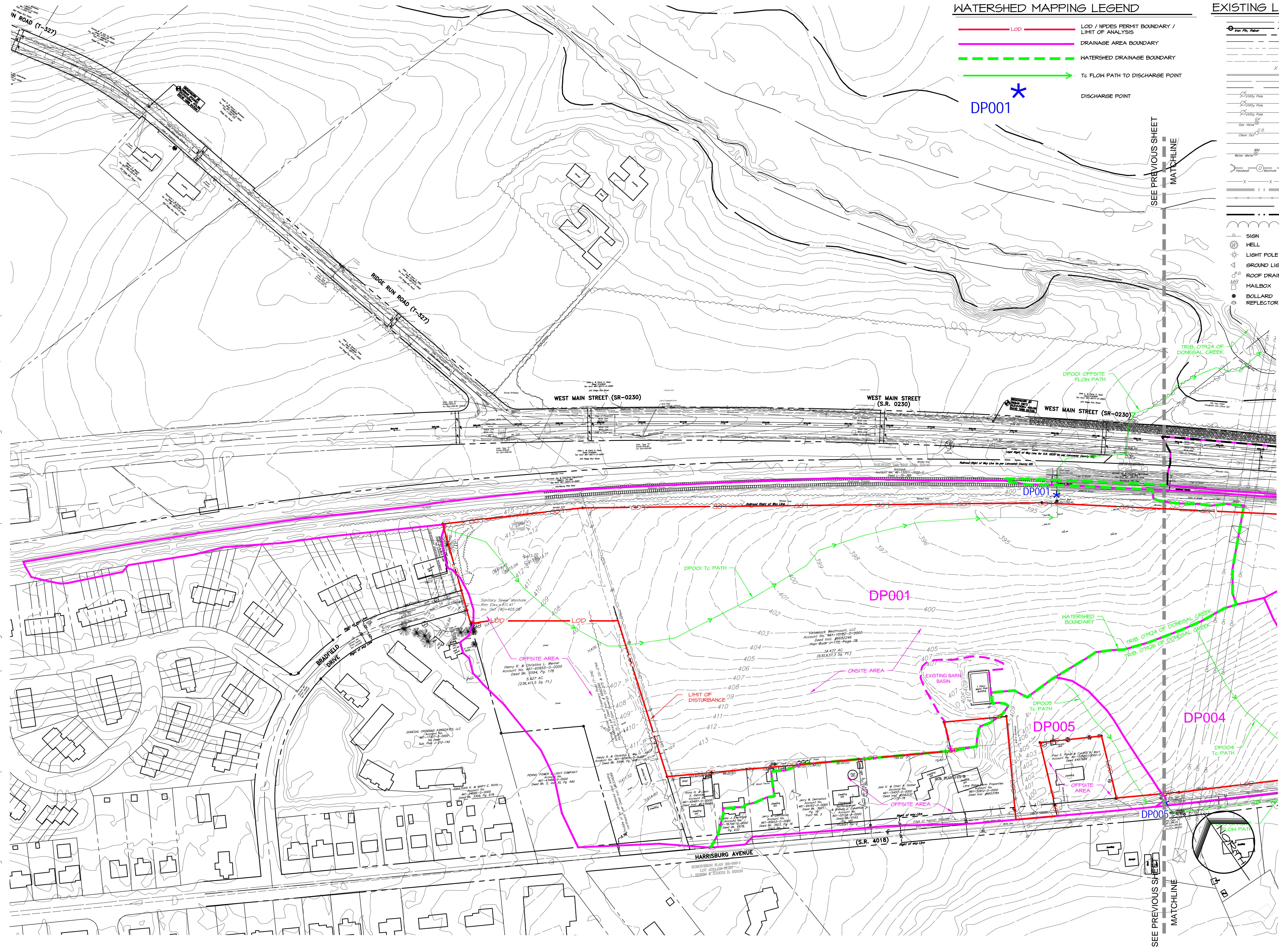
**PRELIMINARY PLAN**  
SUBJECT:  
**PRE CONSTRUCTION WATERSHED MAP 'A'**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER:	BDG	DATE:	OCTOBER 7, 2024
DESIGNER:	BDG	PROJECT NO.:	1212-004
DRAWN BY:	BLM	SCALE:	1" = XX'

