

**LOWER PROVIDENCE TOWNSHIP
BOARD OF SUPERVISORS BUSINESS MEETING
March 16, 2023**

Call to Order: Chair Coless called the hybrid live/virtual meeting to order at 7:03 p.m.

Pledge of Allegiance

Protocol for Hybrid Meetings: Chair Coless provided an overview of the protocols for public participation for members of the public attending the meeting virtually over Zoom.

Roll Call:

- a. The following members were in attendance: Chair Coless, Vice Chair Darby (via Zoom), and Supervisors MacFarland, Neights (via Zoom), and Sorgini.
- b. Also in attendance were: E.J. Mentry (via Zoom), Township Manager; Mike Mrozinski, Community Development Director; Michael Jackson, Chief of Police; Michael Clarke, Township Solicitor; and Ted Locker, Township Engineer.

Chairman's Comments

Chair Coless announced that there was an Executive Session held prior to the meeting to discuss legal matters.

1) Presentations

- A. Moyer's Landfill presentation - Caleb Melvin and Katie Page, Environmental Protection Agency (EPA), and Christine McCarthy, Bonnie McClennen, Rob Fogel, and Ragesh Patel, PA Department of Environmental Protection (PA DEP). Mr. Melvin and Ms. Page presented an overview of the site, contamination remedy, and current status.
 - a. The Moyers Landfill Superfund Site was an active landfill from 1940 to 1981, accepting municipal waste, sewage sludge, industrial wastewater treatment sludges and general industrial wastes. In 1983, metals and volatile organic compounds were identified as contaminants of concern, with on and offsite groundwater, leachate, soil and surface water contamination. Deeper groundwater was not contaminated. In 1985, per the Record of Decision, the remedy included: An impermeable landfill cap; gas venting and monitoring; collection of surface water and discharge to Skippack Creek; leachate collection and on-site treatment. In 2000, leachate treatment was changed to off-site at the Oaks Wastewater Treatment Plant.
 - b. The landfill cap was completed in 1994 and operation and maintenance was transferred to the PA DEP in 1998. The site was removed from the National Priorities List in 2014 and after years of data showing no impact, groundwater sampling and ambient air sampling was discontinued in 2017.
 - c. PA DEP's ongoing operation and maintenance includes site inspections monthly and after storms and monthly monitoring of the leachate collection system to make sure the originally prescribed remedy remains protective.
 - d. In 2022, there were three PFAS leachate sampling events at the site's collection system. PFAS (per- and polyfluorinated substances) are a group of chemicals used to make coatings and products that resist heat, oil, stains, grease, and water. PFOS and PFOA are two of the most extensively produced PFAS. The sampling indicated PFOS and PFOA

values above the state's drinking water standards. Federal drinking water standards are in the process of being established.

- i. The highest value found for PFOA was 1400 parts per trillion (PA maximum level is 14 parts per trillion).
- ii. The highest value found for PFOS was 69 parts per trillion (PA maximum is 18 parts per trillion).
- e. EPA notified homes on private drinking water around the landfill of the findings and is scheduling sampling for May-June. If PFOS and PFOA are found in private drinking water, bottled water will be provided by EPA/PA DEP. Property-specific remediation could include carbon filtration systems or a move to public water.
- f. Concerns were raised by the supervisors about:
 - i. Impacts on Evansburg State Park and Skippack Creek
 - ii. Possible adverse effects on soil
 - iii. Safety of the wells utilized by companies that provide public water
 1. Audubon Water Company was notified to conduct its own testing because its previous results were now above the new standards.
 - iv. Potential public health impacts
 1. Residents can report issues to Ms. Page of the EPA or the Agency for Toxic Substances and Disease Registry
 - v. Notification of well water test results
- g. Residents were encouraged to visit EPA's Moyers website: epa.gov./Superfund/Moyers
- h. Julia Nekhleh, Valley High Estates, expressed concern about effects on vegetable gardens, and asked about drinking water versus water used to shower, and availability of test results.
- i. Laura Winslow expressed concern regarding overflow from a manhole at the site and effects on Skippack Creek and soil, and who is being sampled.
- j. Erin McCool, Coldspring Crossing, expressed concern about effects to Hoy Park, wildlife, and the nearby day camp; testing by Audubon Water Company; and climate change consequences.
- k. Fred Walker, Coldspring Crossing, asked about regulations for wastewater treatment plants.
- l. State Sen. Katie Muth expressed concern about the migration of contamination and the need to expedite the resident well testing.
- m. Terry Hoffman, Sunnyside Avenue, asked about the percentage of various diseases found in those living around the landfill.

2) Consent Agenda

- A. **MOTION:** Supervisor MacFarland made a motion to approve the consent agenda items 2(a), 2(b) and 2(c) including moving the meeting minutes of the March 2, 2023 Board of Supervisors meeting into the record and authorizing payment of bills in the amount of \$385,972.74 and escrow release #4 for Woodland Avenue Tracts in the amount of \$75,274.60. Supervisor Neights seconded the motion.
 - a. There was no public comment.
 - b. The motion *passed* 5-0.

3) Old Business

- A. Approval of proposal for municipal campus master plan study

- a. Mr. Mentry stated that three proposals had been received for the study which would include looking at the entire campus and buildings to determine the best course for expansion – renovation, renovation with expansion or new construction.
- b. There was discussion regarding the difference in costs and an “apples to apples” comparison of the proposals.
- c. Supervisors Darby requested an additional proposal from a minority-owned firm.
- d. **MOTION:** Supervisor MacFarland made a motion to table the item to a future date uncertain, seconded by Supervisor Sorgini.
- e. There was no public comment.
- f. The motion *passed* 5-0.

4) New Business

A. Request for waiver of fence standards, 2860 Eagleville Road

- a. Mr. Mrozinski said that the waiver would permit the installation of a solid-style fence on frontage of the corner property. It would be replacing an existing six-foot wood fence installed when different standards were in place. There are no sight issues created by the new fence.
- b. **MOTION:** Supervisor Sorgini made a motion to grant the waiver of fence standards at 2860 Eagleville Road. Supervisor MacFarland seconded the motion.
- c. There was no public comment.
- d. The motion *passed* 5-0.

B. Request for waiver of fence standards, 309 Evansburg Road

- a. Mr. Mrozinski said the waiver would permit the installation of a solid-style six-foot fence on frontage at the property. Chief Jackson said the fence would create sight distance issues for motorists and those exiting the driveway.
- b. **MOTION:** Supervisor Neights made a motion to deny the waiver of fence standards at 309 Evansburg Road. Supervisor MacFarland seconded the motion.
- c. There was no public comment.
- d. The motion *passed* 5-0.

C. Request for waiver of special event permit fee, Lower Providence Baptist Church, 3430 Ridge Pike

- a. Mr. Mentry said the church will be hosting a free concert and requests waiver of the \$150 special event permit fee. The event has been held previously.
- b. **MOTION:** Supervisor MacFarland made a motion to waive the special event permit fee for Lower Providence Baptist Church. Supervisor Sorgini seconded the motion.
- c. There was no public comment.
- d. The motion *passed* 5-0.

5) Announcements/Meetings

- Chief Jackson announced the hiring of Nikki Urbanski as the department’s Social Services Liaison. In this newly-created position, she will provide connections, resources and support for community members in need including mental health, addiction, substance use, trauma, food insecurity, homelessness, aging and adult services.
- Environmental Advisory Council – March 20 at 7:00 p.m.
- Library Board – March 20 at 7:00 p.m.
- Parks and Recreation Board – March 21 at 7:00 p.m.
- Planning Commission – March 22 at 7:00 p.m. - Cancelled

- Zoning Hearing Board – March 23 at 7:00 p.m.

6) Comments and Other Business

- a. Supervisor Sorgini provided a Sewer Authority update, noting that the Authority is a locally-operated public utility. Fees are put back into the system and to ongoing improvement projects.
- b. Supervisor MacFarland said the Township’s annual Easter Egg Hunt is scheduled for March 25. He said the Business Development Committee will be welcoming a new business, Grazeffly Delicious, to the Colonial Shopping Center. The “Wall That Heals,” the traveling replica of the Vietnam Veterans Memorial, will be in Upper Providence in October.
- c. Chair Coless said the Business Development Committee also will be holding an open house for businesses in the Park Pointe Business Park.

7) Courtesy of the Floor

- A. No public comment

8) Adjournment

- A. **MOTION:** Supervisor MacFarland made a motion to adjourn. Supervisor Sorgini seconded the motion. The motion *passed 5-0*. The meeting adjourned at 9:30 p.m.

Next Business Meetings: Wednesday April 5, 2023
April 20, 2023



LOWER PROVIDENCE TOWNSHIP



100 Parklane Drive • Eagleville, PA 19403 • www.lowerprovidence.org

Administration: 610 539-8020 • Fax: 610 539-6347

Police: 610-539-5900 • Fax: 610-630-2219

LOWER PROVIDENCE TOWNSHIP INTER-OFFICE MEMORANDUM

TO: Members of the Board of Supervisors; E.J. Mentry, Township Manager

FROM: Mike Mrozinski, Director of Community Development *MM*

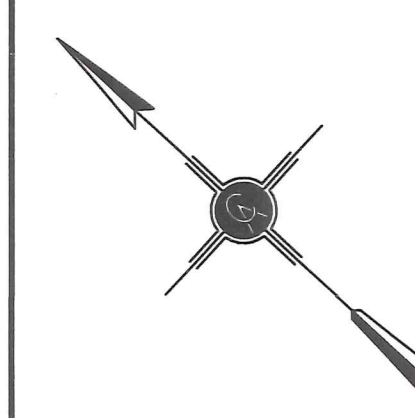
DATE: March 28, 2023

RE: LD-23-02 LP Presbyterian 3050 Ridge - waiver of land development request

For your consideration is a request from Chris Drummond Committee Chairman of Boy Scout Troop 267 who regularly meet at Lower Providence Presbyterian Church 3050 Ridge Pike. A plan was prepared by Joe Hanna of Chambers Associates and is dated February 23, 2023.

The proposal is to add a storage shed and carport in the parking area to the east of the primary church building. The proposed shed is to be 20' x 12' and the proposed carport for the Scout Troop trailer 21' x 12'. The plan adds a lawn area instead of pavers. With this, there is no increase in impervious surface. The sheds are supported above grade so the runoff from the parking area still drains to the stone seepage bed.

Staff has reviewed and recommends the waiver, conditioned on the applicant getting the required permits. Letters to neighbors have been sent.

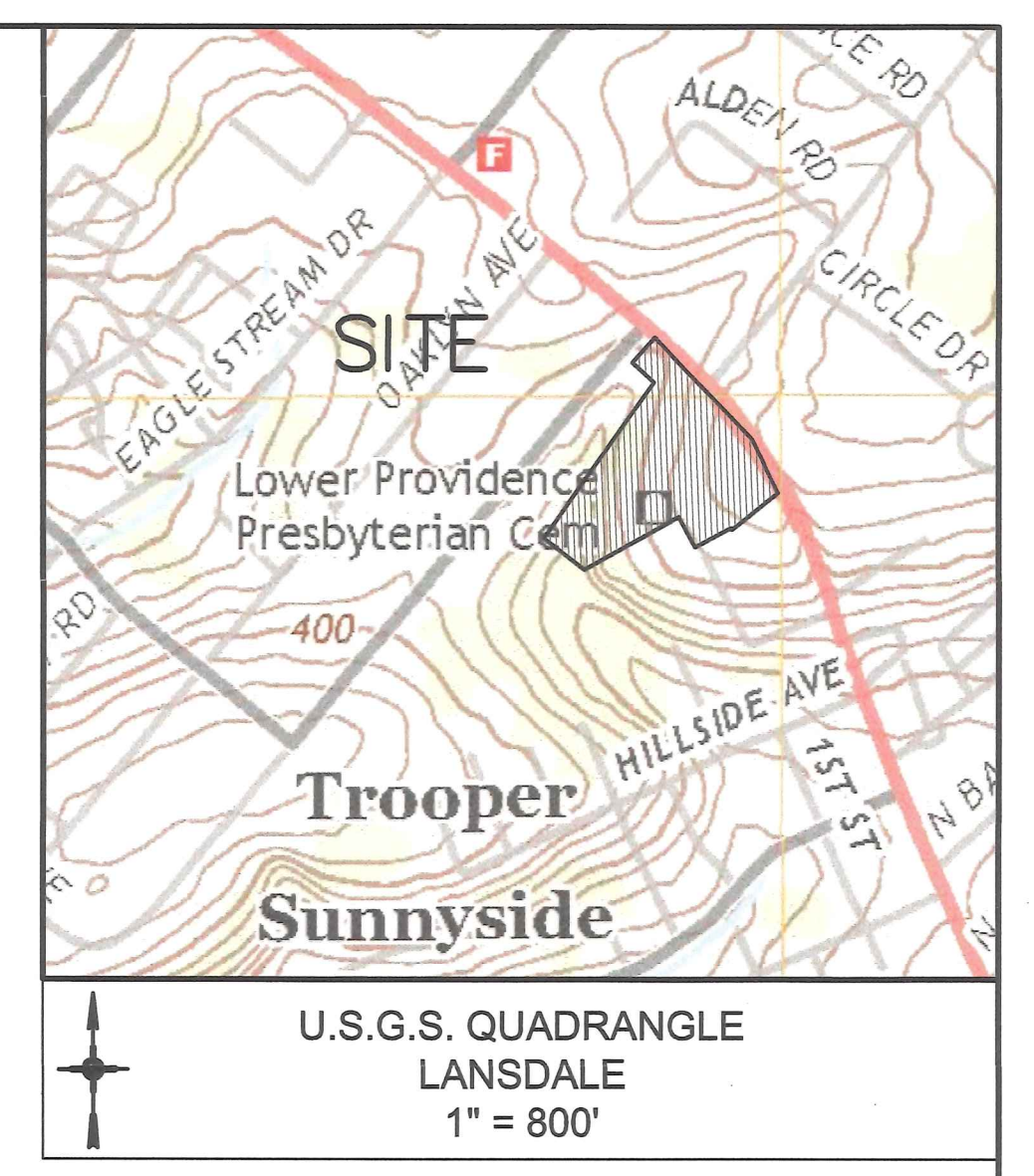


ZONING
R-2 RESIDENTIAL DISTRICT
 CONDITIONAL USE: RETIREMENT COMMUNITY

	REQUIRED	EXISTING	PROPOSED
LOT AREA =	40,000 S.F. MIN.	479,425 (GROSS) / 465,276 (NET.)	479,425 (GROSS) / 465,276 (NET.)
LOT WIDTH =	115' MIN. (@ BLDG. SETBACK LINE)	175.0'	175.0'
BUILDING HEIGHT =	35' MAX.	40' MAX.	40' MAX.
FRONT YARD =	50' MIN.	28.0'	28.0'
SIDE YARD =	30' MIN.	286.7'	286.7'
REAR YARD =	80' MIN.	153.1'	153.1'
BUILDING COVERAGE =	20% MAX.	19,874 S.F. / 4.2%	20,406 S.F. / 4.4%
IMPERV. COVERAGE =	35% MAX.	114,004 S.F. / 24.5%	113,994 S.F. / 24.5%

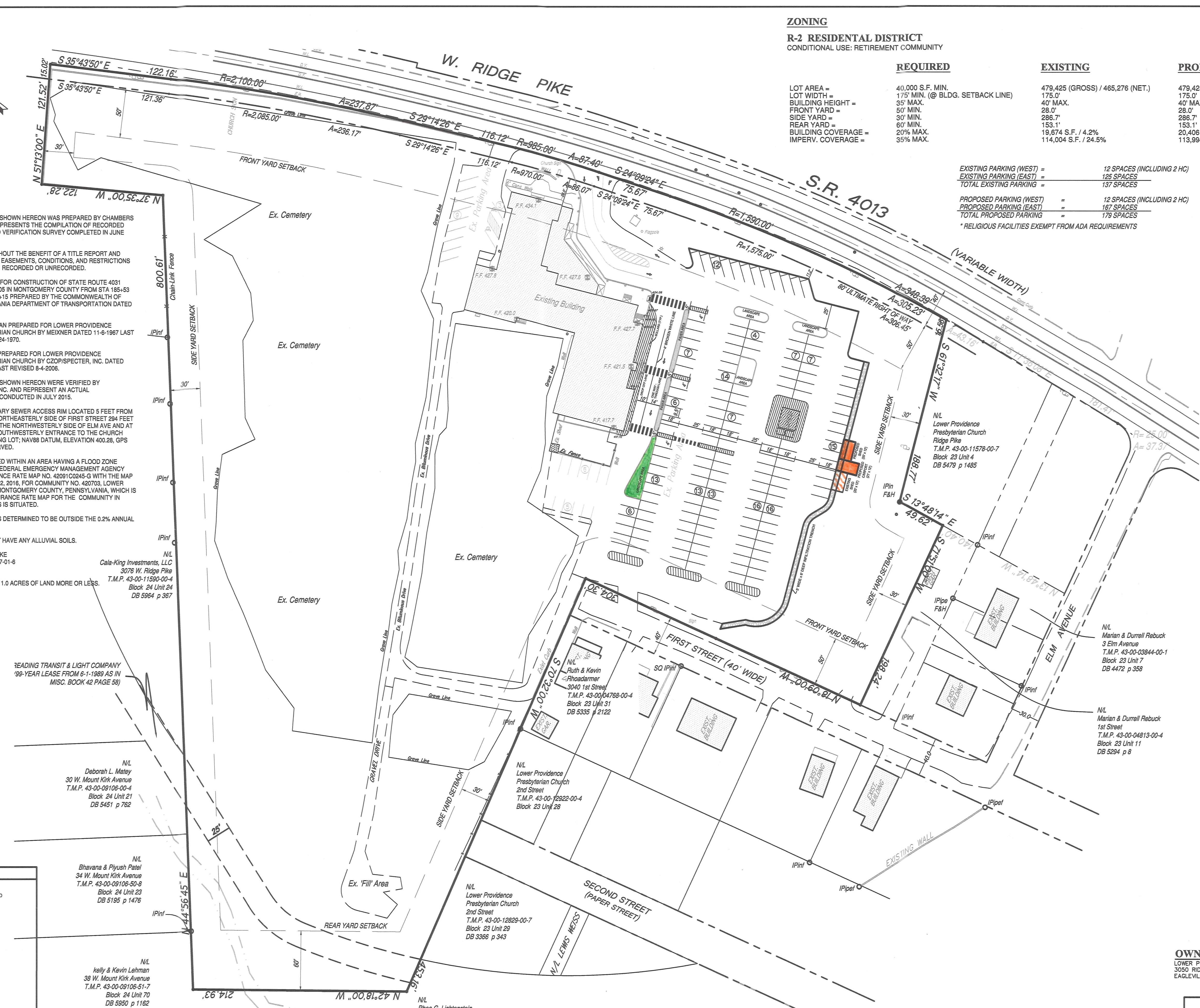
EXISTING PARKING (WEST) =	12 SPACES (INCLUDING 2 HO)
EXISTING PARKING (EAST) =	125 SPACES
TOTAL EXISTING PARKING =	137 SPACES
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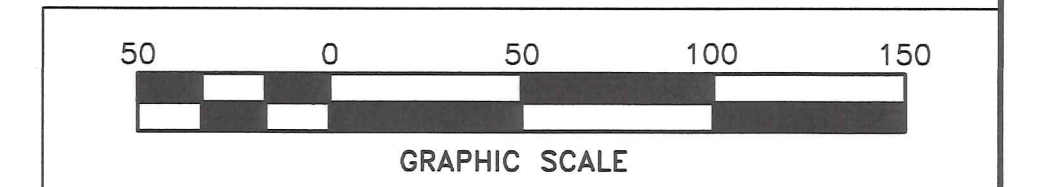
GENERAL NOTES:

