

PHASE III FINAL LAND DEVELOPMENT PLANS

FOR

SUSQUEHANNA UNION GREEN

SUSQUEHANNA TOWNSHIP

DAUPHIN COUNTY, PENNSYLVANIA

JULY 9, 2021

PREPARED BY:

**COMMONWEALTH OF PENNSYLVANIA
COUNTY OF DAUPHIN**

ON THIS THE _____ DAY OF _____, 2020 BEFORE ME THE UNDERSIGNED PERSONALLY APPEARED.

OWNER(S) _____

WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT THEY ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN AND THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND DEED AND DESIRE THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

WITNESS MY HAND AND NOTORIAL SEAL THE DAY AND DATE ABOVE WRITTEN.

NOTARY PUBLIC _____ MY COMMISSION EXPIRES _____

OWNER STATEMENT OF DEDICATION

IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAT AND THAT ALL STREETS OR PARTS THEREOF, IF NOT PREVIOUSLY DEDICATED, ARE HEREBY TENDERED FOR DEDICATION TO PUBLIC USE.

OWNER(S) _____

OWNER CERTIFICATION (STORMWATER)

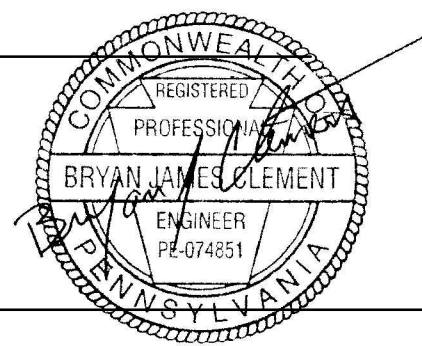
IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN AND THAT ALL STORMWATER BMPs ARE FIXTURES THAT CANNOT BE ALTERED OR REMOVED WITHOUT PRIOR APPROVAL BY SUSQUEHANNA TOWNSHIP.

OWNER(S) _____

ENGINEER CERTIFICATION

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN.

(ENGINEER'S SIGNATURE AND SEAL)



SURVEYOR CERTIFICATION

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE SUSQUEHANNA TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

(SURVEYOR'S SIGNATURE AND SEAL)

STORMWATER MANAGEMENT CERTIFICATION

I, BRYAN CLEMENT, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF SUSQUEHANNA TOWNSHIP'S STORMWATER MANAGEMENT ORDINANCE.

WETLAND STATEMENT

I, _____, HEREBY CERTIFY THAT THERE (ARE/ARE NOT) WETLANDS ON THE SUBJECT PROPERTY, THE PROPOSED PROJECT (WILL/WILL NOT) IMPACT OFF-SITE WETLANDS, AND PERMITS (ARE/ARE NOT) REQUIRED FROM THE STATE OR FEDERAL GOVERNMENT.

DAUPHIN COUNTY PLANNING COMMISSION REVIEW STATEMENT

THIS PLAN REVIEWED BY THE DAUPHIN COUNTY PLANNING COMMISSION THIS _____ DAY OF _____, 2021

CHAIRMAN _____

SECRETARY _____

SUSQUEHANNA TOWNSHIP ENGINEER REVIEW STATEMENT

THIS PLAN REVIEWED BY THE SUSQUEHANNA TOWNSHIP ENGINEER THIS _____ DAY OF _____, 2021

TOWNSHIP ENGINEER _____

SUSQUEHANNA TOWNSHIP PLANNING COMMISSION APPROVAL STATEMENT

THIS PLAN RECOMMENDED FOR APPROVAL BY THE SUSQUEHANNA TOWNSHIP PLANNING COMMISSION THIS _____ DAY OF _____, 2021

CHAIRMAN _____

SECRETARY _____

SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS APPROVAL STATEMENT

THIS PLAN APPROVED BY THE SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS, AND ALL CONDITIONS IMPOSED WITH RESPECT TO SUCH APPROVAL WERE COMPLETED ON THIS _____ DAY OF _____, 2021

PRESIDENT _____

SECRETARY _____

RECORDING STATEMENT

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR DAUPHIN COUNTY THIS _____ DAY OF _____, 2021

INSTRUMENT NUMBER _____

MODIFICATIONS GRANTED THROUGH PRELIMINARY PLANNING APPROVAL:

- 22-507.9.3 REQUIRING SIDEWALKS ON BOTH SIDES OF STREET
- 22-502.8 REQUIRING CLEAR SIGHT TRIANGLES IN ACCORDANCE WITH SALDO EXHIBIT 6
- 22-405.2.M REQUIRING A PRELIMINARY GREENWAY/OPEN SPACE LANDS & COMMON FACILITIES OWNERSHIP AND MAINTENANCE PLAN
- 22-405.1.A.12 REQUIRING THE DESIGNATION OF PARCELS OF LAND INTENDED TO BE DEDICATED OR RESERVED FOR PUBLIC, SEMI-PUBLIC OR COMMUNITY PURPOSES
- 507.10.4 REQUIRING STREET SECTIONS IN ACCORDANCE WITH DESIGN GUIDELINES



Nature leads, art follows.

SITE INFORMATION

OWNER:

HAWTHORNE SPE, LLC
3605 VARTAN WAY
SUITE 301
HARRISBURG, PA 17110
MR. H. RALPH VARTAN - PRESIDENT
(717) 657-0100

APPLICANT:

VARTAN GROUP INC.
3605 VARTAN WAY
SUITE 301
HARRISBURG, PA 17110
MR. H. RALPH VARTAN
(717) 657-0100

ZONING

TRADITIONAL NEIGHBORHOOD DEVELOPMENT-1 (TND-1)

TOTAL SITE AREA:

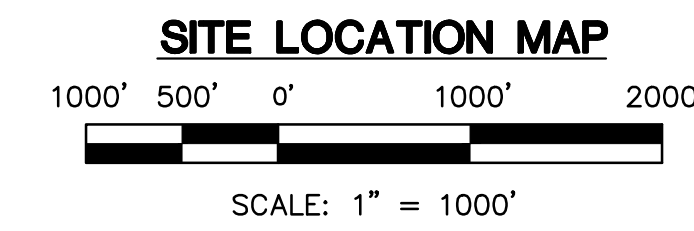
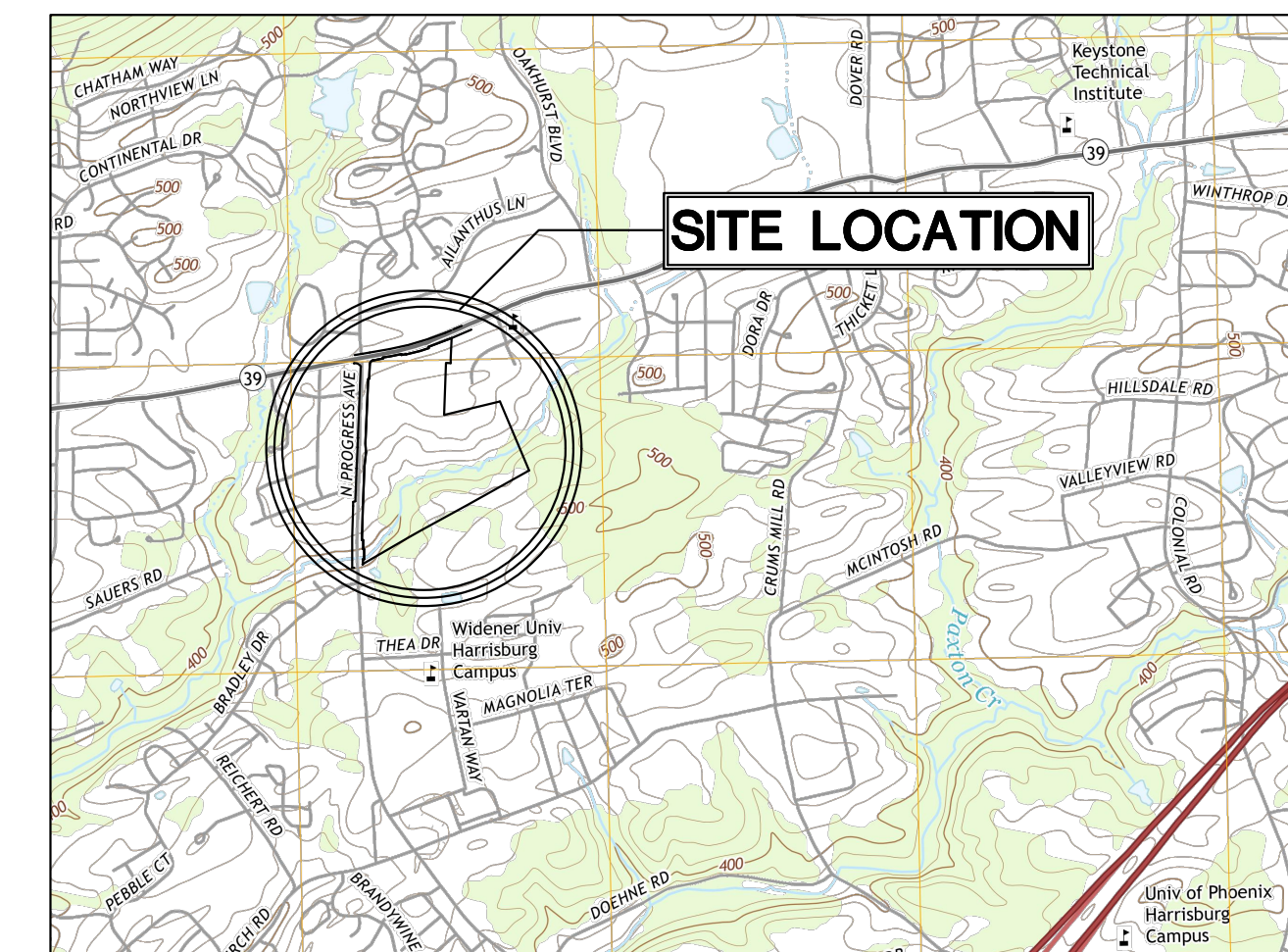
58.07 ACRES

BULK AREA REQUIREMENTS

	PROVIDED	REQUIRED / PERMITTED
MINIMUM TRACT AREA		
MULTIPLE FAMILY:	40,000 S.F.	40,000 S.F.
PRINCIPAL FREE STANDING BUILDING:	10,000 S.F.	10,000 S.F.
MINIMUM LOT AREA FOR IN LINE RETAIL:	1,000 S.F.	1,000 S.F.
ACRES DEVOTED TO RESIDENTIAL USES		
SINGLE-FAMILY DETACHED	37.8% X 36.24 AC. = 13.70 AC.	2.9 AC. MIN. (NO MAX.)
MULTI-FAMILY	62.2% X 36.24 AC. = 22.54 AC.	
MAXIMUM DWELLING UNITS PER GROSS ACRE		
SINGLE-FAMILY DETACHED	40 UNITS	10.2 AC. X 9 UNITS/AC. = 92 UNITS
BUILD TO LINES:		
MINIMUM SIDE YARD	12' MAXIMUM	12'
NON-RESIDENTIAL / MULTI-FAMILY:		
RESIDENTIAL:	20'	20'
	15'	15'
MAXIMUM IMPERVIOUS COVERAGE:	53.9%	55%
MINIMUM GREEN SPACE		
CENTRAL GREEN:	0.56 AC.	0.5 AC.
ADDITIONAL GREENS	3.70 AC.	1 AC. EACH
MINIMUM PRINCIPAL BUILDING HEIGHT:	20'	20'
MAXIMUM PRINCIPAL BUILDING HEIGHT:	55'	55' (4 STORIES)

TAX PARCEL: NO. 62-013-056
DEED INSTRUMENT NO. 20170009139
PLAN INSTRUMENT NO. 20130022125

SHEET NUMBER	SHEET TITLE	AUTHOR
C000	COVER SHEET	H.F. LENZ COMPANY
C100	GENERAL INFORMATION SHEET	H.F. LENZ COMPANY
C200	EXISTING CONDITIONS PLAN	H.F. LENZ COMPANY
L100	PHASING PLAN	La QUATRA BONCI ASSOCIATES
L101	REGULATING PLAN	La QUATRA BONCI ASSOCIATES
L102	STREETSCAPE PLAN	La QUATRA BONCI ASSOCIATES
L103	PUBLIC REALM PLAN	La QUATRA BONCI ASSOCIATES
L200	SITE & LANDSCAPE REFERNECE PLAN	La QUATRA BONCI ASSOCIATES
L201	ENLARGED SITE & LANDSCAPE PLAN-PHASE IIIA	La QUATRA BONCI ASSOCIATES
L202	ENLARGED SITE & LANDSCAPE PLAN-PHASE IIIB	La QUATRA BONCI ASSOCIATES
C300	SITE PLAN	H.F. LENZ COMPANY
C400	GRADING AND DRAINAGE PLAN	H.F. LENZ COMPANY
C401	STORM SEWER PROFILES	H.F. LENZ COMPANY
C500	UTILITY PLAN	H.F. LENZ COMPANY
C600 TO C601	SITE DETAILS	H.F. LENZ COMPANY
C602 TO C605	UTILITY DETAILS	H.F. LENZ COMPANY
ES100	EROSION AND SEDIMENTATION CONTROL PLAN	H.F. LENZ COMPANY
ES200 TO ES201	EROSION AND SEDIMENTATION CONTROL GENERAL NOTES	H.F. LENZ COMPANY
ES202	EROSION AND SEDIMENTATION CONTROL NOTES & SYMBOLS	H.F. LENZ COMPANY
ES202	EROSION AND SEDIMENTATION CONTROL DETAILS	H.F. LENZ COMPANY



**LaQuatra Bonci
ASSOCIATES**
LANDSCAPE ARCHITECTURE

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Nature leads, art follows.



Prepared for:

Vartan Group, Inc.
3605 Vartan Way, Suite 301
Harrisburg, PA 17110

Susquehanna
Union Green

Susquehanna
Township, Dauphin
County, PA

Project Number:

210191.01

Drawn by:

LBG/REA

Checked by:

LBG/BJC

Date:

July 9, 2021

Revisions:

Scale:

Sheet Name:

Cover Sheet

Submission:

Phase III Final Land Development
Plans

Sheet Number:

C000

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GENERAL NOTES:

- 1. THIS PLAN IS IN SUBSTANTIAL COMPLIANCE WITH THE SUSQUEHANNA TOWNSHIP ZONING, SUBDIVISION AND LAND DEVELOPMENT, AND STORMWATER MANAGEMENT ORDINANCES PURSUANT TO SECTION 507 OF THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE (THE "MPC"). ANY DESIGN MODIFICATIONS MUST BE APPROVED BY THE SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS PRIOR TO FINAL PLAN APPROVAL PURSUANT TO SECTION 508(4) OF THE MPC.
- 2. PURSUANT TO 27-1912 OF THE SUSQUEHANNA TOWNSHIP ZONING ORDINANCE, THE BOARD OF COMMISSIONERS HEREBY MAKES THE FOLLOWING FINDINGS:
 - A. THIS PLAN IS CONSISTENT WITH THE "KEY DESIGN ELEMENTS" OF EXHIBIT A, THE "PRECEDENTS" OF EXHIBIT B, AND THE "REGULATING PLAN" OF EXHIBIT C OF PART 19 OF THE SUSQUEHANNA TOWNSHIP ZONING ORDINANCE.
 - B. THE MANUAL OF WRITTEN AND GRAPHIC DESIGN GUIDELINES ACCOMPANYING THIS PLAN IS CONSISTENT WITH THE DESIGN GUIDELINES IN 22-507 OF THE SUSQUEHANNA TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
 - C. DATE OF FINAL REVIEW BY BOARD OF COMMISSIONERS:
 _____,2021

- 3. THE PROPOSED STREET AND SPEED LIMIT SIGNAGE SHALL BE CONSISTENT WITH THE SPECIFICATIONS OF SUSQUEHANNA TOWNSHIP.
- 4. ALL FIRE HYDRANTS SHALL HAVE SHUT OFF VALVES.
- 5. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A MINIMUM OF 48 HOURS NOTICE AND TO COORDINATE WITH THE TOWNSHIP/TOWNSHIP ENGINEER IN REGARDS TO ALL MUNICIPAL INSPECTION WORK REQUIRED ON THE PROJECT SITE.
- 6. THE DEVELOPER SHALL PROVIDE TWO (2) SETS OF RECORD DRAWINGS OF ALL STORMWATER MANAGEMENT FACILITIES TO SUSQUEHANNA TOWNSHIP PRIOR TO OCCUPANCY OR THE RELEASE OF FINANCIAL SECURITY.
- 7. THE DEVELOPER SHALL PROVIDE TWO (2) SETS OF RECORD DRAWINGS TO THE SUSQUEHANNA TOWNSHIP AUTHORITY. THESE RECORD DRAWINGS SHALL BE PROVIDED AFTER THE STRUCTURES ARE CONSTRUCTED AND SHALL SHOW THE CONNECTION TO THE SEWER MAIN.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE ANY NON-STANDARD HEADWALLS OR ENDWALLS STRUCTURALLY DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA. THE STRUCTURAL DESIGN CALCULATIONS SHALL BE SUBMITTED TO AND REVIEWED BY THE TOWNSHIP AND THEIR ENGINEER.
- 9. INSTALLATION OF STORM DRAINAGE PIPING THROUGH THE CORNER OF PRE-CAST INLETS (OR "KNOCKOUT CORNERS") IS PROHIBITED. ALL PIPE CONNECTIONS AT INLETS SHALL OCCUR AT THE SIDES OF THE INLET.
- 10. ALL STORMWATER INLET FRAMES, CONCRETE TOPS, AND GRADE ADJUSTMENT RINGS SHALL BE SET IN A FULL BED OF MORTAR.
- 11. ALL STORMWATER CONVEYANCE PIPING SHALL HAVE WATERTIGHT JOINTS.
- 12. ROADWAY AND/OR CURB UNDERDRAIN(S) SHALL BE INSPECTED BY THE MUNICIPAL ENGINEER OR HIS DESIGNATED AGENT AFTER COMPLETION OF ALL WORK, JUST PRIOR TO THE BASE COURSE APPLICATION.
- 13. THE TOWNSHIP STAFF HAS PERMISSION TO ACCESS THE DRAINAGE EASEMENTS FROM THE NEAREST PUBLIC RIGHT-OF-WAY.
- 14. SIDEWALKS SHALL BE INSPECTED BY THE MUNICIPAL ENGINEER OR HIS DESIGNATED AGENT AFTER THE FORMS HAVE BEEN PLACED, JUST PRIOR TO THE POURING OF CONCRETE AND AFTER THE COMPLETION OF ALL WORK.
- 15. ALL STREET ADDRESS NUMBERS SHALL BE DISPLAYED IN ACCORDANCE WITH ORDINANCE SECTION 22-1112 REQUIREMENTS.
- 16. EASEMENTS AND RESERVATIONS OF COMMON AREAS INCLUDING ACCESS DRIVES, PARKING AREAS, AND COMMON OPEN SPACES WILL BE PROVIDED IN CONDOMINIUM DOCUMENTS AT THE TIME OF FINAL DEVELOPMENT.
- 17. AS DEFINED BY FEMA FLOODPLAIN PANEL 42043C0330D, THERE IS NO FEMA DELINEATED FLOODPLAIN LOCATED WITHIN THE SUBJECT SITE.
- 18. IN A LETTER DATED SEPTEMBER 7, 2017, THE TOWNSHIP ACKNOWLEDGES RECEIPT AND APPROVAL OF THE CONCEPT/SKETCH PLAN MEETING THE REQUIREMENTS AS NOTED IN THE TND-1 ZONING ORDINANCE.
- 19. STORMWATER OPERATIONS AND MAINTENANCE (O&M) AGREEMENT IS PART OF THE STORMWATER MANAGEMENT SITE PLAN. OPERATIONS AND MAINTENANCE AGREEMENTS SHALL BE RECORDED WITH THE FINAL LAND DEVELOPMENT STORMWATER MANAGEMENT PLAN.
- 20. ALL STREET LIGHTS AND OUTDOOR LIGHTING SHALL UTILIZE LIGHT EMITTING DIODE (LED) TECHNOLOGY.
- 21. WHERE APPLICABLE, ALL CONSTRUCTION SHALL CONFORM TO PENNDOT PUBLICATIONS 408 AND 72 STANDARDS, SUSQUEHANNA TOWNSHIP ORDINANCES, AND SUSQUEHANNA TOWNSHIP AUTHORITY MANUAL FOR SEWER EXTENSION CONSTRUCTION.
- 22. BMPs ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PA STORMWATER BMP MANUAL. BMPs SHALL BE SEQUENCED RELATIVE TO PROJECT PHASING PLAN AND PER FINAL PLAN APPROVALS.
- 23. DO NOT SCALE DRAWINGS.

CAUTION NOTICE TO CONTRACTOR:

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. ALL BURIED UTILITIES ARE NOT NECESSARY SHOWN. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY IN ACCORDANCE WITH PA ACT 38 OF 1991 BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL CONFIRM ALL FINAL CONNECTION POINTS TO EXISTING UTILITIES WITH THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.

- 24. PROPOSED CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
- 25. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE.
- 26. ALL MAPPING AND LOCATION OF EXISTING UTILITIES WERE OBTAINED FROM THE UTILITY COMPANIES LISTED UNDER "UTILITY CONTACTS". ALL DATA CONCERNING THESE EXISTING CONDITIONS WAS ACQUIRED BY THE H.F. LENZ COMPANY FOR USE IN DESIGNING THIS PROJECT. ITS ACCURACY OR COMPLETENESS IS NOT GUARANTEED BY THE H.F. LENZ COMPANY AND IN NO EVENT IS IT TO BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS. CONTRACTORS MUST ASSUME ALL RISKS PERTAINING TO EXISTING SITE CONDITIONS.
- 27. THE CONTRACTOR SHALL EXERCISE CAUTION AND EMPLOY CAREFUL EXCAVATION METHODS DURING INSTALLATION OF THE FACILITIES TO AVOID DAMAGE TO OR CONFLICT WITH EXISTING UTILITIES. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AS DIRECTED AND/OR REQUIRED BY THE ENGINEER TO ASCERTAIN THE HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES PRIOR TO CONSTRUCTION IN AFFECTED AREAS AND MAKE THE APPROPRIATE ADJUSTMENTS IN THE FIELD IF CONFLICTS OCCUR. NO SEPARATE PAYMENT SHALL BE MADE FOR THE HEREIN DESCRIBED PROVISIONS AND SHALL BE INCLUDED IN THE COST OF THOSE ITEMS FOR WHICH PAYMENT SHALL BE MADE IN THE BID SCHEDULE.
- 28. CONTRACTOR IS RESPONSIBLE TO MAINTAIN USE OF ALL UTILITIES WITHIN THE IMMEDIATE WORK AREA DURING CONSTRUCTION WHEN WORK IS IN PROGRESS AT ALL TIMES.
- 29. CONTRACTOR IS RESPONSIBLE TO STABILIZE AND MAINTAIN ALL UTILITY POLES WITHIN THE IMMEDIATE WORK AREA THAT MAY BE AFFECTED BY THE CONSTRUCTION OPERATIONS.
- 30. PROVIDE, ERECT AND MAINTAIN BARRICADES, LIGHTING AND GUIDE RAILS AS REQUIRED BY APPLICABLE REGULATORY AGENCIES TO PROTECT THE PUBLIC AND WORKMAN.
- 31. ALL DISTURBED AREAS EXCEEDING THE LIMITS OF WORK SHALL BE RESTORED TO EXISTING CONDITIONS AT THE FULL EXPENSE OF THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 32. ALL CONCRETE WORK SHALL COMPLY WITH THE SPECIFICATIONS AND THE AMERICAN CONCRETE INSTITUTE'S "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318-89 OR THE LATEST REVISION THERETO.
- 33. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT THE END OF 28 DAYS.
- 34. ALL REINFORCEMENT STEEL TO BE GRADE 60 DEFORMED BARS.
- 35. MINIMUM SPLICE FOR REINFORCEMENT STEEL IS 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.
- 36. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A-185 SPECIFICATIONS.
- 37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO ESTABLISH LINES, LOCATION, GRADES, DIMENSIONS AND ELEVATIONS OF THE WORK FROM EXISTING FACILITIES.
- 38. THE CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCES ENCOUNTERED TO THE DEPTHS INDICATED. ALL EXCAVATED MATERIAL NOT REQUIRED OR UNSUITABLE FOR FILL SHALL BE REMOVED AND WASTED OFF SITE.
- 39. UNLESS OTHERWISE INDICATED ON THESE DRAWINGS, REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION. REMOVAL INCLUDES DIGGING OUT STUMPS AND ROOTS.
- 40. DURING EXCAVATION EXTREME CARE SHOULD BE TAKEN BY THE CONTRACTOR TO AVOID UNNECESSARY CUTTING OF ROOTS. WHEN ROOTS ARE CUT THEY SHOULD BE PROPERLY DRESSED SO AS NOT TO KILL THE TREE.
- 41. ALL TRENCH EXCAVATION SIDE WALLS GREATER THAN 5 FEET IN DEPTH SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED BY MEANS OF THE SUFFICIENT STRENGTH TO PROTECT THE WORKMAN WITHIN THEM IN ACCORDANCE WITH APPLICABLE RULES AND REGULATIONS ESTABLISHED FOR CONSTRUCTION BY THE DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND BY LOCAL ORDINANCES. LATERAL TRAVEL DISTANCES TO AN EXIT LADDER OR STEPS SHALL NOT BE GREATER THAN 25 FEET IN TRENCHES 4 FEET OR DEEPER.
- 42. ALL TRAFFIC LINE PAINTING TO BE PADOT TYPE 1, IN ACCORDANCE WITH THE LATEST EDITION OF THE PADOT 408, SECTION 962.
- 43. ALL TRAFFIC SIGNS TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE PADOT 408, SECTION 1103.
- 44. THE DESIGN REVIEW COMMITTEE MUST REVIEW THE CONSTRUCTION DRAWINGS FOR COMPLIANCE WITH THE DESIGN GUIDELINES PRIOR TO ISSUANCE OF A BUILDING PERMIT.
- 45. CONTRACTOR SHALL NOTIFY SUSQUEHANNA TOWNSHIP AND THEIR ONSITE REPRESENTATIVE A MINIMUM OF 24 HOURS PRIOR TO THE PLACEMENT OF ENGINEERED FILL OVER PREVIOUSLY INSTALLED PIPE TRENCHES.
- 46. ALL ELECTRICAL, TELEPHONE AND CABLE LINES MUST BE PLACED UNDERGROUND.

CONFORMITY WITH DESIGN GUIDELINES:

- PROPOSED WALKING TRAILS SHALL BE IN ACCORDANCE WITH THE DESIGN GUIDELINES
- ALL PLANTERS SHALL BE IN ACCORDANCE WITH SECTION 507 – SITE ELEMENTS OF THE DESIGN GUIDELINES
- HARDSCAPE SHALL BE IN ACCORDANCE WITH SECTION 503– PEDESTRIAN GATHERING AREAS, PEDESTRIAN MEWS & CENTRAL GREEN OF THE DESIGN GUIDELINES
- PARKING SHALL BE SCREENED AND BUFFERED FROM ADJACENT STREETS USE STREET WALL #2 AS PER SECTIONS 505 AND 507 OF THE DESIGN GUIDELINES
- ALL LIGHTING SHALL BE IN ACCORDANCE WITH SECTION 506– SITE LIGHTING OF THE DESIGN GUIDELINES
- STREETS AND SIDEWALKS SHALL BE IN ACCORDANCE WITH SECTION 502 – STREETScape OF THE DESIGN GUIDELINES
- PROPOSED BENCHES SHALL BE IN ACCORDANCE WITH SECTION 507– SITE ELEMENTS OF THE DESIGN GUIDELINES
- ALL LANDSCAPING SHALL BE IN ACCORDANCE WITH SECTION 502 AND 508 OF THE DESIGN GUIDELINES

LEGEND

	EXISTING CONTOUR LINE
	WATERLINE
	GAS LINE
	SANITARY SEWER
	STORM SEWER
	STEAM LINE
	UNDERGROUND ELEC TELE CABLE
	UNDERGROUND TELEPHONE
	UNDERGROUND CABLE
	OVERHEAD ELECTRIC
	OVERHEAD TELEPHONE
	OVERHEAD CABLE
	OVERHEAD WIRES
	CONDUIT
	FIBER OPTICS / COMMUNICATIONS
	FIRE HYDRANT
	POWER POLE
	SIGN (EXISTING)
	PROPOSED CONTOUR LINE
	WATERLINE
	GAS LINE
	SANITARY SEWER
	STORM SEWER
	DOWNSPOUT COLLECTOR PIPE
	STEAM LINE
	UNDERGROUND ELEC TELE CABLE
	UNDERGROUND TELEPHONE
	UNDERGROUND CABLE
	FIBER OPTICS/COMMUNICATIONS
	OVERHEAD ELECTRIC
	OVERHEAD TELEPHONE
	OVERHEAD CABLE
	CONDUIT
	FIRE HYDRANT
	POWER POLE
	STREET LIGHT
	SIGN
	FENCE
	NUMBER OF PARKING SPACES

NOTE:

- ANY FUTURE LAND DEVELOPMENT, LAND DISTURBANCE ACTIVITY, AND/OR BUILDING OR OCCUPANCY PERMIT APPLICATION WILL REQUIRE AN APPROVED STORMWATER MANAGEMENT PLAN AND VERIFY THAT IT COMPLIES WITH THE APPROVED STORMWATER MANAGEMENT DESIGN PRIOR TO COMMENCEMENT OR APPROVAL
- CONSTRUCTION DOCUMENTS SHALL BE SUBMITTED TO THE TOWNSHIP AND REVIEWED BY THE DESIGN REVIEW COMMITTEE PRIOR TO ISSUING OF ANY BUILDING PERMITS.

SYMBOL AND ABBREVIATION SCHEDULE

AC	ACRE	EMH	ELECTRIC MANHOLE	PE	POLYETHYLENE
AC	AIR CONDITIONER	EM	ELECTRIC METER	PUB	PUBLICATION
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS	EL/ELEV	ELEVATION	PSI	POUNDS PER SQUARE INCH
ACI	AMERICAN CONCRETE TRANSPORTATION OFFICIALS	EQ	EQUAL	PP	POWER POLE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	EXP	EXPANSION	PVC	POLYVINYL CHLORIDE
⊙	AT	EX	EXISTING	ℓ	PROPERTY LINE
⊕	BASELINE	FFE	FINISH FLOOR ELEVATION	R	RADIUS
BC	BOTTOM OF CURB	FH	FIRE HYDRANT	REINF	REINFORCEMENT
BW	BOTTOM OF WALL	GM	GAS METER	RCP	REINFORCED CONCRETE PIPE
BY/4"	BROKEN YELLOW PAVEMENT LINE/WIDTH BUILDING	GV	GAS VALVE	R/W	RIGHT-OF-WAY
℄	CENTERLINE	HP	HIGH POINT	SCH	SCHEDULE
CC C/C	CENTER TO CENTER	HORIZ	HORIZONTAL	SEC	SECTION
CLR	CLEAR	INC	INCORPORATED	SEG	SEGMENT
CONC	CONCRETE	INV	INVERT	SLOPP	SMOOTH LINED CORRUGATED PLASTIC PIPE
CONSTR	CONSTRUCTION	LP	LIGHT POLE	STA	STATION
CMP	CORRUGATED METAL PIPE	MH	MANHOLE	SR	STATE ROUTE
CPP	CORRUGATED POLYETHYLENE PIPE	MAX	MAXIMUM	ST	STREET
DIA	DIAMETER	MIN	MINIMUM	SRL	SKID RESISTANCE LEVEL
DI	DUCTILE IRON	MPH	MILES PER HOUR	S	SOUTH
DS	DOWN SPOUT	N	NORTH	SF	SQUARE FEET
EOB	EDGE OF BERM	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	SY	SQUARE YARD
EOP	EDGE OF PAVEMENT	No/#	NUMBER	TC	TOP OF CURB
ELEC	ELECTRIC	PM	PARKING METER	TW	TOP OF WALL
		OC	ON CENTER	XF	TRANSFORMER
		PADOT	PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	TYP	TYPICAL
		PERF	PERFORATED	WM	WATER METER
				WW	WATER VALVE
				WWF	WELDED WIRE FABRIC
				W/4"	WHITE PAVEMENT LINE/WIDTH

LIST OF PUBLIC UTILITIES AND CONTACTS

CTSI LLC 100 CTE DR DALLAS, PA 18612 (888) 278-8783 SUEZ WATER PENNSYLVANIA INC 4211 EAST PARK CIRCLE HARRISBURG, PA 17111 (717) 554-3664 VERIZON PENNSYLVANIA INC 11 FLOOR STRAWBERRY SQUARE HARRISBURG, PA 17101 (800) 821-0088 PA COMMONWEALTH OF OFFICE OF ADMIN GOVERNORS OFFICE OF ADMIN 207 FINANCE BUILDING HARRISBURG, PA 17120 (717) 787-9945 PPL ELECTRIC UTILITIES CORPORATION 1801 BROOKWOOD ST HARRISBURG, PA 171042222 (800) 342-5775	COMCAST CABLE COMMUNICATIONS INC 4601 SMITH ST HARRISBURG, PA 17109 (800) 266-2278 UGI UTILITIES INC 1500 PAXTON ST HARRISBURG, PA 17104 (800) 609-4844 SUSQUEHANNA TWP AUTH/SUSQUEHANNA TWP 1900 LINGLETOWN RD HARRISBURG, PA 171103301 (717) 545-0116 ZAYO BANDWIDTH FORMERLY PPL TELECOM LLC 7010 SNOWDRIFT ROAD ALLENTOWN, PA 18106 (866) 364-6033
--	---

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE – STOP CALL

 POCS SERIAL NUMBER
20171141544



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95 South Tenth Street
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tel 412.488.8822
fax 412.488.8825

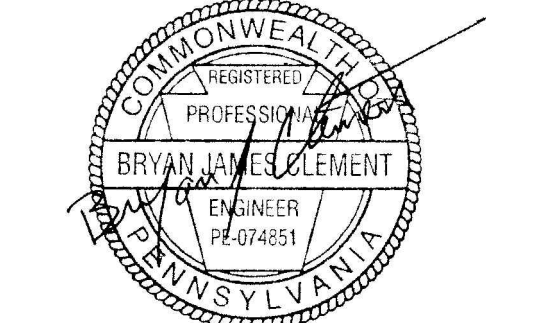
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Prepared for:
Vartan Group, Inc.
3605 Vartan Way, Suite 301
Harrisburg, PA 17110

Susquehanna Union Green

Susquehanna Township, Dauphin County, PA



Project Number:
210191.01

Drawn by:
Lbg/REA

Checked by:
Lbg/BJC

Date:
July 9, 2021

Revisions:

Scale:



Sheet Name:

General Information Sheet

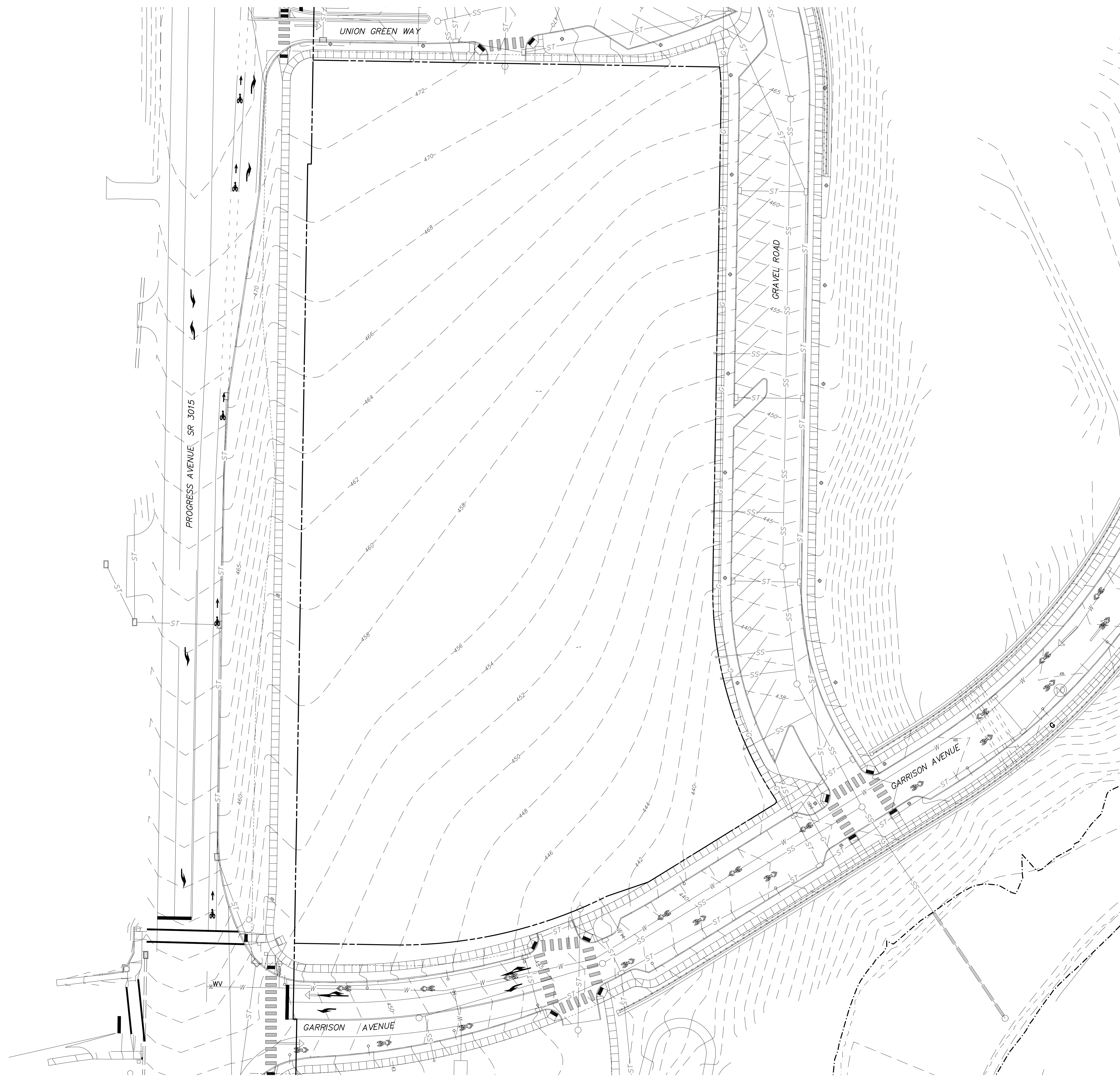
Submission:
Phase III Final Land Development Plans

Sheet Number:

C100

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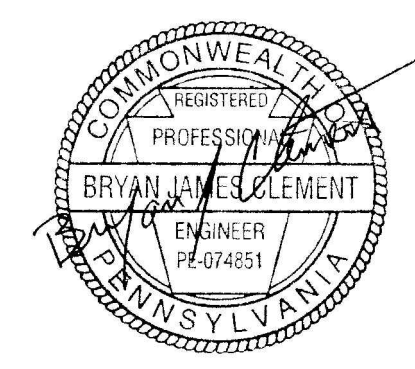
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fax 412.488.8825

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Susquehanna
Union Green
Susquehanna
Township, Dauphin
County, PA



Project Number:
210191.01
Drawn by:
LBG/REA
Checked by:
LBG/BJC
Date:
July 9, 2021

Revisions:

Scale:
1"=30'
30' 15' 0 30'

Sheet Name:
Existing Conditions
Plan
Submission:
Phase III Final Land Development
Plans

Sheet Number:
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Phasing Plan

Progress & Linglestown: TND

Phase	Disturbance (Ac.)	% of Total Development	Required
Phase I	21.72	37%	Minimum 25%
Phase II	13.24	21%	N/A
Phase III	6.25	11%	N/A
Phase IV	6.8	12%	N/A
Phase V	10.98	19%	N/A



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Union Green
Susquehanna Township,
Dauphin County, PA



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Date:
July 9, 2021

Revisions:

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SCALE 1"=100'

Sheet Name:
Phasing Plan

Submission:
Phase III Final Land Development
Plans

Sheet Number:

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Regulating Plan

Progress & Linglestown: TND

Legend

Building - For Approval	Parking	Park Structure
Building - Future Development	Stairs	Canopy/Shade Tree
Building - Approved	Site Wall	Understory/Ornamental Tree
Building - Constructed	Street Wall	Lawn
Future Site Work	Sidewalk	Understory Planting
Parking Lot Light	Shared Lane Markings	Stormwater Management Area
Street Light 1	Crosswalk	Floodplain
Street Light 2	Contour - Major	Wetland
Street Light 3	Contour - Minor	Site Furnishings

Mixed-Use Compliance Table

Use	Acreage	% of Site	Required/ Permitted
Commercial Use	(+/-) 21.04	36%	50% Max.
Residential Use	(+/-) 36.24	62%	40% Min.
Total Tract	(+/-) 58.07	100%	
Green Space	(+/-) 17.22	30%	25% Min.
Residential Single Family Detached	(+/-) 13.70 GROSS	24%	5% Min.
Residential Multi-Family	(+/-) 22.54 GROSS	39%	5% Min./40% Max.

