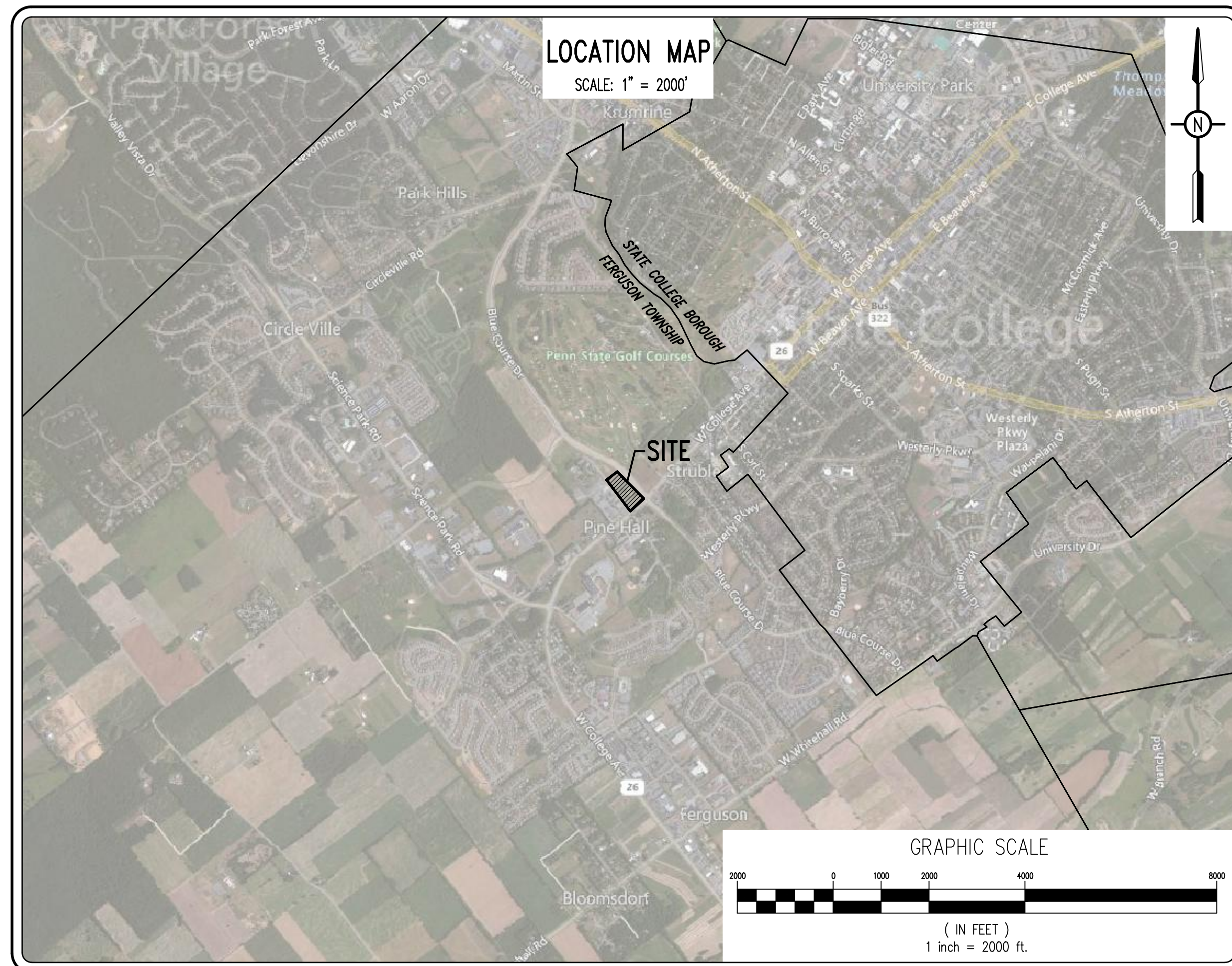


RUTTERS STORE #110

PRELIMINARY LAND DEVELOPMENT PLAN

FERGUSON TOWNSHIP * CENTRE COUNTY * PENNSYLVANIA
 DECEMBER 8, 2023



PennTerra
 ENGINEERING, INC.

CENTRAL PENNSYLVANIA REGION OFFICE:
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 SUITE 100
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 PH: 814-231-8285
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LANCASTER REGION OFFICE:
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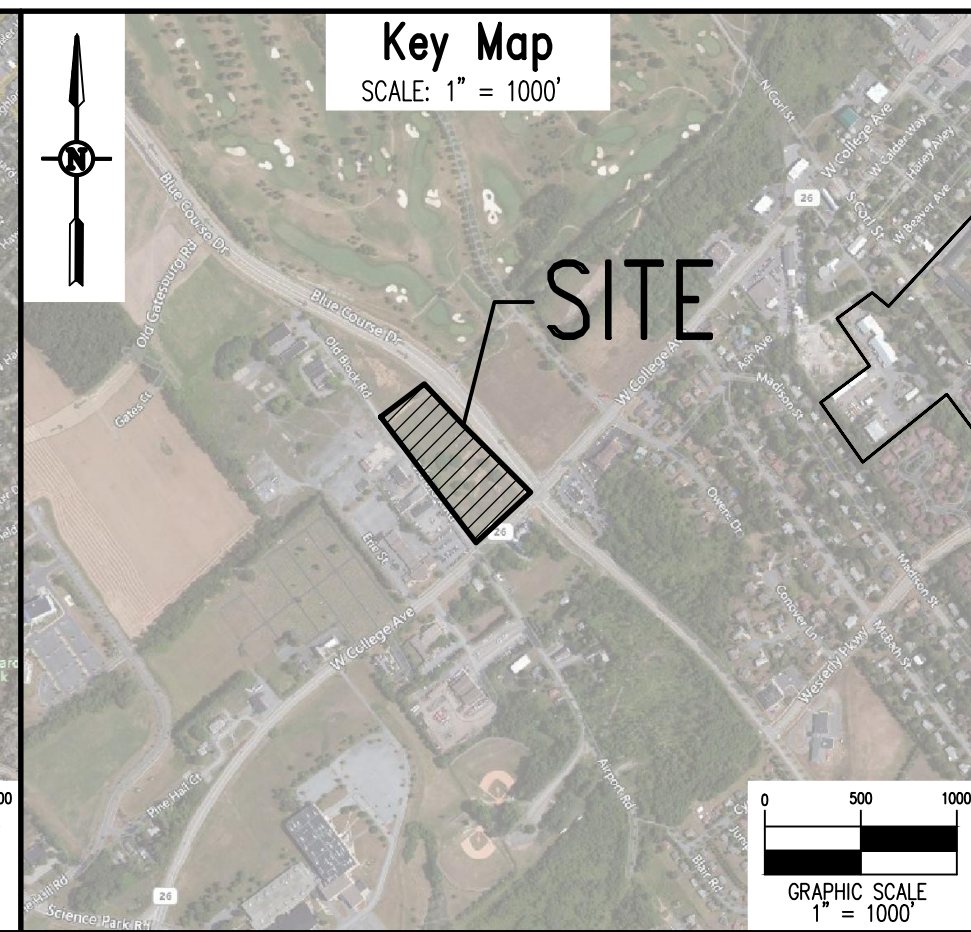
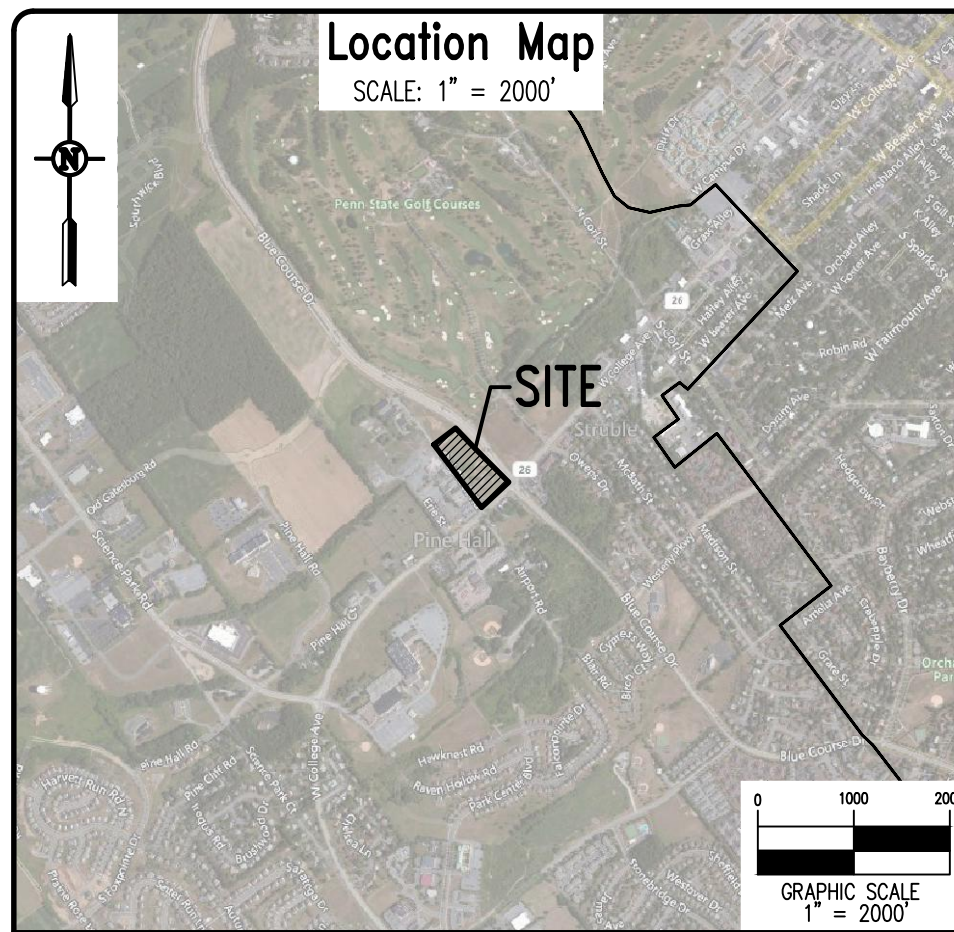
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ES3	EROSION & SEDIMENTATION CONTROL DETAILS

ACT 287 UTILITY INFORMATION:
 (SERIAL NUMBER: 20212303729)

All utility locations should be verified prior to any construction. Utility information and locations should be considered approximate. Contractor shall notify PA One Call prior to any excavation.

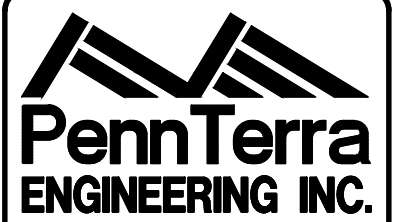
COMPANY: WINDSTREAM ADDRESS: 1450 CENTER POINT RD HIAWATHA, IA. 52233 CONTACT: LOCATE DESK PERSONNEL EMAIL: locate.desk@windstream.com PHONE: 800-289-1901	COMPANY: WEST PENN POWER ADDRESS: 800 CABIN HILL DR ROOM B100N GREENSBURG, PA. 15601 CONTACT: ROBERT PAINTER EMAIL: rpainter@firstenergycorp.com PHONE: 724-838-6825
COMPANY: COLUMBIA GAS OF PA INC ADDRESS: 1600 DUBLIN RD COLUMBUS, OH. 43215 CONTACT: LISA COLLINS EMAIL: ldugan@source.com PHONE: 614-325-5961	COMPANY: PENNSYLVANIA ELEC CO ADDRESS: 311 INDUSTRIAL PARK RD JOHNSTOWN, PA. 15904 CONTACT: KEITH GARDNER EMAIL: kgardner@firstenergycorp.com PHONE: 814-269-6678
COMPANY: COMCAST ADDRESS: 250 REESE RD STATE COLLEGE, PA. 16801 CONTACT: JEFF WALKER EMAIL: jeffrey.walker@cable.comcast.com PHONE: 814-954-5207	COMPANY: PENN STATE UNIVERSITY ADDRESS: 110 UNIVERSITY SUPPORT BLDG 2 UNIVERSITY PARK, PA. 16802 CONTACT: RANDY KIBE EMAIL: rsk17@psu.edu PHONE: 814-867-4611
COMPANY: VERIZON PENNSYLVANIA LLC ADDRESS: 1026 HAY ST PITTSBURGH, PA. 15221 CONTACT: DEBORAH BARUM EMAIL: deborah.d.delia@verizon.com PHONE: 412-344-3901	COMPANY: PENN STATE UNIVERSITY ADDRESS: WASTEWATER TREATMENT PLANT 501 UNIVERSITY DR STATE COLLEGE, PA. 16801 CONTACT: JEFF MCDONALD EMAIL: jsm86@psu.edu PHONE: 814-865-7701
COMPANY: FERGUSON TOWNSHIP ADDRESS: 3147 RESEARCH DR STATE COLLEGE, PA. 16801 CONTACT: CHRIS LEIDY EMAIL: cleidy@wp.ferguson.pa.us PHONE: 814-238-4651	COMPANY: STATE COLLEGE BOROUGH WATER AUTHORITY ADDRESS: 1201 W BRANCH RD STATE COLLEGE, PA. 16801 CONTACT: STEVEN ALBRIGHT EMAIL: steve@schwa.org PHONE: 814-238-6766 EXT. 119
COMPANY: UNIVERSITY AREA JOINT AUTHORITY ADDRESS: 1576 SPRING VALLEY RD STATE COLLEGE, PA. 16801 CONTACT: MARK HARTER EMAIL: mharter@uaa.org PHONE: 814-238-5361 EXT. 7715	


 BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA 1 CALL 1-800-242-1776 NON-MEMBERS MUST BE CONTACTED DIRECTLY



CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C1	157.37'	1265.33'	78.79'	S 41° 06' 24" E	157.27'	7° 07' 33"
C2	202.29'	4640.17'	101.16'	S 38° 47' 33" E	202.27'	2° 29' 52"
C3	287.34'	3779.83'	143.74'	S 44° 30' 04" W	287.27'	4° 21' 20"

LINE	DIRECTION	LENGTH
L1	S 46° 45' 30" W	20.15'
L2	N 46° 45' 30" E	20.15'



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Draftsman: D.J.L.
Proj. Manager: C.A.F.
Surveyor:
Perimeter Ok:
Book: Pg:
File: 21042-PRELM-04-RECORD
Layout: RECORD

Date	Description
	REVISIONS

RUTTERS STORE #110
FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

RECORD PLAN

PROJECT NO. 21042
DATE: DECEMBER 8, 2023
SCALE: 1" = 40'
SHEET NO. 4

EXISTING FEATURES LEGEND

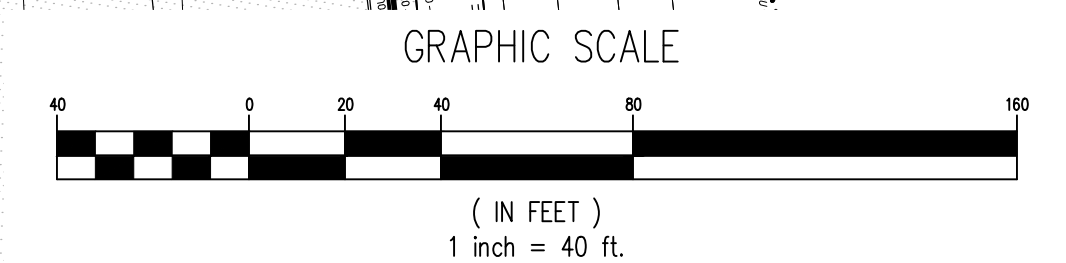
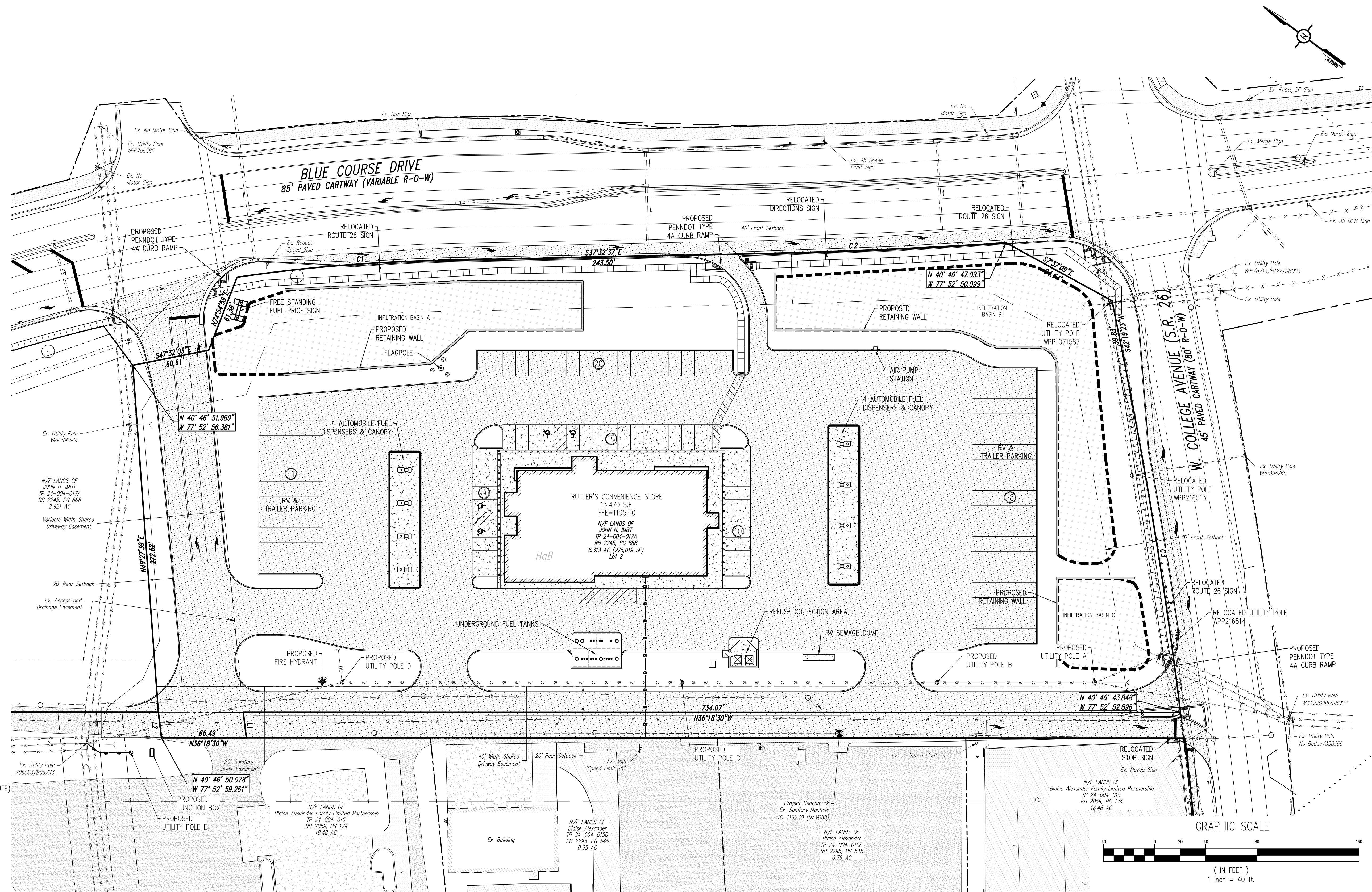
- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Underground Electric
- Existing Overhead Utility Line w/ Pole
- Existing Guy Wire
- Existing Bollard
- Existing Sign
- Existing Soil Type
- Existing Tree Row