- BOUNDARY INFORMATION SHOWN HEREON WAS PREPARED BY CHAMBERS ASSOCIATES, INC., AND REPRESENTS THE COMPILATION OF RECORDED INFORMATION AND A FIELD VERIFICATION SURVEY COMPLETED IN JUNE 2015.
- PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND PROPERTY IS SUBJECT TO EASEMENTS, CONDITIONS, AND RESTRICTIONS ETC. CONTAINED THEREIN, RECORDED OR UNRECORDED.
- REFERENCES: DRAWINGS FOR CONSTRUCTION OF STATE ROUTE 4031 SECTION M05 IN MONTGOMERY COUNTY FROM STA 185+53 TO STA 247+15 PREPARED BY THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DATED 9-8-1989.
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- SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION "X" BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 42091C0245-G WITH THE MAP REVISED DATE OF MARCH 2, 2016, FOR COMMUNITY NO. 420703, LOWER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH THE SAID PREMISES IS SITUATED.
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 T.M.P. 43-00-11587-01-6
 BLOCK 23 UNIT 1
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 Block 24 Unit 24
 DB 5964 p 367
- AREA 479,425 S.F. OR 11.0 ACRES OF LAND MORE OR LESS.



LEGEND

○	MONUMENT FOUND
□	IRON PIN OR PIPE FOUND
—	CONTOUR ELEVATION
—	CURB LINE
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NO.	DATE	DESCRIPTION	BY

OWNER/APPLICANT:
 LOWER PROVIDENCE PRESBYTERIAN CHURCH
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SITE PLAN - SHED LOCATION
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LOWER PROVIDENCE PRESBYTERIAN CHURCH
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SCALE	DATE	JOB	DRAWING NO.
1" = 50'	2-23-23	984-001.04	SHEET 1 of 1
MANAGER:	JPH	DRAWN BY:	JAS



Community Development Department
 100 Parklane Drive • Eagleville, PA 19403
 Phone: (610) 635-3514 • Fax: (610) 539-6347
 www.lowerprovidence.org

APPLICATION FOR SUBDIVISION AND LAND DEVELOPMENT

Please complete all of the following sections below. All sections must be complete with the required information. If the required information is not provided, the application will not be processed. Please attach any addendums or supportive documents to this application. Twenty (20) complete sets (ten may be 11" x 17") of the site plans must be submitted to Lower Providence Township not less than thirty (30) days prior to the scheduled planning commission meeting date. Please note that any false statement or misrepresentation of fact contained within this application is a criminal offense and subject to severe penalties of the PA Criminal Codes.

Please check one only:

Sketch Plan
 Preliminary Plan
 Preliminary/Final Plan
 Final Plan
 De Mimimis Plan

Please check one only:

Minor Subdivision
 Major Subdivision
 Minor Land Development
 Major Land Development

1. Applicant information:

Name: LOWER PROVIDENCE PRESBYTERIAN CHURCH	Address: 3050 RIDGE PIKE EAGLEVILLE, PA 19403
Phone: 610-539-6635	Fax: 610-630-0656
E-Mail:	

2. Name of Subdivision or Development:

LOWER PROVIDENCE PRESBYTERIAN CHURCH - SHED
--

3. Main Contact Person¹:

Name: CHRIS DRUMMOND	Address:
Phone: [REDACTED]	Fax:
E-Mail:	

¹Contact person should be permitted to make decisions pertaining to processing of application

4. Agent or Attorney (if any):

Name:	Address:
Phone:	Fax:
E-Mail:	

5. Registered Engineer or Surveyor:

Name: JOSEPH P. HANNA, P.E. CHAMBERS ASSOCIATES, INC.	Address: P.O. BOX 0678 WORCESTER, PA 19490
Phone: 610-633-6604	Fax: 484-991-8371
E-Mail: J.HANNA@CHAMBERSASSOC.COM	

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6. Owner of Record of Land:

Name: SAME AS APPLICANT	Address:
Phone:	Fax:

7. Location of the property to be subdivided or developed:

3050 RIDGE PIKE, EAGLEVILLE, PA 19403

8. Tax Parcel Number of the parent parcel: 43-00-11587-01-6

9. Parent Parcel ---Deed Book & Page #: PLAN BK 0044 PG 00075

10. Total Proposed No. of Lots or Dwelling Units: N/A

11. Total area to be developed or subdivided:

Gross: <u>11.00 AC</u>	Net: <u>10.68 AC</u>
Acres to be disturbed: <u>800 S.F.</u>	(area calculated to the legal right-of-way – net areas are to be used for density and land area requirements)
Sq ft of building floor area: <u>732 S.F.</u>	(area calculated to center of street)
Project located within a stream or flood plain (if any): Yes ___ No <u>X</u>	
PADEP Permits required? Yes ___ No <u>X</u>	

12. Density (dwelling units per acre): N/A

13. Zoning classification of subject land: R-2 CONDITIONAL USE: RETIREMENT COMMUNITY

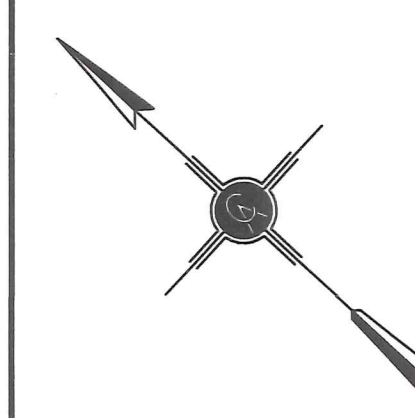
14. Water Supply: Public system? YES. Who is the supplier _____ well? _____

15. Sewage System: Public system? YES. On-lot system? _____ EDU's required: _____

16. Please attach to this application all encumbrances and deeds involving the property.

17. Lineal Feet of New Street to be dedicated to the township: N/A

18. Are waivers or modifications requested at this time from the Subdivision and Land Development Ordinance? _____ if yes, please attach a letter to this application stating all waivers or modifications being requested.

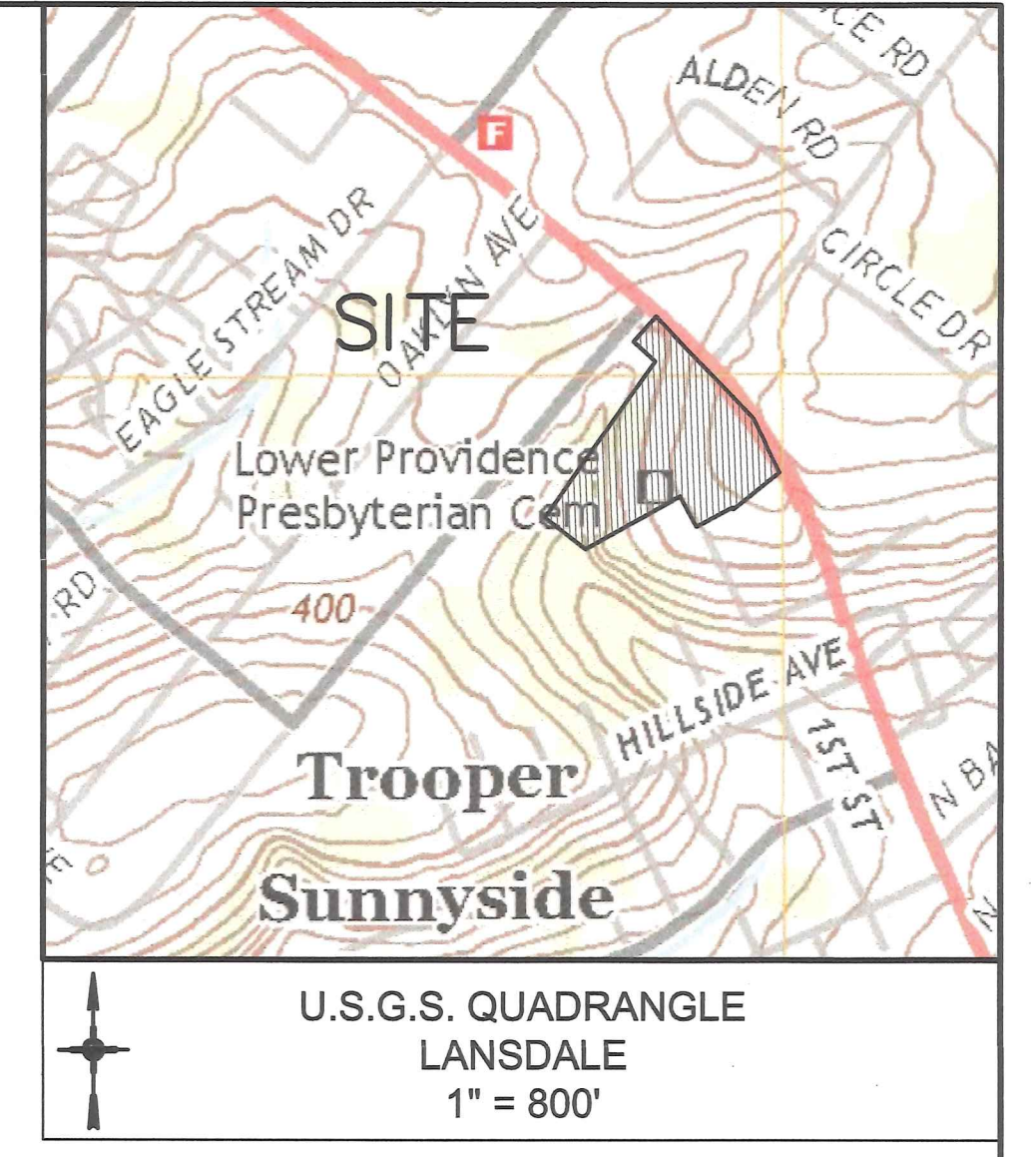


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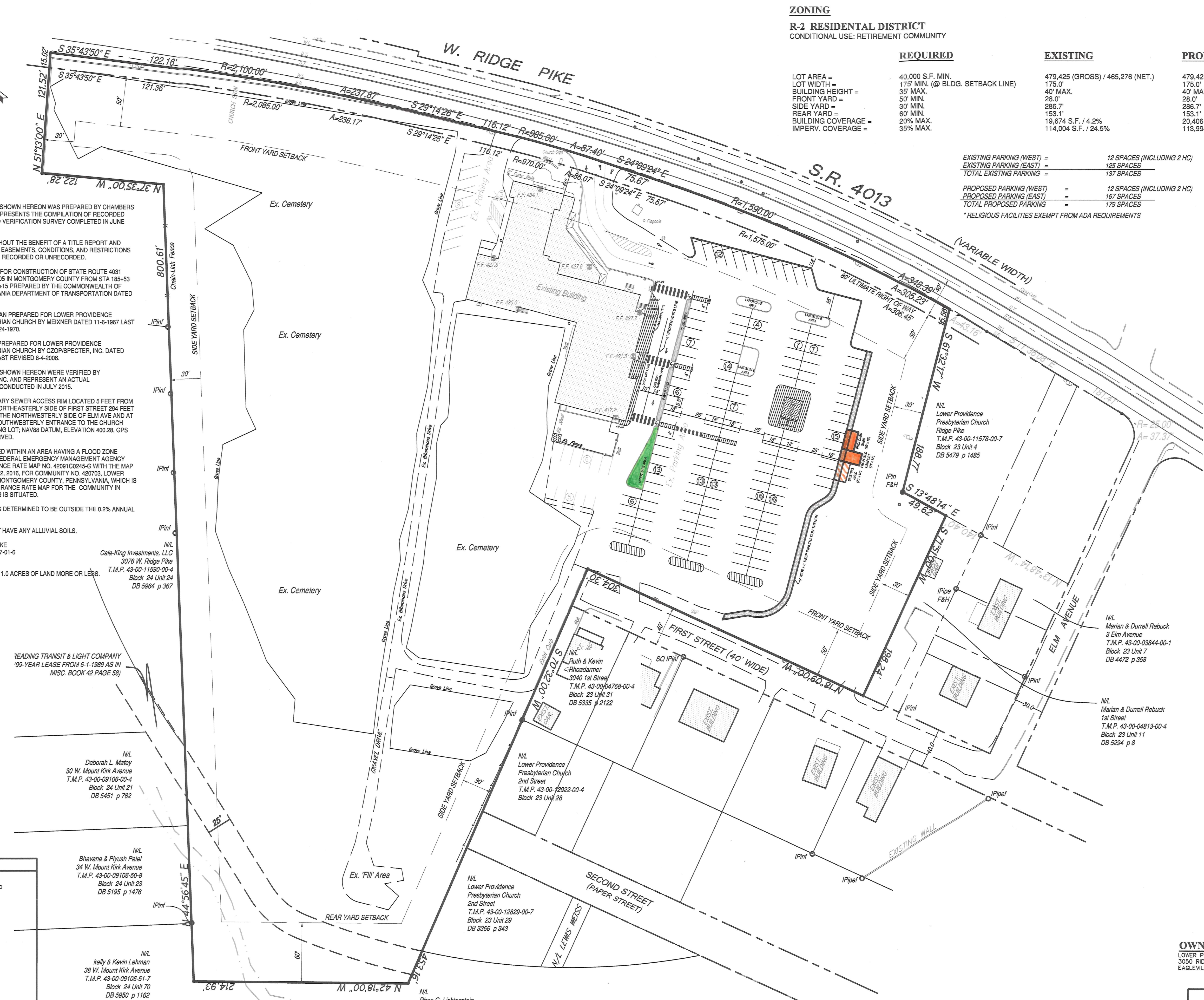
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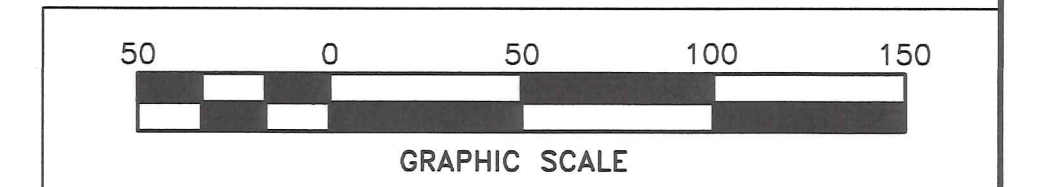
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MANAGER:	JPH	DRAWN BY:	JAS



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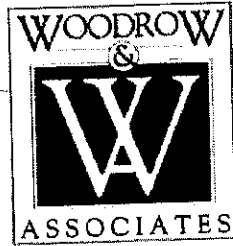
FROM: Mike Mrozinski, Director of Community Development 

DATE: March 28, 2023

RE: LD-23-03 -Evansburg Vineyards -waiver of land development request

For your consideration is a request from Yuval Blat of Evansburg Vineyards to construct 31 additional parking spaces. This will be on stone instead of asphalt. The construction will require some stormwater facilities to be relocated. Some evergreen plantings will be added.

Staff has reviewed and recommends the waiver conditioned on obtaining standard grading and stormwater plans and permitting. Impacts on neighbors have been considered. A letter from Township Engineer Woodrow dated March 8, 2023, is attached. Letters have been sent to neighbors.



March 8, 2023

Michael Mrozinski, Director of Community Development
Lower Providence Township
100 Parklane Drive
Eagleview, PA 19403

Reference: Evansburg Winery – Parking Lot Expansion

Dear Mike:

My office is in receipt of a request for a land development waiver for certain improvements proposed at the Evansburg Winery facility. The request is supplemented by a two-sheet set of documents dated February 28, 2023, with no revision date. The plans describe the proposed construction of a 31-car event parking facility. The proposal calls for a stone parking lot versus an asphalt pavement. Please recall our site meeting where we met the owner and his engineer as well as his contractor to discuss the goals of the project and potential adverse neighborhood impacts. Key points of discussion are as follows:

1. The proposed parking lot will disrupt the existing stormwater management facility constructed in conjunction with the original project.
2. The plan submission indicates a potential location for a relocated and improved stormwater facility and controlling not only the existing obligations, but those additive needs caused by the proposed parking lot expansion.
3. The proposed stone parking lot will be considered “impervious” for stormwater design calculations, as parking facilities become compacted and essentially stormwater permeability bulletproof over time.
4. The point of discharge of the revised basin will need to be designed to return outflow to a “sheet flow” condition versus any form of point source discharge.
5. Any consideration made by the Board of Supervisors must be conditioned upon a full design of stormwater management facilities, grading plans, erosion control plans, lighting plans and enhanced landscape screen buffering.
6. We bring to the applicant's attention recent sustainability goals of the community. The applicant should seek to implement green technologies that could include solar power with facility, electric vehicle charging stations, geothermal heating and air conditioning, additional shade tree plantings, and green roof technologies.

