





### DEMOLITION FEATURES LEGEND

- AREA WITH EXISTING MANUFACTURED HOME PADS TO BE REMOVED
- EXISTING BITUMINOUS SIDEWALK TO BE REMOVED
- EXISTING GRAVEL AREAS TO BE REMOVED
- EXISTING PAVEMENT TO BE REMOVED

### SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Property Corner Found
- Property Corner To Be Set
- Project Benchmark

### SOILS LEGEND

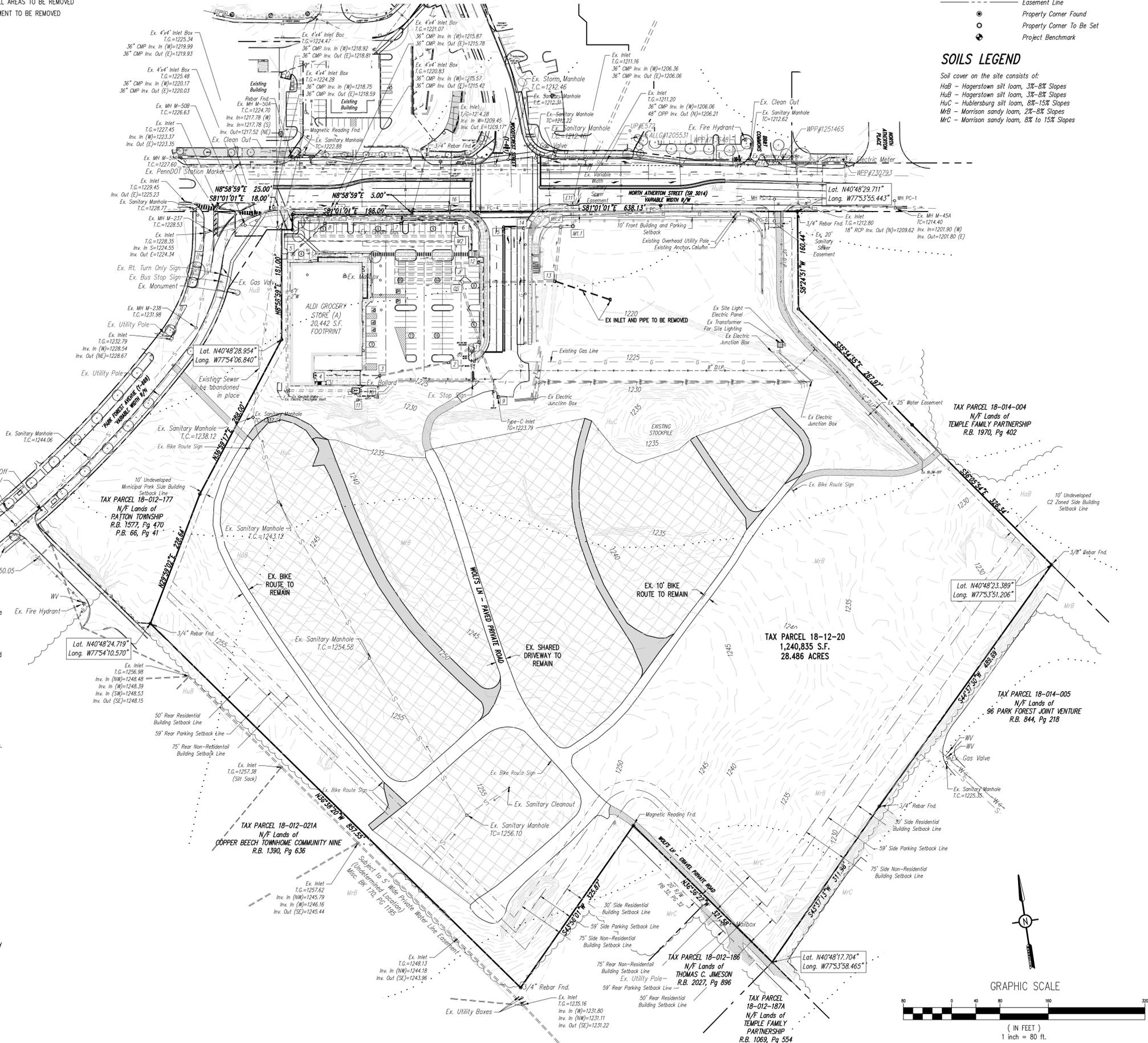
- Soil cover on the site consists of:
- HaB - Hagerstown silt loam, 3% - 8% Slopes
  - HuB - Hagerstown silt loam, 3% - 8% Slopes
  - HuC - Hubersburg silt loam, 8% - 15% Slopes
  - MrB - Morrison sandy loam, 2% - 8% Slopes
  - MrC - Morrison sandy loam, 8% to 15% Slopes

### EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Guide Rail
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Sewer Lateral w/ Clean Out
- Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Underground Electric
- Existing Underground Telephone
- Existing Underground TV Cable
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Light Pole/Standard
- Existing Sign
- Existing Soil Limit Line / Boundary
- Existing Soil Type
- Existing Tree Row
- 25% Slopes Or Greater

### GENERAL SITE DEMOLITION NOTES

- The Contractor is responsible for obtaining all local and state permits required for demolition work unless other arrangements are coordinated with the owner.
- The Contractor shall indemnify and hold harmless the Owner and/or architect and engineer for any and all injuries and/or damages to personnel, equipment and/or existing facilities in the demolition and construction described in the plans and specifications.
- Existing conditions as depicted on these plans are general and illustrative in nature and do not include mechanical, electrical and miscellaneous structures. It is the responsibility of the Contractor to examine the site and be familiar with existing conditions prior to bidding on the demolition work for this project. If conditions encountered during examination are significantly different than those shown, the Contractor shall notify the architect and engineer immediately.
- All existing utilities not to be removed or abandoned are to remain operational at all times. Appropriate existing utilities shall remain in service until replacement/relocated utilities are installed.
- Existing above and below ground structures within the limits of new construction noted to be removed shall be razed unless noted otherwise in this construction set, architectural plans and/or project specifications. This includes foundation slabs, walls, and footings.
- Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify PA One Call 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.
- All demolition waste and construction debris shall be removed by the Contractor and disposed of in a state approved waste site and in accordance to all local and state codes and permit requirements.
- All utility removal, relocation, cutting, capping and/or abandonment shall be coordinated with the appropriate utility company.
- The burning of cleared material and debris shall not be allowed without approval from owner and appropriate governing agency. Erosion and sedimentation control measures around areas of demolition shall be installed prior to initiation of demolition activities. Refer to plan and details for site specific information including tree protection details, if necessary.
- Asbestos or hazardous materials, if found on site, shall be removed by a licensed hazardous materials Contractor. Contractor shall notify Owner immediately if hazardous materials are encountered.
- Contractor shall protect all corner pins, monuments, property corners, and benchmarks during demolition activities. If disturbed, Contractor shall have disturbed items reset by a licensed surveyor at no additional cost to the Owner.
- Contractor shall adhere to all local, state, federal, and OSHA regulations operating demolition equipment around utilities.
- Contractor shall provide and maintain traffic control measures in accordance with the PennDOT standards, and as required by local agencies working in and/or along streets, roads, highways, etc. It shall be the Contractor's responsibility to obtain approval and coordinate with local and/or state agencies regarding the need, extent, and limitations associated with installing and maintaining traffic control measures.
- Contractor shall protect at all times adjacent structures and items from damage due to demolition activities.
- Contractor shall refer to Construction Plans for other pertinent information where applicable.
- Contractor shall replace or repair to Owner's satisfaction all curb, utilities, sidewalks, landscaping, etc. damaged during construction that are not indicated to be removed.
- Contractor shall be responsible for all costs and work required to adjust existing and proposed utilities and appurtenances to finish grades within the limit of work.
- All paving to be removed shall be sawcut to provide a sharp clean edge. All sidewalks to be removed shall be sawcut at the nearest joint. Existing pavement shall be removed as required for new curb, walkway, or utility construction.
- Contractor shall verify the location of manholes, inlets valves, etc. Contractor shall test pit existing utilities as deemed necessary within the limits of construction to determine the exact location and depth as required. Report any discrepancies from that indicated on the plan to the architect and engineer. All existing utilities shall be retained unless marked otherwise, and appurtenances shall be adjusted to final grade. Damage to existing conditions and utilities to remain shall be repaired as required to the Owner's satisfaction at the expense of the Contractor.
- Contractor shall coordinate with utilities companies on installation, relocation or replacement of electrical, phone, gas and cable services.
- The Contractor shall contact PA One Call system @ 1-800-242-1776 at least three (3) days before construction activities.
- The existing private roads are to be removed, graded and seeded with grass where indicated on this plan. The 10' wide bike route is to be maintained throughout construction. The existing access to Wolf's Lane is to be maintained throughout construction.
- The existing manufactured home pads and associated driveways are to be removed, graded and seeded with grass in the areas indicated on this plan.



**PennTerra ENGINEERING INC.**  
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 STATE COLLEGE, PA 16801  
 PH: 814-231-8285  
 WWW.PENNTERRA.COM

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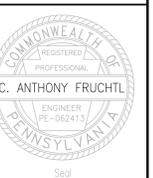
Designer(s)	EAH
Environmental	JFS
Proj. Manager	CAF
Surveyor	BRK/MAK/JDE
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-UP-ECON & DEMO
Layout	EX. CON & DEMO

Date	Description
	REVISIONS

PATTON CROSSING PHASE 2 CAVA RESTAURANT	
PATTON TOWNSHIP CENTRE COUNTY PENNSYLVANIA	
FINAL LAND DEVELOPMENT PLAN	

EXISTING CONDITIONS & DEMOLITION PLAN	
PROJECT NO.	12142-PH2B
DATE	DECEMBER 6, 2024
SCALE	SHEET NO.
1" = 80'	2.0

PROJECT NO. 12142-PH2B  
 DATE: DECEMBER 6, 2024  
 SCALE: 1" = 80' SHEET NO. 2.0



Designer(s) EAH  
Environmental JFS  
Proj. Manager CAF  
Surveyor BRK/MAK/JDE  
Perimeter Ck. \_\_\_\_\_  
Book 541 Pg. 7  
File 12142-PH2B-MASTER-PLAN  
Layout MASTER PLAN

Date \_\_\_\_\_ Description \_\_\_\_\_  
REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**

PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**MASTER PLAN - PHASE 2**

PROJECT NO.  
**12142-PH2B**

DATE  
**DECEMBER 6, 2024**

SCALE SHEET NO.  
**1"=80' 3.0**

**BUILDING USE TABLE**

BUILDING	DESCRIPTION	PHASE	STORIES	FOOTPRINT (Impervious Area) (sf)	IMPERVIOUS %	TOTAL BUILDING AREA (sf)	BUILDING HEIGHT (ft)	BUILDING FAR	USE TYPE													
									RETAIL	GROUND FLOOR RESIDENTIAL	2nd-4th FLOOR RESIDENTIAL	COMM / OFFICE	RESTAURANT	HOTEL	PARKING	AMENITIES	RESIDENTIAL UNITS					
A	1-STORY RETAIL	1	1	20,422	1.6%	20,422	35	0.016	20,422													
B3	RESTAURANT	2	1	2,500	0.2%	2,500	35	0.002						2,500								
C	2-STORY RETAIL	2	2	-	0.0%	0	-	0.000														
D	RETAIL/RES	3	4	-	0.0%	0	-	0.000														
E	RETAIL/RES	3	4	-	0.0%	0	-	0.000														
F	HOTEL/140 ROOMS	4	5	-	0.0%	0	-	0.000														
G	RETAIL/RES	5	4	-	0.0%	0	-	0.000														
H	RETAIL/COMM	8	4	-	0.0%	0	-	0.000														
I	RETAIL/RES	7	4	-	0.0%	0	-	0.000														
J	RETAIL/RES	7	4	-	0.0%	0	-	0.000														
K	RETAIL/COMM	12B	4	-	0.0%	0	-	0.000														
L	RETAIL/RES	12A	4	-	0.0%	0	-	0.000														
M	RETAIL/RES	11	4	-	0.0%	0	-	0.000														
N	RETAIL/RES	10	4	-	0.0%	0	-	0.000														
O	RESIDENTIAL	9	4	-	0.0%	0	-	0.000														
P	RESIDENTIAL	9	4	-	0.0%	0	-	0.000														
Q	RESIDENTIAL	12B	3	-	0.0%	0	-	0.000														
R	PARKING	10	4	-	0.0%	0	-	0.000														
S	PARKING	12B	3	-	0.0%	0	-	0.000														
T	PARKING	9	3	-	0.0%	0	-	0.000														
TO-DATE TOTALS									22,922	1.8%	22,922											
MASTER PLAN TOTALS									365,805	29.50%	1,203,063											
									20,422	0	0	0	2,500	0	0	0	0	0	0	0		
									103,790	19,310	399,673	122,200	56,000	100,350	398,740	3,000	392					

**EXISTING FEATURES LEGEND**

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Fence
- Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Lateral w/ Clean Out
- Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line & Pole
- Existing Fire Hydrant
- Existing Clean-Out
- Existing Light Pole
- Existing Sign
- Existing Mail Box
- Existing Tree Row
- Existing Deciduous Street Tree

**PROPOSED FEATURES LEGEND**

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED GRAVEL AREAS
- PROPOSED RETAINING WALL
- PROPOSED SIGN
- PROPOSED FIRE HYDRANT
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED PAINTED TRAFFIC ARROWS
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE
- PROPOSED PARKING STALL COUNT

**SURVEY FEATURES LEGEND**

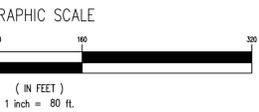
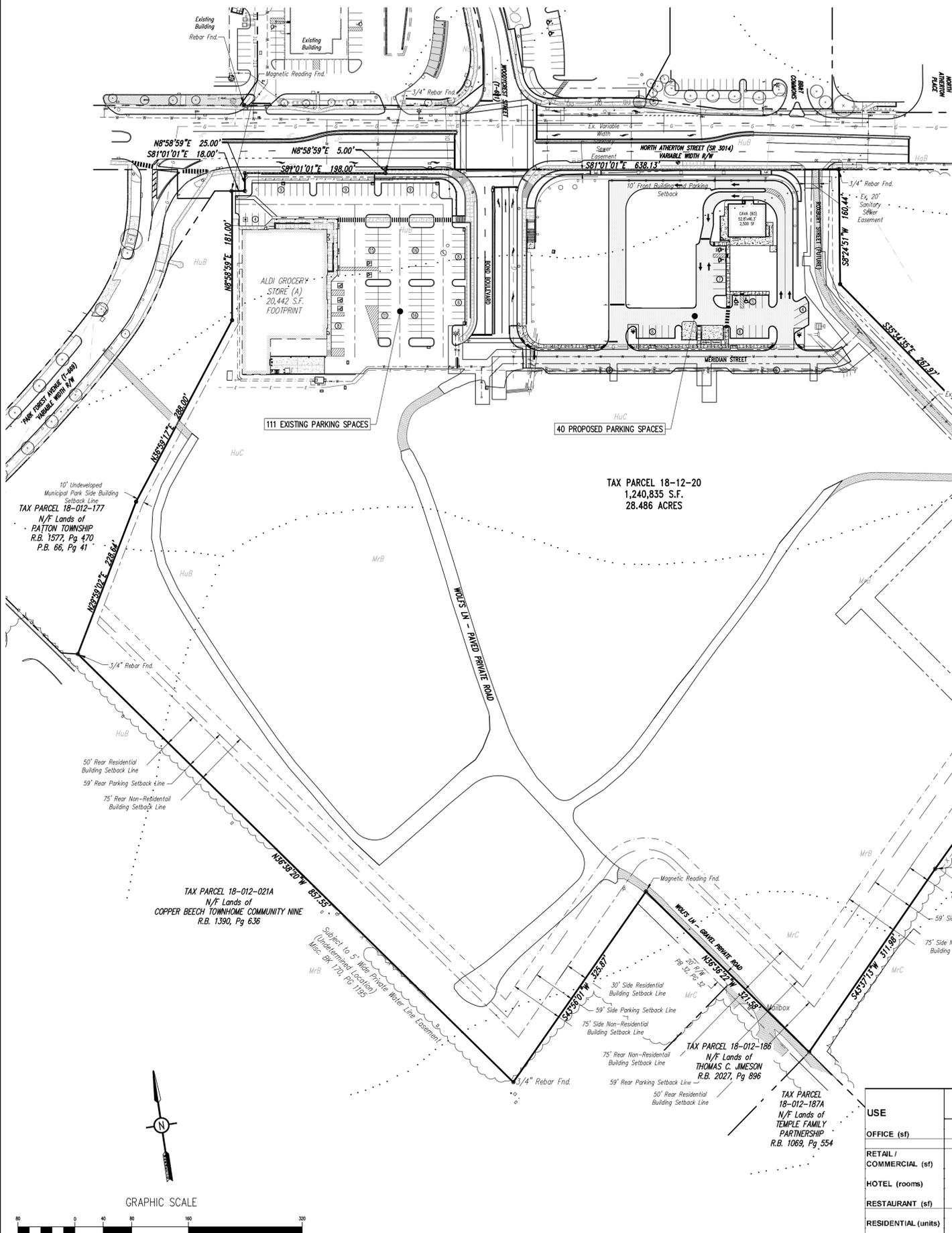
- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Roadway Center Line
- Property Corner Found
- Property Corner To Be Set

**SOILS LEGEND**

Soil cover on the site consists of:  
 HaB - Hagerstown silt loam, 3%-8% Slopes  
 HuB - Hagerstown silt loam, 3%-8% Slopes  
 HuC - Hubersburg silt loam, 8%-15% Slopes  
 MrB - Morrison sandy loam, 2%-8% Slopes  
 MrC - Morrison sandy loam, 8% to 15% Slopes

**REQUIRED PARKING TABLE - SHARED USE**

USE	TOTAL UNITS *	PARKING SPACES / UNIT	BASE PARKING SPACES	WEEKDAYS						WEEKENDS									
				SHARED PARKING 8:00 AM TO 5:00 PM		SHARED PARKING 5:00 PM TO 9:00 PM		SHARED PARKING 9:00 PM TO MIDNIGHT		SHARED PARKING 8:00 AM TO 5:00 PM		SHARED PARKING 5:00 PM TO 9:00 PM		SHARED PARKING 9:00 PM TO 8:00 AM					
				RATIO	SPACES	RATIO	SPACES	RATIO	SPACES	RATIO	SPACES	RATIO	SPACES	RATIO	SPACES				
OFFICE (sf)	0	1 / 250 sf	0	100%	0	10%	0	5%	0	2%	0	30%	0	5%	0	5%	0	2%	0
RETAIL / COMMERCIAL (sf)	20,422	1 / 250 sf	82	95%	78	75%	61	20%	16	2%	2	100%	82	70%	57	30%	25	2%	2
HOTEL (rooms)	0	1.0 / room	0	80%	0	80%	0	100%	0	100%	0	60%	0	80%	0	100%	0	100%	0
RESTAURANT (sf)	2,500	14.9 / 1,000 sf	37	60%	22	100%	37	80%	30	10%	4	45%	17	100%	37	30%	11	2%	1
RESIDENTIAL (units)	0	1.5 / unit	0	60%	0	70%	0	95%	0	100%	0	60%	0	70%	0	100%	0	100%	0
TO-DATE TOTALS			119		100		99		46		5		98		94		36		2
MASTER PLAN TOTALS			2466		1849		1718		1474		830		1374		1673		1127		763





**Owners Certification for Tax Parcel 18-012-020**

Commonwealth of Pennsylvania  
County of Centre  
On this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,

the undersigned owners personally appeared before me and certified that they were the owners of the properties shown on this plan and acknowledge the same to be their act and plan and designs, the same to be recorded as such, according to the law.

\_\_\_\_\_  
Owner

witness my hand and seal, this date \_\_\_\_\_

\_\_\_\_\_  
Notary Public Commission Expires \_\_\_\_\_

**Fire Chief Certification**

I have reviewed and hereby certify that the location of Fire Lanes and Fire Hydrants shown on this plan are adequate.

\_\_\_\_\_  
Fire Chief Date \_\_\_\_\_

**Design Engineer Stormwater Certification**

I, \_\_\_\_\_, hereby certify that the Stormwater Management Plan meets all design standards and criteria of the Patton Township Stormwater Management Regulations, Chapter 147 of the Patton Township Code of Ordinances.

**Professional Land Surveyor Certification**

I, Nevin L. Grove, a Professional Land Surveyor in the Commonwealth of Pennsylvania, do hereby certify that this plan correctly represents the tracts of lands as shown.

\_\_\_\_\_  
Signature Date \_\_\_\_\_

**Township Supervisors**

Patton Township Supervisors Approved

\_\_\_\_\_  
Chairman Date \_\_\_\_\_

\_\_\_\_\_  
Secretary Date \_\_\_\_\_

**Township Planning Commission**

Patton Township Planning Commission Approved

\_\_\_\_\_  
Chairman Date \_\_\_\_\_

\_\_\_\_\_  
Secretary Date \_\_\_\_\_

**Storm Water Facilities Acknowledgement**

I, \_\_\_\_\_ the landowner, acknowledge the Stormwater Management System is to be maintained in accordance with the approved Ownership and Maintenance Program and shall remain a permanent fixture which can be altered only after approval of a revised plan by the Township of Patton.