GENERAL NOTES:

1. All property lines are build-to lines with the exception of R-1 (single family detached residences). Consult Design Guidelines for build-to lines for R-1.
2. Consult Design Guidelines, Section 500 for sidewalk details, scoring patterns, crosswalk dimensions, and trail details.
3. Consult Design Guidelines, Section 500 for street wall dimensions and details.
4. Consult Design Guidelines, Section 500 for site lighting specifications and details.
5. Consult Design Guidelines, Section 500 for street trees, stormwater screening, buffer yards, and landscaping design.
6. Dimensions of all thoroughfares are provided on the Layout Plans C4.00A, C4.00B and C4.01-4.04. Consult the Design Guidelines, Section 500 for all thoroughfare pavement materials and design details.
7. Single family housing unit footprints are shown for representation only.



Property lines are build-to lines

Public Transportation

Walking Trails

Floodplain

Stormwater Management Area

Floodplain

Green Space

Stormwater Management Area



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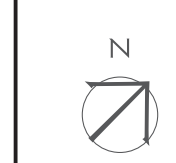


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Susquehanna Union Green
Susquehanna Township,
Dauphin County, PA



Project Number:
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Checked by:
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Date:
July 9, 2021

Revisions:

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Sheet Name:
Regulating Plan

Submission:
Phase III Final Land Development Plans

Sheet Number:

L101

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Streetscape Plan

Progress & Linglestown: TND

Legend

Building - For Approval	Parking	Park Structure
Building - Future Development	Stairs	Canopy/Shade Tree
Building - Approved	Site Wall	Understory/Ornamental Tree
Building - Constructed	Street Wall	Lawn
Future Site Work	Sidewalk	Understory Planting
Parking Lot Light	Shared Lane Markings	Floodplain
Street Light 1	Crosswalk	Wetland
Street Light 2	Contour - Major	Site Furnishings
Street Light 3	Contour - Minor	



GENERAL NOTES:

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6. Dimensions of all thoroughfares are provided on the Layout Plans C4.00A, C4.00B and C4.01-4.04. Consult the Design Guidelines, Section 500 for all thoroughfare pavement materials and design details.
7. Single family housing unit footprints are shown for representation only.



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Union Green

Susquehanna Township,
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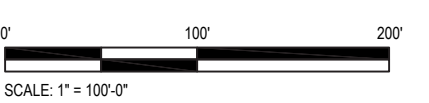
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Streetscape Plan

Submission:
Phase III Final Land Development
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Public Realm Plan

Progress & Linglestown: TND

Legend

Building - For Approval	Parking	Park Structure
Building - Future Development	Stairs	Canopy/Shade Tree
Building - Approved	Site Wall	Understory/Ornamental Tree
Building - Constructed	Street Wall	Lawn
Future Site Work	Sidewalk	Understory Planting
Parking Lot Light	Shared Lane Markings	Floodplain
Street Light 1	Crosswalk	Wetland
Street Light 2	Contour - Major	Site Furnishings
Street Light 3	Contour - Minor	

Gross Tract Area Requirements

	Provided	Acreage	Required/Permitted
Green Space	30%	17.22	25% min.
Greens	7%	4.26	3% min.

GENERAL NOTES:

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- Consult Design Guidelines, Section 500 for site lighting specifications and details.
- Consult Design Guidelines, Section 500 for street trees, stormwater screening, buffer yards, and landscaping design.
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- Single family housing unit footprints are shown for representation only.



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Union Green**
Susquehanna Township,
Dauphin County, PA



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21023:1
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Checked by:
FB/DM
Date:
July 9, 2021

Revisions:

Scale:
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0' 100' 200'
SCALE: 1"=100'

Sheet Name:
Public Realm Plan

Submission:
**Phase III Final Land Development
Plans**

Sheet Number:

L103

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Site Reference Plan



Progress & Linglestown: TND

Legend

- | | | |
|-------------------------------|----------------------|----------------------------|
| Building - For Approval | Parking | Park Structure |
| Building - Future Development | Stairs | Canopy/Shade Tree |
| Building - Approved | Site Wall | Understory/Ornamental Tree |
| Building - Constructed | Street Wall | Lawn |
| Future Site Work | Sidewalk | Understory Planting |
| Parking Lot Light | Shared Lane Markings | Floodplain |
| Street Light 1 | Crosswalk | Wetland |
| Street Light 2 | Contour - Major | Site Furnishings |
| Street Light 3 | Contour - Minor | |



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Susquehanna Township,
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Revisions:

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Sheet Name:
Site & Landscape Reference Plan
Submission:
Phase III Final Land Development Plans

Sheet Number:
L200

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Site Plan - Phase III A



Progress & Linglestown: TND

Legend

Building - For Approval	Parking	Park Structure
Building - Future Development	Stairs	Canopy/Shade Tree
Building - Approved	Site Wall	Understory/Ornamental Tree
Building - Constructed	Street Wall	Lawn
Future Site Work	Sidewalk	Understory Planting
Parking Lot Light	Shared Lane Markings	Floodplain
Street Light 1	Crosswalk	Wetland
Street Light 2	Contour - Major	Site Furnishings
Street Light 3	Contour - Minor	

GENERAL NOTES:

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- Consult Design Guidelines, Section 500 for site lighting specifications and details.
- Consult Design Guidelines, Section 500 for street trees, stormwater screening, buffer yards, and landscaping design.
- Dimensions of all thoroughfares are provided on the Layout Plans C4.00A, C4.00B and C4.01-4.04. Consult the Design Guidelines, Section 500 for all thoroughfare pavement materials and design details.
- Current tree count subject to change during construction document design phase. All tree species will meet the Design Guideline requirements.
Phase III A/B Tree Count:
Canopy/Shade Tree: 34
Understory/Ornamental Tree: 24



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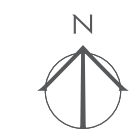


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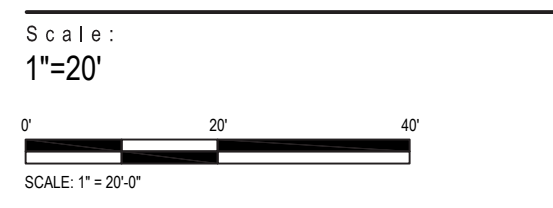
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Susquehanna Township,
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Enlarged Site & Landscape
Plan - Phase III A
Submission:
Phase III Final Land Development
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Site Plan - Phase III B



Progress & Linglestown: TND

Legend

Building - For Approval	Parking	Park Structure
Building - Future Development	Stairs	Canopy/Shade Tree
Building - Approved	Site Wall	Understory/Ornamental Tree
Building - Constructed	Street Wall	Lawn
Future Site Work	Sidewalk	Understory Planting
Parking Lot Light	Shared Lane Markings	Floodplain
Street Light 1	Crosswalk	Wetland
Street Light 2	Contour - Major	Site Furnishings
Street Light 3	Contour - Minor	

GENERAL NOTES:

- All property lines are build-to lines with the exception of R-1 (single family detached residences). Consult Design Guidelines for build-to lines for R-1.
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- Dimensions of all thoroughfares are provided on the Layout Plans C4.00A, C4.00B and C4.01-4.04. Consult the Design Guidelines, Section 500 for all thoroughfare pavement materials and design details.
- Current tree count subject to change during construction document design phase. All tree species will meet the Design Guideline requirements.
Phase III A/B Tree Count:
Canopy/Shade Tree: 34
Understory/Ornamental Tree: 24



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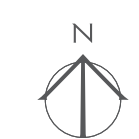


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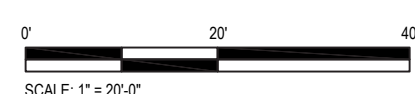
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Sheet Name:

Enlarged Site & Landscape
Plan - Phase III B

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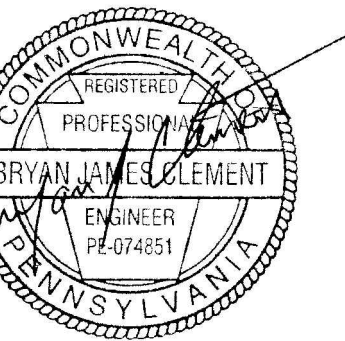


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Township, Dauphin
County, PA



Project Number:
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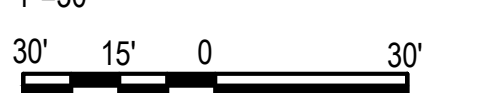
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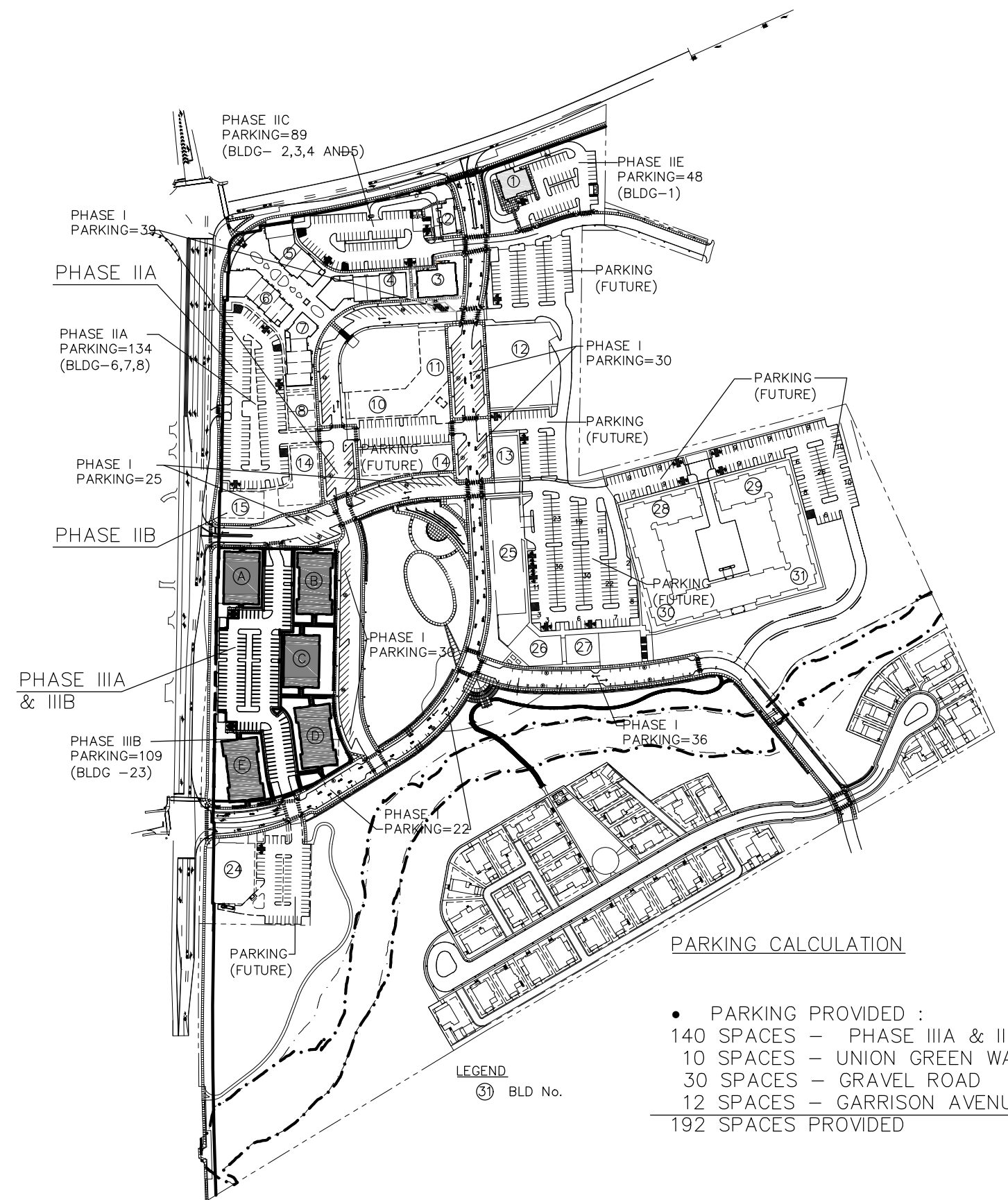
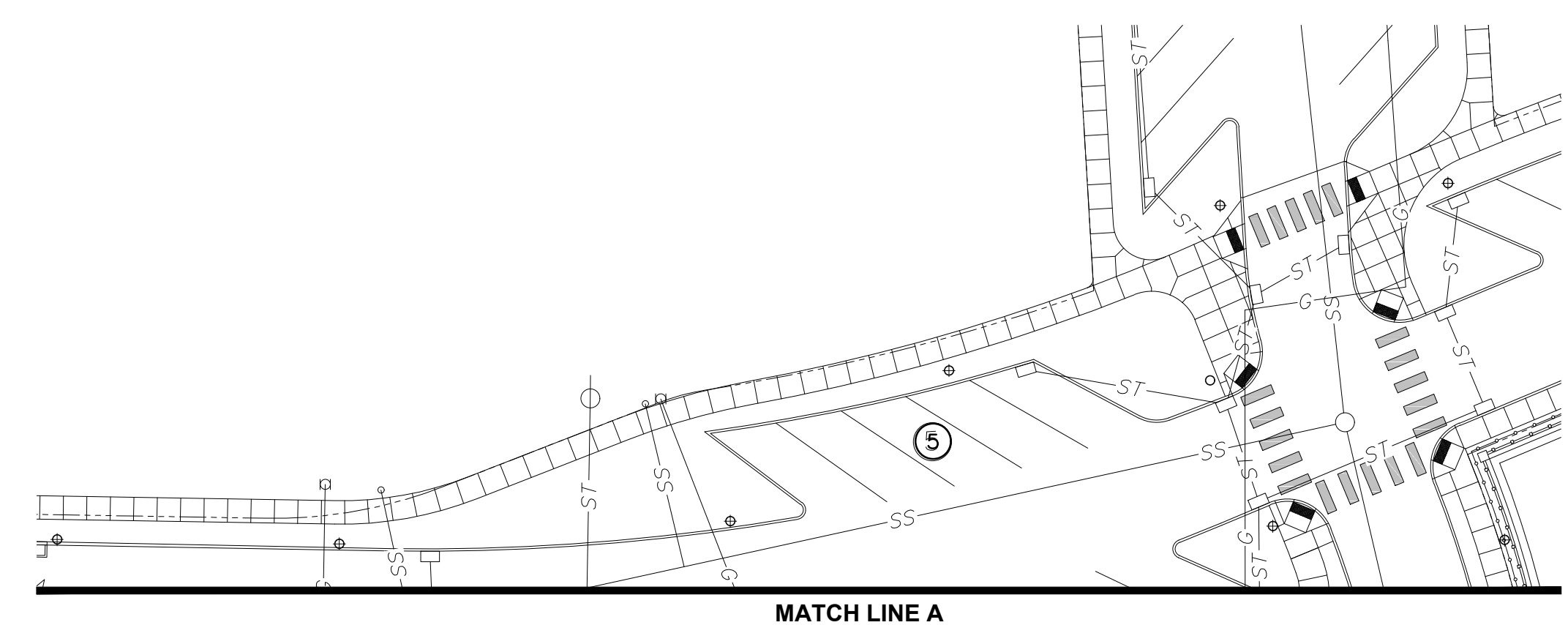
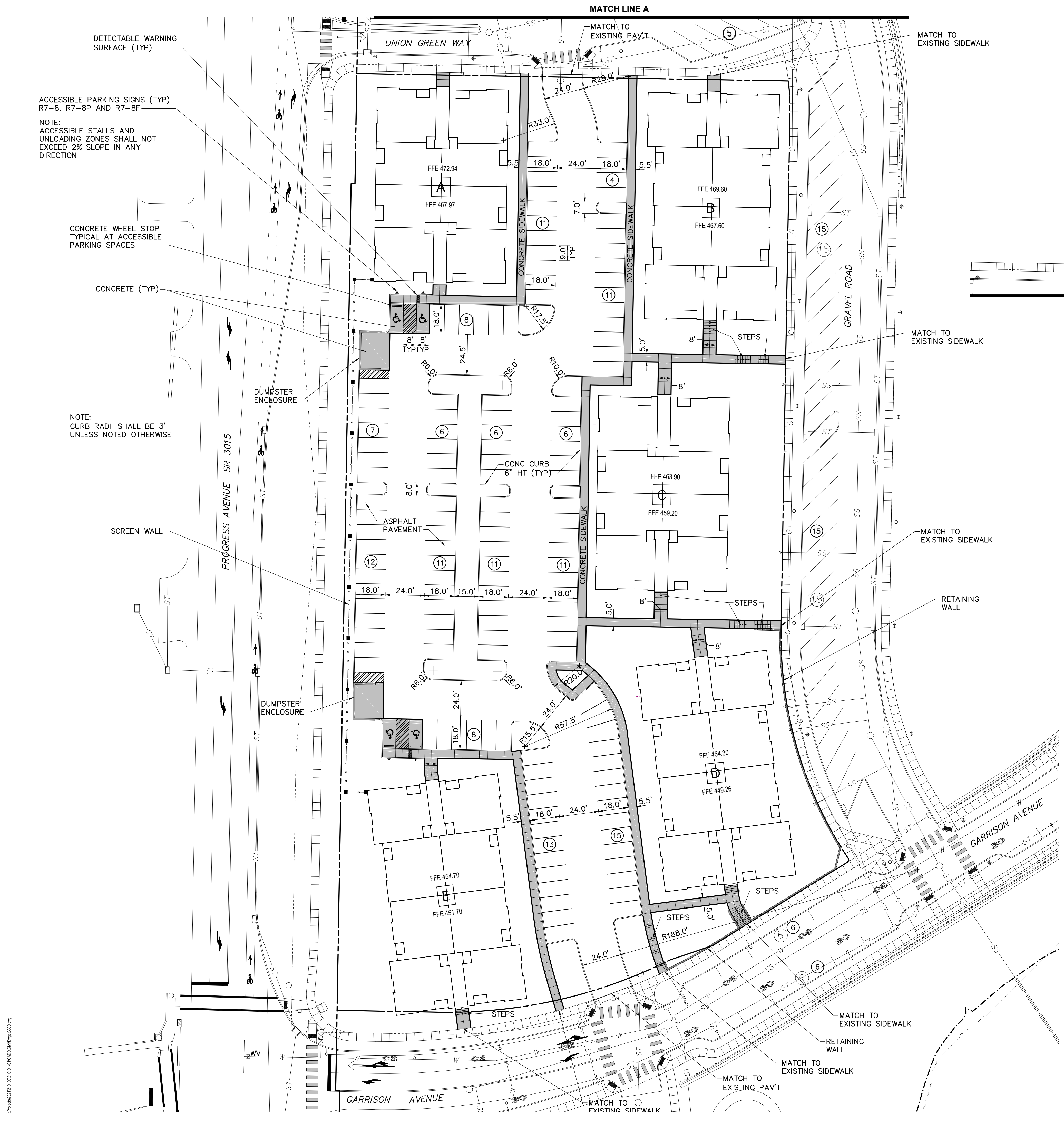
Site Plan

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PARKING CALCULATION

- PARKING PROVIDED :
- 140 SPACES - PHASE IIIA & IIIB
- 10 SPACES - UNION GREEN WAY
- 30 SPACES - GRAVEL ROAD
- 12 SPACES - GARRISON AVENUE
- 192 SPACES PROVIDED

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Structure Table		
Structure Name	Structure Details	Pipe Direction
EX STM MH-15	T/RIM = 470.68 INV IN (30") = 457.64 INV OUT (30") = 457.64	TO STM MH 3-1
EX STM MH-16	T/RIM = 444.15 INV IN (30") = 434.50 INV OUT (30") = 434.50	FROM INLET 3-9
INLET 3-1 PADOT TYPE C STD BOX	T/RIM = 466.62 INV IN (12") = 461.20 INV OUT (18") = 461.00	FROM RL BLDG B TO MH3-1
INLET 3-2 PADOT TYPE C STD BOX	T/RIM = 462.97 INV IN (12") = 452.80 INV OUT (18") = 452.60	FROM RL BLDG B TO MH3-2
INLET 3-3 PADOT TYPE C TYPE 4 BOX	T/RIM = 460.40 INV IN (30") = 451.05 INV IN (18") = 453.17 INV IN (12") = 456.40 INV OUT (30") = 450.85	FROM MH 3-2 FROM MH 3-4 FROM RL BLDG C TO INLET 3-5
INLET 3-4 PADOT TYPE C STD BOX	T/RIM = 461.67 INV OUT (18") = 454.67	TO INLET 3-3
INLET 3-5 PADOT TYPE C TYPE 4 BOX	T/RIM = 455.14 INV IN (30") = 446.89 INV IN (12") = 446.89 INV IN (18") = 446.89 INV OUT (30") = 446.69	FROM INLET 3-3 FROM RL BLDG C FROM INLET 3-6 TO INLET 3-7
INLET 3-6 PADOT TYPE C STD BOX	T/RIM = 456.40 INV OUT (18") = 450.40	TO INLET 3-5
INLET 3-7 PADOT TYPE C TYPE 4 BOX	T/RIM = 452.44 INV IN (30") = 444.92 INV IN (18") = 445.14 INV OUT (30") = 444.72	FROM INLET 3-5 FROM INLET 3-8 TO INLET 3-9
INLET 3-8 PADOT TYPE C STD BOX	T/RIM = 453.40 INV OUT (18") = 446.86	TO INLET 3-7
INLET 3-9 PADOT TYPE C TYPE 4 BOX	T/RIM = 447.17 INV IN (30") = 438.25 INV IN (12") = 438.25 INV IN (18") = 442.11 INV OUT (30") = 438.05	FROM INLET 3-7 FROM RL BLDG D FROM INLET 3-10 TO EX MH-16
INLET 3-10 PADOT TYPE C STD BOX	T/RIM = 446.94 INV IN (12") = 442.40 INV OUT (18") = 442.40	FROM RL BLDG-E TO INLET 3-9
STM MH 3-1 5' DIAMETER	T/RIM = 467.10 INV IN (30") = 457.27 INV IN (18") = 460.86 INV OUT (30") = 457.07	FROM EX MH-15 FROM INLET 3-1 TO STM MH 3-2
STM MH 3-2 5' DIAMETER	T/RIM = 463.71 INV IN (30") = 452.47 INV IN (12") = 459.01 INV IN (18") = 452.47 INV OUT (30") = 452.27	FROM STM MH 3-1 FROM RL BLDG A FROM INLET 3-2 TO INLET 3-3

- ALL DOWNSPOUT COLLECTOR PIPES (RL) ARE 12" SLCPP @ 0.5% MIN



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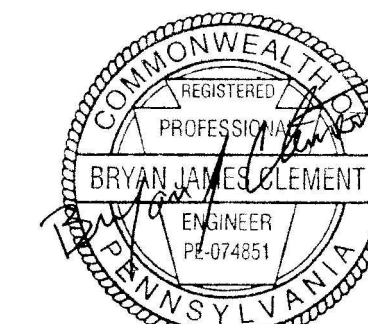


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Union Green

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Township, Dauphin
County, PA



Project Number:

210191.01

Drawn by:

LBG/REA

Checked by:

LBG/BJC

Date:

July 9, 2021

Revisions:

Scale:
1"=30'



Sheet Name:

**Grading and
Drainage Plan**

Submission:

Phase III Final Land Development
Plans

Sheet Number:

C400

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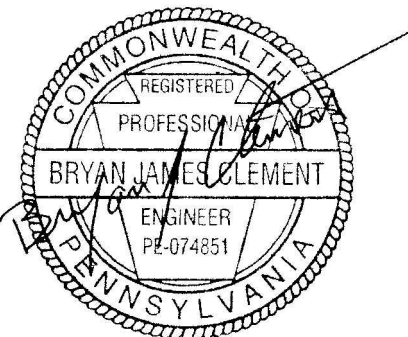


Prepared for:

Vartan Group, Inc.
3605 Vartan Way, Suite 301
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Susquehanna
Union Green

Susquehanna
Township, Dauphin
County, PA



Project Number:

210191.01

Drawn by:

LBG/REA

Checked by:

LBG/BJC

Date:

July 9, 2021

Revisions:

Scale:

Sheet Name:

Storm Sewer Profiles

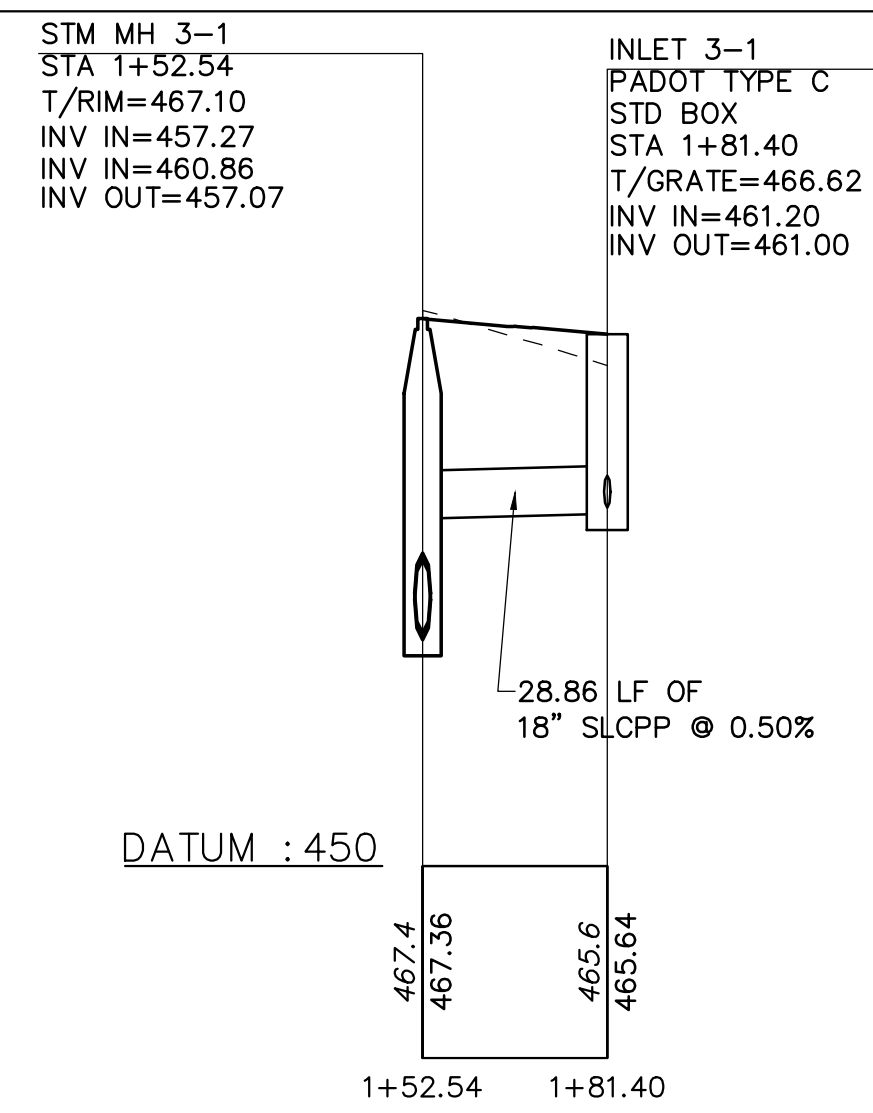
Submission:

Phase III Final Land Development
Plans

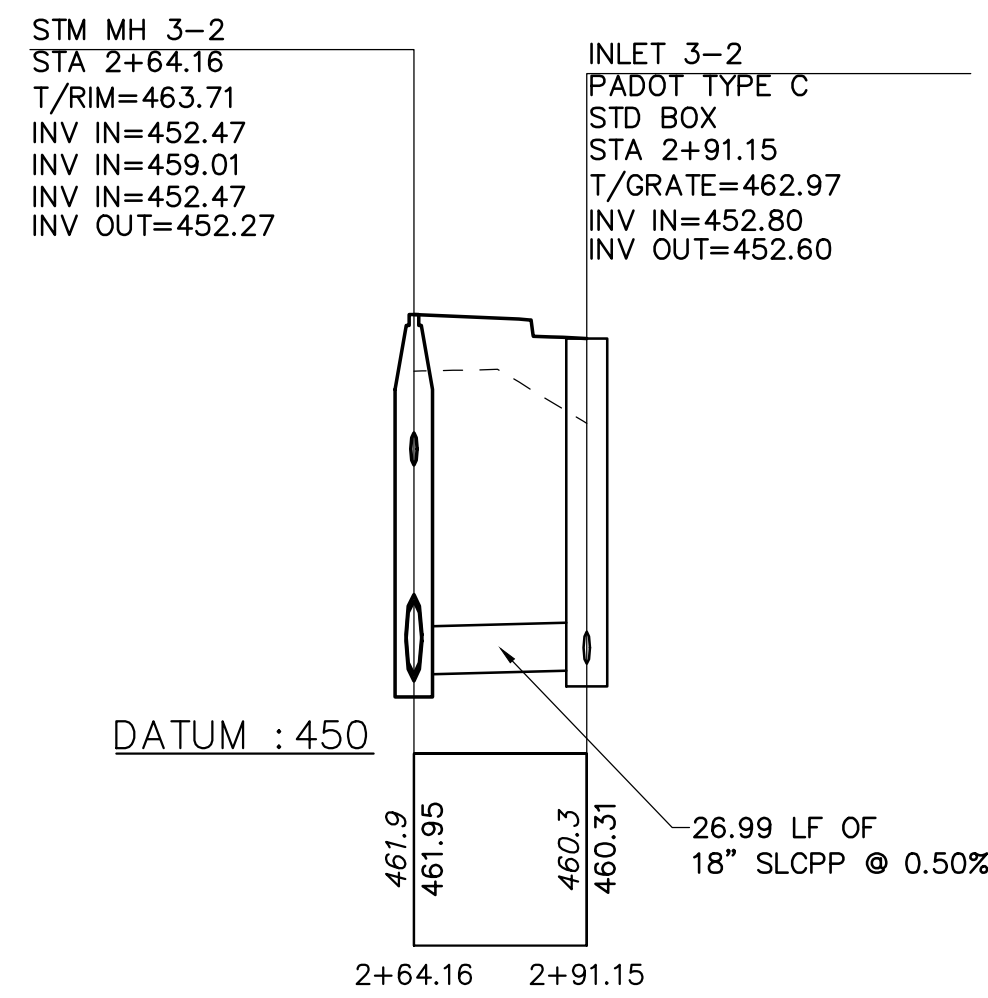
Sheet Number:

C401

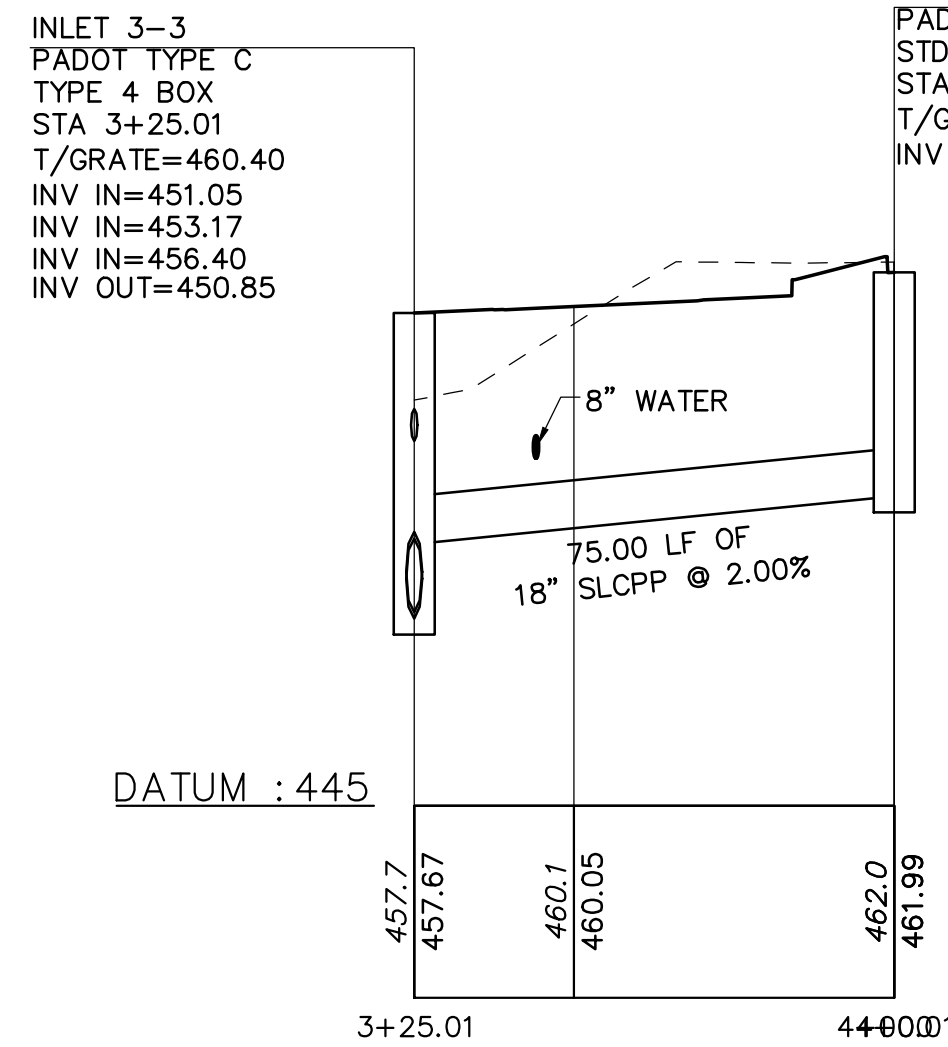
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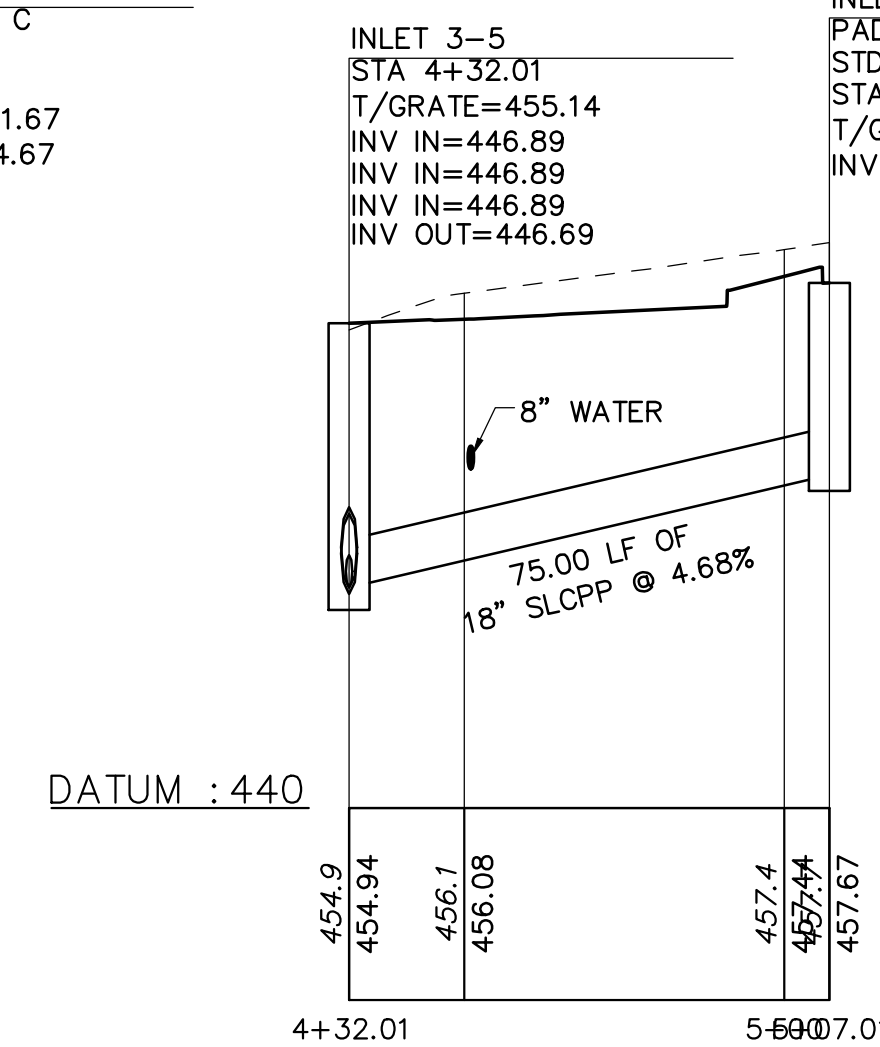
STORM PROFILE
INLET 3-1 TO STM MH 3-1