March 8, 2023

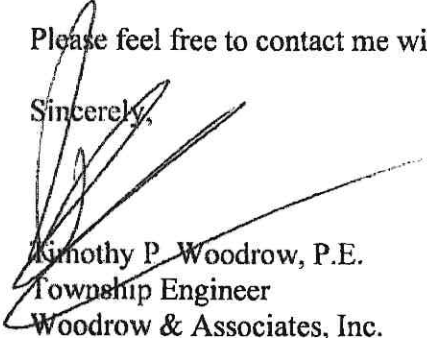
Michael Mrozinski, Director of Community Development
Lower Providence Township

Reference: Evansburg Winery – Parking Lot Expansion

7. During the land development process, pedestrian improvements along the Germantown Pike frontage were made. At this time, the board and planning commission should consider whether additional pedestrian connections from Germantown Pike to the facility may be warranted, given the success of the facility.
8. Neighbor Notification – Given the size and dimension of the proposed parking expansion, it would be incumbent upon the applicant to notify neighbors of the proposed development. Neighbor comments regarding the expansion should be considered by the Township prior to plan approval recommendations.
9. As an alternative to a waiver of land development, perhaps the application could merely be considered a revised final plan. The revised final plan will memorialize the new construction relative to the earlier approvals more consistently.

Please feel free to contact me with any questions you have regarding this matter.

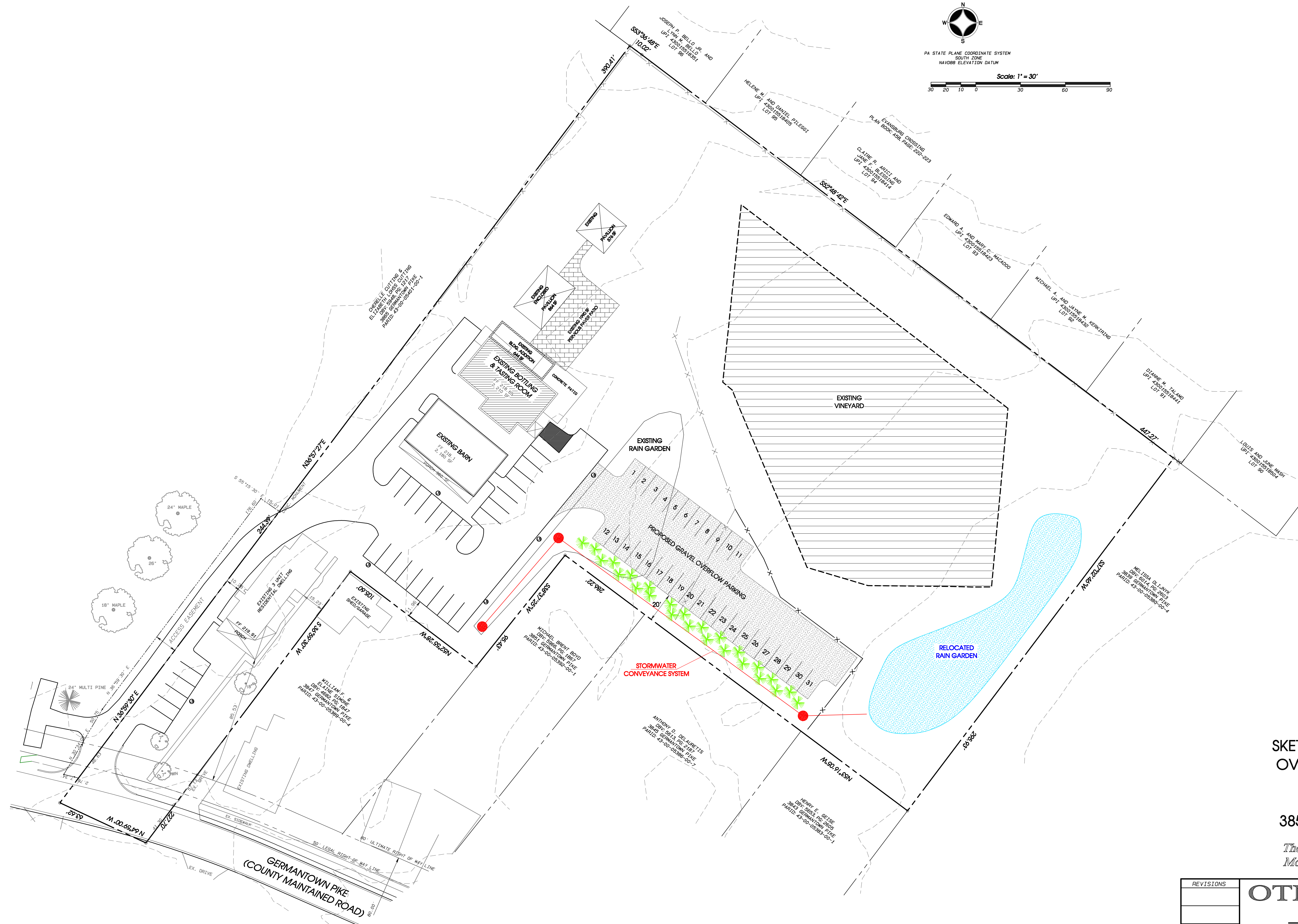
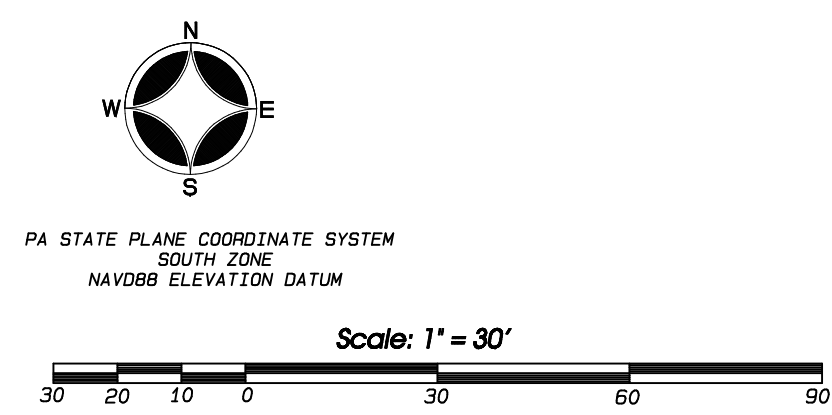
Sincerely,



Timothy P. Woodrow, P.E.
Township Engineer
Woodrow & Associates, Inc.

TPW/del

cc: EJ Mentry, Township Manager – Lower Providence Township
Bradford R. Grauel, P.L.S. – OTM LLC
Yuval Blat
Ray Carbone
Michael Clarke, Esq., Township Solicitor – Rudolph Clarke, LLC
Lauren Gallagher, Esq. – Rudolph Clarke, LLC



SKETCH PLAN OF PROPOSED
 OVERFLOW PARKING AREA
 PREPARED FOR
 EVANSBURG WINERY
 3855 GERMANTOWN PIKE
Situate In:
 The Township of Lower Providence
 Montgomery County, Pennsylvania

REVISIONS	

OTM LLC
 SURVEYING - LAND PLANNING
 & DESIGN SERVICES
 200 Spring Ridge Drive, Suite 201, Wyomissing, Pa. 19610
 (484) 336-6454

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DRAWN BY: GRAUEL, PLS 01/22/2022
 CHECK: []
 SCALE: 1"=20'
 PROJECT NO. 22-012
 SHEET 1 of 2

200 Spring Ridge Drive, Suite 201, Wyomissing, Pa. 19610
(484) 336-6454; www.otm-surveying.com

Wednesday, March 1, 2023

Lower Providence Township
Planning Commission
Board of Supervisors
100 Parklane Drive
Eagleville, Pa. 19403

Re: Request for waiver of Land Development process
Evansburg Winery overflow parking area project.

Dear Township Officials,

Mr. and Mrs. Blat, the owners of Evansburg Winery are seeking to install a gravel event overflow parking area on the property along with a minor 644 sq. ft. building addition intended for expansion of restroom facilities to serve their customers.

This site had previously been reviewed and approved in 2019 as a Land Development Plan entitled "Backyard Winery" and I note that all of the improvements, including road frontage improvements had been previously installed as part of the original land development.

Due to the minor nature of these latest proposed site improvements, we respectfully request on behalf of Mr. and Mrs. Blat, that the Township not require the full land development process and to permit the plan to be submitted, reviewed and approved as merely a site grading, stormwater management and improvements plan.

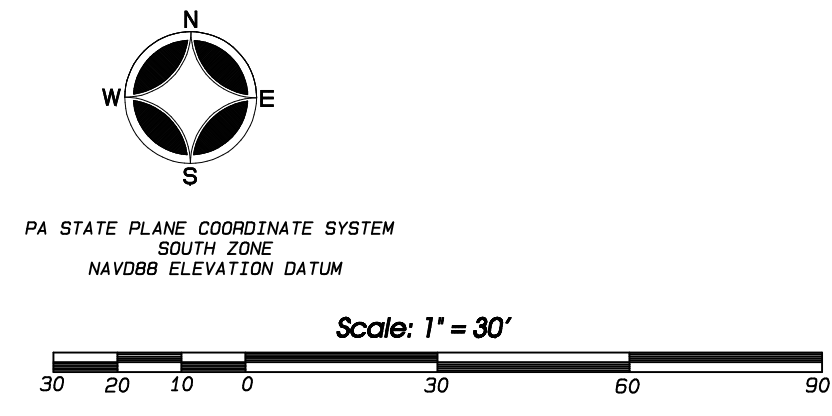
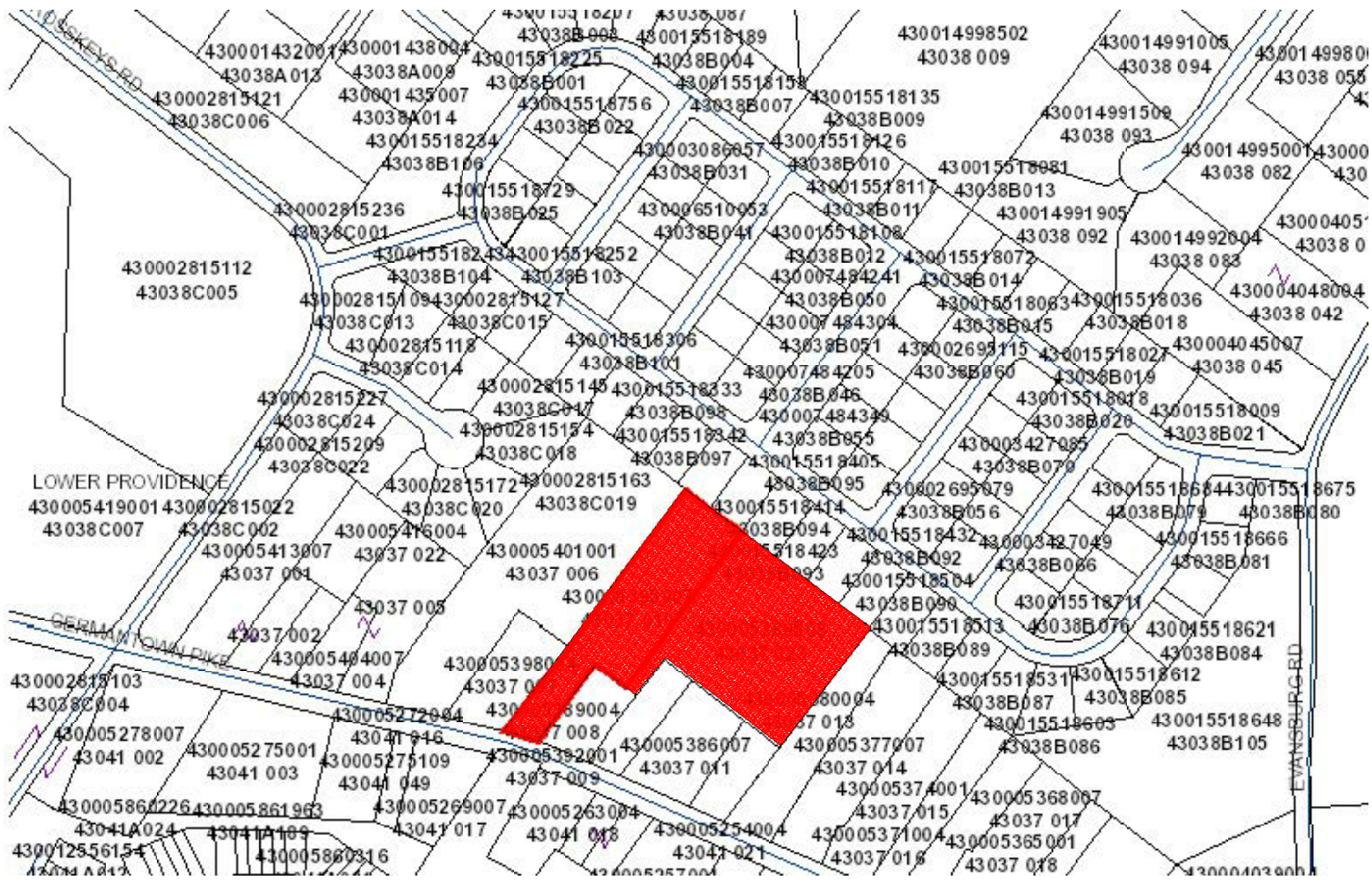
On behalf of Mr. and Mrs. Blat, thank you for your kind consideration of this request. Should you have any questions or need any further information, please do not hesitate to contact me directly at (484) 638-0206 or via email at bradgr.otm@gmail.com.

Sincerely,

Bradford R. Grauel, PLS

Owner/President
OTM, LLC

*Cc: Mr. and Mrs. Yuval Blat
Mr. Timothy Woodrow, PE, Woodrow Assoc.
Mr. Michael Mrozinski, Lower Providence Township*



RECORD OWNER AND APPLICANT
 BLAT PROPERTIES, LLC
 MR. YUVAL BLAT, OWNER
 4317 GYPSY LANE
 COLLEGEVILLE, PA. 19426
 (610) 348-8760

SITE ADDRESS: 3855 GERMANTOWN PIKE

SOURCE OF TITLE:
 GRANTORS: LOUIS A. DAMIANI AND BEVERLY A. DAMIANI
 GRANTEE: BLAT PROPERTIES, LLC
 DEED DATED: MAY 8, 2018
 DEED BOOK 6090, PAGE 508B
 MONTGOMERY CO. RECORDS
 PARCEL ID NO. 43-00-05395-00-7

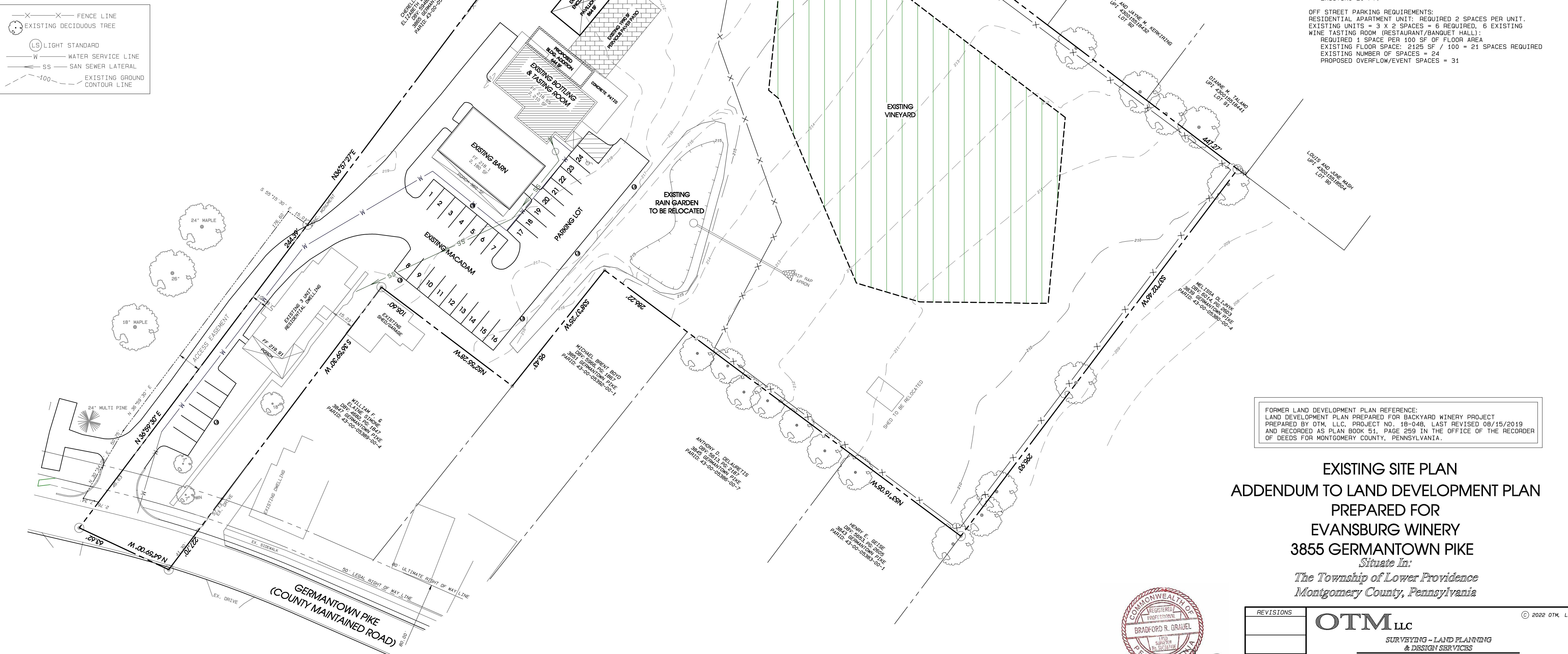
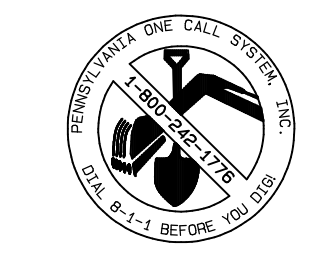
TRACT AREA: 3.827 ACRES GROSS, 3.752 ACRES NET
 CURRENT TRACT USE: RESIDENTIAL APARTMENT BUILDING AND COMMERCIAL VINEYARD AND WINERY

CURRENT ZONING: (EVC) EVANSBURG VILLAGE COMMERCIAL DISTRICT (CLASS 1 AND 2 USES)
 MAXIMUM BUILDING HEIGHT PERMITTED: 35 FT.
 EXISTING: 35 FT. OR LESS
 MAXIMUM BUILDING WIDTH FACING STREET PERMITTED: 40 FT.
 EXISTING APARTMENT BUILDING: 24 FT.
 MAXIMUM PERMITTED BUILDING COVERAGE: 10%
 EXISTING: 8241 SF (5%) PROPOSED: 8885 SF (5.4%)
 MAXIMUM PERMITTED IMPERVIOUS COVERAGE: 30%
 EXISTING: 25,227 SF (15.4%) PROPOSED: 35,952 SF (15%)
 MINIMUM REQUIRED VEGETATION/TREES/LANDSCAPING: 22%
 PROPOSED: 50% OR GREATER
 MINIMUM REQUIRED LOT SIZE: 20,000 SF
 EXISTING: 163,437 SF
 MINIMUM LOT WIDTH AT BUILDING SETBACK LINE REQUIRED: 100 FT.
 EXISTING: 67 FT (EXISTING NON-CONFORMITY)
 FRONT YARD SETBACK EXISTING: 85.5 FT.
 MINIMUM REAR YARD REQUIRED: 30 FT.
 EXISTING: 212 FT.
 MINIMUM REQUIRED SETBACK TO A RESIDENTIAL DISTRICT: 80 FT.
 EXISTING: 212 FT.
 MINIMUM DISTANCE BETWEEN BUILDINGS REQUIRED: 15 FT.
 EXISTING: 20 FT.
 MAXIMUM PERMITTED DISTANCE BETWEEN BUILDINGS: 85 FT.
 EXISTING 20 FT.