**Recorder of Deeds**

**Recorder's Stamp Here**

**PROJECT NOTES:**

- General Site Information of Tax Parcel 18-012-020**
  - Owners of Record: 1752 N. Atherton St. Associates, LP  
210 West Hamilton Ave, Suite 360  
State College, PA 16801  
133 Meridian Street  
State College, PA 16803
  - Site Location: Planned Commercial (C2) Mixed Use Overlay 2 (MX02)  
Record Book 2245, Page 839  
Plot Book 94, Page 176
  - Parcel Size: 28.486 Acres (1,240,835 S.F.)  
Front: 10'  
Rear: 50' Residential use & 75' Non-Residential Use  
Side: 10' when adjacent to nonresidential zoning districts;  
30' Residential Use & 75' Non-Residential Use  
Rear: 59' when adjacent to existing residential uses  
Side: 10' when adjacent to nonresidential or undeveloped residential zoning districts;  
59' when adjacent to existing residential uses
  - Land Use: Existing: Vacant  
Proposed: Restaurant
  - Building Height: Maximum Allowed: 60'; Proposed: 35'
  - Impervious Coverage: Maximum Allowed: 75% x 28.486 Acres (1,240,835 S.F.) = 21.364 Acres (930,626 S.F.)  
Existing Coverage: 7.25 Acres = 25.5%  
Proposed Coverage: 6.33 Acres = 22.2% (5.30 Acres + 1.03 Acres of future Phase 2 development)
  - Building Size: Maximum Allowed: 60,000 S.F. Ground Floor Area  
Proposed Provided: 2,500 S.F. Ground Floor Area (Building B3-CAVA)  
Maximum Allowed: 0.150 for Total Floor Area  
Proposed Provided: 0.002 for Total Floor Area (Building B3-CAVA)
- Parking Stalls Calculations**
  - Required Parking Stalls: 100 Spaces (Per Shared-Use Parking Table shown on Sheet 3.0)
  - Proposed Parking Stalls: 111 Existing + 40 Proposed = 151 Spaces
- Act 287 Utility Information:** Serial No. 20221392335  
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.
  - Electric: West Penn Power Company, 2800 E. College Ave., State College, PA 16801 – Phone: (800) 686-0021
  - Telephone: Verizon, Facility Management Center, 224 S. Allen Street, State College, PA 16801 – Phone: (814) 231-6511
  - TV Cable: Comcast, 60 Decibel Road, State College, PA 16801 – Phone: (888) 266-2278
  - Gas: Columbia Gas of Pennsylvania, 2550 Carolean Drive, State College, PA 16801 – Phone: (814) 238-6775
  - Sanitary Sewer Treatment: University Area Joint Authority (UAJA), 1576 Spring Valley Road, State College, PA 16801  
Phone: (814) 238-5361
  - Stormwater: Patton Township, 100 Patton Plaza., State College, PA 16803 – Phone: (814) 234-0271  
PennDOT, 70 PennDOT Drive, Clearfield, PA 16830 – Phone: (814) 765-0400
  - Water: State College Borough Water Authority (SCBWA), 1201 West Branch Road, State College, PA 16801 – Phone: (814) 238-6766
- Natural Site Features & Survey Information**
  - Soil limits and descriptions have been taken from the Natural Resources Conservation Service Web Soil Survey dated June 2019 as shown on the Existing Conditions Plan.
  - There are no wetlands on the property according to the National Wetland Inventory Mapping (U.S. Fish & Wildlife Service) for State College, PA last updated December 2019. PennTerra Engineering also performed a field study, which verified the absence of wetlands on the property.
  - There are no floodways, areas prone to flooding or portions of this property located within a Zone 'A' 100-year Flood Plain according to the Federal Emergency Management Agency (FEMA) Map Number 42027C0617F for Patton Township, effective date May 4, 2009.
  - There are steep slopes (> 25%) located on this property as shown on the Existing Conditions Plan.
  - There are no closed depressions located on this property from visual inspection of the existing conditions.
  - Contours shown are in 1' intervals, and were generated from a topographic field survey by PennTerra Engineering, Inc.
  - Horizontal Datum is Pennsylvania North Zone State Plane Coordinates, North American Datum of 1983 (PA NAD83) U.S. Feet.
  - Elevation Datum is the National Geodetic Vertical Datum of 1929 (NGVD 29)
  - The Project Benchmark is a Sanitary Manhole top of casting. The Sanitary Manhole (PC-3) is located along the northern property line of Tax Parcel 18-012-020 near North Atherton Street. Elevation = 1212.58'
- Project References**  
Refer to the following plans and documents for additional information:
  - Project Narrative as prepared by PennTerra Engineering, Inc. dated January 31, 2020.
  - Patton Township Code Chapter 175-40.9
  - "Consolidation of Tax Parcels 18-012-18, 18-012-19 & 18-012-21" dated August 9, 2019, prepared by PennTerra Engineering, Inc. and recorded in Centre County Record Book 94, Page 176.
  - "Patton Crossing Master Plan", dated June 24, 2019, prepared by PennTerra Engineering, Inc., and recorded in Centre County Record Book 95, Page 46.
  - "Consolidation of Tax Parcels 18-012-20 & 18-012-21", dated November 5, 2019, prepared by PennTerra Engineering, Inc. and recorded in Record Book 95, Page 46.
  - "Patton Crossing Phase 1 Aldi Store #27 Land Development Plan", prepared by PennTerra Engineering, Inc., dated January 31, 2020, last revised March 19, 2020, and recorded at Centre County Recorder of Deeds in Book 95, Page 112 on May 21, 2020.
  - "Patton Crossing Phase 1, Aldi Store #27 Land Development Plan, Minor Revision Plan", prepared by PennTerra Engineering, Inc., dated May 5, 2021, and recorded at Centre County Recorder of Deeds in Book 96, Page 144.
  - "Patton Crossing Phase 2, Centre 1st Bank Final Land Development Plan", prepared by PennTerra Engineering, Inc., dated July 1, 2022, and recorded at Centre County Recorder of Deeds in Plat Book 98, Page 35.
- Additional Information**
  - Water supply to the site will be provided by State College Borough Water Authority (SCBWA). Water mains through the site will be owned and maintained by the Authority.
  - Sanitary sewer service to the site will be provided by University Area Joint Authority (UAJA). Sewer mains through the site will be owned and maintained by the Sewer Authority.
  - All proposed on-site utilities will be underground.
  - A fire suppression system will be provided in the proposed building.
  - All parking stalls, loading spaces, and parking lot surfaces shall be constructed using all weather materials, such as concrete pavement and bituminous asphalt pavement.
  - An Erosion and Sedimentation Pollution Control Plan will be submitted to Centre County Conservation District for approval.
  - The building address is 133 Meridian Street.
- The purpose of this plan is to develop Phase 2 of Patton Crossing with a restaurant and all associated infrastructure. It replaces the former Phase 2 Final Land Development Plan for a bank. The restaurant will have a call-ahead drive-thru pickup window.
- A copy of the NPDES Permit will be provided to the Township with each Phase's Final Land Development Plan.
- Any proposed signage for the CAVA restaurant will need to be submitted for approval with a sign permit application.
- Per Patton Township Code Section 175-48.2.C(14)(a) – Flood and/or spot lights utilized to uplight landscaping shall have luminaires with a maximum output of no more than 2,000 lumens (150 watts incandescent). The luminaires shall be located or shielded so that the light source is not visible by an observer standing at ground level at the property line.

**STORMWATER FACILITIES MAINTENANCE:**

All stormwater management facilities on the site of Patton Crossing not contained in a Patton Township Right-of-Way shall be owned and maintained by the owner, their executors, heirs, agents and assigns. The owners agree to provide perpetual maintenance, access to and ownership of the BMPs. Patton Township, its agents and assigns shall have the uninterrupted right to access the property for inspection and maintenance of the stormwater BMPs. This note applies to the entire property shown on these plans and shall be in effect for perpetuity. The responsibility for long-term operation and maintenance of the BMPs is a covenant that runs with the land and binding upon and enforceable by subsequent grantees.

Patton Township and/or the Centre County Conservation District may require The Owner to maintain a record of all inspections, repairs, and maintenance activities associated with the proposed Stormwater management and permanent erosion and sediment pollution control facilities at this project site. The Owner shall immediately notify Patton Township and Centre County Conservation District prior to initiating any major repair activities.

The Owner hereby acknowledges Patton Township's right to periodically access the project site to inspect the permanent stormwater management facilities that are part of this project. The Owner acknowledges Patton Township's right to access the project site with notice to repair and/or maintain the permanent stormwater management facilities in accordance with this Maintenance Program. Any maintenance and/or repair activities conducted by Patton Township shall be at the expense of the Owner.

The facilities that will require maintenance are the inlets, storm sewer pipes, rip-rap aprons, Jelly Fish Filters and stormwater basins. All stormwater facilities should be inspected quarterly or after any rainfall producing runoff and maintained as follows:

- The proposed storm sewer pipe inlets and outlets shall be cleaned of all debris, litter, and other deleterious material.
- The rip-rap aprons at the outlets of the pipes need to be inspected to ensure proper erosion protection. If erosion occurs, additional rip-rap should be added.
- The underground stormwater basin piping shall be cleaned of sediment and debris. The orifice plates shall be kept clean of trash and debris.
- The above ground basin shall be cleaned of debris and if any erosion is present the area is to be backfilled with topsoil and seeded with a permanent mixture. The outlet structures shall be kept clean of trash and debris. The vegetation within the basin bottom should only be periodically mowed once or twice a year to a height of six to eight inches. The sides shall be maintained to a height of six inches. Vehicular traffic in the bottom shall be limited to the maximum extent possible. No vehicular traffic should operate within the basin bottom when the soils are saturated.
- Jellyfish filters shall be cleaned of sediment for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner. Floatable trash, debris, and oil must be removed. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs first. Replace filter cartridge if rinsing does not remove accumulated sediment from the tentacles, or if tentacles are damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged by the spill.

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7.1	UTILITY PLAN – PHASE 2
8.0	LIGHTING PLAN – PRE-CURFEW
8.1	LIGHTING PLAN – POST-CURFEW
9.0	LANDSCAPING PLAN
10.1	GENERAL CONSTRUCTION DETAILS
11.1	UTILITY DETAILS
PC1.0	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN – OVERALL
PC1.1	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN – PHASE 2
PC1.2	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN – BASIN
PC2.0	POST CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS
PC3.0	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
ES1.0	EROSION & SEDIMENTATION CONTROL PLAN – OVERALL
ES1.1	EROSION & SEDIMENTATION CONTROL PLAN – PHASE 2
ES1.2	EROSION & SEDIMENTATION CONTROL PLAN – BASIN
ES2.0	EROSION & SEDIMENTATION CONTROL NARRATIVE & DETAILS
ES3.0	EROSION & SEDIMENTATION CONTROL DETAILS



3075 ENTERPRISE DRIVE  
SUITE 100  
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\_\_\_\_\_  
Seal

Designer(s) \_\_\_\_\_ EAH  
Environmental \_\_\_\_\_ JFS  
Proj. Manager \_\_\_\_\_ CAF  
Surveyor \_\_\_\_\_ BRK/MAK/JDF  
Perimeter Ok \_\_\_\_\_  
Book \_\_\_\_\_ 541 Pg. \_\_\_\_\_ 7  
File \_\_\_\_\_ 12142-PH2B-LD-SIGNATURES & NOTES  
Layout \_\_\_\_\_ SIGN/NOTES

\_\_\_\_\_  
Date \_\_\_\_\_ Description \_\_\_\_\_  
REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**

PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**SIGNATURES & NOTES**

PROJECT NO.  
12142-PH2B  
DATE  
DECEMBER 6, 2024  
SCALE SHEET NO.  
N.T.S. **4.0**

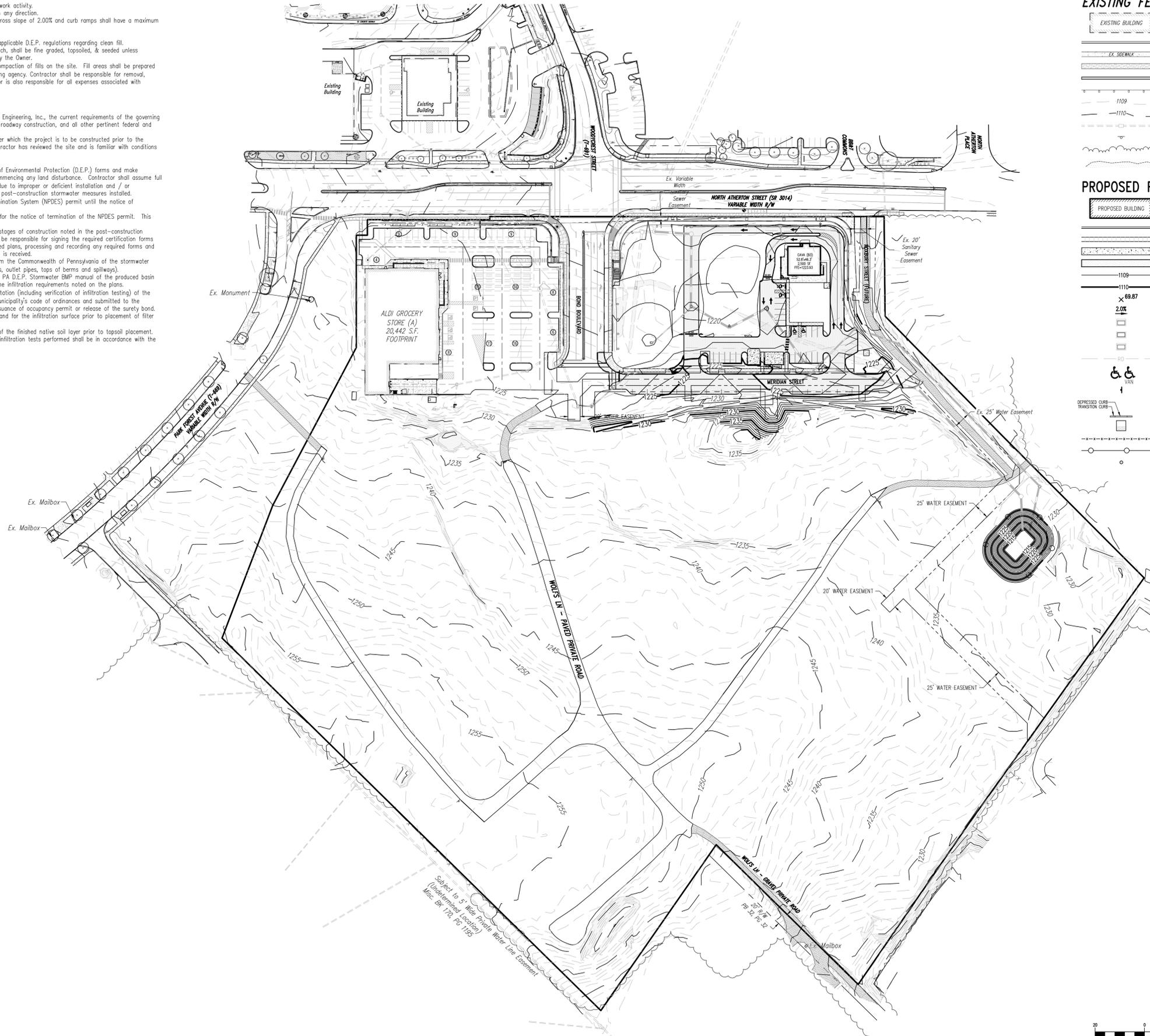


**GRADING NOTES**

- The project benchmark is a Sanitary Manhole top of casing. The Sanitary Manhole (PC-3) is located along the northern property line of Tax Parcel 18-012-020 near North Atherton Street. Elevation = 1212.58'
- All existing trees, vegetation, pavements, concrete foundations, structures and organic topsoil shall be stripped and removed from new construction areas unless noted otherwise.
- All areas not paved shall be sodded, seeded, mulched or landscaped unless otherwise noted in the construction drawings, site specifications or instructed by the Owner.
- Contractor shall refer to the geotechnical report prior to initiation of any earthwork activity.
- The maximum slope within all the handicapped parking spaces shall be 2.00% in any direction.
- The maximum slope for all on-site sidewalks shall be 4.90% with a maximum cross slope of 2.00% and curb ramps shall have a maximum slope of 8.30%.
- Proposed spot elevation are to bottom of curb unless noted otherwise.
- All fill material brought on to the job by the Contractor must comply with all applicable D.E.P. regulations regarding clean fill.
- All areas disturbed during construction, not designated to receive paving or mulch, shall be fine graded, topsoiled, & seeded unless otherwise noted in the construction drawings, site specifications or instructed by the Owner.
- The Contractor shall notify Owner's testing agency before any placement and compaction of fills on the site. Fill areas shall be prepared and compacted per the project specifications and certified by the Owner's testing agency. Contractor shall be responsible for removal, retesting, and replacement of fills not meeting the specifications. The Contractor is also responsible for all expenses associated with replacement of fills not meeting the specifications.

**STORMWATER MANAGEMENT NOTES**

- All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
- The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
- All storm pipe shall be as noted. All joints shall be watertight.
- Co-permittee requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittee of the individual NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Contractor shall remain a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
- Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
  - Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
  - Prepare an as-built topographic survey sealed by a licensed surveyor from the Commonwealth of Pennsylvania of the stormwater management facilities (infiltration basin, rain garden and outlet structures, outlet pipes, tops of berms and spillways).
  - Provide double-ring infiltrometer tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom soil mix prior to installation to certify that the soil mix meets the infiltration requirements noted on the plans.
- Contractor shall have a licensed professional submit as-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surface prior to placement of filter fabric/amended soils must also be submitted to the governing municipality.
- As-built infiltration testing in infiltration basins shall be performed at the top of the finished native soil layer prior to topsoil placement. This testing is in addition to the testing identified in Note 5.c. The number of infiltration tests performed shall be in accordance with the governing municipality's code of ordinances.



**SURVEY FEATURES LEGEND**

- Property Line, Lot Line or Right of Way Line
- Project Benchmark

**EXISTING FEATURES LEGEND**

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Guide Rail
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Sign
- Existing Tree Row
- 25% Slopes Or Greater

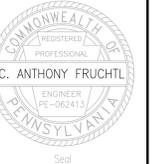
**PROPOSED FEATURES LEGEND**

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- 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 INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED SIGN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED 42" TALL CABLE GUIDE RAIL
- PROPOSED 6' TALL CHAIN LINK FENCE W/12' WIDE ACCESS GATE
- PROPOSED 6" Ø STEEL BOLLARD FILLED W/ CONCRETE



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Designer(s)	EAH
Environmental	JFS
Proj. Manager	CAF
Surveyor	BRK/MAK/JDE
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-12-GRADING
Layout	GRADING-OVERALL

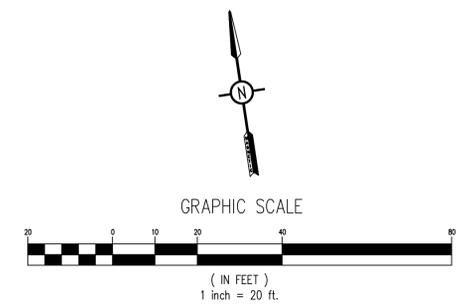
**PATTON CROSSING PHASE 2 CAVA RESTAURANT**

PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**GRADING PLAN - OVERALL**

PROJECT NO.	12142-PH2B
DATE	DECEMBER 6, 2024
SCALE	1" = 80'
SHEET NO.	6.0





**SURVEY FEATURES LEGEND**

- Property Line, Lot Line or Right of Way Line
- ⊕ Project Benchmark

**EXISTING FEATURES LEGEND**

- ▭ EXISTING BUILDING Existing Building
- EXISTING CURBING & EDGE OF PAVEMENT Existing Curbing & Edge of Pavement
- EX. SIDEWALK Existing Concrete Sidewalk
- EXISTING GRAVEL AREAS Existing Gravel Areas
- EXISTING RETAINING WALL Existing Retaining Wall
- EXISTING GUIDE RAIL Existing Guide Rail
- 1109 Existing Contours w/ Elevation (1's & 2's)
- 1110 Existing Contours w/ Elevation (5's & 10's)
- EXISTING STORM SEWER LINE w/ INLET Existing Storm Sewer Line w/ Inlet
- EXISTING SIGN Existing Sign
- EXISTING TREE ROW Existing Tree Row
- 25% SLOPES OR GREATER 25% Slopes Or Greater

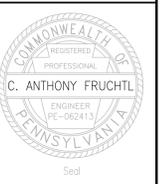
**PROPOSED FEATURES LEGEND**

- ▭ PROPOSED BUILDING PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK PROPOSED CONCRETE SIDEWALK
- PROPOSED BITUMINOUS PAVEMENT AREAS PROPOSED BITUMINOUS PAVEMENT AREAS
- 1109 PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110 PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- ⊗ 69.87 PROPOSED SPOT ELEVATION
- 2.0% PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED STORM SEWER ROOF DRAIN
- ♿ VAN PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- ♿ VAN PROPOSED SIGN
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- PROPOSED 6" Ø STEEL BOLLARD FILLED W/ CONCRETE



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Designer(s) EAH  
Environmental JRS  
Proj. Manager CAF  
Surveyor BRK/MAK/DF  
Perimeter Ok.  
Book 541 Pg. 7  
File 12142-PH2B-12-GRADING  
Layout GRADING-BASIN

Date	Description
	REVISIONS

**PATTON CROSSING  
PHASE 2  
CAVA RESTAURANT**  
PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

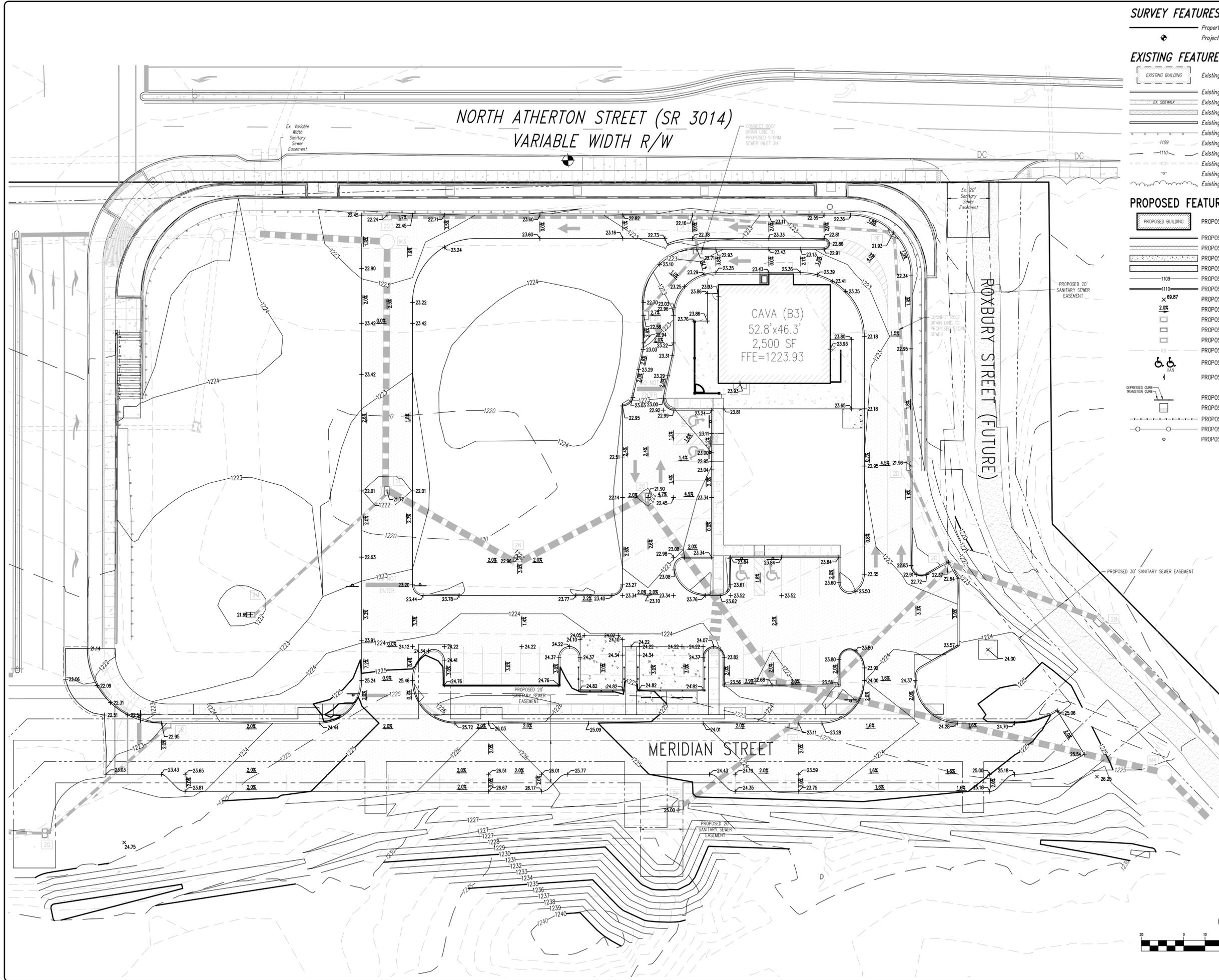
**FINAL LAND  
DEVELOPMENT PLAN**

**GRADING PLAN -  
BASIN**

PROJECT NO.  
**12142-PH2B**  
DATE  
**DECEMBER 6, 2024**

SCALE SHEET NO.  
1" = 20' **6.1**

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**SURVEY FEATURES LEGEND**

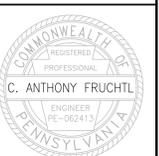
- Property Line, Lot Line or Right of Way Line
- Project Benchmark

**EXISTING FEATURES LEGEND**

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Guide Rail
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Sign
- Existing Tree Row

**PROPOSED FEATURES LEGEND**

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- 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 INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED SIGN
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- PROPOSED HANDICAPPED RAMP
- PROPOSED 42" TALL CABLE GUIDE RAIL
- PROPOSED 6" TALL CHAIN LINK FENCE W/ 12" WIDE ACCESS GATE
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE



Designer(s) EAH  
Environmental JFS  
Proj. Manager CAF  
Surveyor BRK/MAK/DE  
Perimeter Ck. \_\_\_\_\_  
Book 541 Pg. 7  
File 12142-PH2B-12-24000  
Layout GRADING-PH2