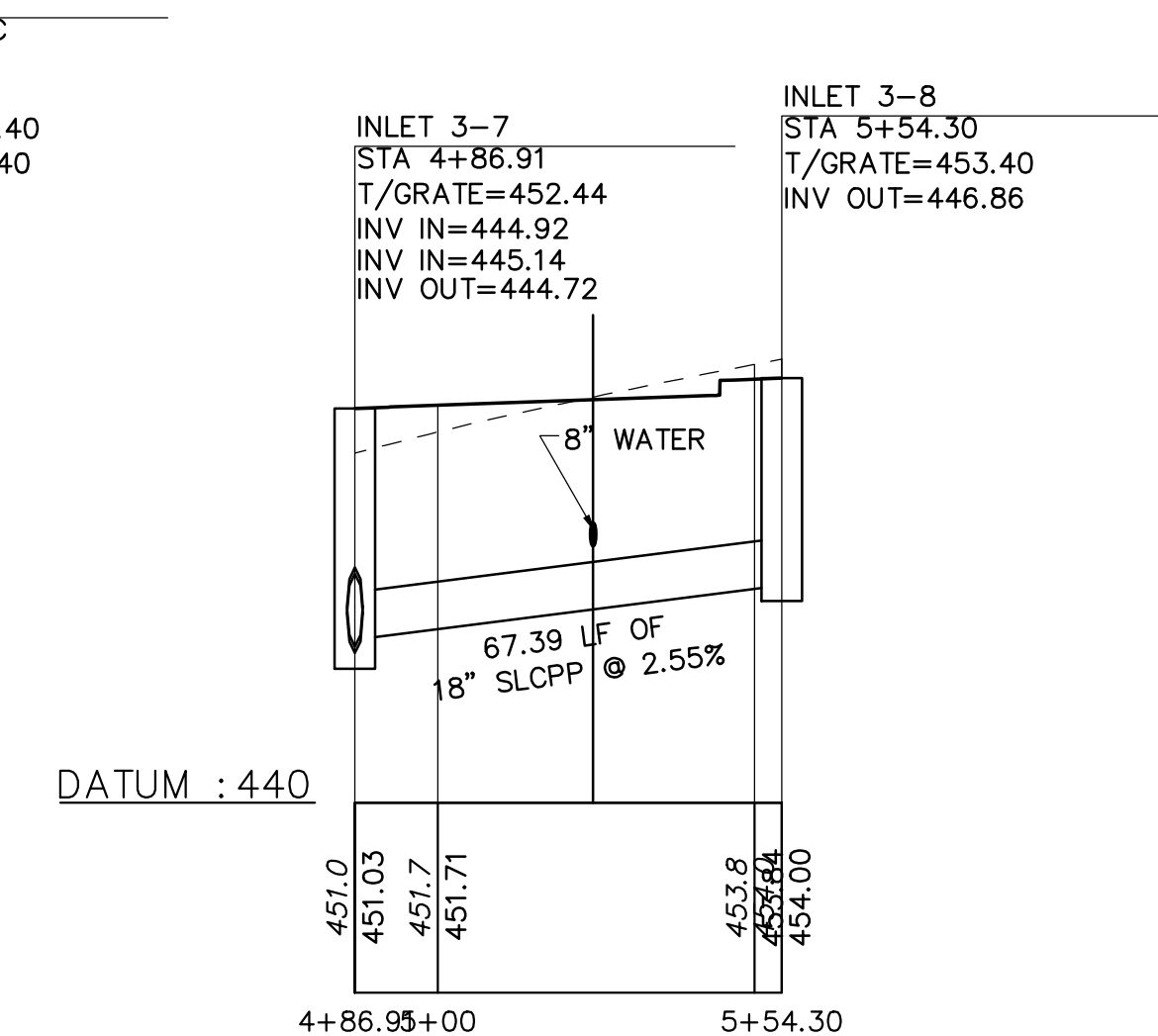
STORM PROFILE
INLET 3-2 TO STM MH 3-2



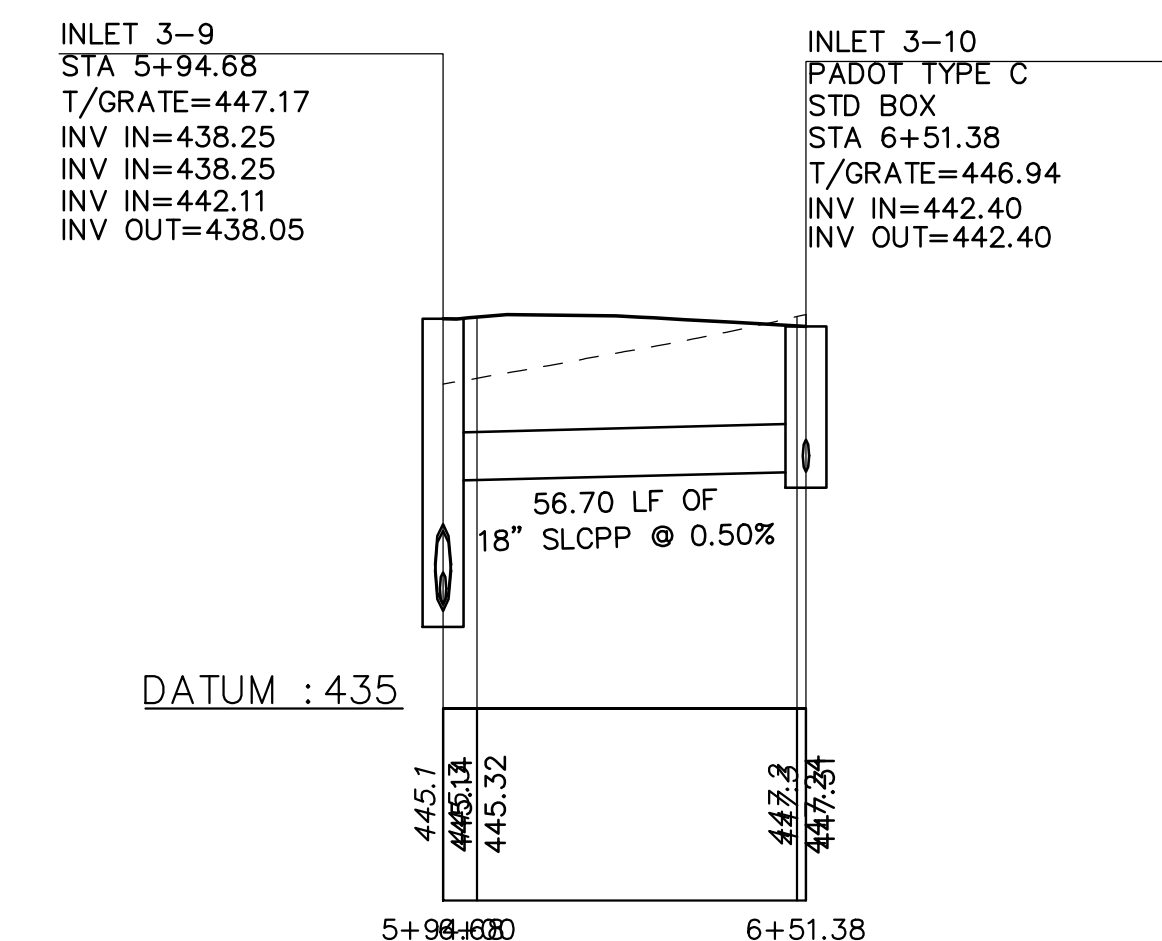
STORM PROFILE
INLET 3-4 TO INLET 3-3



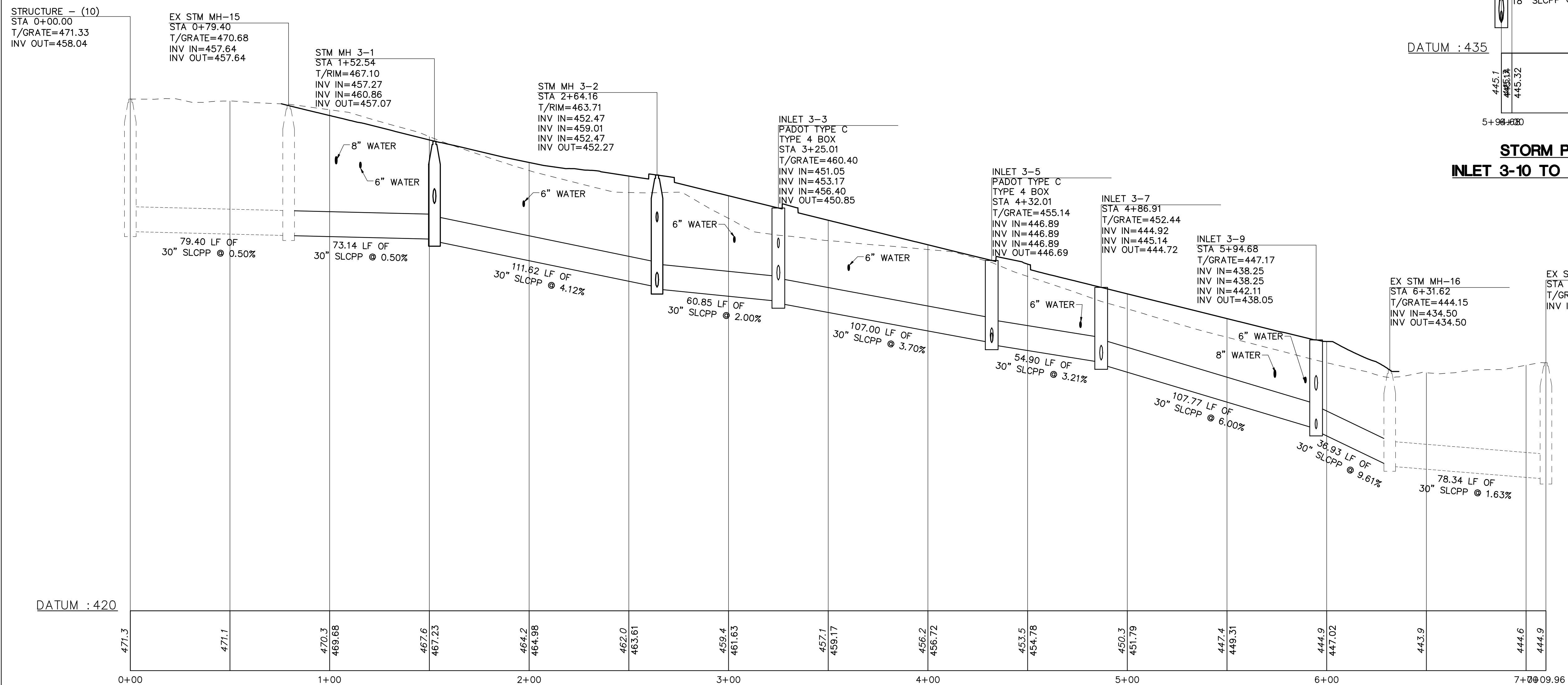
STORM PROFILE
INLET 3-6 TO INLET 3-5



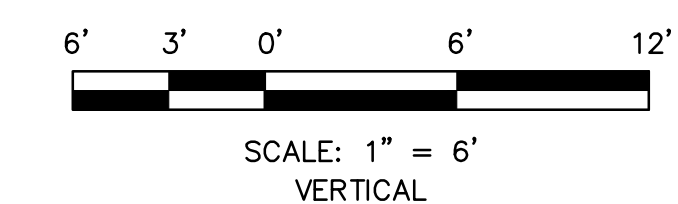
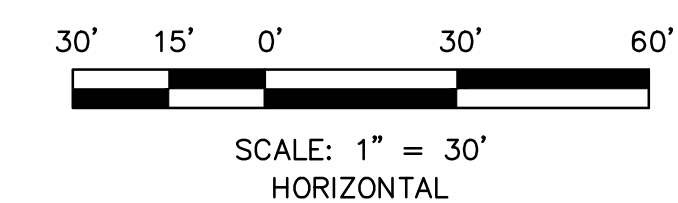
STORM PROFILE
INLET 3-8 TO INLET 3-7



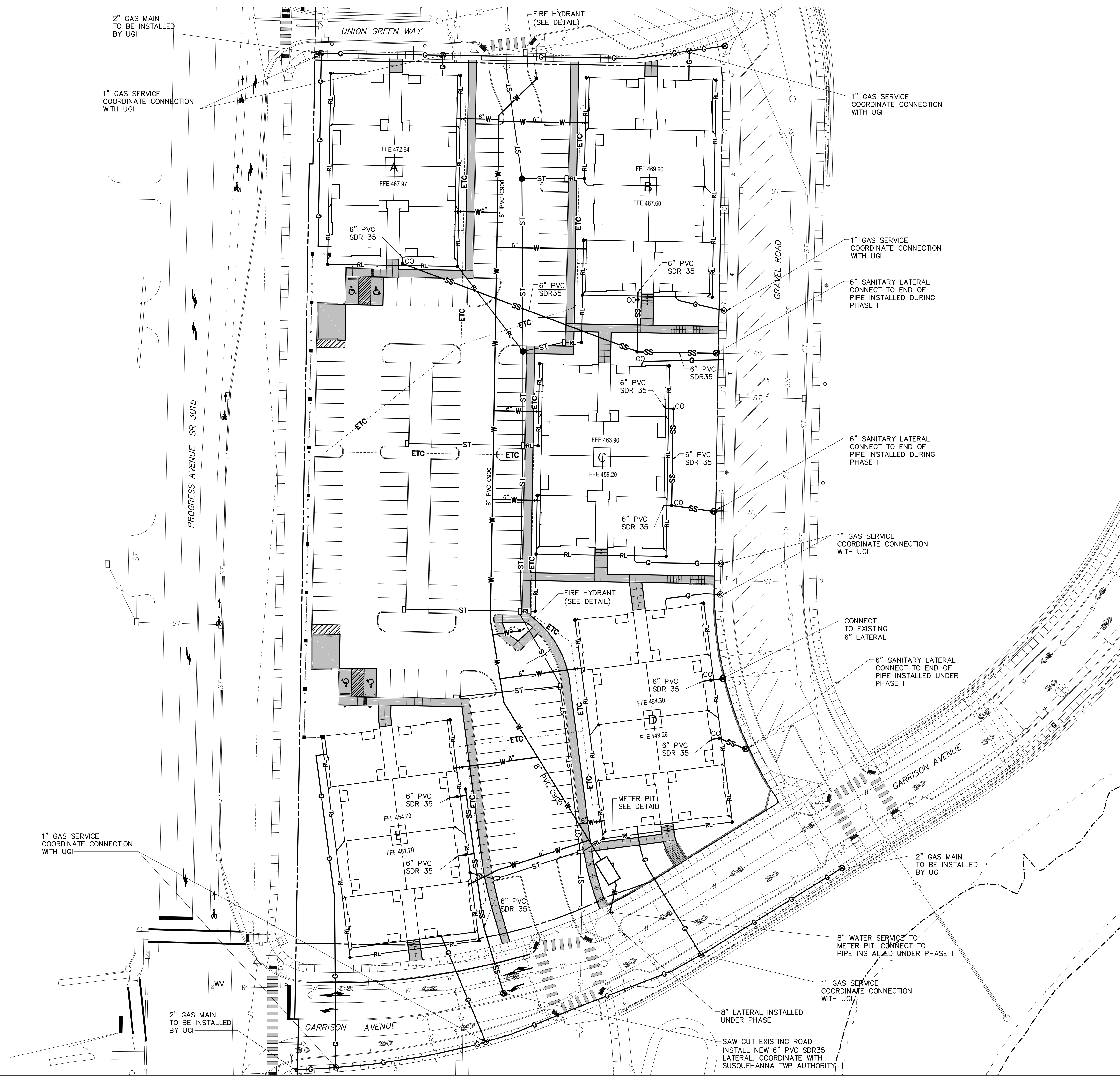
STORM PROFILE
INLET 3-10 TO INLET 3-9



STORM PROFILE - FROM EXISTING STM MH-15 TO EXISTING STM MH-16



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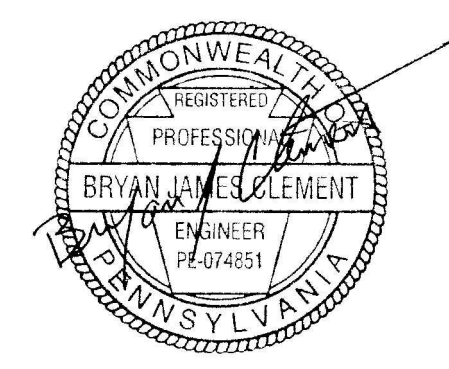
Nature leads, art follows.

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1407 Scalp Avenue
Johnstown, PA 15904
Phone: 814-269-9300
FAX: 814-269-9300



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Susquehanna Union Green
Susquehanna Township, Dauphin County, PA



Project Number:
210191.01
Drawn by:
LBG/REA
Checked by:
LBG/BJC
Date:
July 9, 2021

Revisions:

Scale:
1"=30'
30' 15' 0 30'

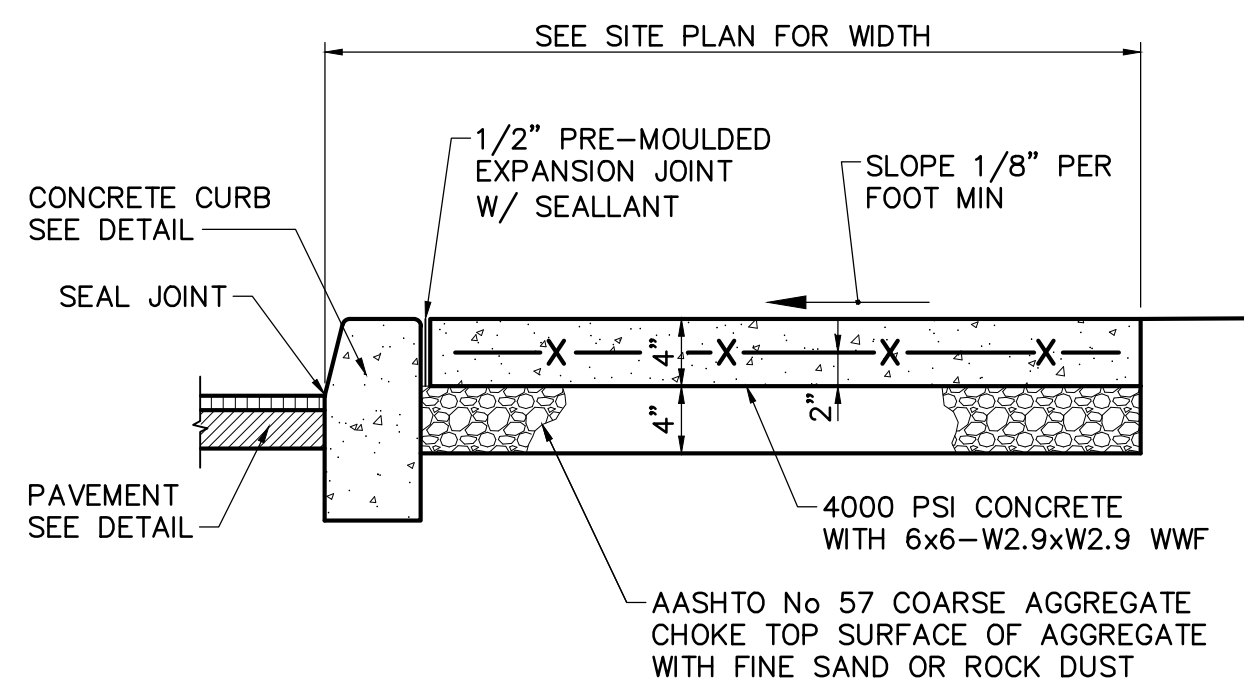
Sheet Name:
Utility Plan

Submission:
Phase III Final Land Development Plans

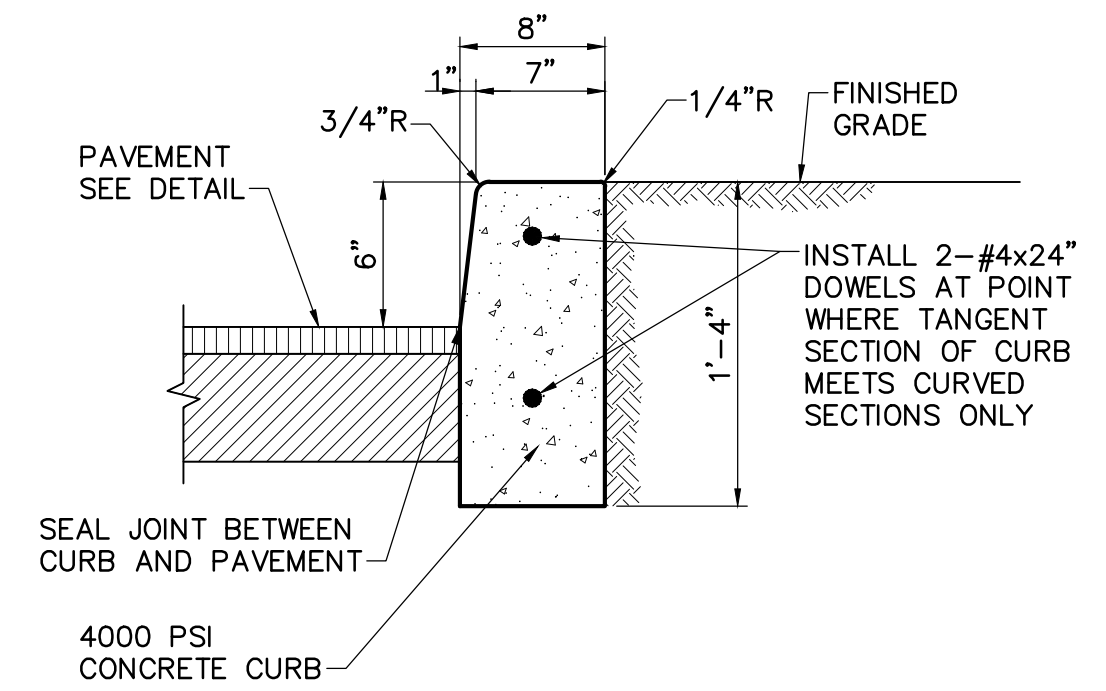
Sheet Number:
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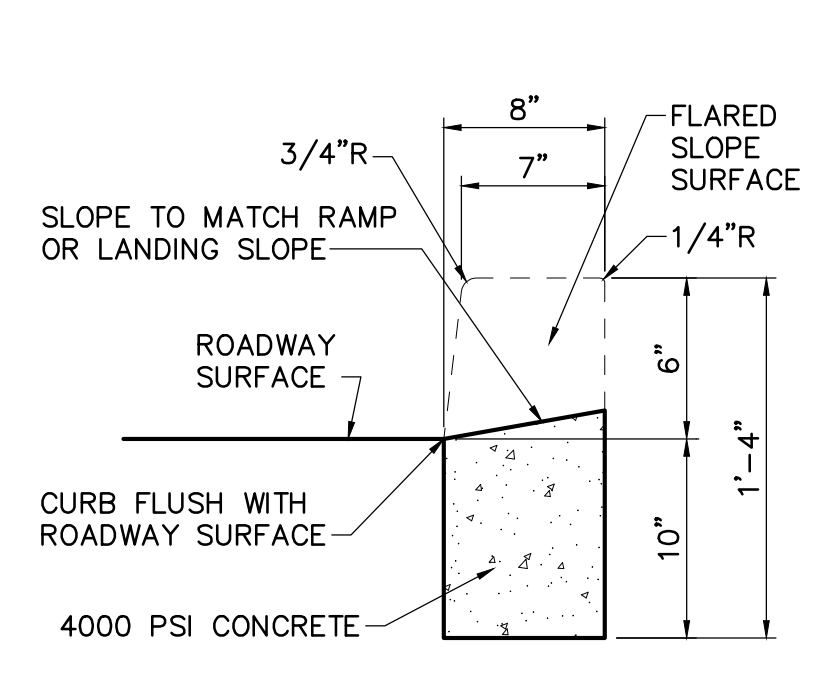
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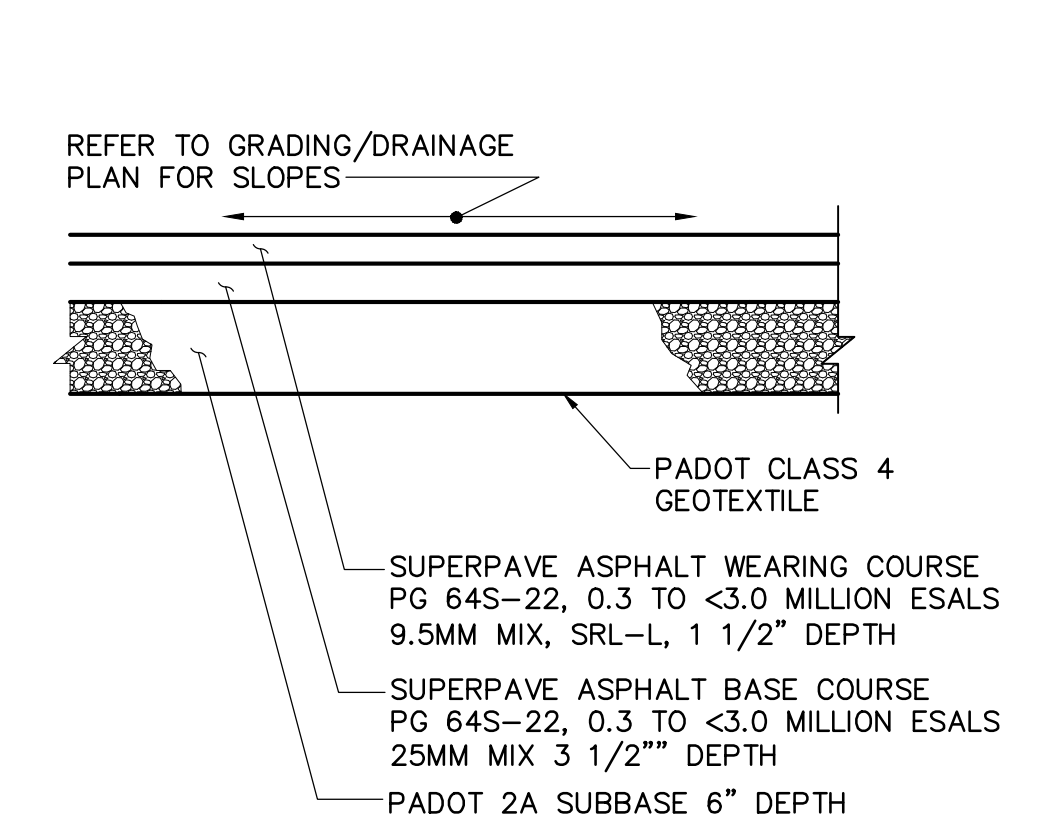
CURB AND CONCRETE SIDEWALK SECTION
NOT TO SCALE



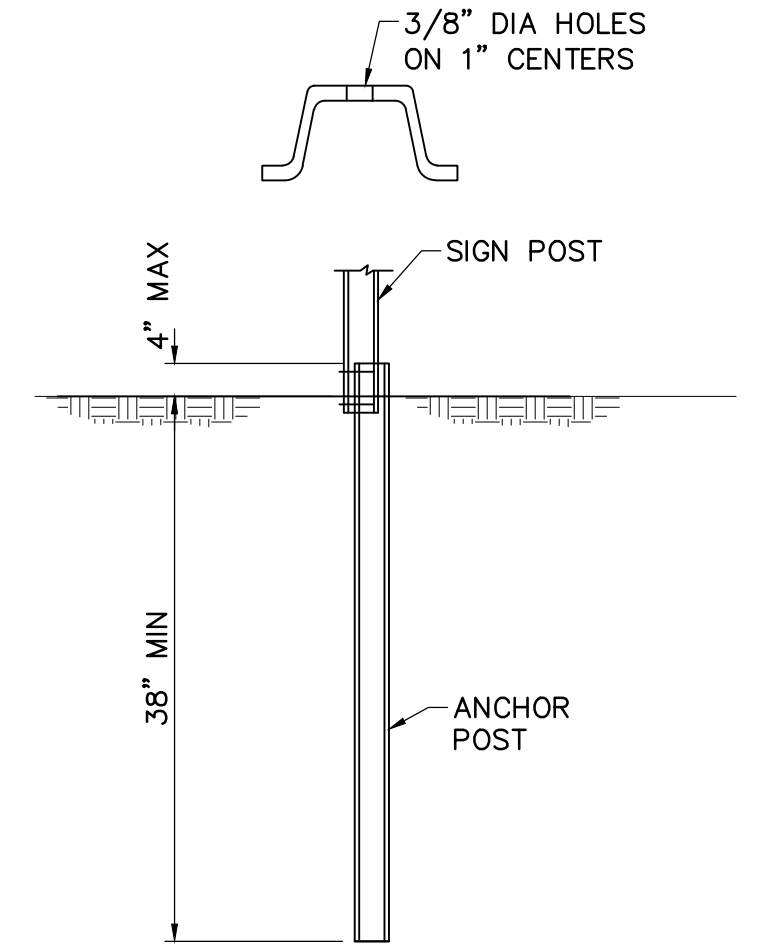
CONCRETE CURB (6" REVEAL) DETAIL
NOT TO SCALE



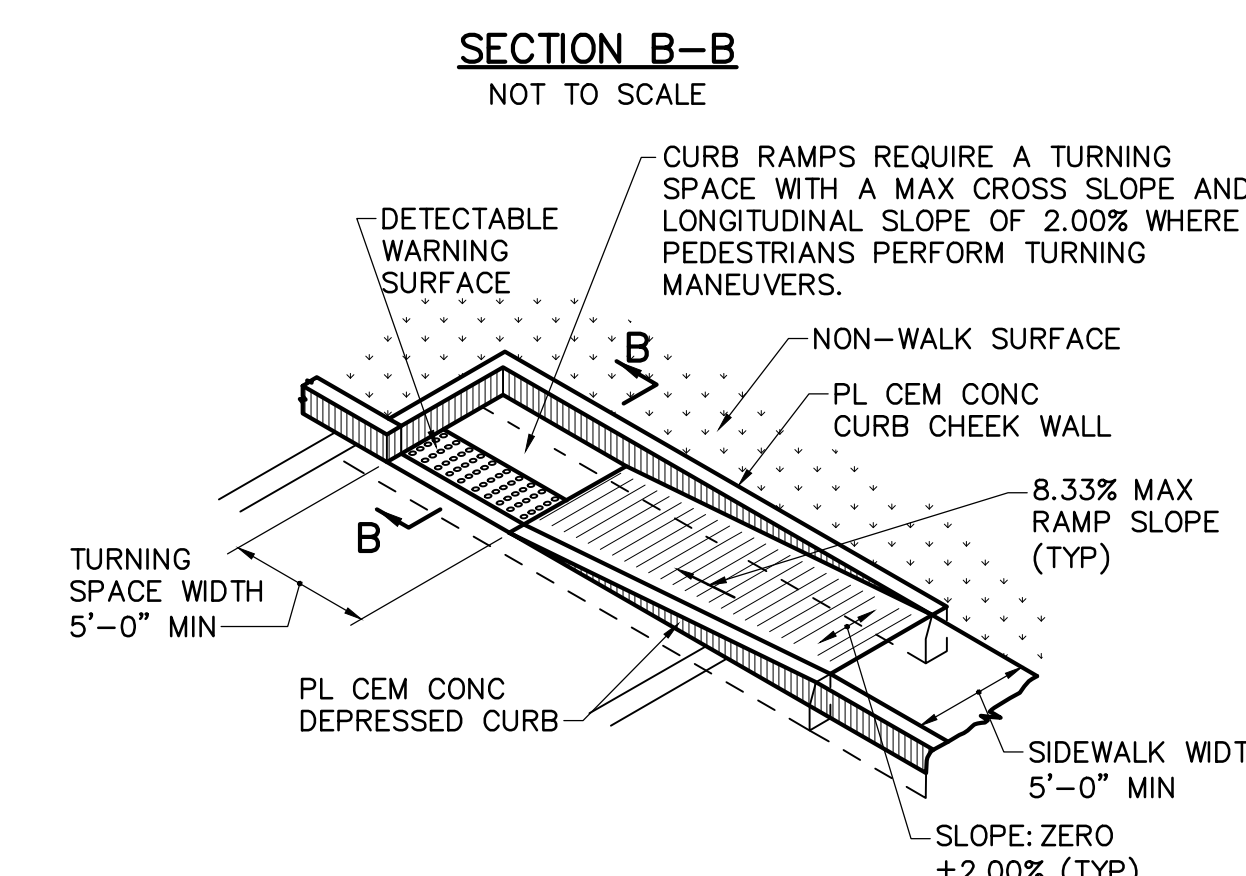
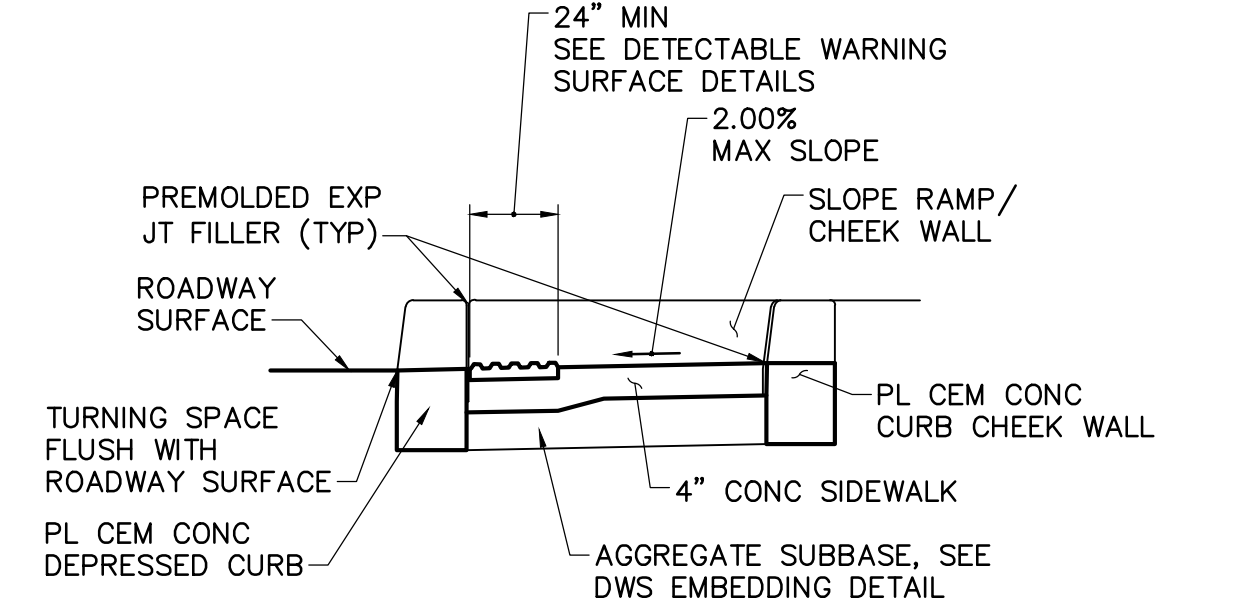
DEPRESSED CURB FOR CURB RAMPS
NOT TO SCALE



NOTE: SLAG IS NOT PERMITTED IN SUBBASE
BITUMINOUS PAVEMENT (PARKING LOT)
NOT TO SCALE

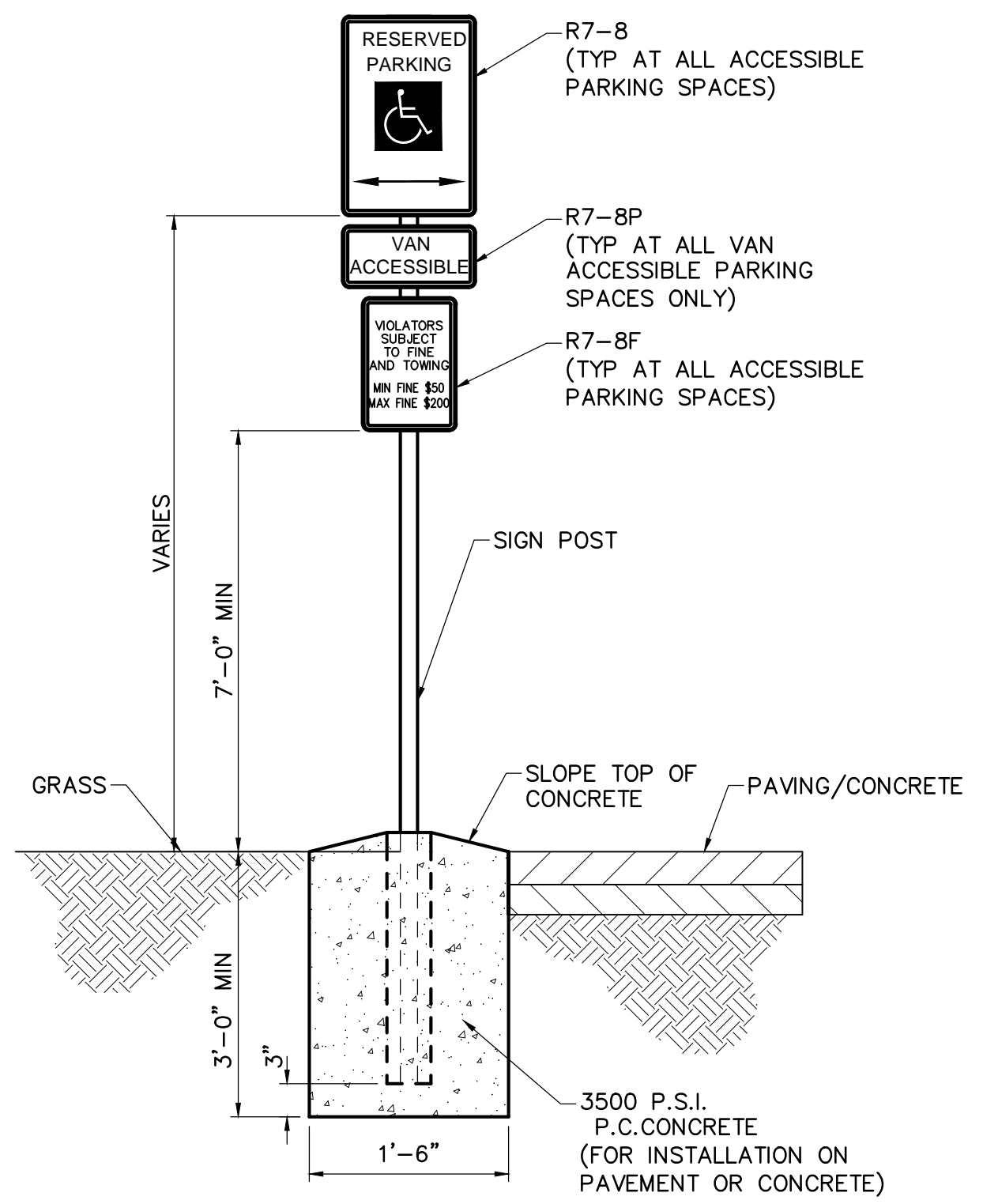


NOTE:
• MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408.
• REFER TO PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 111, TC-8702B FOR ADDITIONAL INFORMATION.
CHANNEL BAR POSTS SIGN POST INSTALLATION
NOT TO SCALE

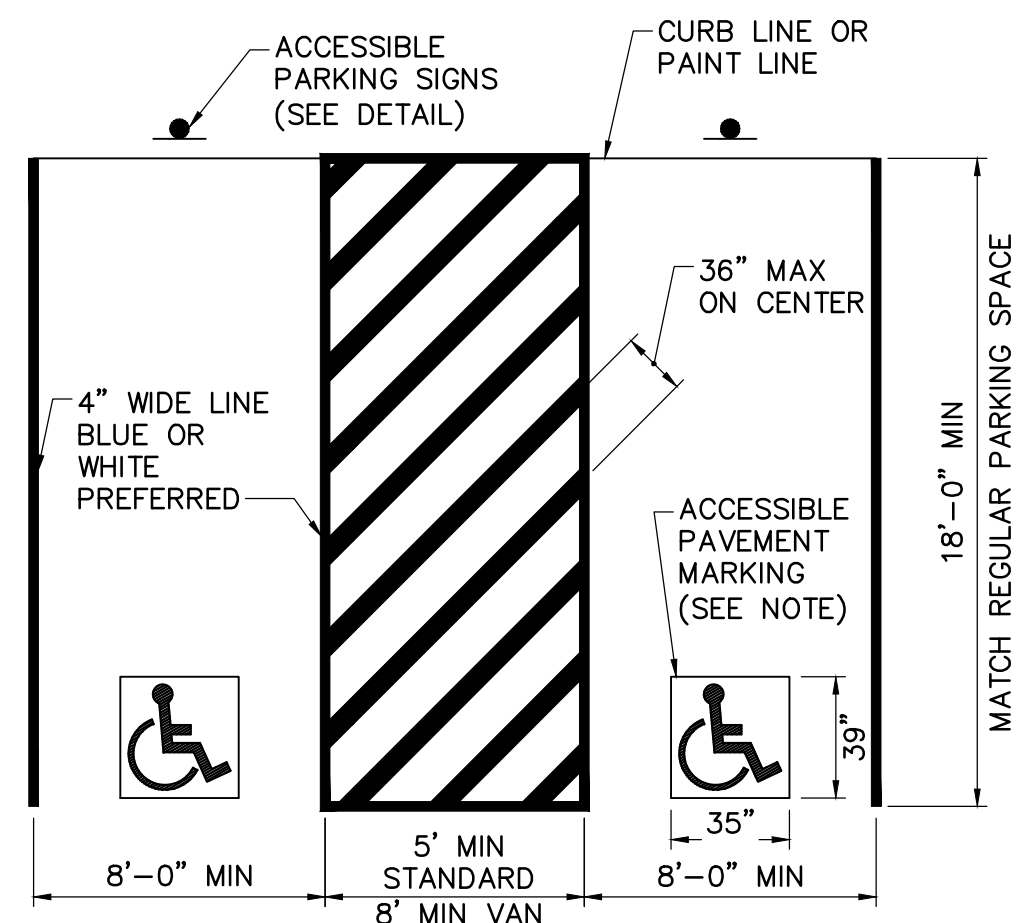


TYPE 2 PARTIAL CURB RAMP
NOT TO SCALE

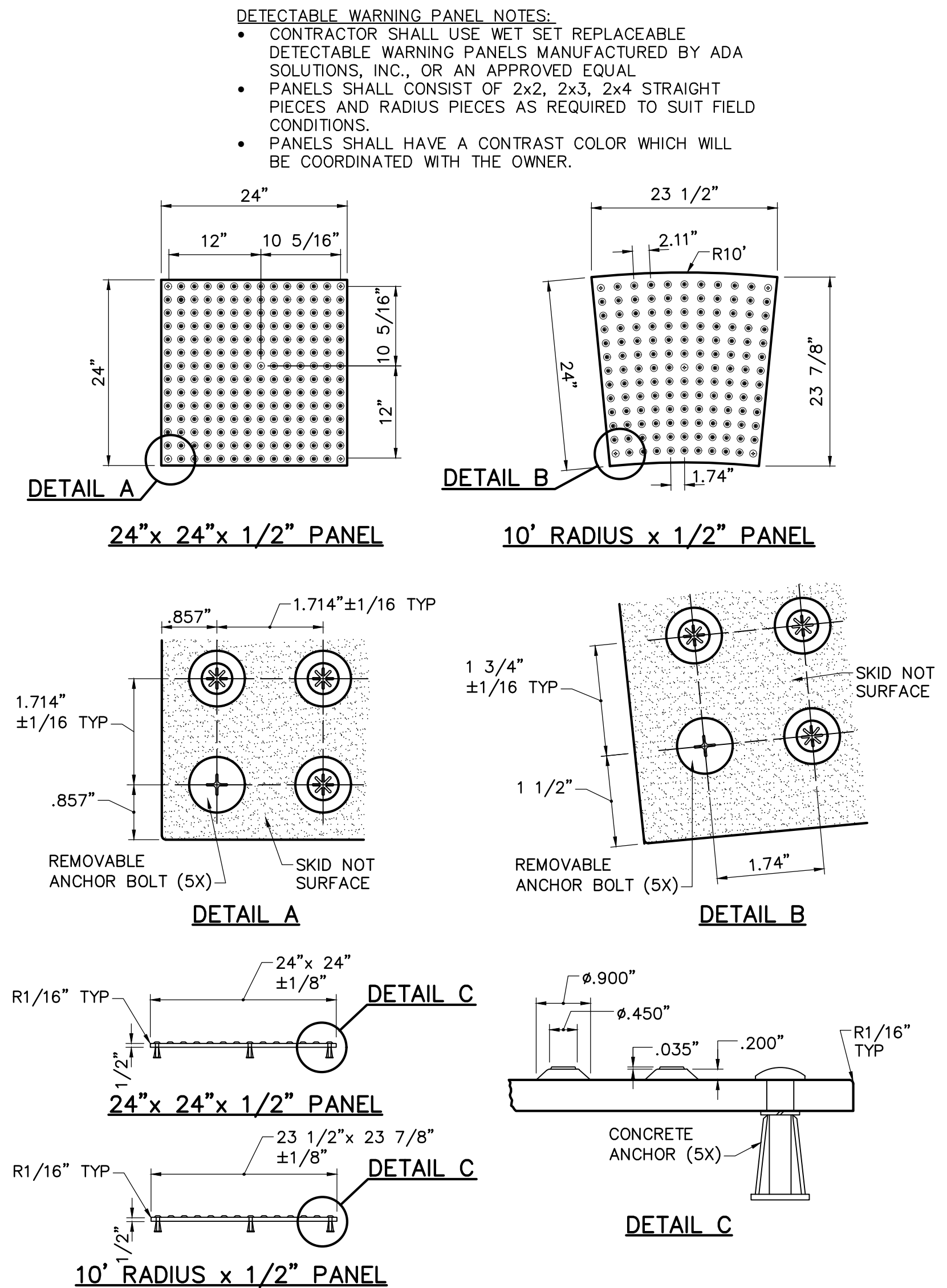
TRAFFIC SIGN SCHEDULE				
SIGN No	SIZE	DESCRIPTION	HEIGHT TO BOTTOM OF SIGN	REMARKS
R1-1	30"x30"	STOP SIGN	7'-0"	--
R7-8	12"x 18"	RESERVE PARKING	VARIES	--
R7-8P	12"x 6"	VAN ACCESSIBLE	8'-6"	--
R7-8F	12"x 18"	RESERVE PARKING PENALTIES SIGN	7'-0"	--



ACCESSIBLE PARKING SIGN
NOT TO SCALE



NOTES:
• HANDICAP SYMBOL SHALL BE WHITE, IT MAY BE INSTALLED ALONG WITH A BLUE BACKGROUND WHICH EXTENDS 3" BEYOND THE HANDICAP SYMBOL
• SEE SITE PLAN FOR PARKING SPACE DIMENSIONS
ACCESSIBLE PARKING SPACES
NOT TO SCALE



REPLACEABLE DETECTABLE WARNING PANELS
NOT TO SCALE



LaQuatra Bonci ASSOCIATES LANDSCAPE ARCHITECTURE

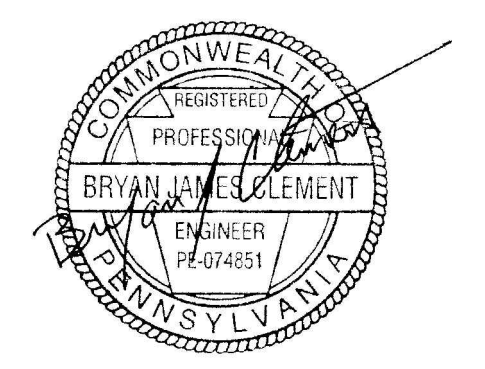
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Nature leads, art follows.