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED FENCE / TYPE
- PROPOSED STORMWATER BASIN / BEST MANAGEMENT PRACTICE (BMP) FACILITIES
- PROPOSED PAINTED SITE CROSSWALK (ACCESSIBLE ROUTE)
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED PARKING STALL COUNT
- PROPOSED SIGN W/ LABEL
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP



UTILITY NOTES

1. Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify PA One call at 1-800-242-1776. The location of all utilities and underground structures are approximate and may not all be shown. It is the responsibility of the Contractor to determine the existence and exact location of all utilities and underground structures.
2. It is the responsibility of the Contractor to bid and perform all utility work in compliance to all applicable local and state codes and regulations. The Contractor shall be responsible for all fees associated with the installation, testing and final acceptance of all proposed utilities construction unless other arrangements have been made with the owner. Contractor shall be responsible for all fees associated with the installation, inspection, testing and final acceptance of all proposed utility construction.
3. Contractor shall coordinate with the appropriate utility company on the addition, removal and/or relocation of utilities and utility poles and the extension of all proposed utilities to the proposed facilities.
4. All utilities shall be installed in accordance with the specifications of the respective utility company. It is the responsibility of the Contractor to ensure all utilities are installed correctly to meet project requirements whether performed by the Contractor or not.
5. Contractor shall verify all utility service connections at the proposed building with the architectural/mechanical/plumbing/electrical plans.
6. An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
7. All sanitary sewer & water lines shall have 48" minimum coverage.
8. All public water main construction and all private water main & lateral service construction shall be in accordance with the water authority's standards and specifications.
9. All sanitary sewer service laterals shall be in accordance with the sanitary sewer authority's standards and specifications. PVC pipe material shall be as shown on plan.
10. An as-built drawing of new utility services must be prepared by the Contractor and submitted to the Owner upon completion of the project.
11. The Contractor shall be responsible for all costs and work required to adjust existing and proposed utilities and appurtenances to finished grades within the limits of work.
12. The Contractor shall be responsible for coordination with utility companies on location/removal and/or replacement of electrical, phone, gas, sanitary, water, and cable services.

STATE COLLEGE BOROUGH WATER AUTHORITY

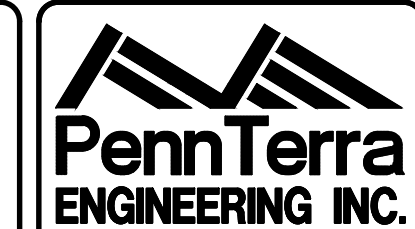
All private water main & lateral service construction shall be in accordance with State College Borough Water Authority's (SCBWA) "material & installation specifications for "private" distribution lines, service lines & fire hydrants", latest edition. All water line pipes shall meet the State College Borough Water Authority's "public water main, service connections & fire hydrant specifications for Contractor installation" as well as "material & installation specifications for "private" distribution lines, service lines & fire hydrants", latest edition.

UNIVERSITY AREA JOINT AUTHORITY

Sanitary sewer laterals & clean-outs beyond UAJA's utility easement shall be PVC schedule 40 in accordance with UAJA specifications. Sanitary sewer laterals within the utility easement shall be PVC SDR-35.

Contractor shall coordinate depths of non-gravity utility lines gravity line inverts & other non-gravity lines to obtain adequate depths, clearances, & coverage.

The Contractor shall refer to the architectural plans for the exact location of utility entrances, building dimensions, roof leaders exit doors, exit ramps, and porches. All site work shall be done in accordance with the plans prepared by PennTerra Engineering, the current regulations of the governing municipality, and all other pertinent federal, state & local laws. Any conflicts between the architectural plans and site plans shall be reported immediately to the Owner's representative.

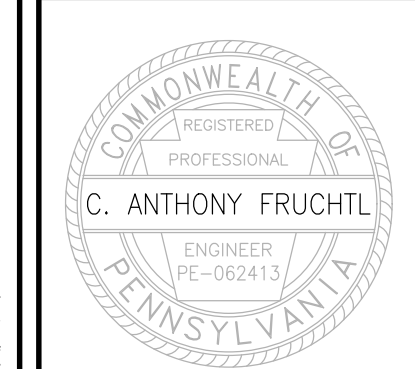


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Draftsman	D.J.L.
Proj. Manager	CAF
Surveyor	
Perimeter Ck.	
Book	Pg
File	2024-PREL-07-UTILITIES
Layout	UTILITIES

Date	Description
	REVISIONS

RUTTERS STORE #110
FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

UTILITY PLAN

PROJECT NO.	21042
DATE	DECEMBER 8, 2023
SCALE	1" = 40'
SHEET NO.	7

EXISTING FEATURES LEGEND

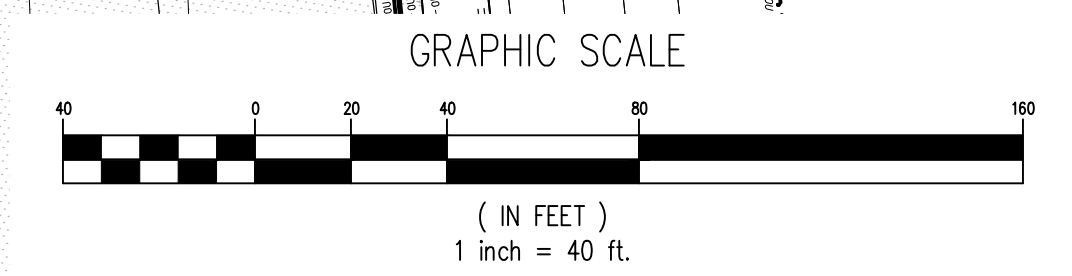
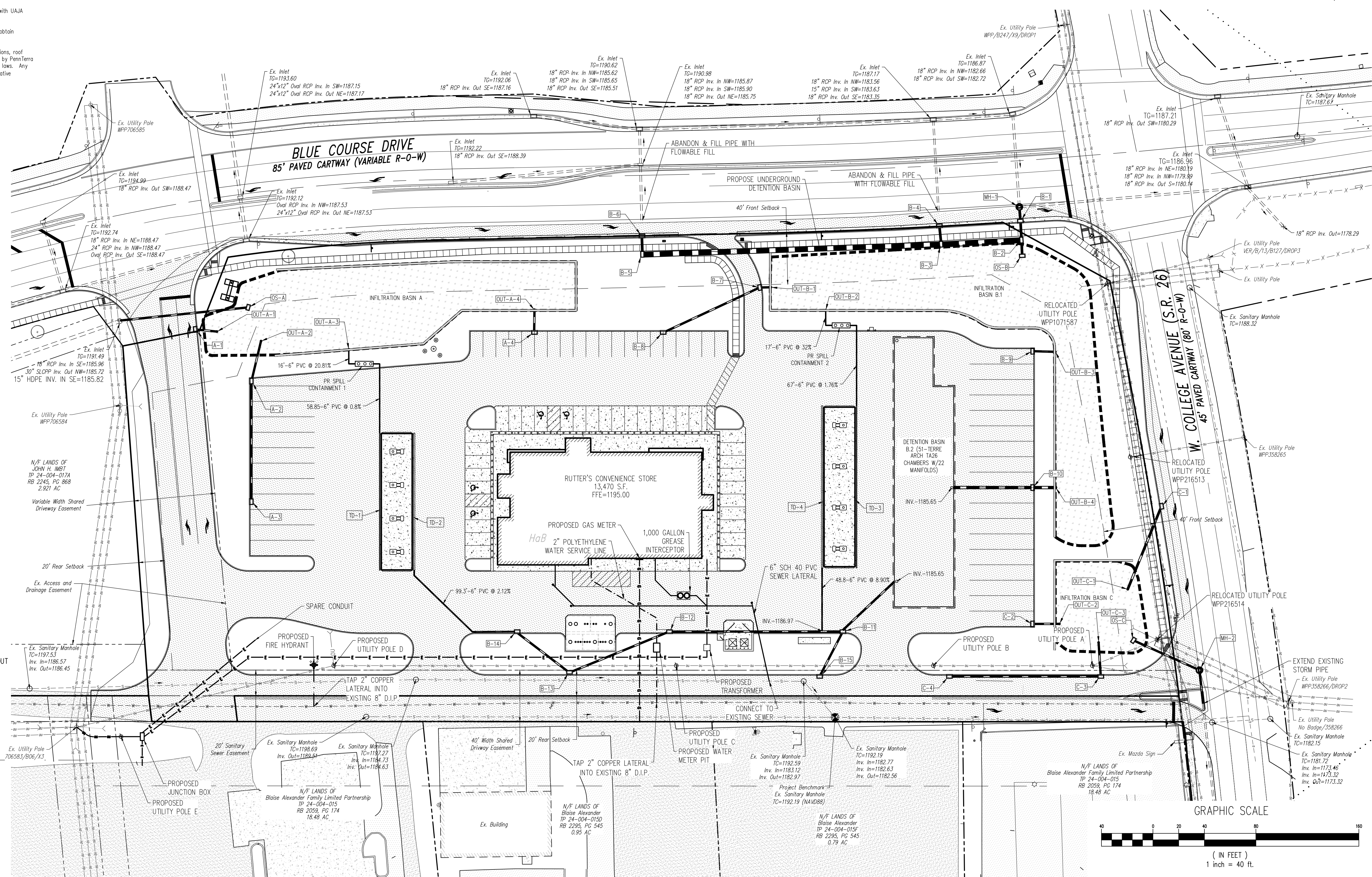
- EXISTING BUILDING Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
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- Existing Overhead Utility Line w/ Pole
- Existing Guy Wire
- Existing Bollard
- Existing Sign
- Existing Soil Type
- Existing Tree Row

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED FENCE / TYPE
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED 8" WATER LINE W/ VALVE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED GAS LINE
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED OVERHEAD UTILITY LINE W/ POLE
- PROPOSED FIRE HYDRANT
- PROPOSED STORMWATER BASIN/ BEST MANAGEMENT PRACTICE (BMP) FACILITIES
- PROPOSED PAINTED SITE CROSSWALK (ACCESSIBLE ROUTE)
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED SIGN W/ LABEL
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP



LANDSCAPE NOTES

- Trees are to be mulched individually in a 4' diameter circle.
- The mulch is to be double shredded hardwood bark mulch, well-aged and dark in color. Apply the mulch 3-4" thick.
- Plant material substitutions may only be permitted at the approval of the owner and approving municipality prior to planting.
- Any plantings which do not survive for a period of one year from the date of planting are to be replaced by the landscape contractor at no additional cost to the Owner.
- All new plant material is to be kept watered by the landscape contractor when working on site until acceptance of the completion of the landscape or end of the season (then resume next season until project is completed). The owner will be responsible for watering thereafter.
- All disturbed areas not being planted in trees or shrubs are to be fine graded with 6" of topsoil and seeded with a hardy perennial grass seed mixture and mulched with straw.
- Grass must be 2 inches high over 90% of the seeded areas prior to acceptance by the owner.
- All caliper measurements for landscaping shall be measured at 6" above the root ball.
- Quantities of plant material noted on the planting schedule are to be verified with quantities shown on the plan which will have priority.
- See sheet _____ for lawn and basin bottom seed mixes.

PLANTING SCHEDULE					
SYMBOL	KEY	QTY	COMMON NAME	BOTANICAL NAME	SIZE
CANOPY TREES					
	T-1	24	London Planetree	Platanus x acerifolia	2" Cal.
	T-2	13	Armstrong Maple	Acer x freemani "Armstrong"	2" Cal.
SHRUBS					
	S-1	218	Allegheny Viburnum	Viburnum x rhytidophyllum	36"
	S-2	210	Red Chokeberry	Aronia arbutifolia	36"

NOTE: ALL TREES AND SHRUBS SHALL BE PLANTED IN ACCORDANCE WITH THE FERGUSON TOWNSHIP STANDARDS.

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Underground Electric
- Existing Overhead Utility Line w/ Pole
- Existing Guy Wire
- Existing Bollard
- Existing Sign
- Existing Soil Type
- Existing Tree Row

SURVEY FEATURES LEGEND

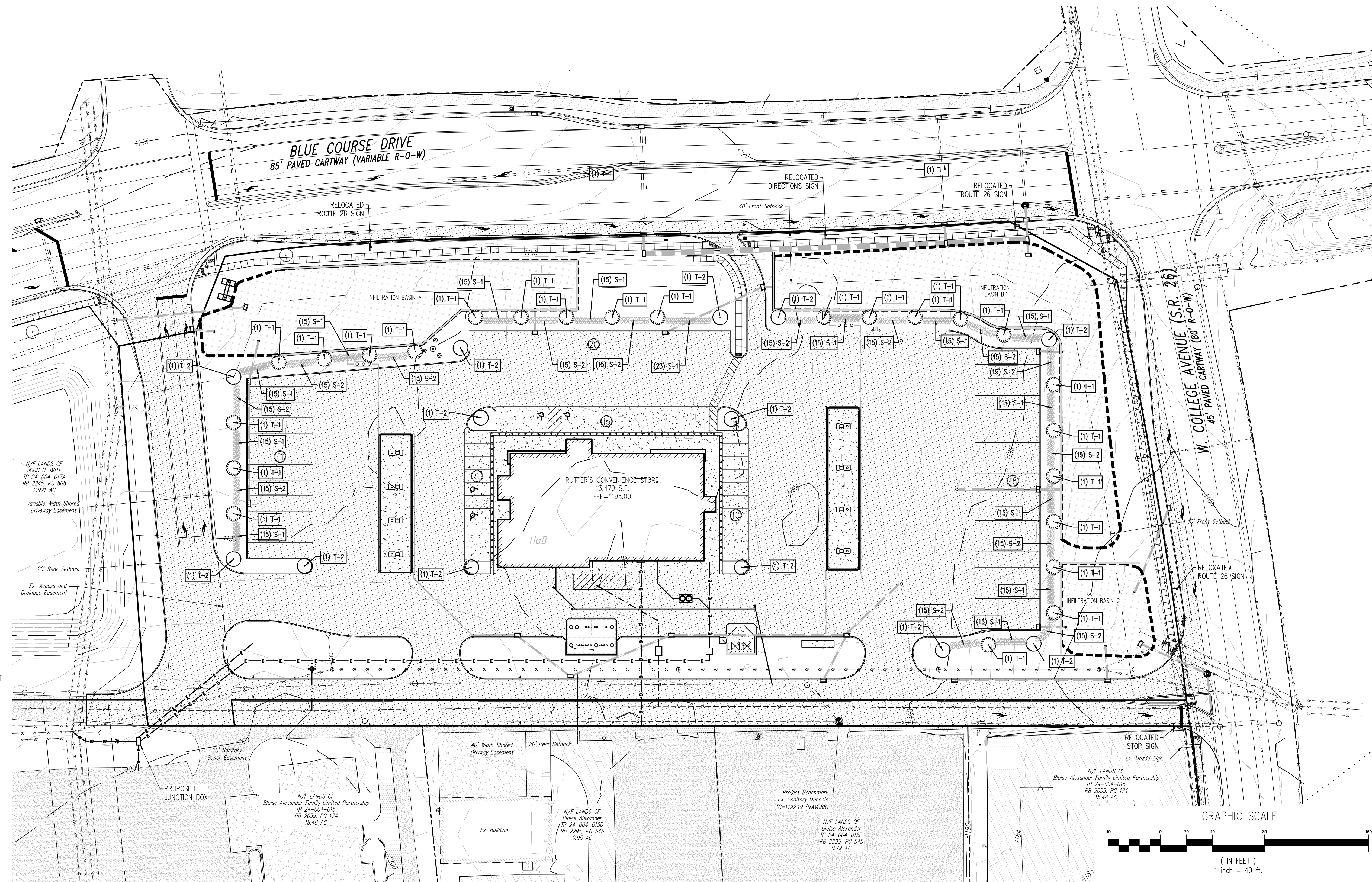
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SOILS LEGEND