Date	Description
	REVISIONS

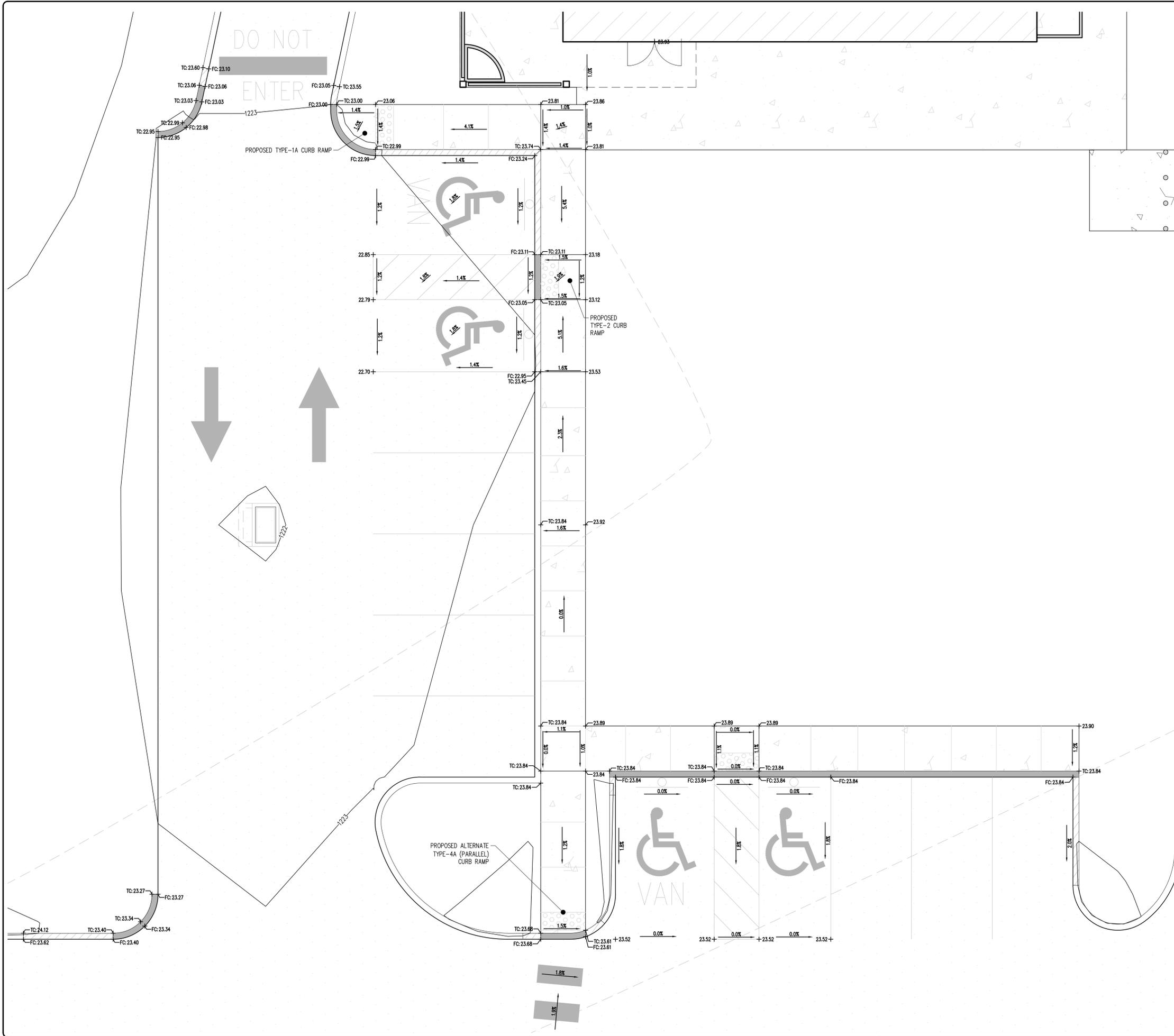
**PATTON CROSSING PHASE 2  
CAVA RESTAURANT**  
PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**GRADING PLAN - PHASE 2**

PROJECT NO.  
**12142-PH2B**  
DATE  
**DECEMBER 6, 2024**  
SCALE SHEET NO.  
1" = 20' **6.2**

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**SURVEY FEATURES LEGEND**

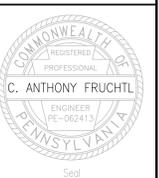
- Property Line, Lot Line or Right of Way Line
- Project Benchmark

**EXISTING FEATURES LEGEND**

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Guide Rail
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Sign
- Existing Tree Row
- 25% Slopes Or Greater

**PROPOSED FEATURES LEGEND**

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- 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 INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED SIGN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED 42" TALL CABLE GUIDE RAIL
- PROPOSED 6' TALL CHAIN LINK FENCE W/12' WIDE ACCESS GATE
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE



Designer(s)	EAH
Environmental	JFS
Proj. Manager	CAF
Surveyor	BRK/MAK/DF
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-LS-GRADING
Layout	GRADING-EXT

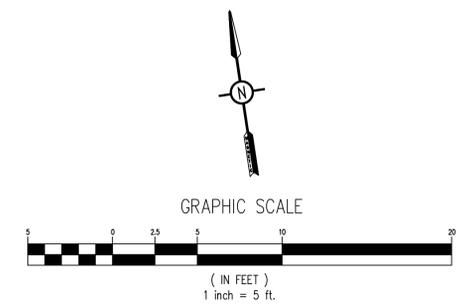
**PATTON CROSSING PHASE 2 CAVA RESTAURANT**

PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

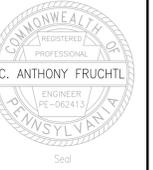
**FINAL LAND DEVELOPMENT PLAN**

**GRADING PLAN - ADA PARKING ENLARGEMENT**

PROJECT NO.	12142-PH2B
DATE	DECEMBER 6, 2024
SCALE	1" = 5'
SHEET NO.	6.3



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Designer(s)	EAH
Environmental	JRS
Proj. Manager	CAF
Surveyor	BRK/MAK/DF
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-LS-GRADING
Layout	GRADING-EN2

Date	Description
	REVISIONS

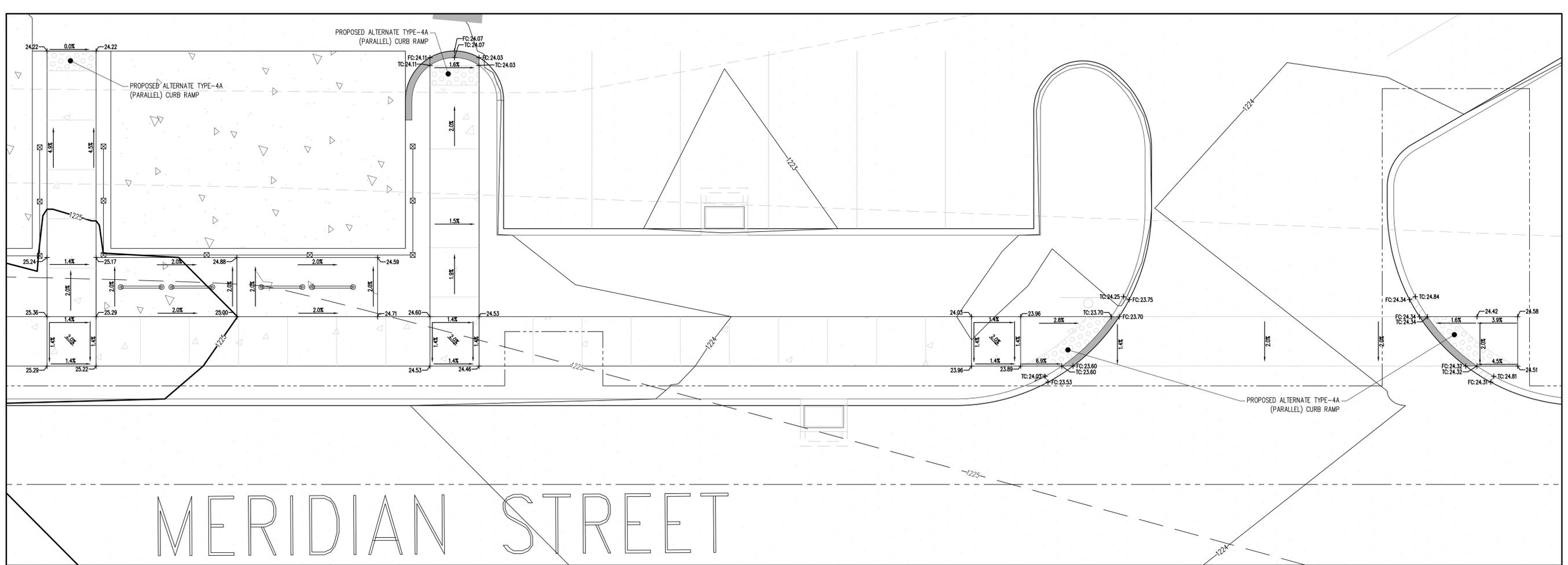
**PATTON CROSSING  
PHASE 2  
CAVA RESTAURANT**

PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND  
DEVELOPMENT PLAN**

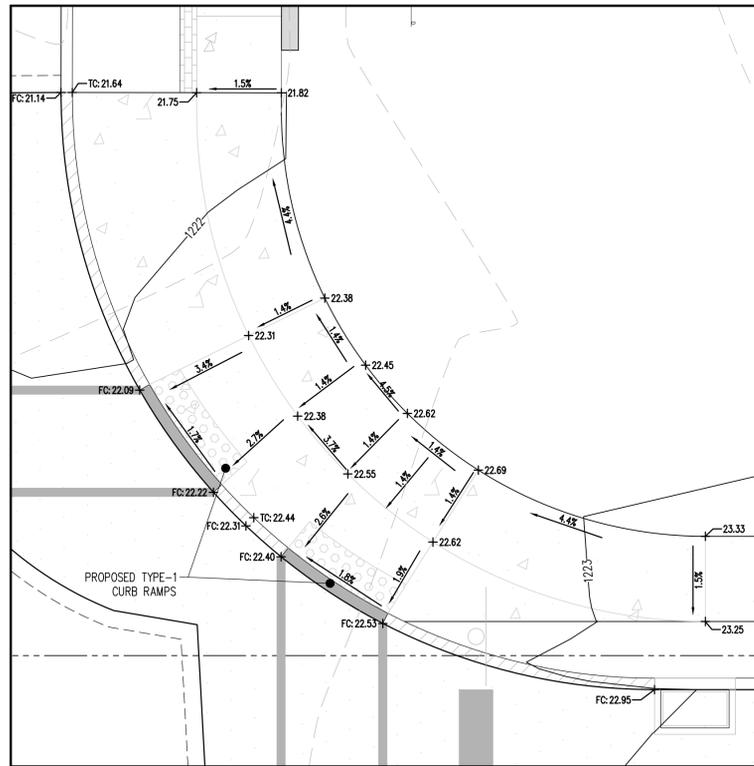
**GRADING PLAN -  
CURB RAMP AND  
DRIVEWAY AREA  
ENLARGEMENTS**

PROJECT NO.	12142-PH2B
DATE	DECEMBER 6, 2024
SCALE	1" = 5'
SHEET NO.	<b>6.4</b>



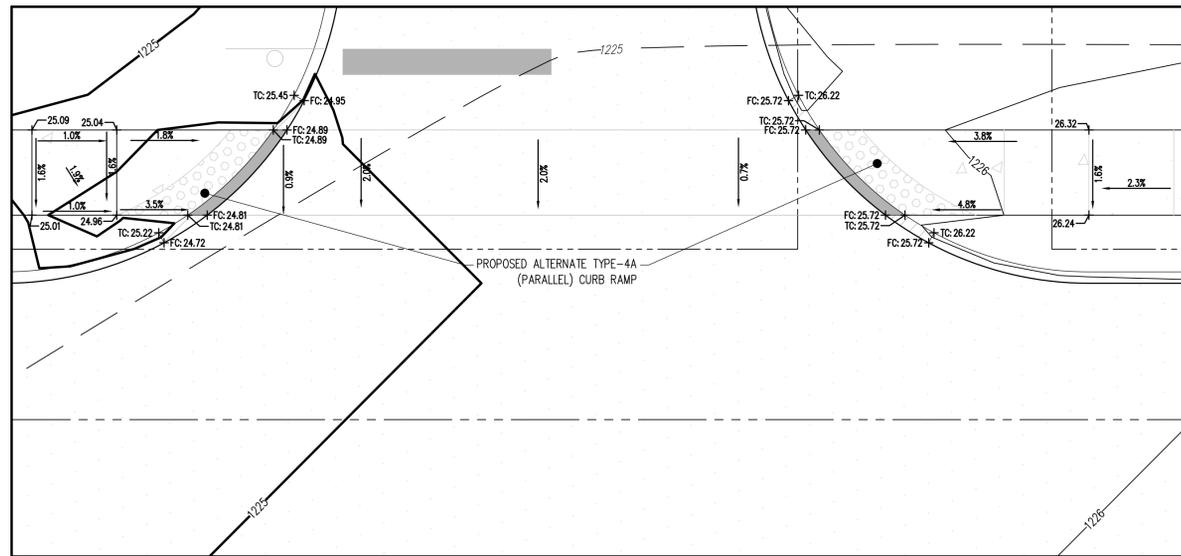
**SOUTHEASTERN DRIVEWAY AREA ENLARGEMENT**

SCALE: 1"=5'



**SOUTHWESTERN CURB RAMP ENLARGEMENT**

SCALE: 1"=5'



**SOUTHWESTERN DRIVEWAY AREA ENLARGEMENT**

SCALE: 1"=5'

**SURVEY FEATURES LEGEND**

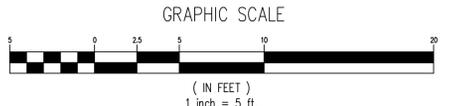
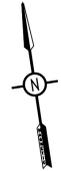
- Property Line, Lot Line or Right of Way Line
- Project Benchmark

**EXISTING FEATURES LEGEND**

- EXISTING BUILDING Existing Building
- Existing Curbing & Edge of Pavement
- EXIST. SIDEWALK Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Guide Rail
- 1109 Existing Contours w/ Elevation (1's & 2's)
- 1110 Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Sign

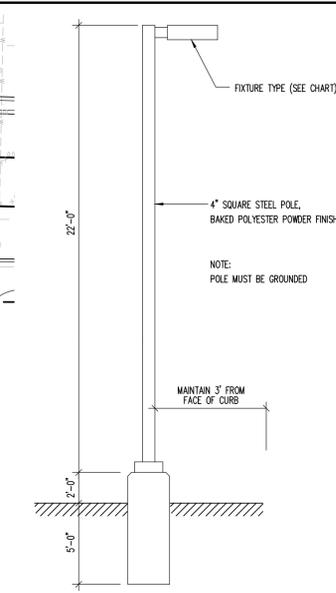
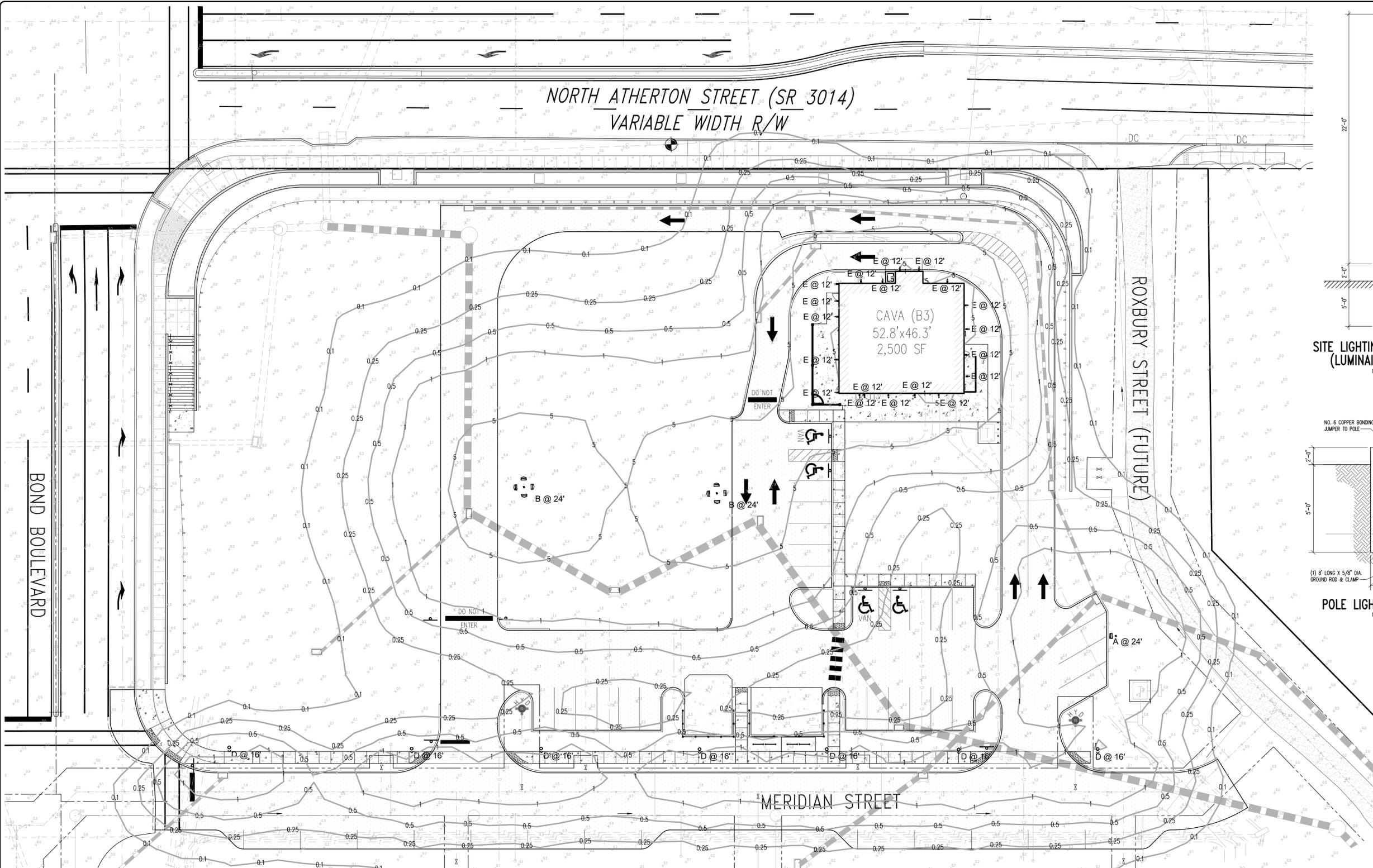
**PROPOSED FEATURES LEGEND**

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- 1109 PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110 PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- 69.87 PROPOSED SPOT ELEVATION
- 2.0% PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED SIGN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED 42" TALL CABLE GUIDE RAIL
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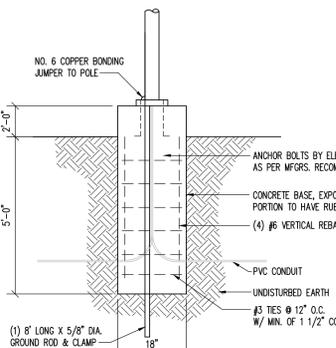








**SITE LIGHTING POLE DETAIL (LUMINAIRES A & B)**  
NOT TO SCALE



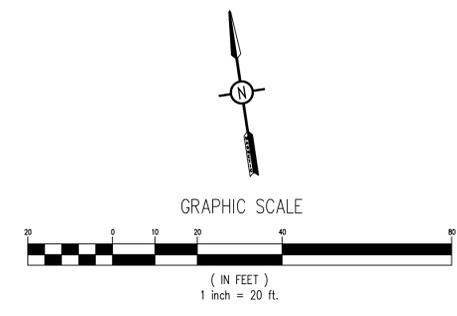
**POLE LIGHT BASE DETAIL**  
NOT TO SCALE

LUMINAIRE SCHEDULE									
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	A	1	Cree Inc	OSQ-A-xx-4ME-B-57K-ULxxxxx CONFIGURED FROM OSQ-A-xx-4ME-B-30K-ULxxxxx	Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 5700K CONFIGURED FROM Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 3000K	1	11649	1	86
	B	2	Cree Inc	OSQ-A-xx-4ME-B-57K-ULxxxxx CONFIGURED FROM OSQ-A-xx-4ME-B-30K-ULxxxxx	Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 5700K CONFIGURED FROM Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 3000K	1	11649	1	344
	D	7	Landscape Forms	AC-04BL3-035F-30K	Black aluminum housing, frosted plastic lens	1	2717	1	57.28
	E	19	Cree Inc	XSPW-B-WM-3ME-4L-30K-UL-WH CONFIGURED FROM XSPW-B-WM-3ME-8L-40K-UL-WH	CONFIGURED FROM XSPW Wall Mount, Type III Medium Distribution, 8L, 4000K CCT	1	4270	1	33

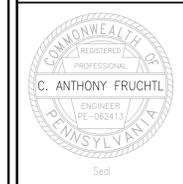
- ELECTRICAL NOTES**
- Electrical contractor shall verify and coordinate all existing and new underground facilities with all contractors, utility companies, etc. before beginning any underground construction.
  - Wiring under all pavement surfaces shall be in PVC conduit size as indicated - minimum size 1". Electrical contractor shall field verify location of all roadways, walkways, patios, terraces, etc. and provide conduit under all locations for wiring access.
  - All circuits shall be complete with ground wire.
  - All conduit shall be set at a minimum depth of 24".
  - All wiring trenches shall be run as close as possible to all curbs - no wiring shall run through the center of any island, planter, terrace, courtyard, etc. Electrical contractor shall verify conduit location in the field before excavating.
  - Contractor shall provide electrical design services and drawings per latest building & electrical code standards for lighting connections, circuitry & controller, and shall be responsible for any code approvals for the design.
  - Proposed fixtures for curfew lighting shall be installed on same circuit to be set to remain on post after-business hours. All other proposed fixtures shall be set to be turned off for after-business hours.