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Susquehanna Union Green
Susquehanna Township, Dauphin County, PA



Project Number:
210191.01
Drawn by:
LBG/REA
Checked by:
LBG/BJC
Date:
July 9, 2021

Revisions:

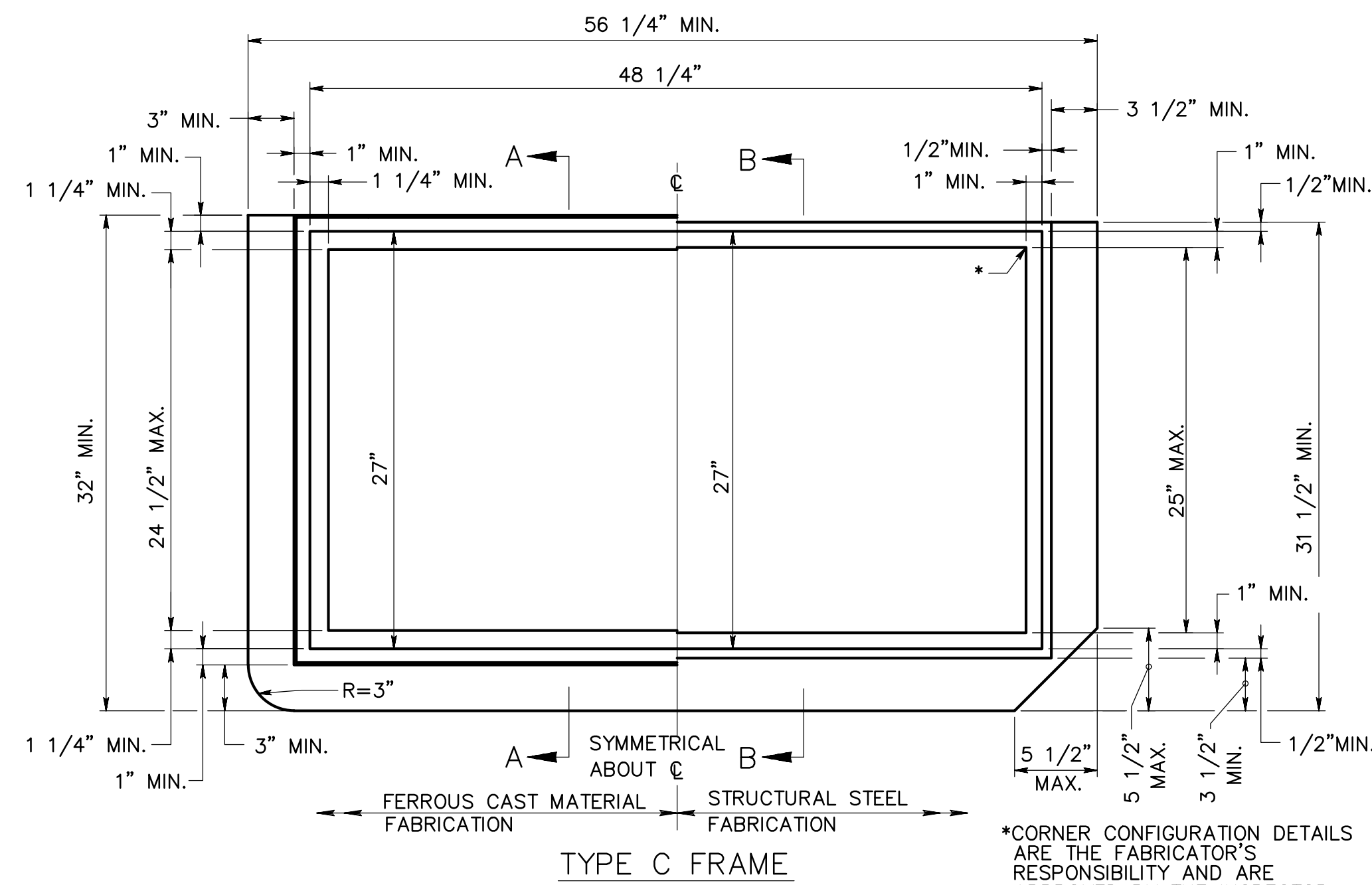
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Site Details

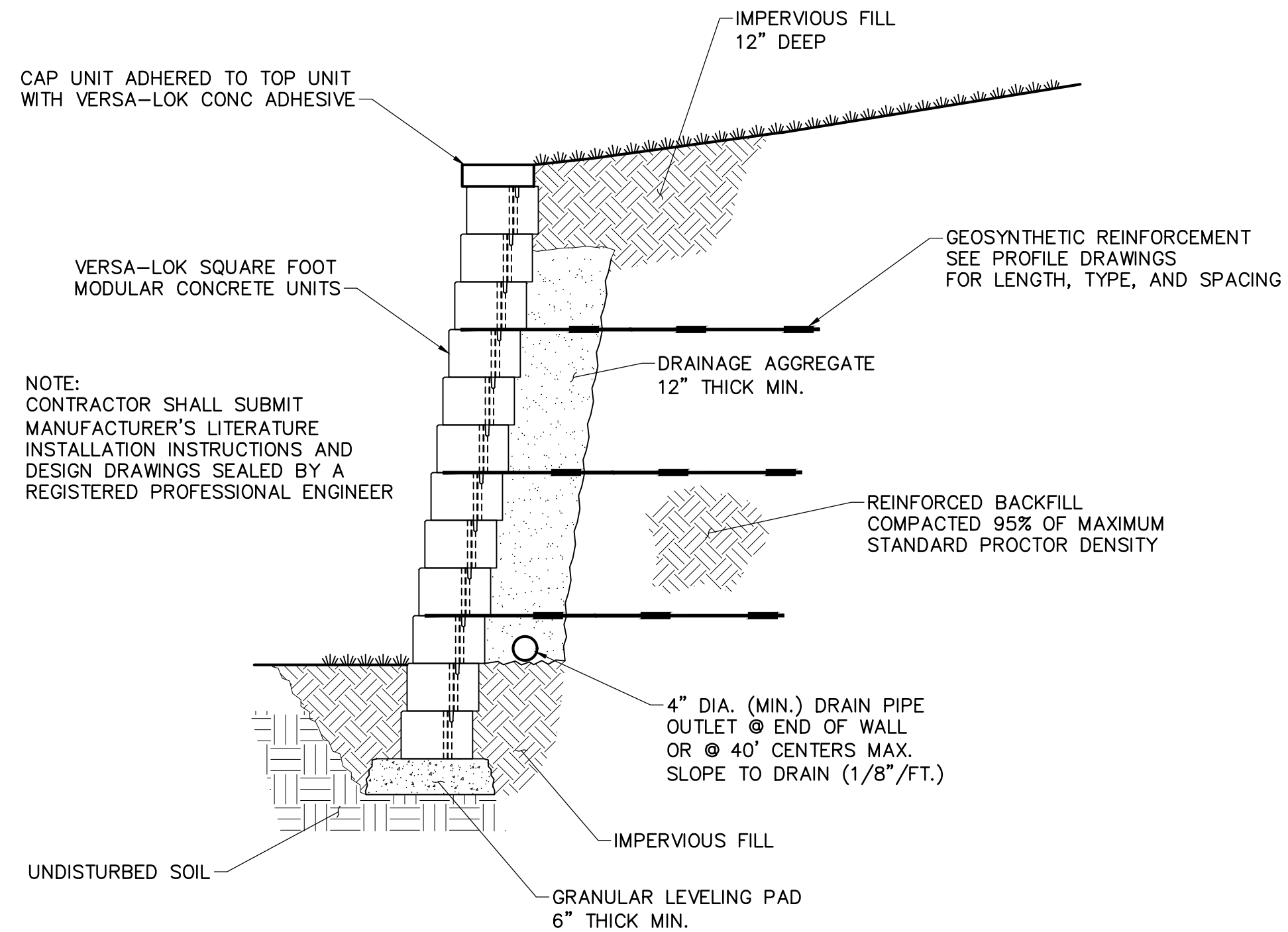
Submission:
Phase III Final Land Development Plans
Sheet Number:

C600

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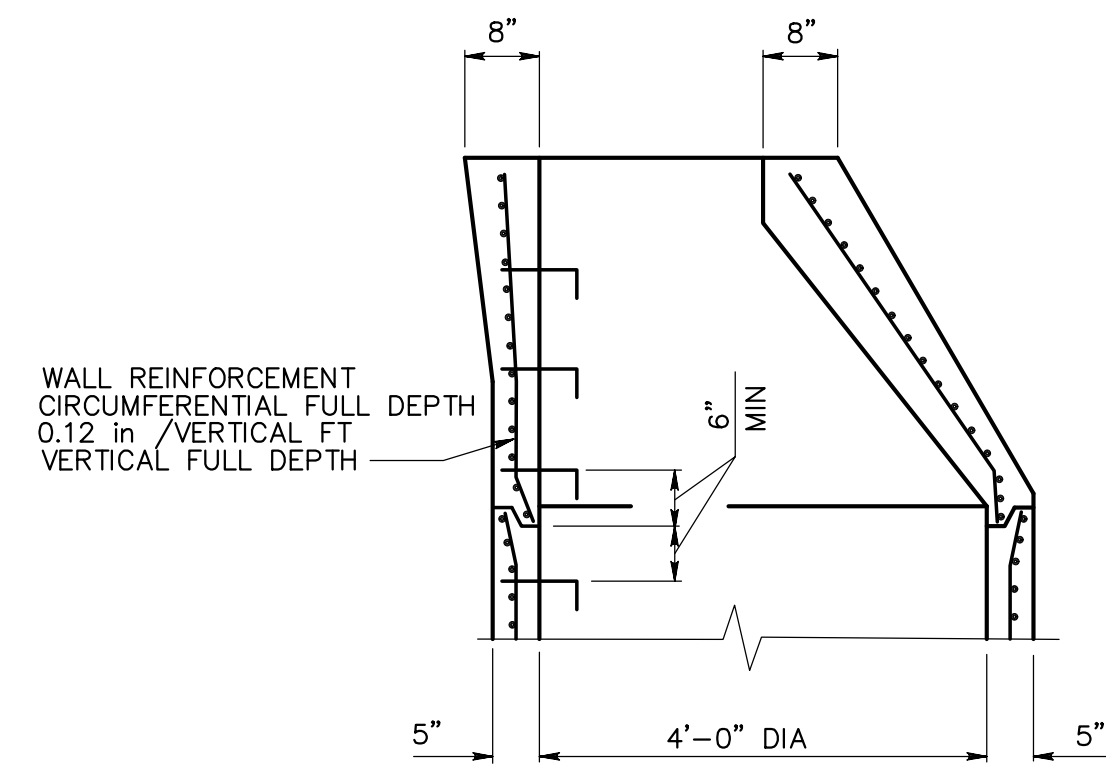


*CORNER CONFIGURATION DETAILS ARE THE FABRICATOR'S RESPONSIBILITY AND ARE APPROVED BY THE INSPECTOR.

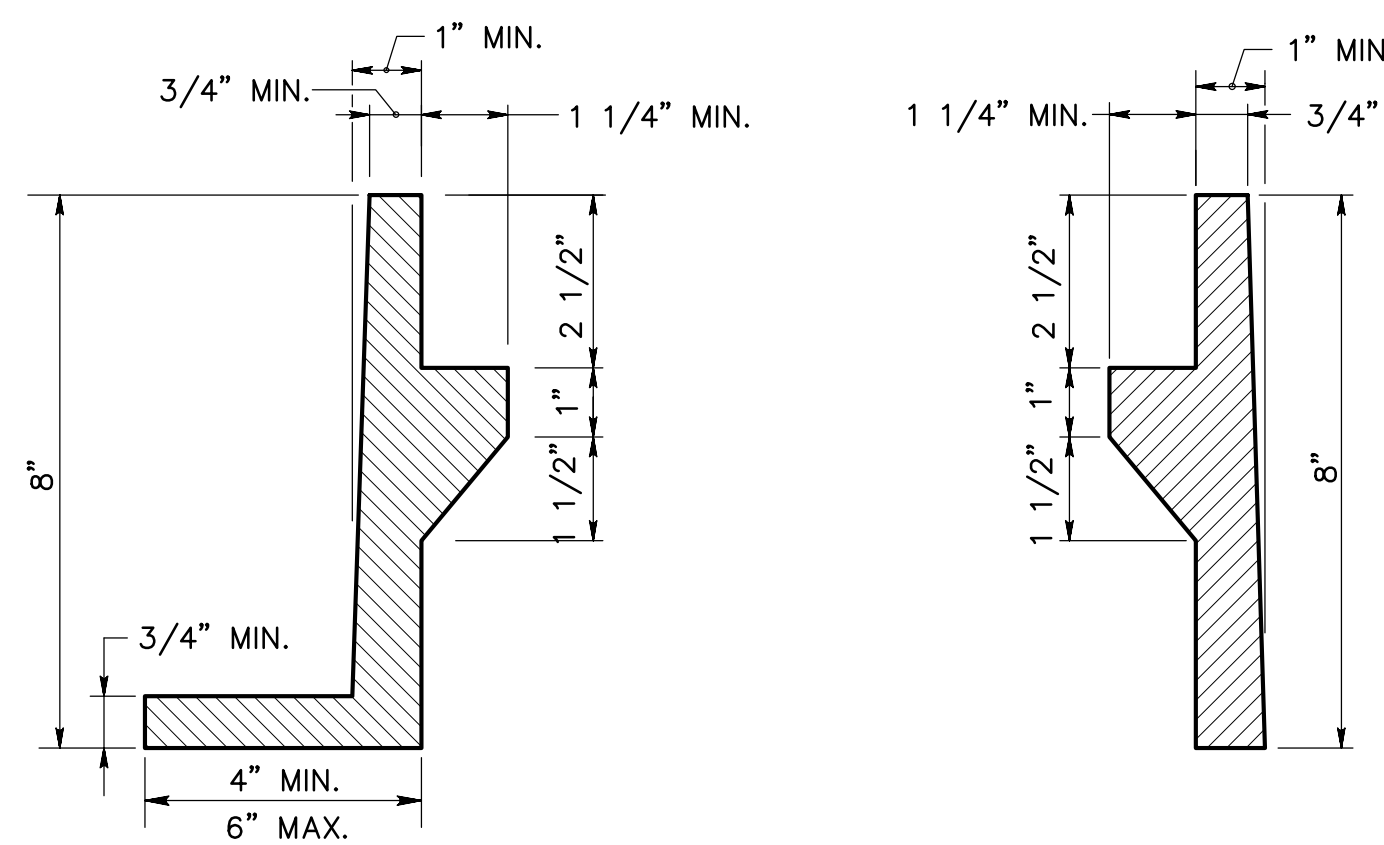


TYPICAL SECTION-REINFORCED RETAINING WALL

NOT TO SCALE

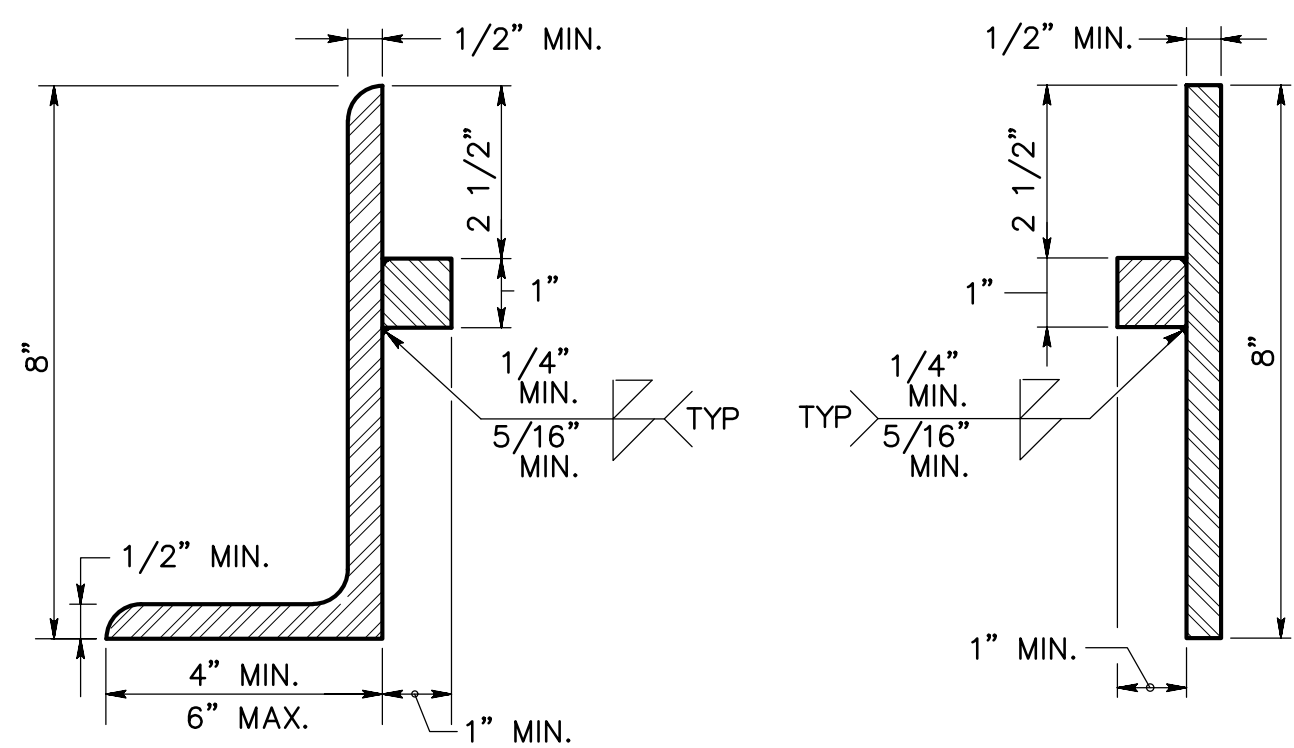


SECTION B-B



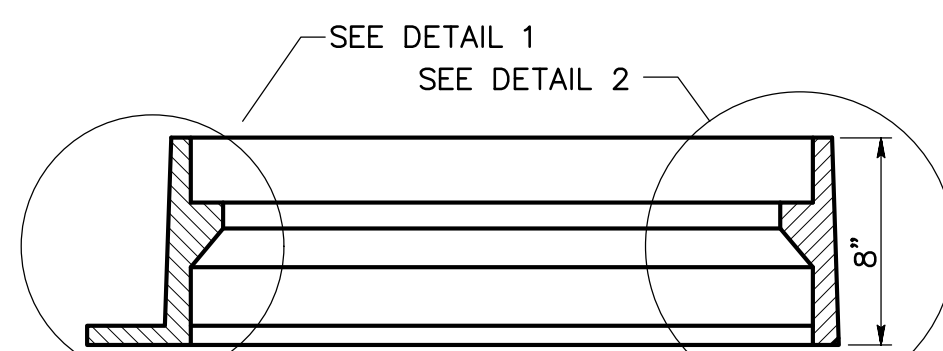
DETAIL 1

DETAIL 2

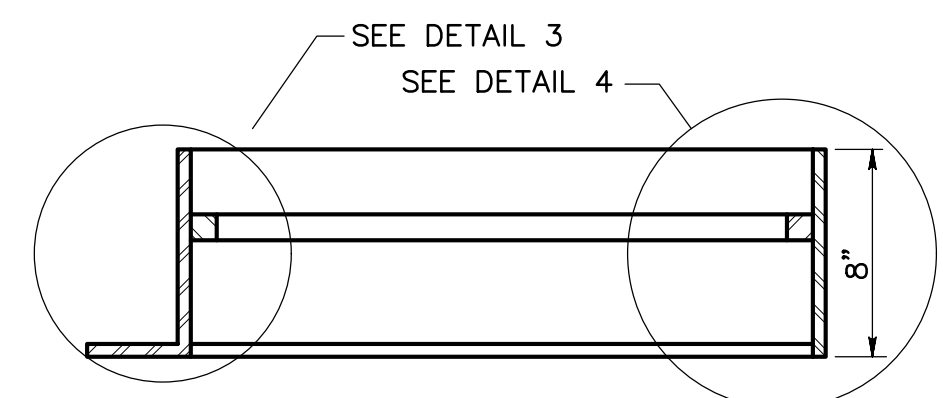


DETAIL 3

DETAIL 4



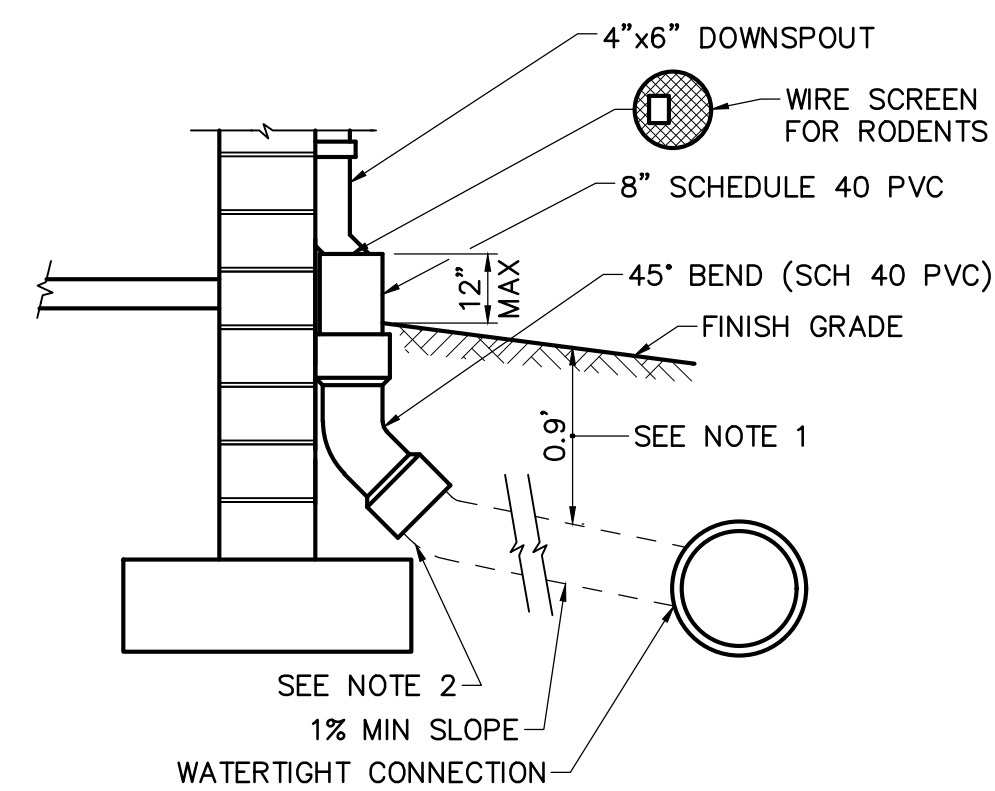
SECTION A-A
FERRUCS CAST MATERIAL



SECTION B-B
STRUCTURAL STEEL

INLET FRAME NOTES:

- SHEETS 14 AND 15 (PADOT PUBLICATION NO 72M, RC-45M) DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGEABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING. FOR DEVIATIONS OR MODIFICATIONS OF THE STANDARDS, SUBMIT SHOP DRAWINGS TO THE BUREAU OF DESIGN HIGHWAY QUALITY ASSURANCE DIVISION CHIEF FOR REVIEW AND ACCEPTANCE.
- PROVIDE EITHER STRUCTURAL STEEL FRAMES OR CAST IRON FRAMES SUPPLIED BY A MANUFACTURER LISTED IN PADOT BULLETIN 15.
- PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE PADOT PUBLICATION 408, AASHTO/AWS BRIDGE WELDING CODE AND THE CONTRACT SPECIAL PROVISIONS.
- STRUCTURAL STEEL FRAMES:
 - TYPE C FRAMES: PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270M (M270) GRADE 345 (50) [ASTM A709M (A709), GRADE 345 (50)].
 - WELD STRUCTURAL STEEL FRAMES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 1105. WELDING SHOPS ARE NOT REQUIRED TO BE AISC CERTIFIED.
 - COAT FRAMES WITH AN APPROVED BITUMINOUS PAINT, IN ACCORDANCE WITH PUBLICATION 408, SECTION 605.2(f). AS AN ALTERNATE TO BITUMINOUS PAINT, GALVANIZE FRAMES IN ACCORDANCE WITH PADOT PUBLICATION 408, SECTION 1105.02(s).
- CAST IRON FRAMES:
 - PROVIDE EITHER GRAY IRON CASTINGS CONFORMING TO AASHTO M105 (ASTM A48/A48M), CLASS 225B (35B) AND AASHTO M306, MALLEABLE IRON CASTINGS CONFORMING TO ASTM A47/A47M, GRADE 22010 (32510), OR DUCTILE IRON CASTINGS CONFORMING TO ASTM A536, GRADE -40-18.

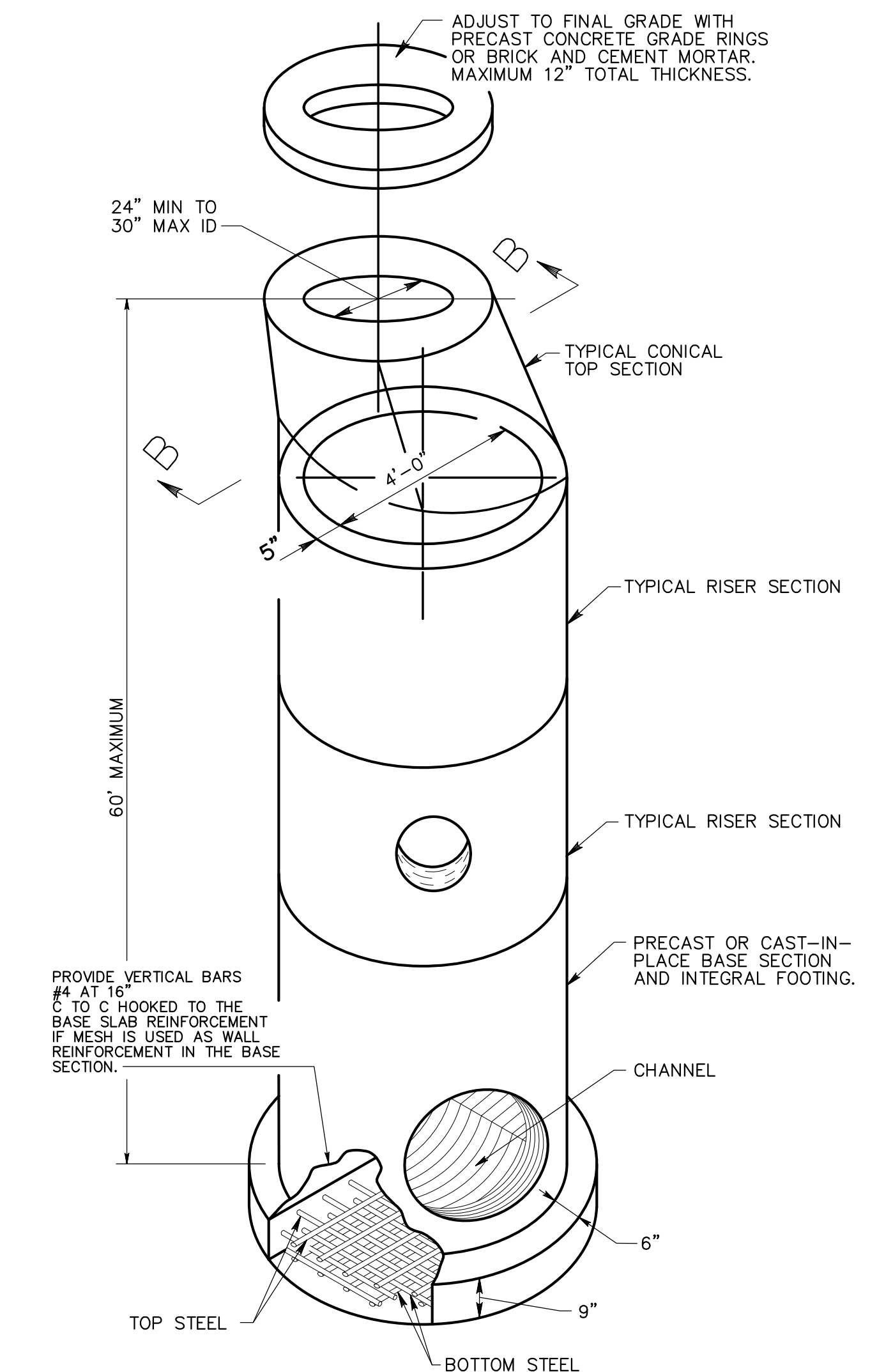


NOTES:

- FOR ALL DEPTHS OF COVER LESS THAN TWO (2) FEET, PIPE MUST BE SCHEDULE 40 PVC. FOR DEPTHS OF COVER GREATER THAN TWO (2) FEET, FLEXIBLE PIPE MAY BE USED. REFER TO SPECIFICATIONS FOR ALLOWABLE PIPE TYPES.
- A WATERTIGHT CONNECTION SHALL BE MAINTAINED WITH ANY TRANSITION 2. FROM SCHEDULE 40 PVC PIPE TO ANY OTHER PIPE TYPE.
- THE DOWNSPOUT COLLECTOR DRAIN SHALL BE INSTALLED BEFORE THE DOWNSPOUTS ARE INSTALLED ON THE BUILDING. SITEWORK CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK TO AND INCLUDING THE RODENT SCREEN. BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONNECTION AT THE POINT OF THE RODENT SCREEN.

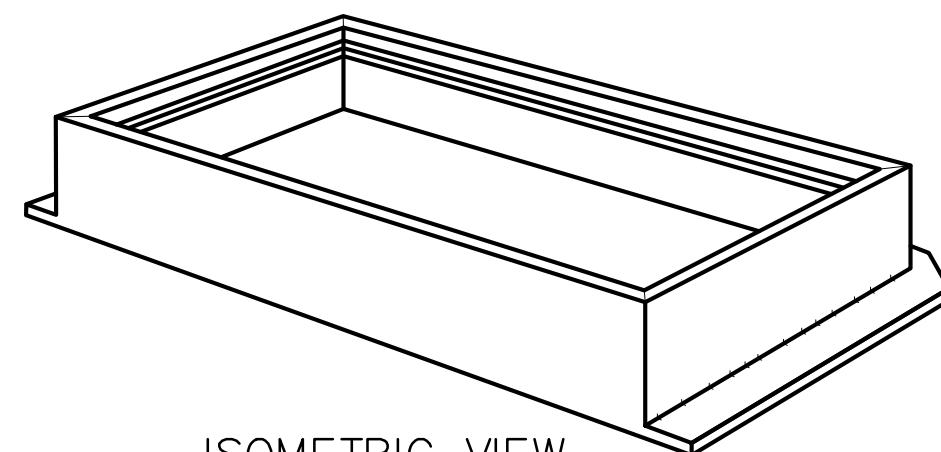
DOWNSPOUT COLLECTOR DETAIL

NOT TO SCALE



PRECAST MANHOLE DETAIL

NOT TO SCALE



PADOT STANDARD TYPE C INLET FRAME

NOT TO SCALE
NOT TO SCALE



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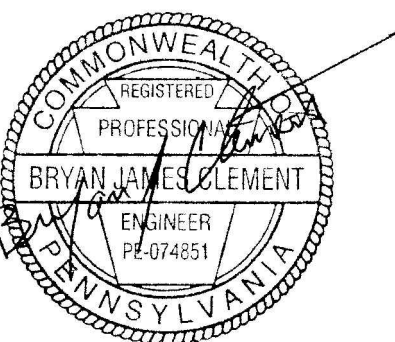


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Susquehanna Township, Dauphin County, PA