Soil cover on the site consists of:
 HaB - Hagerstown silt loam, 3%-8% Slopes

PROPOSED FEATURES LEGEND

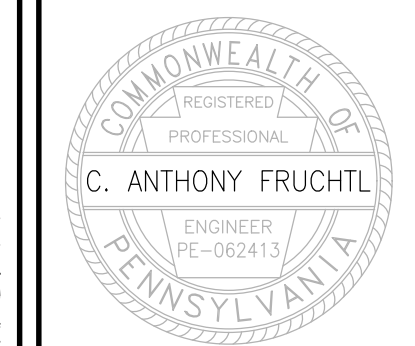
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Draftsman	D.J.L.
Proj. Manager	CAF
Surveyor	
Perimeter Ck.	
Book	Pg
File	2024-PRJ-18-LANDSCAPE
Layout	LANDSCAPE

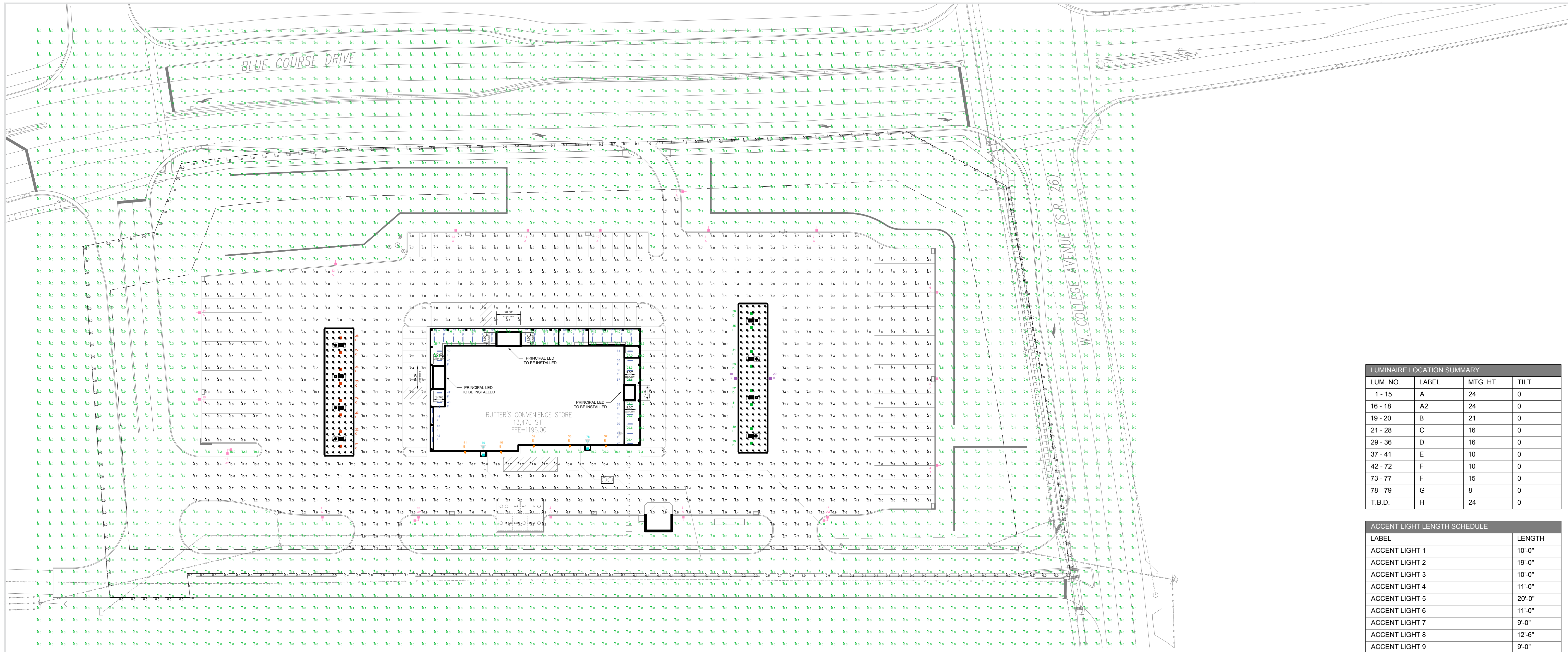
Date	Description
	REVISIONS

RUTTERS STORE #110
 FERGUSON TOWNSHIP
 CENTRE COUNTY
 PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

LANDSCAPING PLAN

PROJECT NO.	21042
DATE	DECEMBER 8, 2023
SCALE	SHEET NO.
1" = 40'	8



LUMINAIRE LOCATION SUMMARY			
LUM. NO.	LABEL	MTG. HT.	TILT
1 - 15	A	24	0
16 - 18	A2	24	0
19 - 20	B	21	0
21 - 28	C	16	0
29 - 36	D	16	0
37 - 41	E	10	0
42 - 72	F	10	0
73 - 77	F	15	0
78 - 79	G	8	0
T.B.D.	H	24	0

ACCENT LIGHT LENGTH SCHEDULE	
LABEL	LENGTH
ACCENT LIGHT 1	10'-0"
ACCENT LIGHT 2	19'-0"
ACCENT LIGHT 3	10'-0"
ACCENT LIGHT 4	11'-0"
ACCENT LIGHT 5	20'-0"
ACCENT LIGHT 6	11'-0"
ACCENT LIGHT 7	9'-0"
ACCENT LIGHT 8	12'-6"
ACCENT LIGHT 9	9'-0"

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
CANOPY_DIESEL	36.45	52	13	2.80	4.00
CANOPY_GAS	40.44	60	14	2.89	4.29
PAVED AREA	4.05	25.0	0.6	6.75	41.67
PROPERTY LINE	0.11	1.2	0.0	N.A.	N.A.
UNDEFINED AREA	0.62	39.2	0.0	N.A.	N.A.

NOTES:
 - ALL AREA LIGHTS ARE ON NEW 20 FT. POLES MOUNTED ON 4 FT. CONCRETE BASES TO MEET ORDINANCE REQUIREMENT.

- THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES.

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
[Symbol]	15	A	SINGLE	18000	1.020	B3-U0-G2	175	2625	CREE, INC.	OSQ-ML-C-DA-BK + OSQ-C-30L-57K7-4B-UL-NM-BK
[Symbol]	3	A2	2 @ 90 DEGREES	18000	1.020	B3-U0-G2	175	1050	CREE, INC.	OSQ-ML-C-DA-BK + OSQ-C-30L-57K7-4B-UL-NM-BK
[Symbol]	2	B	SINGLE	28500	1.020	B3-U0-G3	175	350	CREE, INC.	OSQ-ML-C-AA-BK + OSQ-C-30L-57K7-4M-UL-NM-BK + PGM-1
[Symbol]	8	C	SINGLE	20899	1.020	B4-U0-G2	127	1016	CREE, INC.	CP5-20L-57K7-DF-UL-RC-WH-Q9
[Symbol]	8	D	SINGLE	20899	1.020	B4-U0-G2	127	1016	CREE, INC.	CP5-20L-57K7-DF-UL-RC-BZ-Q9
[Symbol]	5	E	SINGLE	12425	1.030	B3-U0-G2	134	670	CREE, INC.	SEC-EDG-4M-WM-06-E-UL-BK-700-40K
[Symbol]	36	F	SINGLE	4092	1.000	B2-U1-G1	28	1008	H.E. WILLIAMS, INC.	75S-4-L50/940-(L40)-HEW BLACK-DIM-UNV
[Symbol]	2	G	SINGLE	3803	1.020	B2-U0-G1	29	58	CREE, INC.	CPY250-C-4L-40K9-F-UL-DM-BK
[Symbol]	T.B.D.	H	SINGLE	305/FT	1.000	N.A.	4/FT	N.A.	PRINCIPAL LED	M-SX-24-40 (STREET WRAP FLEX BACK BEND 4000K) (SEE ACCENT LIGHT SCHEDULE)

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QTY	LABEL	DESCRIPTION
STREET WRAP	T.B.D	M-SX-24-40 (STREET WRAP FLEX BACK BEND 4000K) (SEE ACCENT LIGHT SCHEDULE)



STREET WRAP™ FLEX BACK-BEND

Our border solution is perfect for adding an extra punch of color to your building! No pricey customization or set-up fee. Enjoy wrapping your building quickly and easily.

SPECIFICATIONS		FEATURES	
Certifications	UL 94V0, UL & cUL Recognized (SAM Manual, CE, RoHS)	Bends front to back	
Dimensions	24" and Custom Lengths Available	2.36" minimum bending radius	
Input	24V	Dual emission, diffused silicone lens and thermal conductive base	
Operating Temp	-40° to +65°C	Easy installation	
Power	3.60 W per foot	Applications: neon tube light source, building and sign outline lighting, and/or lighting, indoor/outdoor	
Power Supply	P-LED-24V	UV resistant	
Protection Grade	IP67	Evenly illuminates	
Run Footage	Max. 24'	Standard color cuttable every 3.937" (100mm), RGB cuttable every 2.811" (71mm)	

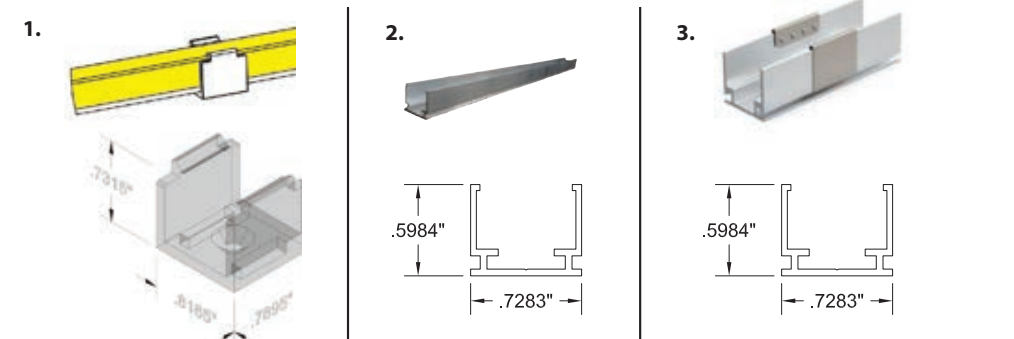
PRODUCT OPTIONS							
Color	Wavelength/CCT	Jacket Color	Lm./ft.	Cut Section Length	Max Length/50 W PS	W/Max Length	SKU
Sign White	6500K	White	305	3.937" (100mm)	287.4016'	87.7	M-SX24-45
Natural White	5000K	White	305	3.937" (100mm)	287.4016'	87.7	M-SX24-50
Medium White	4000K	White	305	3.937" (100mm)	287.4016'	87.7	M-SX24-40
Red	623 nm	Red	82	3.937" (100mm)	287.4016'	87.7	M-SX24-RD
Blue	468 nm	Blue	20	3.937" (100mm)	287.4016'	87.7	M-SX24-BL
Green	525 nm	Green	140	3.937" (100mm)	287.4016'	87.7	M-SX24-GR
Yellow	590 nm	Yellow	158	3.937" (100mm)	287.4016'	87.7	M-SX24-YL
Orange	609 nm	Orange	116	3.937" (100mm)	287.4016'	87.7	M-SX24-OR
Cyan	N/A	White	36	2.811" (71.4mm)	287.7244"	87.5	M-SX24-CN
Amber	N/A	White	41	2.811" (71.4mm)	287.7244"	87.5	M-SX24-AM
Pink	N/A	White	17	2.811" (71.4mm)	287.7244"	87.5	M-SX24-PK
RGB	N/A	White	N/A	2.811" (71.4mm)	287.7244"	87.5	M-SX24-3C

Custom colors will utilize white LEDs behind a color matched silicone over molding and the MOQ is 656,166ft. (200 meters).

IMPORTANT WARRANTY INFO
This warranty is void if any cuts are made in the field. Any cuts must be made by Principal LED to maintain warranty.
NOTE: The LED uses heat and all its components may not be mechanically stressed. Please ensure that the power supply is adequate to operate the total load. Only qualified personnel should be allowed to perform installation. The design of the housing should be according to their standards in the application. If a sign protection structure is not within power supplies, a lightning protector should be needed additionally. Before cutting and sealing, please read the user manual, and please ensure you have read and fully understand it. Please do not twist the product and do not bend it in wrong direction, see Figure 1 for a correct demonstration.

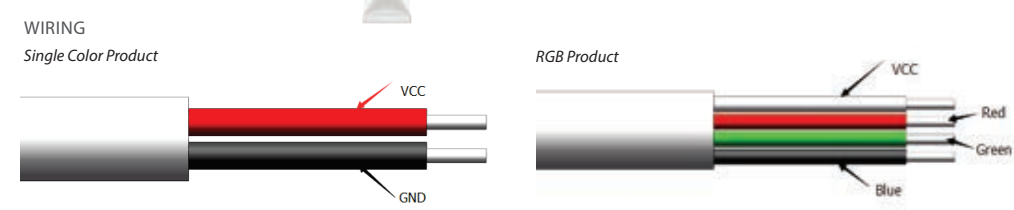


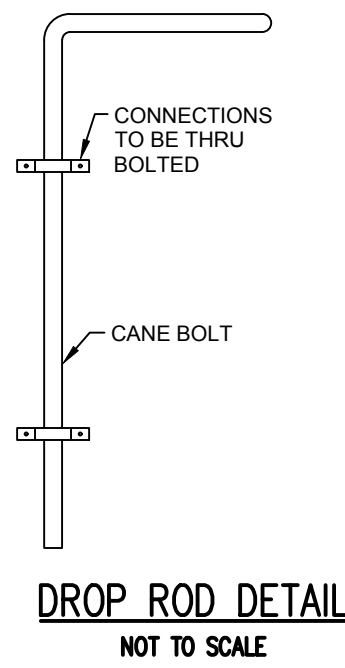
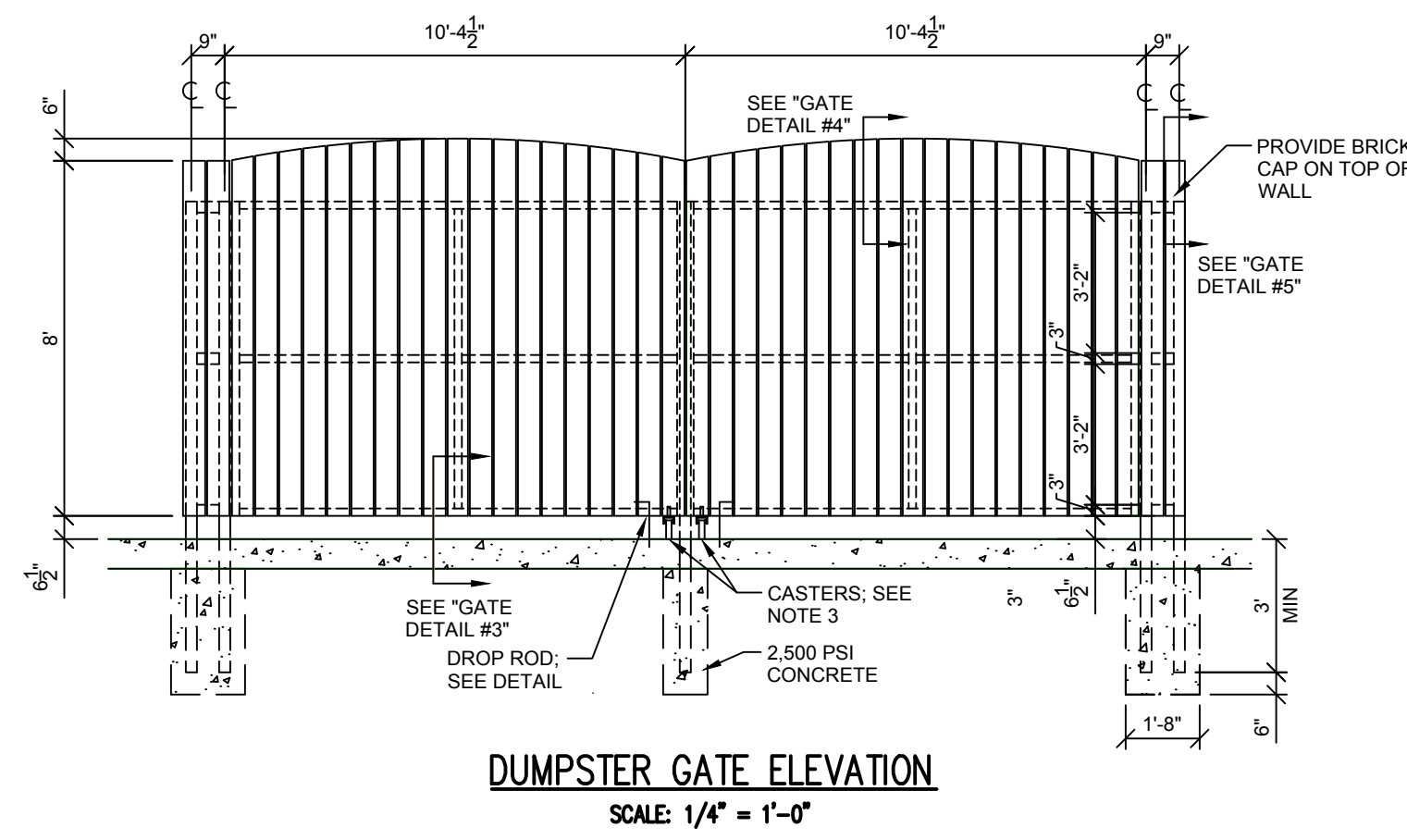
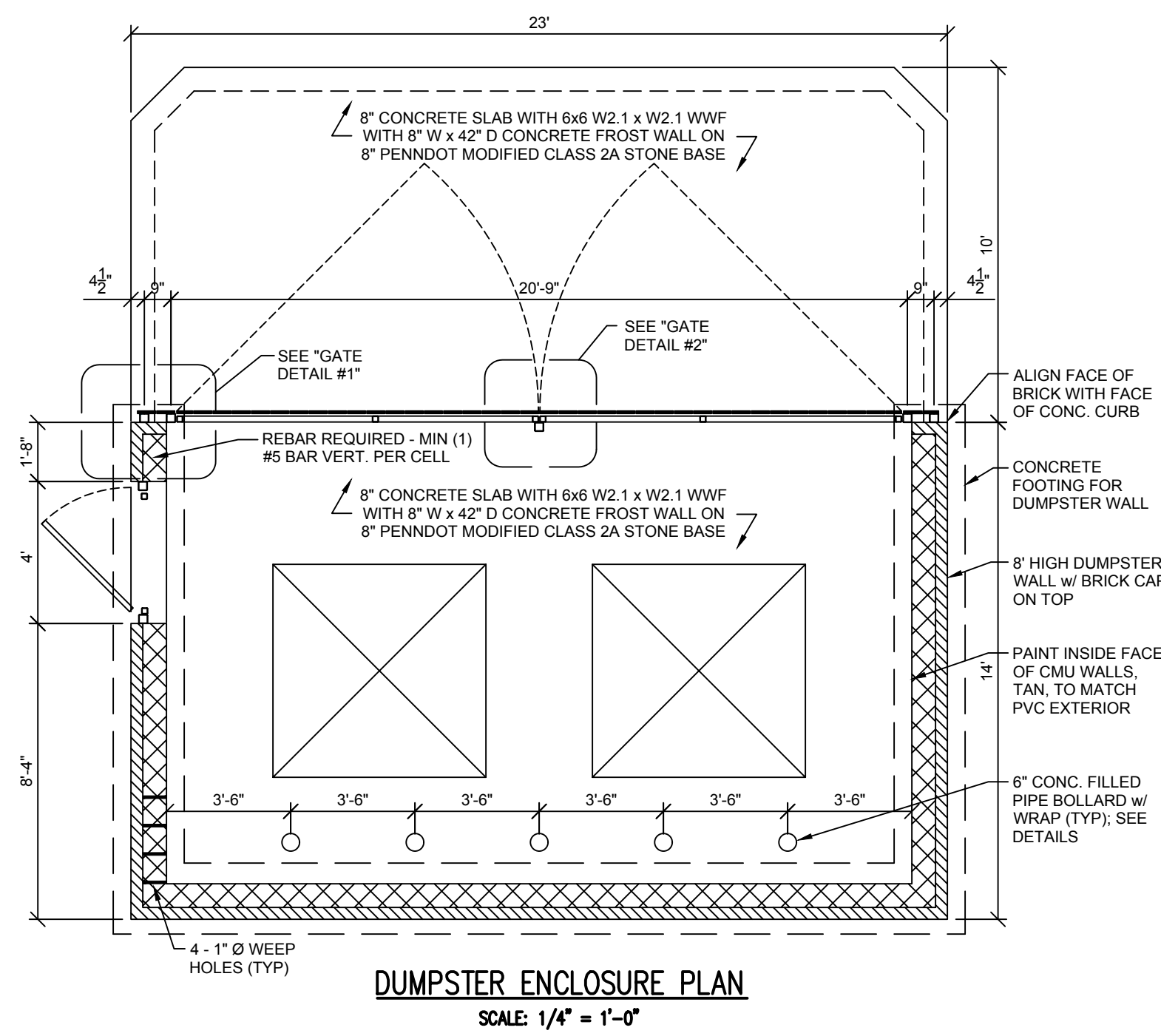
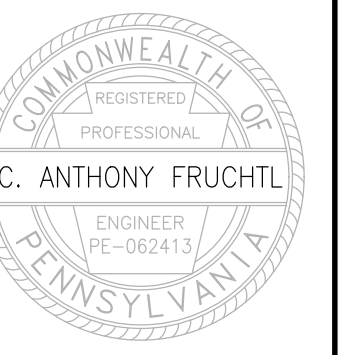
INSTALLATION ACCESSORIES		
Type	Description	Part Number
1	Transparent PC clips	A-SXMH-CLPL
2	3.28 Ft. and 8 Ft. aluminum mill finish extrusions for outdoor application	A-SXMH-FRAL
3	Aluminum mill finish clips for outdoor applications - 1.96687"ps	A-SXMH-CLAL