**STATISTICS**

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PAVED AREA	+	2.6 fc	19.3 fc	0.0 fc	N/A	N/A



**PennTerra ENGINEERING INC.**  
3075 ENTERPRISE DRIVE  
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[www.PENNTERRA.com](http://www.PENNTERRA.com)  
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Designer(s) EAH  
Environmental JFS  
Proj. Manager CAF  
Surveyor BRK/MAK/JDE  
Perimeter Ck.  
Book 541 Pg. 7  
File 12142-PH2-UB-100100-PRF  
Layout LP-PH2-PRF

Date Description  
REVISIONS

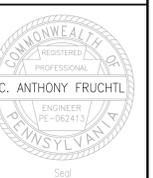
**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**LIGHTING PLAN - PRE-CURFEW**

PROJECT NO.  
**12142-PH2B**  
DATE  
**DECEMBER 6, 2024**  
SCALE SHEET NO.  
**1" = 20' 8.0**

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Designer(s) EAH  
Environmental JFS  
Proj. Manager CAF  
Surveyor BRK/MAK/DE  
Perimeter Ck.  
Book 541 Pg. 7  
File 12142-PH2-12-LIGHTING-POST.dwg  
Layout LP-PH2-POST

Date Description  
REVISIONS

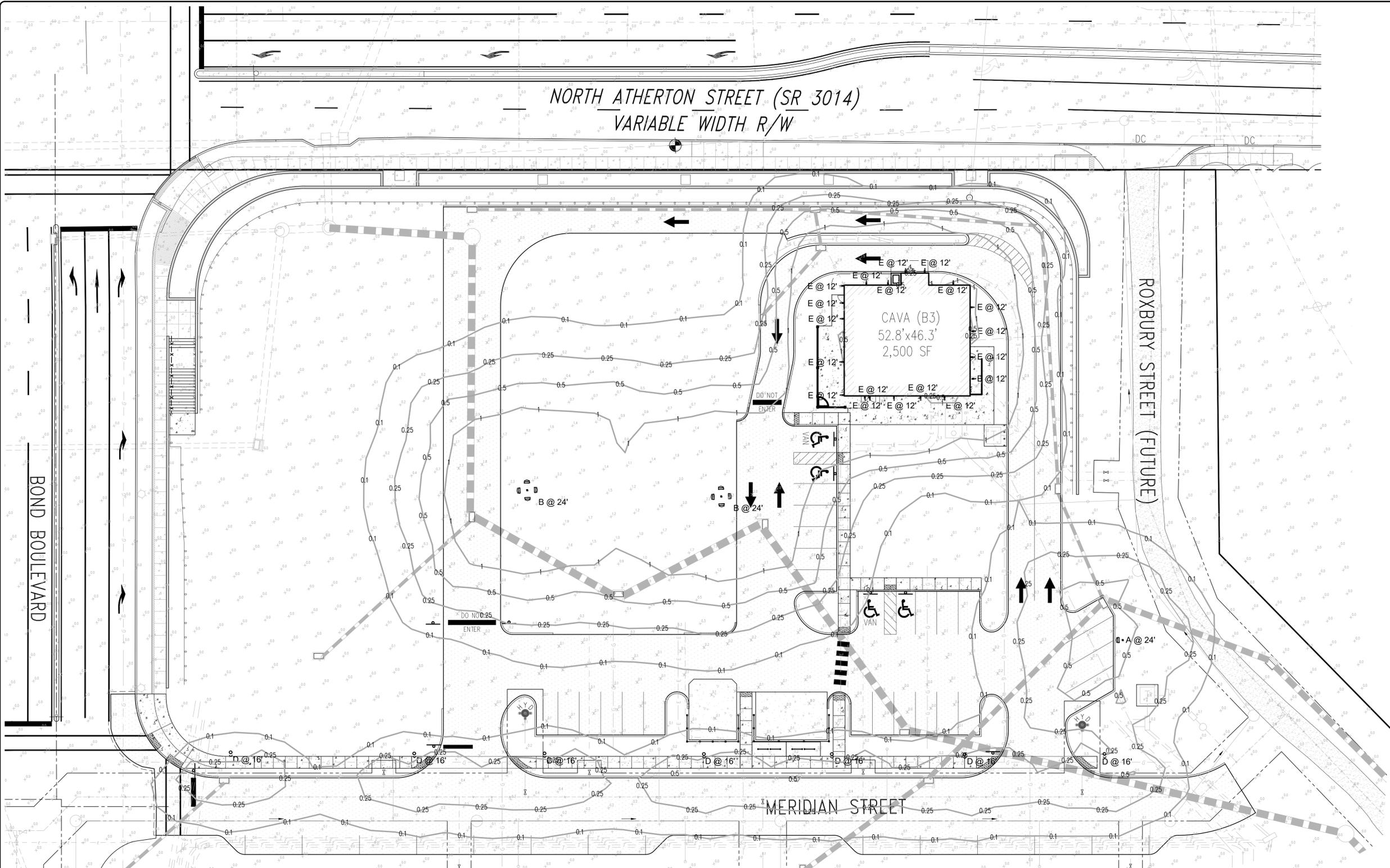
**PATTON CROSSING  
PHASE 2  
CAVA RESTAURANT**

PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND  
DEVELOPMENT PLAN**

**LIGHTING PLAN -  
POST-CURFEW**

PROJECT NO.  
**12142-PH2B**  
DATE  
**DECEMBER 6, 2024**  
SCALE SHEET NO.  
1" = 20' **8.1**

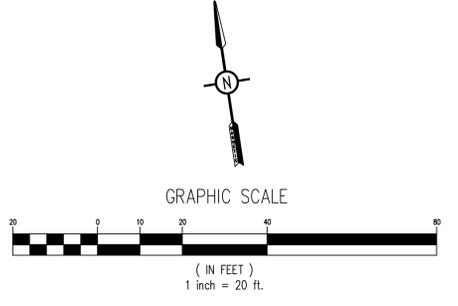


Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	A	1	Cree Inc	OSQ-A-xx-4ME-B-57K-ULxxxxx CONFIGURED FROM OSQ-A-xx-4ME-B-30K-ULxxxxx	Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 5700K CONFIGURED FROM Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 3000K	1	11649	0.25	86
	B	2	Cree Inc	OSQ-A-xx-4ME-B-57K-ULxxxxx CONFIGURED FROM OSQ-A-xx-4ME-B-30K-ULxxxxx	Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 5700K CONFIGURED FROM Cree OSQ Series Area Luminaire, Type IV Medium Distribution, B Input Power Designator, 3000K	1	11649	0.25	344
	D	7	Landscape Forms	AC-04BL3-035F-30K	Black aluminum housing, frosted plastic lens	1	2717	0.25	57.28
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- ELECTRICAL NOTES**
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  - Wiring under all pavement surfaces shall be in PVC conduit size as indicated - minimum size 1". Electrical contractor shall field verify location of all roadways, walkways, patios, terraces, etc. and provide conduit under all locations for wiring access.
  - All circuits shall be complete with ground wire.
  - All conduit shall be set at a minimum depth of 24".
  - All wiring trenches shall be run as close as possible to all curbs - no wiring shall run through the center of any island, planter, terrace, courtyard, etc. Electrical contractor shall verify conduit location in the field before excavating.
  - Contractor shall provide electrical design services and drawings per latest building & electrical code standards for lighting connections, circuitry & controller, and shall be responsible for any code approvals for the design.
  - Post-curfew lighting shall reflect a 75% reduction by 2:00 AM in light levels compared to proposed Pre-curfew conditions.

**STATISTICS**

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PAVED AREA	+	0.6 fc	4.8 fc	0.0 fc	N/A	N/A



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NORTH ATHERTON STREET (SR 3014)  
VARIABLE WIDTH R/W

ROXBURY STREET (FUTURE)

MERIDIAN STREET

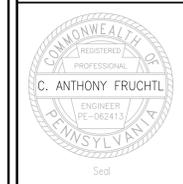
CAVA (B3)  
52.8'x46.3'  
2,500 SF

PLANTING SCHEDULE					
SYMBOL	KEY	QTY	COMMON NAME	BOTANICAL NAME	SIZE
<b>ORNAMENTAL TREES</b>					
	AME GRA	1	'Autumn Brilliance' Serviceberry	AMELANCHIER x grandiflora 'Autumn Brilliance'	1.5" CAL.
	CER CAN	7	Forest Pansy Eastern Redbud	CERCIS canadensis 'Forest Pansy'	1.5" CAL.
<b>SHRUBS</b>					
	ARO ARB	19	Brilliant Red Chokeberry	ARONIA arbutifolia 'Brilliantissima'	#3 Container
	CLE ALN	1	'Sweet Pepper Bush "Hummingbird'	CLETHRA alnifolia 'Hummingbird'	#3 Container
	COR SER ALL	13	Allemans' Red twig dogwood	CORNUS sericea 'Allemans'	#3 Container
	ILE GLA	20	Compact Inkberry	ILEX glabra 'Compacta'	#3 Container
<b>SMALL SHRUBS / GRASSES</b>					
	AND GER	75	Red October Blue Stem	ANDROPOGON gerardii 'Red October'	#2 Container
	CEN ALO	60	Hameln Dwarf Fountain Grass	CENCHRUS alopecuroides 'Hameln'	#2 Container
	ECH PUR	163	Fatal Attraction Cone Flower	ECHINACEA purpurea 'Fatal attraction'	#2 Container
	PAN VIR	110	'Shenandoah' Switch Grass	PANICUM virgatum 'Shenandoah'	#2 Container
	RUD FUL E	167	'Early Bird Gold' BLACK-EYED SUSAN	RUDEBECKIA fulgida 'Early Bird Gold'	Plug, 24" O.C.
<b>TREE - SHADE</b>					
	CLA KEN	1	American Yellowwood	Cladrastis kentukea	1.5" CAL.
	NYS SYL	4	Black Gum	Nyssa sylvatica	1.5" CAL.

- NOTE: ALL TREES AND SHRUBS SHALL BE PLANTED IN ACCORDANCE WITH THE PATTON TOWNSHIP STANDARDS.**
- LANDSCAPE NOTES:**
- THE MULCH IS TO BE DOUBLE SHREDDED HARDWOOD BARK MULCH, WELL AGED AND DARK IN COLOR. APPLY THE MULCH 4" THICK.
  - PLANT MATERIAL SUBSTITUTIONS MAY ONLY BE PERMITTED AT THE APPROVAL OF THE OWNER, TOWNSHIP AND ENGINEER OR LANDSCAPE ARCHITECT.
  - ANY PLANTINGS WHICH DO NOT SURVIVE FOR A PERIOD OF ONE YEAR FROM THE DATE OF PLANTING ARE TO BE REPLACED BY THE 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 COMPLETION OF THE LANDSCAPE OR SEASON'S END (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 AND SEEDED WITH A HARDY PERENNIAL GRASS SEED MIXTURE AND MULCHED WITH STRAW.
  - ALL CALIPER MEASUREMENTS FOR LANDSCAPING SHALL BE MEASURED AT 6" ABOVE THE ROOT BALL.
  - ALL LANDSCAPED ISLANDS SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 2' AND FILLED WITH SUITABLE MATERIAL.
  - ALL ABOVEGROUND UTILITY BOXES WILL BE SCREENED PER SECTION 175-40.4.C(2) OF THE TOWNSHIP ZONING ORDINANCE.
  - AN UNOBSTRUCTED 24" OVERHANG AREA SHALL BE PROVIDED ALONG ALL PERIMETER PARKING STALLS. ALL PLANTINGS SHALL BE LOCATED OUTSIDE OF THIS OVERHANG AREA.

**PennTerra ENGINEERING INC.**  
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STATE COLLEGE, PA 16801  
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Designer(s) EAH  
Environmental JFS  
Proj. Manager CAF  
Surveyor BRK/MAK/DE  
Perimeter Ck. \_\_\_\_\_  
Book 541 Pg. 7  
File 12142-PH2B-13-LANDSCAPING  
Layout LSP

Date	Description	REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**LANDSCAPING PLAN**

PROJECT NO. **12142-PH2B**  
DATE **DECEMBER 6, 2024**  
SCALE **1" = 20'** SHEET NO. **9.0**

**SURVEY FEATURES LEGEND**

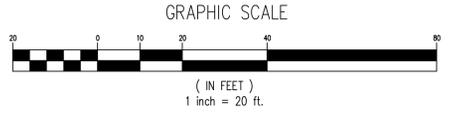
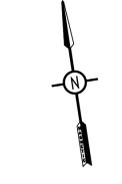
- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line

**EXISTING FEATURES LEGEND**

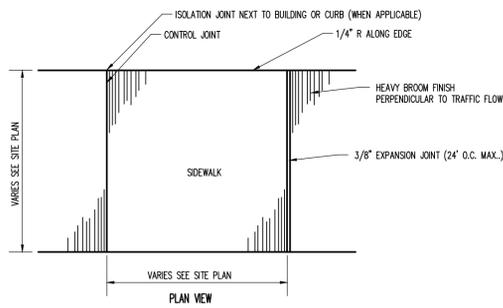
- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Guide Rail
- Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Sewer Lateral w/ Clean Out
- Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Underground Electric
- Existing Underground Telephone
- Existing Underground TV Cable
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Light Pole/Standard
- Existing Sign
- Existing Tree Row

**PROPOSED FEATURES LEGEND**

- Proposed Building
- Proposed Curbing & Edge of Pavement
- Proposed Concrete Sidewalk
- Proposed Concrete Areas
- Proposed Bituminous Pavement Areas
- Proposed 8" Sanitary Sewer w/ Manhole
- Proposed 6" PVC Sanitary Sewer Lateral w/ Clean Out
- Proposed Single Unit Domestic Water Service Lateral w/ Curb Box
- Proposed Fire Service Lateral
- Proposed Storm Sewer w/ Type C Inlet
- Proposed Storm Sewer Roof Drain
- Proposed Gas Line
- Proposed Underground Electric
- Proposed Combined Utility Conduit
- Proposed Overhead Utility Line w/ Pole
- Proposed Storm Sewer Inlet - Type M
- Proposed Storm Sewer Inlet - Type C
- Proposed Clean-Out
- Proposed Light Fixture (Decorative)
- Proposed Painted Handicapped Parking Symbols
- Proposed Sign
- Proposed Depressed Curb w/ Curb Transition
- Proposed Fire Hydrant
- Proposed 6" Steel Bollard Filled w/ Concrete

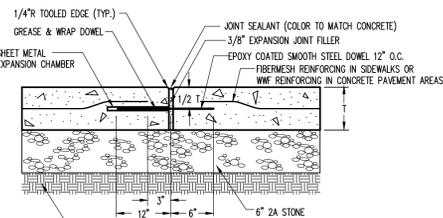


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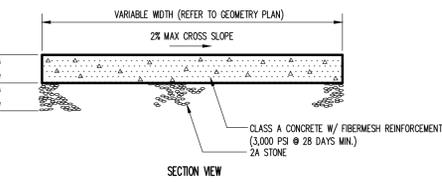
**CONCRETE CONTROL JOINT DETAIL  
(CONCRETE AREAS & SIDEWALKS)**  
NOT TO SCALE

- NOTES:  
1. USE 1/2" WIDE CONTROL JOINT FOR CONCRETE AREAS  
2. USE 3/8" WIDE CONTROL JOINT FOR SIDEWALKS  
3. MAXIMUM JOINT SPACING = 15 FEET



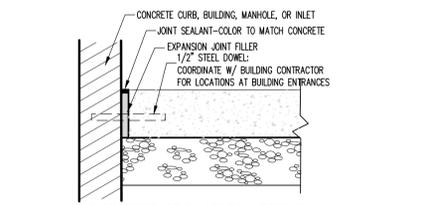
**CONCRETE EXPANSION JOINT DETAIL  
(CONCRETE AREAS & SIDEWALKS)**  
NOT TO SCALE

- NOTES:  
1. USE 1/2" EXPANSION JOINTS & 1" DOWELS FOR CONCRETE PAVING/COMPACTOR DESIGN  
2. USE 3/8" EXPANSION JOINTS & 1/2" DOWELS FOR CONCRETE SIDEWALKS



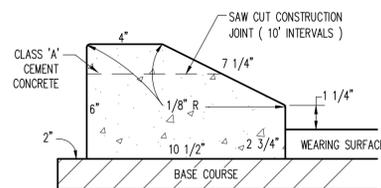
**CONCRETE SIDEWALKS & PADS SECTION**  
NOT TO SCALE

- NOTES:  
1. CONTROL JOINTS SHALL HAVE A MAXIMUM SPACING OF 5'  
2. FULL DEPTH EXPANSION JOINTS SHALL BE INSTALLED WHEN ABUTTING SOLID STRUCTURES, CURBS, AND AT THE BEGINNING/END OF WORKING DAY.



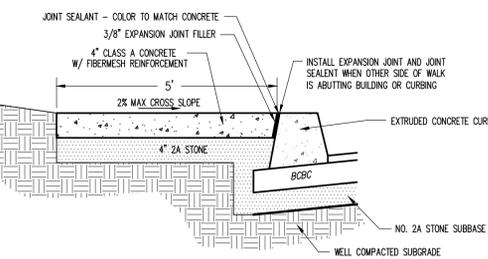
**CONCRETE ISOLATION DETAIL  
(CONCRETE AREAS & SIDEWALKS)**  
NOT TO SCALE

- NOTES:  
1. INSTALL ISOLATION JOINTS FOR CONCRETE SIDEWALKS AT ABUTTING WALLS, CURBS, BUILDING WALLS & COLUMNS  
2. REFER TO STRUCTURAL DRAWINGS & DETAILS FOR CONCRETE PAVEMENT AREAS  
3. USE 3/8" ISOLATION JOINTS & 1/2" DOWELS FOR SIDEWALKS

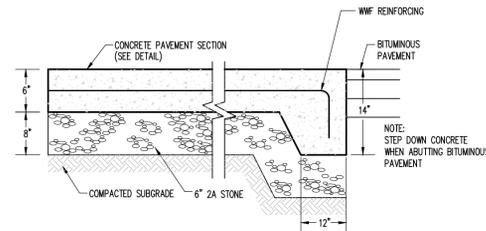


**10.5" EXTRUDED MOUNTABLE  
CONCRETE CURB DETAIL**  
NOT TO SCALE

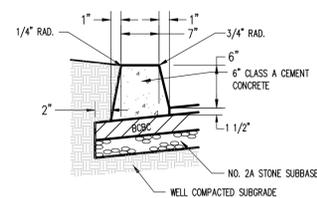
- NOTES:  
1. SEE SHEET 5.0 FOR LOCATION OF EXTRUDED MOUNTABLE CURB  
2. IF WEARING COURSE IS NOT TO BE PLACED WITHIN 30 DAYS, SEAL ALONG THE CURB AND ROAD SURFACE WITH AC-20



**INTEGRAL EXTRUDED STRAIGHT FACE  
CONCRETE CURB WITH CONCRETE SIDEWALK**  
NOT TO SCALE

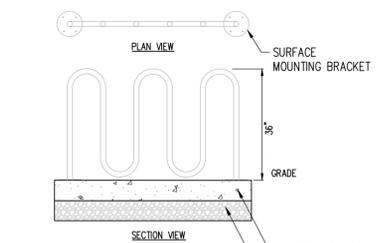


**CONCRETE PAVING TRANSITION DETAIL**  
NOT TO SCALE



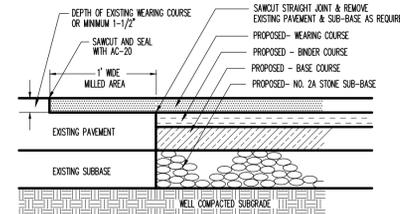
**6" EXTRUDED STRAIGHT FACE  
CONCRETE CURB DETAIL**  
NOT TO SCALE

- NOTES:  
1. BIKE RACK SHALL BE DUMOR, INC MODEL 130-30 RACK OR APPROVED EQUAL.  
2. BIKE RACK MATERIAL SHALL BE 2" SCHEDULE 40 STEEL.  
3. BIKE RACK SHALL BE SURFACE MOUNTED ON CONCRETE.  
4. COLOR TO BE DETERMINE BY OWNER.  
5. BIKE RACK SHALL HAVE 5 BENDS TO ACCOMMODATE 7 BICYCLES.  
6. EACH BIKE RACK PAD SHOWN ON THE PLAN SHALL HAVE (2)-BIKE RACKS INSTALLED ON IT.



**BIKE RACK DETAIL**  
NOT TO SCALE

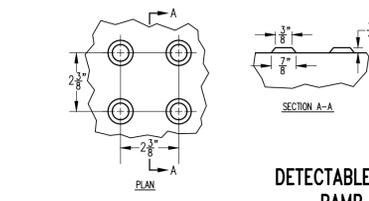
- NOTES:  
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2. BIKE RACK MATERIAL SHALL BE 2" SCHEDULE 40 STEEL.  
3. BIKE RACK SHALL BE SURFACE MOUNTED ON CONCRETE.  
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6. EACH BIKE RACK PAD SHOWN ON THE PLAN SHALL HAVE (2)-BIKE RACKS INSTALLED ON IT.



**ASPHALT PAVEMENT  
SECTION**  
NOT TO SCALE

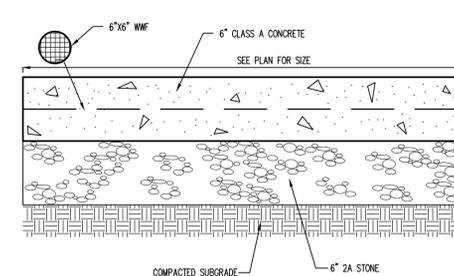
- NOTE: WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT  
SAW CUT & MILL 1" WIDE MINIMUM BY DEPTH OF EXISTING WEARING COURSE

**PAVEMENT NOTCH DETAIL**  
NOT TO SCALE

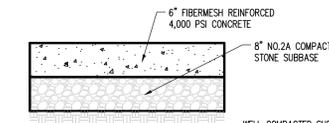


**DETECTABLE WARNING SURFACE/  
RAMP CROSS SECTION**  
NOT TO SCALE

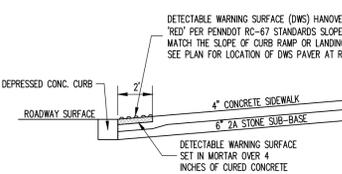
- NOTES: ANY CUTTING OF THE PAVEMENT BLOCKS SHALL NOT RESULT IN PARTIAL TRUNCATED DOMES.



**DUMPSTER PAD DETAIL**  
NOT TO SCALE

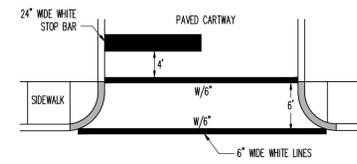


**CONCRETE PAVEMENT SECTION**  
NOT TO SCALE

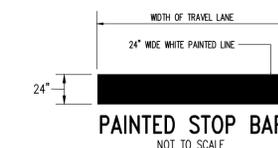


**DETECTABLE WARNING SURFACE/  
RAMP CROSS SECTION**  
NOT TO SCALE

- NOTES: ANY CUTTING OF THE PAVEMENT BLOCKS SHALL NOT RESULT IN PARTIAL TRUNCATED DOMES.



**CROSSWALK DETAIL**  
NOT TO SCALE



**PAINTED STOP BAR**  
NOT TO SCALE



**SIGN DETAILS**  
NOT TO SCALE

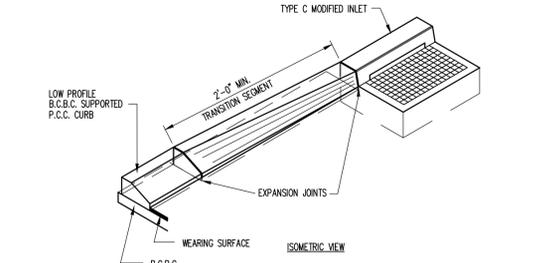
- NOTE: REFERENCE SHEET 5.0 FOR SIGN LOCATIONS



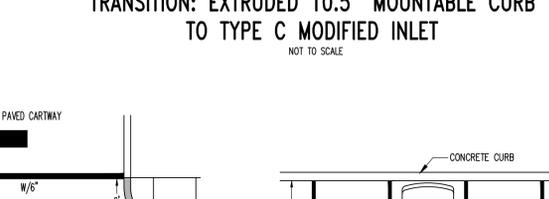
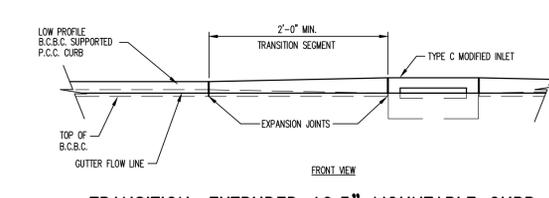
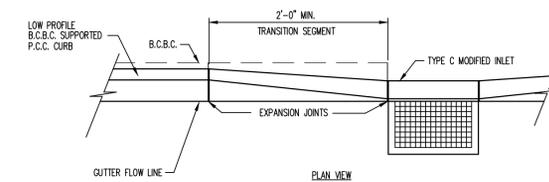
**RESERVED PARKING**  
MINIMUM FINE \$50.00  
VAN ACCESSIBLE

**SIGN DETAILS**  
NOT TO SCALE

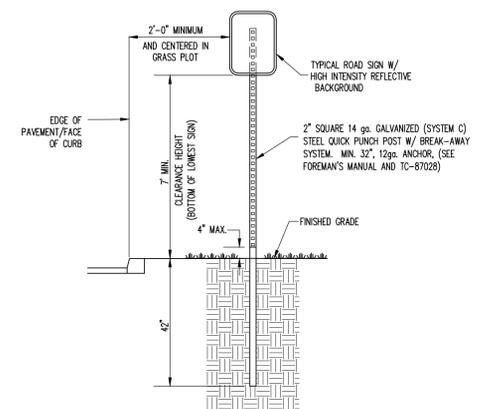
- NOTE: REFERENCE SHEET 5.0 FOR SIGN LOCATIONS