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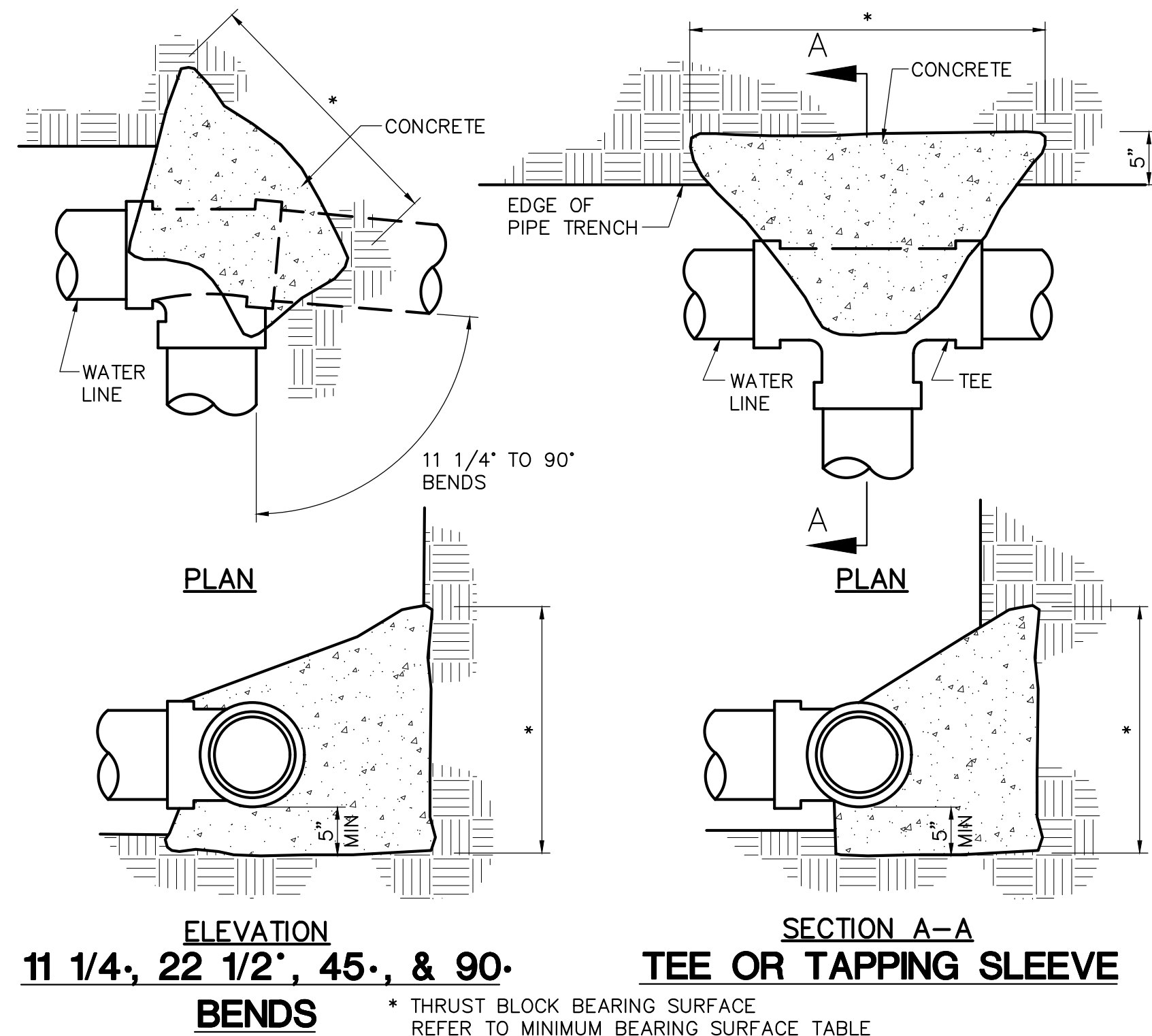
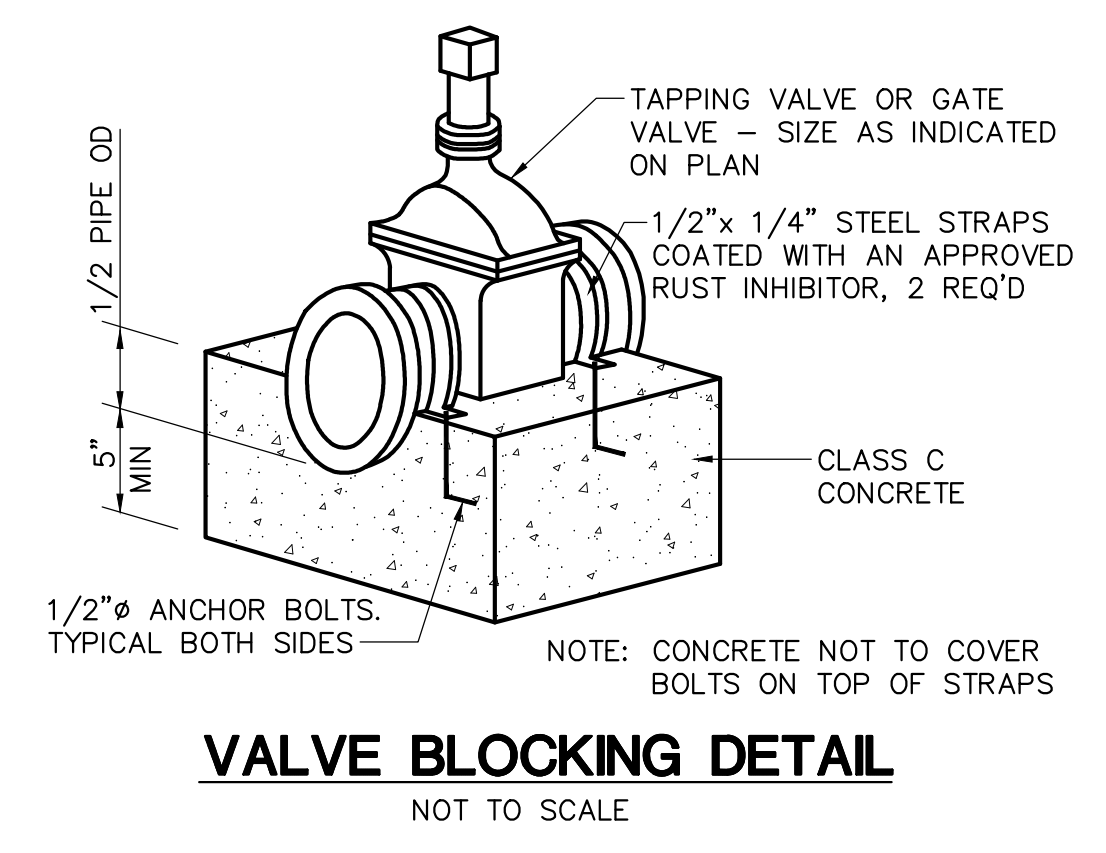
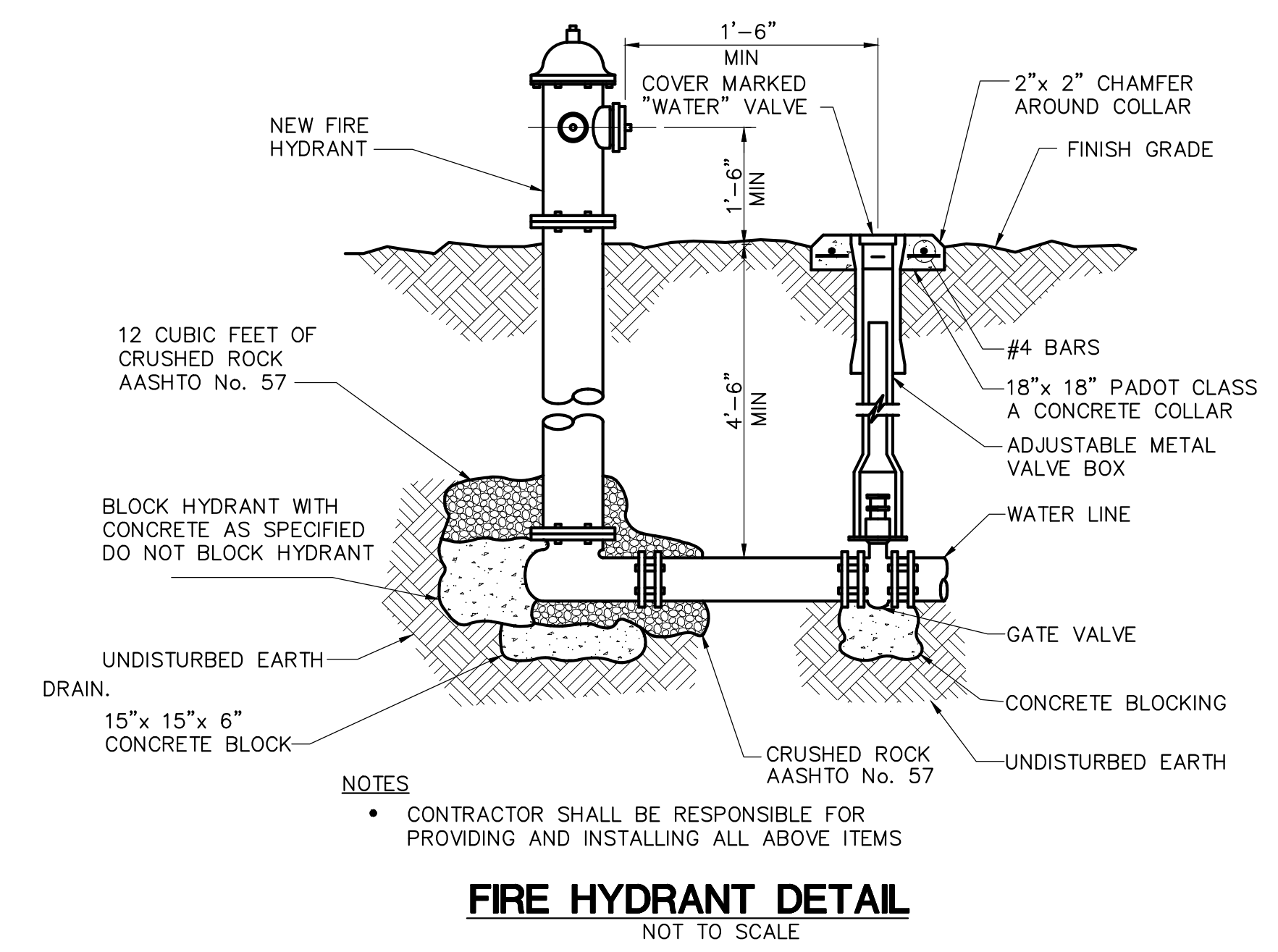
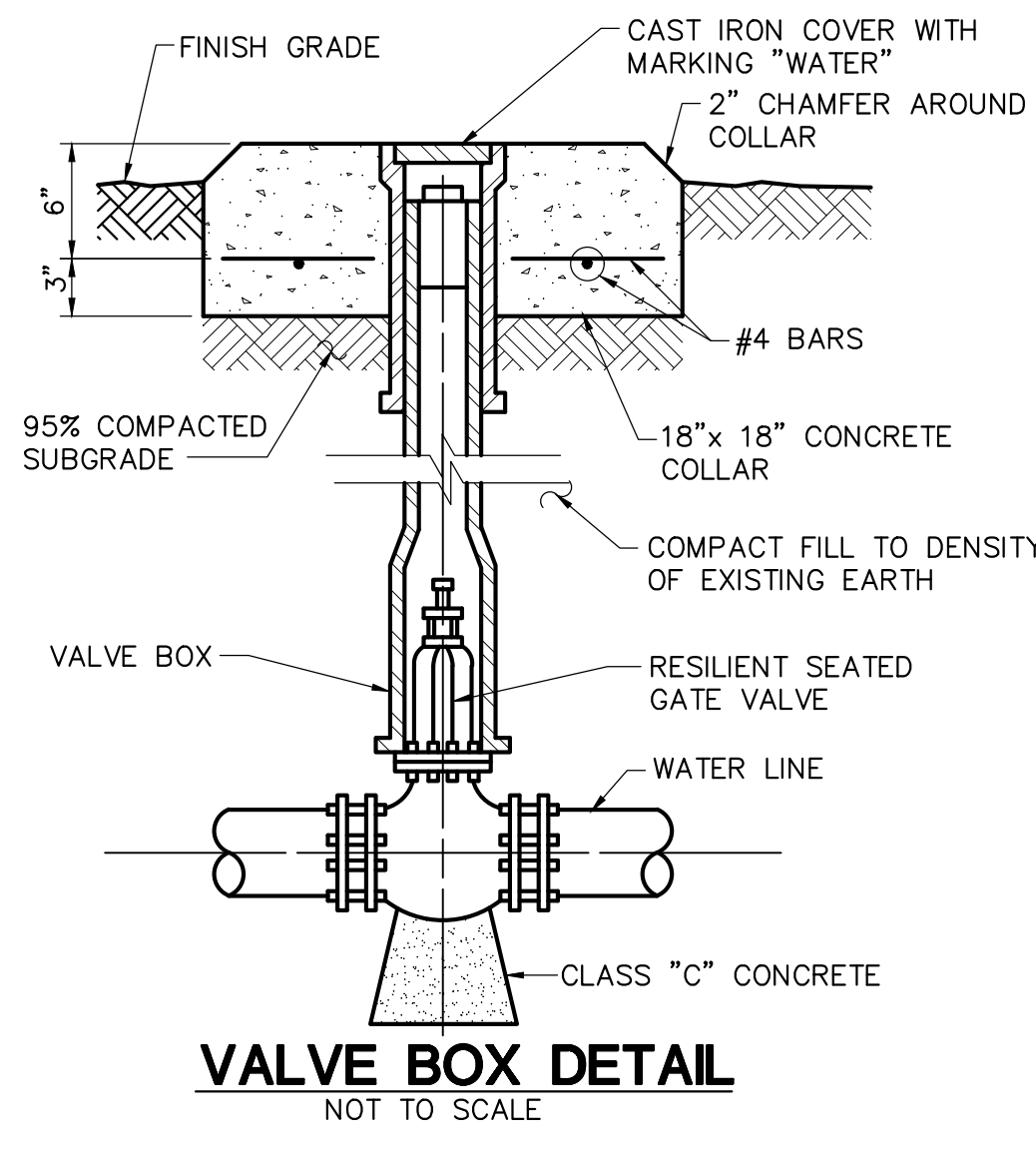
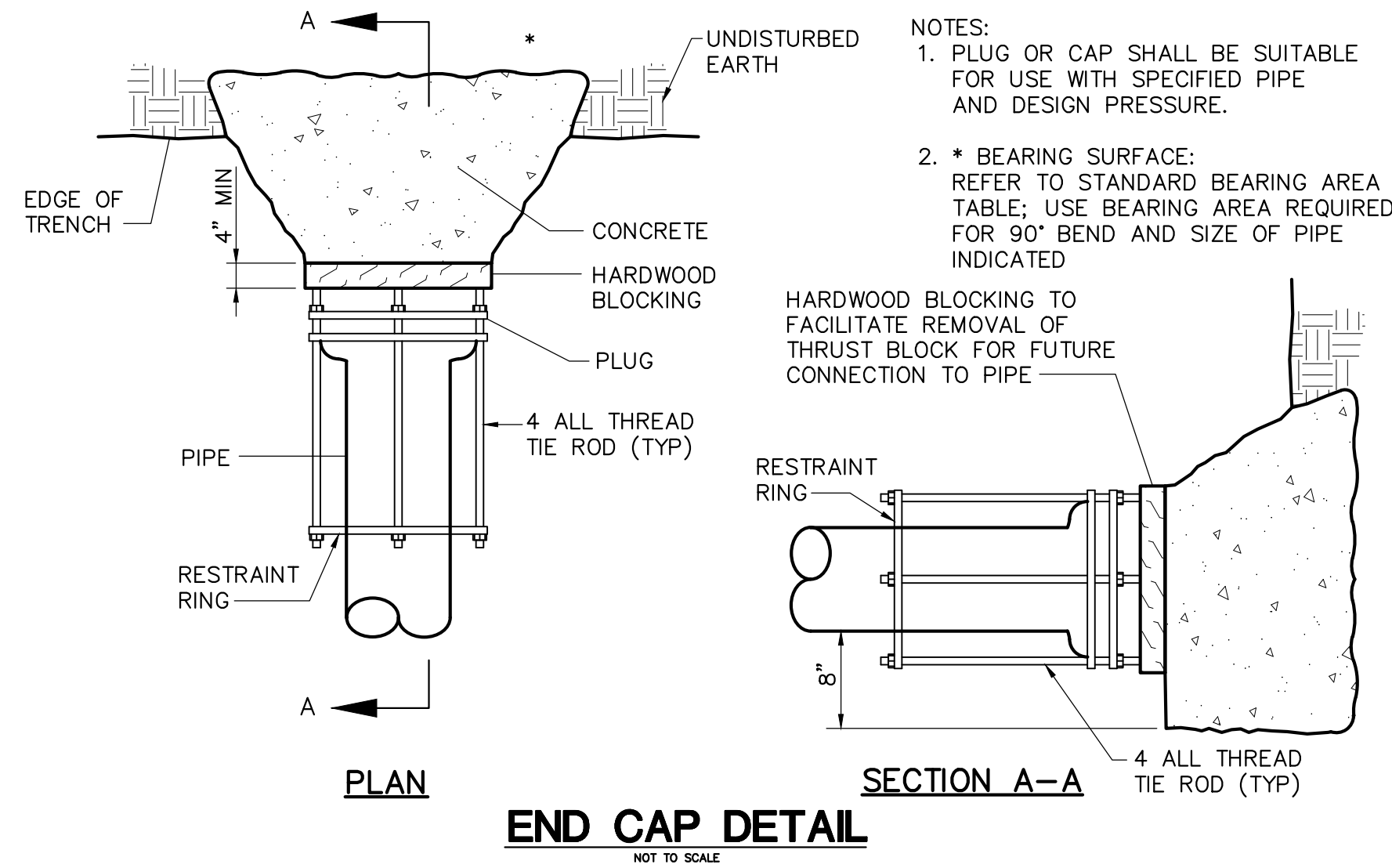
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Site Details

Submission:
Phase III Final Land Development Plans

Sheet Number:

C601

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THRUST BLOCK BEARING AREA
THRUST BLOCKING AT 100 PSI WORKING PRESSURE

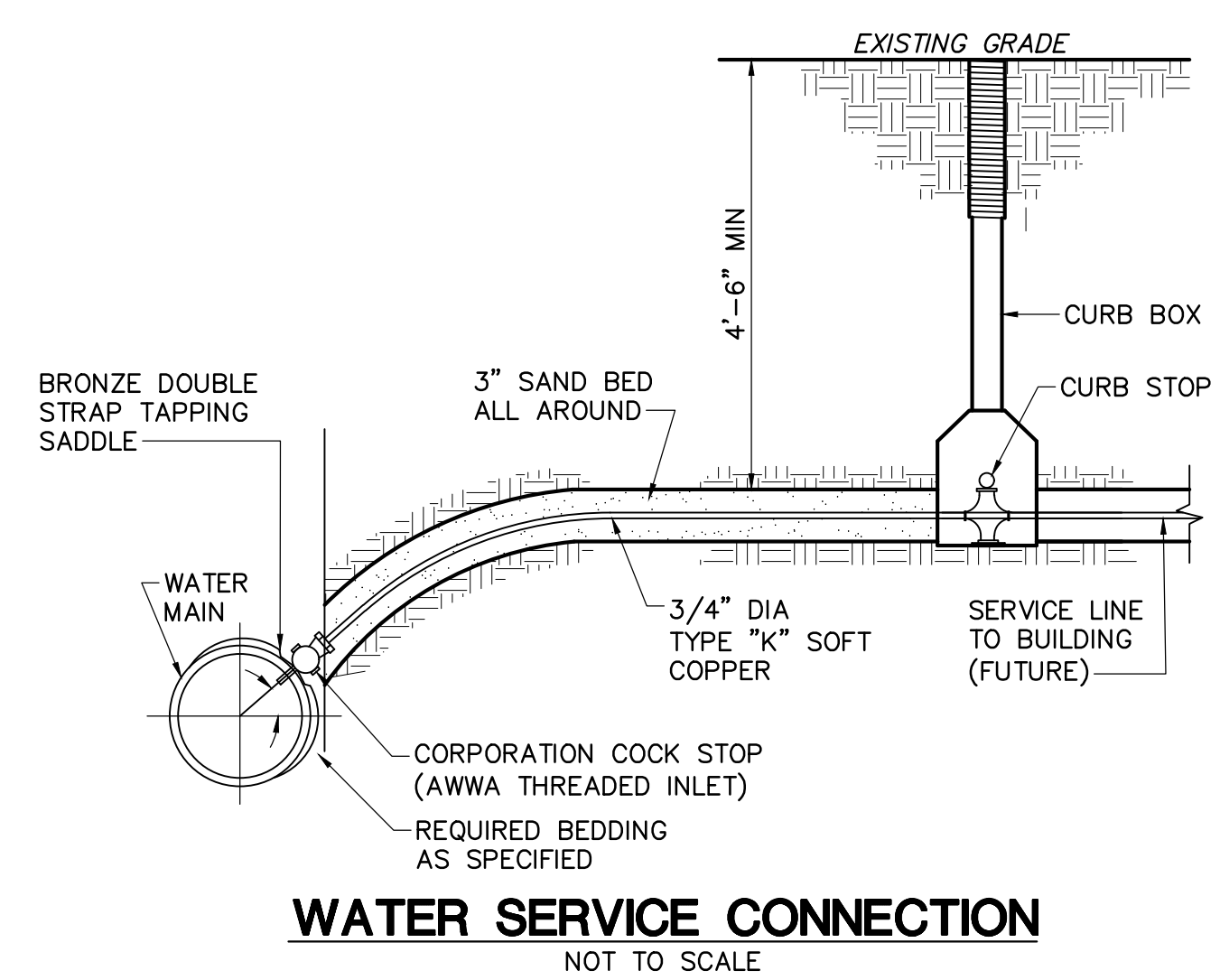
PIPE SIZE INCHES	MIN. BEARING SURFACE REQUIRED - S.F.				
	11 1/4° BEND	22 1/2° BEND	45° BEND	90° BEND	TEES & PLUGS
4	1.0	1.0	1.0	1.0	1.0
6	1.0	1.0	1.5	2.5	2.0
8	1.0	1.5	2.5	4.0	3.0
10	1.0	2.0	3.5	6.5	5.0
12	1.5	2.5	5.0	9.0	7.0

THRUST BLOCKING AT 150 PSI WORKING PRESSURE

PIPE SIZE INCHES	MIN. BEARING SURFACE REQUIRED - S.F.				
	11 1/4° BEND	22 1/2° BEND	45° BEND	90° BEND	TEES & PLUGS
4	1.5	1.5	1.5	1.5	1.5
6	1.5	1.5	2.0	4.0	3.0
8	1.5	2.0	4.0	7.0	5.0
10	1.5	3.0	5.5	10.5	7.5
12	2.0	4.0	8.0	14.5	10.5

THRUST BLOCKING AT 200 PSI WORKING PRESSURE

PIPE SIZE INCHES	MIN. BEARING SURFACE REQUIRED - S.F.				
	11 1/4° BEND	22 1/2° BEND	45° BEND	90° BEND	TEES & PLUGS
4	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	3.0	5.5	4.0
8	2.0	2.5	5.0	9.0	6.5
10	2.0	4.0	7.5	14.0	10.0
12	3.0	5.5	10.5	19.5	14.0



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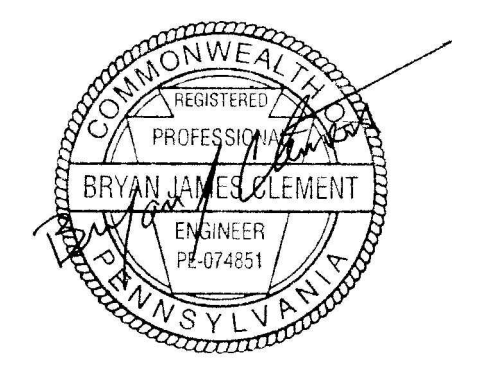
Nature leads, art follows.



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Susquehanna Union Green

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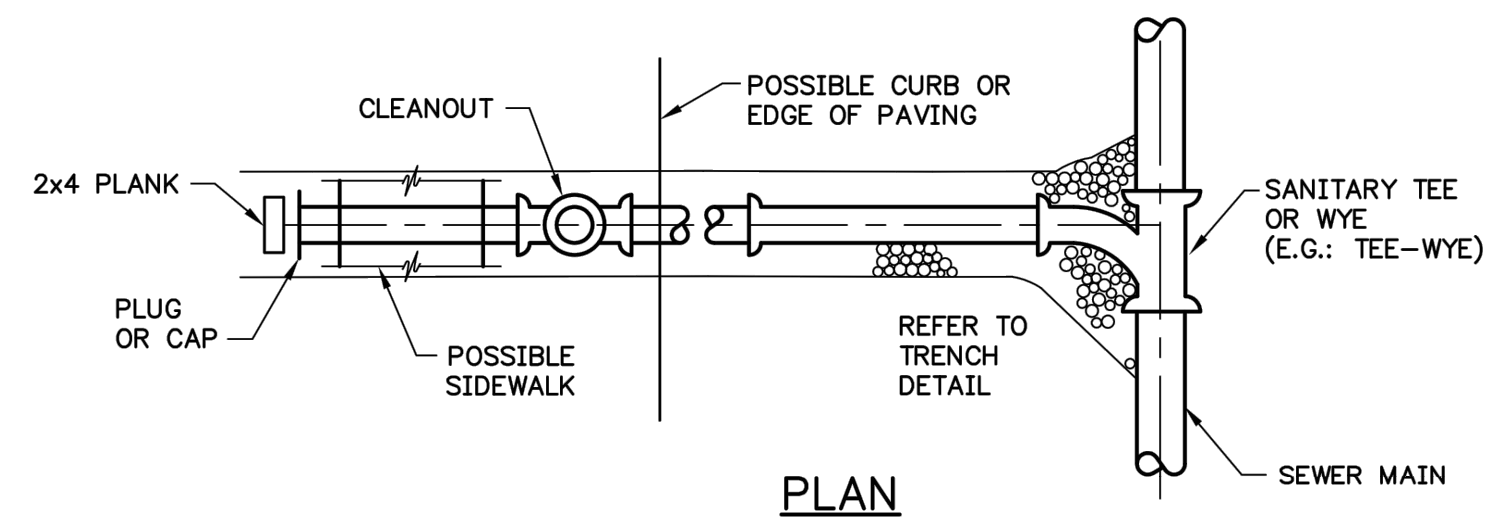
Sheet Name:

Site Utility Details

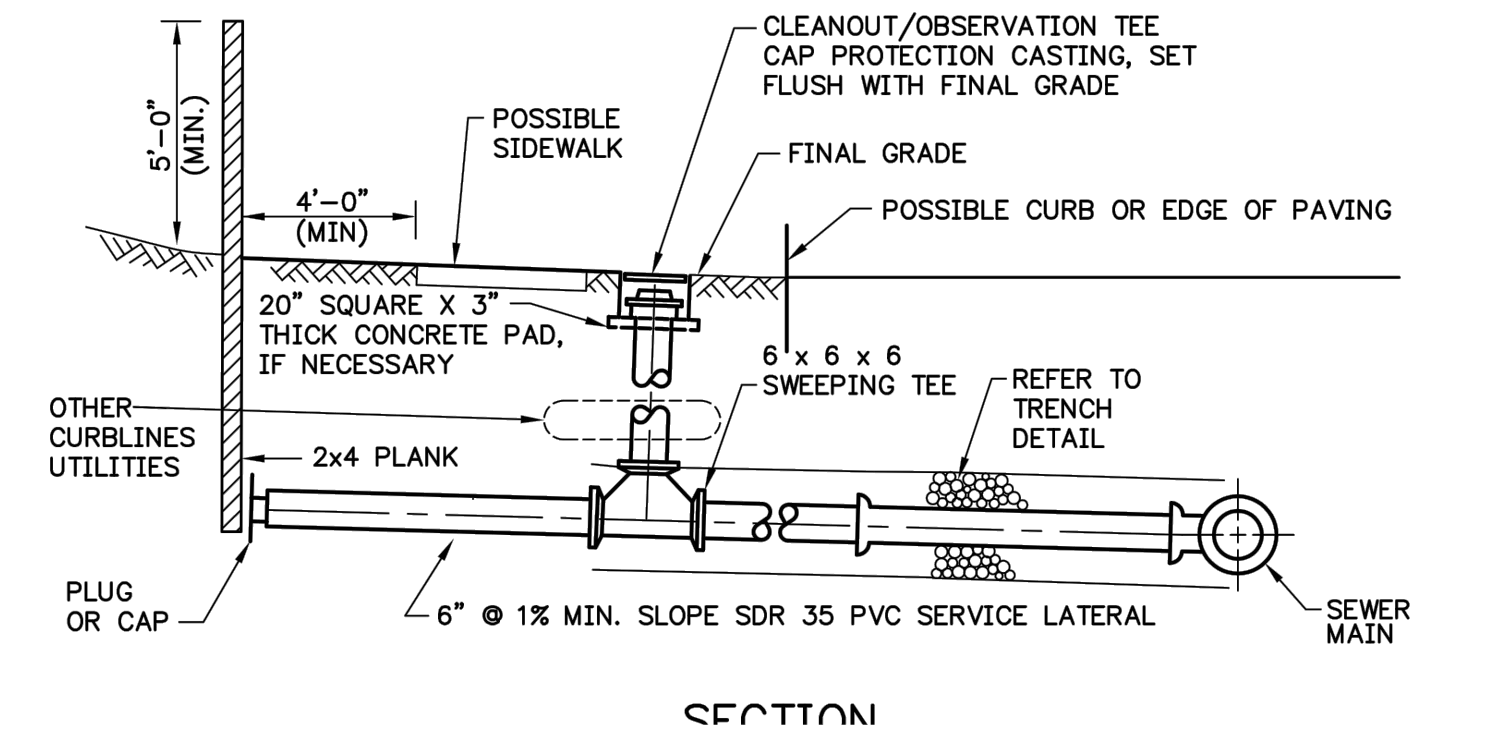
Submission:
Phase III Final Land Development Plans
Sheet Number:

C603

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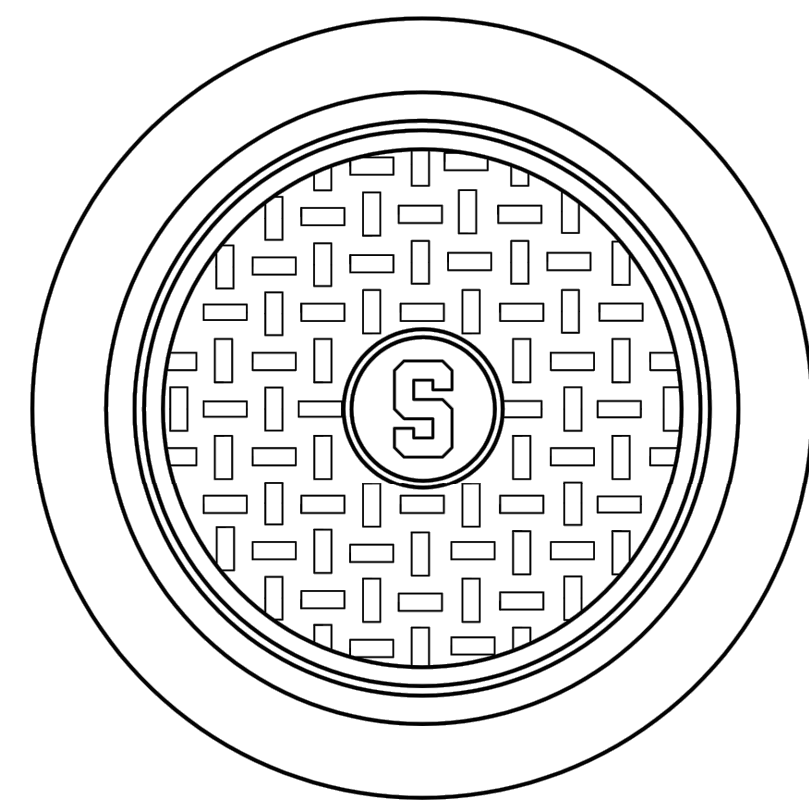
PLAN



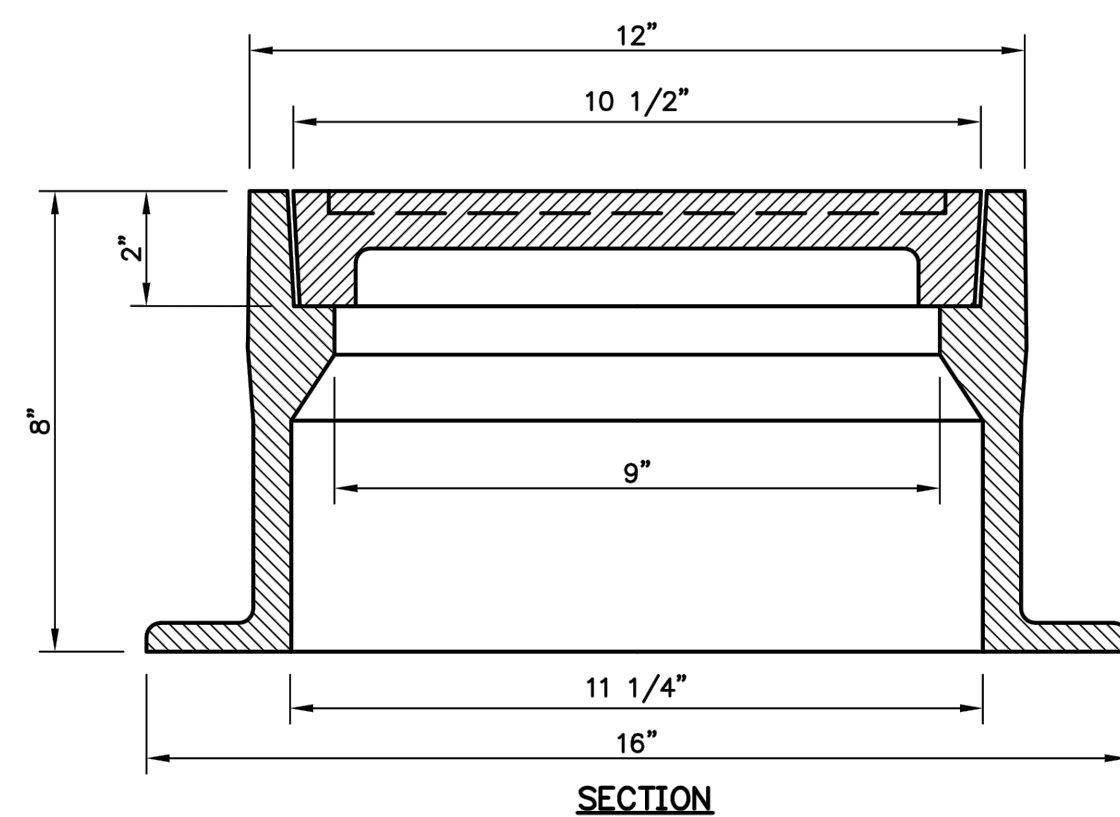
SECTION

NOTE:
CURB CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURBLINE UTILITIES

**SERVICE LATERAL DETAIL
NORMAL DEPTH**
NOT TO SCALE

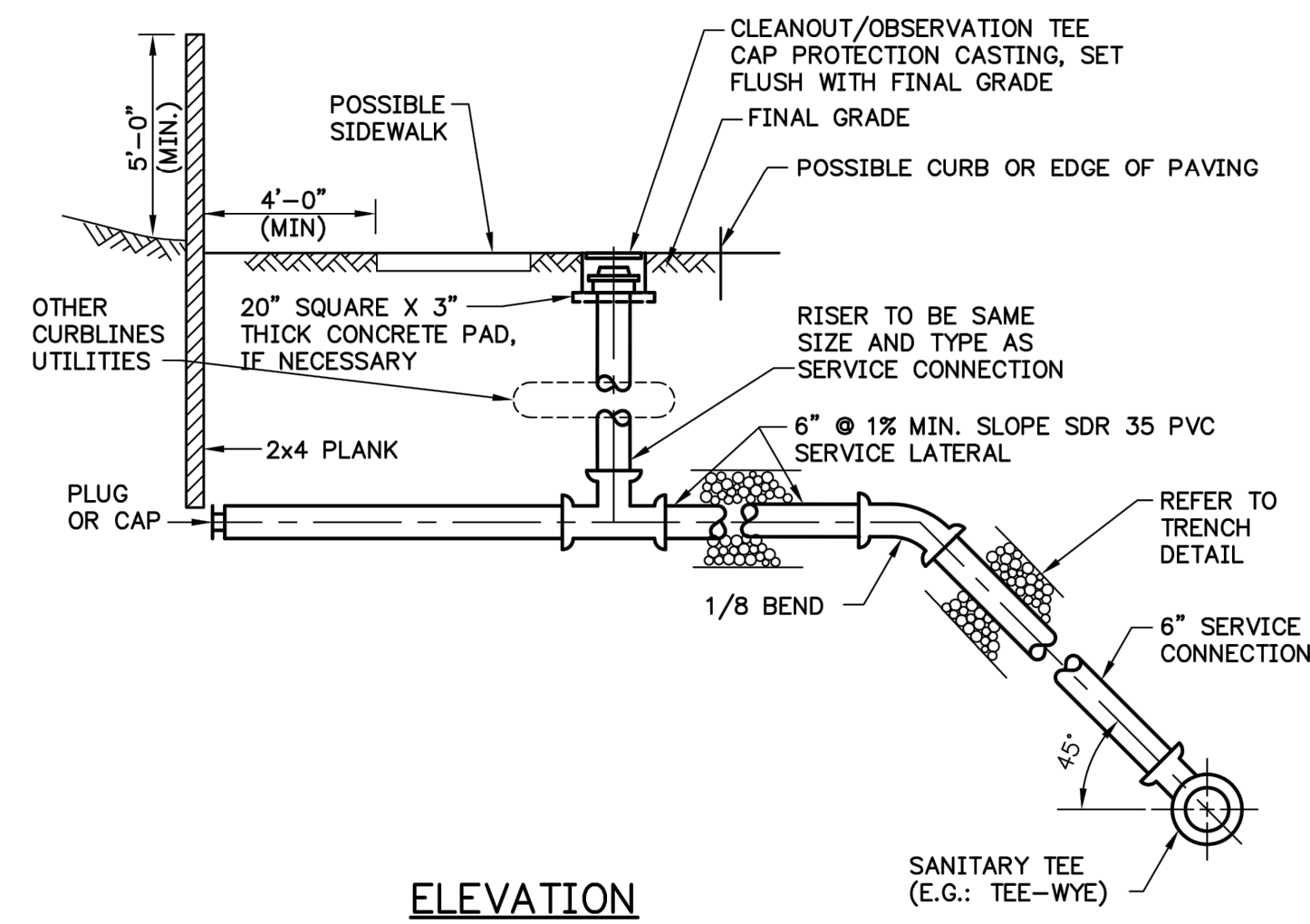


PLAN



SECTION

**CLEANOUT/TEST TEE
CAP PROTECTION CASTING**
NOT TO SCALE



ELEVATION

NOTE:
CURB CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURBLINE UTILITIES

**SERVICE LATERAL DETAIL
DEEP SEWER**
NOT TO SCALE

SANITARY SEWER LINE INSTALLATION

NEW SANITARY SEWER PIPE AND FITTINGS SHALL COMPLY WITH ASTM D 3034, RATED SDR 35. PIPE SHALL BE CONTINUALLY MARKED WITH MANUFACTURER'S NAME PIPE SIZE, CELL CLASSIFICATION, SDR RATING, AND ASTM D 3034 CLASSIFICATION.

PIPE JOINTS SHALL BE INTEGRALLY MOLDED BELL ENDS PER ASTM D 3034, TABLE 2, WITH FACTORY SUPPLIED ELASTOMERIC GASKETS AND LUBRICANT.

SANITARY SEWER INSTALLATION (BEDDING AND BACKFILL) TO BE IN ACCORDANCE WITH SUSQUEHANNA TOWNSHIP AUTHORITY REQUIREMENTS.

THE SANITARY SEWER LINE MUST SUCCESSFULLY PASS AIR/VACUUM TESTING TO ENSURE THE LINE IS IN A WATERTIGHT CONDITION.

THE FILL TO BE PLACED ON THE PROPERTY AT THE LOCATION OF THE PROPOSED SEWER INSTALLATION MUST BE COMPACTED IN 4" LIFTS USING AN APPROVED MECHANICAL TAMPER AND BEING ABLE TO OBTAIN A 98% STANDARD PROCTOR. BACKFILL MATERIAL MUST BE FREE OF ASHES, ROCK OR GRAVEL LARGER THAN 4" IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, ORGANICS, OR OTHER MATERIAL.

CONTRACTOR TO SUBMIT SHOP DRAWINGS OF THE MATERIALS TO BE USED FOR THE SANITARY SEWER SYSTEM TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

SEWER LINE SHALL BE A MINIMUM OF 10' AWAY (HORIZONTAL SEPARATION FROM ALL WATER LINES)

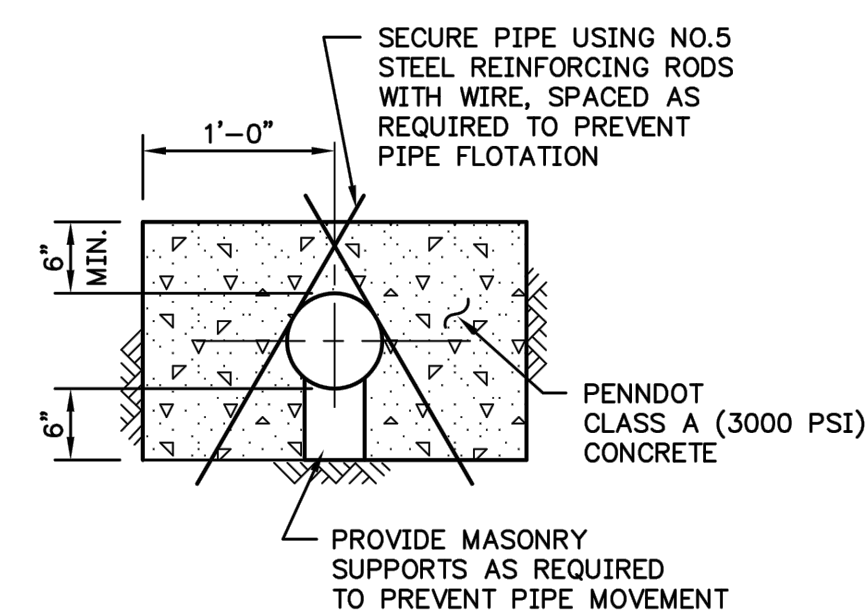
A MINIMUM OF 18" VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN THE TOP OF THE SEWER AND THE BOTTOM OF THE WATER LINE.

WHERE LESS THAN 18" VERTICAL SEPARATION EXISTS CONTRACTOR SHALL CONCRETE ENCASE SEWER LINE.