DRAWING NO.  
**83 of 86**



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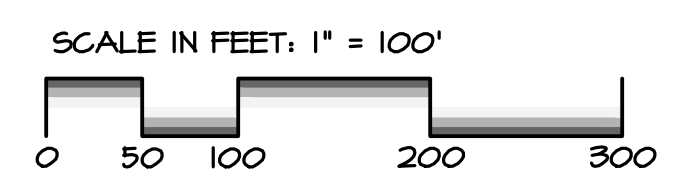


### WATERSHED MAPPING LEGEND

- LOD / NPDES PERMIT BOUNDARY / LIMIT OF ANALYSIS
- DRAINAGE AREA BOUNDARY
- WATERSHED DRAINAGE BOUNDARY
- T<sub>c</sub> FLOW PATH TO DISCHARGE POINT
- DISCHARGE POINT

### 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
- STORM DRAINAGE PIPING
- FENCE
- ZONING LINE
- GUIDE RAIL
- EDGE OF WATER (STREAM)
- FEMA 100 YEAR FLOODPLAIN
- TREE LINE
- DECIDUOUS TREES
- CONIFEROUS TREE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL MAST



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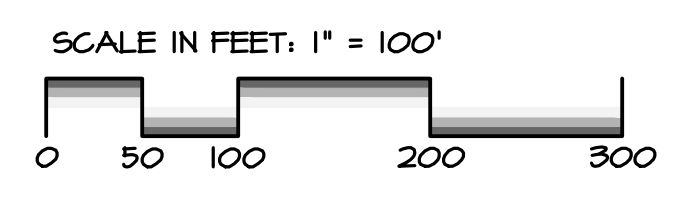
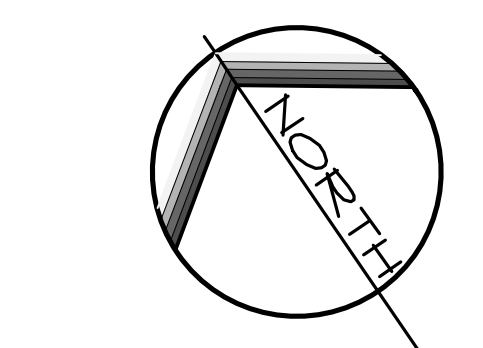
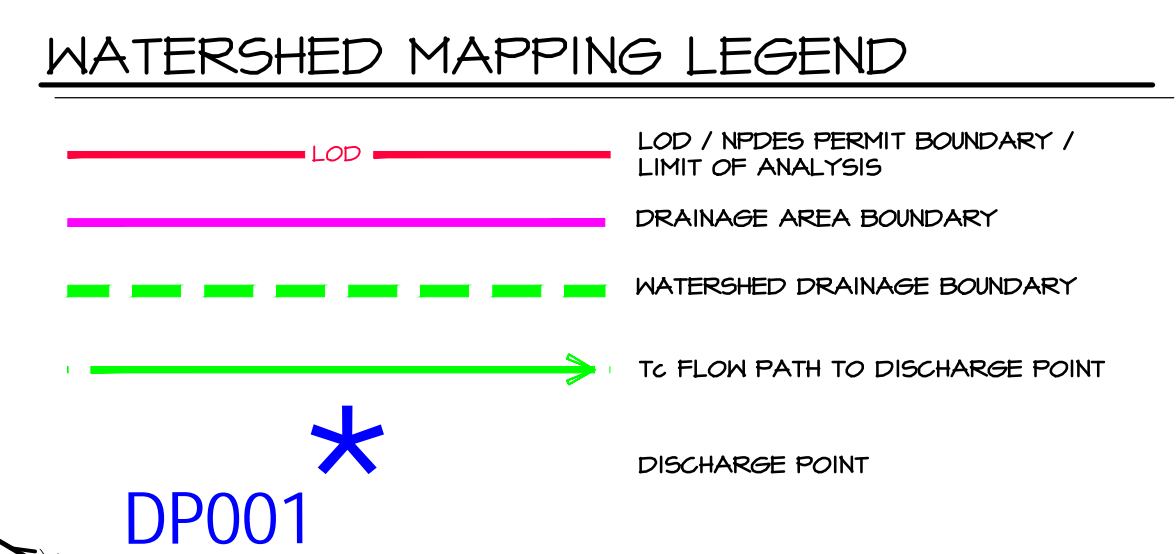
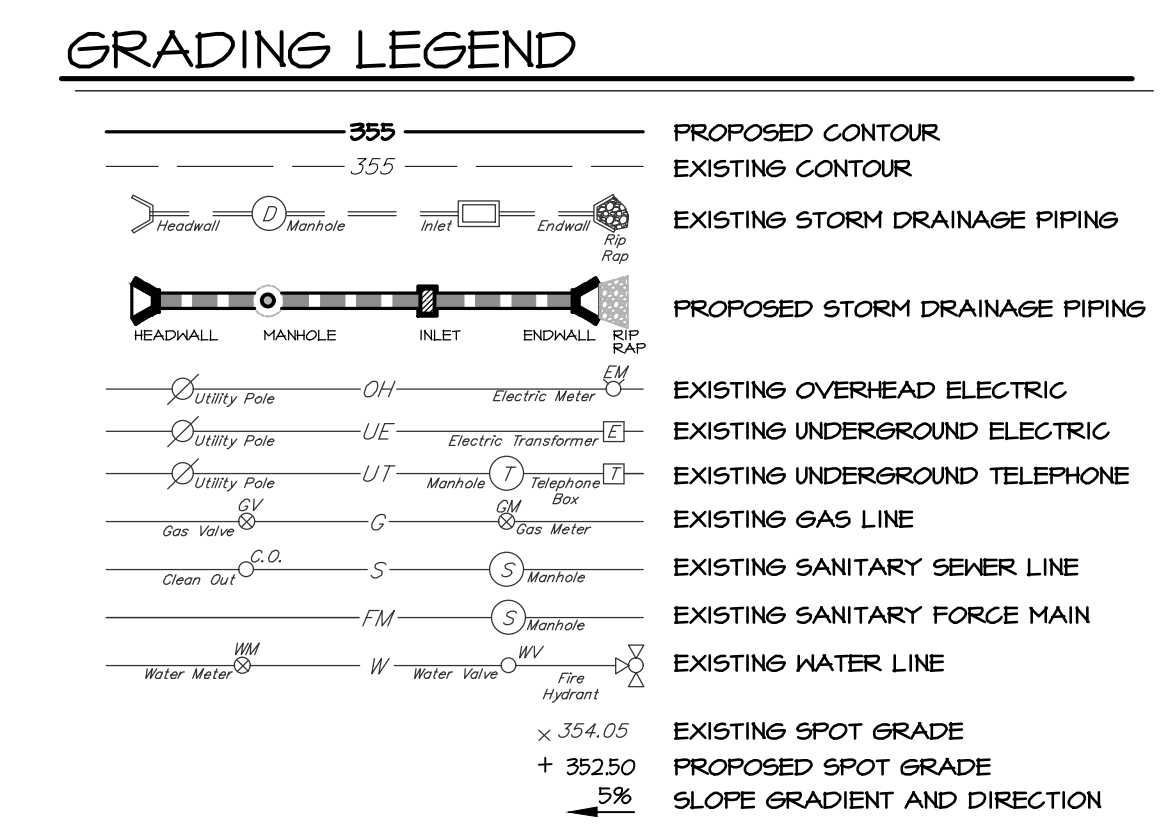
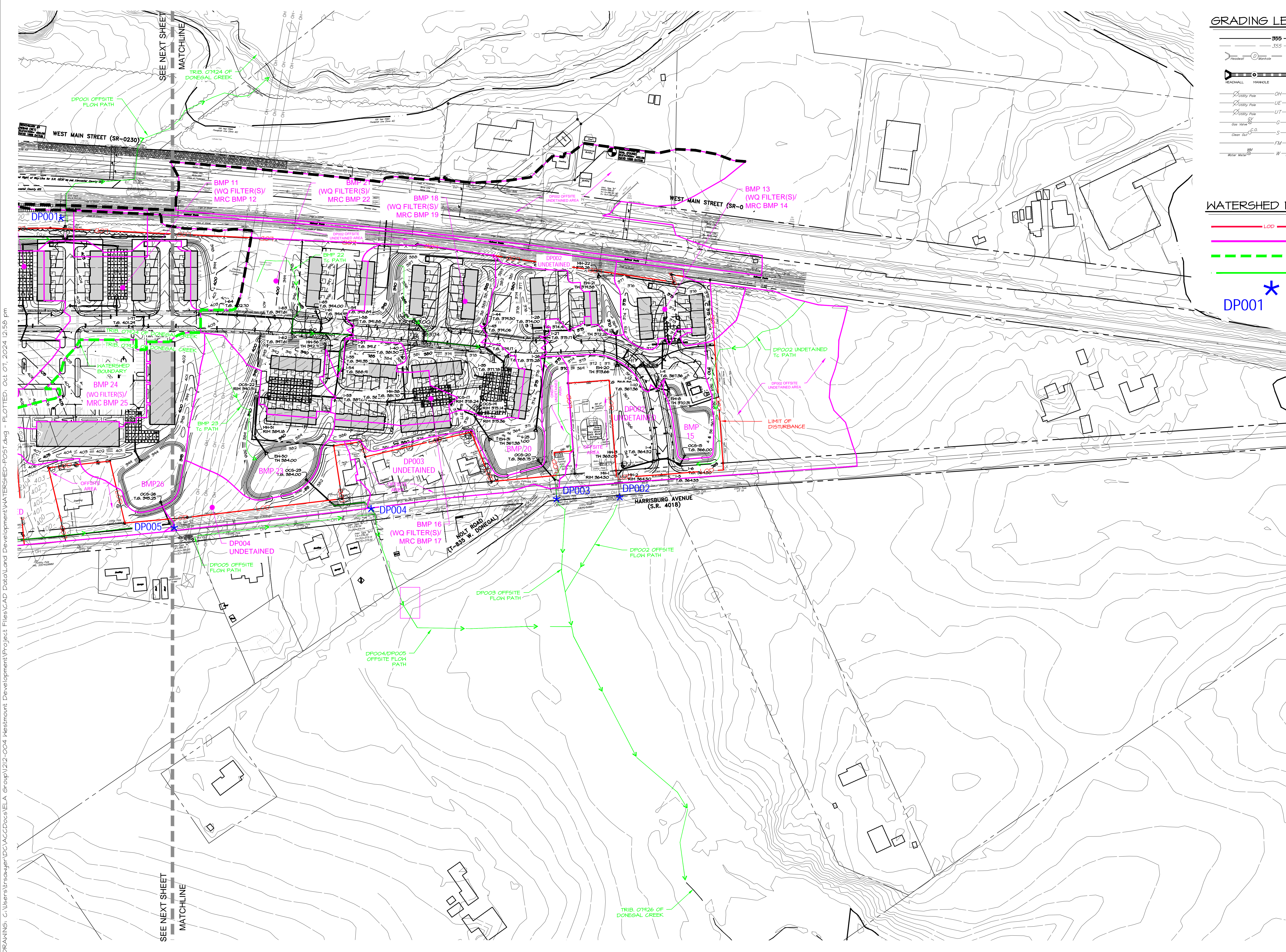
REGISTERED PROFESSIONAL ENGINEER  
TYLER E. HILL  
ENGINEER  
PA 000000