**TRANSITION: EXTRUDED 10.5" MOUNTABLE CURB  
TO TYPE C MODIFIED INLET**  
NOT TO SCALE

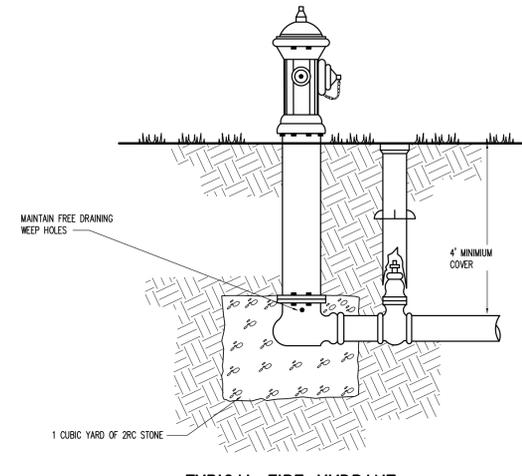
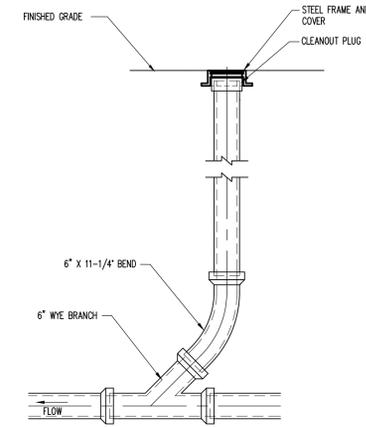
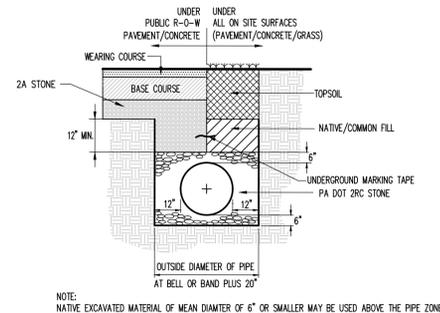
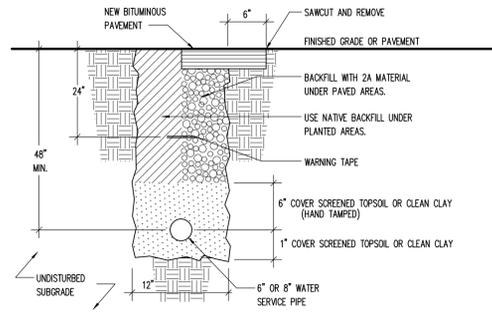
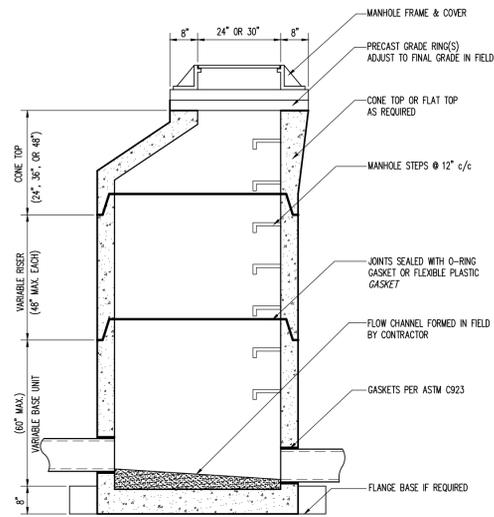


**TYPICAL PARKING STALL DETAIL**  
NOT TO SCALE

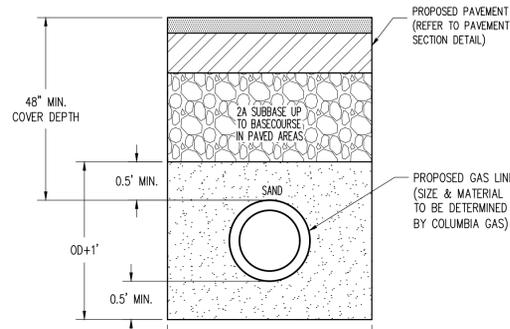


**SIGN POST DETAIL**  
NOT TO SCALE

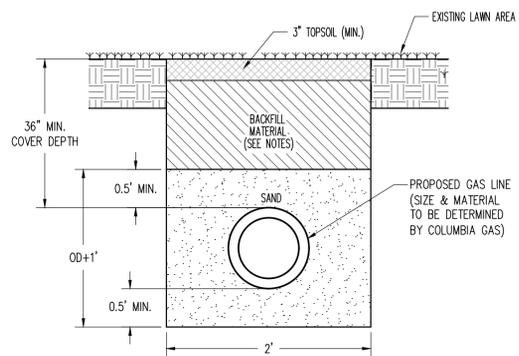
- NOTES:  
1. MOUNT SIGN AT RIGHT ANGLE TO DIRECTION OF TRAFFIC FLOW.  
2. PROVIDE A MINIMUM CLEARANCE OF ONE FOOT FROM FACE OF CURB.



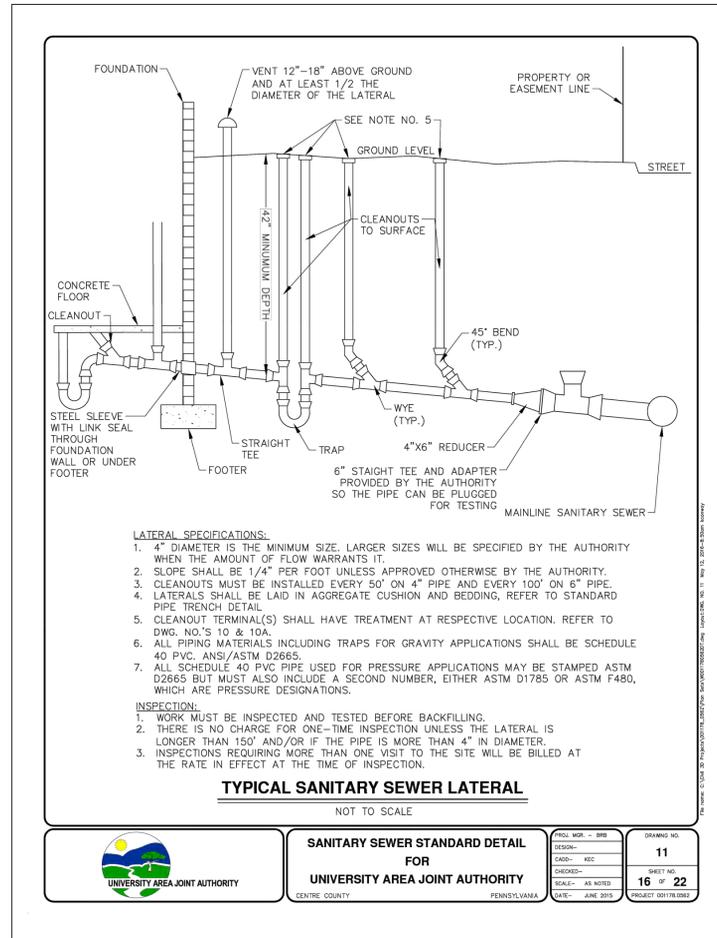
**PRE-CAST CONCRETE MANHOLE INSTALLATION**  
NOT TO SCALE



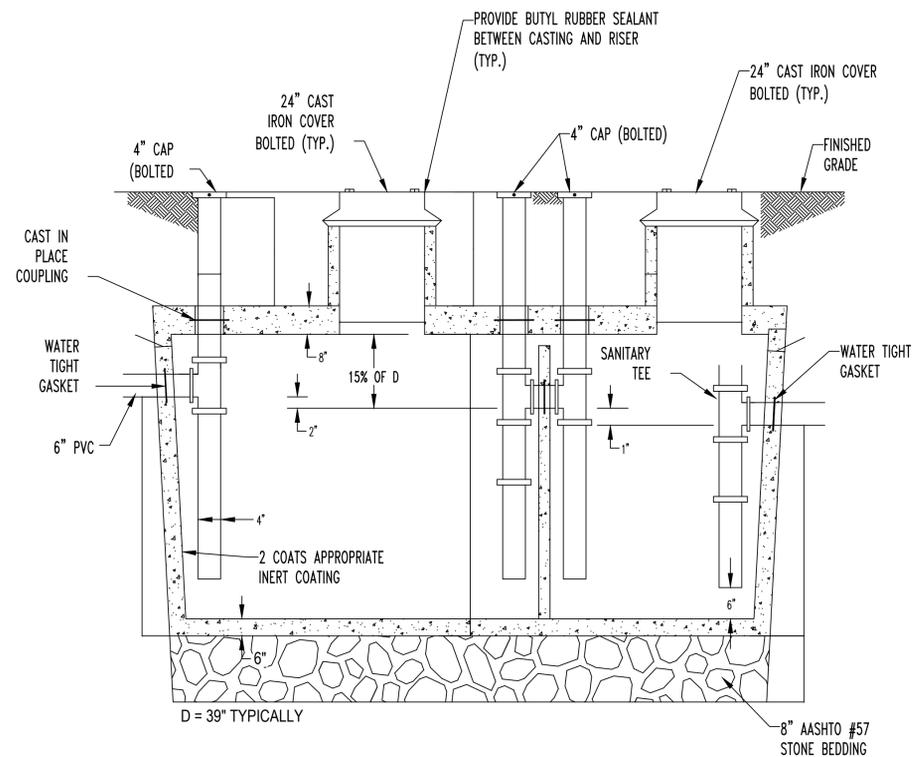
- NOTES:  
1. COMPACT BACKFILL MATERIAL IN 8" LIFTS TO 100% STANDARD PROCTOR DENSITY.  
2. GAS LINE SHALL BE LOCATED A MINIMUM HORIZONTAL SEPARATION OF 8" FROM PARALLEL ELECTRIC, TELECOM AND CABLE CONDUITS.



- NOTES:  
1. NATIVE OR SUITABLE BACKFILL MATERIAL MAY BE UTILIZED ABOVE SAND TO THE BOTTOM OF THE TOPSOIL.  
2. COMPACT BACKFILL MATERIAL IN 8" LIFTS TO 100% STANDARD PROCTOR DENSITY.  
3. GAS LINE SHALL BE LOCATED A MINIMUM HORIZONTAL SEPARATION OF 8" FROM PARALLEL ELECTRIC, TELECOM AND CABLE CONDUITS.



UNIVERSITY AREA JOINT AUTHORITY	SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY		DATE: JUNE 2015	PROJECT: 0011781000
	SCALE: AS NOTED	DESIGNED: REC	DRAWING NO: 11	SHEET NO: 16 OF 22



- ALL INLET AND OUTLET PIPES SHALL BE INSTALLED NO MORE THAN 6" FROM THE BOTTOM OF THE GREASE TRAP.  
-TANK TAPERS TOP TO BOTTOM AND IS TRAPEZOIDAL IN CROSS SECTION.  
-TANK IS 5000 PSI CONCRETE-STEEL REINFORCED (@ 28 DAYS) CONCRETE CONFORMS TO ACI 318-16-4.5.1 AND 318-16-4.5.2, ASTM A615 AND A185  
-DIMENSION: 151" INTERIOR/ 163" EXTERIOR LENGTH x 72" INTERIOR/ 84" EXTERIOR WIDTH
- NOTES:  
1. WHEN LOCATED IN DRIVEWAYS OR PAVED AREAS, GREASE TRAP TO BE DESIGNED FOR APPROPRIATE LOAD BEARING CONDITIONS. GREASE TRAP SHALL BE CAPABLE OF WITHSTANDING HS-20 LOADING.  
2. ALL PIPE PENETRATIONS SHALL BE WATERTIGHT.  
3. GREASE TRAP SHALL BE PROVIDED WITH GAS-TIGHT MANHOLE COVERS, IN ACCORDANCE WITH TOWNSHIP STANDARD SPECIFICATIONS.  
4. PRECAST CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH 5000 PSI.  
5. EXTERIOR CONCRETE SURFACES BELOW GRADE SHALL HAVE 2 COATS OF COAL TAR EPOXY.  
6. SPECIFIC SEALANT DETAIL AT CONCRETE RISER TO CONCRETE VAULT INTERFACE SHALL BE WATERTIGHT. AT A MINIMUM, THE JOINT SHALL BE SEALED WITH BUTYL RUBBER SEALANT (KENT SEAL #2 OR APPROVED EQUIVALENT) AND THE EXTERIOR OF THE JOINT SHALL BE SEALED WITH NON-SHRINK GROUT IN CONFORMANCE WITH THE TOWNSHIP STANDARD GREASE TRAP DETAIL.  
7. TANK SHALL BE TESTED FOR WATER TIGHTNESS BY FILLING FOR 24 HRS. TO SOAK, THEN TOPPED OFF, AND THEN WATCHED FOR 24 HRS. NO DROP IN WATER IS ALLOWED.  
8. CAST IRON SHALL BE BOLTED TO CONCRETE WITH MASTIC TAPE (KENT SEAL OR APPROVED EQUIVALENT) SEALANT.  
9. MAXIMUM EARTH COVER=5.0', HS-20 LOADING.  
10. INLET AND OUTLET EQUIPPED WITH PIPE SEALS.

**STORMWATER MANAGEMENT NOTES**

- All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
- The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
- The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
- Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 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.
- An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
- All storm pipe shall be as noted. All joints shall be watertight.
- Co-permit requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittee of the individual NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Contractor shall remain a co-permittee of the National Pollution Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
- Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
  - Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
  - Prepare an as-built topographic survey sealed by a licensed surveyor from the commonwealth of Pennsylvania of the stormwater management facilities (infiltration basin, rain garden and outlet structures, outlet pipes, tops of berms and spillways).
  - Provide double-ring infiltrometer tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom soil mix prior to installation to certify that the soil mix meets the infiltration requirements noted on the plans.
- Contractor shall have a licensed professional submit as-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surface prior to placement of filter fabric/amended soils must also be submitted to the governing municipality.
- As-built infiltration testing in infiltration basins shall be performed at the top of the finished native soil layer prior to topsoil placement. This testing is in addition to the testing identified in Note 8.c. The number of infiltration tests performed shall be in accordance with the governing municipality's code of ordinances.

**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 be 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.

**STORMWATER FACILITIES MAINTENANCE:**

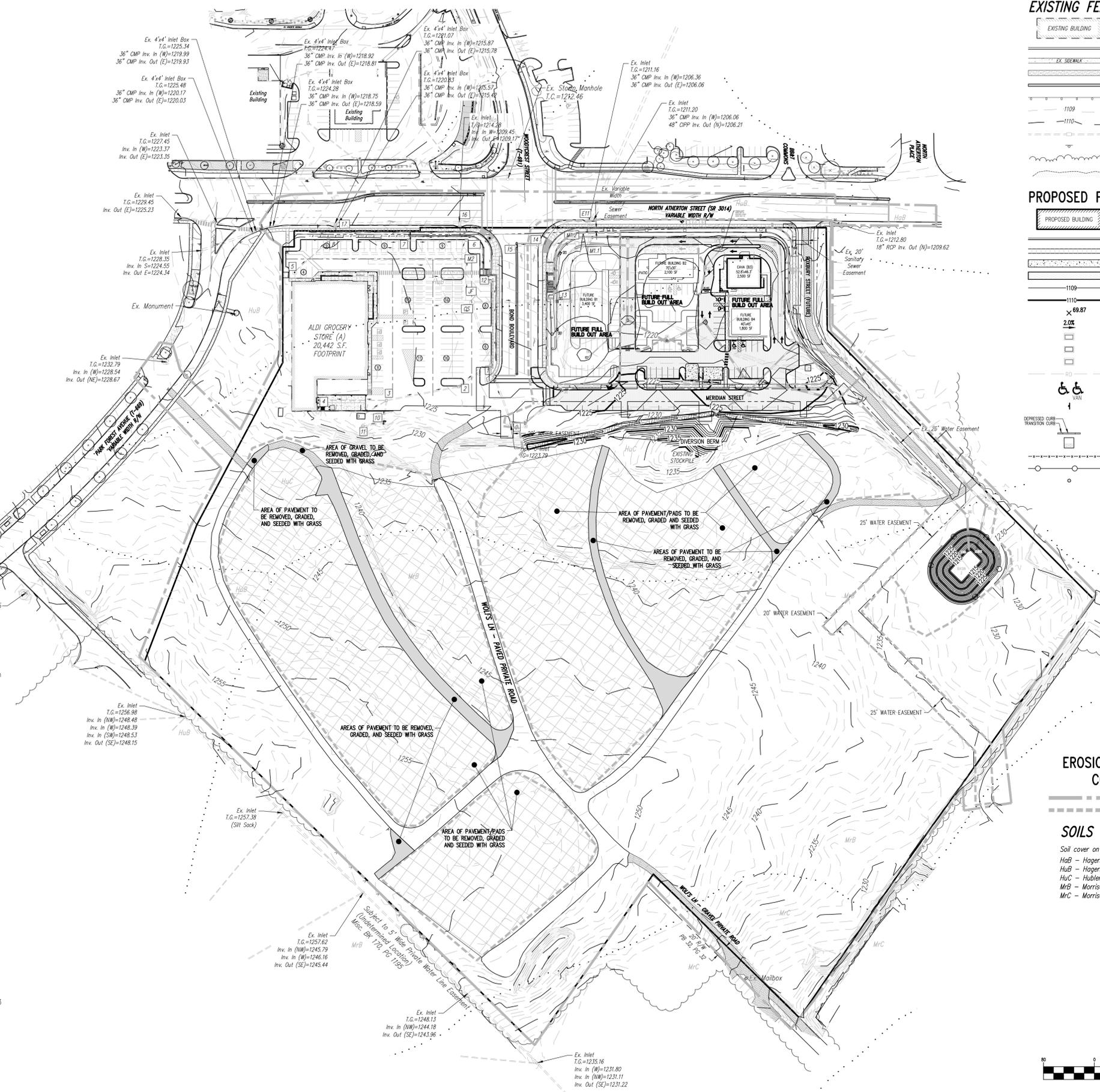
All stormwater management facilities on the site of Patton Crossing not contained in a Patton Township Right-of-Way shall be owned and maintained by the owner, their executors, heirs, agents and assigns. The owners agree to provide perpetual maintenance, access to and ownership of the BMPs. Patton Township, its agents and assigns shall have the uninterrupted right to access the property for inspection and maintenance of the stormwater BMPs. This note applies to the entire property shown on these plans and shall be in effect for perpetuity. The responsibility for long-term operation and maintenance of the BMPs is a covenant that runs with the land and binding upon and enforceable by subsequent grantees.

Patton Township and/or the Centre County Conservation District may require the Owner to maintain a record of all inspections, repairs, and maintenance activities associated with the proposed Stormwater management and permanent erosion and sediment pollution control facilities at this project site. The Owner shall immediately notify Patton Township and Centre County Conservation District prior to initiating any major repair activities.

The Owner hereby acknowledges Patton Township's right to periodically access the project site to inspect the permanent stormwater management facilities that are part of this project. The Owner acknowledges Patton Township's right to access the project site with notice to repair and/or maintain the permanent stormwater management facilities in accordance with this Maintenance Program. Any maintenance and/or repair activities conducted by Patton Township shall be at the expense of the Owner.

The facilities that will require maintenance are the inlets, storm sewer pipes, rip-rap aprons, Jelly Fish Filters and stormwater basins. All stormwater facilities should be inspected quarterly or after any rainfall producing runoff and maintained as follows:

- The proposed storm sewer pipe inlets and outlets shall be cleaned of all debris, litter, and other deleterious material.
- The rip-rap aprons at the outlets of the pipes need to be inspected to ensure proper erosion protection. If erosion occurs, additional rip-rap should be added.
- The underground stormwater basin piping shall be cleaned of sediment and debris. The orifice plates shall be kept clean of trash and debris.
- The above ground basin shall be cleaned of debris and if any erosion is present the area is to be backfilled with topsoil and seeded with a permanent mixture. The outlet structures shall be kept clean of trash and debris. The vegetation within the basin bottom should only be periodically mowed once or twice a year to a height of six to eight inches. The sides shall be maintained to a height of six inches. Vehicular traffic in the bottom shall be limited to the maximum extent possible. No vehicular traffic should operate within the basin bottom when the soils are saturated.
- Jellyfish filters shall be cleaned of sediment for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner. Floatable trash, debris, and oil must be removed. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs first. Replace filter cartridge if rinsing does not remove accumulated sediment from the tentacles, or if tentacles are damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged by the spill.



**SURVEY FEATURES LEGEND**

- Property Line, Lot Line or Right of Way Line
- Project Benchmark

**EXISTING FEATURES LEGEND**

- EXISTING BUILDING: Existing Building
- EXISTING CURBING & EDGE OF PAVEMENT: Existing Curbing & Edge of Pavement
- EXISTING CONCRETE SIDEWALK: Existing Concrete Sidewalk
- EXISTING GRAVEL AREAS: Existing Gravel Areas
- EXISTING RETAINING WALL: Existing Retaining Wall
- EXISTING GUIDE RAIL: Existing Guide Rail
- 1109: Existing Contours w/ Elevation (1's & 2's)
- 1110: Existing Contours w/ Elevation (5's & 10's)
- EXISTING STORM SEWER LINE w/ INLET: Existing Storm Sewer Line w/ Inlet
- EXISTING SIGN: Existing Sign
- EXISTING TREE ROW: Existing Tree Row
- 25% SLOPES OR GREATER: 25% Slopes Or Greater

**PROPOSED FEATURES LEGEND**

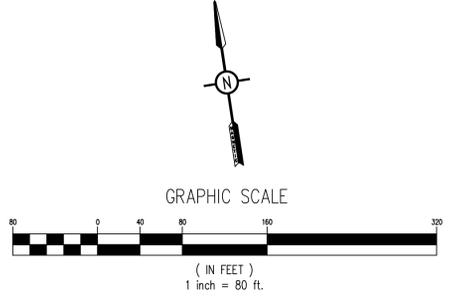
- PROPOSED BUILDING: PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT: PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK: PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS: PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS: PROPOSED BITUMINOUS PAVEMENT AREAS
- 1109: PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110: PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- 69.87: PROPOSED SPOT ELEVATION
- 2.0%: PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET: PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER INLET - TYPE M: PROPOSED STORM SEWER INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C: PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED STORM SEWER ROOF DRAIN: PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS: PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED SIGN: PROPOSED SIGN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION: PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP: PROPOSED HANDICAPPED RAMP
- PROPOSED 42" TALL CABLE GUIDE RAIL: PROPOSED 42" TALL CABLE GUIDE RAIL
- PROPOSED 6' TALL CHAIN LINK FENCE W/ 12" WIDE ACCESS GATE: PROPOSED 6' TALL CHAIN LINK FENCE W/ 12" WIDE ACCESS GATE
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE: PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE

**EROSION & SEDIMENTATION CONTROL LEGEND**

- NPDES BOUNDARY LINE
- LIMIT OF DISTURBANCE

**SOILS LEGEND**

- Soil cover on the site consists of:
- HaB - Hagerstown silt loam, 3%-8% Slopes
- HuB - Hagerstown silt loam, 3%-8% Slopes
- HuC - Hubersburg silt loam, 8%-15% Slopes
- MrB - Morrison sandy loam, 2%-8% Slopes
- Mrc - Morrison sandy loam, 8% to 15% Slopes



**PennTerra ENGINEERING INC.**  
 3075 ENTERPRISE DRIVE  
 SUITE 100  
 STATE COLLEGE, PA 16801  
 PH: 814-231-8285  
 WWW.PENNTERRA.COM

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C. ANTHONY FRUCHTL  
 ENGINEER  
 PE-062413  
 Seal

Designer(s)	EAH
Environmental	JFS
Proj. Manager	CAF
Surveyor	BRK/MAK/JDE
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-03-PCSM-PLAN
Layout	PCSM-OVERALL

Date	Description
	REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
 PATTON TOWNSHIP  
 CENTRE COUNTY  
 PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**POST CONSTRUCTION STORMWATER MANAGEMENT PLAN - OVERALL**

PROJECT NO.  
 12142-PH2B  
 DATE  
 DECEMBER 6, 2024  
 SCALE SHEET NO.  
 1" = 80' **PC1.0**





**STORMWATER MANAGEMENT NOTES**

- All site work shall be done in accordance with the plans prepared by PennTerra Engineering, inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
- The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
- The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
- Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 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.
- An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
- All storm pipe shall be as noted. All joints shall be watertight.
- Contractor shall refer to other plans within this construction set for other pertinent information.
- Co-permittee requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittee of the individual NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Contractor shall remain a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
- Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
  - Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
  - Prepare an as-built topographic survey sealed by a licensed surveyor from the commonwealth of Pennsylvania of the stormwater management facilities (stormwater basins, outlet structures, outlet pipes, tops of berms and spillways).
  - Provide infiltration tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom soil mix prior to installation to certify that the soil mix meets the infiltration requirements noted on the plans.
- Contractor shall have a licensed professional submit as-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with chapter 147 of the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surfaces prior to placement of filter fabric/amended soils must also be submitted to the governing municipality.