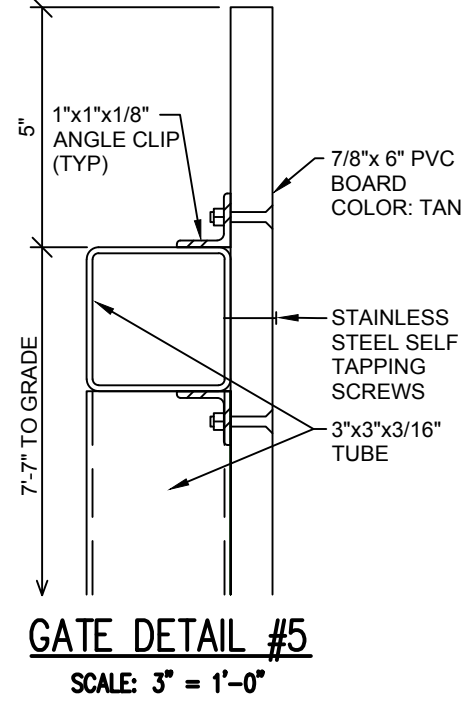
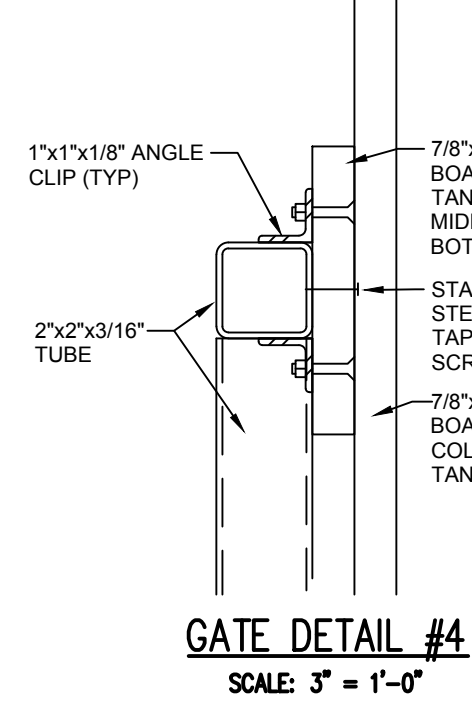
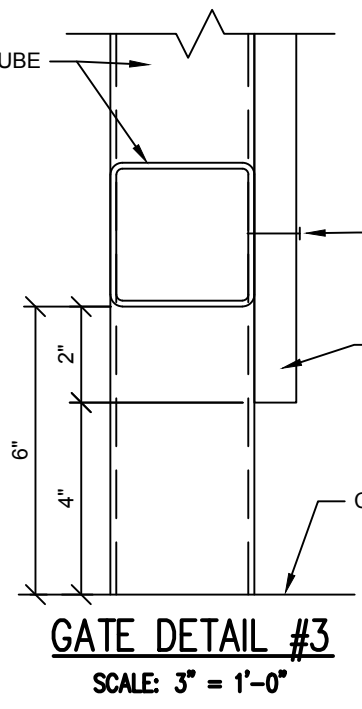
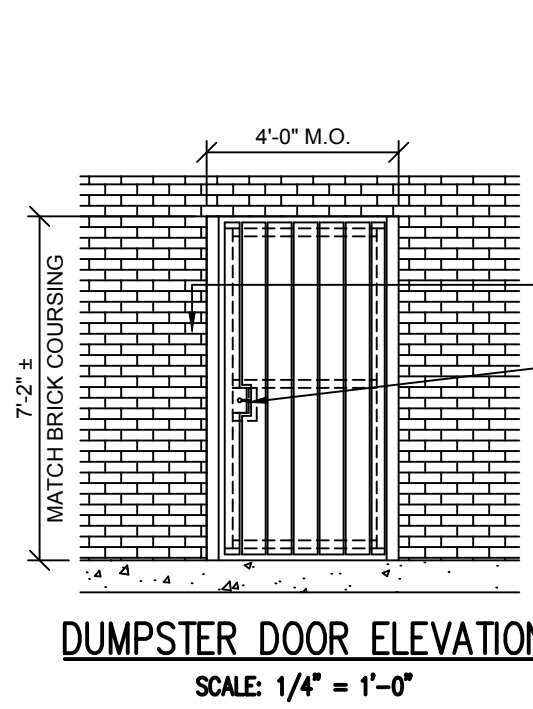
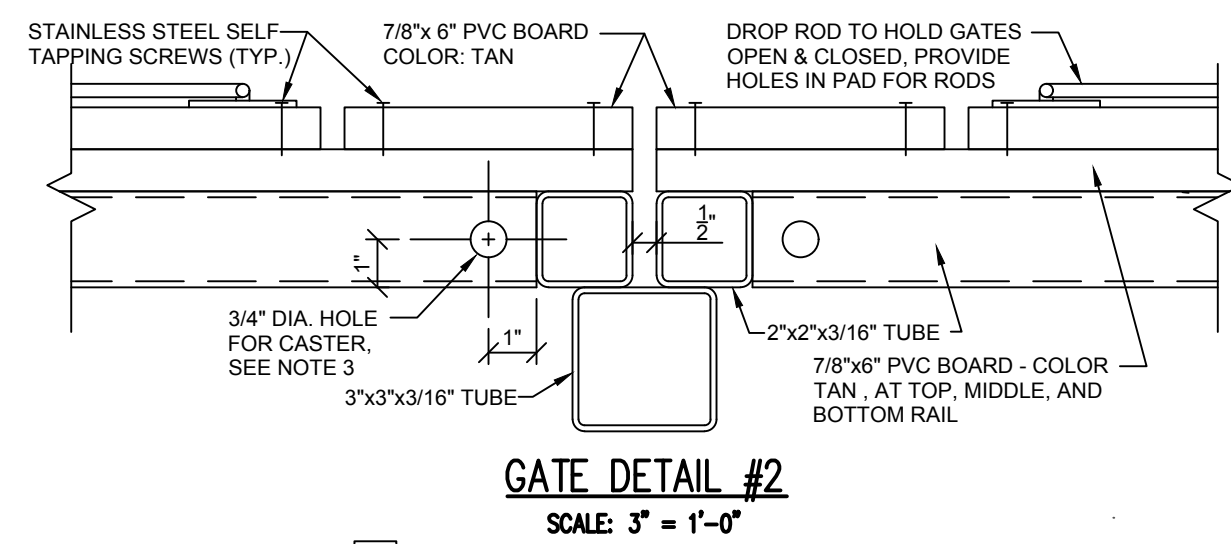
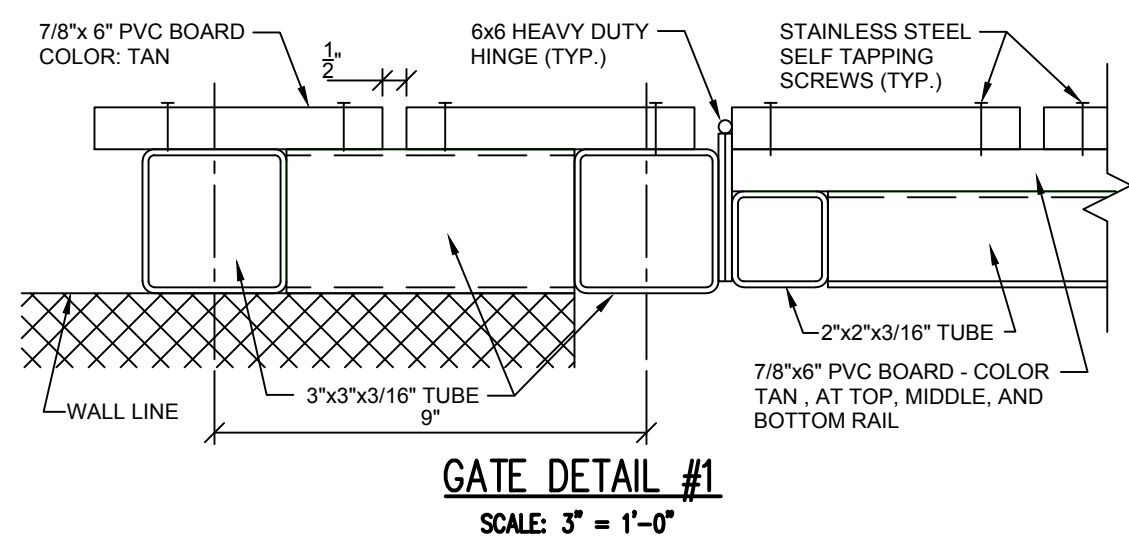
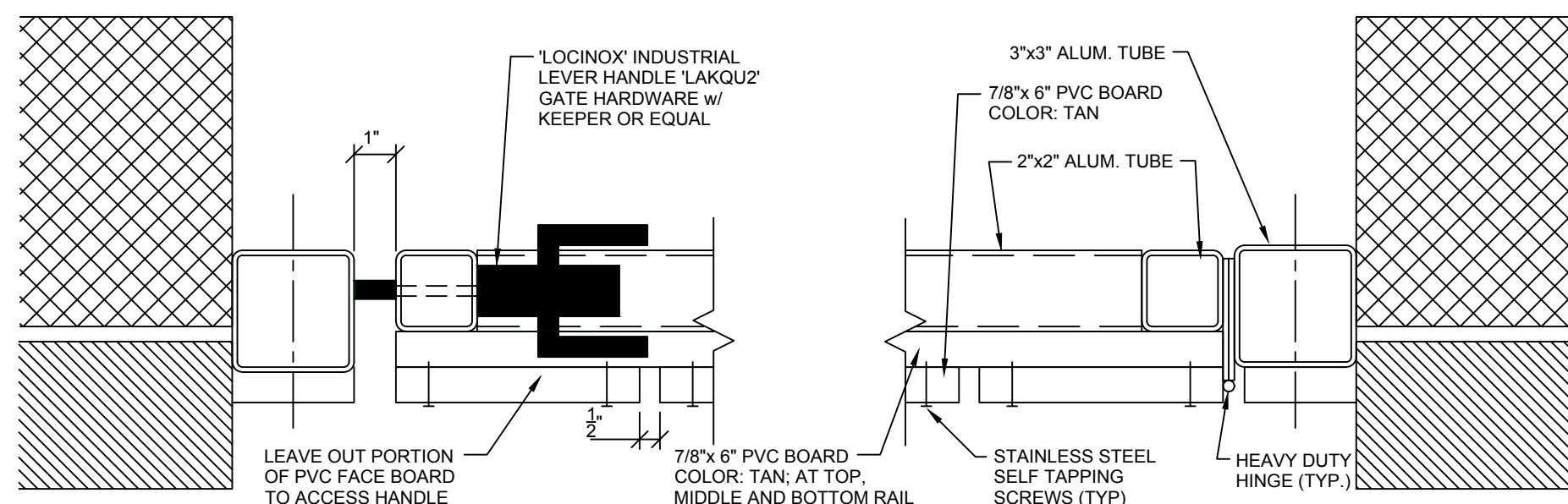
END CAP		
Type	Product	Ordering Part Number
1	Silicone End Cap	A-SXWH-ECB
2a	Silicone Insert Single Color	X-C-SX-G1C
2b	Silicone Insert RGB	X-C-SX-G3C
3	Silicone Glue	A-SXWX-SA

End cap quantities are available upon request.





- NOTES:**
1. ALL FASTENERS TO BE STAINLESS STEEL. COLOR TO MATCH PVC.
 2. ALL METAL FRAMES TO BE PAINTED TAN TO MATCH PVC.
 3. CASTERS TO BE MODEL NO. 3.00514.309 WITH TREAD LOCK & 3/4" DIAMETER STEM BY COLSON



DUMPSTER ENCLOSURE DETAILS

Designer	D.J.L.
Draftsman	D.J.L.
Proj. Manager	CAF
Surveyor	
Perimeter Clk.	
Book	Pg
File	21042-PRELU-10-DETAILS
Layout	DETAILS (4)