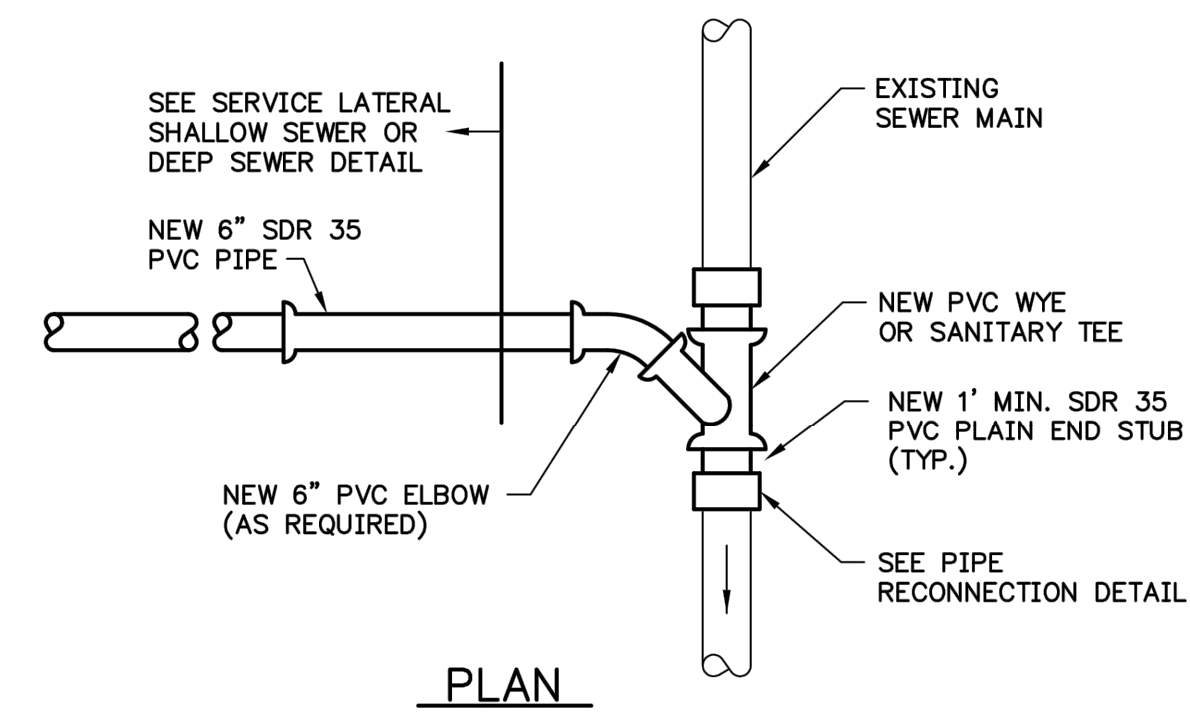
CONTRACTOR SHALL MAINTAIN MINIMUM 10' SEPARATION BETWEEN WATER AND SANITARY SEWER LATERALS.

MANHOLE COVERS SHALL BE ALLEGHENY FOUNDRY PATTERN No 125 OR APPROVED EQUAL.

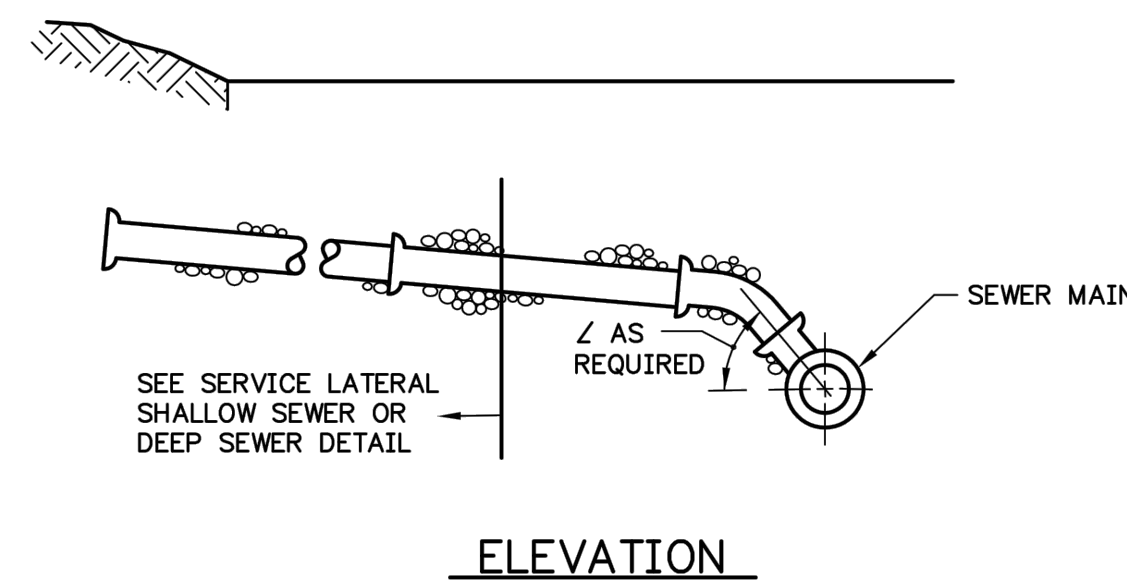
LATERALS LOCATED IN AREAS CONSTRUCTED ON DUCTILE IRON PIPE SHALL BE DUCTILE IRON TO THE RIGHT-OF-WAY LINE WHERE THEY ARE TRANSITIONED TO PVC USING ROMAC TRANSITION GASKET.



CONCRETE ENCASEMENT DETAIL
NOT TO SCALE



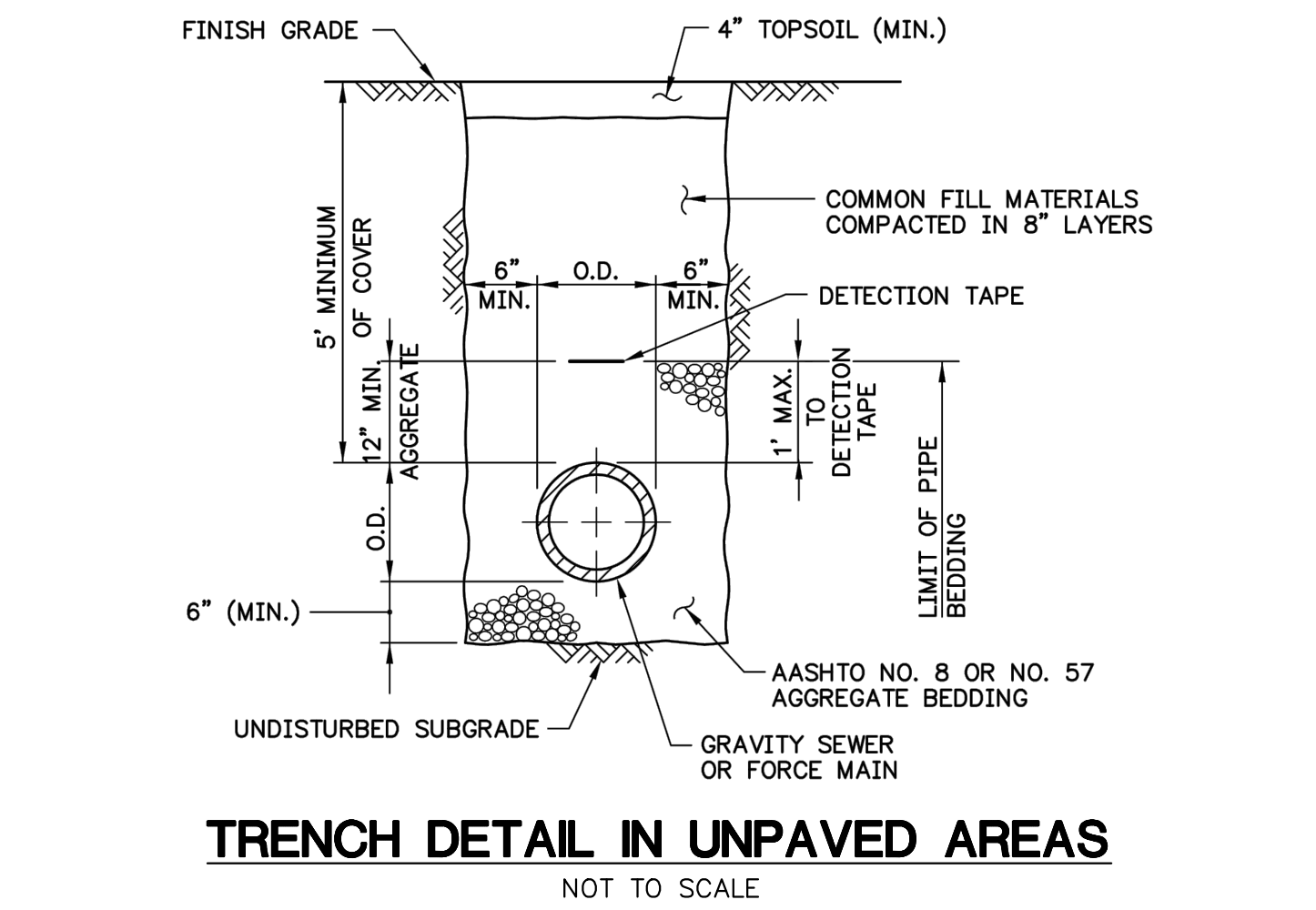
PLAN



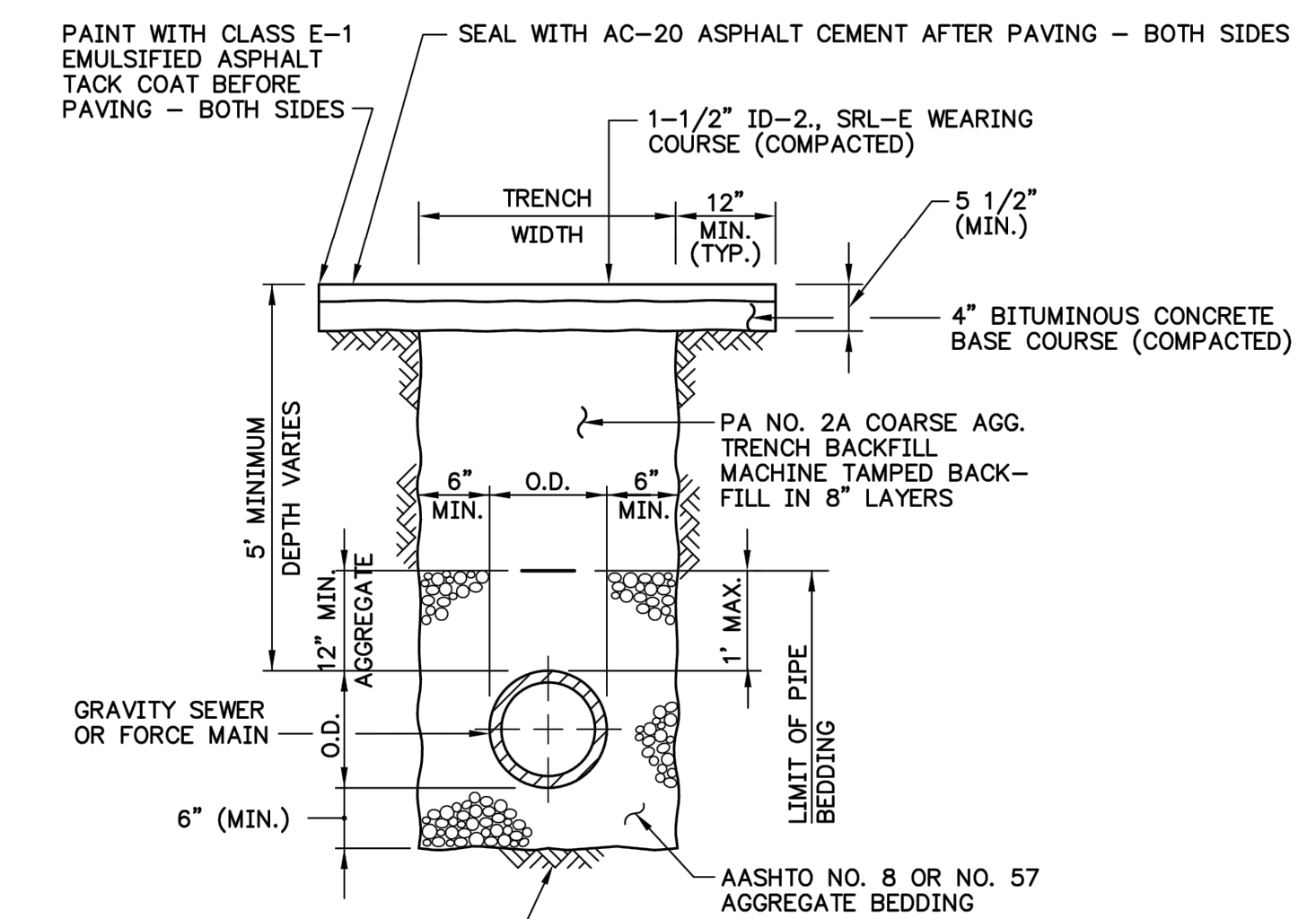
ELEVATION

NOTE:
EXISTING MAIN SEWER TO BE SAW CUT

**SERVICE LATERAL CONNECTION TO
EXISTING SEWER MAIN**
NOT TO SCALE



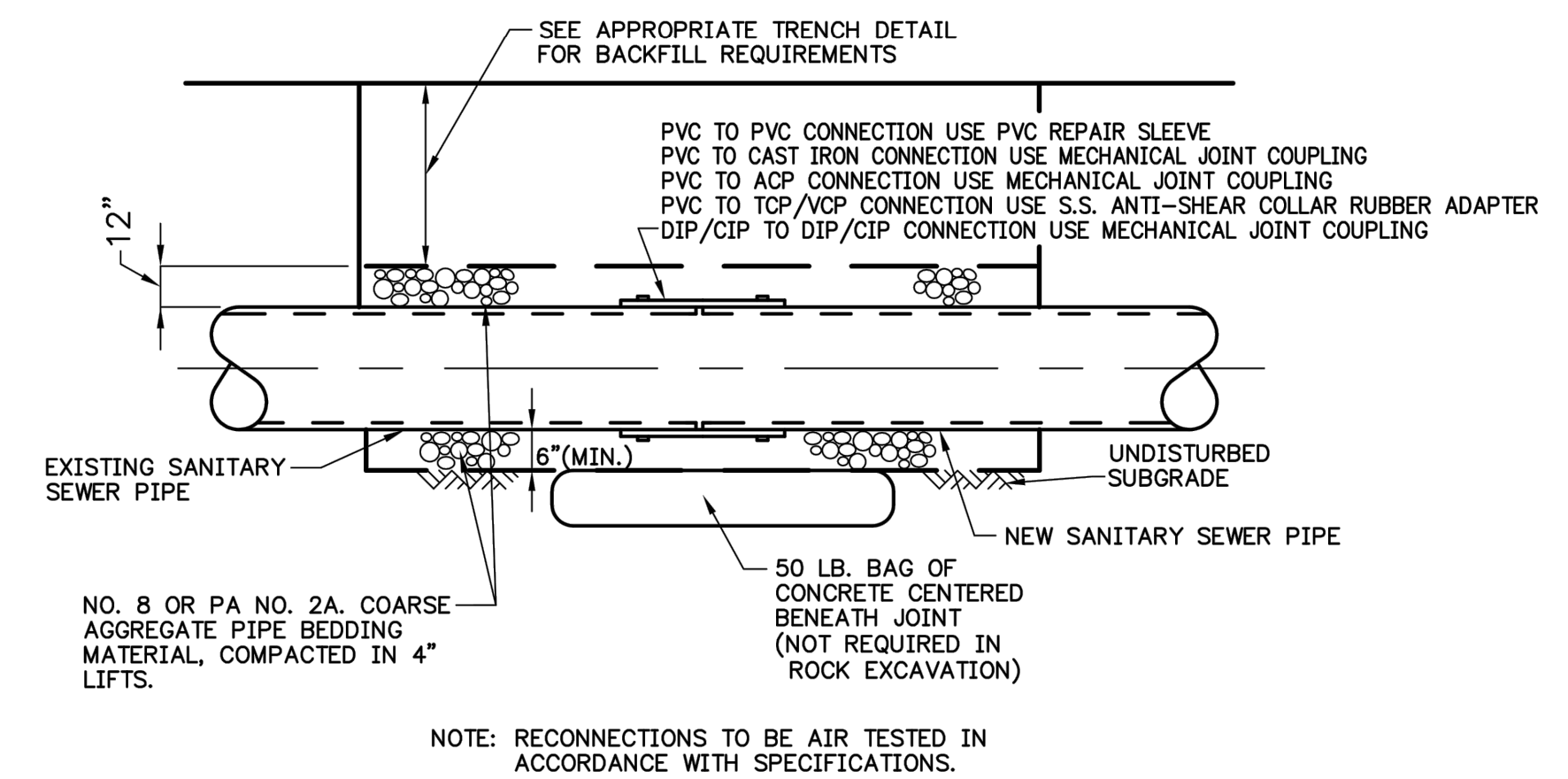
TRENCH DETAIL IN UNPAVED AREAS
NOT TO SCALE



TOWNSHIP ROADS

NOTE:
WHEN IN PAVED AREAS SUCH AS DRIVEWAYS OR PARKING LOTS, PAVING RESTORATION SHALL BE IN ACCORDANCE WITH CONTRACT DOCUMENTS

TRENCH DETAIL IN PAVED AREAS
NOT TO SCALE



NOTE: RECONNECTIONS TO BE AIR TESTED IN ACCORDANCE WITH SPECIFICATIONS.

MECHANICAL JOINT COUPLINGS TO BE SMITH-BLAIR OR APPROVED EQUAL

PIPE RECONNECTION DETAIL
NOT TO SCALE



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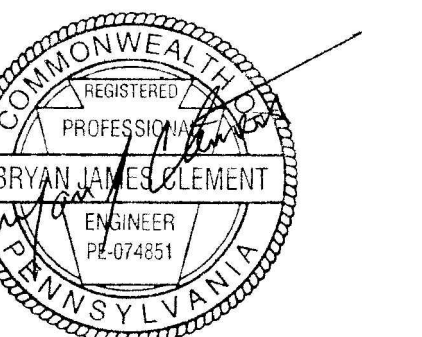


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Susquehanna
Township, Dauphin
County, PA



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Drawn by:
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Checked by:
LBG/BJC

Date:
July 9, 2021

Revisions:

Scale:

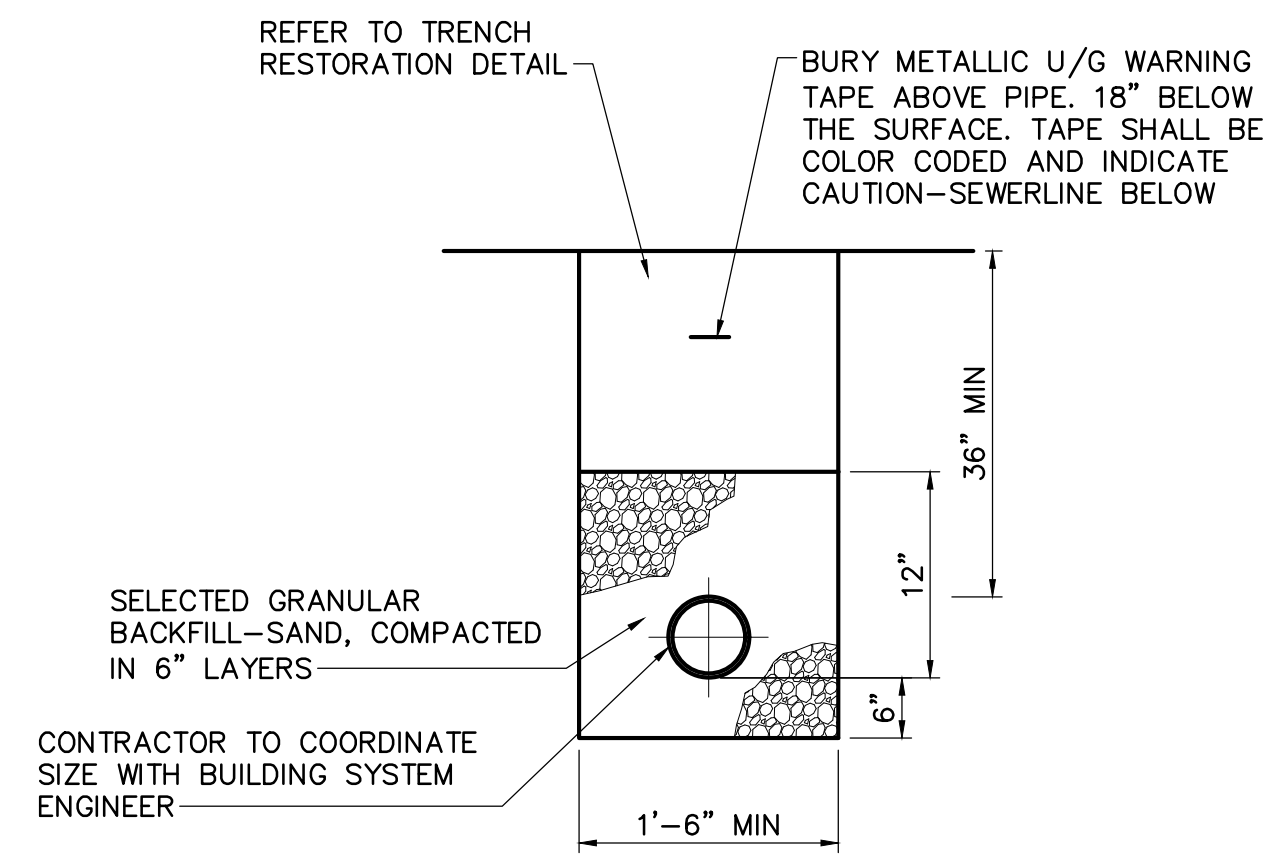
Sheet Name:
Site Utility Details

Submission:
Phase III Final Land Development
Plans

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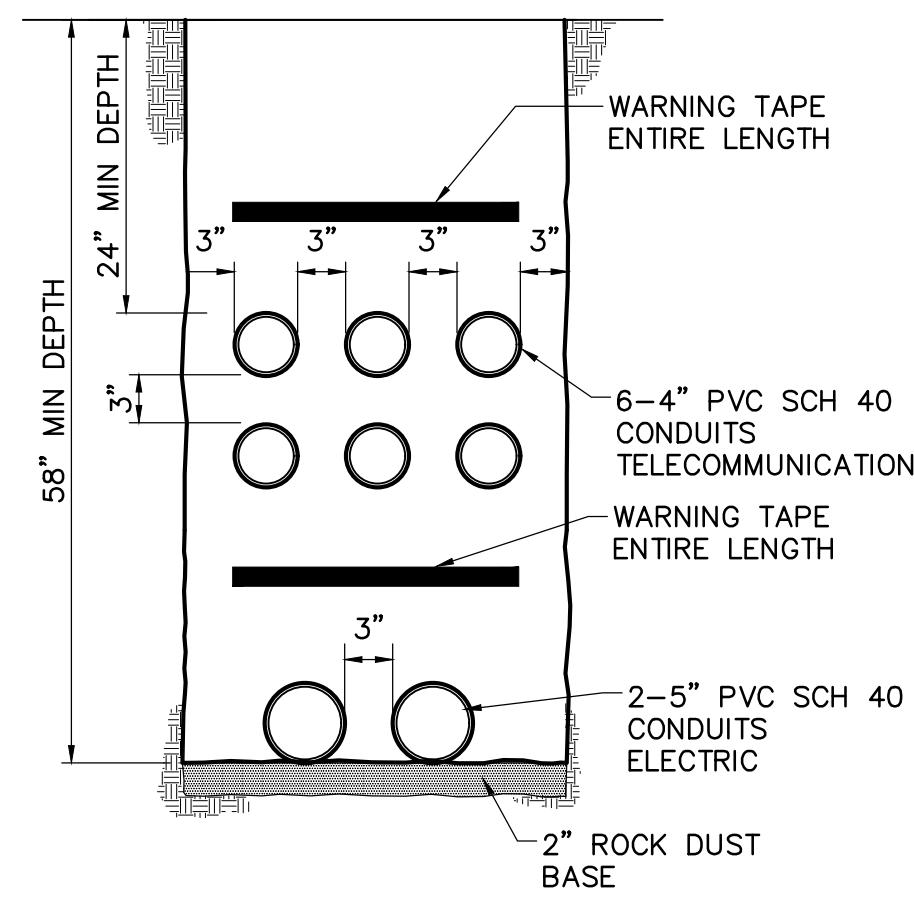
C604

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NOTE:
ALL TRENCHING AND BACKFILL BY CONTRACTOR. GAS COMPANY IS RESPONSIBLE FOR SUPPLYING PIPE AND INSTALLATION, CONTRACTOR TO COORDINATE.

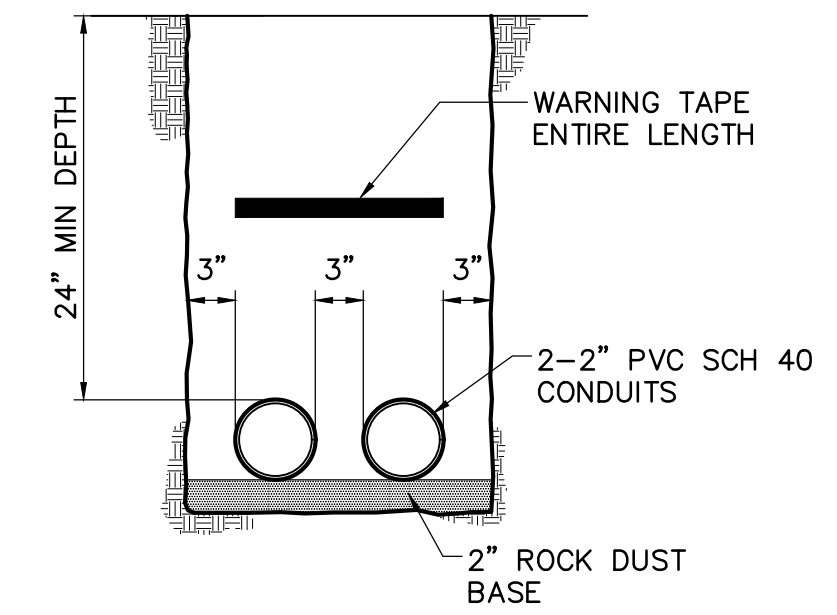
**GAS LINE TRENCH
(MAINLINE)**
NOT TO SCALE



**SITE ELECTRIC, TELECOMMUNICATION
DUCT BANK**

DUCTBANK NOTES:

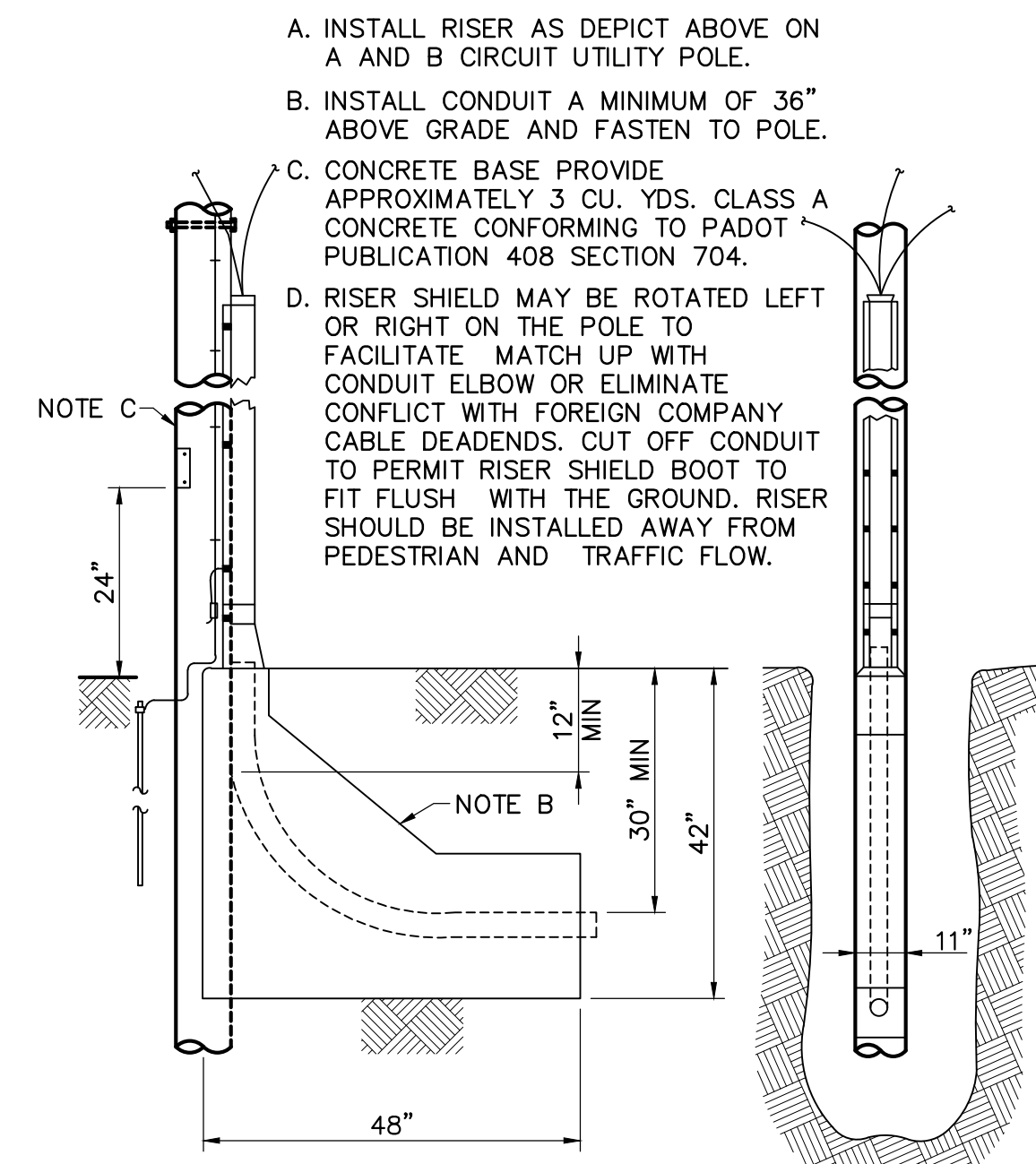
- BACKFILL EACH BANK OF CONDUITS WITH A MIN OF 7" ROCK DUST. BACKFILL REMAINING PORTION OF THE TRENCH WITH EARTHEN FILL FREE FROM STONES GREATER THAN 1 INCH AND ORGANIC MATTER EXCEPT UNDER EXISTING OR PROPOSED PAVEMENT. IN THIS CASE BACKFILL REMAINING PORTION OF THE TRENCH WITH COARSE AGGREGATE (PADOT 2A) TO ROADWAY SUBGRADE ELEVATION.
- BACKFILL TO BE TAMPED TO AVOID SETTLING.
- WARNING TAPE SHALL BE SUPPLIED BY THE UTILITY COMPANY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PLACEMENT AND ARRANGING FOR PICKUP OF TAPE. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY NO LESS THAN TWO WEEKS PRIOR TO TRENCHING TO OBTAIN WARNING TAPE.
- CONTRACTOR TO VERIFY TRENCH DIMENSIONS, SIZE AND NUMBER OF CONDUITS WITH UTILITY COMPANIES PRIOR TO INSTALLATION.



SITE LIGHTING DUCTBANK

GENERAL NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIES UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. ALL BURIED UTILITIES ARE NOT NECESSARY SHOWN. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY IN ACCORDANCE WITH PA ACT 38 OF 1991 BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL PROVIDE UTILITY LATERALS TO EACH LOT. SIZE AND TYPE OF LATERAL AS INDICATED. EXTEND LATERAL TO RIGHT-OF-WAY/EASEMENT LINE, CAP AND MARK END.
- CONTRACTOR SHALL COORDINATE ALL WORK AND INSPECTION WITH THE UTILITY PROVIDER HAVING JURISDICTION.



RISER DETAILS
NOT TO SCALE



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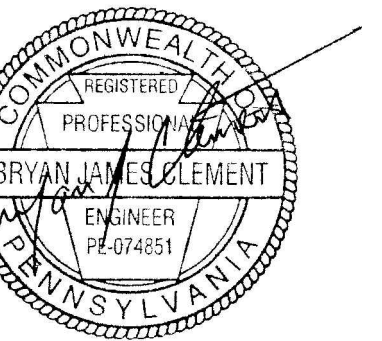


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Township, Dauphin
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Drawn by:

LBG/REA

Checked by:

LBG/BJC

Date:

July 9, 2021

Revisions:

Scale:



Sheet Name:

Site Utility Details

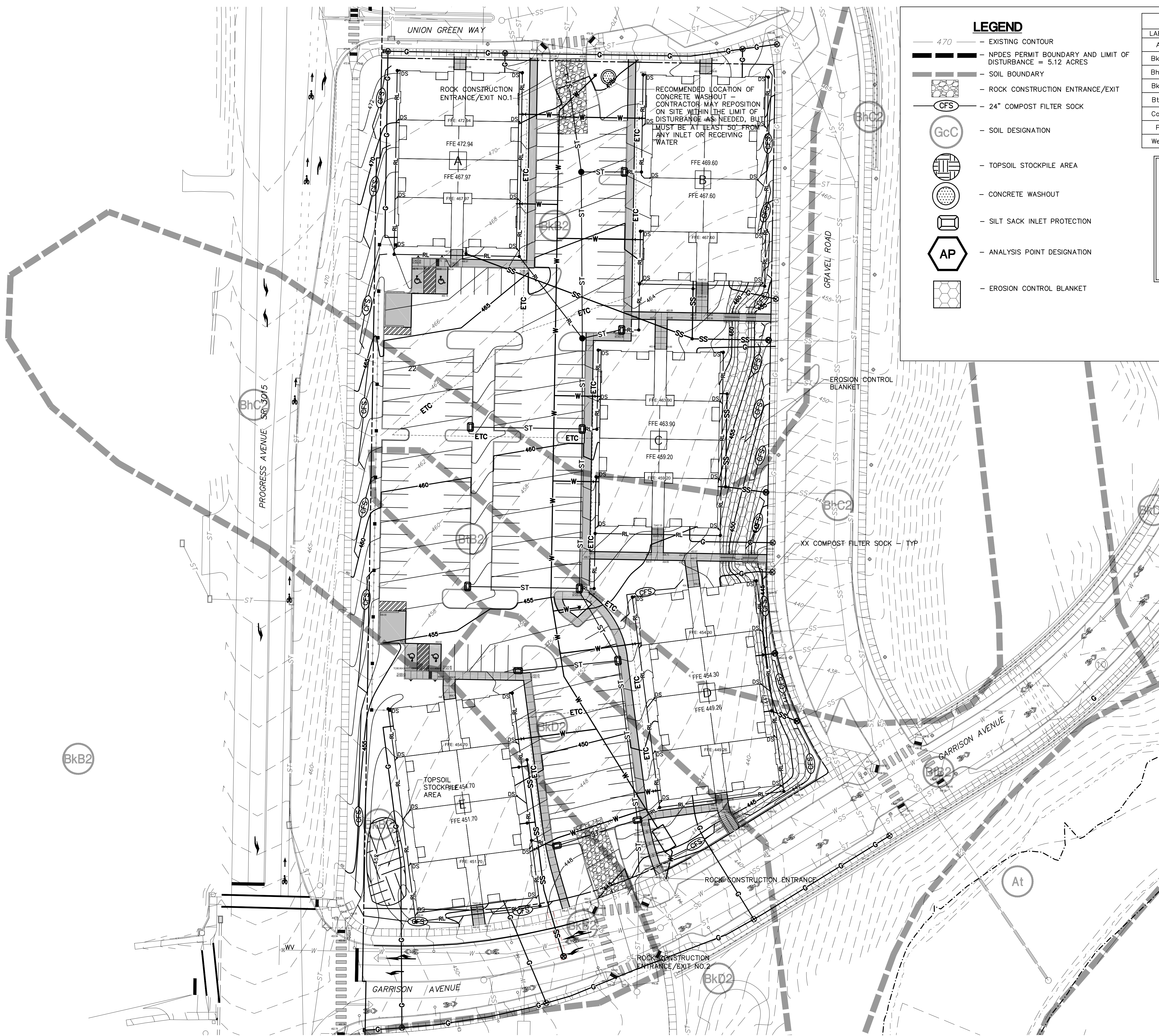
Submission:

Phase III Final Land Development
Plans

Sheet Number:

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LEGEND

- 470 - EXISTING CONTOUR
- NPDES PERMIT BOUNDARY AND LIMIT OF DISTURBANCE = 5.12 ACRES
- SOIL BOUNDARY
- ROCK CONSTRUCTION ENTRANCE/EXIT
- 24" COMPOST FILTER SOCK
- SOIL DESIGNATION
- TOPSOIL STOCKPILE AREA
- CONCRETE WASHOUT
- SILT SACK INLET PROTECTION
- ANALYSIS POINT DESIGNATION
- EROSION CONTROL BLANKET

SOIL TYPES SUMMARY

LABEL	DESCRIPTION	SLOPE
At	ATKINS SILT LOAM	0 TO 3
BkC2	BERKS SHALY SILT LOAM	3 TO 8
BhC2	BERKS CHANNERY SILT LOAM	8 TO 15
BKD2	BERKS CHANNERY SILT LOAM	15 TO 25
BlB2	BRINKERTON & ARMAGH SILT LOAMS	3 TO 8
CoB2	COMLY SILT LOAM	2 TO 8
Ph	PHILO SILT LOAM	0 TO 2
WeE2	WEIKERT SHALY SILT LOAM	25 TO 50

NOTE:

- CONTRACTOR IS RESPONSIBLE FOR CLEANING MUD, DIRT AND DEBRIS CARRIED ONTO PUBLIC ROADWAYS FROM THE JOB SITE ON A DAILY BASIS OR AS DIRECTED BY SUSQUEHANNA TOWNSHIP REPRESENTATIVES.
- THE OWNER IS RESPONSIBLE FOR FORWARDING COPIES OF ALL COUNTY CONSERVATION DISTRICT INSPECTION REPORTS AND NOTICES ISSUED FOR THIS PROJECT TO SUSQUEHANNA TOWNSHIP.

NOTE

- REFER TO SHEET No. ES200, ES201, ES202, ES203 & ES204 FOR ALL EROSION AND SEDIMENTATION CONTROL DETAILS.