**NPDES PERMIT CO-PERMITTEE AND NOTICE OF TERMINATION NOTES:**

- The contractor shall process forms with the Local County Conservation District to become a co-permittee on the NPDES. The contractor shall remain a co-permittee until the applicant releases them from the permit.
- The Notice of Termination requires certification by a licensed professional of the stormwater facilities as noted on the Post Construction Stormwater Management Plan under the section labeled "Critical Stages of Construction".
- The licensed professional responsible for certifying the Notice of Termination (NOT) of the NPDES permit shall be selected prior to commencing earth disturbance activities on the project site. The general site contractor shall be responsible for supplying & coordinating the licensed professional.
- The licensed professional responsible for certifying the NOT shall be present for all "Critical Stages of Construction".
- A pre-construction meeting between the contractor, owner and licensed professional responsible for certifying the NOT is required to ensure all "Critical Stages of Construction" are reviewed, acknowledged and milestones established to ensure the licensed professional is present onsite during the "Critical Stages of Construction".
- 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.
- Upon completion of all earth moving activities and once site stabilization is achieved in accordance with the Erosion and Sediment Control Plan, the contractor shall then file the as-built drawings and NOT certification with the Local County Conservation District

**CRITICAL STAGES OF CONSTRUCTION FOR PROJECTS REQUIRING A GENERAL OR INDIVIDUAL NPDES PERMIT**

Critical Stages of Construction are key components of the construction sequence of the Post Construction Stormwater Management Plan and require certification and construction oversight by the licensed professional responsible for certification of the certified stormwater as-built plan and the NOT.

At least two weeks in advance of construction, the contractor shall schedule a coordination meeting with the licensed professional to review the critical stages and establish a schedule for inspections/verifications of all critical stages. At the discretion of the licensed professional, the contractor will provide photo documentation of the installation of certain items in lieu of the licensed professional being present.

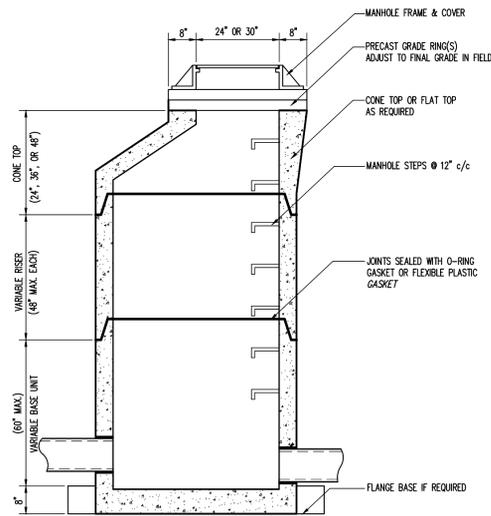
The critical stages for each Post Construction Stormwater Best Management Practice are as follows:

**INFILTRATION BASINS**

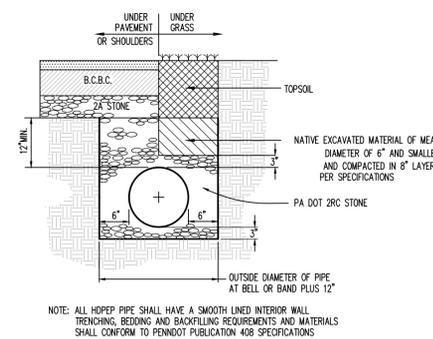
- In order to ensure the basin floor is not compacted, equipment shall not be permitted to operate within the basin when the floor is less than 36" from subgrade elevation. A typical infiltration facility bottom excavation detail has been provided on the plans for construction. Alternatively, the contractor may develop their own plan and methods for bottom excavation. The contractor must review the proposed plan/methods with the licensed professional during the coordination meeting.
- Once subgrade of the facility has been reached, and prior to topsoil placement, the licensed professional and responsible testing firm shall be notified to schedule infiltration testing verification of the subgrade.
- A typical rock over excavation detail has been provided on the plans. Once subgrade of the basin floor has been reached, the contractor shall request the licensed professional review the subgrade to determine if rock over excavation is required.
- Infiltration testing of the final basin floor elevation to verify infiltration rates of the soil mixture (i.e. topsoil and amendments) placed on the basin floor is required. The contractor shall coordinate infiltration testing with the licensed professional and responsible testing firm. It is recommended that this soil mixture also be tested prior to placement.
- The contractor must notify the licensed professional of the installation of the outlet structure, outfall pipe and 11"-seep collars prior to backfill to ensure installation has been completed in accordance with the approved plan.
- Compaction testing reports are required on the basin berm. The contractor shall coordinate compaction testing with the licensed professional and responsible testing firm.
- Berms shall be installed and compacted in conformance with the requirements of the local municipality's Stormwater Management Ordinance. If the municipality does not specify compaction requirements, then all berms shall be in installed as follows:
  - Whenever berm fill material in excess of 3 feet in height is to be used, each layer of compacted fill shall be tested to determine its density per ASTM D2922 or ASTM D3017.
  - All berm lifts shall be 8" or less.
  - The density of each layer shall be 96% of a Standard Proctor Density analysis per ASTM D698.
- All proposed vegetation within the limits of construction shall be established to a 70% uniform vegetated cover prior to final notice of termination certification.

**GENERAL STORMWATER FACILITY CONSTRUCTION NOTES**

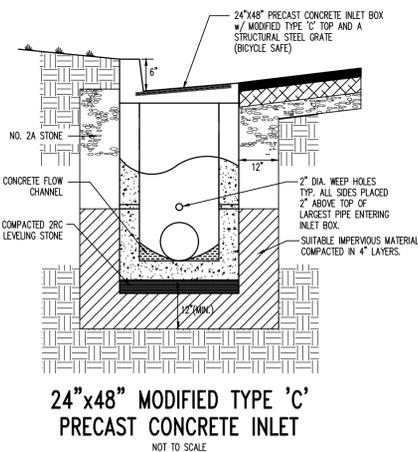
- All site work shall be done in accordance with the plans prepared by PennTerra Engineering, inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
- The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
- The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
- Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 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.
- All storm pipe shall be as noted. All joints shall be watertight.
- Contractor shall refer to other plans within this construction set for other pertinent information.



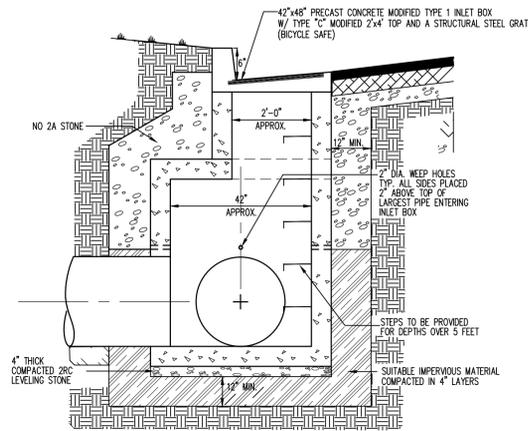
**PRE-CAST CONCRETE MANHOLE INSTALLATION**  
NOT TO SCALE



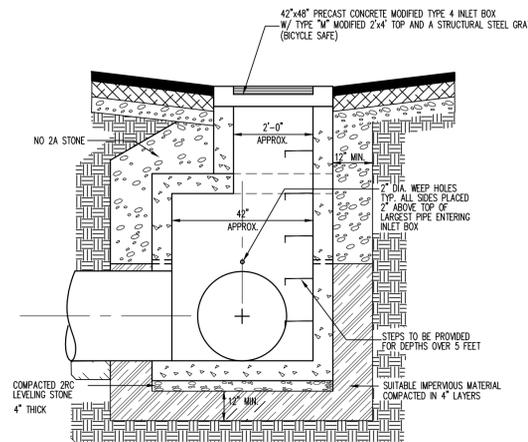
**STORMSEWER (HDPEP) INSTALLATION**  
NOT TO SCALE



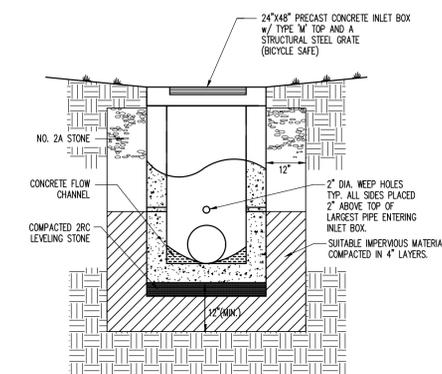
**24"x48" MODIFIED TYPE 'C' PRECAST CONCRETE INLET**  
NOT TO SCALE



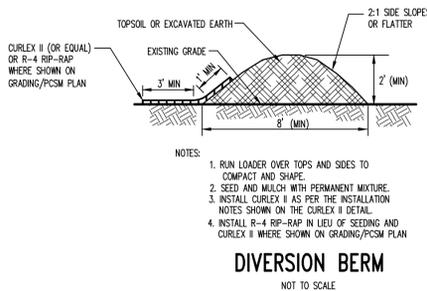
**42"x48" PENNDOT PRECAST TYPE 4 INLET W/ 24 X 48 MODIFIED TYPE C TOP**  
NOT TO SCALE



**42"x48" PENNDOT PRECAST TYPE 4 INLET W/ 24 X 48 TYPE M TOP**  
NOT TO SCALE



**24"x48" TYPE 'M' PRECAST CONCRETE INLET**  
NOT TO SCALE



**DIVERSION BERM**  
NOT TO SCALE

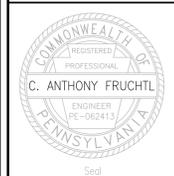
PROPOSED STORM DRAINAGE STRUCTURE DATA										
ID	STRUCTURE TYPE	TG ELEV	INVERT IN	INVERT OUT	PIPE RUN PIPE TYPE	LENGTH (FT)	SIZE (IN)	SLOPE (%)		
OUT 2A	HDPEP End Section			1214.00	2A TO OUT 2A	HDPEP	71.2	30	0.55	
2A	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type C Modified Bicycle Safe Grate/Top	1232.00	1214.49	2B	1214.39	2B TO 2A	HDPEP	319.2	30	0.5
2B	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type C Modified Bicycle Safe Grate/Top	1224.07	1216.19	2C	1216.09	2C TO 2B	HDPEP	71.8	30	0.5
2C	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type C Modified Bicycle Safe Grate/Top	1222.27	1216.65	2D	1216.55	2D TO 2C	HDPEP	47.7	15	0.5
2D	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1221.86	1216.99	2E	1216.89	2E TO 2D	HDPEP	105.6	15	0.5
2E	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1221.83	1217.62	2F	1217.52	2F TO 2E	HDPEP	90.9	15	0.5
2F	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.06	1218.18	2G	1218.08	2G TO 2F	HDPEP	140.2	15	0.5
2G	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.14			1218.89					
2H	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.61	1219.03	2I	1218.93	2I TO 2H	HDPEP	36.3	15	0.55
2I	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.48			1219.23					
2J	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type C Modified Bicycle Safe Grate/Top	1223.01	1217.69	2K	1217.59	2K TO 2J	HDPEP	62	24	0.5
2K	24" X 48" Precast Type M Inlet w/ Bicycle Safe Grate	1225.00			1218.00					
9	Existing 42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type C Modified Bicycle Safe Grate/Top	1223.79	1218.70	2Q	1218.60	2Q TO 9	HDPEP	20	15	0.75
2Q	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1223.79	1218.95	2R	1218.85	2R TO 2Q	HDPEP	75.1	15	0.87
2R	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.85			1219.60					
M1.1	EXISTING STORMWATER MANHOLE	1223.04	1206.70	EX	1206.60	M1.2 TO M1.1	HDPEP	14	36	0.71
M3	7' Dia. Manhole	1222.47	1206.88	2L	1206.88	M3 TO M1.1	HDPEP	56.4	36	0.5
2L	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type M Modified Bicycle Safe Grate/Top	1221.67	1207.92	2M	1207.44	2M TO 2L	HDPEP	83.5	15	0.5
2M	24" X 48" Precast Type M Inlet w/ Bicycle Safe Grate	1221.59	1207.54	2N		2N TO 2L	HDPEP	67.2	36	0.5
2N	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type C Modified Bicycle Safe Grate/Top	1222.86	1207.98	2O	1207.88	2O TO 2N	HDPEP	64.5	36	0.5
2O	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type M Modified Bicycle Safe Grate/Top	1221.80	1208.40	2P	1208.30	2P TO 2O	HDPEP	101.6	36	0.5
2P	42 X 48 Precast PennDOT Type 4 Inlet Box with 24 x 48 Type C Modified Bicycle Safe Grate/Top	1222.58	1209.01	M4	1208.91	M4 TO 2P	HDPEP	184.6	36	0.5
M4	7' Dia. Manhole	1226.00	1209.93	M5	1209.93	M5 TO M4	HDPEP	233.7	36	0.5
M5	7' Dia. Manhole	1232.50	1211.10	OS-2	1211.10	OS-2 TO M5	HDPEP	50	36	0.5
OS-2	MODIFIED 24" X 72" INLET BOX (SEE DETAIL)	1217.00			1211.35					

FUTURE PROPOSED STORM DRAINAGE STRUCTURE DATA										
ID	STRUCTURE TYPE	TG ELEV	INVERT IN	INVERT OUT	PIPE RUN PIPE TYPE	LENGTH (FT)	SIZE (IN)	SLOPE (%)		
2S	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.64	1218.75	2U	1208.20	2U TO 2S	HDPEP	40.2	15	1
2U	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.64	1218.05	2T	1208.15	2T TO 2S	HDPEP	71.6	15	1
2T	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1222.02			1219.15					
					1218.77					

NOTE: ALL ROOF DRAIN SHALL BE CONNECTED TO THE STORMSEWER SYSTEM AND SHALL CONSIST OF 6" PVC WITH A MINIMUM SLOPE OF 1% AND MINIMUM 2' OF COV

**PennTerra ENGINEERING INC.**  
3075 ENTERPRISE DRIVE  
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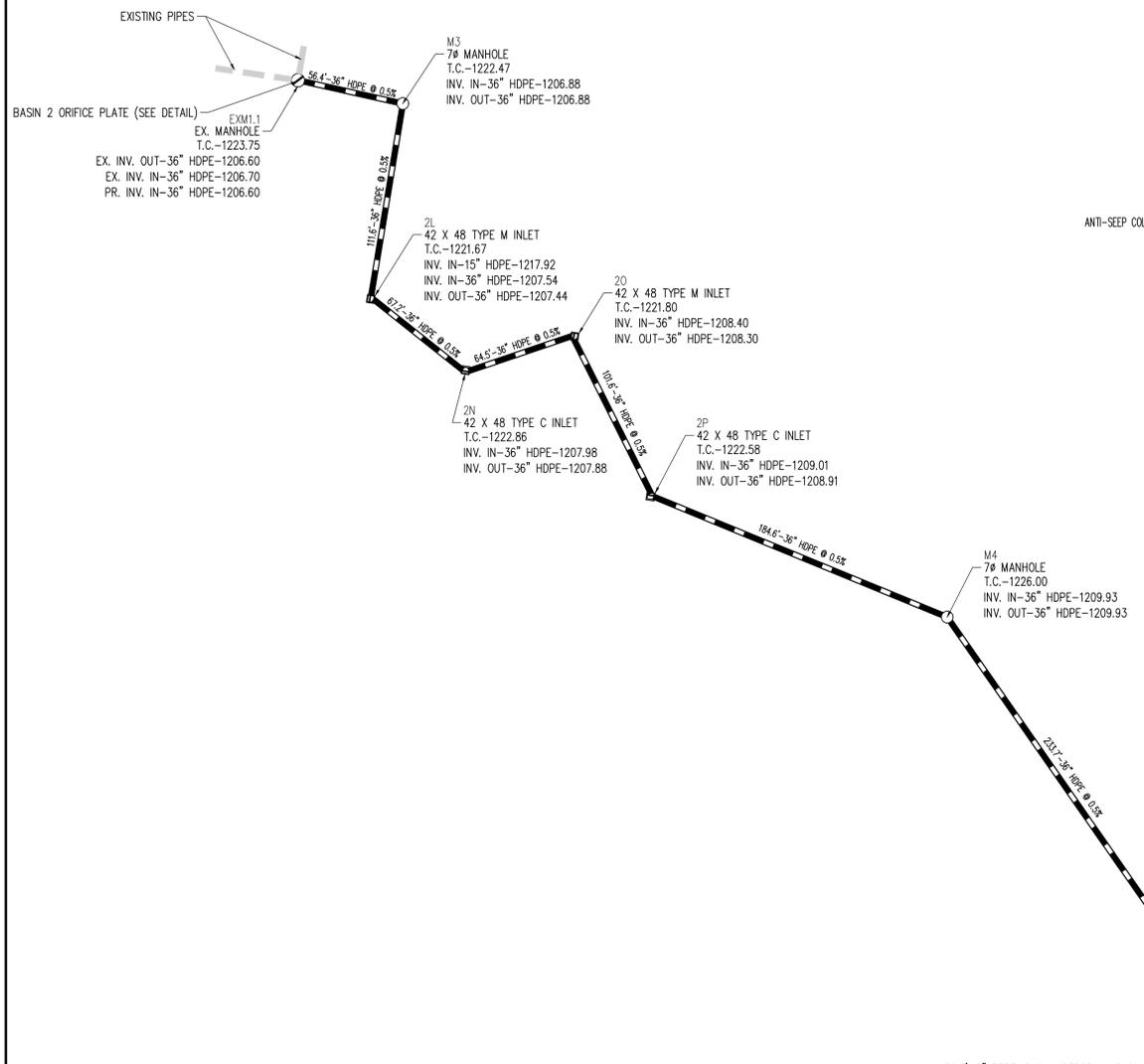
Designer(s) EAH  
Environmental JFS  
Proj. Manager CAF  
Surveyor BRK/MAK/JDE  
Perimeter Ok  
Book 541 Pg. 7  
File 12142-PH2B-UB-PCSM-DETAILS  
Layout PCSM-DETAILS (1)

Date	Description
	REVISIONS

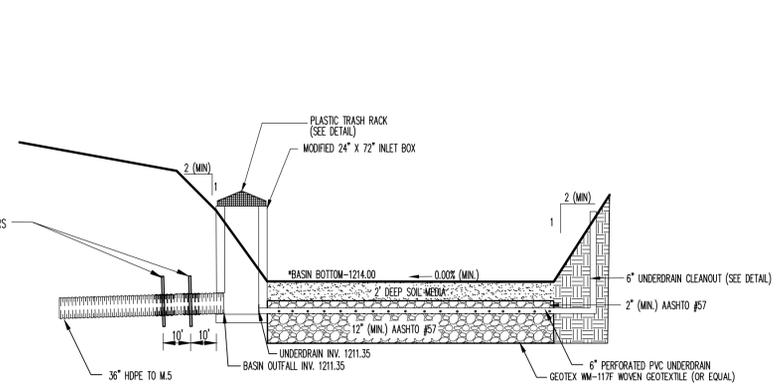
**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**  
  
**POST CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS**

PROJECT NO.  
12142-PH2B  
DATE  
DECEMBER 6, 2024  
SCALE  
N.T.S  
SHEET NO.  
**PC2.0**



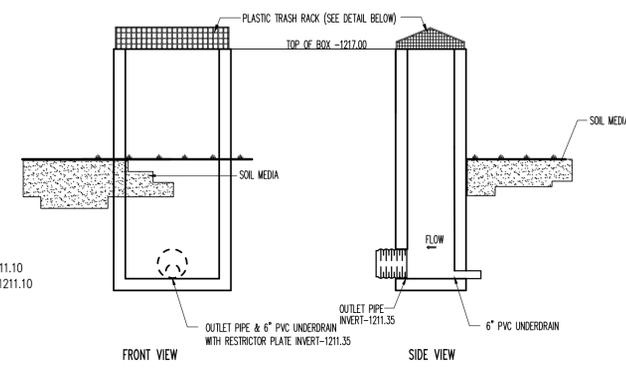
**UNDERGROUND BASIN 2-PLAN VIEW**  
NOT TO SCALE



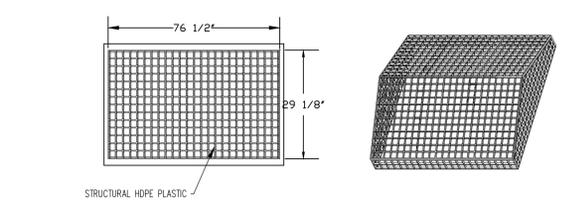
**STORMWATER BASIN 2 ABOVE GROUND - CROSS SECTION**  
NOT TO SCALE

\*THE BASINS MUST BE PROTECTED FROM SEDIMENTATION AND COMPACTION DURING CONSTRUCTION, UNTIL THE SITE IS PROPERLY STABILIZED, THE UNDERDRAIN SYSTEM AND FINAL BASIN BOTTOM SURFACE SHALL NOT BE CONSTRUCTED. REFER TO THE EROSION AND SEDIMENTATION CONTROL PLANS FOR INTERIM BOTTOM ELEVATIONS. ADHERE TO THE EROSION AND SEDIMENTATION CONTROL PLAN STAGING OF EARTH MOVING ACTIVITIES CONSTRUCTION SEQUENCE FOR TIMING OF FINAL BASIN BOTTOM CONSTRUCTION.

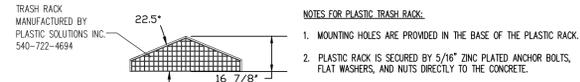
NOTE: SOIL MEDIA SHALL CONSIST OF TOPSOIL WITH A MINIMUM INFILTRATION RATE OF 0.5 IN/HR IN ALL BASINS. SOIL AMENDMENTS SUCH AS MULCH OR COMPOST SHALL BE MIXED WITH TOPSOIL AS NECESSARY IN ORDER TO ACHIEVE THE MINIMUM REQUIRED INFILTRATION RATE. THE INFILTRATION RATE SHALL BE VERIFIED BY A PROFESSIONAL SOILS CONSULTANT. THE SOILS CONSULTANT SHALL RECOMMEND AND VERIFY THE APPROPRIATE SOIL AMENDMENTS, WHEN REQUIRED TO ACHIEVE THE APPROPRIATE MINIMUM RATE.



**STORMWATER BASIN 2 ABOVE GROUND - MODIFIED INLET (OS-2)**  
NOT TO SCALE

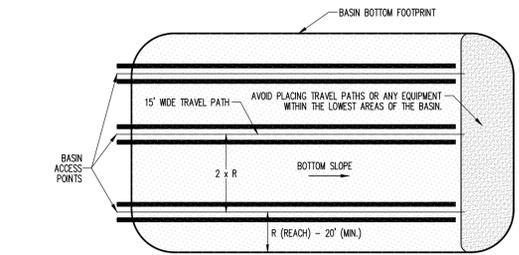


**TOP VIEW TRASH RACK ASSEMBLY**



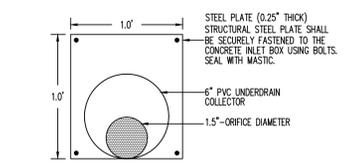
**SIDE VIEW PLASTIC TRASH RACK-MODIFIED 24\"/>**

NOTES FOR PLASTIC TRASH RACK:  
1. MOUNTING HOLES ARE PROVIDED IN THE BASE OF THE PLASTIC RACK.  
2. PLASTIC RACK IS SECURED BY 5/16\"/>

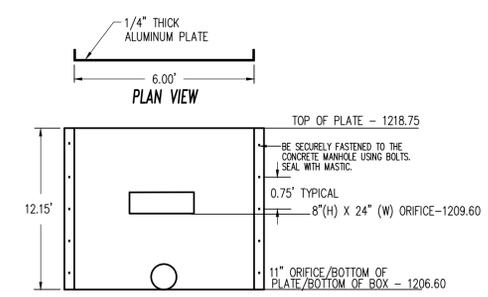


THIS DETAIL REPRESENTS A TYPICAL BASIN BOTTOM EXCAVATION TECHNIQUE. EACH BASIN VARIES WITH GEOMETRY AND OTHER VARIOUS PHYSICAL FEATURES. THE CONTRACTOR MUST DEVELOP A BASIN BOTTOM EXCAVATION PLAN AND CONSULT WITH THE SITE ENGINEER PRIOR TO COMMENCING THE BASIN BOTTOM EXCAVATION.