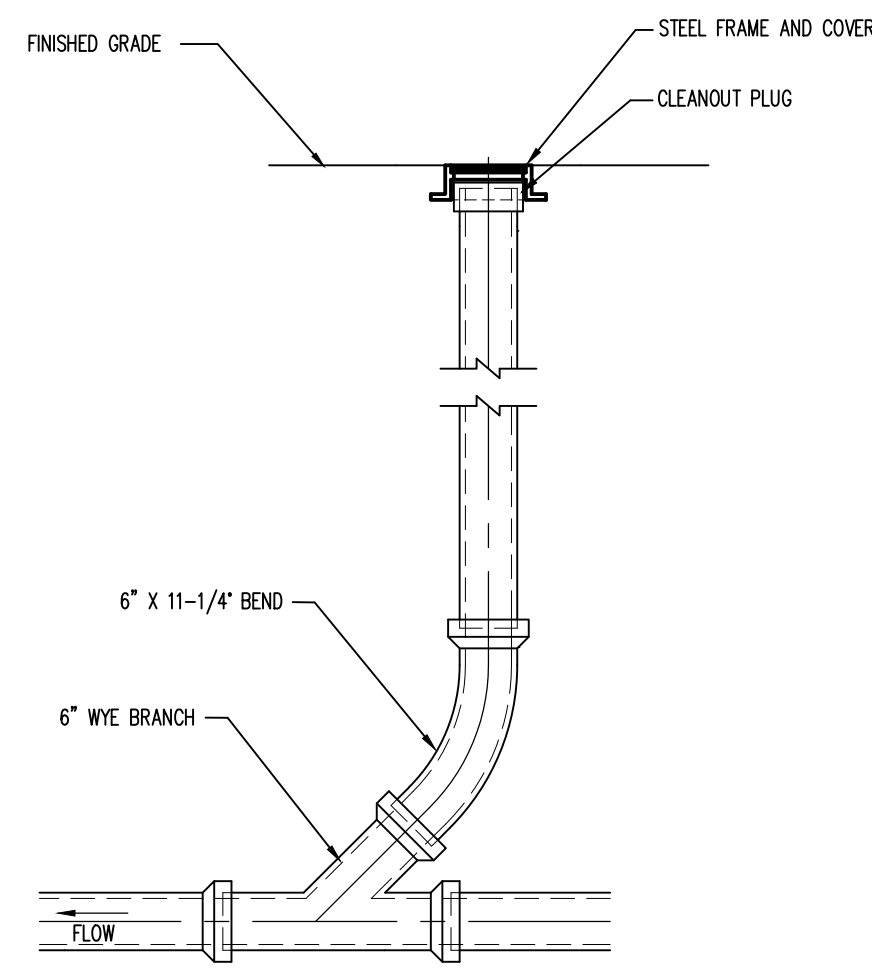
Date	Description

RUTTERS STORE #110
FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

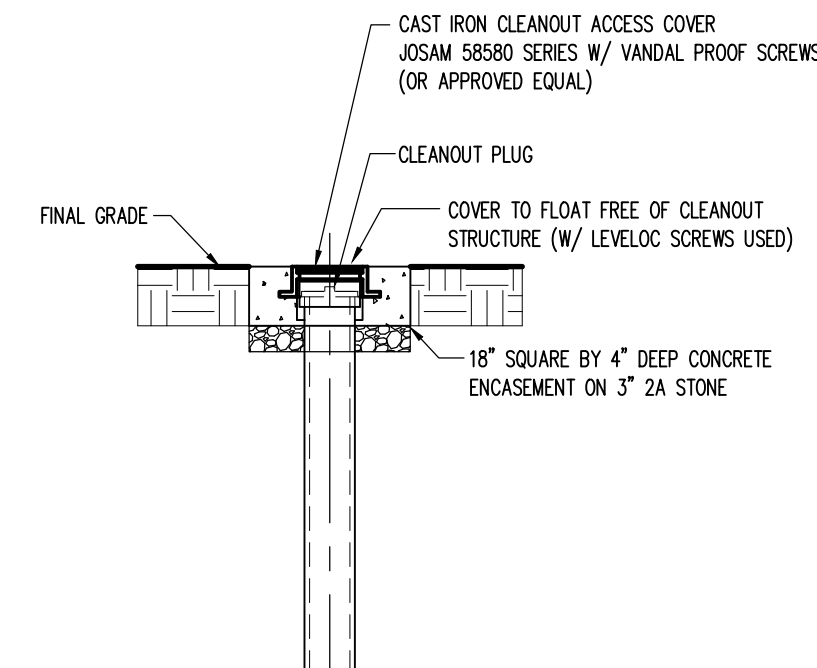
PRELIMINARY LAND DEVELOPMENT PLAN

GENERAL SITE DETAILS

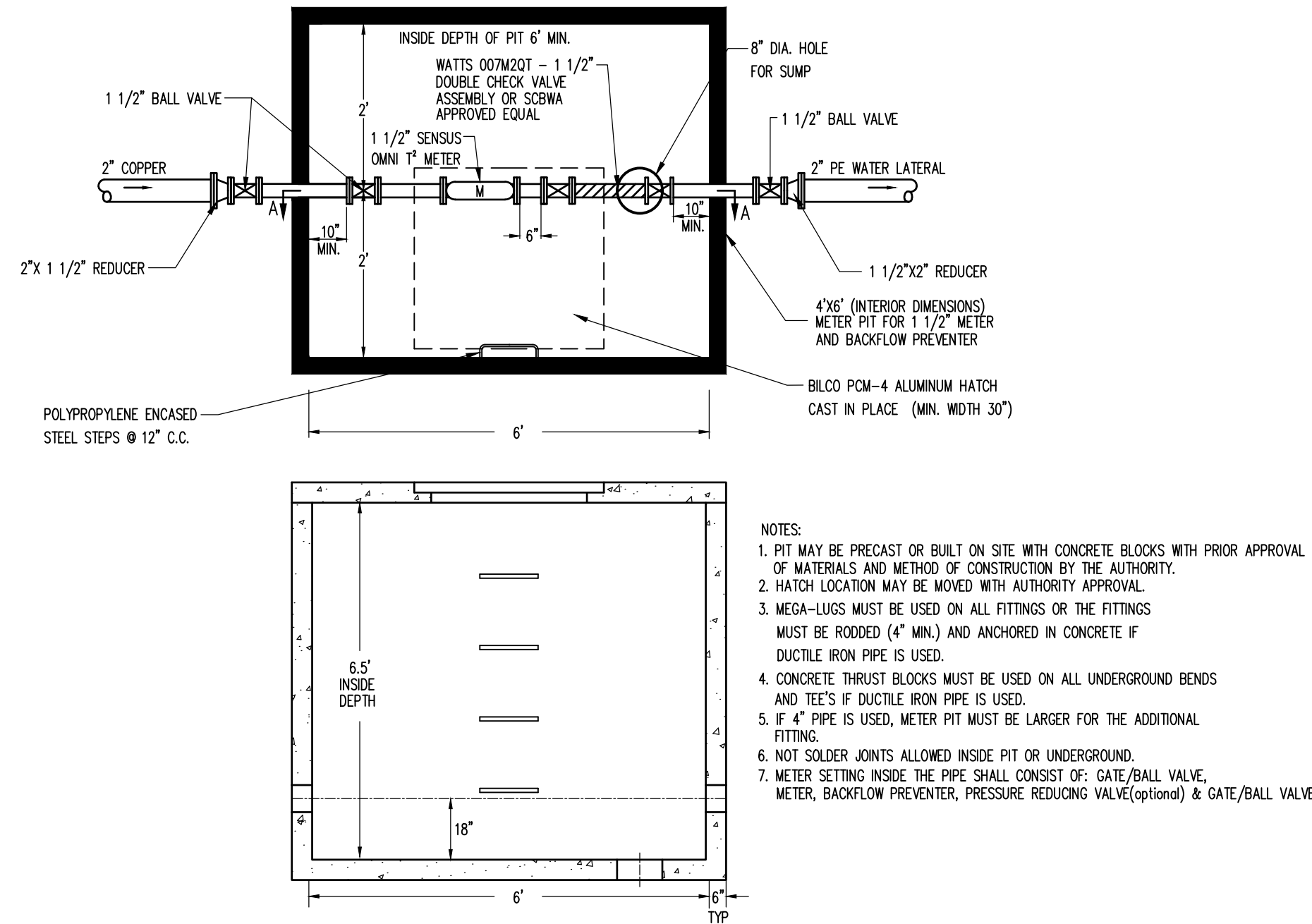
PROJECT NO.	21042
DATE	DECEMBER 8, 2023
SCALE	N.T.S.
SHEET NO.	12



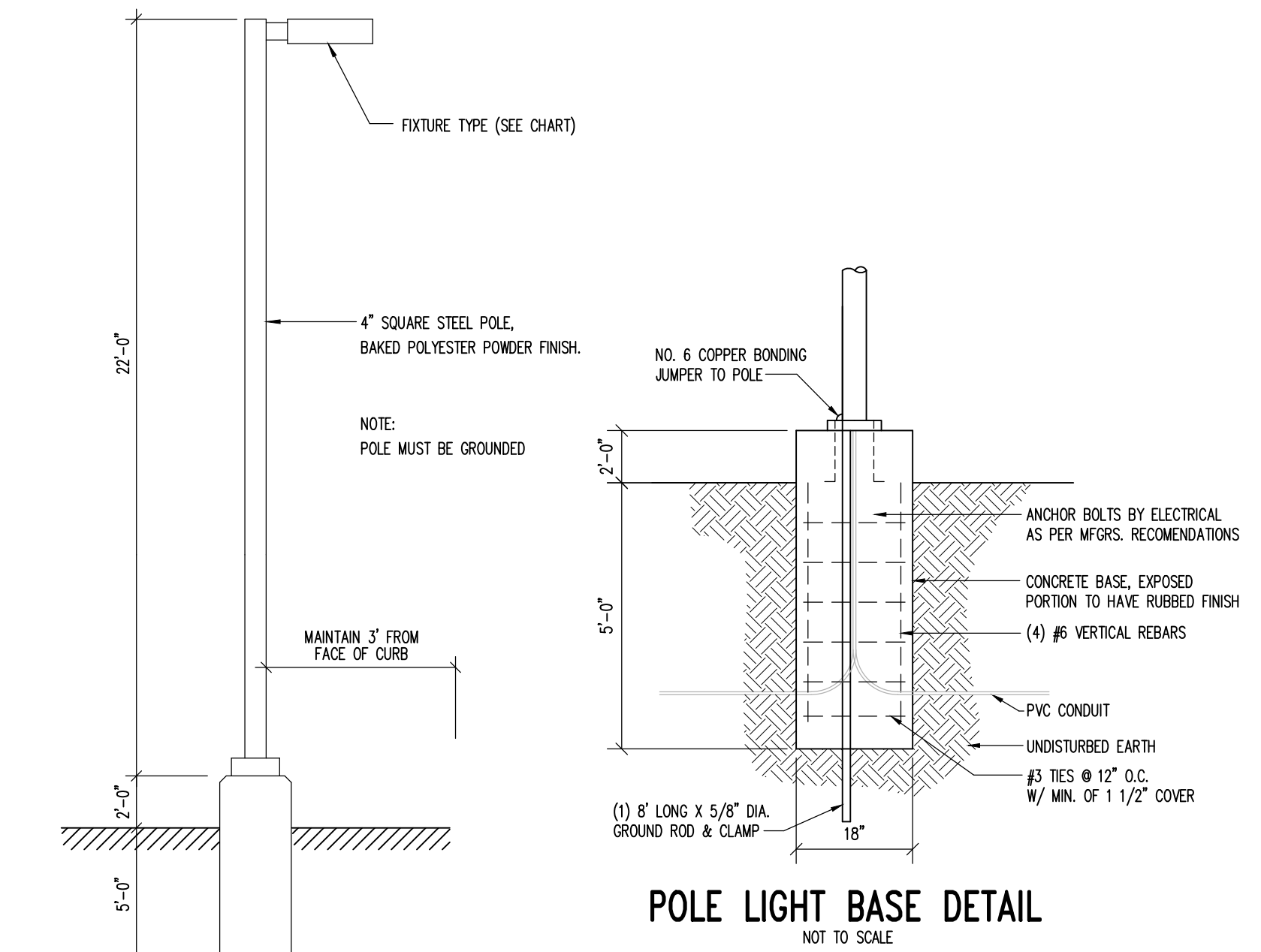
6" SANITARY SEWER CLEAN-OUT DETAIL
NOT TO SCALE



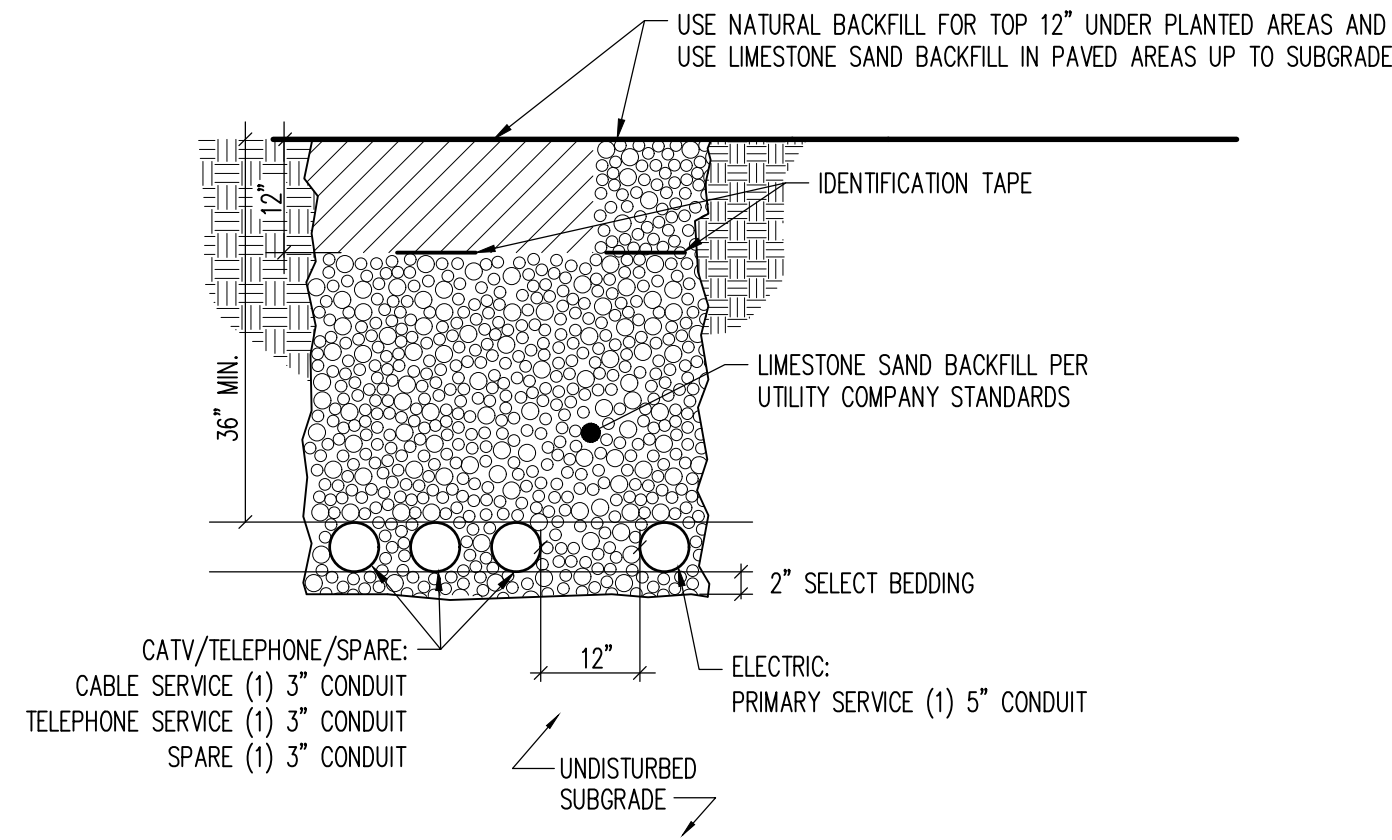
6" SANITARY SEWER CLEAN-OUT COVER
NOT TO SCALE



1 1/2" METER & DOUBLE CHECK VALVE ASSEMBLY
NOT TO SCALE

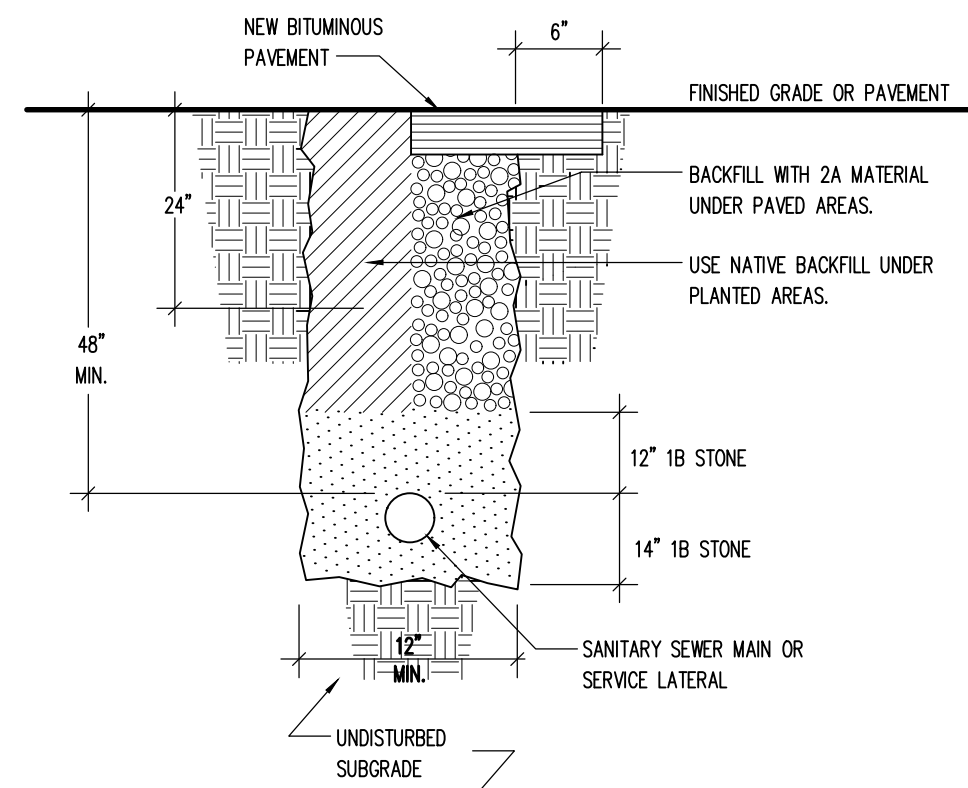


SITE LIGHTING POLE DETAIL
NOT TO SCALE

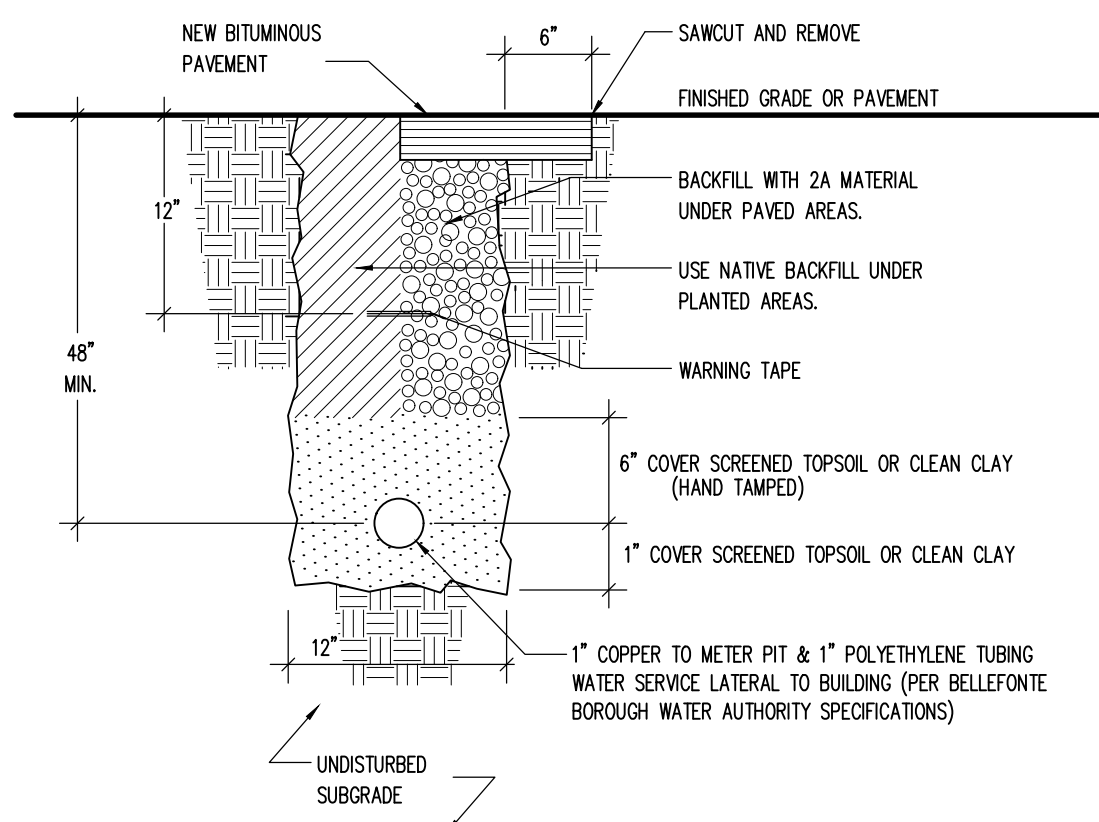


- NOTES: 1. LIMESTONE SAND BACKFILL PER UTILITY COMPANY STANDARDS.
2. REFER TO UTILITY COMPANY DESIGN PLANS FOR LOCATIONS AND SIZES OF PVC CONDUITS.
3. INSTALL CONDUIT FOR POWER, TELEPHONE, & CATV AS SHOWN ON UTILITY PROVIDER PLANS.