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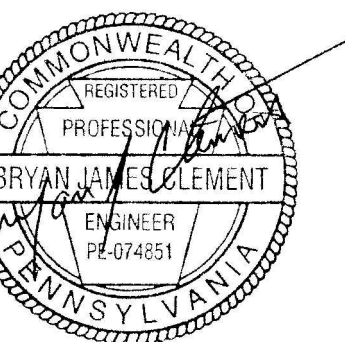


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1"=30'



Sheet Name:

Erosion &

Sedimentation

Control Plan

Submission:

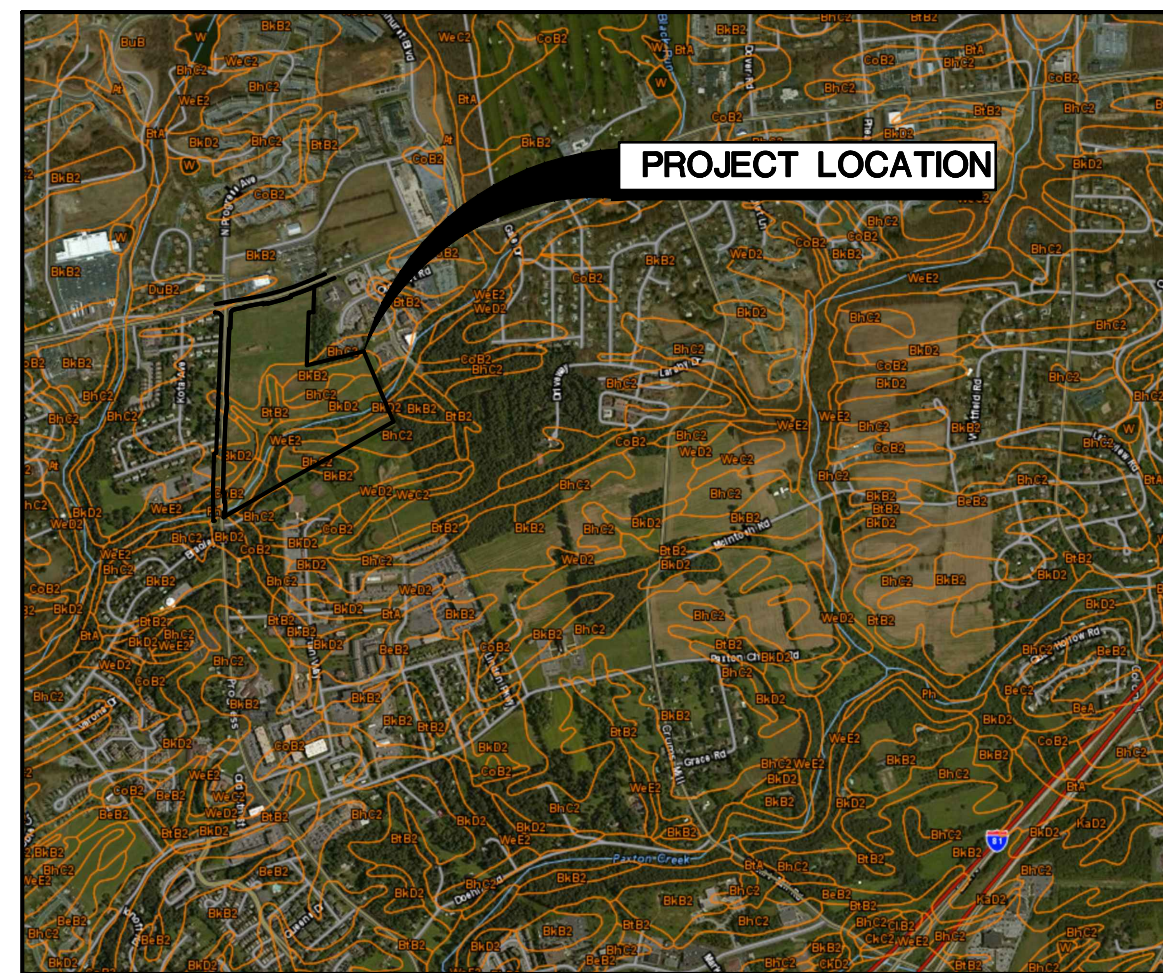
Phase III Final Land Development

Plans

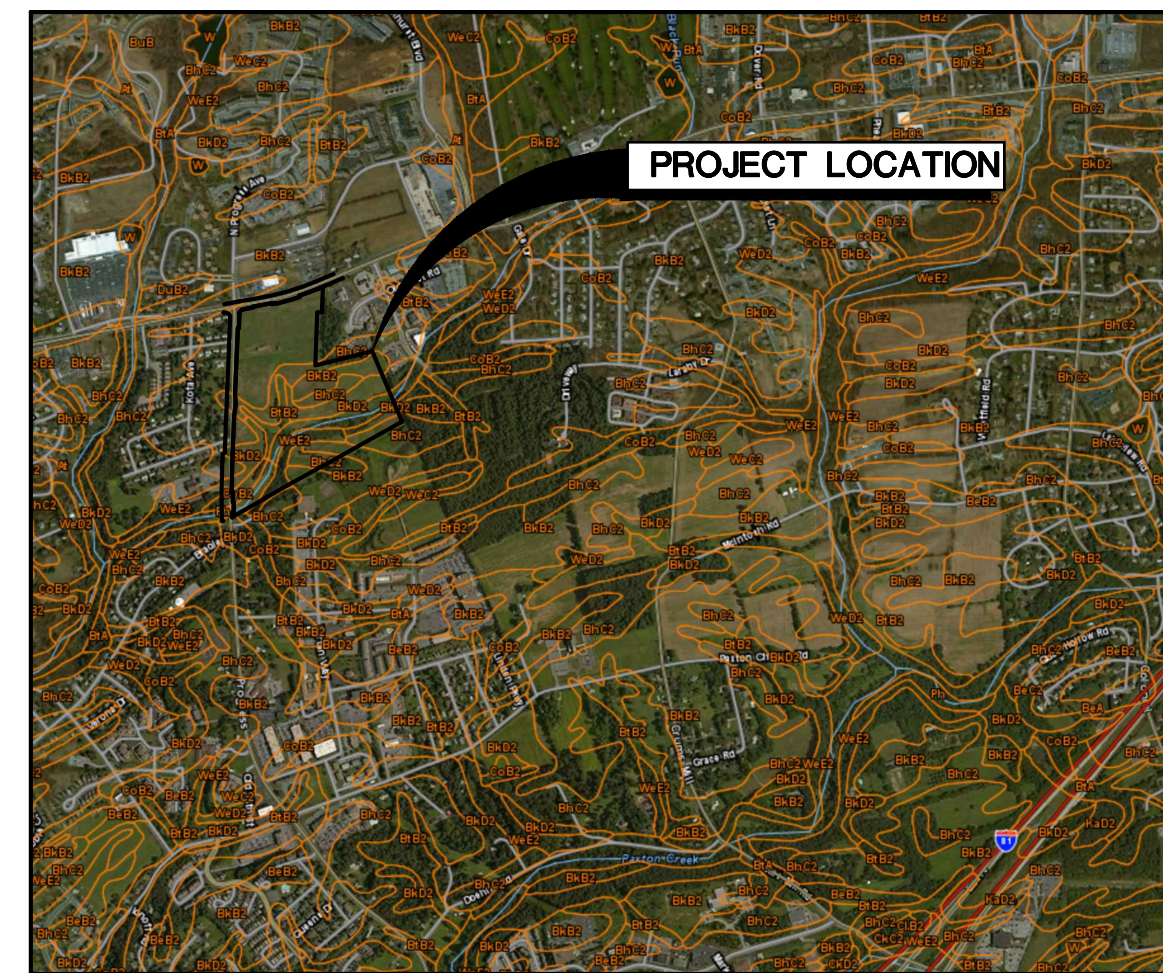
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LOCATION MAP
SCALE: 1"=2000'



SOILS MAP
SCALE: 1" = 500'

A SEQUENCE OF BMP INSTALLATION AND REMOVAL IN RELATION TO THE SCHEDULING OF EARTH DISTURBANCE ACTIVITIES PRIOR TO, DURING, AND AFTER EARTH DISTURBANCE ACTIVITIES

ANTICIPATED CONSTRUCTION BEGIN DATE: SPRING 2021

1. INSTALL ROCK CONSTRUCTION ENTRANCES AT LOCATIONS INDICATED ON THE PLANS.
2. CESSATION OF CONSTRUCTION ACTIVITY FOR FOUR (4) OR MORE DAYS REQUIRES TEMPORARY STABILIZATION.
3. INSTALL CONSTRUCTION FENCE AROUND WETLANDS AND TREES AT LOCATIONS INDICATED ON THE PLANS.
4. INSTALL COMPOST FILTER SOCKS DOWNSLOPE OF THE PROPOSED WORK AREA. REFER TO THE PLANS FOR THE LOCATION OF THE COMPOST FILTER SOCKS. NO EARTHMOVING OPERATIONS SHALL BEGIN UNTIL ALL COMPOST FILTER SOCKS HAVE BEEN PROPERLY INSTALLED. NO COMPOST FILTER SOCKS SHALL BE REMOVED UNTIL THE CONTRIBUTORY AREA DRAINING TO A SECTION OF COMPOST FILTER SOCK IS STABILIZED. THE AREA SHALL BE CONSIDERED STABILIZED AS OUTLINED BELOW.
5. CLEAR AND GRUB PROJECT AREA. STRIP ALL THE TOPSOIL AND PLACE IN DESIGNATED TOPSOIL STOCKPILE AREAS. COMPOST FILTER SOCK SHALL BE PLACED ON THE DOWNSLOPE SIDE OF THE TOPSOIL STOCKPILE AS SHOWN ON THE PLAN. TEMPORARY SEEDING SHALL BE PLACED ON THE TOPSOIL STOCKPILE (REFER TO TEMPORARY SEEDING SPECIFICATIONS). MINIMIZE MOVING AND REPLACING COMPOST FILTER SOCK TO LIMIT DAMAGE TO THE SOCK.
6. PERFORM DEMOLITION OF EXISTING BUILDING FEATURES AND SITE FEATURES.
7. THE CONCRETE WASHOUT SHALL BE INSTALLED.
8. BEGIN EARTHWORK FOR THE PAD DEVELOPMENT, INFILTRATION BASIN NO.2, ROADWAY AND SIDEWALK AREAS.
9. INSTALL COMPOST FILTER SOCK AROUND THE INFILTRATION BASINS AT LOCATIONS INDICATED ON THE PLANS.
10. REMOVE CONSTRUCTION FENCE FROM TREES THAT WILL BE DISTURBED AS PART OF THE DEVELOPMENT OF THIS PROJECT.
11. PERFORM GRADING TO BRING THE SITE TO FINAL GRADE ELEVATIONS.
12. INSTALL NEW STORM SEWER AS INDICATED ON THE PLANS. ANY NEWLY INSTALLED INLET SHALL RECEIVE SILT SACK INLET PROTECTION WITHIN 8 HOURS OF THE INLET BEING PLACED. NO INLET PROTECTION SHALL BE REMOVED UNTIL THE CONTRIBUTORY AREA DRAINING TO A SECTION OF INLET PROTECTION IS STABILIZED. THE AREA SHALL BE CONSIDERED STABILIZED AS OUTLINED BELOW.
13. INSTALL ALL UTILITIES ON SITE.
14. BEGIN CONSTRUCTION OF THE BITUMINOUS AREA AFTER ALL UTILITIES HAVE BEEN INSTALLED. AS SOON AS PRACTICAL, AFTER AREAS TO BE PAVED HAVE REACHED SUBGRADE ELEVATION, PLACE STONE SUBBASE. THESE AREAS SHALL BE CONSIDERED STABILIZED ONCE THE SUBBASE HAS BEEN INSTALLED.
15. COMPLETE THE INFILTRATION BASIN NO.2, WHEN THE AREA UPSLOPE IS CONSIDERED STABILIZED.
16. COMPLETE CONSTRUCTION ACTIVITIES FOR PHASE 5 OF THE PROJECT.
17. SPREAD TOPSOIL OVER ALL DISTURBED AREAS NOT TO BE PAVED. SEED IN ACCORDANCE TO PERMANENT SEEDING SPECIFICATIONS.
18. REMOVE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ONCE PERMANENT MEASURES ARE ESTABLISHED. PERMANENT CONTROL IS CONSIDERED ACHIEVED WHEN ROADWAYS ARE PAVED AND A 70% UNIFORM PERENNIAL VEGETATIVE COVER IS ESTABLISHED ON ALL SEEDED AREAS. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE ASSESSED/INSPECTED BY THE DAUPHIN COUNTY CONSERVATION DISTRICT/PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION PERSONNEL TO VERIFY THAT SUFFICIENT VEGETAL COVER HAS BEEN ATTAINED PRIOR TO THE REMOVAL OR CONVERSION OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY AREAS DISTURBED DURING THE REMOVAL OF THE TEMPORARY CONTROLS SHALL BE REPAIRED WITHIN 8 HOURS.
19. FINAL CLEANUP OF PROJECT SITE - THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL OFF SITE IN A LAWFUL MANNER.

ANTICIPATED CONSTRUCTION COMPLETION DATE: FALL 2021

SPECIFIC BMP MAINTENANCE INSTRUCTIONS

TEMPORARY VEGETATIVE COVER

- A. SOW ANNUAL RYE GRASS AT THE RATE OF 43 POUNDS PER ACRE, ONE POUND PER 1000 SQFT. BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION; PLUS A STRAW MULCH ANCHORED TO PREVENT LOSS.
- B. COVER GRASS SEED WITH 1/4" (6MM) OF SOIL USING SUITABLE EQUIPMENT FOR THAT PURPOSE. ADD LIME AND FERTILIZER (LIME=1 TON/AC, FERTILIZER = 5:5:5 MIX).
- C. MULCHING, WITHOUT SEEDING, IS TO BE USED AS AN INTERIM STABILIZATION CONTROL DURING NON-GROWING SEASONS OF THE YEAR

ROCK CONSTRUCTION ENTRANCE

- A. ROCK CONSTRUCTION ENTRANCE WILL BE PLACED AT THE LOCATION SHOWN ON THE PLAN AND CONSTRUCTED TO THE MINIMUM DIMENSIONS AS SHOWN ON THE DETAIL.
- B. THE ROCK CONSTRUCTION ENTRANCE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON SITE FOR THIS PURPOSE.
- C. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC AND PRIVATE ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAYS IS NOT PERMITTED.

COMPOST FILTER SOCKS

- A. COMPOST FILTER SOCKS WILL BE PLACED AS SHOWN ON THE PLAN TO INTERCEPT THE STORM WATER, AND FILTER THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE.
- B. COMPOST FILTER SOCKS ARE NOT PERMITTED IN ANY AREA OF CONCENTRATED FLOW SUCH AS DITCHES, SWALES, OR CHANNELS.
- C. ADD SECTION OF COMPOST FILTER SOCK FROM POST TO POST WHEN UNDERCUTTING OF COMPOST FILTER SOCK OCCURS.
- D. INSTALL COMPOST FILTER SOCKS IN ACCORDANCE WITH DETAILS AS SHOWN ON THE DRAWINGS.
- E. INSPECT COMPOST FILTER SOCKS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- F. ACCUMULATED SEDIMENT WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCKS FUNCTIONAL. IN ALL CASES REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK.
- G. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCHED.
- H. ANY COMPOST FILTER SOCK SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A NEW COMPOST FILTER SOCK.
- I. ADHERE TO MANUFACTURERS RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCKS DUE TO WEATHERING.
- J. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, REMOVE ALL COMPOST FILTER SOCKS AND UNSTABLE SEDIMENT DEPOSITS. BRING THE DISTURBED AREA TO GRADE AND STABILIZE.

INLET PROTECTION

- A. INLET PROTECTION WILL BE PLACED IN EXISTING AND NEW INLETS AS DEPICTED ON THE PLANS.
- B. INSTALL INLET PROTECTION IN ACCORDANCE WITH THE DETAIL ON THE DRAWING.
- C. INSPECT INLET PROTECTION AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS OR REPLACE IMMEDIATELY.
- D. IN ALL CASES, REMOVE DEPOSITS AFTER EACH RAINFALL EVENT.
- E. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCH.
- F. ADHERE TO MANUFACTURERS RECOMMENDATIONS FOR INSTALLATION OF INLET PROTECTION.
- G. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, REMOVE INLET PROTECTION.

RIPRAP APRONS

- A. RIPRAP APRONS WILL BE PLACED IN INFILTRATION AREAS WHERE CONCENTRATED FLOW IS PRESENT AS DEPICTED ON THE PLANS.
- B. INSTALL RIPRAP APRON IN ACCORDANCE WITH THE DETAIL ON THE DRAWING.
- C. INSPECT RIPRAP APRON AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS OR REPLACE IMMEDIATELY.
- D. IN ALL CASES, REMOVE DEPOSITS AFTER EACH RAINFALL EVENT.
- E. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCH.
- F. IF NEEDED, ADD ROCK TO BRING THE RIPRAP APRON TO SPECIFIED DIMENSIONS.
- G. ADD ROCK AND EXTEND THE RIP RAP APRON TO AVOID RUNOFF FROM ESCAPING AROUND THE RIPRAP APRON.

GENERAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENTATION CONTROL

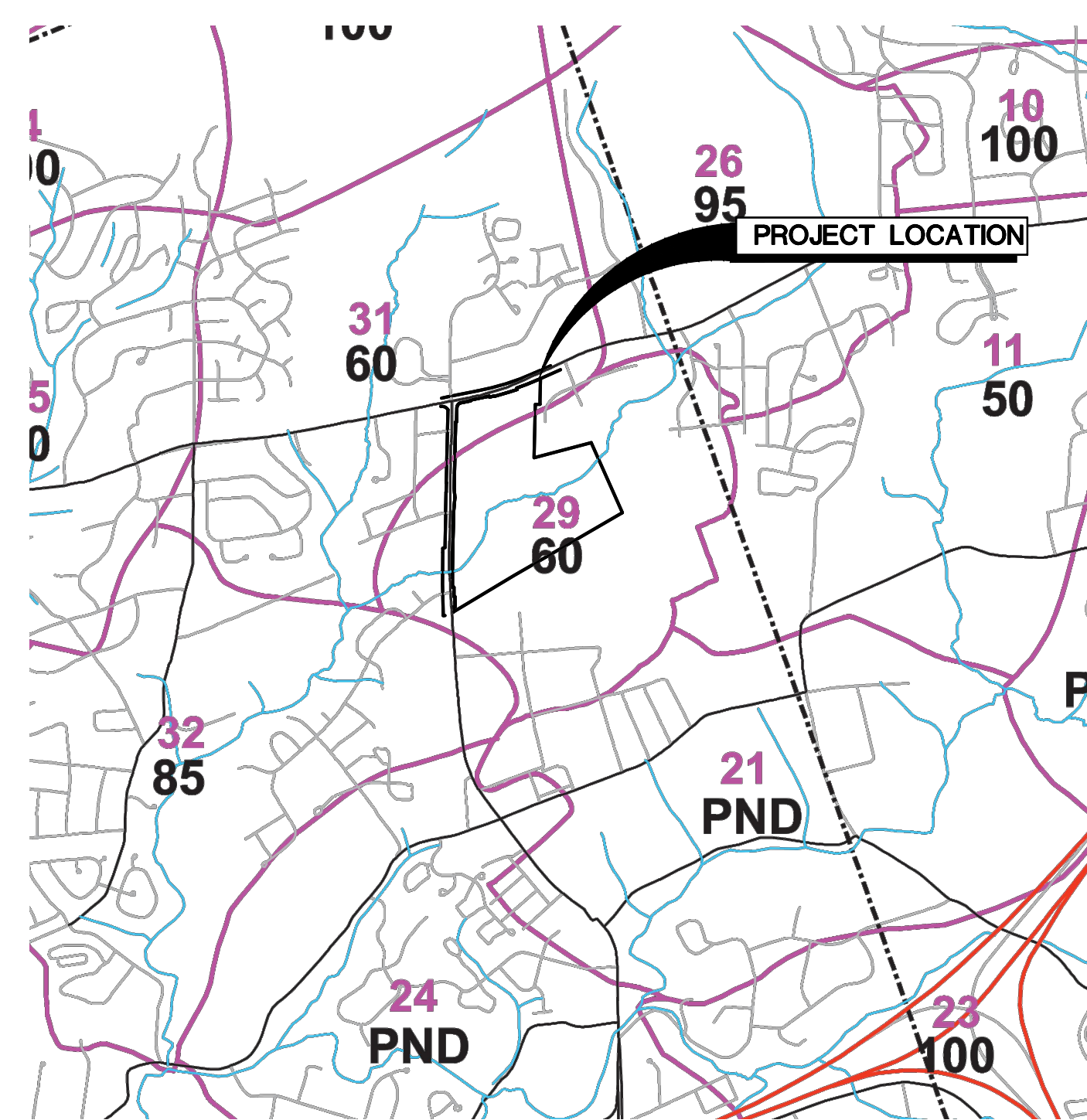
- SOIL EROSION AND SEDIMENTATION CONTROL SHALL BE IMPLEMENTED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. COMPOST FILTER SOCK SHALL BE INSTALLED TO A MINIMUM AS SHOWN ON THESE DRAWINGS.
- EARTH MOVING OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE ACCELERATED SOIL EROSION, IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL", AND AS SHOWN ON THESE DRAWINGS.
- COMPOST FILTER SOCK SHALL BE INSTALLED DOWNSTREAM OF CONSTRUCTION AND STOCKPILE AREAS TO CONFINE SEDIMENT THAT MAY BE WASHED FROM NEW FILL OR CUT SLOPES.
- COMPOST FILTER SOCK MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST EXTEND AT LEAST 10 FEET UPSLOPE AT 45° TO THE MAIN SOCK ALIGNMENT.
- COMPOST FILTER SOCK SHALL BE INSPECTED ONCE A WEEK AND AFTER EACH RUNOFF EVENT. DAMAGE SHALL BE REPAIRED IMMEDIATELY. SEDIMENT ACCUMULATIONS SHALL BE REMOVED AND PLACED IN THE TOPSOIL STOCKPILE.
- COMPOST FILTER SOCK SHALL BE MAINTAINED UNTIL FINAL PROTECTIVE VEGETATION HAS BEEN ESTABLISHED, OR OTHER GROUND COVER MATERIALS HAVE BEEN PLACED.
- THE CONTRACTOR SHALL PLACE SEEDING, SOIL SUPPLEMENTS, AND MULCHING IN ALL DISTURBED AREAS IN ACCORDANCE WITH PADOT PUB. 408, LATEST EDITION.
- FILTER FABRIC MATERIAL SHALL BE PADOT CLASS 3 GEOTEXTILE IN ACCORDANCE WITH SECTION 735 OF THE PADOT PA. 408, LATEST EDITION.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY.
- A STAMPED AND SIGNED SET OF APPROVED EROSION AND SEDIMENTATION CONTROL PLANS AND NARRATIVE SHALL REMAIN ON SITE FOR THE DURATION OF THE PROJECT.

GENERAL EROSION AND SEDIMENT CONTROL REQUIREMENTS FOR PIPELINE AND UTILITY INSTALLATION

- LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING, AND SITE RESTORATION AND STABILIZATION OPERATIONS.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. NO MORE THAN 50 LINEAR FEET OF OPEN TRENCH SHALL EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORK DAY.
- WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. PUMPED WATER WILL BE DISCHARGED THROUGH A COMMERCIALY AVAILABLE FILTER BAG (SEE DETAIL).
- ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS, AND APPROPRIATE PERMANENT/TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES/FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS SHALL BE COMPLETED WITHIN SEVEN DAYS AFTER THE PIPELINE/UTILITY LINE IS INSTALLED.

CONSTRUCTION SEQUENCE FOR INFILTRATION BED AND RAIN GARDEN INSTALLATION

1. INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION
2. THE EXISTING SUBGRADE UNDER THE INFILTRATION BED SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT. THESE AREAS ARE TO BE PROTECTED FROM THE CONSTRUCTION TRAFFIC WITH THE USE OF COMPOST FILTER SOCKS.
3. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE OR EQUIVALENT AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
4. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILES SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 18 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED.
5. ONCE STABILIZED, INSTALL PROPOSED STORMWATER CONVEYANCE SYSTEM AS INDICATED IN THE PLANS AND PER THE PROVIDED DETAILS.



RELEASE RATE MAP
NOT TO SCALE



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Nature leads, art follows.

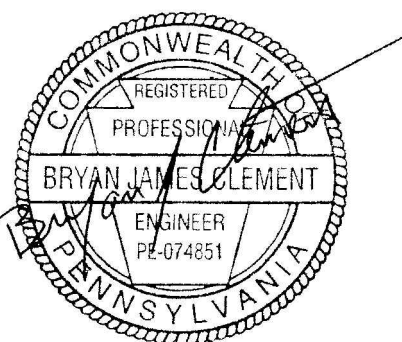


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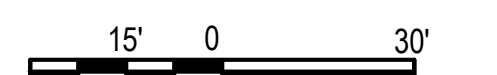
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ES201

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THE TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

SOIL TYPES

THE SOILS ON THE SITE AS DETERMINED BY THE USDA-SCS SOIL SURVEY OF DAUPHIN COUNTY, PENNSYLVANIA, CONSIST OF THE FOLLOWING TYPES. REFER TO THE ATTACHED SOILS INFORMATION IN APPENDIX B.

SOIL TYPE SOIL DESCRIPTION

At ATKINS SILT LOAM, 0 TO 3 PERCENT SLOPES. THE SOIL IS ON FLOOD PLAINS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY LOW. DEPTH TO ROOT RESTRICTIVE LAYER, BEDROCK, OR LITHIC IS 10 TO 99 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND SURFACE RUNOFF VERY HIGH. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS MODERATE. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS FREQUENTLY FLOODED. IT IS NOT PONDED. SEASONAL WATER SATURATION IS AT A DEPTH OF 6 INCHES FROM NOVEMBER THROUGH JUNE. THIS SOIL BELONGS TO HYDROLOGIC GROUP B/D. THIS SOIL DOES MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE AND STEEL, FLOODING, HIGH SEASONAL WATER TABLE, HYDRIC INCLUSIONS, SLOW PERCOLATION RATES, LANDSLIDE PRONE, SOIL PIPING, FROST POTENTIAL, AND POOR SOURCE OF TOPSOIL, AND SOIL WETNESS.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

BkB2 BERKS SHALY LOAM, 3 TO 8 PERCENT SLOPES. THIS SOIL IS ON SHALE HILLSLOPES. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY HIGH. DEPTH TO ROOT RESTRICTIVE LAYER, BEDROCK, LITHIC IS 20 TO 40 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND SURFACE RUNOFF IS LOW. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS VERY LOW. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED OR PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC GROUP B. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE, DROUGHTY, EASILY ERODIBLE, HYDRIC INCLUSIONS, SLOW PERCOLATION, SOIL PIPING, AND A POOR SOURCE OF TOPSOIL.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

BhC2 BERKS CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES. THIS SOIL IS ON RIDGES ON HILLS AND MOUNTAIN SLOPES ON MOUNTAINS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY LOW. DEPTH TO ROOT RESTRICTIVE LAYER, BEDROCK, LITHIC IS 20 TO 40 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND SURFACE RUNOFF IS MEDIUM. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS VERY LOW. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED OR PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC GROUP B. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE, DROUGHTY, EASILY ERODIBLE, HYDRIC INCLUSIONS, SLOW PERCOLATION, SOIL PIPING, AND A POOR SOURCE OF TOPSOIL.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

BkD2 BERKS CHANNERY LOAM, 15 TO 25 PERCENT SLOPES. THIS SOIL IS ON RIDGES ON HILLS AND MOUNTAIN SLOPES ON MOUNTAINS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY LOW. DEPTH TO ROOT RESTRICTIVE LAYER, BEDROCK, LITHIC IS 20 TO 40 INCHES. THIS SOIL HAS A MODERATE HAZARD OF EROSION AND SURFACE RUNOFF IS MEDIUM. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS VERY LOW. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED OR PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC GROUP B. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE, DROUGHTY, EASILY ERODIBLE, HYDRIC INCLUSIONS, SLOW PERCOLATION, SOIL PIPING, AND A POOR SOURCE OF TOPSOIL.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

SOIL TYPE SOIL DESCRIPTION

BtB2 BRINKERTON AND ARMAGH SILT LOAMS, 3 TO 8 PERCENT SLOPES. THE SOIL IS ON DEPRESSIONS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY LOW. DEPTH TO ROOT RESTRICTIVE LAYER, FRAGIPAN, BEDROCK, LITHIC IS 11 TO 72 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND SURFACE RUNOFF VERY HIGH. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS MODERATE. SHRINK SWELL POTENTIAL IS MODERATE. THIS SOIL IS NOT FLOODED OR PONDED. SEASONAL WATER SATURATION IS AT A DEPTH OF 3 INCHES FROM OCTOBER THROUGH JUNE. THIS SOIL BELONGS TO HYDROLOGIC GROUP C/D. THIS SOIL DOES MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE AND STEEL, DROUGHTY, EASILY ERODIBLE, HIGH SEASONAL WATER TABLE, HYDRIC INCLUSIONS, SLOW PERCOLATION RATES, LANDSLIDE PRONE, SOIL PIPING, FROST POTENTIAL, SHRINK-SWELL POTENTIAL, POOR SOURCE OF TOPSOIL, AND SOIL WETNESS.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

CoB2 COMLY SILT LOAM, 2 TO 8 PERCENT SLOPES. THIS SOIL IS ON HILLS AND VALLEYS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY HIGH. DEPTH TO ROOT RESTRICTIVE LAYER, FRAGIPAN IS 20 TO 35 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND SURFACE RUNOFF IS MEDIUM. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS LOW. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED OR PONDED. A SEASONAL ZONE OF WATER SATURATION IS 24 INCHES FROM NOVEMBER THROUGH MARCH. THIS SOIL BELONGS TO HYDROLOGIC GROUP C. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE AND STEEL, DROUGHTY, EASILY ERODIBLE, HIGH WATER TABLE, HYDRIC INCLUSIONS, SOIL PIPING, FROST POTENTIAL, AND A POOR SOURCE OF TOPSOIL.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

Ph PHILO SILT LOAM, 0 TO 2 PERCENT SLOPES. THIS SOIL IS ON FLOOD PLAINS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY HIGH. DEPTH TO ROOT RESTRICTIVE LAYER IS GREATER THAN 60 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND SURFACE RUNOFF IS MEDIUM. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS MODERATE. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS OCCASIONALLY FLOODED. IT IS NOT PONDED. A SEASONAL ZONE OF WATER SATURATION IS 21 INCHES FROM DECEMBER THROUGH APRIL. THIS SOIL BELONGS TO HYDROLOGIC GROUP B/D. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE AND STEEL, EASILY ERODIBLE, FLOODING, HIGH WATER TABLE, HYDRIC INCLUSIONS, LANDSLIDE PRONE, SLOW PERCOLATION, SOIL PIPING, FROST POTENTIAL, POOR SOURCE OF TOPSOIL, AND SOIL WETNESS.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

WeE2 WEIKERT SHALY SILT LOAM, 25 TO 50 PERCENT SLOPES. THIS SOIL IS ON HILLS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS HIGH. DEPTH TO ROOT RESTRICTIVE LAYER, BEDROCK, LITHIC IS 10 TO 20 INCHES. THIS SOIL HAS A SEVERE HAZARD OF EROSION AND SURFACE RUNOFF IS MEDIUM. AVAILABLE WATER TO A DEPTH OF 60 INCHES IS HIGH. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED OR PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC GROUP D. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

LIMITATIONS INCLUDE THE POTENTIAL OF CAVE-IN OF CUTBANKS, CORROSIVE TO CONCRETE AND STEEL, DROUGHTY, LANDSLIDE PRONE, HYDRIC INCLUSIONS, SLOW PERCOLATION, SOIL PIPING, FROST POTENTIAL, AND A POOR SOURCE OF TOPSOIL.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUVIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURE SINCE THE SOILS ARE LANDSLIDE PRONE. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

SYMBOL AND ABBREVIATION SCHEDULE

AC	ACRE	EX	EXISTING	REINF	REINFORCEMENT
AC	AIR CONDITIONER	FD	FLOOR DRAIN	RCP	REINFORCED CONCRETE PIPE
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS	FFE	FINISH FLOOR ELEVATION	R/W	RIGHT-OF-WAY
ACI	AMERICAN CONCRETE TRANSPORTATION OFFICIALS	FH	FIRE HYDRANT	SCH	SCHEDULE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GM	GAS METER	SEC	SECTION
⊕	AT	CV	GAS VALVE	SEG	SEGMENT
ℓ	BASELINE	HP	HIGH POINT	SLCPP	SMOOTH LINED CORRUGATED PLASTIC PIPE
BC	BOTTOM OF CURB	HORIZ	HORIZONTAL	STA	STATION
BW	BOTTOM OF WALL	INC	INCORPORATED	SR	STATE ROUTE
BY/4"	BROKEN YELLOW PAVEMENT LINE/WIDTH	INV	INVERT	ST	STREET
BLDG	BUILDING	LP	LIGHT POLE	SRL	SKID RESISTANCE LEVEL
℄	CENTERLINE	MH	MANHOLE	S	SOUTH
CC C/C	CENTER TO CENTER	MAX	MAXIMUM	SF	SQUARE FEET
CLR	CLEAR	MIN	MINIMUM	SY	SQUARE YARD
CONC	CONCRETE	MPH	MILES PER HOUR	TC	TOP OF CURB
CONSTR	CONSTRUCTION	N	NORTH	TW	TOP OF WALL
CMP	CORRUGATED METAL PIPE	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	XF	TRANSFORMER
CPP	CORRUGATED POLYETHYLENE PIPE	No/#	NUMBER	TYP	TYPICAL
DIA	DIAMETER	PM	PARKING METER	WM	WATER METER
DI	DUCTILE IRON	OC	ON CENTER	WV	WATER VALVE
EOB	EDGE OF BERM	PADOT	PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	WWF	WELDED WIRE FABRIC
EOP	EDGE OF PAVEMENT	PERF	PERFORATED	W/4"	WHITE PAVEMENT LINE/WIDTH
ELEC	ELECTRIC	PE	POLYETHYLENE		
EMH	ELECTRIC MANHOLE	PUB	PUBLICATION		
EM	ELECTRIC METER	PSI	POUNDS PER SQUARE INCH		
EL/ELEV	ELEVATION	PP	POWER POLE		
EQ	EQUAL	PVC	POLYVINYL CHLORIDE		
		ℓ	PROPERTY LINE		
		R	RADIUS		

LEGEND

EXISTING	PROPOSED
WATERLINE	WATERLINE
GAS LINE	GAS LINE
SANITARY SEWER	SANITARY SEWER
STORM SEWER	STORM SEWER
STEAM LINE	STEAM LINE
UNDERGROUND ELEC TELE CABLE	UNDERGROUND ELEC TELE CABLE
UNDERGROUND TELEPHONE	UNDERGROUND TELEPHONE
UNDERGROUND CABLE	UNDERGROUND CABLE
OVERHEAD ELECTRIC	FIBER OPTICS/COMMUNICATIONS
OVERHEAD TELEPHONE	OVERHEAD ELECTRIC
OVERHEAD CABLE	OVERHEAD TELEPHONE
OVERHEAD WIRES	OVERHEAD CABLE
CONDUIT	CONDUIT
FIBER OPTICS / COMMUNICATIONS	FIRE HYDRANT
FIRE HYDRANT	POWER POLE
POWER POLE	STREET LIGHT
SIGN (EXISTING)	SIGN
FENCE	NUMBER OF PARKING SPACES
NUMBER OF PARKING SPACES	NEW CAST IRON DOWNSPOUT BOOT
NEW CAST IRON DOWNSPOUT BOOT	AREA DRAIN
AREA DRAIN	CONNECT TO EXISTING
CONNECT TO EXISTING	



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Nature leads, art follows.

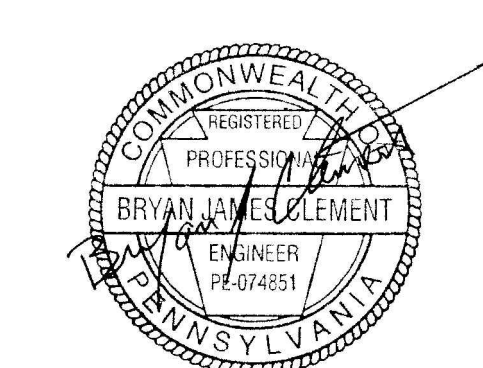


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Susquehanna Township, Dauphin County, PA