OFF STREET PARKING REQUIREMENTS:
 RESIDENTIAL APARTMENT UNIT: REQUIRED 2 SPACES PER UNIT.
 EXISTING UNITS = 3 X 2 SPACES = 6 REQUIRED, 6 EXISTING
 WINE TASTING ROOM (RESTAURANT/BANQUET HALL):
 REQUIRED 1 SPACE PER 100 SF OF FLOOR AREA
 EXISTING FLOOR SPACE: 2125 SF / 100 = 21 SPACES REQUIRED
 EXISTING NUMBER OF SPACES = 24
 PROPOSED OVERFLOW/EVENT SPACES = 31

THIS PLAN WAS PREPARED WITHOUT THE FILING OF EITHER A DESIGN OR ROUTINE WORK NOTICE WITH THE PA. ONE CALL SYSTEM. USERS OF THIS PLAN ARE HEREBY CAUTIONED THAT PURSUANT TO THE REQUIREMENTS OF ACT 287 OF THE PENNA. LEGISLATURE, A ONE CALL NOTICE MUST BE FILED WITH THE PENNA. ONE CALL SYSTEM (1-800-242-1776) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.

- X-X- FENCE LINE
- EXISTING DECIDUOUS TREE
- (LS) LIGHT STANDARD
- W- WATER SERVICE LINE
- SS- SAN SEWER LATERAL
- 100- EXISTING GROUND CONTOUR LINE



FORMER LAND DEVELOPMENT PLAN REFERENCE:
 LAND DEVELOPMENT PLAN PREPARED FOR BACKYARD WINERY PROJECT
 PREPARED BY OTM, LLC, PROJECT NO. 18-04B, LAST REVISED 06/15/2019
 AND RECORDED AS PLAN BOOK 51, PAGE 259 IN THE OFFICE OF THE RECORDER OF DEEDS FOR MONTGOMERY COUNTY, PENNSYLVANIA.

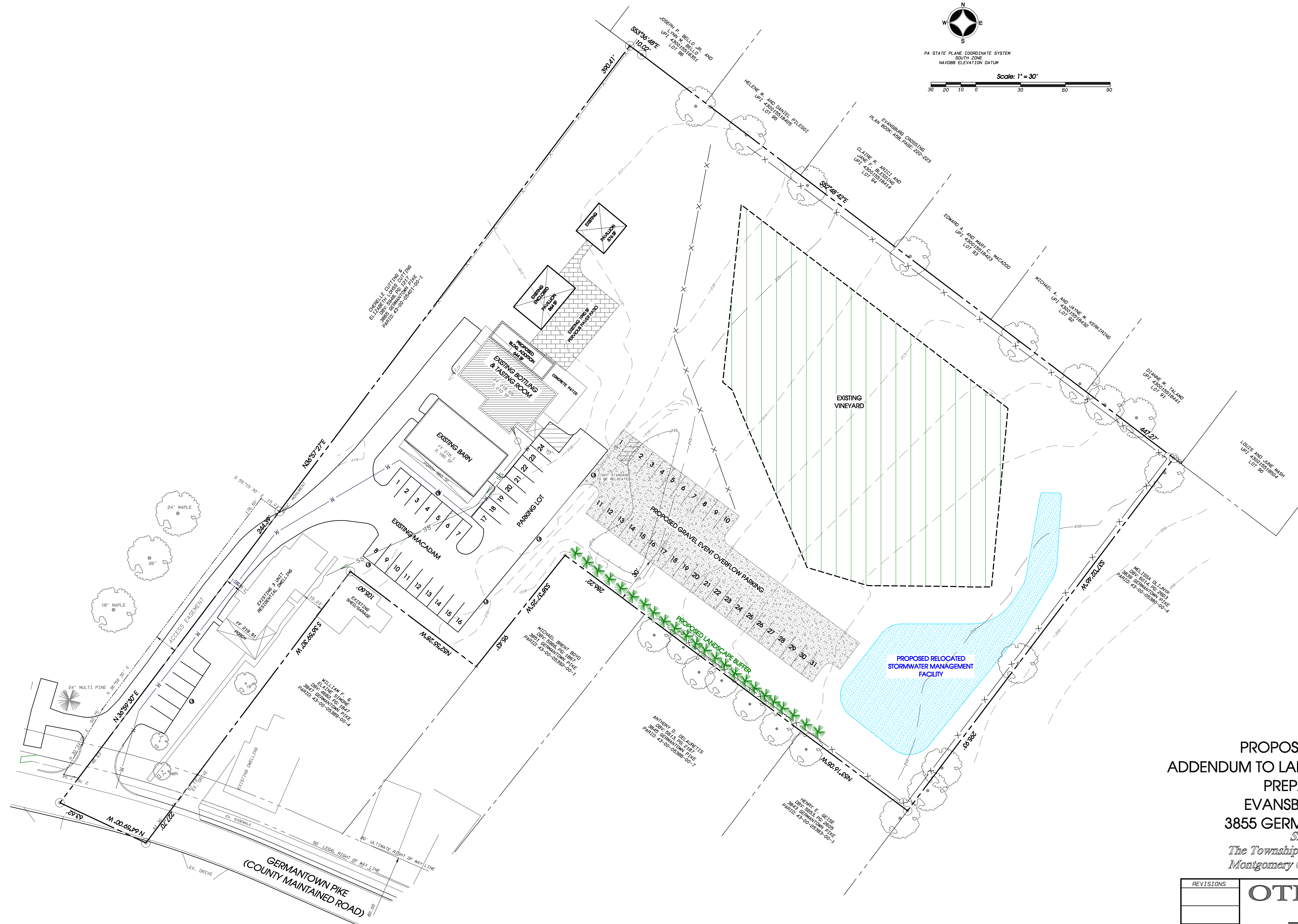
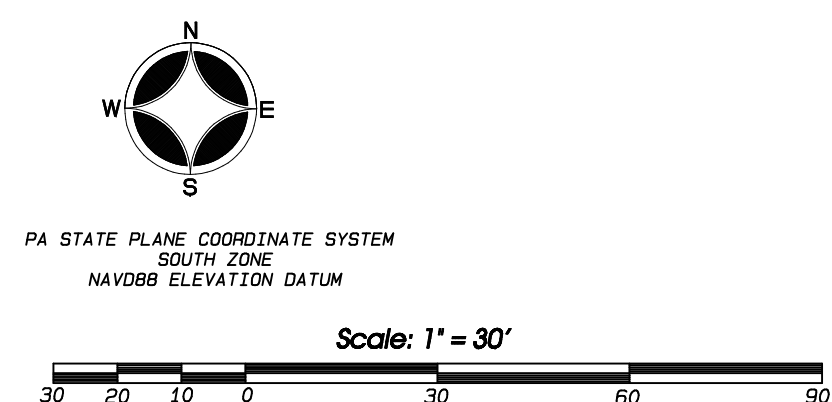
EXISTING SITE PLAN
ADDENDUM TO LAND DEVELOPMENT PLAN
 PREPARED FOR
EVANSBURG WINERY
3855 GERMANTOWN PIKE
Situate in:
The Township of Lower Providence
Montgomery County, Pennsylvania



REVISIONS	

OTM LLC
 SURVEYING - LAND PLANNING
 & DESIGN SERVICES
 200 Spring Ridge Drive, Suite 201, Wyomissing, Pa. 19610
 (484) 336-6454

DRAWN BY BRAD R. GRAUEL, PLS 02/28/2023
 CHECK
 SCALE 1"=20'
 PROJECT NO. 22-012
 SHEET 1 of 2



PROPOSED SITE PLAN
ADDENDUM TO LAND DEVELOPMENT PLAN
 PREPARED FOR
EVANSBURG WINERY
 3855 GERMANTOWN PIKE
Situate in:
The Township of Lower Providence
Montgomery County, Pennsylvania

REVISIONS	

OTM LLC
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 200 Spring Ridge Drive, Suite 201, Wyomissing, Pa. 19610
 (484) 336-6454

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 DRAWN BY: GRAVEL, PLS 02/28/2023
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 SCALE 1"=20'
 PROJECT NO. 22-012
 SHEET 2 of 2



March 29, 2023

**BOARD OF SUPERVISORS
EXECUTIVE SUMMARY**

**Preliminary/Final Plan Major Land Development: LD-22-04 – PJ Land Development-
2619 Ridge Pike Car Wash**

Requested Action: Consider and recommend waiver requests and preliminary/final plan approval.

Plan Summary: For your consideration is a proposal from PJ Land Development to construct a 3,386 SF automated car wash at 2619 Ridge Pike.

Requested Waivers:

§123-18 requiring separate preliminary and final plan approval. The applicant requests combined preliminary final plan approval and will address all outstanding issues with staff and consultants prior to submitting record plans for execution.

§123.31.B requiring that Ridge Pike as a Urban Semi controlled Access road to be widened to a minimum cartway of 52 feet. No cartway widening is proposed from the existing cartway width of 40 feet. Property up to the ultimate right of way has been previously offered for dedication as part of an earlier land development project.

§123-50.B.2 and 123-50.C requiring that trees or shrubs be planted along the easterly and westerly property lines. Alternately, the applicant will add plantings to the area of parkland between the applicant's fence and the park fence, to the satisfaction of Township staff and consultants.

§123-110.M.3 requiring that the refuse area be located either within the building or outside with a minimum setback of 50 feet from any residential property. The applicant proposes to install a gated masonry trash enclosure in the existing shared parking area approximately 8.8 feet from the rear property line. This area will be buffered from the adjacent township park property area by fence and landscape buffering.

There are also waiver requests for Chapter 129 Stormwater Management design standards.

Current review letters:

- Bohler Engineering, August 19, 2022
- Woodrow and Associates, March 7, 2023
- McMahon Associates, February 13, 2023
- Thomas Comitta Associates, February 7, 2023
- LTPD Chief, January 17, 2023
- LP Fire Marshal, September 12, 2022
- MCPC, October 7, 2022
- MCCD, January 5, 2023
- Conditional Use Decision, June 16, 2022
- ZHB Decision, June 23, 2022

Review Comment Summary

1. Traffic circulation is a primary concern with this project. Discussions with PennDOT have been on-going.
2. This plan has received approval from the Board of Supervisors for the use of a stand-alone car wash in the RPB – Ridge Pike Business zoning district and approval from the Zoning Hearing Board for reduced rear yard setback and to clarify signage.
3. Based on the relief conditionally granted by the ZHB for reduced setback along the rear property line adjoining the Township Park, the applicant and Township developed an enhanced buffering design, including sold fencing and increased plantings.
4. The Township Engineer and the Applicants Engineer are working to improve the stormwater management on the site due to large amount of existing impervious coverage.
5. The Township Engineer points out that there are design standards in the RPB – Ridge Pike Business zoning district that the applicant must show compliance with.

Traffic Impact fee: 40 new trips @\$1,822 = \$72,880

Park and Rec fee: 3386 Sf @\$1.10 = \$3724.60



1515 Market Street, Suite 920
Philadelphia, PA 19102
267.402.3400

August 19, 2022
Via: FedEx Priority

Lower Providence Township
100 Parklane Drive
Eagleville, PA 19403
Phone: (610) 635-3514

Re: Preliminary/Final Land Development Submission
Proposed Tidal Car Wash
2619 Ridge Pike
Lower Providence, PA 19426
Bohler Project No. PP2132641

To Whom It May Concern:

On behalf of the Applicant, Bohler Engineering hereby requests the following waivers in regards to the above referenced project:

1. From Subdivision and Development of Land Section §123-18 of the Township Ordinance to submit plans as preliminary/final land development plans.

Due to the development schedule going through preliminary/final would have significant impacts to the project

Upon review, should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

BOHLER ENGINEERING PA, LLC

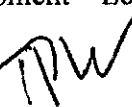

Matthew Kearse, PE, Project Manager

JW/ag/as
\\bohlereng.net\shares\PA-PROJECTS\21\PP213264\Administrative\Correspondence\Township\PP213264_2022-08-19_L_Waiver.docx



MEMORANDUM

To: Mike Mrozinski, Director of Community Development – Lower Providence Twp.

From: Timothy P. Woodrow, P.E. – Township Engineer 

Cc: EJ Mentry, Township Manager – Lower Providence Township
Matthew Kearse, P.E. – Bohler Engineering PA, LLC
Michael Clarke, Esq., Township Solicitor – Rudolph Clarke, LLC
Lauren Gallagher, Esq. – Rudolph Clarke, LLC
Robert Jordan, Woodrow & Associates, Inc.

Date: March 7, 2023

Reference: Tidal Wave Carwash – Technical Stormwater Plan Review
Land Development Application
2619 Ridge Pike

Pursuant to my review letter dated February 13, 2023, below are our stormwater details and general plan set comments:

Stormwater Management Review:

1. Section 129-13.Q – Any stormwater management facilities regulated by this chapter that would be located on state highway rights-of-way, or discharge stormwater to facilities located within a state highway right-of-way, shall be subject to approval by the Pennsylvania Department of Transportation (PennDOT).
2. Section 129-13.T – All storm sewer inlets must be identified with a storm drain marker. Storm drain markers shall be stainless steel, affixed to the inlet hood with adhesive, rivets, or bolts. (Marker may be bolted to the grate in off-road locations). Marker shall have a minimum diameter of 3 ½ inches and include, "No Dumping - Drains to Waterway" and a fish symbol. Provide a detail to be affixed to all stormwater inlets.
3. Section 129-17 – Water Quality calculations must be provided in accordance with this section and sub-sections listed within. Calculations must be submitted utilizing the equation located in Section 129-17.1.
4. Section 129-19.C.(2) – Pipe Materials. All storm sewer piping shall be Class III reinforced concrete pipe, except when pipe class and strength is required to be increased in accordance with PennDOT specification. A note shall be added to the plans.

5. Section 129-19.C.(4) – Inlet and Manhole Construction. Inlet and manhole castings and concrete construction shall be equivalent to PennDOT Design Standards. Manhole castings and covers shall have the word "STORM" cast in two-inch-high letters on the top of the cover. All inlet grates shall be bicycle-safe, heavy duty structural steel. All storm sewer inlets must be identified with a storm drain marker (environmental type). Storm drain markers shall be stainless steel affixed to the inlet hood with adhesive, rivets, or bolts. A note shall be added to the plans and detail sheets.
6. Section 129-19.C.(12) – Stormwater pipes shall have a minimum depth of cover of 18 inches (including over the bell) or as designated by the American Concrete Pipe Association (whichever is greater), and in no case shall any part of the pipe project into the road subbase or curb. We note that based upon the profiles and calculations provided, the pipe run from Inlet 01 to Inlet 02 does not have sufficient cover.
7. Section 129-19.G.(6) – The top or bottom edge of slopes shall be a minimum of five feet from property or right-of-way lines of streets or alleys in order to permit the normal rounding of the edge without encroaching on the abutting property. A waiver from this section will be required for this application for the proposed grading on the northeastern side of the property.
8. Section 129-19.H.(2) – Add a note to the plans stating, "During construction, duly authorized representatives of Lower Providence Township may enter at any reasonable time upon any property within the Township to investigate whether construction activity is in compliance with the Lower Providence Township Stormwater Ordinance."
9. Section 129-21.E – Add a note to the plans stating, "A copy of the Erosion and Sediment Control Plan and any required permit, as required by PADEP or Montgomery County Conservation District regulations, shall be available at the project site at all times."
10. Section 129-23.E.(1) – The following note shall be attached to all stormwater management site plans and signed and sealed by the applicant's professional engineer: "I, _____, certify that the proposed stormwater management facility (circle one) is/is not underlain by limestone." This note should be added to the Post Construction Stormwater Management Plan.
11. Section 129-23.G.(23) – A statement, signed by the landowner, acknowledging the stormwater management system to be a permanent fixture that can only be altered or removed only after approval of a revised plan by the Township, which shall be recorded with the record plan and which shall be applicable to all future landowners. This note should be added to the Post Construction Stormwater Management Plan.
12. Section 129-23.G.(25) – The following signature block for the design engineer, "(Design engineer), on this date (date of signature), has reviewed and hereby certifies that the Stormwater Management Site Plan meets all design standards and criteria of the Lower Providence Township Stormwater Management Ordinance No. 129." This note should be added to the Post Construction Stormwater Management Plan.