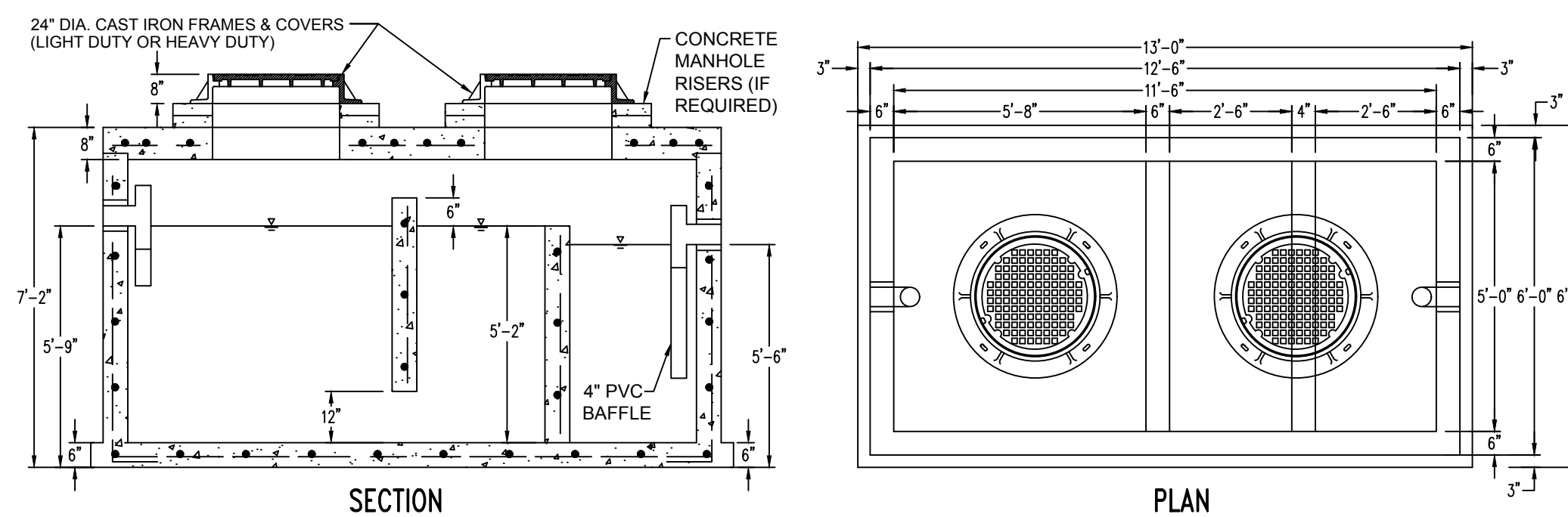
ELECTRIC, TELEPHONE & CABLE TRENCH DETAIL
NOT TO SCALE



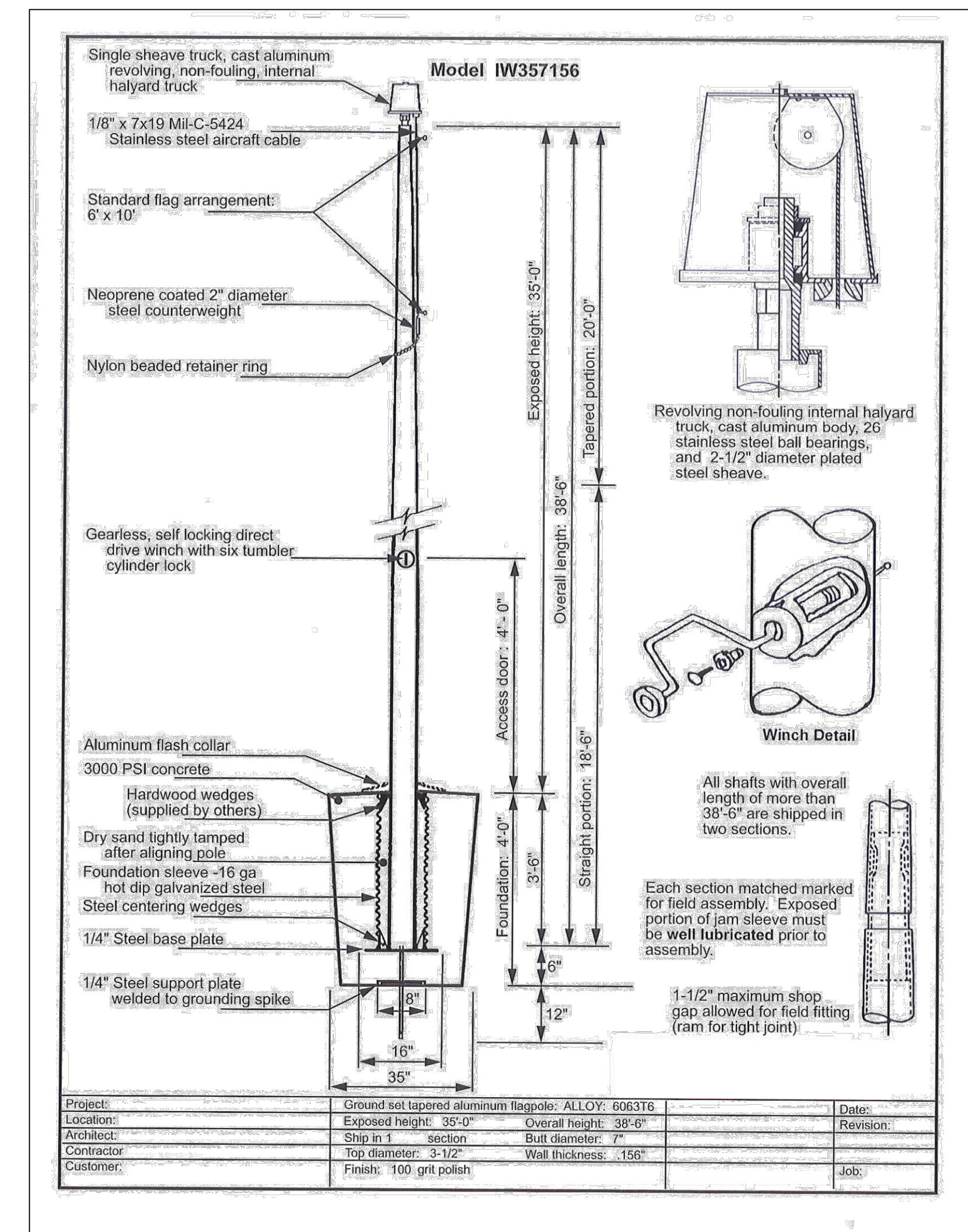
SANITARY LATERAL TRENCH DETAIL
NOT TO SCALE



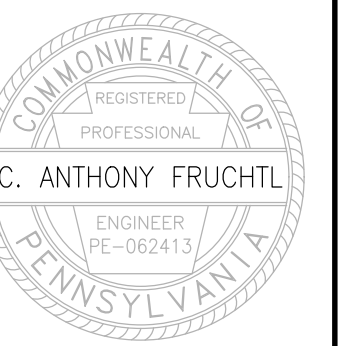
WATER LAT TRENCH DETAIL
NOT TO SCALE



2000 GALLON COMMERCIAL GREASE INTERCEPTOR
NOT TO SCALE



Project:	Ground set tapered aluminum flagpole: ALLOY: 6063T6	Date:	
Location:	Exposed height: 35'-0"	Overall height: 38'-6"	Revision:
Architect:	Ship in 1 section	Butt diameter: 7"	
Contractor:	Top diameter: 3-1/2"	Wall thickness: .156"	
Customer:	Finish: 100 grit polish		



Designer	D.J.L.
Draftsman	D.J.L.
Proj. Manager	CAF
Surveyor	
Perimeter Ok.	
Book	Pg
File	2046-PRELIM-TO-DETAILS
Layout	UTILITY DETAILS

REVISIONS	
1	
2	
3	
4	
5	
6	
Date	Description

RUTTERS STORE #110
FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

UTILITY DETAILS

PROJECT NO.	21042
DATE	DECEMBER 8, 2023
SCALE	N.T.S.
SHEET NO.	13

CRITICAL STAGES OF CONSTRUCTION NOTES

The following stages of construction require that a licensed professional or designee registered within the Commonwealth of Pennsylvania be present onsite. Notice shall be given two weeks prior to commencing construction activities for which the licensed professional is present. The general site contractor shall be responsible for supplying & coordinating the licensed professional. The licensed professional will be required to certify and seal as-built drawings at the end of construction that the stormwater facilities have been built to the specifications on the post construction stormwater management plans and details. The contractor shall then file this certification with the Centre County Conservation District when the Notice of Termination (NOT) document is completed.

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Underground Electric
- Existing Overhead Utility Line w/ Pole
- Existing Guy Wire
- Existing Ballard
- Existing Sign
- Existing Soil Type
- Existing Tree Row

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark

SOILS LEGEND

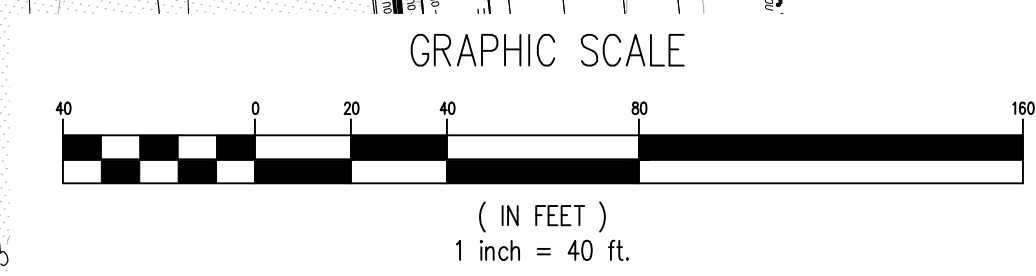
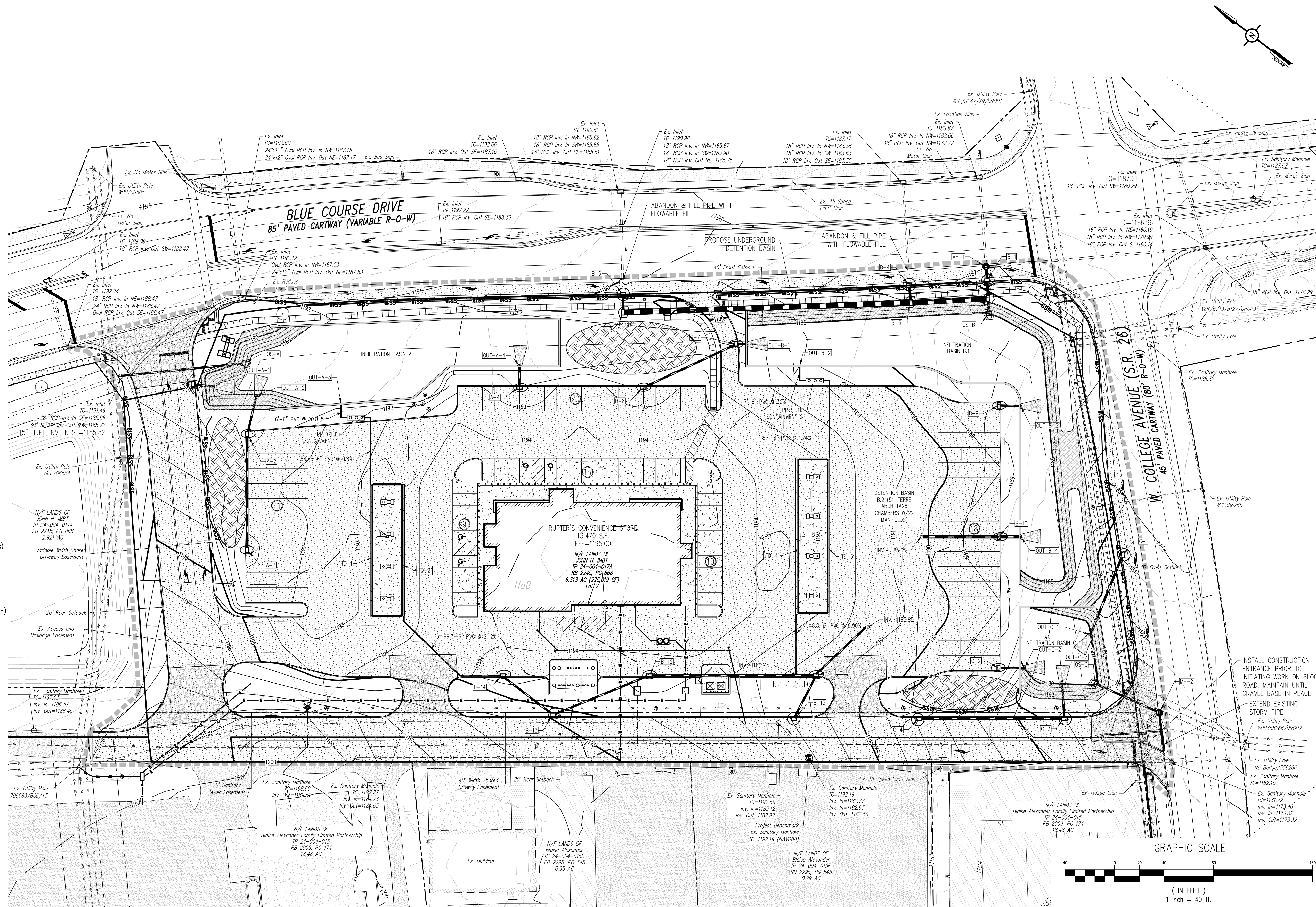
- Soil cover on the site consists of:
- HaB - Hagerstown silt loam, 3%-8% Slopes

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED FENCE / TYPE
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED PAINTED SITE CROSSWALK (ACCESSIBLE ROUTE)
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED PARKING STALL COUNT
- PROPOSED SIGN W/ LABEL
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP

EROSION & SEDIMENTATION CONTROL LEGEND

- NPDES BOUNDARY/LIMIT OF DISTURBANCE
- 18" SILT SOCK
- CONSTRUCTION ENTRANCE
- INLET PROTECTION BLACKHAWK FILTER
- INLET PROTECTION TYPE 'M'
- INLET PROTECTION TYPE 'C'
- RIP-RAP APRON
- EROSION CONTROL LINING (CURLEX II OR APPROVED EQUAL)
- TOPSOIL STOCKPILE
- BASIN OUTLET STRUCTURE ROCK FILTER



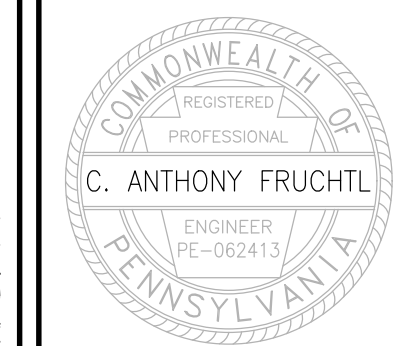
PennTerra ENGINEERING INC.
CENTRAL PENNSYLVANIA REGION OFFICE:
 3075 ENTERPRISE DRIVE
 SUITE 100
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 PH: 814-231-8285
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 Fax: 717-522-5046

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Designer	DJL
Draftsman	XXX
Proj. Manager	CAF
Surveyor	
Perimeter Ok.	
Book	Pg
File	21042-PRELIM-E&S-01-PLAN
Layout	E&S-PLAN

Date	Description

RUTTERS STORE #110

FERGUSON TOWNSHIP
 CENTRE COUNTY
 PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL PLAN