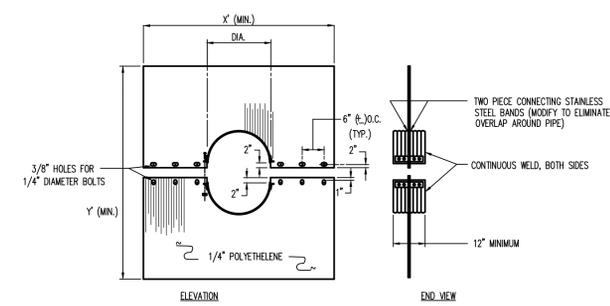
1. ALL EQUIPMENT MOBILIZATION AND MANEUVERS MUST BE LIMITED TO THE TRAVEL PATH LOCATIONS. THE CONTRACTOR SHALL LOCATE AND CLEARLY POST ALL TRAVEL PATHS IN THE FIELD.
2. TRAVEL PATH LOCATIONS SHOULD BE SELECTED BASED UPON EQUIPMENT REACH CAPABILITY AND BASIN GEOMETRY. TRAVEL PATH LOCATIONS SHOULD BE SELECTED SUCH THAT THEY PARALLEL THE LONGEST SIDE OF THE BASIN.
3. TRAVEL PATH SPACING SHALL VARY WITH EQUIPMENT REACH CAPABILITY. REACH CAPABILITY SHOULD BE A MINIMUM OF 20 FEET.
4. MATERIAL SHALL BE REMOVED FROM THE TRAVEL PATH LOCATIONS WORKING TOWARD THE BASIN ACCESS POINTS. ONCE MATERIAL IS REMOVED FROM EACH TRAVEL PATH LOCATION AND FINAL GRADE IS ACHIEVED, ALL EQUIPMENT SHALL BE PROHIBITED FROM THESE LOCATIONS.
5. THIS PROCEDURE SHALL BE FOLLOWED FOR THE INITIAL SEDIMENT FACILITY CONSTRUCTION AND FINAL DETENTION BASIN GRADING. THE CONTRACTOR MUST USE THE SAME TRAVEL PATHS FOR BOTH CONSTRUCTION PHASES.



**BASIN 2 UNDERDRAIN RESTRICTOR BLOW-UP**  
NOT TO SCALE

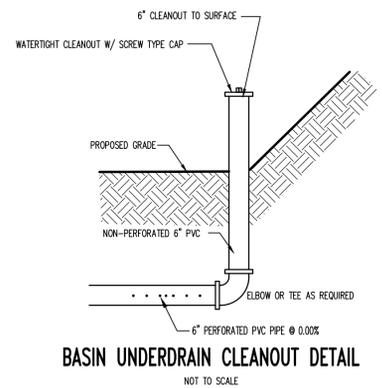


**UNDERGROUND BASIN 2 ORIFICE PLATE**  
NOT TO SCALE



**STORMWATER BASIN 2 ANTI-SEEP COLLAR**  
NOT TO SCALE

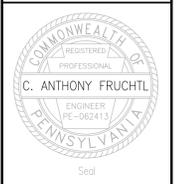
BASIN	DIA.	X	Y	NUMBER
BASIN 2	36	9.2	9.2	2



**BASIN UNDERDRAIN CLEANOUT DETAIL**  
NOT TO SCALE

**ABOVE GROUND BASIN NOTES**

1. PRIOR TO THE START OF CONSTRUCTION, COORDINATION WITH THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSEEING CRITICAL STAGES OF BASIN CONSTRUCTION IS REQUIRED.
  2. TEMPORARY AND PERMANENT GRASSES OR STABILIZATION MEASURES SHALL BE ESTABLISHED ON THE SIDES AND BASE OF ALL BASINS WITHIN 15 DAYS OF CONSTRUCTION.
  3. IN ORDER TO AVOID COMPACTION OF THE BASIN BOTTOM, SPECIAL PROCEDURES SHALL BE IMPLEMENTED FOR EQUIPMENT OPERATIONS WITHIN THE LAST THREE FEET OF BASIN BOTTOM EXCAVATION. ONCE EXCAVATION OF THE BASIN BOTTOM IS TO BE BROUGHT TO WITHIN THREE FEET OF FINAL GRADE, THE FINAL EXCAVATION SHALL BE COMPLETED UTILIZING EQUIPMENT LOCATED OUTSIDE OF THE BASIN BOTTOM. IF EXCAVATION CANNOT FULLY BE COMPLETED FROM OUTSIDE OF THE BASIN BOTTOM, REFER TO THE TYPICAL INFILTRATION BASIN BOTTOM DETAIL.
  4. THE TOPSOIL MEDIA SHALL HAVE AN INFILTRATION RATE BETWEEN 1 AND 10 IN/HR. SOIL AMENDMENTS SUCH AS COMPOST OR MULCH SHALL BE MIXED WITH TOPSOIL AS NECESSARY TO ACHIEVE THE REQUIRED INFILTRATION RATES. CONFORMANCE BY AN INFILTRATION TESTING PROFESSION IS REQUIRED TO VERIFY INFILTRATION RATES.
  5. OTHER THAN THE BASIN BOTTOM, A MINIMUM OF SIX INCHES OF TOPSOIL SHALL BE SPREAD OVER THE ENTIRE BASIN AREA. ALL AREAS OF THE BASINS TO BE VEGETATED SHALL BE SEEDED WITH THE PERMANENT SEEDING MIXTURE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN.
  6. PERMANENT SEEDING SPECIFICATIONS FOR THE BASIN ARE AS FOLLOWS:  
PERMANENT SEEDING ON INFILTRATION BASIN BOTTOM MAY CONSIST OF THE FOLLOWING:
- | ITEM  | RATE                            |
|---|---------------------------------|
| 1. SEED MIXTURE CONSISTS OF:<br>ERNAW-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 OTHER AREAS OF THE BASIN MAY CONSIST OF THE FOLLOWING:
- | ITEM   | RATE            |
|--|-----------------|
| 1. SEED MIXTURE CONSISTS OF:<br>50% POA PRATENSIS (KENTUCKY BLUEGRASS)<br>30% FESTUCA RUBRA (CREEPING RED FESCUE)<br>20% LOLIUM PERENNE L. (PERENNIAL RYE) | 102 LBS. / ACRE |
| 2. MULCH   | 3 TONS / ACRE   |
- \*MULCHING: APPLY MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR PROPERLY WITH AN ANCHORING TOOL OR FOLLOWING ONE OF THE METHODS LISTED BELOW.
- 1) TRACKING: THE PROCESS OF CUTTING MULCH INTO THE SOIL VIA EQUIPMENT THAT RUNS IN TRACKS, IS EMPLOYED PRIMARILY ON SLOPES 3:1 OR STEEPER.
  - 2) MULCH NETTINGS: STAPLE LIGHTWEIGHT BIODEGRADABLE PAPER, PLASTIC OR COTTON NETTING OVER THE MULCH ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
  - 3) SYNTHETIC BINDERS: SYNTHETIC BINDERS SUCH AS ACRYLIC CLR (AGR-TAC), DCA-70, PETROSET OR TERRATAK MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIAL.
  - 4) 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.
  - 5) 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.



Designer(s)	EAH
Environmental	JFS
Proj. Manager	CAF
Surveyor	BRK/MAK/JDE
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-UD-PCSM-DETAILS
Layout	PCSM-DETAILS (2)

Date	Description
	REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS**

**STORMWATER MANAGEMENT NOTES**

- All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
- The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
- The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
- Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 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.
- An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
- All storm pipe shall be as noted. All joints shall be watertight.
- Co-permittee requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittee of the individual NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Contractor shall remain a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
- Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
  - Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
  - Prepare an as-built topographic survey sealed by a licensed surveyor from the commonwealth of Pennsylvania of the stormwater management facilities (infiltration basin, rain garden and outlet structures, outlet pipes, tops of berms and spillways).
  - Provide double-ring infiltrometer tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom soil mix prior to installation to certify that the soil mix meets the infiltration requirements noted on the plans.
- Contractor shall have a licensed professional submit as-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surface prior to placement of filter fabric/amended soils must also be submitted to the governing municipality.
- As-built infiltration testing in infiltration basins shall be performed at the top of the finished native soil layer prior to topsoil placement. This testing is in addition to the testing identified in Note 8.c. The number of infiltration tests performed shall be in accordance with the governing municipality's code of ordinances.

**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 be 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.

**EROSION AND SEDIMENT CONTROLS-PLAN LAYOUT NOTE:**

All Erosion and Sediment Controls depicted in "GRAY SHADING" Shall be installed with construction of the "Future Full Build Out Areas". Refer to the Staging of Earth Moving Activities on Plan Sheet ES2.0 for additional information.

**EROSION & SEDIMENTATION CONTROL LEGEND**

- NPDES BOUNDARY LINE
- LIMIT OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- TOPSOIL STOCKPILE
- 12" SILT SOCK
- 24" SILT SOCK
- INLET PROTECTION-TYPE C
- INLET PROTECTION-TYPE M
- INLET PROTECTION-BLACKHAWK FILTER

**SURVEY FEATURES LEGEND**

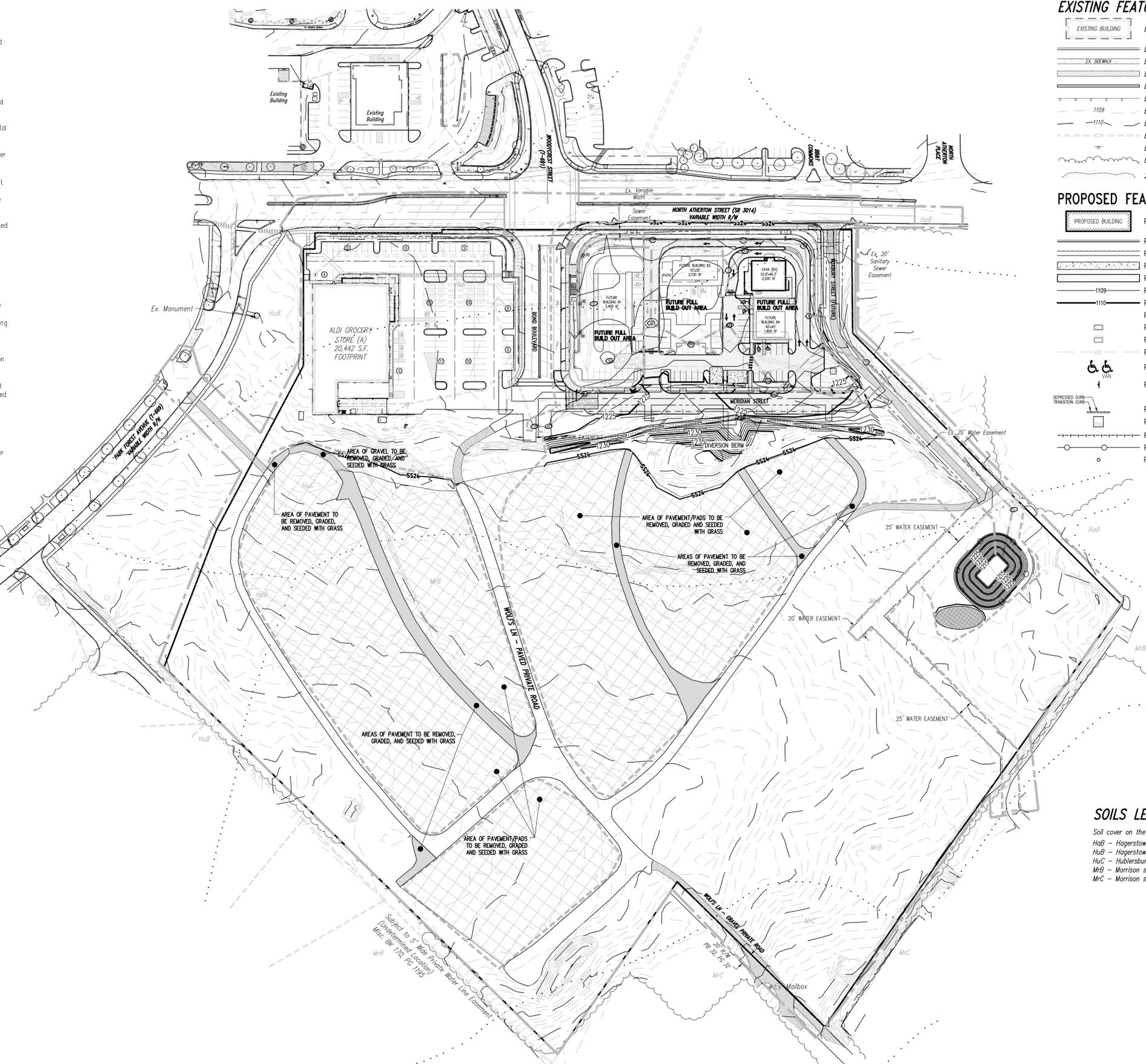
- Property Line, Lot Line or Right of Way Line
- Project Benchmark

**EXISTING FEATURES LEGEND**

- EXISTING BUILDING
- Existing Building
- Existing Curbing & Edge of Pavement
- EXISTING CONCRETE SIDEWALK
- Existing Concrete Sidewalk
- EXISTING GRAVEL AREAS
- Existing Gravel Areas
- EXISTING RETAINING WALL
- Existing Retaining Wall
- EXISTING GUIDE RAIL
- Existing Guide Rail
- 1109
- Existing Contours w/ Elevation (1's & 2's)
- 1110
- Existing Contours w/ Elevation (5's & 10's)
- EXISTING STORM SEWER LINE W/ INLET
- Existing Storm Sewer Line w/ Inlet
- EXISTING SIGN
- Existing Sign
- EXISTING TREE ROW
- Existing Tree Row
- 25% SLOPES OR GREATER

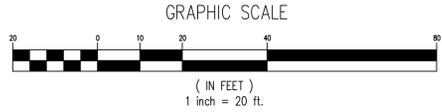
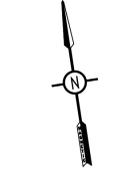
**PROPOSED FEATURES LEGEND**

- PROPOSED BUILDING
- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- 1109
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED STORM SEWER INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED SIGN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED 42" TALL CABLE GUIDE RAIL
- PROPOSED 6" TALL CHAIN LINK FENCE W/12" WIDE ACCESS GATE
- PROPOSED 6" STEEL BOLLARD FILLED W/ CONCRETE



**SOILS LEGEND**

- Soil cover on the site consists of:
- HoB - Hagerstown silt loam, 3%-8% Slopes
- HoB - Hagerstown silt loam, 3%-8% Slopes
- HuB - Hubertburg silt loam, 8%-15% Slopes
- MrB - Morrison sandy loam, 2%-8% Slopes
- MrC - Morrison sandy loam, 8% to 15% Slopes



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 PH: 814-231-8285  
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Seal  
 COMMONWEALTH OF PENNSYLVANIA  
 PROFESSIONAL ENGINEER  
 C. ANTHONY FRUCHTL  
 ENGINEER PE-062413  
 Seal

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Proj. Manager	CAF
Surveyor	BRK/MAK/DE
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-10-E&S-PLAN
Layout	E&S-OVERALL

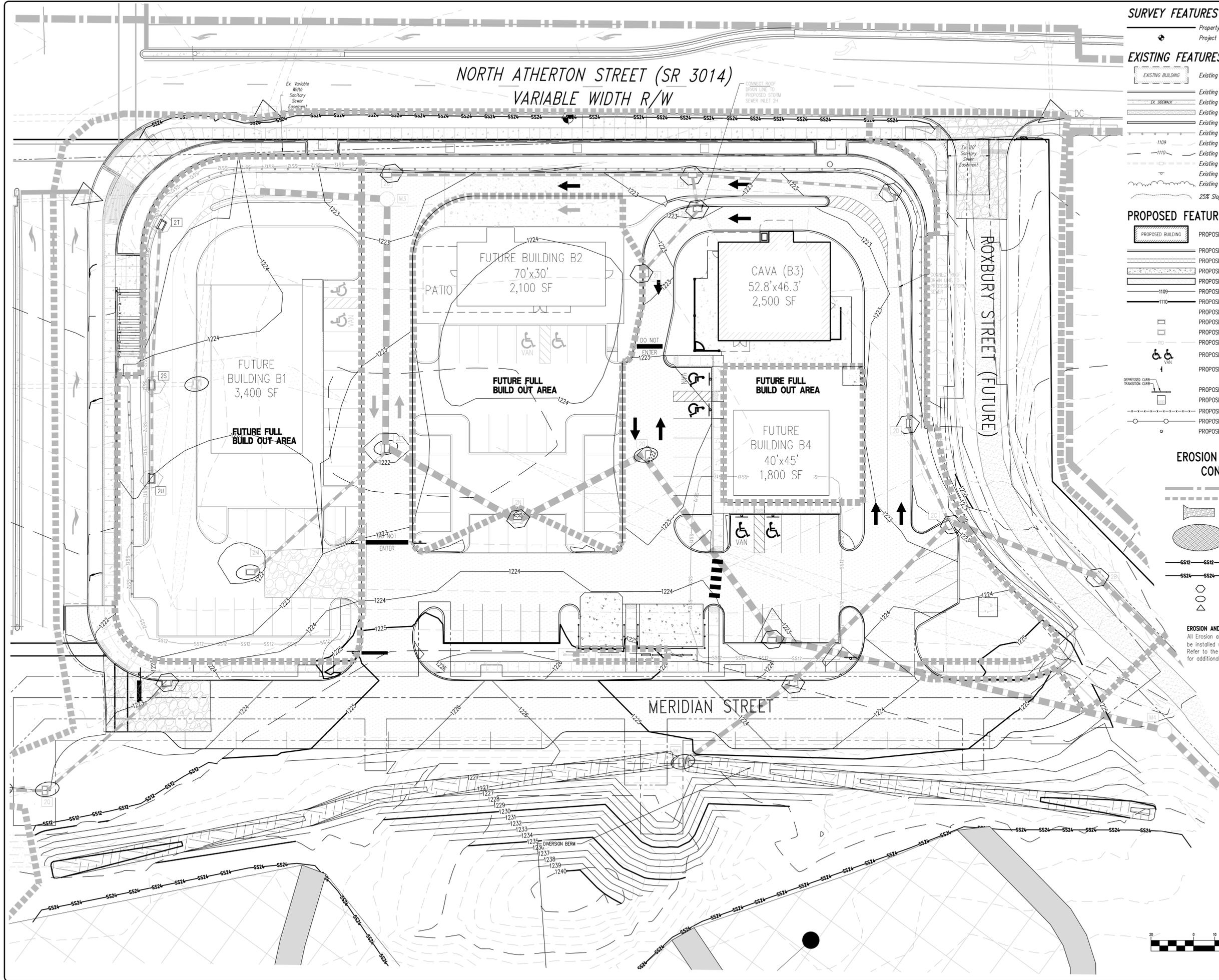
Date	Description
	REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
 PATTON TOWNSHIP  
 CENTRE COUNTY  
 PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**EROSION & SEDIMENTATION CONTROL PLAN - OVERALL**

PROJECT NO.  
 12142-PH2B  
 DATE  
 DECEMBER 6, 2024  
 SCALE SHEET NO.  
 1" = 80' **ES1.0**

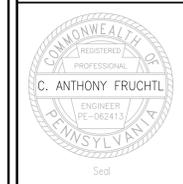


- ### SURVEY FEATURES LEGEND
- Property Line, Lot Line or Right of Way Line
  - Project Benchmark
- ### EXISTING FEATURES LEGEND
- Existing Building
  - Existing Curbing & Edge of Pavement
  - Existing Concrete Sidewalk
  - Existing Gravel Areas
  - Existing Retaining Wall
  - Existing Guide Rail
  - Existing Contours w/ Elevation (1's & 2's)
  - Existing Contours w/ Elevation (5's & 10's)
  - Existing Storm Sewer Line w/ Inlet
  - Existing Sign
  - Existing Tree Row
  - 25% Slopes Or Greater
- ### PROPOSED FEATURES LEGEND
- PROPOSED BUILDING
  - PROPOSED CURBING & EDGE OF PAVEMENT
  - PROPOSED CONCRETE SIDEWALK
  - PROPOSED CONCRETE AREAS
  - PROPOSED BITUMINOUS PAVEMENT AREAS
  - PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
  - PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
  - PROPOSED SPOT ELEVATION
  - PROPOSED STORM SEWER INLET - TYPE M
  - PROPOSED STORM SEWER INLET - TYPE C
  - PROPOSED STORM SEWER ROOF DRAIN
  - PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
  - PROPOSED SIGN
  - PROPOSED DEPRESSED CURB W/ CURB TRANSITION
  - PROPOSED HANDICAPPED RAMP
  - PROPOSED 42" TALL CABLE GUIDE RAIL
  - PROPOSED 6" TALL CHAIN LINK FENCE W/12" WIDE ACCESS GATE
  - PROPOSED 6" Ø STEEL BOLLARD FILLED W/ CONCRETE

- ### EROSION & SEDIMENTATION CONTROL LEGEND
- NPDES BOUNDARY LINE
  - LIMIT OF DISTURBANCE
  - CONSTRUCTION ENTRANCE
  - TOPSOIL STOCKPILE
  - 12" SILT SOCK
  - 24" SILT SOCK
  - INLET PROTECTION-TYPE C
  - INLET PROTECTION-TYPE M
  - INLET PROTECTION-BLACKHAWK FILTER
- EROSION AND SEDIMENT CONTROLS-PLAN LAYOUT NOTE:**  
 All Erosion and Sediment Controls depicted in "GRAY SHADING" Shall be installed with construction of the "Future Full Build Out Areas". Refer to the Staging of Earth Moving Activities on Plan Sheet ES2.0 for additional information.