13. Section 129-23.I.(4) – All stormwater management/BMP facility easements required by this chapter must be shown on the stormwater management site plan, including the bearing and distance of each segment of the easement(s) boundary. We recommend the applicant consider a blanket easement in favor of the Township.
14. Section 129-29 – The applicant for any regulated activity requiring a stormwater management site plan and stormwater management permit shall be responsible for completing an as-built survey, sealed by a professional engineer licensed in the Commonwealth of Pennsylvania or a registered surveyor licensed in the Commonwealth of Pennsylvania, of all stormwater management facilities/improvements included in the approved plan. Add a note to the Post Construction Stormwater Management Plan.
15. Section 129-30 – A note should be added to the plans stating, “A set of plans approved by the Township shall be on file at the site throughout the duration of the development activity. Periodic inspections may be made by the Township or designee during development activities.”
16. Section 129-31 – Add a note to the plans, “It shall be unlawful for any person to undertake any regulated activity on any property except as provided for in the approved plan and pursuant to the requirements of this chapter. It shall be unlawful to alter or remove any stormwater management facility or BMP required by the plan pursuant to this chapter or to allow the property to remain in a condition which does not conform to the approved plan.”
17. Section 129-34.A – A note shall be added to the plans stating, “The Township Engineer shall inspect all phases of the installation of the permanent stormwater management facilities required pursuant to a stormwater management site plan and simplified stormwater management site plan and shall provide an inspection report to the Township.”
18. 129-39.H – A note shall be added to the plans stating “In the event a property owner or other entity responsible for maintenance fails to honor their maintenance responsibilities set forth in the O&M plan, in any manner, Lower Providence Township shall have the right of entry upon and within the area of the easement to undertake any required corrective or maintenance effort. The total cost of such, including administrative, engineering, and legal costs for enforcement, may be imposed upon the responsible party as determined by the O&M agreement. Failure to pay all costs described above may be subject of the imposition of a lien by the Township against the property in question, in the same manner as the Township might otherwise be empowered by law to assess or impose a lien against a property for municipal improvements.”

General Comments:

Sheet C-608:

1. The Storm Tech Chamber Cross Section Detail should be revised to reflect elevations for the following:

- Invert of stone on prepared subgrade
 - Invert of chamber system
 - Top of chamber system
 - Top of stone elevation
 - Finish grading elevations atop the system.
2. It is also recommended that a detailed system layout be provided showing the following:
- Length and width of system as shown on Sheet C-607/.
 - Length and width of Overall Basin Area as shown on Sheet C-607.
 - Pipe tie ins and inverts.
 - All Structures and invert information as shown on Sheet C-605.

Sheet C-801:

1. The Storm Profile for MH-01 to IN06 should be revised to reflect the electric and water lines crossing.
2. The Storm Profile for OS01 to MH02 should be revised to reflect the Outlet Structure and Basin System.

Sheet C-901:

1. All concrete details should be revised to reflect a minimum 4,000 psi in lieu of the 3,500 psi shown.

General PCSM Report Comments:

1. The Grate/Rim elevation for OS-01 is incorrect in the storm cad calculations and should be revised. In addition, add a profile for the pipe run from OS-01 to MH-02.



February 13, 2023

Mr. Michael Mrozinski
Director of Community Development
Lower Providence Township
100 Parklane Drive
Eagleview, PA 19403

RE: Traffic Review #3 – Transportation Impact Assessment and Preliminary/Final Land Development Plans

Proposed Car Wash – 2619 Ridge Pike (S.R. 0363)
Lower Providence Township, Montgomery County, PA
McMahon Project No. 821B12.11

Dear Mike:

Per the Township's request, McMahon, a Bowman company (McMahon) has completed our third (3rd) review of the proposed development to be located at 2619 Ridge Pike (S.R. 0363) in Lower Providence Township, Montgomery County, PA. According to the submitted materials, the proposed development will consist of a 3,386 square-foot automated car wash. Access to the proposed development is proposed to be provided via a full-movement driveway to Ridge Pike (S.R. 0363), as well as via the access points for the adjacent site (Lidl Supermarket) to the south of the proposed development parcel via an internal connection between the two sites.

The following documents were received and reviewed in preparation of our comments:

- Transportation Impact Assessment – Tidal Car Wash (Trooper Development), prepared by Traffic Planning and Design, Inc., last revised February 1, 2023.
- Response to Comments Letter – Tidal Car Wash, prepared by Traffic Planning and Design, Inc., dated February 1, 2023.
- Response to PennDOT Comments Letter – Tidal Car Wash, prepared by Traffic Planning and Design, Inc., dated February 1, 2023.
- Preliminary/Final Land Development Plans – Tidal Wave Car Wash, prepared by Bohler Engineering, last revised January 27, 2023.

Based on our review of the documents listed above, and participation in the technical meeting with the applicant's traffic engineer, PennDOT, and Township staff on December 16, 2022, McMahon offers the following comments for consideration by the Township and action by the applicant.

General

1. According to the Township's Roadway Sufficiency Analysis, the proposed development is in Transportation Service Area One, which has a corresponding impact fee of \$1,822 per "new" weekday afternoon peak hour trip and the applicant will be required to pay a Transportation Impact Fee in accordance with the Township's Transportation Impact Fee Ordinance. Based upon information on studies conducted at carwash sites that is provided in Table 6 of the Transportation Impact Analysis study (TIA), the proposed development is expected to generate approximately 40 "new" trips (net of pass-by trips) during the weekday afternoon peak hour, resulting in a **transportation impact fee of \$72,880.**

425 Commerce Drive, Suite 200, Fort Washington, PA 19034

P: 215.283.9444

mcmahonassociates.com | bowman.com

2. A PennDOT Highway Occupancy Permit (HOP) is required for this project since Ridge Pike (S.R. 0363) is a State Roadway for any work that may be completed within the legal right of way on Ridge Pike (S.R. 0363). The Township and our office must be copied on all TIA and HOP submissions, as well as correspondence between the applicant and PennDOT, and invited to any and all meetings among these parties.
3. A response letter **must be provided** with the resubmission detailing how each comment herein has been addressed, and where each can be found in the resubmission materials (i.e., page number(s)) to assist in the re-review process. Additional comments may follow upon review of any resubmitted materials.

Transportation Impact Assessment

4. From our January 18, 2023 Review Letter: The applicant's traffic engineer conducted queue demand analysis for the site based on data collected at three similar area facilities. Based on this data, the longest observed queue at the three facilities was 175 feet, equating to 7 vehicles assuming a vehicle length of 25 feet. Therefore, based on the queue demand analysis, it is expected that the proposed car wash stacking lane (400 feet from the pay kiosk) will be able to accommodate the maximum expected queue (175 feet) for the proposed car wash. **We continue to recommend, however, that the Board of Supervisors place a condition on any approval of the project that if car wash queuing issues and conflicts arise, that the property owner will be responsible to remedy any issue immediately, by resolving the traffic circulation and queuing operational problems that impact traffic safety and efficiency, especially impacting access to/from Ridge Pike (S.R. 0363).**
5. The signal timing offsets used in the analysis during both peak hours at the intersection of Ridge Pike (S.R. 0363)/Main Street (S.R. 3009) and Trooper Road (S.R. 0363/S.R. 3002) are currently referenced to the Start of Green; however, based on review of the traffic signal system plan included in the study, the offsets should be referenced to the beginning of NEMA TS2 first green. In addition, the recall mode for the westbound through/right-turn movement should be set to CMAX during both peak hours. Please update accordingly so the document to be left on file has the proper analyses for this intersection.

Preliminary/Final Land Development Plans

6. A portion (access, parking spaces, and drive aisles) of the adjacent site to the north (TD Bank) are located on the car wash property. Documentation of this condition (i.e., an easement provision for parking to continue for the adjacent property or subdivision/lot line revision, etc.), between the applicant and the owner of the adjacent property to the north, must be provided in subsequent submissions.
7. According to the Township Street Map, Ridge Pike (S.R. 0363) is classified as a semi-controlled access urban road and should have a minimum 52-foot cartway width as required in **Section 123-31.B of the Subdivision and Land Development Ordinance**. The plans currently show an approximate 40-foot cartway width along the site frontage of Ridge Pike (S.R. 0363), thereby not satisfying the ordinance requirement. A waiver will need to be requested from this requirement, or otherwise the plans should be revised to show a minimum 52-foot cartway width (26 feet from the centerline) along the site frontage of Ridge Pike (S.R. 0363).
8. A note must be added to the plans stating the area between the existing right-of-way line and the ultimate right-of-way line must be dedicated to the authority having jurisdiction over any public streets

for future taking, when or as necessary, as required by **Section 123-31.K** of the **Subdivision and Land Development Ordinance**.

9. If the area between the legal and ultimate right-of-way is utilized for the widening of Ridge Pike (S.R. 0363) in the future for additional lanes, the applicant's engineer should confirm that the proposed access design and frontage design is being planned so that they can be modified and still function satisfactorily, as well as the sidewalk be capable of being relocated and maintained along Ridge Pike (S.R. 0363).
10. The existing legal right-of-way line is not clearly labeled on the plans on the site side of Ridge Pike (S.R. 0363). The plans should be modified accordingly.
11. Sight distance measurements must be shown on the plans at the proposed driveway along Ridge Pike (S.R. 0363) and must satisfy requirements in **Section 123-36.A** of the **Subdivision and Land Development Ordinance**, as well as PennDOT safe stopping sight distance requirements contained in Chapter 441 of **PennDOT Publication 282**. Specifically, vehicular egress sight distances looking in both directions must be provided for the proposed driveway to Ridge Pike (S.R. 0363) at ten (10) feet back of the closest travel lane edge at an eye height of 3.5 feet looking at an approaching vehicle of 3.5 feet, as well as for the ingressing left-turn vehicle sight distance (at a position 35 feet prior to each driveway centerline) looking to the front (3.5 feet eye height to 3.5 feet eye height) and rear (2 feet taillight height to 3.5 feet approaching driver eye height). At least the minimum safe stopping sight distances must be achievable at the proposed driveway and must be sufficient for the speed and conditions of this section of the roadway in order to allow for all ingress and egress movements at the driveway location as shown on the plans.
12. The dimensions of the curb radii should be shown on the plans on both sides of the proposed driveway at its intersection with Ridge Pike (S.R. 0363) and meet requirements in **Section 123-36.F** of the **Subdivision and Land Development Ordinance**. If they do not meet requirements of the Township ordinance and/or PennDOT, then written justification must be made by the applicant that the engineering design for the radii is satisfactory and able to accommodate the safe and efficient ingress/egress of vehicles that will utilize this driveway. A waiver will also need to be requested if the ordinance is not met.
13. A clear sight triangle should be shown on the plans at the proposed driveway along Ridge Pike (S.R. 0363) as required in **Section 123-36.H** of the **Subdivision and Land Development Ordinance**.
14. There are currently no parking requirements in **Section 143-71.G** of the **Zoning Ordinance** for a car wash use. The applicant and their team should conduct a parking demand evaluation to confirm that the proposed number of parking spaces on site, and those reserved for vacuuming, are able to accommodate the peak parking demand for the proposed car wash. In addition, the plans should provide information on where employees will park on site. If available, the applicant may use any historical parking demand data for similar Tidal Car Wash facilities.
15. Upon receipt of the information in the prior comment, our office can confirm that the number of proposed ADA parking spaces meets requirements in **Section 123-37.Q(1)** of the **Subdivision and Land Development Ordinance**.
16. The plans currently use a compact size car for the vehicle turning template. The plans should be revised to also demonstrate the ability of an SUV/pick-up truck to maneuver through the car wash lane and the

car wash bypass lane, as well as enter and exit the site access safely and efficiently without routinely crossing the centerline dividing ingress and egress lanes on the access.

17. Turning templates should also be provided demonstrating the ability of the largest expected delivery vehicle to maneuver into and out the site driveway, given that the connection to the Lidl will still exist and be more accessible with the proposed site design.
18. The Township Fire Marshal should review the emergency vehicle turning templates for accessibility and the circulation needs of Township emergency apparatus. Ensure that any correspondence, including any review comments and/or approvals, is included in subsequent submissions.
19. We recommend that the that the Township limit trash collection and delivery vehicles using this driveway to outside normal operating hours for the carwash to minimize turning conflicts in or out of the Ridge Pike (S.R. 0363) access.
20. All proposed signs must be clearly identified as to type, size, et and labeled on the plans. The following signs appear that they may be part of the plans, however, they are not clearly identified, and a separate pavement marking and signing sheet is recommended to be provided unless they can be clearly shown on the plans otherwise:
 - A "Stop" sign on the site driveway approach to Ridge Pike (S.R. 0363).
 - A "Stop" sign on the car wash bypass lane approach to the parking area to the south of the proposed car wash.
 - A "Stop" sign on the parking area approach to the driveway leading to/from Ridge Pike (S.R. 0363)/Lidl.
 - A "Stop" sign on the car wash egress lane approach to the parking area to the south of the proposed car wash.
21. The following signs should be added to the plans, and a separate pavement marking and signing sheet is recommended to be provided unless they can be clearly shown on the plans otherwise:
 - "Do Not Enter" signs should be shown on both sides of the car wash egress lane at its intersection with the parking area to the south of the proposed car wash facing the parking area.
 - "Do Not Enter" signs should be shown on both sides of the car wash bypass lane at its intersection with the parking area to the south of the proposed car wash facing the parking area.
 - "Exit Only" or "Do Not Enter" signs should be shown at the parking lot/vacuum area egress facing traffic entering the car wash drive-thru lane so as not to enter the wrong way.
 - Double sided, "One-Way" signs should be provided on the south side or both sides of the entrance to the car wash drive-thru lane where the counterclockwise, one-way circulation begins.
 - A "No Left-Turn, 4 PM to 6 PM Weekdays" sign must be shown under the proposed "Stop" sign on the site driveway approach to Ridge Pike (S.R. 0363).
 - A "Yield to Pedestrian" sign should be shown at the proposed crosswalk along the car wash egress lane.
22. Painted pavement marking arrows and legends like "STOP" and "ONE-WAY" (or otherwise flow arrows for review purposes) are shown on several of the plan sheets for the access along Ridge Pike (S.R. 0363) and some internal flow. The plans indicate on Sheet 4 of 25 where arrows and legends are proposed to be painted. The arrows on the driveway egress indicate a vehicle can make a left-turn/through/right-turn from that lane. There is a driveway/access directly across from this access. We recommend that this arrow and the painted word "STOP" be removed at this location.

23. The proposed pavement section detail provided on Sheet 23 must include the proposed pavement sections and depths, and be in accordance with **Section 120-19.A of the Subdivision and Land Development Ordinance**.
24. Sheet 23 indicates details for both concrete pavement and reinforced concrete pavement; however, it is unclear based on the plans and legend on Sheet 4 where the different pavement sections are located.
25. No details appear to be shown on the plans for the vacuum features in the parking area. We recommend this information be added to the plans.
26. All curb ramps and pedestrian routes (i.e., sidewalks, crosswalks, etc.) are to be constructed in accordance with the current Federal and PennDOT ADA standards. McMahon has not reviewed any ramps internal to the site, as the applicant's engineer will be responsible for their design satisfying the required ADA standards.

We trust that this review letter responds to the Township's request and addresses our review of the materials for traffic operations and issues related to the proposed development apparent to us at this time. Please contact me, or Michelle Eve, P.E., should you have any questions.

Sincerely,



Casey A. Moore, P.E.
Executive Vice President – Corporate Operations

CAM/BMJ

cc: E.J. Mentry, Township Manager
Lauren A. Gallagher, Esquire, Rudolph Clarke, LLC, Township Solicitor
Timothy Woodrow, P.E., Woodrow Engineers, Township Engineer
John Miklos, Montgomery County Planning Commission
Fran Hanney, PennDOT
Scott Burton, PennDOT
Eric Ostimchuk, P.E., PTOE, Traffic Planning and Design, Inc., Applicant's Traffic Engineer
Matthew Kearse, P.E., Bohler, Applicant's Engineer

E:\eng\LOWERPR01\821B12_Tidal Wave Car Wash\Project Management\Submissions\2023-02-02 TIS_LD Plans\Review\2023-02-13 Review Letter #3_Tidal Wave Car Wash TIA_LD Plans (finalized).docx



THOMAS COMMITTA ASSOCIATES, INC.
Town Planners & Landscape Architects

MEMORANDUM

TO: Lower Providence Township Officials, Staff, and Consultants
Tidal Wave Car Wash Team

FROM: Thomas J. Comitta, AICP, CNU-A, RLA
Erin L. Gross, AICP, RLA

DATE: September 15, 2022; **Updated: February 7, 2023**

SUBJECT: **REVIEW COMMENTS – TIDAL WAVE CAR WASH (2619 RIDGE PIKE)**
PRELIMINARY/FINAL LAND DEVELOPMENT PLANS,
DATED REVISED 1-27-2023

The enclosed Review Comments pertain to the following documents that we received on **February 2, 2023, and previously**, and to a Site Visit on September 14, 2022, including:

- Preliminary / Final Land Development Plan: Tidal Wave Car Wash – 2619 Ridge Pike (25 sheets), prepared by Bohler, dated revised **1-27-2023**.

Please call or email if there are any questions.



THOMAS COMMITTA ASSOCIATES, INC.
Town Planners & Landscape Architects

REVIEW COMMENTS – TIDAL WAVE CAR WASH (2619 RIDGE PIKE)
PRELIMINARY/FINAL LAND DEVELOPMENT PLANS, DATED REVISED 1-27-2023

September 15, 2022; Updated: February 7, 2023

The following Review Comments pertain to the documents listed in the Cover Memorandum. **New comments are in bold type.**

1. Overview, Existing Conditions, and RPB District Uses

- 1.1. The Applicant is **still** proposing to remove the existing asphalt parking lots, and to build a +/- 3,386 square foot Car Wash Tunnel Building on the 1.27 acre property located in the RPB (Ridge Pike Business) District.
- 1.2. A gasoline service station with a car wash is a listed permitted use in the RPB District, per Section 143-259.O. of the Zoning Ordinance (ZO). However, the proposed Car Wash Use is not listed as a permitted stand alone use. **Please still clarify.**

2. Setbacks, Buffering & Screening, and Fencing

- 2.1. Section 143-262.B. front, side, and rear yard setbacks shall be no less than 10 feet, unless adjacent to an existing residential zoning district, in which the minimum side and rear yard setbacks shall be 30 feet. The proposed drive thru lane on the east side of the property (to the rear), is proposed to be 2.7' from the property line.

We **still** recommend that the drive thru lane be at least 10 feet from the property line, especially since Section 143-57.D.(ZO) speaks to using landscaping to establish community identity.