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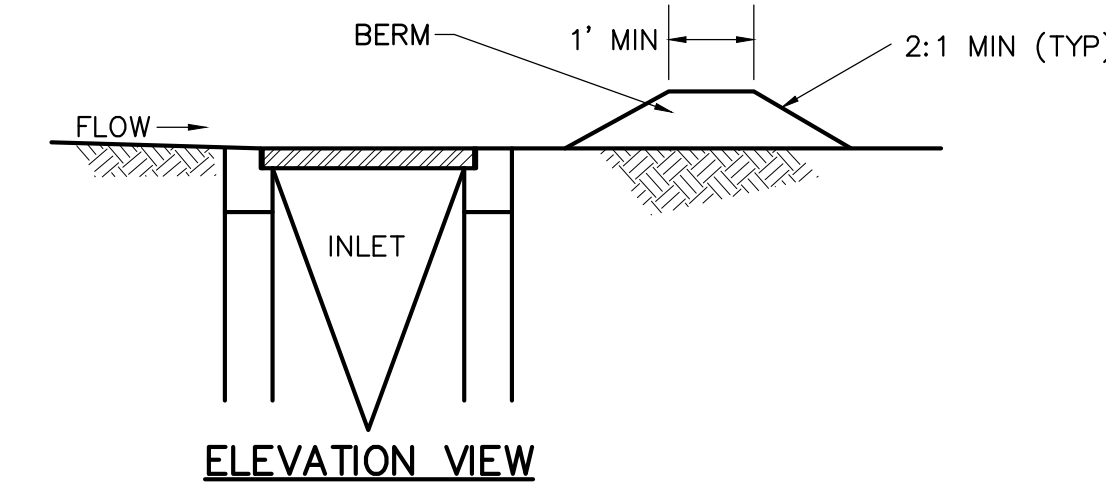
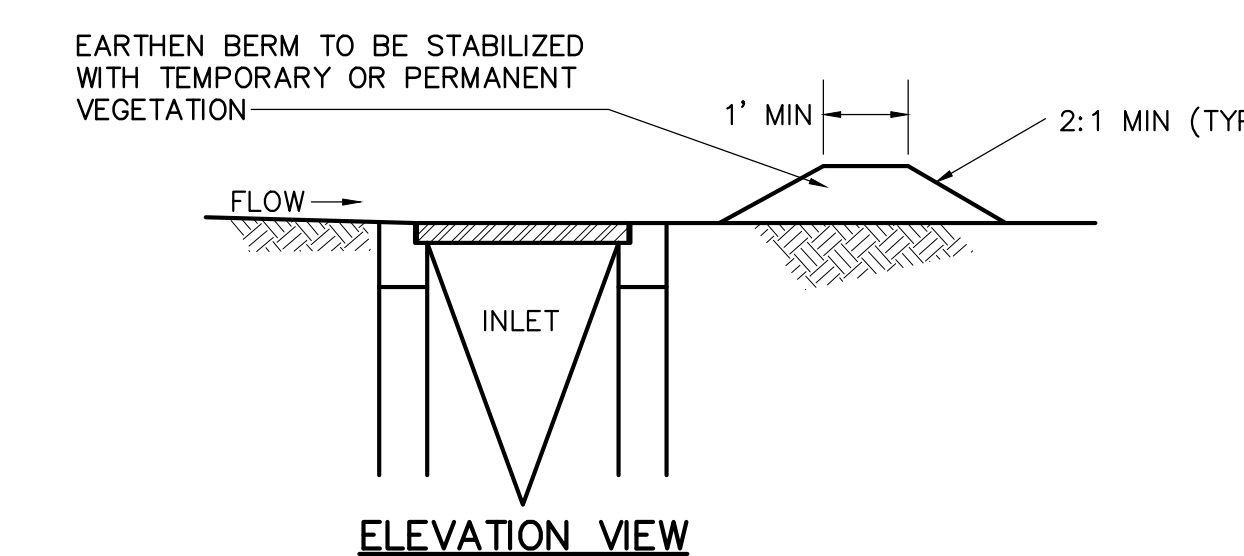
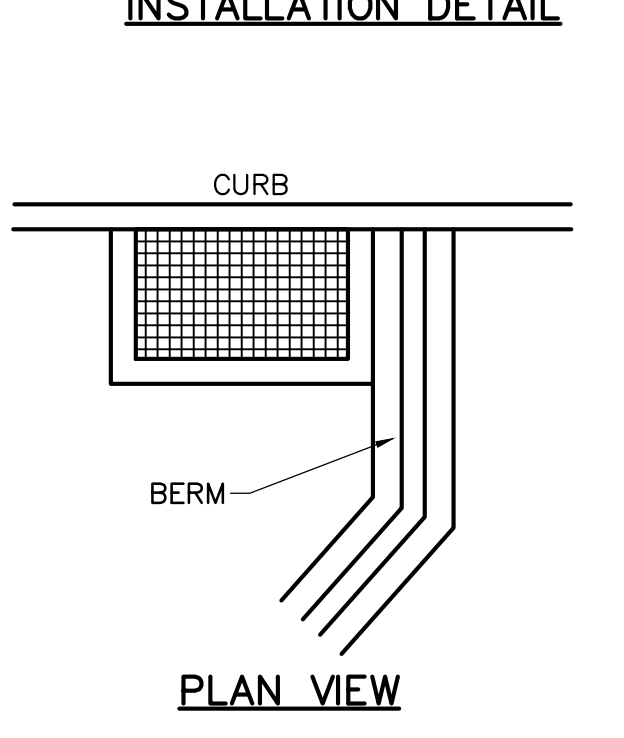
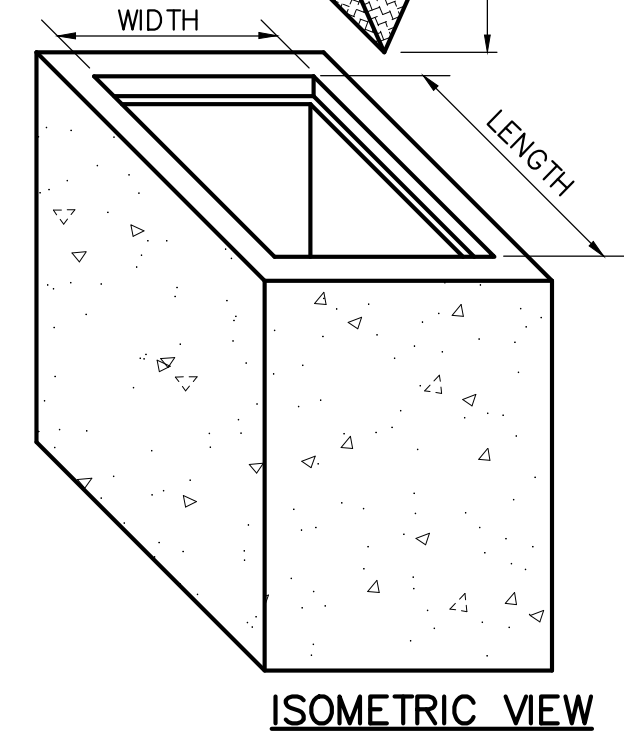
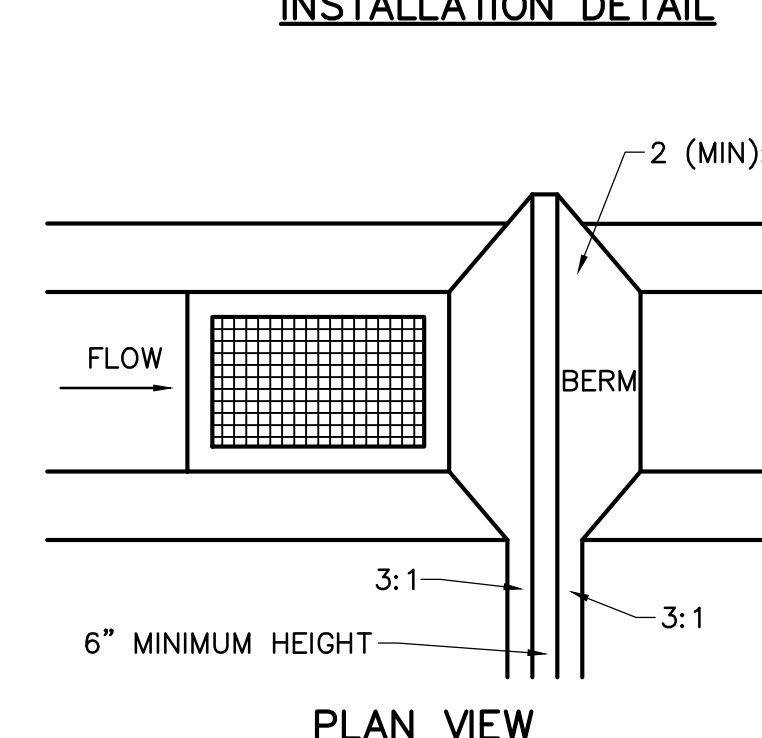
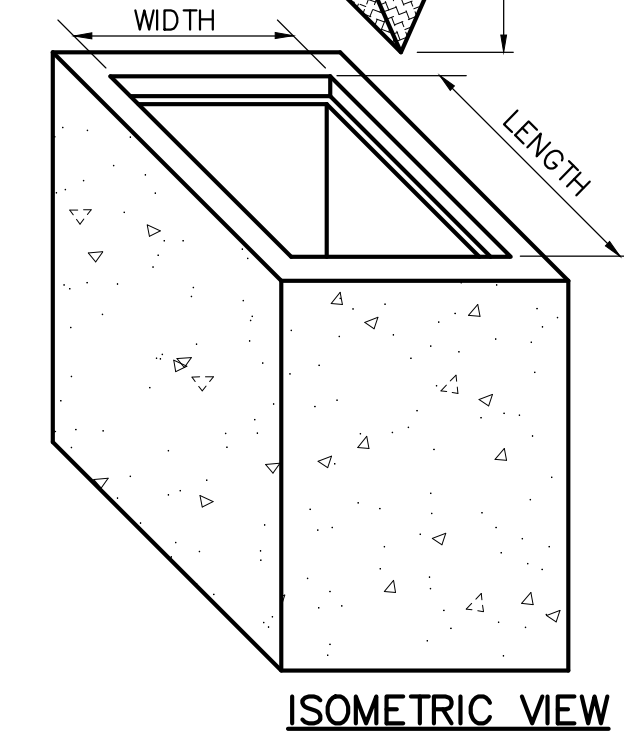
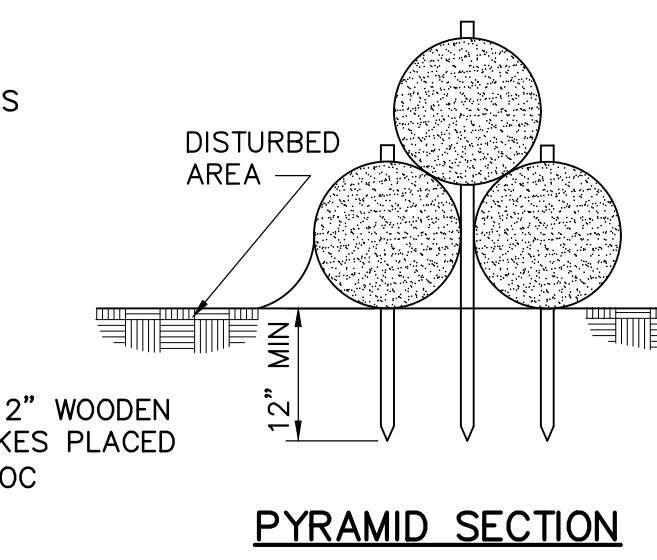
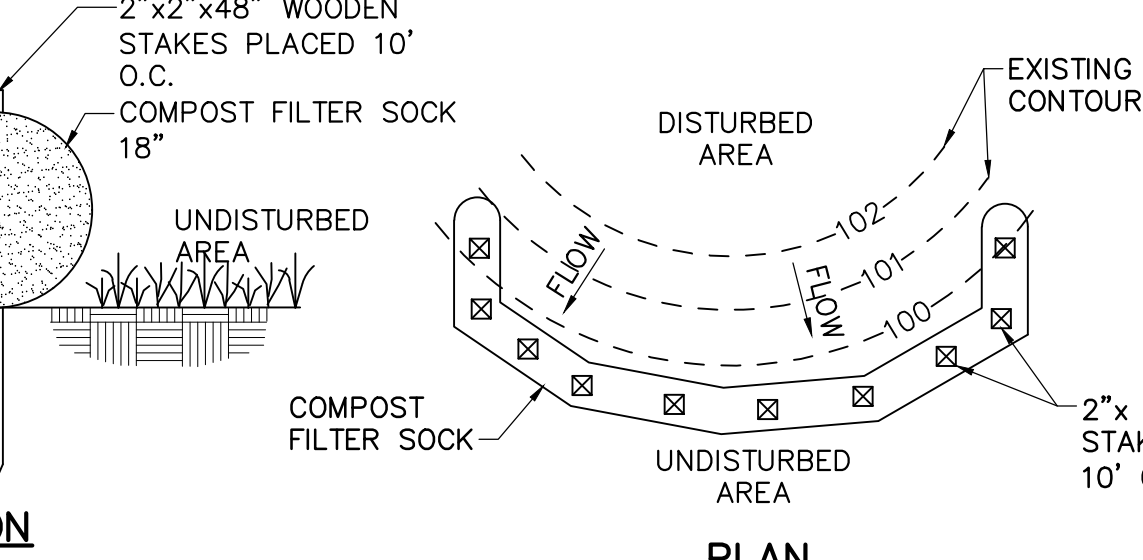
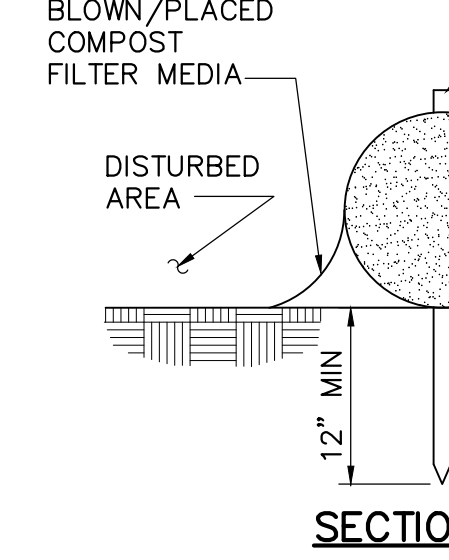
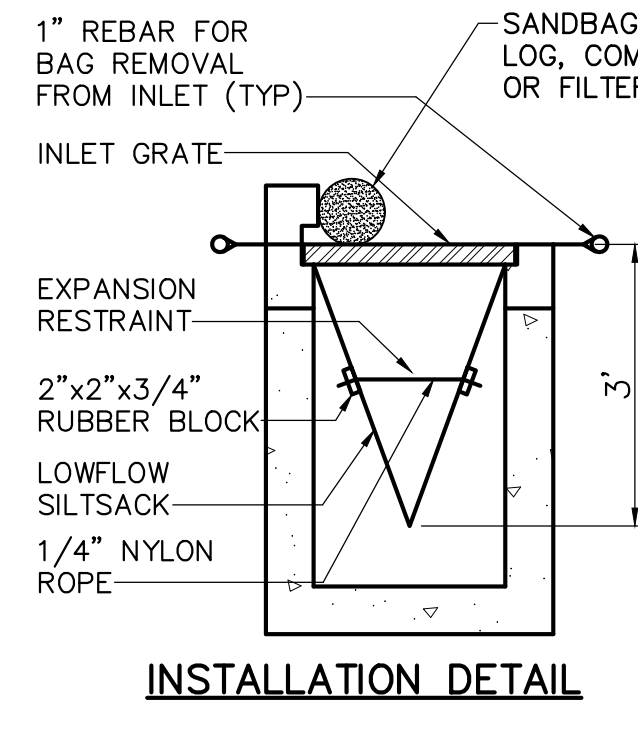
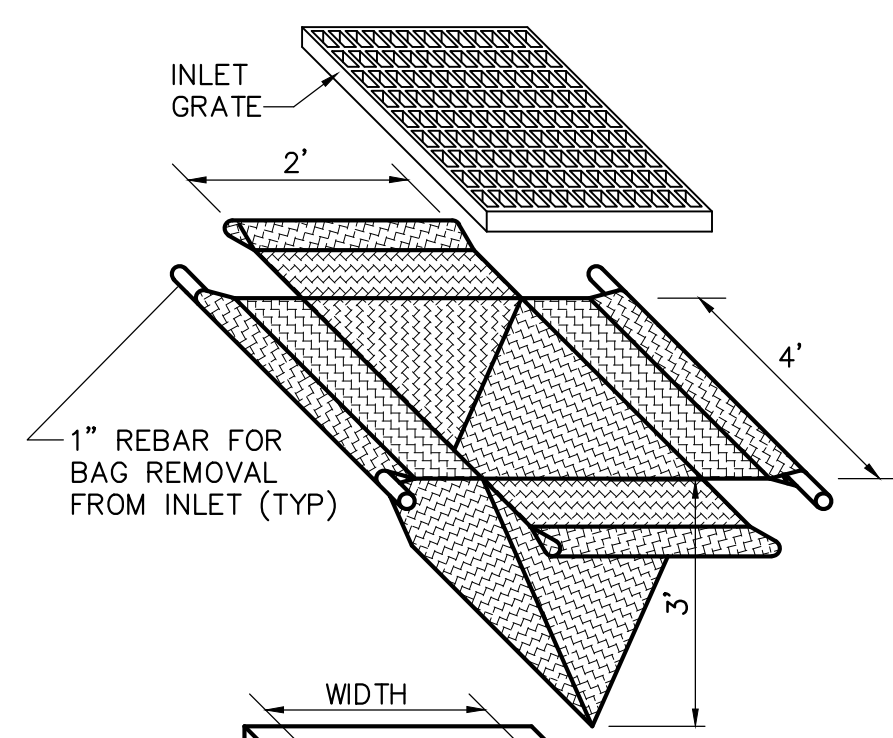
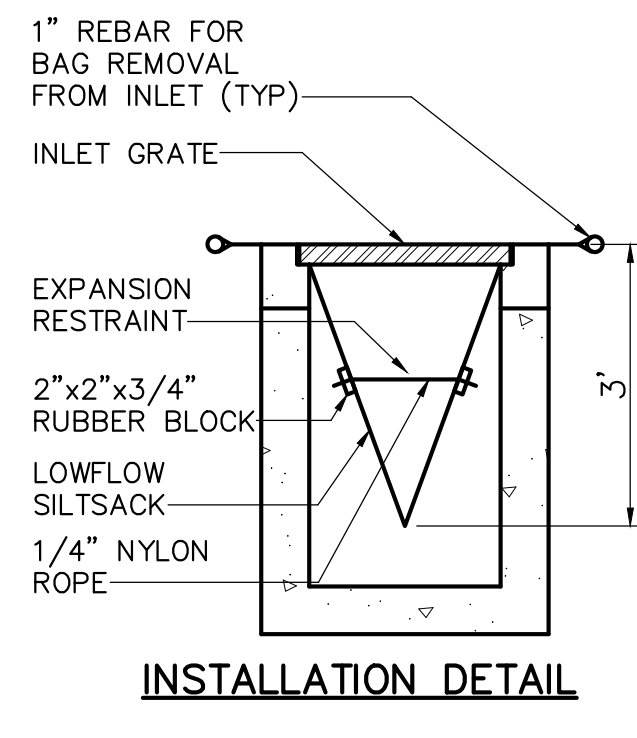
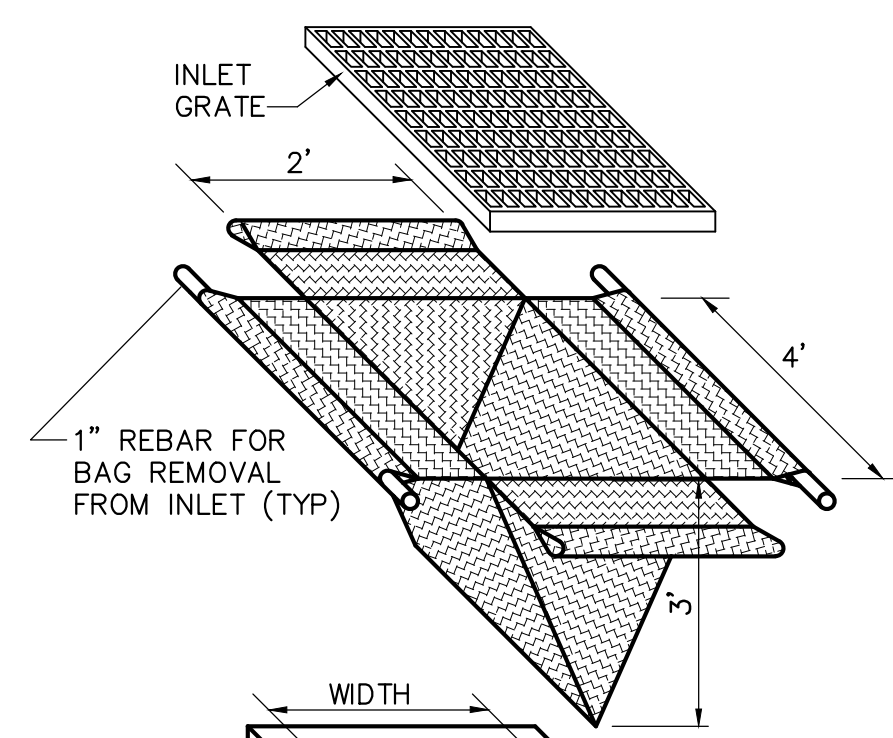
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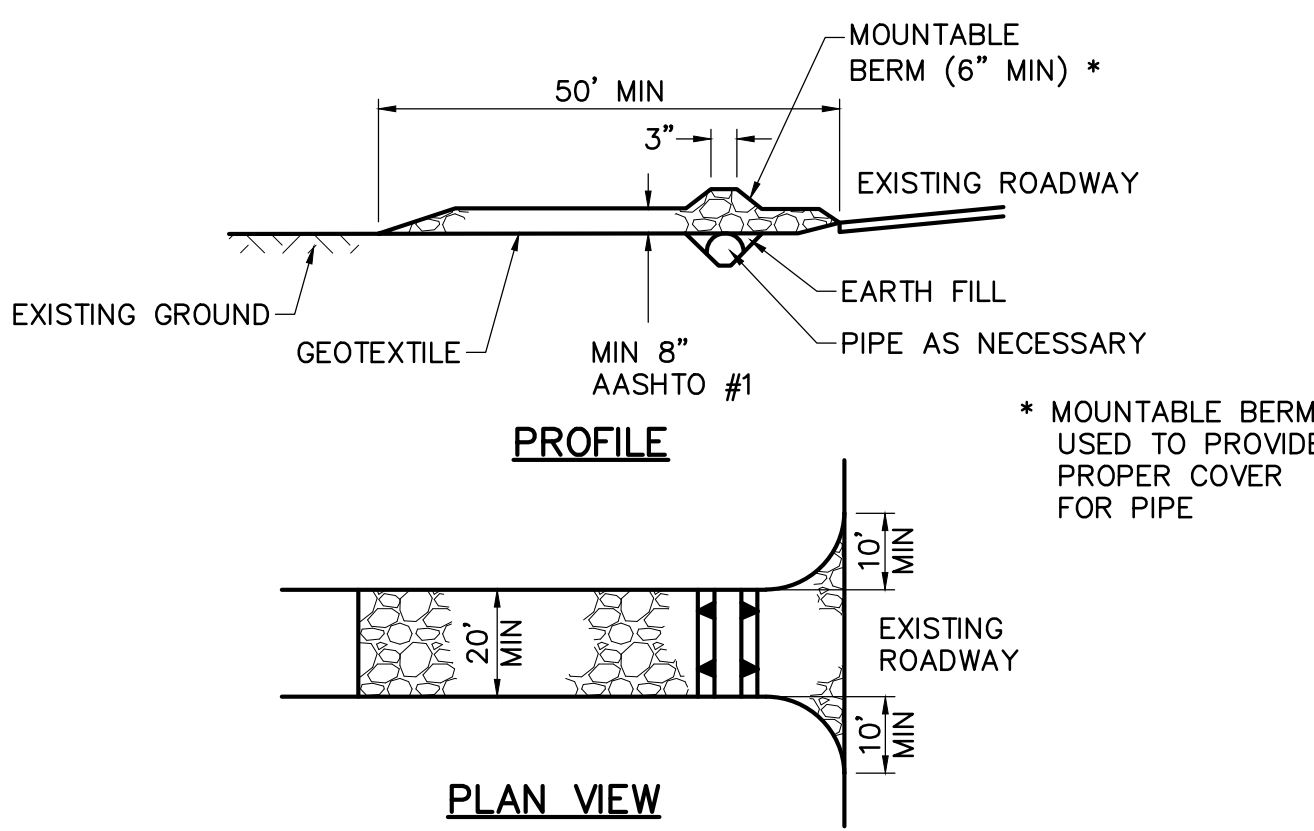
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**FILTER BAG INLET PROTECTION DETAIL
TYPE M INLET**
NOT TO SCALE

**FILTER BAG INLET PROTECTION DETAIL
TYPE C INLET**
NOT TO SCALE

- NOTES:**
- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
 - INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
 - ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
 - AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A No. 40 SIEVE.
 - INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
 - DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.



REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHERE OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAY SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

**ROCK CONSTRUCTION
ENTRANCE**
NOT TO SCALE

- NOTES:**
- SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.
 - COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF FILTER SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
 - TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
 - ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN
 - SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
 - BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 - UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
 - STAKES SPACED AT 10' MAXIMUM. USE 2"x 2" WOOD OR EQUIVALENT STEEL STAKES.

COMPOST FILTER SOCK
NOT TO SCALE

TABLE 4.1 COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS					
MATERIAL TYPE	3 mil HOPE	5 mil HOPE	5 mil HOPE	MULTI-FILAMENT POLYPROPYLENE (MFPF)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPF)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 psi	26 psi	44 psi	202 psi
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING	HOPE BIAXIAL NET				
	CONTINUOUSLY WOUND				
	FUSION-WELDED JUNCTURES				
3/4" X 3/4" MAX. APERTURE SIZE					
OUTER FILTRATION MESH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
	3/16" MAX. APERTURE SIZE				
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					

TABLE 4.2 COMPOST STANDARDS	
ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM



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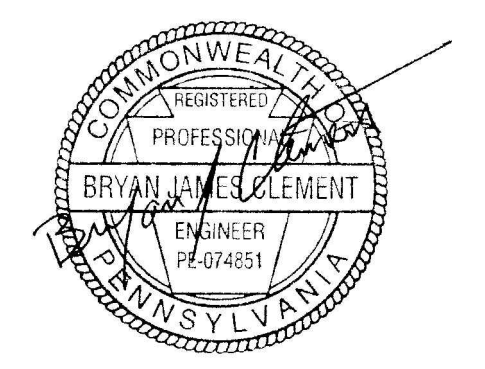
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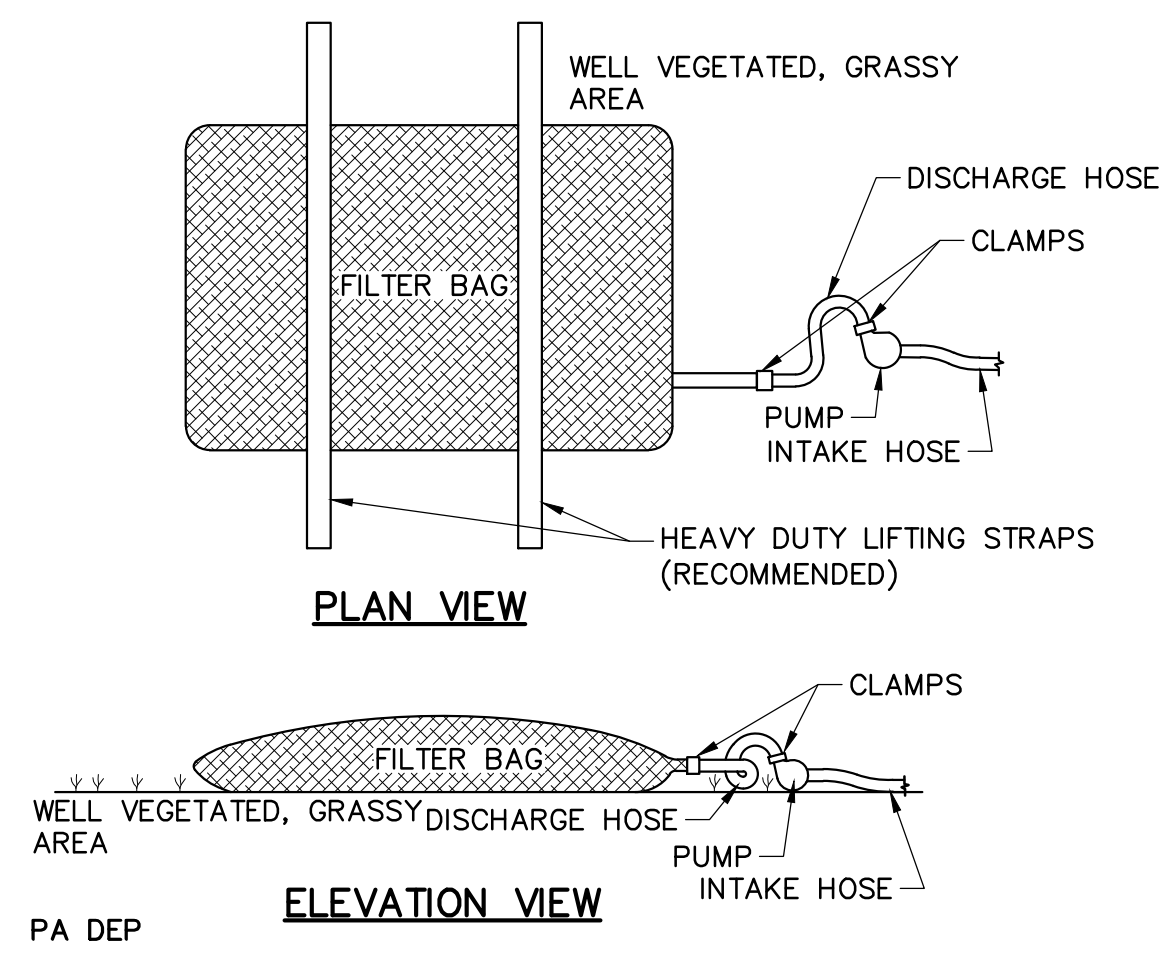
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LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

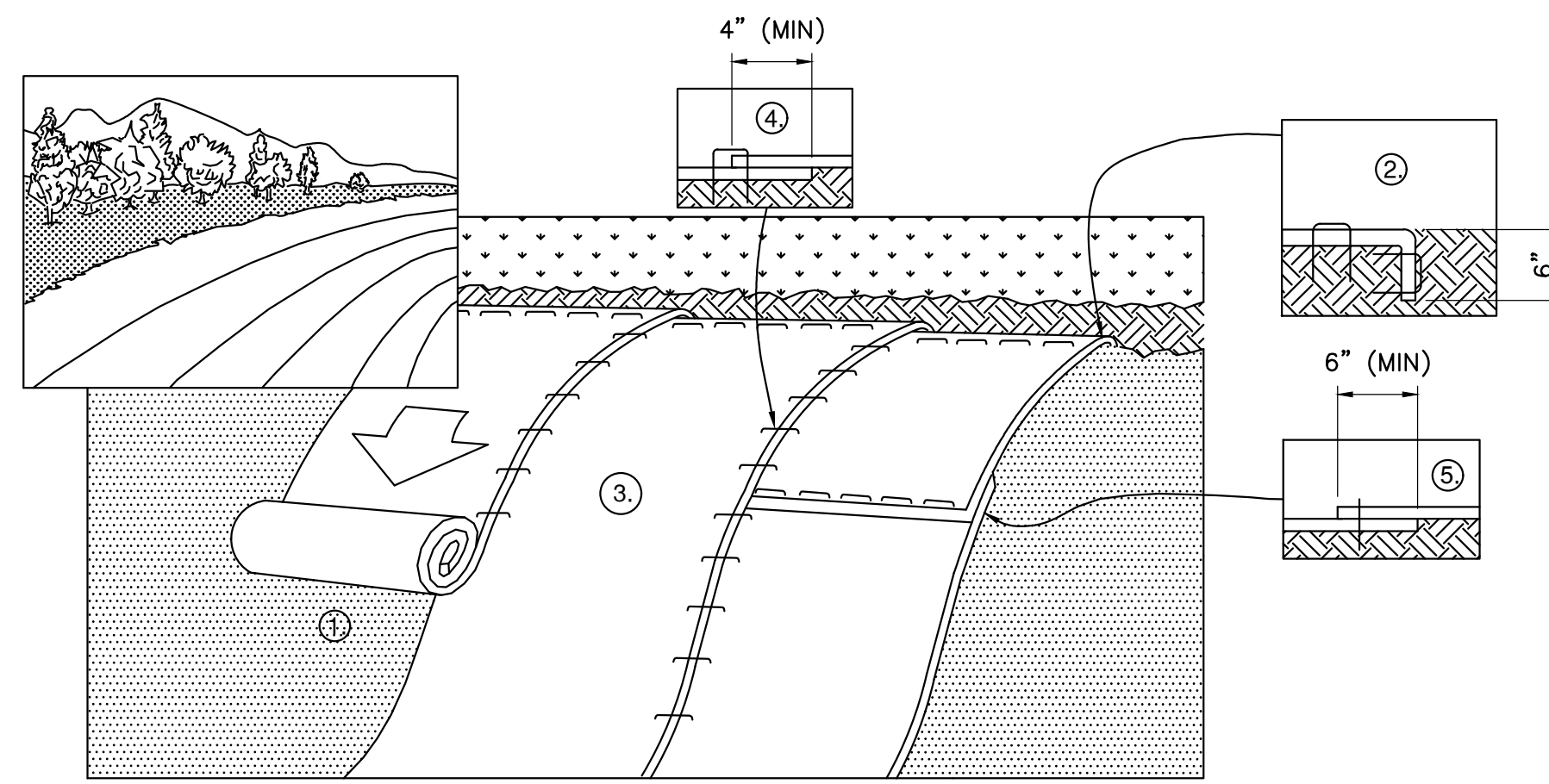
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

FILTER BAG DETAIL FOR PUMPED WATER

NOT TO SCALE



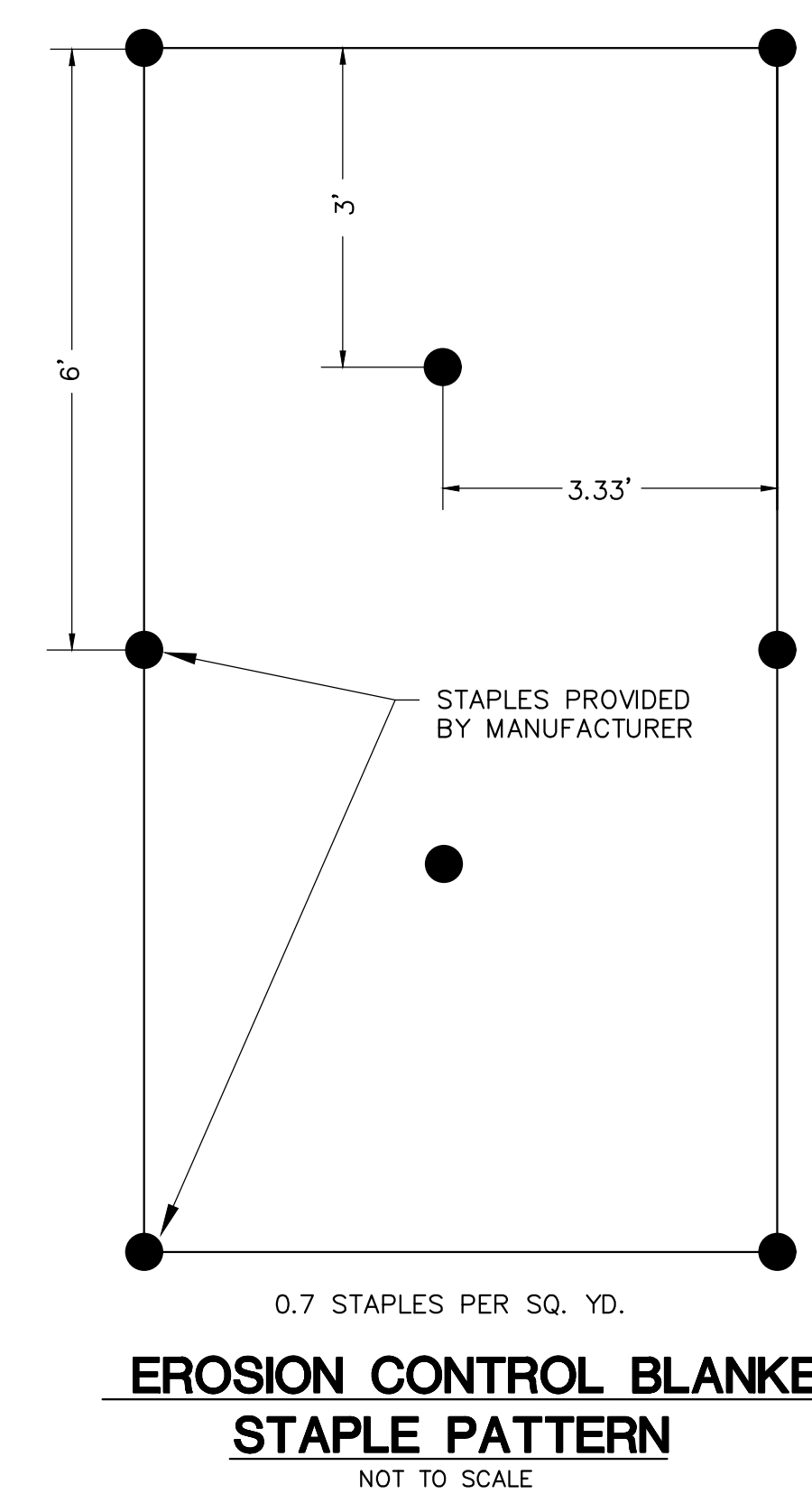
- PREPARE SOIL (SEED BED) BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF SLOPE. ROLL BLANKETS IN DIRECTION OF WATER FLOW. INSTALL BEGINNING OF ROLL IN 6"x6" ANCHOR TRENCH, STAPLE, BACKFILL, AND COMPACT SOIL.
- ROLL THE BLANKETS DOWN THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURER'S RECOMMENDATION.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 4" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN MINIMUM 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, REFER TO MANUFACTURER RECOMMENDATION FOR STAPLE PATTERN ACROSS ENTIRE BLANKET WIDTH.
- PLACE STAPLES/STAKES PER MANUFACTURE RECOMMENDATION FOR THE APPROPRIATE LENGTH OF SLOPE AND STEEPNESS BEING BLANKETED. THE BLANKET SHOULD NOT BE STRETCHED; IT MUST MAINTAIN GOOD SOIL CONTACT.

NOTES:

- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION
- SEED FILL SLOPES IN 15 FOOT INCREMENTS AS EMBANKMENT HEIGHT INCREASES.
- EROSION CONTROL BLANKETS SHOULD BE USED ON ALL CUT AND FILL SLOPES 3:1 OR GREATER.
- THE EROSION CONTROL BLANKET SHALL BE S75 AS MANUFACTURED BY NORTH AMERICAN GREEN OR APPROVED EQUAL.
- SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKETS.
- PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
- BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
- THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

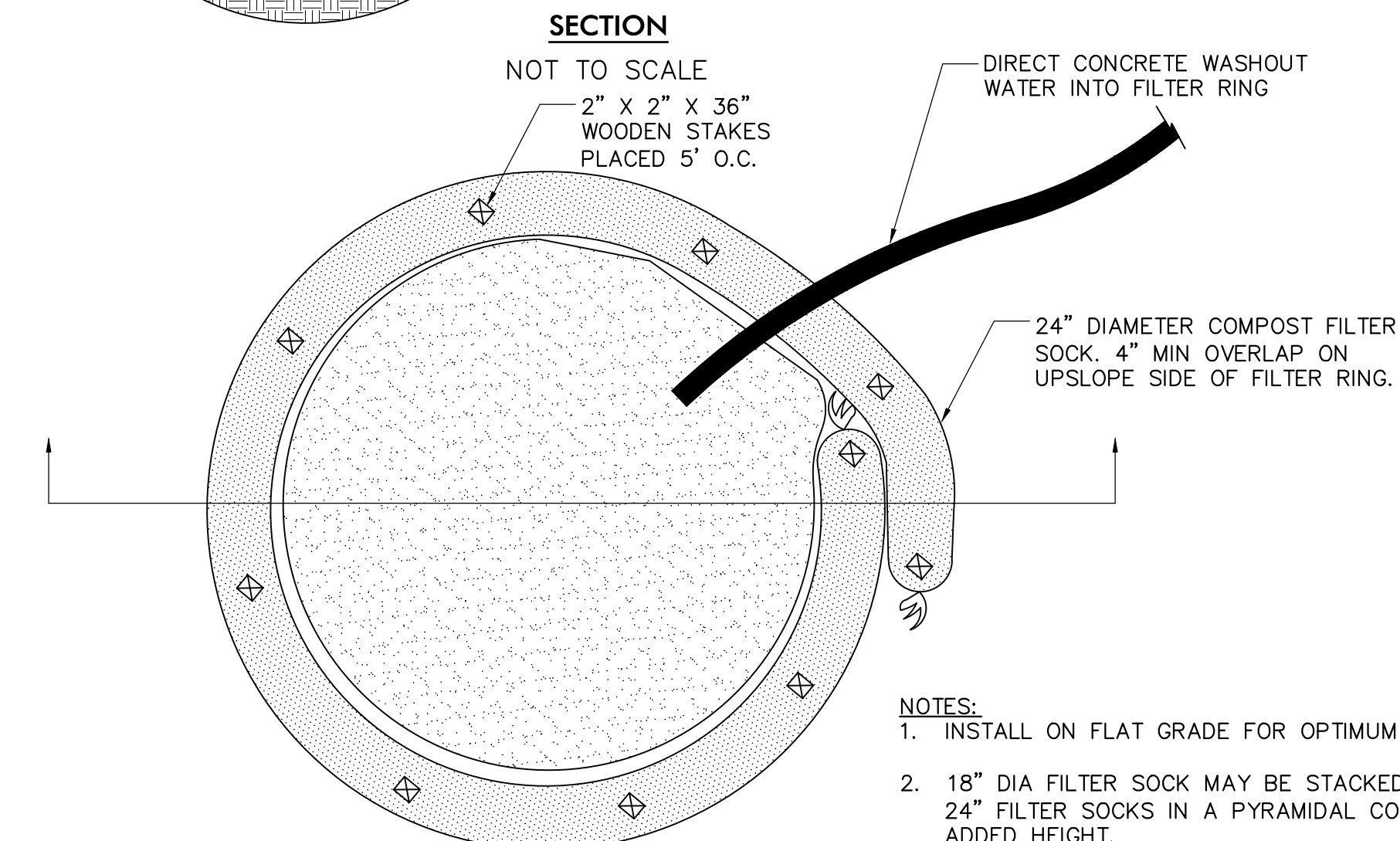
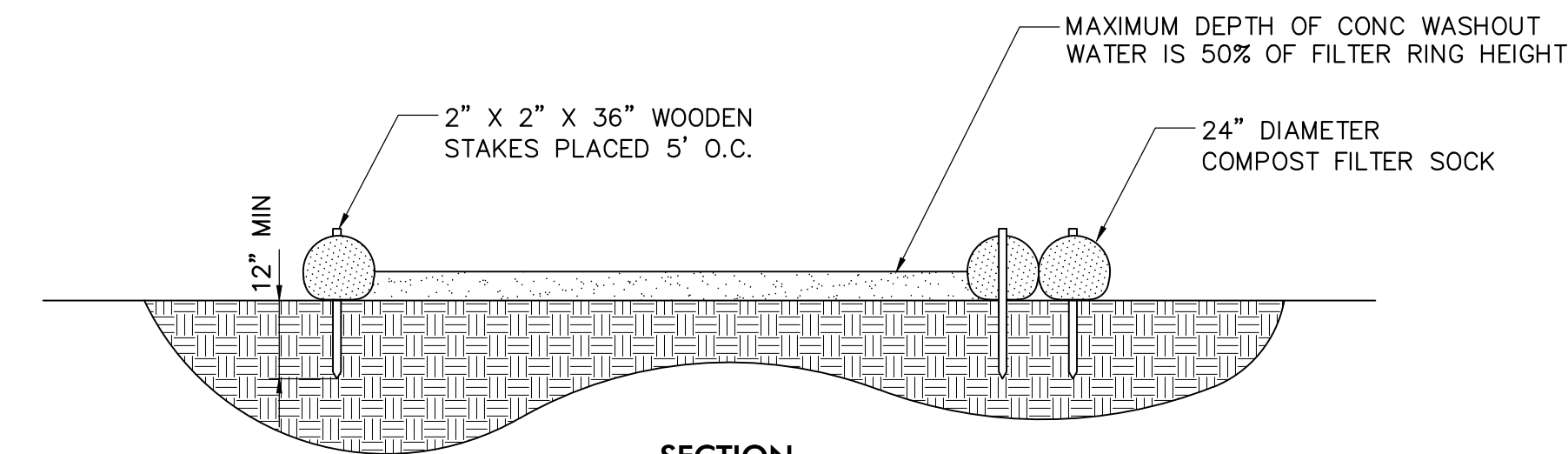
EROSION CONTROL BLANKET DETAIL (SLOPE INSTALLATION)

NOT TO SCALE



EROSION CONTROL BLANKET STAPLE PATTERN

NOT TO SCALE



NOTES:

- INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
- 18" DIA FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" FILTER SOCKS IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
- A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF WASHOUT PRIOR TO INSTALLING THE FILTER SOCKS.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION

NOT TO SCALE



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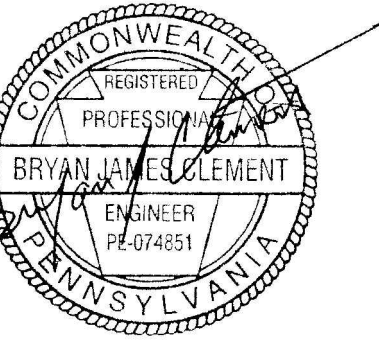


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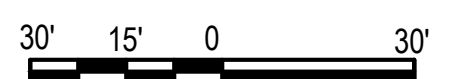
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