**PRELIMINARY PLAN**  
SUBJECT:  
**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

MANAGER: BDG DATE: OCTOBER 7, 2024  
DESIGNER: BDG PROJECT NO. 1212-004  
DRAWN BY: BLM SCALE: 1" = XX'

DRAWING NO.  
**84 of 86**

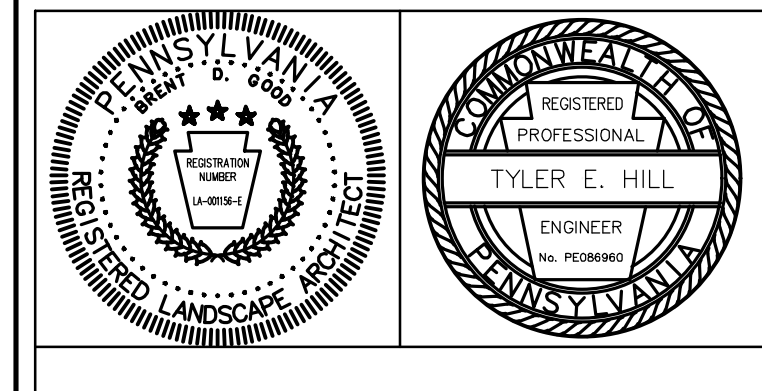
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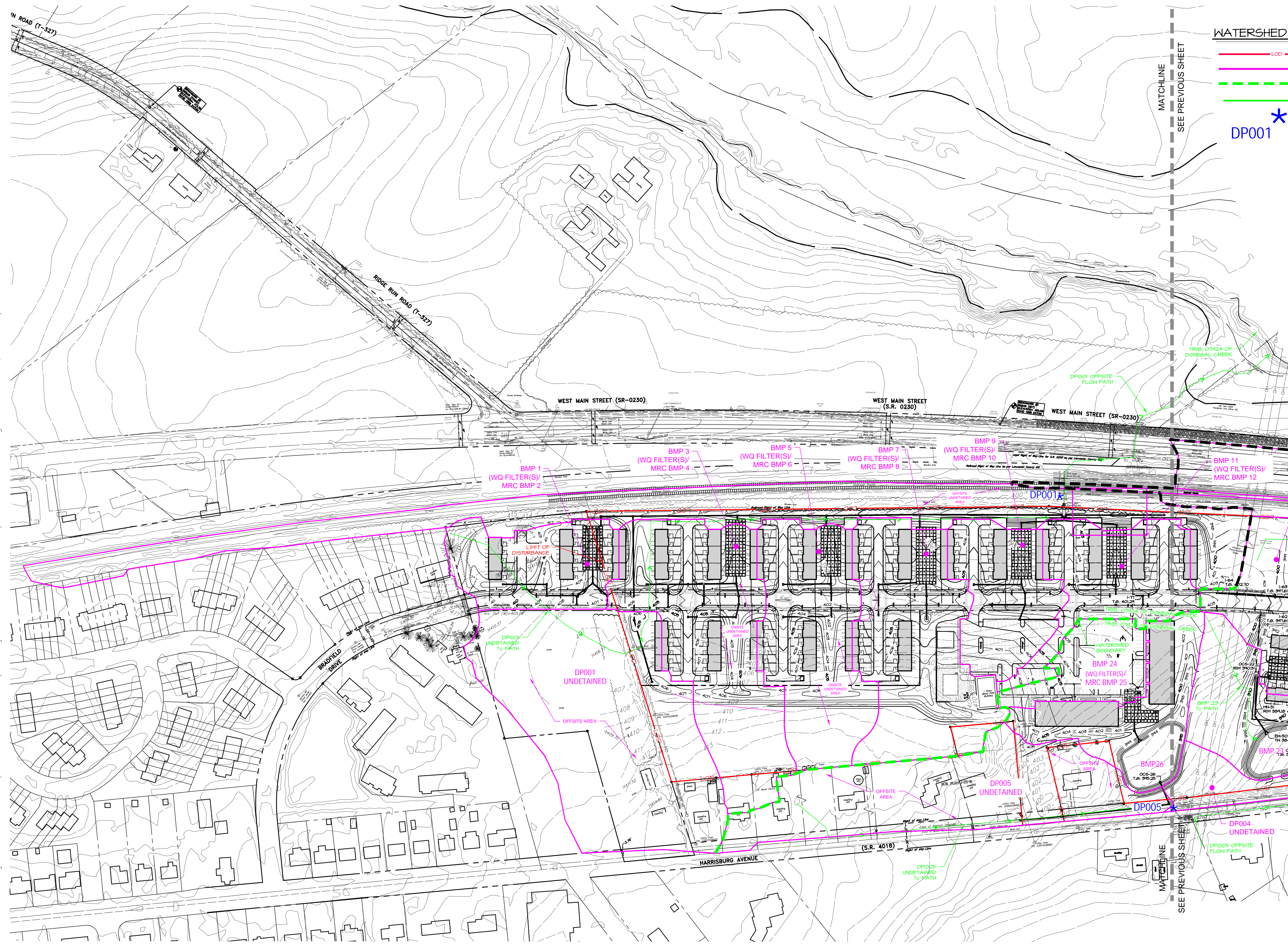


**PRELIMINARY PLAN**  
SUBJECT:  
**POST CONSTRUCTION WATERSHED MAP 'A'**  
FOR  
WESTMOUNT  
MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA  
CLIENT:  
**VISTABLOCK, LLC**  
150 FARMINGTON LANE  
LANCASTER, PA 17601  
717-682-8775

MANAGER: BDG    DATE: OCTOBER 7, 2024  
DESIGNER: BDG    PROJECT NO. 1212-004  
DRAWN BY: BLM    SCALE: 1" = XX'

DRAWING NO.  
**85 of 86**

DRAWING: C:\Users\rsawyer\Documents\EIA\_Group\1212-004 Westmount Development\1212-004 Land Development\WATERSHED-PO51.dwg - PLOTTED: Oct 01, 2024 12:58 pm



### WATERSHED MAPPING LEGEND

- LOD / NPDES PERMIT BOUNDARY / LIMIT OF ANALYSIS
- DRAINAGE AREA BOUNDARY
- - - WATERSHED DRAINAGE BOUNDARY
- TC FLOW PATH TO DISCHARGE POINT
- \* DISCHARGE POINT

NORTH

SCALE IN FEET: 1" = 100'

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**PRELIMINARY 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: OCTOBER 7, 2024  
 DESIGNER: BDG      PROJECT NO. 1212-004  
 DRAWN BY: BLM      SCALE: 1" = XX'

DRAWING NO.  
**86 of 86**