- 2.2. A 5 foot high wood fence is proposed on the eastern property line which abuts R-2 residential. A detail of the fence has been provided on Sheet C-901. Please clarify if the proposed pressure treated lumber will be stained

The detail has been revised to include a note that indicates all wood to be pressure treated lumber. Therefore, this item is resolved.

3. Landscaping

- 3.1. Per Section 143-262.E.(3)(ZO), "a minimum of one three-inch caliper street tree...having a minimum of six foot height ... is required for every 25 feet of property lot frontage width". The Compliance Chart of the Landscape Plan correctly outlines this requirement. However, the Plant Schedule includes the Canopy Trees at 2.5" Caliper. **Therefore, please still revise the Plant Schedule to indicate size to be 3" caliper and also indicate a 6 foot minimum planting height.**
- 3.2. Section 123-50.B.(2) requires perimeter plantings along property lines. The Compliance Chart indicates that the northwest property line is an existing non-conformity and, therefore, there are no proposed perimeter plantings. However, we **still** believe that plantings should be provided both



THOMAS COMMITTA ASSOCIATES, INC.
Town Planners & Landscape Architects

REVIEW COMMENTS – TIDAL WAVE CAR WASH (2619 RIDGE PIKE)
PRELIMINARY/FINAL LAND DEVELOPMENT PLANS, DATED REVISED 1-27-2023

September 15, 2022; Updated: February 7, 2023

along the existing commercial property line (because a new long building is proposed), and along the eastern property line (as this is a new land development that abuts the R-2 residential zoning district). **Therefore, please still add additional plantings.**

- 3.3. Ten (10) of the existing Spruce Trees along the southern property line are dead, and need to be replaced. Therefore, 10 additional new Spruce Trees are **still** needed in the area marked on the Landscape Plan as "Landscape To Remain".
- 3.4. The Landscape Specifications Note 12 indicates that plants shall be guaranteed for a period of one (1) year. However, Section 123-50.D. (SALDO) indicates that plants shall be guaranteed for 18 months. Therefore, this note should **still** be revised to indicate 18 months.

4. Tree Protection and Tree Removal

- 4.1. There are over 15 mature trees located in the rear of the property along the eastern property line. However, these trees do not appear on the Existing Conditions/Demolition Plan. Please **still** add these trees to the Existing Conditions/Demolition Plan, and **still** provide replacement trees.
- 4.2. Please **still** expand the Landscape Compliance Chart on the Landscape Plan in order to indicate the number of trees to be removed, and the proposed required replacement trees per §123-114.B.(6)(a) (SALDO).
- 4.3. Please illustrate the location for the Tree Protection Fencing on the Erosion & Sediment Pollution Control Plan.

Tree Protection Fencing (TPF) is depicted on the Erosion & Sediment Pollution Control Plan. However, TPF is still missing around the existing trees along the eastern property line. Also, TPF should be added in the area where existing trees are located, but no yet shown on the Plans.

5. Design Standards for the Ridge Pike Business District

- 5.1. Section 123-110.E. (SALDO) indicates that architectural elevations or sketches of the buildings shall be provided in order to determine if the proposed buildings (Tunnel Building and Vacuum Building) comply with the Design Standards in Section 123-110.B., C., and D.

Therefore, please **still** provide architectural elevations in order to demonstrate compliance.

Please call or email if there are any questions.

LOWER PROVIDENCE TOWNSHIP POLICE DEPARTMENT

Inter Office Communications Memo

DATE: January 17, 2023
TO: Mike Mrozinski
FROM: Chief Jackson
SUBJECT: LD-22-04 PJ Land Development - 2619 Ridge Pike

I have reviewed the land development plan for 2619 Ridge Pike and have no questions or recommendations at this time.



LOWER PROVIDENCE TOWNSHIP

100 Parklane Drive • Eagleville, PA 19403 • www.lowerprovidence.org
Administration: 610 539-8020 • Fax: 610 539-6347
Police: 610-539-5900 • Fax: 610-630-2219



DATE: September 12, 2022

TO: Michael Mrozinski
Director of Community Development

FROM: Michael Rohlfing
Fire Marshal

SUBJECT: Plan Review for 2619 Ridge Pike Tidal Wave

After reviewing the plans provided and the updated truck turning plan (attached for reference), there are no requirements at this time.

Please contact me should you have any questions.

**MONTGOMERY COUNTY
BOARD OF COMMISSIONERS**

VALERIE A. ARKOOSH, MD, MPH, CHAIR
KENNETH E. LAWRENCE, JR., VICE CHAIR
JOSEPH C. GALE, COMMISSIONER



**MONTGOMERY COUNTY
PLANNING COMMISSION**

MONTGOMERY COUNTY COURTHOUSE • PO BOX 311
NORRISTOWN, PA 19404-0311
610-278-3722 • FAX: 610-278-3941
WWW.MONTCOPA.ORG

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

October 7, 2022

Michael Mrozinski, Director of Community Development
Lower Providence Township
100 Parklane Drive
Eagleville, PA 19403

Re: MCPC #22-0238-001
Plan Name: Tidal Wave Auto Spa #004
(1 lot comprising 1.12 acres)
Situates: Ridge Pike (S) and Trooper Road (E)
Lower Providence Township

Dear Mr. Mrozinski:

We have reviewed the above-referenced land development in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on September 12, 2022. We forward this letter as a report of our review.

BACKGROUND

The applicant, PJ Land Development LLC, has submitted land development plans for a drive-through car wash on a 1.12 acre lot on the north side of Ridge Pike, west of Trooper Road. This site is located in the RPB Ridge Pike Business zoning district and has public water and sewer service. The site is currently occupied by a parking lot that is connected via driveways to the neighboring properties that front on Ridge Pike. The proposed development would entail the demolition of the existing parking lot and would eliminate vehicular access to the adjacent bank property.

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) generally supports the applicant's proposal, however, in the course of our review we have identified the following issues that the applicant and township may wish to consider prior to final plan approval. Our comments are as follows:



REVIEW COMMENTS

ZONING

- A. Permitted Uses – The use that is proposed in this land development plan- a standalone car wash- is not specifically named as a permitted use in the Ridge Pike Business zoning district but is of the same general character as “gasoline service station containing a car wash” (§145-259.O). The standards established for the “gasoline service station containing a car wash” use may be applicable to the proposed development, where the two uses are comparable.
- B. Vehicle Service Activities – We defer to the determination of the township’s zoning administrator as to whether the requirement of §143-259.O(2) “All activities except those performed at fuel or air pumps shall be performed within an enclosed building.” should apply to the vacuuming stations featured in the proposed development.
- C. Legislative Intent – The intent of the Ridge Pike Business zoning district includes “increase the number of pedestrian and vehicular connections between adjacent properties to provide complementary and coordinated development of adjacent properties.” (§143-257.B) and also to “minimize the potential for increased traffic congestion” (§143-257.A) and lists shared access points, cross-access easements, and shared parking areas as features of development that contribute to this goal. We encourage the applicant and township to consider whether this development plan could be reconfigured to continue to provide cross-access and create a shared access point with the adjacent bank property.

SUBDIVISION AND LAND DEVELOPMENT

- A. Lot Lines – The existing lot line separating this proposed land development and the adjacent bank property do not align with the placement of existing or proposed structures. The parcel boundary cuts across the parking lot and vehicle circulation areas that serve the neighboring bank. We recommend that the owners of the two properties work with the township to consider options for adjusting lot lines to better match the layout and uses of these two parcels.
- B. Easements – As noted above, the existing lot lines of this proposal enclose a portion of the driveways and parking area that serve the adjacent bank. If there is an access easement, or any other easement, which applies to this parcel, the development plans should include the location and details of the easement or easements. If no such easements exist, the applicant should provide for easements for access to the parking area and other functions of the neighboring property which are located on the development parcel.

TOWNSHIP PLANS

- A. Ridge Pike Sidewalk Connection – The Parks, Recreation, and Open Space Plan the township adopted in 2021 identifies the creation of a sidewalk connection between Dell Angelo Park and Ridge Pike as a recommended improvement for the neighborhood park. The plan depicts a potential route for this pedestrian access way that crosses the site of this proposed development (see *attachment*). The submitted development plans include walkways that connect to the existing sidewalk along Ridge Pike

and extend the majority of the lot's depth, towards the park. We recommend the township and applicant consider how this development plan could be adjusted to provide this pedestrian connection.


CONCLUSION

We wish to reiterate that MCPC generally supports the applicant's proposal but we believe that our suggested revisions will better achieve the township's planning objectives for commercial development.

Please note that the review comments and recommendations contained in this report are advisory to the municipality and final disposition for the approval of any proposal will be made by the municipality.

Should the governing body approve a final plat of this proposal, the applicant must present the plan to our office for seal and signature prior to recording with the Recorder of Deeds office. Please print the assigned MCPC number (22-0238-001) on any plans submitted for final recording. A paper copy bearing the municipal seal and signature of approval must be supplied for our files.

Sincerely,



John Miklos, Community Planner II
jmiklos@montcopa.org – (610) 278-3554

c: Matthew Kearse PE, Applicant's Representative
E.J. Mentry, Township Manager
Mark Kuberski, Chair, Township Planning Commission
Timothy Woodrow, PE, Township Engineer
Casey Moore, PE, Township Traffic Engineer

Attachments: 1. Aerial View
2. Site View
3. Recommended Park Improvements

Mr. Michael Mrozinski

ATTACHMENTS

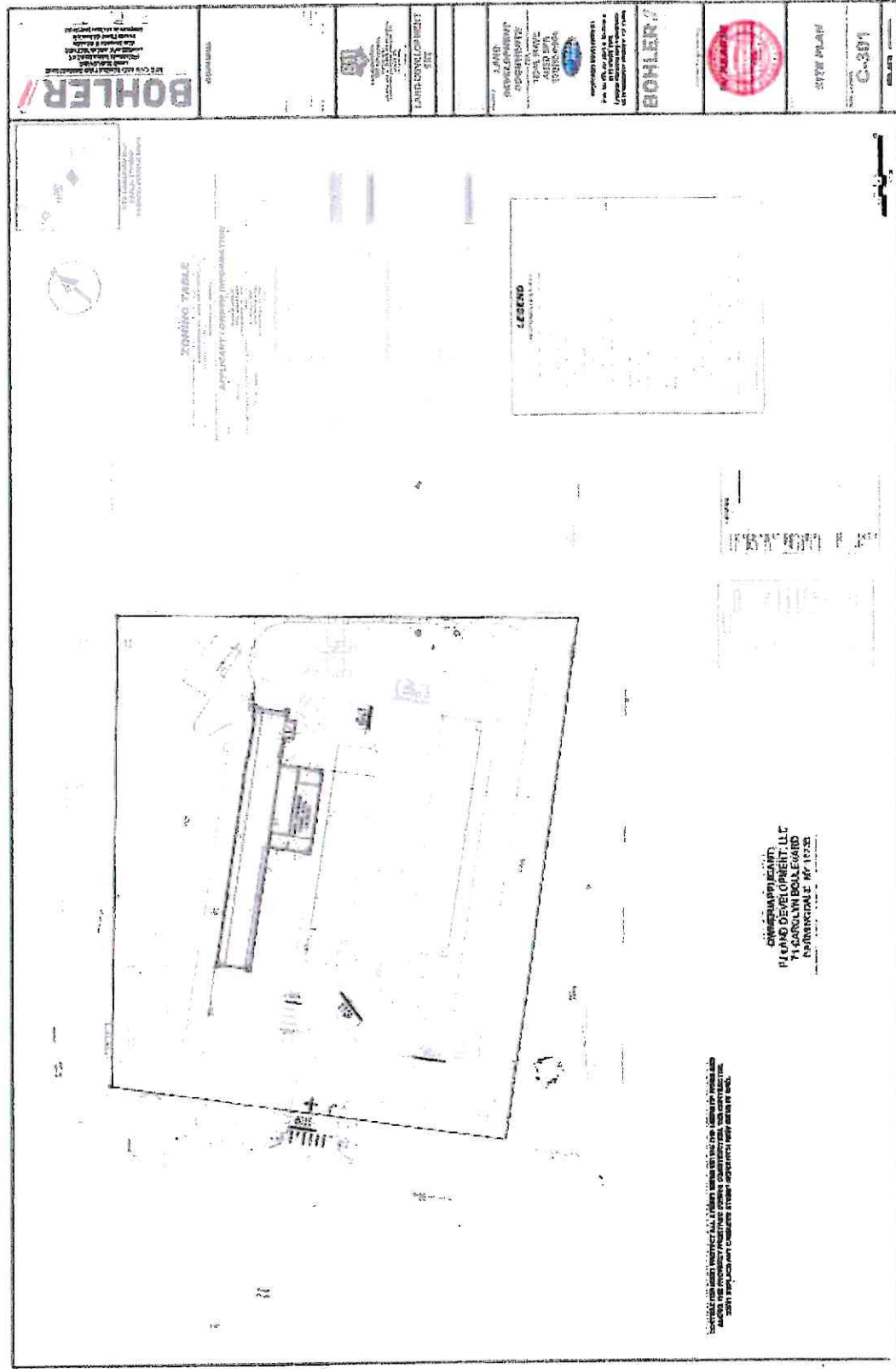
Aerial View



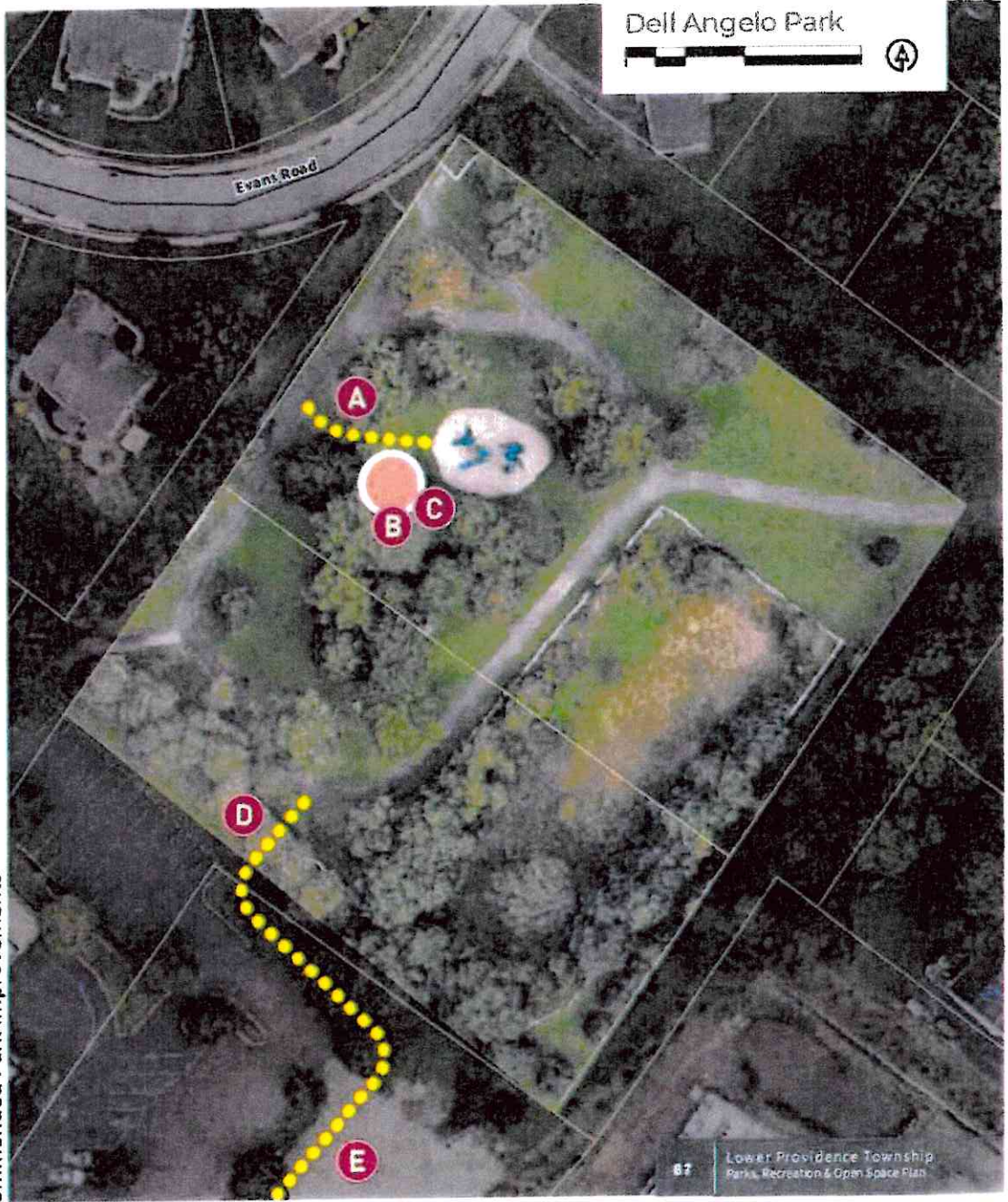
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County
Planning
Commission
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Tidal Wave Auto Spa #004
MCP#220258001

Site Plan



Recommended Park Improvements





MONTGOMERY COUNTY CONSERVATION DISTRICT

143 Level Road • Collegeville, PA 19426-3313 • 610-489-4506 • Fax: 610-489-9795
www.montgomeryconservation.org

January 5, 2023

PJ Land Development LLC
Michael McGrath
71 Carolyn Boulevard
Farmingdale, NY 11735-1527

Re: Incompleteness Review Letter
Tidal Wave Auto Spa Store #004
NPDES Permit Application No. PAC460758
Lower Providence Township, Montgomery County
Project Acres: 1.12
Cumulative Disturbed Acres: 1.12

Dear Mr. McGrath:

The Montgomery County Conservation District has reviewed the above NOI for PAG-02 NPDES General Permit Coverage and has determined that it is incomplete. The list below specifies the items that must be included in the resubmittal of your NOI and/or the submission of additional information. The *Pennsylvania Erosion and Sediment Pollution Control Program Manual (E&S Manual)* and the *Pennsylvania Stormwater Best Management Practices Manual (BMP Manual)* include information that may aid you in responding to some of the items listed below. The items are based on applicable laws and regulations, and the guidance sets forth the DEP's preferred means of satisfying the applicable regulatory requirements.

Please note that pursuant to 25 Pa. Code §102.6(c), this information must be received within 60 calendar days by **January 9, 2023**, or Montgomery County Conservation District may consider the NOI withdrawn.