**PennTerra ENGINEERING INC.**  
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 STATE COLLEGE, PA 16801  
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 Perimeter Ok.  
 Book 541 Pg. 7  
 File 12142-PH2B-10-EAS-PLAN  
 Layout E&S-PH2

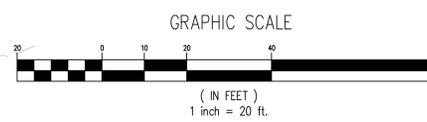
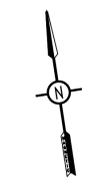
Date	Description
	REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
 PATTON TOWNSHIP  
 CENTRE COUNTY  
 PENNSYLVANIA

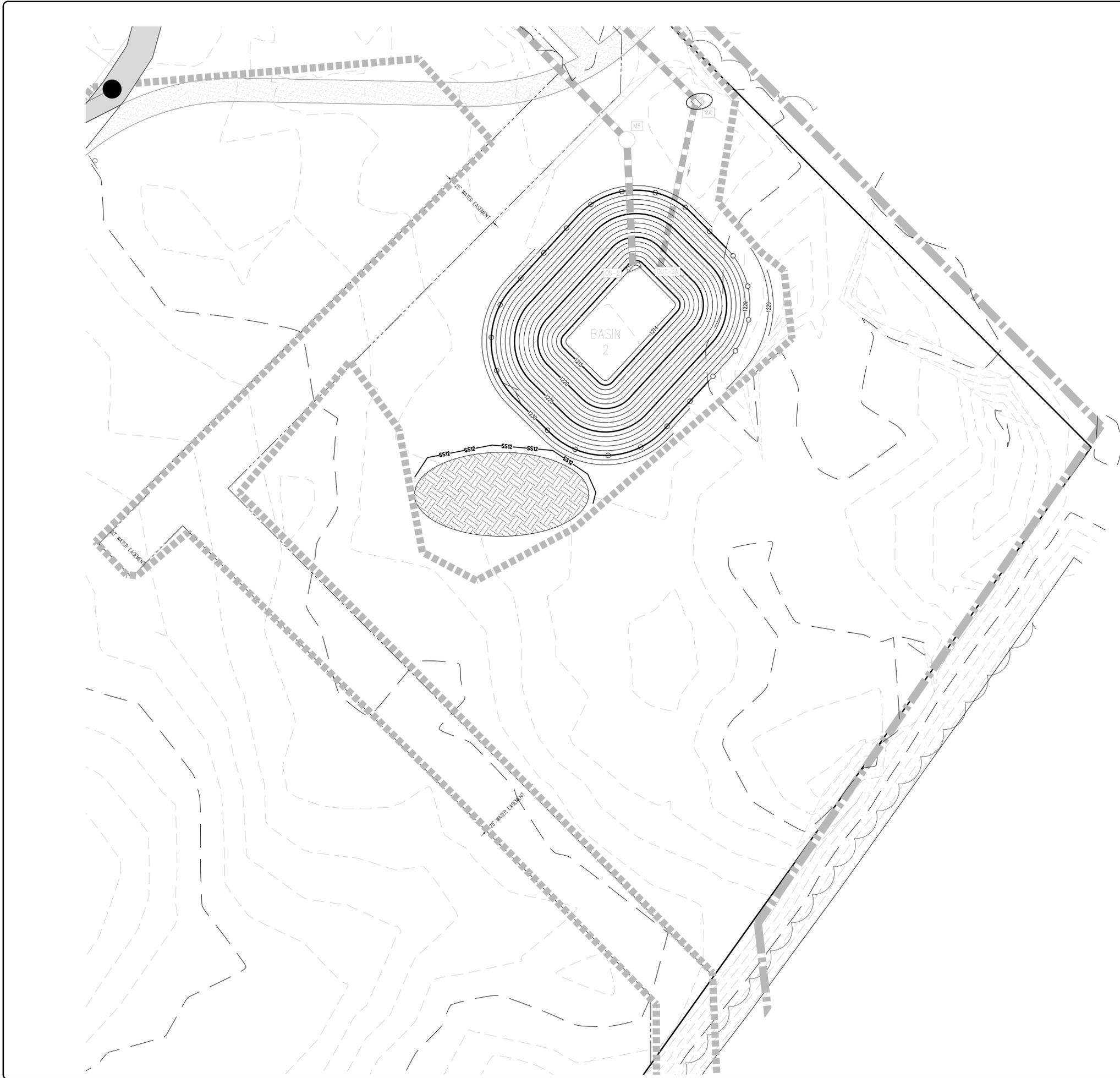
**FINAL LAND DEVELOPMENT PLAN**

**EROSION & SEDIMENTATION CONTROL PLAN - PHASE 2**

PROJECT NO.  
 12142-PH2B  
 DATE  
 DECEMBER 6, 2024  
 SCALE SHEET NO.  
 1" = 20' **ES11**



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**SURVEY FEATURES LEGEND**

- Property Line, Lot Line or Right of Way Line
- Project Benchmark

**EXISTING FEATURES LEGEND**

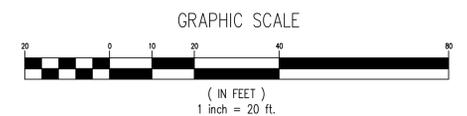
- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Sidewalk
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Guide Rail
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Sign
- Existing Tree Row
- 25% Slopes Or Greater

**PROPOSED FEATURES LEGEND**

- Proposed Building
- Proposed Curbing & Edge of Pavement
- Proposed Concrete Sidewalk
- Proposed Concrete Areas
- Proposed Bituminous Pavement Areas
- Proposed Minor Contours w/ Elevation (1's & 2's)
- Proposed Major Contours w/ Elevation (5's & 10's)
- Proposed Spot Elevation
- Proposed Storm Sewer Inlet - Type M
- Proposed Storm Sewer Inlet - Type C
- Proposed Storm Sewer Roof Drain
- Proposed Painted Handicapped Parking Symbols
- Proposed Sign
- Proposed Depressed Curb w/ Curb Transition
- Proposed Handicapped Ramp
- Proposed 42" Tall Cable Guide Rail
- Proposed 6" Tall Chain Link Fence w/12" Wide Access Gate
- Proposed 6" Steel Bollard Filled w/ Concrete

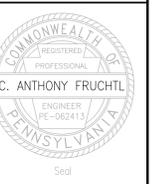
**EROSION & SEDIMENTATION CONTROL LEGEND**

- NPDES Boundary Line
- Limit of Disturbance
- Construction Entrance
- Topsoil Stockpile
- 12" Silt Sock
- 24" Silt Sock
- Inlet Protection - Type C
- Inlet Protection - Type M
- Inlet Protection - Blackhawk Filter



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 Perimeter Ck. \_\_\_\_\_  
 Book 541 Pg. 7  
 File 12142-PH2B-12-1425-PLAN  
 Layout E&S-BASIN

Date	Description
	REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**  
 PATTON TOWNSHIP  
 CENTRE COUNTY  
 PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**EROSION & SEDIMENTATION CONTROL PLAN - BASIN**

PROJECT NO.  
**12142-PH2B**  
 DATE  
**DECEMBER 6, 2024**

SCALE SHEET NO.  
**1" = 20' ES1.2**

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## Standard Erosion and Sediment Control Plan Notes

1. 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.

2. 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.

3. 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.

4. 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.

5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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 by qualifying as clean fill due to analytical testing.

13. 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, mulching 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.

14. 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.

15. 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.

16. All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings.

17. 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 outlopes shall have a minimum of 2 inches of topsoil.

18. 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.

19. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.

20. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills.

21. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills.

22. Fill shall not be placed on saturated or frozen surfaces.

23. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

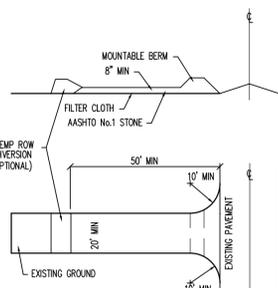
30. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the local conservation district to schedule a final inspection.

31. 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.

32. 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.

33. 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.

34. Channels having stone linings must be sufficiently over-excavated so that the design dimensions will be provided after placement of the protective lining.



**CONSTRUCTION ENTRANCE**  
NOT TO SCALE

## 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 Basin 2 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 Basin 2 bottom shall initially be excavated to final grade without over excavating to subgrade and placing the topsoil media and underdrain. Final bottom excavation, topsoil media and underdrain installation shall occur, once the site has reached proper stabilization, as indicated in the below sequence.
- All disturbed areas requiring vegetation shall receive topsoil prior to placement of the permanent seeding mixture. This includes all areas slated for future build out.

**Phase 2 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 is initiated.**

- 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 and inlet protection on existing inlets, where shown on the E&SCP.
- Commence with the stripping of any site topsoil. Stockpile in a location shown on the E&SCP and apply the temporary seeding mixture.
- Begin all site rough grading.
- Once final grade of the building is reached, commence with the building construction. Continue with all other parking and driveway construction.
- Commence with construction of Basin 2 in accordance with Notes 1-3 above. Strip any topsoil and stockpile at the location shown on the E&SCP. Seed the stockpile with the temporary seeding mixture and repair silt sock if damaged. Construction of the basin shall commence at the existing M1.1 manhole connection and continue upstream to OS-2. Basin construction shall include all piping, manholes, orifice plate, anti-seep collars, and trash rack. Apply the temporary seeding mixture to the basin.
- Continue with all site grading.
- Commence with removal of pavement/remnants of mobile home pads (i.e. impervious areas) in the areas shown on the E&SCP. Immediately apply permanent seeding to these areas upon removal of the pavement and remnants of mobile home pads.
- Commence with construction of all site 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 remaining stormwater 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.
- Construct the diversion berms to inlet 2P. Apply the permanent seeding mixture and appropriate erosion control lining to the berms.
- Continue with the site 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.
- 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. All areas abandoned for more than four (4) days are to be seeded with the temporary seeding mixture.
- 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:

- Excavate the basin bottom to subgrade. Install the underdrain an topsoil media. Apply the appropriate permanent seed mixtures to the basin bottom and sides.
- 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.

**Phase 2-Future Full Build Out Area (Buildings B1, B2 & B4 and associated drives and parking) 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 is initiated.**

- Install the rock construction entrance 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. Place Blackhawk Inlet Protection on inlets 2G, 2L and 2N.
- Commence with the stripping of any site topsoil. Stockpile in a location shown on the E&SCP and apply the temporary seeding mixture.
- Begin all site rough grading.
- Once final grade of each building is reached, commence with the individual building construction. Continue with all other parking and driveway construction.
- Continue with all site grading.
- Commence with construction of all site 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 remaining stormwater 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.
- Continue with the site 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.
- 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. All areas abandoned for more than four (4) days are to be seeded with the temporary seeding mixture.
- 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:

- 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.

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, basin 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 Infiltration Basin Bottom may consist of the following:

Item	Rate
1. Seed Mixture Consists of: ERNMIX-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 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. 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 Terracot 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 Entrance:

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.

## 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.

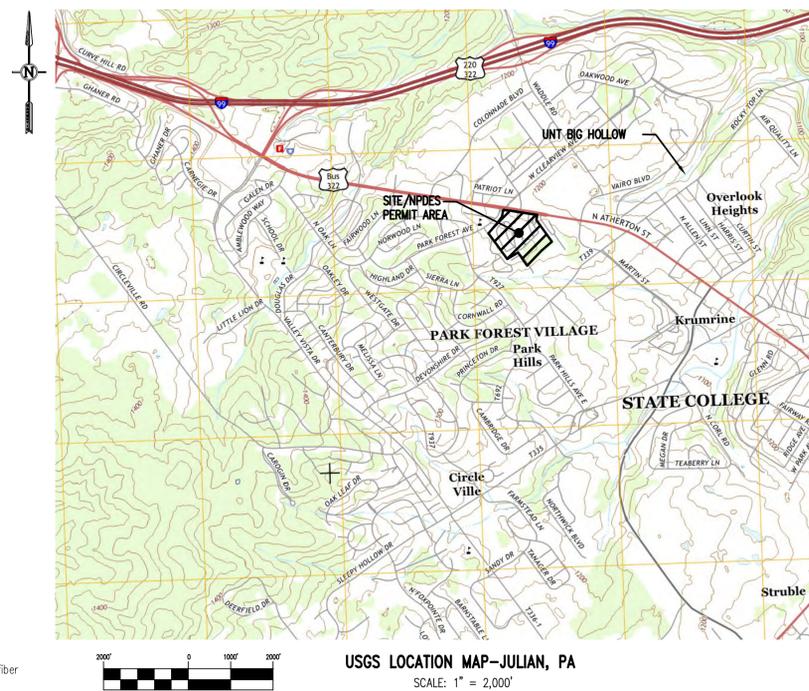
## Responsibilities for Fill Materials

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.)

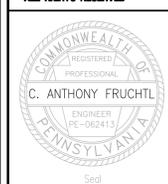
Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental 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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Designer(s)	EAH
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Project Manager	CAF
Surveyor	BRK/NAK/DF
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-LD-E&S-NARRATIVE
Layout	E&S NARRATIVE
Date	Description
	REVISIONS

Date	Description
	REVISIONS

## PATTON CROSSING PHASE 2 CAVA RESTAURANT

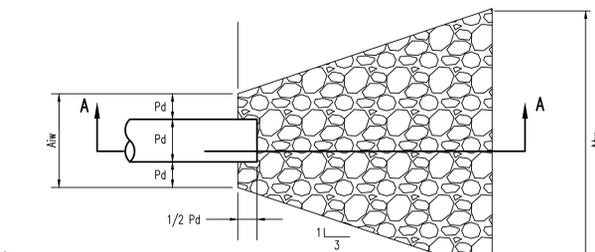
PATTON TOWNSHIP  
CENTRE COUNTY  
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## FINAL LAND DEVELOPMENT PLAN

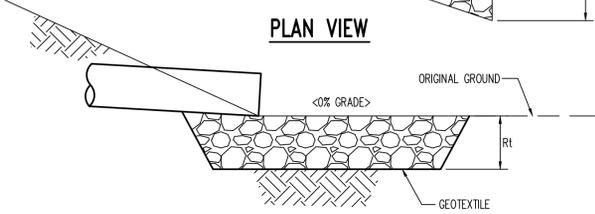
## EROSION & SEDIMENTATION CONTROL NARRATIVE & DETAILS

PROJECT NO.  
12142-PH2B  
DATE  
DECEMBER 6, 2024  
SCALE  
N.T.S.

SHEET NO.  
**ES2.0**



**PLAN VIEW**



**SECTION A-A**

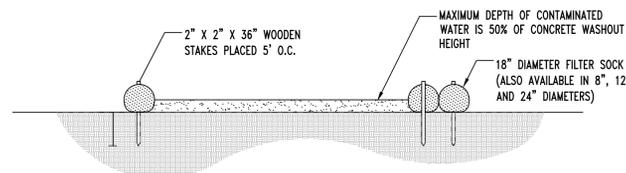
OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP			APRON	
		SIZE (R-)	THICK. Rt (IN)	LENGTH At (FT)	INITIAL WIDTH Atw (FT)	TERMINAL WIDTH Atw (FT)
OUT-2	30	R-5	27	18	7.5	25.5

**NOTES:**

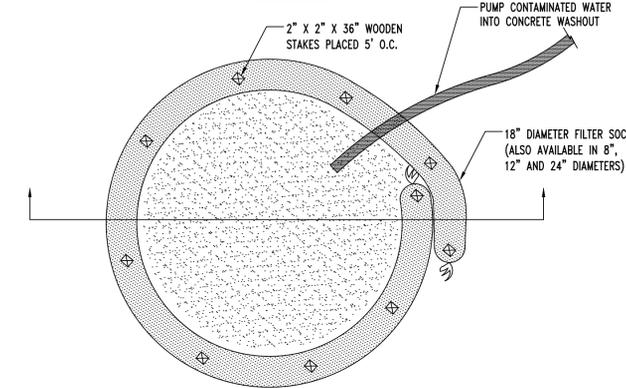
- All aprons shall be constructed to the dimensions shown. Terminal widths shall be adjusted as necessary to match receiving channels.
- All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately.
- Extend riprap on back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

**RIPRAP APRON**

NOT TO SCALE



**SECTION VIEW**



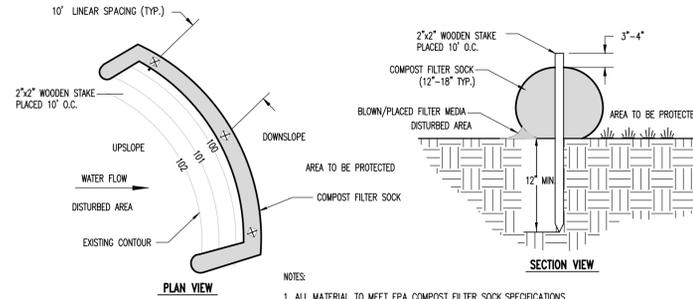
**PLAN VIEW**

**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 SEEDED 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



**SECTION VIEW**

**NOTES:**

- ALL MATERIAL TO MEET EPA COMPOST FILTER SOCK SPECIFICATIONS.
- SILT SOCK COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
- SILT SOCKS DEPICTED 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" 15" 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**

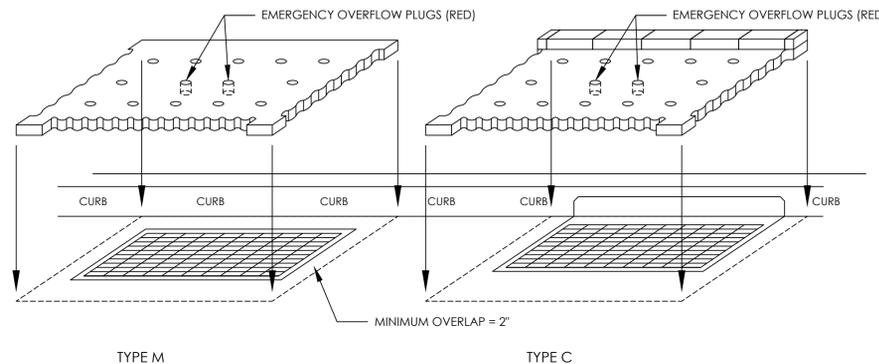
Inner Containment Netting	HDPE biaxial net
	Continuously wound Fusion-welded junctures
Outer Filtration Mesh	3/4"x3/4" Max. aperture size
	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)
3/16" Max. aperture size	
Sock fabrics composed of burlap may 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

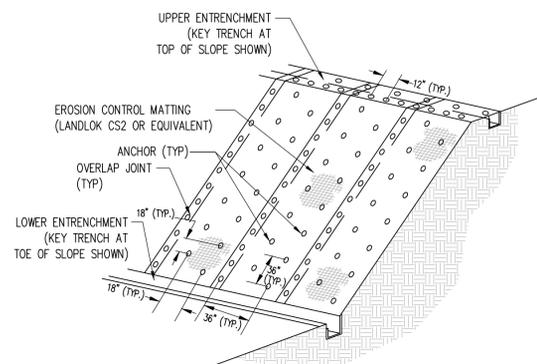


**NOTES:**

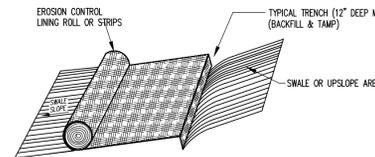
- PRIOR TO INSTALLATION, INLET GRATE SURFACE AND SURROUNDING AREA SHALL BE CLEANED AND CLEARED OF DEBRIS. INLET FILTER MAT SHALL BE INSTALLED WITH A MINIMUM 2' OVERLAP FROM EDGE OF GRATE TO EDGE OF MAT WITH STRAIGHT EDGE FLUSH TO CURB FACE. ADJUST MAT BY HAND UNTIL PLACEMENT ALLOWS FOR OPTIMAL MAGNETIC ADHESION TO GRATE SURFACE.
- PRE-INSTALLED RED EMERGENCY OVERFLOW PLUGS CAN BE REMOVED IN THE EVENT OF FLOODING TO ALLOW FOR RAPID DEWATERING. AFTER DEWATERING, THE INLET FILTER MAT SHALL BE LIFTED AND THOROUGHLY CLEANED OR REPLACED AND THE AND THE EMERGENCY OVERFLOW PLUGS SHALL BE REINSTALLED. IF GRATE IS AT LOWEST POINT OF STREET, REMOVAL OF ONE PLUG WILL ALLOW FOR EXPECTED DEWATERING AT ALL TIMES.
- INLET FILTER MATS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. AS NEEDED, INLET FILTER MATS SHALL BE LIFTED AND RINSED OR REPLACED. WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET OR THE INLET FILTER MAT BECOMES COMPRESSED DUE TO HEAVY TRAFFIC, REPLACEMENT IS REQUIRED.
- A SUPPLY OF SPARE INLET FILTER MATS SHALL BE MAINTAINED ON SITE. ALL NECESSARY REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED MATS ACCORDING TO THE PLAN NOTES.

**BLACKHAWK INLET FILTER SYSTEM**

NOT TO SCALE



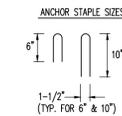
**ON SLOPES**



**INSTALLATION NOTES:**

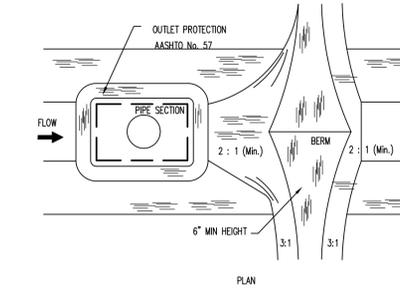
- PRIOR TO EROSION CONTROL LINING INSTALLATION, STABILIZATION SHALL BE AS FOLLOWS:  
A. SPREAD TOPSOIL  
B. SEED SLOPE WITH THE PERMANENT SEEDING MIXTURE  
C. BEGIN APPROPRIATE SLOPE MATING INSTALLATION AS FOLLOWS BELOW
- BURY TOP END OF THE STRIPS IN A TRENCH 12" DEEP (MIN.) X 6" WIDE (MIN.)
- TAMP TRENCH FULL OF SOIL. SECURE WITH ROW OF STAPLES
- 12" SPACING -- 4" AWAY FROM TRENCH.
- OVERLAP AND BURY UPPER END OF LOWER STRIP. OVERLAP END OF TOP STRIP 4" AND STAPLE.
- INSTALL DOUBLE ROW OF STAPLES AT EACH STRIP END (4" ABOVE AND BELOW TRENCH).
- OVERLAP STRIPS AND STAPLE EVERY 18" O.C. ALONG OVERLAP IF MULTIPLE STRIPS ARE REQUIRED ALONG WIDTH OF SLOPE.

**TYPICAL ANCHORING PATTERN**

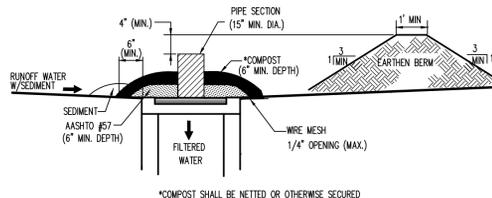


**EROSION CONTROL LINING INSTALLTION**

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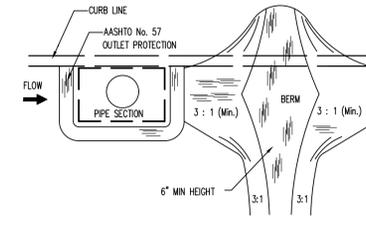
**PLAN**



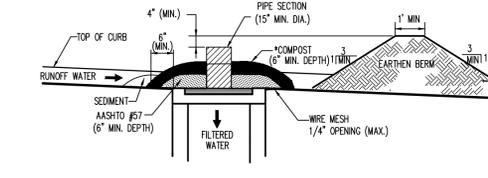
**SECTION**

**DROP INLET FILTER W/ EARTHEN BERM (TYPE M)**

NOT TO SCALE



**PLAN**

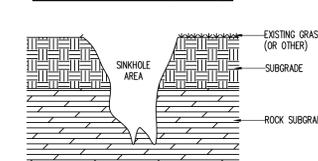


**SECTION**

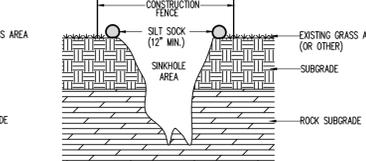
**DROP INLET FILTER W/ EARTHEN BERM (TYPE C)**

NOT TO SCALE

**--EXISTING CONDITIONS (TYPICAL)--**



**--SUGGESTED FIRST COURSE OF REPAIR ACTION--**



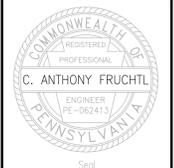
**UPON DISCOVERY OF A SINKHOLE, THE FOLLOWING STEPS SHALL IMMEDIATELY OCCUR:**

- INSTALL SILT SOCK OR SOME OTHER PERIMETER EROSION AND SEDIMENT CONTROL BMP AROUND THE SINKHOLE PERIMETER, AS SHOWN ABOVE UNDER THE SUGGESTED FIRST COURSE OF REPAIR ACTION.
- INSTALL CONSTRUCTION FENCE AROUND THE SINKHOLE PERIMETER, AS SHOWN ABOVE UNDER THE SUGGESTED FIRST COURSE OF REPAIR ACTION.
- CONTACT THE PROJECT GEOTECHNICAL AND CIVIL CONSULTING ENGINEERS TO ARRANGE A FIELD VIEWING OF THE SINKHOLE AND DETERMINE THE FINAL COURSE OF ACTION TO REPAIR THE SINKHOLE.
- IMPLEMENT THE FINAL COURSE OF ACTION TO REPAIR THE SINKHOLE UNDER THE DIRECTION AND SUPERVISION OF THE GEOTECHNICAL ENGINEER. REFER TO THE INVERTED FILTER FOR A TYPICAL REPAIR. THE FINAL REPAIR APPROACH SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER.

**SINKHOLE REPAIR--COURSE OF ACTION PLAN**

(NOT INCLUDED IN UTILITY/EARTHWORK BASE BID)

NOT TO SCALE



Designer(s)	EAH
Environmental	JFS
Proj. Manager	CAF
Surveyor	BRK/MAK/JDE
Perimeter Ck.	
Book	541 Pg. 7
File	12142-PH2B-18-EAS-DETAILS
Layout	EAS-DETAILS (1)

Date	Description
	REVISIONS

**PATTON CROSSING PHASE 2 CAVA RESTAURANT**

PATTON TOWNSHIP  
CENTRE COUNTY  
PENNSYLVANIA

**FINAL LAND DEVELOPMENT PLAN**

**EROSION & SEDIMENTATION CONTROL DETAILS**

PROJECT NO.

12142-PH2B

DATE

DECEMBER 6, 2024

SCALE SHEET NO.

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