PROJECT NO.	21042
DATE	DECEMBER 8, 2023
SCALE	1" = 40'
SHEET NO.	ES1

Standard Erosion and Sediment Control Plan Notes

- All earth disturbances, including clearing and grubbing as well as cuts and fills shall be done in accordance with the approved E&S plan. A copy of the approved drawings (stamped, signed and dated by the reviewing agency) must be available at the project site at all times. The reviewing agency shall be notified of any changes to the approved plan prior to implementation of those changes. The reviewing agency may require a written submittal of those changes for review and approval at its discretion.
- At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the Centre County Conservation District to an on-site preconstruction meeting.
- At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities.
- All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the local conservation district or by the Department prior to implementation.
- Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
- Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the BMP sequence for that stage or phase have been installed and are functioning as described in this E&S plan.
- At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.
- Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan maps(s) in the amount necessary to complete the finish grading of all exposed areas that are to be stabilized by vegetation. Each stockpile shall be protected in the manner shown on the plan drawings. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:1V or flatter.
- Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the local conservation district and/or the regional office of the Department.
- All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1, and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharge at the site.
- All off-site waste and borrow areas must have an E&S plan approved by the local conservation district or the Department fully implemented prior to being activated.
- The contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance buy qualifying as clean fill due to analytical testing.
- Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly. Maintenance shall include inspections of all erosion and sediment BMPs after each runoff event and on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, reanchoring and renetting must be performed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required.
- A log showing dates that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be maintained on the site and be made available to regulatory agency officials at the time of inspection.
- Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.
- All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings.
- Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches – 6 to 12 inches on compacted soils – prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outcrops shall have a minimum of 2 inches of topsoil.
- All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc. shall be compacted in accordance with local requirements or codes.
- All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.
- Fill materials shall be free of frozen particles, brush, rocks, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills.
- Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills.
- Fill shall not be placed on saturated or frozen surfaces.
- Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
- All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated. Seeded areas within 50 feet of a surface water, or as otherwise shown on the plan drawings, shall be blanketed according to the standards of this plan.
- Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non-germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not at finished grade, which will be reactivated within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent stabilization specifications.
- Permanent stabilization is defined as a minimum uniform, perennial 70% vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated erosion. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
- E&S BMPs shall remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the local conservation district or the Department.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the local conservation district for an inspection prior to removal/conversion of the E&S BMPs.
- After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed or converted to permanent post construction stormwater management BMPs. Areas disturbed during removal or conversion of the BMPs shall be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal/conversions are to be done only during the germinating season.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the local conservation district to schedule a final inspection.
- Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E&S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Department as defined in Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for up to \$10,000 per day in civil penalties, up to \$10,000 in summary criminal penalties, and up to \$25,000 in misdemeanor criminal penalties for each violation.
- All channels shall be kept free of obstructions including but not limited to fill, rocks, leaves, woody debris, accumulated sediment, excess vegetation, and construction material/wastes.
- Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work area in the manner described in this plan until such restoration is complete.
- Channels having stone linings must be sufficiently over-excavated so that the design dimensions will be provided after placement of the protective lining.

Staging of Earthmoving Activities

Notes:

- A licensed professional or designee shall be present during construction of the basins. The contractor must coordinate with this responsible party prior to construction.
- The proposed infiltration basins must be protected from compaction and sedimentation. Excavation within the proposed infiltration basin bottoms at any point during construction must be made in accordance with the infiltration basin bottom excavation detail found on the stormwater management details sheet. The basins shall be initially constructed without excavating to subgrade and placing the topsoil media to achieve final grade. For Basins A & C, this involves leaving a minimum of 2.5' of native soils in place, while for Basin B.1 it involves leaving a minimum of 1' of native soils in place. These soils shall remain in place in the site reaches proper stabilization, as indicated on the Erosion and Sediment Control Plan. .

Sequence: All earth disturbance activities shall proceed in accordance with the following staging of earthmoving activities. Each stage shall be completed before a subsequent stage in initiated.

- Other than the Block Road entrance from College Avenue. Install the rock construction entrances for the site at the location shown on the Erosion and Sedimentation Control Plan (E&SCP).
- Install the entire site perimeter silt sock, where shown on the E&SCP.
- As construction progresses, stabilize all vegetated areas, with topsoil and the appropriate seeding mixture immediately after they are brought to final grade. Install the appropriate erosion control lining, where shown on the E&SCP. All areas abandoned for more than four (4) days are to be seeded with the temporary seeding mixture.
- Check all erosion controls on a daily basis and make any needed repairs or replacements as needed immediately. Any erosion control disturbed or removed by the installation of utilities shall be repaired or replaced to proper functioning condition by the end of that same day.
- Strip topsoil from the site and stockpile at the locations shown on the E&SCP. Seed the stockpiles with the temporary seeding mixture and repair silt sock if damaged.
- Commence with the site rough grading. Upon reaching final grade of the building, commence with it's construction.
- Construct Infiltration Basin A to its interim configuration in accordance with Note 2 above. Construction shall include the removal of the existing piping and inlet tributary to inlet EX-A outlet structure, outlet pipe, anti-seep collars, rock filter, topsoil media on the basin sides and appropriate permanent seeding on the sides and temporary seeding on the bottom.
- Begin grading and utility relocation for widening of College Avenue and Blue Course Drive.
- Reconfigure the inlets/drainage system along Blue Course. This shall include the construction of Basin B.3 and shall include the inlets, pipe and basin orifice plate.
- Construct Infiltration Basins B.1 and C to their interim configuration in accordance with Note 2 above. Construction shall include manhole MH-2, outlet structures, outlet pipes, anti-seep collars, rock filter, topsoil media on the basin sides and appropriate permanent seeding on the sides and temporary seeding on the bottom. Seed the stockpile with the temporary seeding mixture and repair silt sock if damaged.
- Begin the rough grading of the remainder of the site.
- Once final grade of the individual buildings is reached, commence with the building construction. Continue with all parking and driveway construction.
- Install Basin B.2. Construction shall include the liner, underground chambers, applicable inlets, outlet pipe an orifice plate.
- Commence with construction of all utilities. All utilities are to be installed at the rate of the length of the utility that can be installed and backfilled in one day. All stormsewer shall be installed beginning at the downstream end and working upstream. Any erosion controls disturbed from the installation of these utilities shall be repaired or replaced properly at the end of each day. Inlet protection shall be placed immediately on all newly installed inlets and outlet protection installed at outlets.
- Continue with the driveway and parking construction until all utilities are installed. Bring them to sub grade and stabilize with stone.
- Begin the paving operations, thus removing the rock construction entrance. All curbing and sidewalks shall also be installed.
- Current regulations state: (a) Upon completion of an earth disturbance activity or any stage or phase of an activity, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation. (b) Erosion and sediment control BMP's shall be implemented and maintained until the permanent stabilization is completed. (c) For an earth disturbance activity or any stage or phase of an activity to be considered permanently stabilized, the disturbed areas shall be covered with one of the following: (1) A minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation. (2) An acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Once stabilization has been achieved, all temporary erosion and sediment controls may be removed as follows:
 - The Infiltration Basin shall be converted to its final configuration. Remove the temporary sediment trap, temporary orange construction fence, rock filter and any accumulated sediment. As-Built Infiltration Testing shall be performed. Complete excavation of the entire basin to subgrade. Place topsoil over all remaining areas in the basin. Install snouts in the appropriate inlets. Apply the appropriate permanent seeding to all disturbed areas of the basin.
 - Remove all temporary controls, such as silt sock, topsoil stockpiles and inlet protection. Any areas disturbed by the removal of these controls shall be stabilized immediately with a permanent seeding mixture.

Temporary Control Measures

Temporary control measures will be implemented to ensure that erosion is minimized and that sediment is retained during construction. The rock construction entrance will be provided at the site entrance to prevent tracking of sediment from the site. Silt sock will be placed at the locations shown on the Erosion and Sedimentation Control Plan to provide proper filtration of the site runoff. Inlet protection will be installed at inlets to prevent the sedimentation of the storm sewer systems. A sediment trap will filter site runoff. S

Temporary seeding on all disturbed areas shall be done immediately after grading is finished and shall consist of the following:

Item	Rate
1. Agricultural grade limestone	1 ton / acre
2. Fertilizer 10-10-10	500 lbs. / acre
3. Annual ryegrass	40 lbs. / acre
4. Mulch (straw)	3 tons / acre

Permanent Control Measures

Permanent control measures include the storm sewer, curbing, basins and seeding / landscaping. Permanent seeding on all disturbed areas may consist of the following:

Soil Enhancements: For permanent seeding outside of the basin bottom, it is recommended that site specific soil testing be performed. Lieu of soil test recommendations, use the following acceptable schedule:

Apply 6 tons/acre (240 lbs./1,000 s.f.) Dolomitic Limestone and 1,000 lbs/acre (25 lbs./1,000 s.f) of 10-20-20 fertilizer before seeding. Harrow or disc into upper three inches of soil.

Permanent seeding on all basin bottom areas may consist of the following:

Permanent seeding on all basin bottom areas shall include live plantings combined with seed. Live plantings shall consist of an equal mixture and diverse type of each species of trees, shrubs, ornamental grasses and perennials taken from the list below. Each basin should have planting areas equal to 25% of basin bottom area. Plantings areas shall be 2000 s.f., distributed across entire basin bottom and be planted at a rate of (1) trees, (2) shrubs, (100) plugs of Ornamental grasses and (100) plugs of perennials:

PLANTING LIST

Trees (1 gallon size minimum) – Use an equal amount of each below	Shrubs (1 gallon size minimum)– Use at least four different species listed below	Ornamental Grasses (plug size minimum)– Use at least three different species listed below	Perennials (plug size minimum)– Use at least eight different species listed below
Downy Serviceberry (Amelanchier arborea)	Summersweet (Ostrya alnifolia), Shrub Dogwood (Cornus alba), Winterberry (Ilex verticillata),Sweetspire Willows (Itea Virginica), Cranberrybush Viburnum (Viburnum trilobum), Arrowwood (Viburnum dentatum), Babyperry (Myrica pensylvanica), Butterflybush (Zizia aurea), Elderberry (Sambucus nigra), Inkberry Holly (Ilex glabra), Spicebush (Lindera benzoin)	Red Switch Grass (Panicum virgatum), Sweet Flag (Acorus spp.)	Goatsbeard (Aruncus dioicus), Aster (Symphyotrichum spp.), Bugbane (Actaea), Flag Iris (Iris versicolor), Ligularia (Ligularia), Cardinal Flower (spp. L. fulgens), Woodland Phlox (Phlox odorsurgens), Queenlet Plant (Physostegia virginiana), Solomon's Seal (Polygonatum multiflorum), Rodgersia (Rodgersia podophylla), Spiderwort (Tradescantia), Globeflower (T. europaeus x cultorum), Beebalm (Monarda), Ironweed (Vernonia noveboracensis), Joe-pye Weed (Eutrochium spp.)

Permanent seeding on Infiltration Basin/Berm Bottoms may consist of the following:

(Note: Seeding shall be applied around all basin bottom plantings indicated above, once they are placed.)

Item	Rate
1. Seed Mixture Consists of: ERMIX-180 by Ernst Seeds (or equal)	20 lbs. / acre (pure live seed)
2. Lolium multiflorum (Annual Ryegrass)	30 lbs. / acre (pure live seed)
3. Mulch	3 tons / acre

Permanent seeding on all Basin & Berm Sides may consist of the following:

Item	Rate
1. Seed Mixture Consists of: ERMIX-181-1 (Spring-Sept.1);ERMIX 181-2 (Sept.1-Feb15) by Ernst Seeds (or equal)	45 lbs. / acre (pure live seed)
2. Lolium multiflorum (Annual Ryegrass)	25 lbs. / acre (pure live seed)
Mulch	3 tons / acre

Permanent seeding on all other disturbed areas may consist of the following:

Item	Rate
1. Seed Mixture Consists of: 50% Poa pratensis (Kentucky Bluegrass) 30% Festuca rubra (Creeping Red Fescue) 20% Lolium perenne L. (Perennial Rye)	102 lbs. / acre
2. Annual Ryegrass	10 lbs / acre
3. Mulch	3 tons / acre

For lawn areas, a suitable lawn mixture, such as Agway's Royal Green, shall be substituted for Item 3 of the permanent seeding mixture and applied at the rate directed by the manufacturer.

*Mulching: Apply mulch immediately after seeding and anchor properly with an anchoring tool or following one of the methods listed below.

- Tracking: The process of cutting mulch into the soil via equipment that runs n tracks, is employed primarily on slopes 3:1 or steeper.
- Mulch Nettings: Staple lightweight biodegradable paper, plastic or cotton netting over the mulch according to the manufacturer's recommendations.
- Synthetic Binders: Synthetic binders such as acrylic DLR (AGRI-TAC), DCA-70, Petrosol or Terralock may be used at rates recommended by the manufacturer to anchor mulch material.
- Wood Cellulose Fiber: The fiber binder shall be applied at a net dry weight of 750 lb/acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs of wood cellulose fiber per 100 gallons.
- Peg & Twine: Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to surface by stretching twine between pegs in a criss-cross within a square pattern. Secure twine around each peg with two or more turns.

Maintenance Program

During construction, the contractor will be responsible for maintenance and repair of all erosion and sedimentation control facilities. These facilities should be inspected weekly and after every runoff event. Any erosion control disturbed during construction or found to be inadequate upon inspection shall be repaired or replaced within 24 hours after the disturbance or the discrepancy is discovered. All inspections and repairs shall be documented within a written report and retained for record keeping. The maintenance of the erosion control facilities will include the following:

Construction Entrances:

a. The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measure used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of- Any section of the filter fabric fence which has been undermined or topped must be immediately replaced with a rock filter outlet.

Inlet Protection:

a. Sediment shall be removed from the structure and spread over an existing stockpile with controls already in place, or spread over an existing windrow and seeded with the temporary seeding mixture.

a. The structure should be checked regularly to ensure its soundness. If the stone filter has been disturbed and cannot perform its proper protective function, additional stone should be installed to provide adequate filtration.

Spoil Materials:

a. All sediment removed from erosion and sedimentation pollution control facilities shall be spread over spoil areas with controls already in place. Stabilize the spoil material with the temporary seeding mixture.

Permanent Seeding:

a. If the vegetative cover is not established uniformly by the third mowing, the contractor shall reapply topsoil if necessary and seed and mulch as needed to provide adequate cover.

Silt Socks:

- The Contractor shall maintain the socks in a functional condition at all times and it shall be routinely inspected.
- Where the sock requires repair, it will be routinely repaired.
- The contractor shall remove sediment collected at the base of the sock when they reach 1/2 of the exposed height of the sock, or as directed by the Engineer. Alternatively, rather than create a soil disturbing activity, the engineer may call for additional sock to be added at areas of high sedimentation, placed immediately on top of the existing sediment laden sock. The sock will be dispersed on site when no longer required, as determined by the Engineer.

Sediment Trap:

a. The sediment trap shall be maintained to ensure it is structurally sound at all times. The trap shall be inspected weekly and after each runoff event. Sediment shall be removed when it reaches 1/3 the height of the socks.

Rock Filters:

- Rock filters should be inspected weekly and after each runoff event. Clogged filter stone should be replaced.
- Sediments must be removed when accumulations reach one-half the height of the filters. All sediment shall be spread over an existing topsoil stockpile and stabilized with the temporary seeding mixture.

Recycling and Disposal of Materials

The operator shall remove from the site, recycle, or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1et seq., 271.1 et seq., and 287.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes.

Wastes generated during the construction of this project shall be recycled if at all possible. Any materials that cannot be recycled or reused shall be disposed of at a Pennsylvania Department of Environmental Protection approved landfill. If soil and/or rock disposal areas are required, erosion and sedimentation controls shall be implemented at these areas. Any excess soil waste may only be disposed of at an approved E&S/NPDES permitted site.

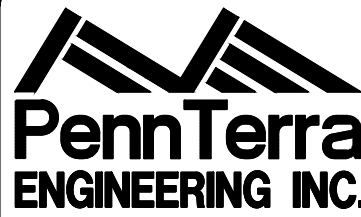
Responsibilities for Fill Materials

The contractor is responsible to use environmental due diligence to ensure any fill material required to be imported to or exported from the site qualifies as Clean Fill.

Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.)

Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of regulated substance. If the fill may have been affected by a spill or release of a regulated substance, it must be tested to determine if it qualifies as clean fill. Testing should be performed in accordance with Appendix A of the Department's policy "Management of Fill".

Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with the Department's municipal or residual waste regulations based on 25 Pa. Code Chapters 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable.