Items for Resubmittal or Submission of Additional Information

A. NOI Information

The Completeness Review Item comments below taken from the NPDES PAG-02 General Permit Fact Sheet from Attachment B of the Standard Operating Procedure (SOP); Review of PAG-02 General NPDES Permit NOIs. The SOP can be found at the following link:

http://files.dep.state.pa.us/Water/Wastewater/20Management/EDMR/PortalFiles/SOPs/BPNPDM_NPDES_SOP_PAG-02.pdf

6. §102.6(a)(1) – PCSM Module 2 (3800-PM-BCW0406b)

a. Stormwater Analysis – Peak Rate Questions #4 and #5: Alternate Rate Calculations.

Please verify the answer to Question #5 as it appears alternate rate calculations were provided. Please note that when alternate rate calculations are provided, the remainder of this section (Questions #6-#9) must be completed.

B. §102.8 – PCSM Requirements

- The PCSM Plan must be the final plan for construction. §102.8(d).

January 5, 2023

C. Miscellaneous

1. Please take note that MCCD will not accept "piecemeal" plan revisions and all revisions must be submitted as part of a complete application package. In the event that it is agreed upon and allowed by the reviewer for individual sheets or pages to be "swapped out," a meeting must be arranged with District staff to make the original submission available. Please submit 2 copies (1 paper, 1 electronic) of the revised information to the District at 143 Level Road, Collegeville, PA 19426.

As stipulated in 25 Pa. Code § 102.6(c)(2) of DEP's Chapter 102 rules and regulations (regarding complete applications), information requested by this office must be received within sixty (60) calendar days from the date of this letter, or the Montgomery County Conservation District may consider the NOI to be withdrawn by the applicant and no further action will be taken. Fees are not refunded when an NOI is withdrawn.

Please submit 2 copies (1 paper, 1 electronic) of the revised information to the District at:
143 Level Road, Collegeville, PA 19426.

If you have questions about the information contained in this letter, please contact Eric Konzelmann by e-mail at ekonzelmann@montgomeryconservation.org or by telephone at (610) 489-4506, ext. 21, for erosion and sedimentation control questions and Gary Kulp by email at gkulp@montgomeryconservation.org or at ext. 18, for post construction stormwater management questions, and refer to PAC460758 - Tidal Wave Auto Spa Store #004.

Sincerely,



Jessica Buck
District Manager
Montgomery County Conservation District

cc: Matthew Kearse, Bohler Engineering PA, LLC
Lower Providence Township
DEP Permits Section Chief
File

LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

RESOLUTION No. 22 – 19

WHEREAS, PJ Land Development LLC (hereinafter referred to as “Applicant”) has submitted a request for conditional use approval related to property located at 2619 Ridge Pike, Lower Providence Township, Montgomery County, Pennsylvania, further identified as Tax Map Parcel Number 43-00-11875-00-7 (the “Property”); and

WHEREAS, the Property is located in the RPBD – Ridge Pike Business District; and

WHEREAS, the Lower Providence Zoning Ordinance (“Ordinance”) permits various uses by conditional use; and

WHEREAS, Applicant has submitted a request for conditional use approval for (2) separate requests for relief:

(1) to use the Property as a car wash, pursuant to §143-259(V) of the Ordinance, which allows uses of the same general character to the principal permitted uses, if approved by conditional use; and

(2) to use the Property as a car wash, pursuant to §143-260(I) of the Ordinance, which allows uses of the same general character to the principal permitted uses, if approved by conditional use.

WHEREAS, Township staff and the Township Engineer have reviewed the Application; and

WHEREAS, the Board of Supervisors of Lower Providence Township (hereinafter referred to as “Board”) is prepared to GRANT approval of Applicant’s request for conditional use approval, subject to certain conditions; and

WHEREAS, the Board is prepared to authorize the Township Manager to execute the written decision of the Township, pursuant to Section 913.2(b)(1) of the Pennsylvania Municipalities Planning Code.

NOW, THEREFORE, BE IT HEREBY RESOLVED, by the Board of Supervisors of Lower Providence Township this 16th day of June, 2022, that said request for conditional use approval is GRANTED, subject to the following conditions:

1. **Plans:** Applicant shall submit any and all plans reasonably required by the Township to review the Project and issue all required permits.
2. **Conditions of Conditional Use Approval.** Applicant shall comply with any and all conditions of approval as documented in the written decision of the Township, which are as follows:
 - a. Applicant shall comply with all objective criteria set forth in the Ordinance at §§143-80.E(2)(b) and 143-79(F) and shall demonstrate such compliance to the satisfaction of the Township prior to issuance of any Certificate of Occupancy.
 - b. Applicant will comply with any requirements of the Township regarding chemical storage and provide a list of chemicals to the Fire Marshal to the satisfaction of the Fire Marshal.
 - c. The Applicant will provide streetscape improvements as requested by the Township to the satisfaction of the Township.
 - d. Applicant will comply with any requirements of the sewer authority for any sanitary sewer flow.
 - e. Applicant will prepare traffic studies as part of the land development process, including PennDOT traffic studies for the access points and implement any

requirements of same to the satisfaction of the Township Engineer.

f. Applicant shall install a fence along the property line to restrict access from the park to the satisfaction of the Township.

g. Hours of operation on the Property shall not exceed 8:00 am to 8:00 pm at any time, for any reason.

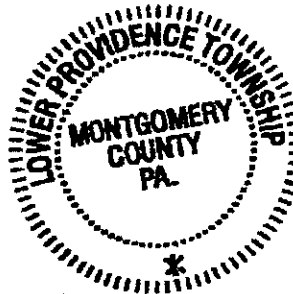
h. Applicant shall provide a phone number and email address for a primary local contact who shall be authorized to act on behalf of Applicant. The primary contact information shall be updated on a regular basis.

i. Compliance with all conditions of approval shall be at Applicant's sole cost and expense, with no cost or expense borne by the Township.

3. Applicant shall comply with all applicable statutes, codes or ordinances during the permitting and construction of the Project.
4. The Township Manager is authorized to sign the aforementioned written decision on behalf of the Board of Supervisors.
5. This approval shall expire six (6) months from the date of this Decision.

RESOLVED and APPROVED this 16th day of June, 2022.

ATTEST:



BOARD OF SUPERVISORS OF LOWER
PROVIDENCE TOWNSHIP

E.J. Mentry
E.J. Mentry, Secretary

By: Gerry Neights
Gerry Neights, Chairman

Exhibit

“A”

ZONING HEARING BOARD OF LOWER PROVIDENCE TOWNSHIP

APPLICATION NO. Z-22-08 : HEARING DATE: June 23, 2022; July 28, 2022
:
:
APPLICATION OF: :
PJ Land Development, LLC :
71 Carolyn Blvd. :
Farmingdale, NY 11735 :
:
PROPERTY: :
2619 Ridge Pike :
Lower Providence Township :
Parcel No. 43-00-11875-00-7 :

**OPINION, DECISION AND ORDER OF THE
LOWER PROVIDENCE TOWNSHIP ZONING HEARING BOARD**

Public hearings on the application (“Application”) concerning the above captioned premises (the “Property” or “Subject Property”) were held on June 23, 2022 and July 28, 2022, before the Zoning Hearing Board of Lower Providence Township (the “Board”) in the Township Administration Building, 100 Parklane Drive, Eagleville, PA, (the “hearing”) pursuant to notice as required by the Lower Providence Township Zoning Ordinance (the “Ordinance”) and the Pennsylvania Municipalities Planning Code (the “MPC”). After consideration of the Application and the testimony, exhibits, argument and briefs presented, the Zoning Hearing Board hereby renders its decision on the Application.

Procedural Matters

1. Application before Zoning Hearing Board

On April 6, 2022, applicant PJ Land Development LLC (“Applicant”) equitable owner of 2619 Ridge Pike, Lower Providence Township filed an application seeking the following relief: (1) a variance from Section 143-262.B of the Ordinance to allow for a rear yard setback of 0 feet where a minimum of 10 feet is required; (2) a variance from Section 143-141.3(J)(1) of the

6. The requested relief represents the minimum that will afford relief and represents the least modification possible of the regulation at issue.

DECISION

On June 23, 2022, The Lower Providence Township Zoning Hearing Board, by a 4-0 vote Granted the following variances from the Lower Providence Township Zoning Ordinance requested in the Application of PJ Land Development LLC to permit the construction of a car wash in the Ridge Pike Business District:

1. A variance from Section 143-141.3(J)(1) of the Ordinance to permit the installation of eight (8) freestanding signs where a total of one (1) per street frontage and a maximum of two is permitted subject to the condition that:
 - a. Placement of the signs shall be as per the plans introduced into evidence at the hearing in this case.
2. A variance from Section 142-141.3(J)(2) of the Ordinance to permit the installation of a total of 135.2 square feet of freestanding signage where a maximum total of 100 square feet of signage is permitted subject to the condition that:
 - a. Placement of the signs shall be as per the plans introduced into evidence at the hearing in this case.

On July 28, 2022, the Lower Providence Township Zoning Hearing Board, by a 3-0 vote Granted the Applicant, PJ Land Development LLC a variance from Section 143-262.B. of the Ordinance to permit a rear yard setback of 5.6 feet where 10 feet is required in the Ridge Pike Business District.

Dated: August 30, 2022

ORDER

The foregoing Findings, Discussion and Decision are hereby approved and ordered.

As to the Motions on June 23, 2022:

LOWER PROVIDENCE TOWNSHIP
ZONING HEARING BOARD

George Ozorowski

Joseph Pucci

Kathie A Eskie

Kathie Eskie

Gail Hager

Gerdes

Christopher Gerdes

T Barnes

Terrance Barnes, Alternate

Randy Klein, Alternate

As to the Motions on July 28, 2022:

LOWER PROVIDENCE TOWNSHIP
ZONING HEARING BOARD

George Ozorowski

George Ozorowski

Joseph Pucci

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

FOR

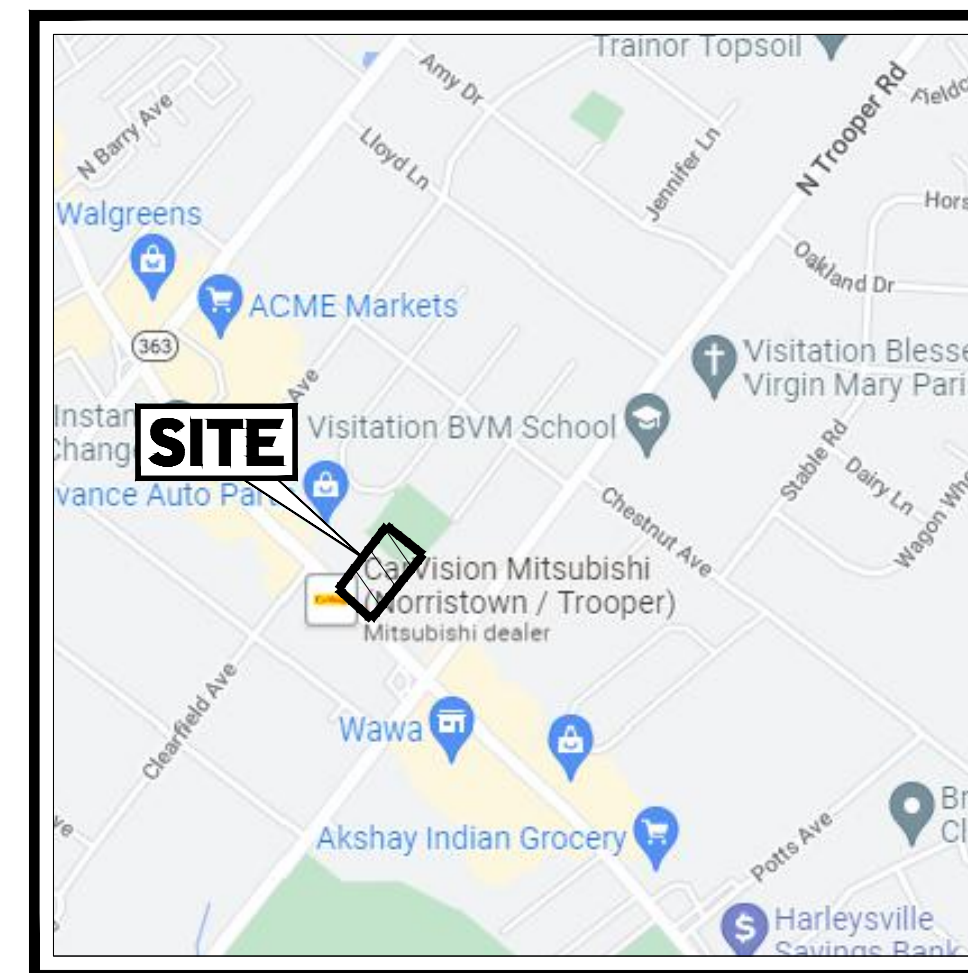


PROPOSED CAR WASH

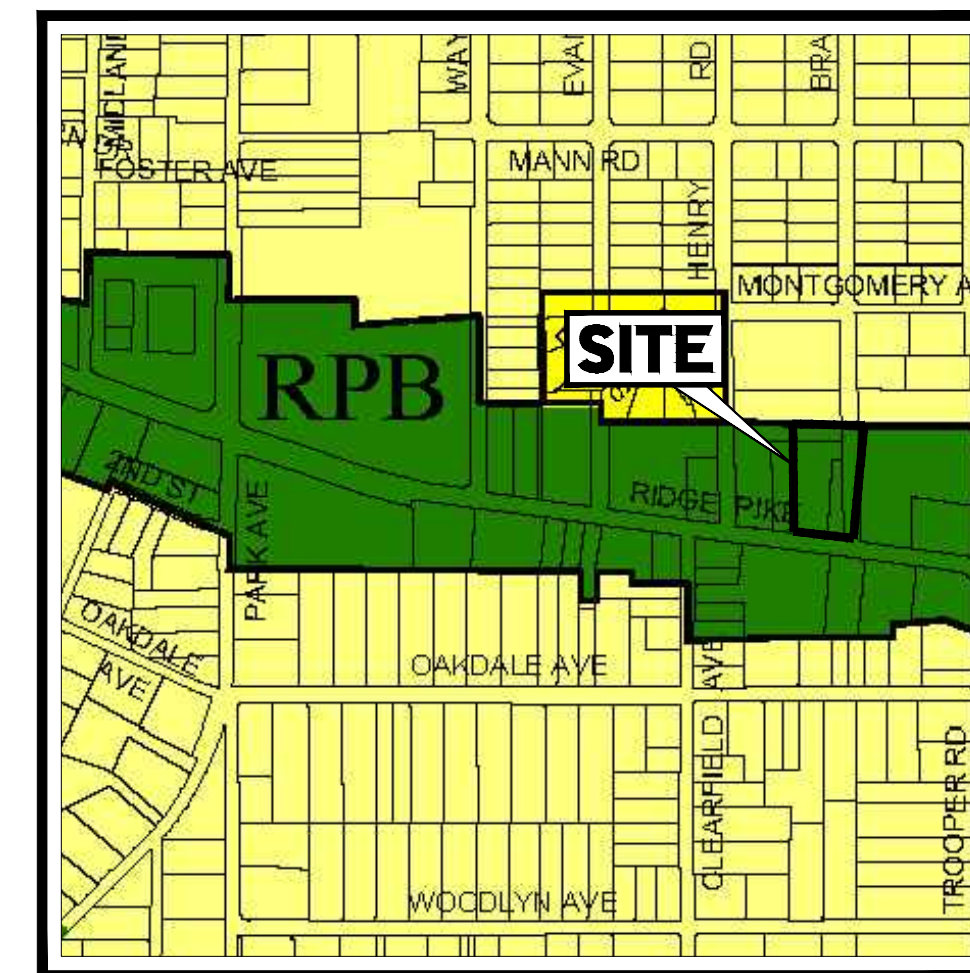
LOCATION OF SITE:
2619 RIDGE PIKE
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA 19403



USGS MAP
SCALE: 1" = 1,000'
SOURCE: USGS.GOV



LOCATION MAP
SCALE: 1" = 1,000'
SOURCE: GOOGLE MAPS



ZONING MAP
SCALE: 1" = 1,000'
SOURCE: LOWERPROVIDENCE.ORG

LIST OF WAIVERS REQUESTED:

- a. FROM S.A.L.D.O. §123-18A TO SUBMIT PLANS AS PRELIMINARY/FINAL LAND DEVELOPMENT PLANS.

MONTGOMERY COUNTY PLANNING COMMISSION

MDPC No. _____
PROCESSED and REVIEWED. A report has been prepared by the Montgomery County Planning Commission in accordance with the Municipalities Planning Code.
Certified this date _____
Montgomery County Planning Commission

APPROVAL OF TOWNSHIP

APPROVED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF LOWER PROVIDENCE, COUNTY OF MONTGOMERY, COMMONWEALTH OF PENNSYLVANIA, ON THE ____ DAY OF _____

PRESIDENT _____ SECRETARY _____

REVIEW OF TOWNSHIP ENGINEER

DATE _____ TOWNSHIP ENGINEER _____

APPLICANT STORMWATER MANAGEMENT CERTIFICATION

I/WE, PJ LAND DEVELOPMENT, LLC, ON THIS DATE _____, HEREBY ACKNOWLEDGE THAT ANY REVISION TO THE APPROVED STORMWATER MANAGEMENT PLAN MUST BE APPROVED BY THE TOWNSHIP AND THAT A REVISED E&S PLAN MUST BE SUBMITTED TO THE CONSERVATION DISTRICT PRIOR TO IMPLEMENTATION.

MICHAEL MCGRATH, VICE PRESIDENT OF DEVELOPMENT
PJ LAND DEVELOPMENT, LLC
71 CAROLYN BOULEVARD,
FARMINGDALE, NY 11735

OFFER OF DEDICATION

I HEREBY OFFER FOR DEDICATION ANY RIGHTS-OF-WAY, WIDENING, OPEN SPACE, FLOODPLAIN AREAS OR EASEMENTS TO THE AGENCY HAVING JURISDICTION AT TIME OF RECORDING OF THE PLAN.