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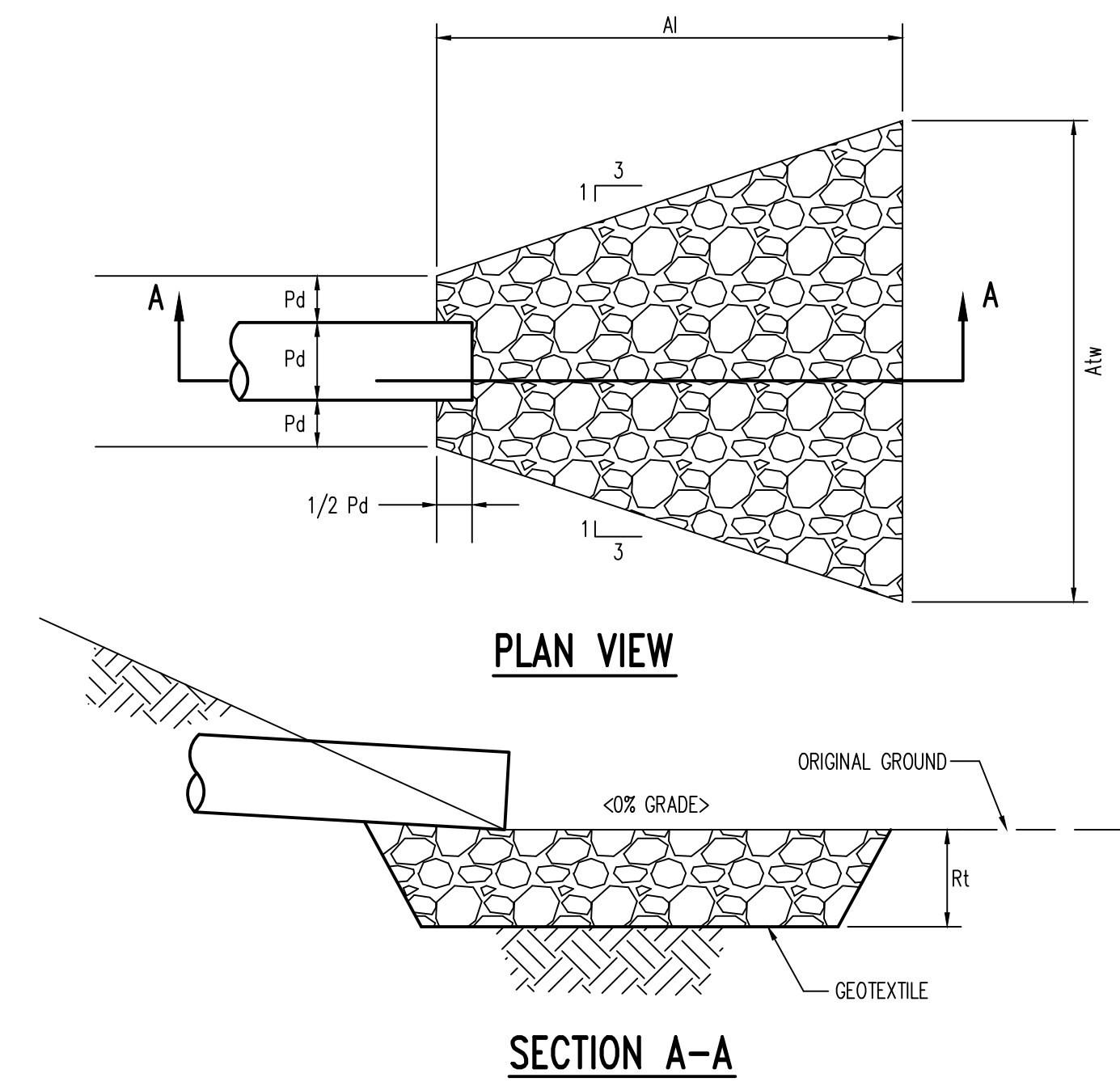
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RUTTERS STORE
#110
FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL NARRATIVE

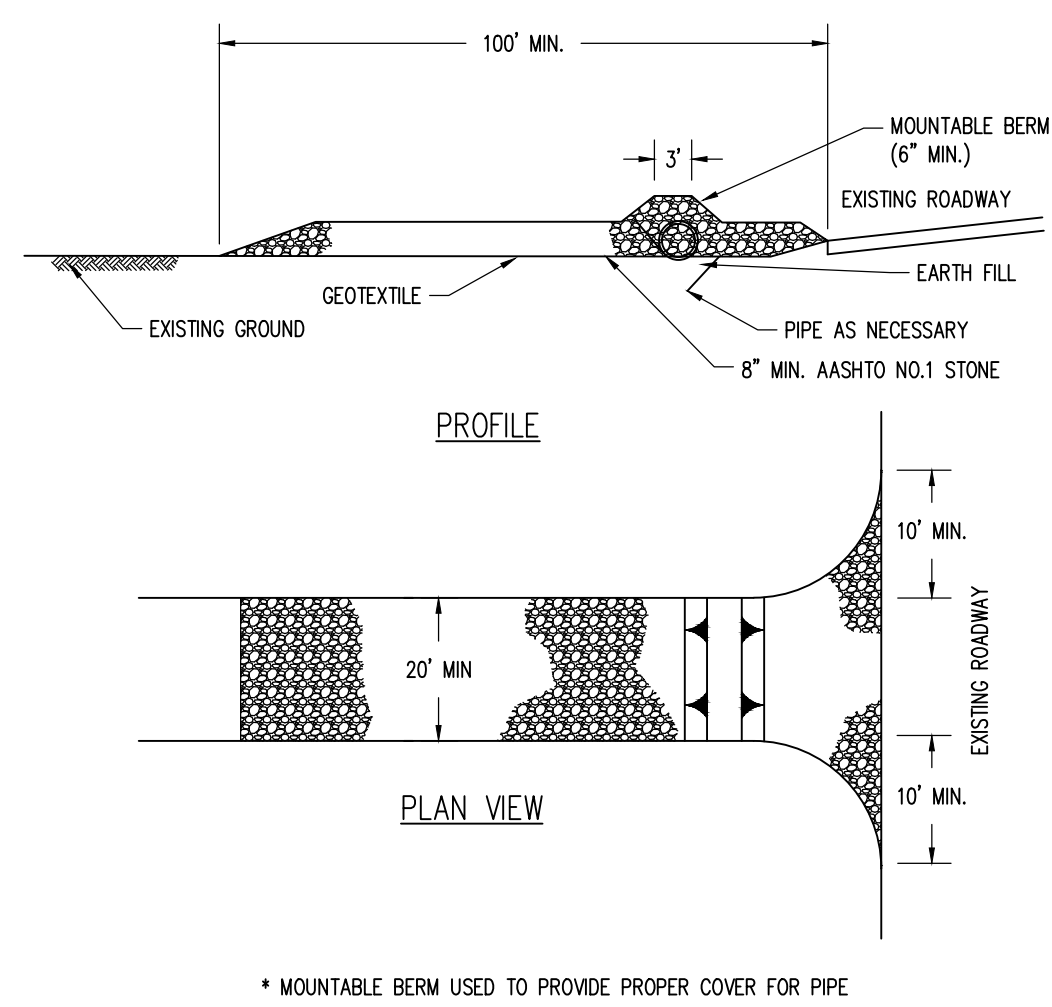
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SCALE	SHEET NO.
N.T.S	ES2



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP		APRON		
		SIZE (R-_)	THICK. Rt (IN)	LENGTH AI (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
A1-4, B1-3, C1-3	15"	R-4	1.5'	8"	3.75'	12.50'
B-4	24"	R-4	1.5'	12.00'	6.0'	18.50'

- NOTES:
- All aprons shall be constructed to the dimensions shown. Terminal widths shall be adjusted as necessary to match receiving channels. Extend aprons further into swales, where shown.
 - All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately.
 - Extend riprap on back side of apron to at least 1/2 depth of pipe on both sides to prevent scour around the pipe.

RIPRAP APRON AT PIPE OUTLET
NOT TO SCALE

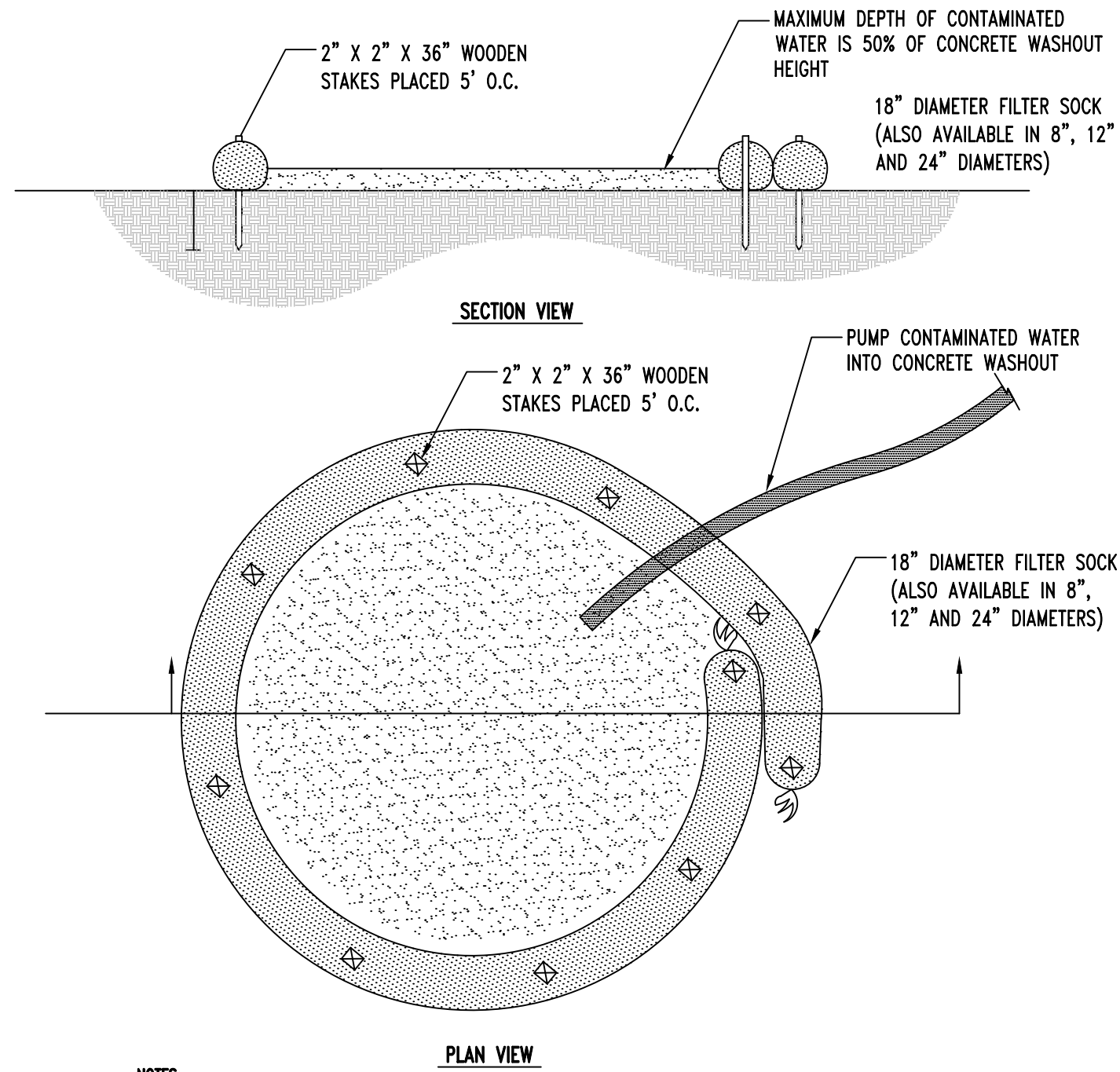


- NOTES:
- REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
 - RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
 - MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT 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 ROADWAYS 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.

CONSTRUCTION ENTRANCE
NOT TO SCALE

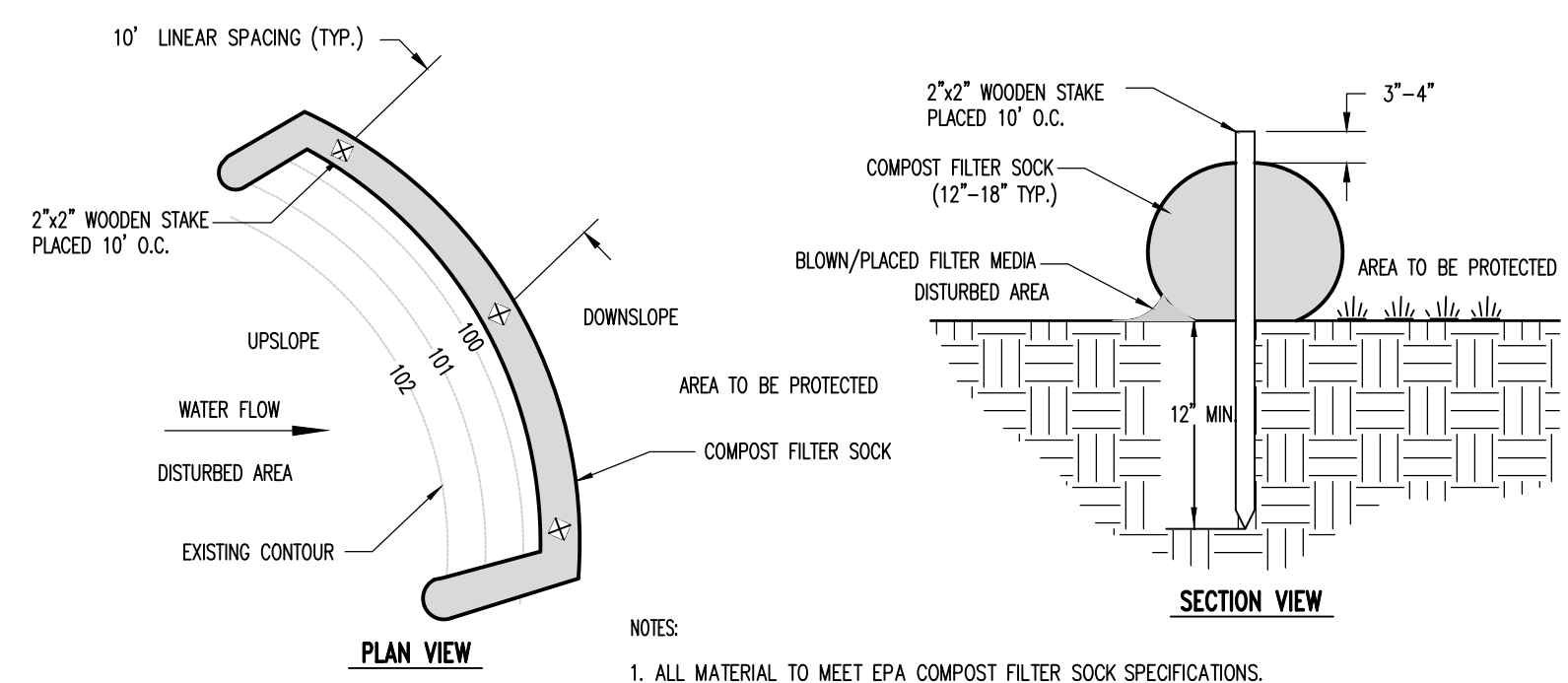
Riprap Gradation

Percent Passing (Square Openings)		
Class, Size NO.	R-5	R-4
42		
30		
24		
18	100	
15		100
12		100
9	15-50	
6		15-50
4	0-15	
3		0-15
2		
Nominal Placement Thickness (inches)	27	18
Filter Stone¹	AASHTO #3	AASHTO #3
V_{max} (ft/sec)	11.5	9.0



- NOTES:
- INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
 - CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY
 - CONCRETE WASHOUT MAY BE DIRECT SEED AT THE TIME OF INSTALLATION
 - A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE FILTER SOCKS.

CONCRETE WASHOUT AREA
NOT TO SCALE

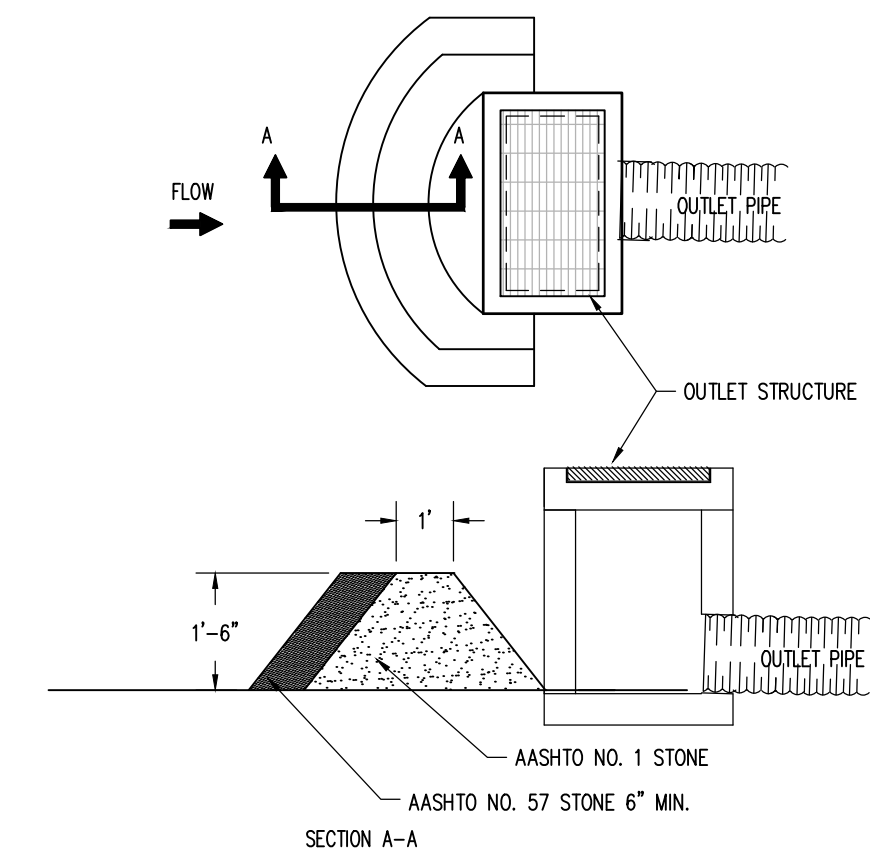


- NOTES:
- ALL MATERIAL TO MEET EPA COMPOST FILTER SOCK SPECIFICATIONS.
 - SILT SOCK COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
 - SILT SOCKS DESIGNATED ARE FOR USE ON MINIMAL SLOPES. GREATER SLOPES MAY REQUIRE LARGER SILT SOCKS PER THE ENGINEER.
 - COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	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	HDPE biaxial net				
	Continuously wound				
	Fusion-welded junctures				
Outer Filtration Mesh	3/4"x3/4" Max. aperture size				
	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				

COMPOST FILTER SOCK DETAIL
NOT TO SCALE



Basin Outlet Structure Rock Filter
NOT TO SCALE

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RUTTERS STORE #110
FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL DETAILS

PROJECT NO.
21042
DATE
DECEMBER 8, 2023
SCALE
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