SURVEYOR'S CERTIFICATION, BOUNDARY

THIS IS TO CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY MADE BY ME OR UNDER MY SUPERVISION, THAT ALL PROPERTY CORNERS ARE SET AS SHOWN HEREON, THAT ALL GEOMETRIC DETAILS AS SHOWN ARE CORRECT, AND THAT ALL LOTS OR TRACTS HAVE A BOUNDARY CLOSURE ERROR OF 1:10,000 OR BETTER.

DESIGN ENGINEER'S CERTIFICATION

I, MATTHEW KEARSE, ON THIS DATE _____, HEREBY CERTIFY THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF LOWER PROVIDENCE TOWNSHIP.

MATTHEW KEARSE, PE
LICENSE NO. PE092988

OWNER CERTIFICATION AND CORPORATE ACKNOWLEDGEMENT OF PLAN

COMMONWEALTH/STATE OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THIS _____ DAY OF _____, 2022, BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC FOR THE COMMONWEALTH/STATE OF PENNSYLVANIA, PERSONALLY APPEARED MICHAEL MCGRATH, VICE PRESIDENT OF DEVELOPMENT, WHO ACKNOWLEDGED THIS PLAN TO BE THE OFFICIAL PLAN OF STREETS AND PROPERTY SHOWN THEREON, SITUATED IN LOWER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA, AND DESIRED THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

NOTARY PUBLIC _____
MY COMMISSION EXPIRES _____

I/WE, PJ LAND DEVELOPMENT, LLC, HAVE LAID UPON MY/OUR LANDS IN LOWER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA, LOTS AND STREETS ACCORDING TO THE ACCOMPANIED PLAN WHICH IS INTENDED TO BE RECORDED. WITNESS MY/OUR HAND AND SEAL THIS _____ DAY OF _____, 2022.

BY: PJ LAND DEVELOPMENT, LLC

NAME: MICHAEL MCGRATH
TITLE: VICE PRESIDENT OF DEVELOPMENT
71 CAROLYN BOULEVARD,
FARMINGDALE, NY 11735

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
NOTES SHEET	C-102
EXISTING CONDITIONS/DEMOLITION PLAN	C-201
SITE PLAN	C-301
GRADING PLAN	C-401
UTILITY PLAN	C-501
SOIL EROSION AND SEDIMENT POLLUTION CONTROL PLAN	C-601
SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES & DETAILS	C-602, C-603, C-604
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	C-605
POST CONSTRUCTION STORMWATER MANAGEMENT NOTES	C-606
POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS	C-607, C-608
PRE DEVELOPMENT DRAINAGE AREA PLAN	C-609
POST DEVELOPMENT DRAINAGE AREA PLAN	C-610
INLET DRAINAGE AREA PLAN	C-611
LIGHTING PLAN	C-701
LANDSCAPE PLAN	C-702
LANDSCAPE DETAILS	C-703
STORM & SANITARY PIPE PROFILES	C-801
VEHICLE CIRCULATION PLAN	C-802
DETAILS SHEET	C-901, C-902, C-903



REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG
2	01/05/2023	PER COMPLETENESS REVIEW	RG
3	01/27/2023	PER PENNDOT COMMENTS	SU



PROJECT No.: PP213264
DRAWN BY: RG
CHECKED BY: SU
DATE: 08/29/2022
CAD ID.: PP213264-X-TTL-LDVP

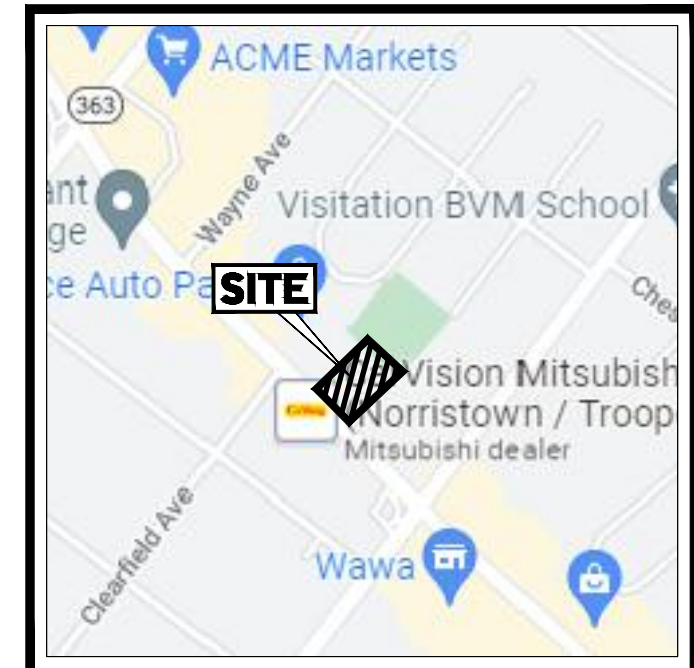
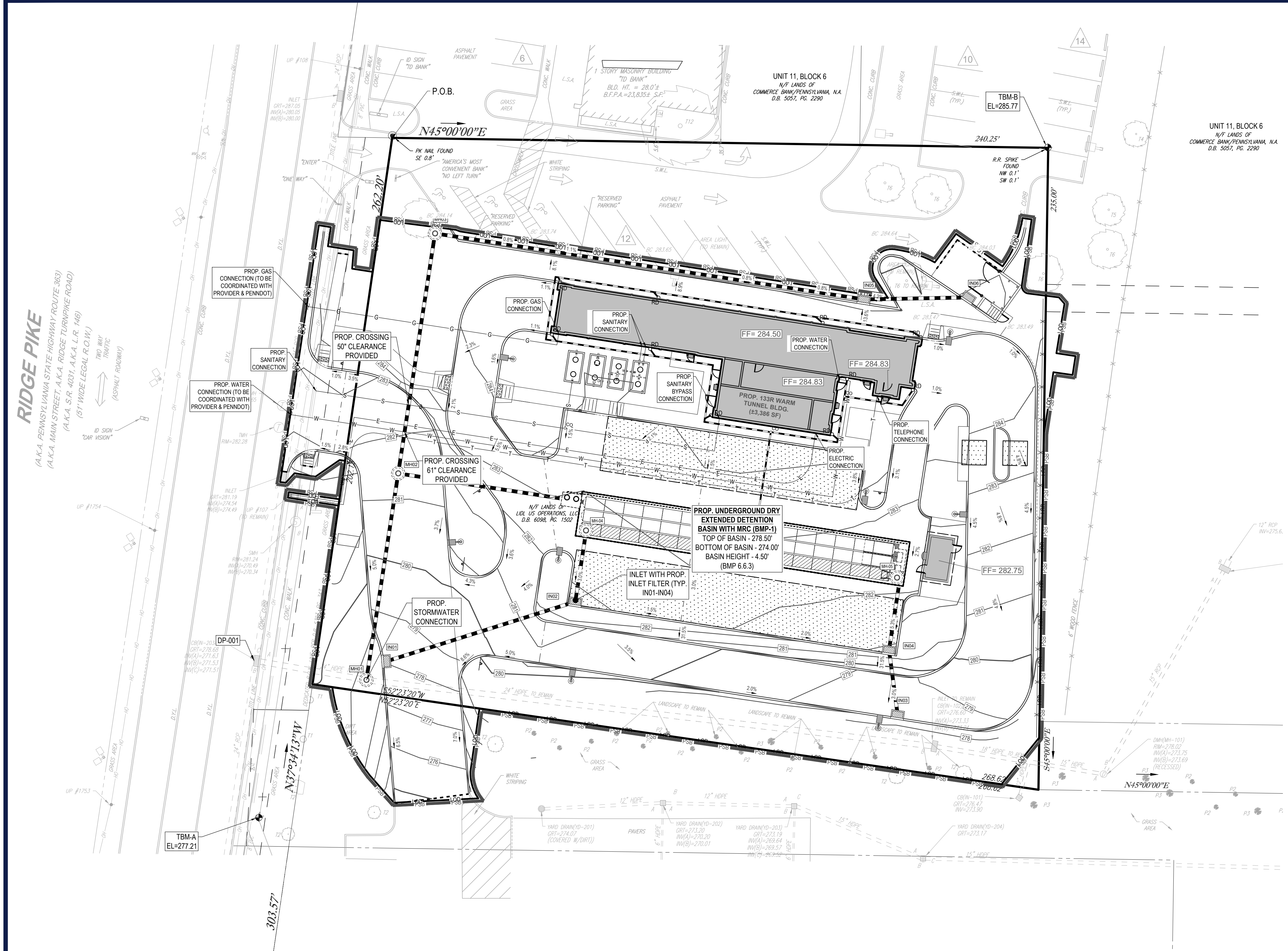
PRELIMINARY/FINAL LAND DEVELOPMENT DOCUMENTS
FOR
TIDAL WAVE AUTO SPA STORE #004
PROPOSED DEVELOPMENT
P.B. 50, PG. 39; UNIT 6, BLOCK 6
2619 RIDGE PIKE
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PA 19403

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com



SHEET TITLE:
COVER SHEET
SHEET NUMBER:
C-101
REVISION 3 - 01/27/2023

R:\1\PP213264\CADD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PP213264-0205.JA...-LAYOUT: C-101 COVER



SITE LOCATION MAP
SCALE: 1"=1000'
SOURCE: GOOGLE MAPS

STORM STRUCTURE SCHEDULE

NAME	TYPE	GR/TRIM ELEV. (FT.)	INVERTS
IN05	STANDARD BOX	283.32'	INV IN = 279.69' (15' RCP) INV OUT = 279.50' (15' RCP)
IN06	STANDARD BOX	283.93'	INV IN = 280.49' (15' RCP) INV OUT = 280.49' (15' RCP)
MH01	TYPE 4	278.72'	INV IN = 272.04' (15' RCP)
MH02	TYPE 4	281.47'	INV IN = 272.88' (15' RCP) INV IN = 274.38' (15' RCP) INV OUT = 272.80' (15' RCP)
MH03	TYPE 4	284.51'	INV IN = 277.91' (15' RCP) INV OUT = 275.87' (15' RCP)
OS01	OUTLET STRUCTURE	276.50'	INV OUT = 275.00' (15' RCP)

STORM STRUCTURE SCHEDULE

NAME	TYPE	GR/TRIM ELEV. (FT.)	INVERTS
IN01	STANDARD BOX	278.34'	INV OUT = 275.89' (15' RCP)
IN02	STANDARD BOX	281.83'	INV IN = 275.46' (15' RCP) INV OUT = 275.29' (15' RCP)
IN03	STANDARD BOX	278.24'	INV OUT = 275.82' (15' RCP)
IN04	STANDARD BOX	280.90'	INV IN = 275.58' (15' RCP) INV OUT = 275.41' (15' RCP)
UGB	CONNECTION TO BASIN	276.93'	INV IN = 275.17' (15' RCP)
UGB	CONNECTION TO BASIN	276.93'	INV IN = 275.17' (15' RCP)

STORM SEWER PIPE SCHEDULE

FROM	TO	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE (%)
IN05	MH03	15"	RCP	159	1.00%
IN06	IN05	15"	RCP	38	2.09%
MH02	MH01	15"	RCP	76	1.00%
MH03	MH02	15"	RCP	89	1.00%
OS01	MH02	15"	RCP	61	1.00%

STORM SEWER PIPE SCHEDULE

FROM	TO	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE (%)
IN01	IN02	15"	RCP	72	0.59%
IN02	UGB	15"	RCP	24	0.50%
IN03	IN04	15"	RCP	24	1.01%
IN04	UGB	15"	RCP	24	1.01%

LEGEND

EXISTING

- PROPERTY LINE
- R.O.W. LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- BUILDING
- CONCRETE CURB
- FLUSH CURB
- FENCE
- CONCRETE MONUMENT/IRON PIN
- SIGN
- AREA LIGHT
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- WATER/GAS VALVES
- ROOF DRAIN/CLEANOUT
- FIRE HYDRANT
- UTILITY POLE W/ LIGHT
- UTILITY POLE
- OVERHEAD UTILITY WIRES
- ELECTRIC LINE
- TELEPHONE LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER
- STORM PIPE

LEGEND

PROPOSED

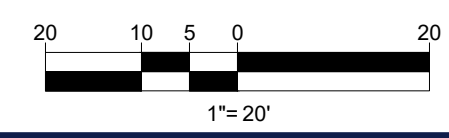
- LIMIT OF DISTURBANCE
- BUILDING
- CONCRETE CURB
- FLUSH CURB
- RAMP
- SIGN
- BOLLARD
- CANOPY
- AREA LIGHT
- DRAINAGE INLET
- MANHOLE
- CLEANOUT
- ELECTRIC LINE
- TELEPHONE LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER
- STORM PIPE

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY

R:\01\PP21324\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PP21324-LDVP-JA...-LAYOUT: C-501 UTILITY

UTILITIES:
THE FOLLOWING COMPANIES WERE NOTIFIED BY THE PENNSYLVANIA ONE-CALL SYSTEM (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST. SERIAL NUMBER: 20191861896.

UTILITY COMPANY	PHONE NUMBER
AT&T	215-233-3474
COMCAST CABLEVISION	215-961-3800
LOWER PROVIDENCE TOWNSHIP	610-539-8020
LOWER PROVIDENCE TOWNSHIP AUTHORITY	610-539-6161
PECO	215-958-3220
PENNSYLVANIA AMERICAN WATER	800-565-7292
VERIZON	215-657-9280
WEST NORRITON TOWNSHIP	610-631-0450



BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG	SU
2	01/05/2023	PER COMPLETENESS REVIEW	RG	SU
3	01/27/2023	PER PENNDOT COMMENTS	RG	SU

811

Know what's below.
Call before you dig.

PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION
WHETHER IT'S ON PRIVATE OR PUBLIC LAND.
1-800-242-1776
www.811.org

PROJECT No.: PP213264
DRAWN BY: RG
CHECKED BY: SU
DATE: 08/29/2022
CAD ID.: PP213264-X-TTLB-LDVP

**PRELIMINARY/FINAL
LAND
DEVELOPMENT
DOCUMENTS**

FOR
**TIDAL WAVE
AUTO SPA
STORE #004**

TIDAL WAVE

PROPOSED DEVELOPMENT
P.B. 50, PG. 39; UNIT 6, BLOCK 6
2619 RIDGE PIKE
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PA 19403

BOHLER

1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
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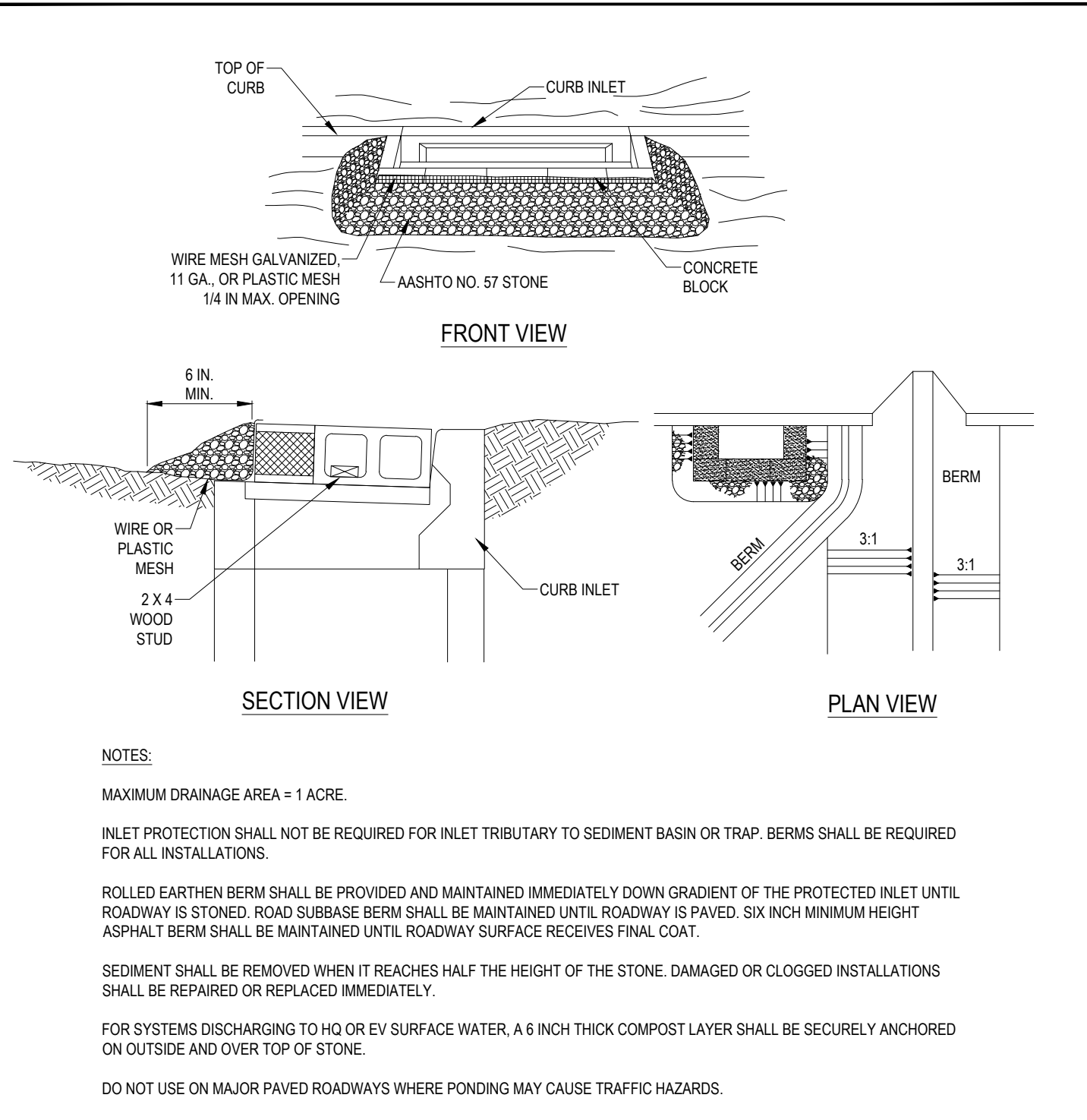
M. KEARSE

PROFESSIONAL
LANDSCAPE ARCHITECT
PENNSYLVANIA

SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
C-501

REVISION 3 - 01/27/2023



NOTES:

MAXIMUM DRAINAGE AREA = 1 ACRE.

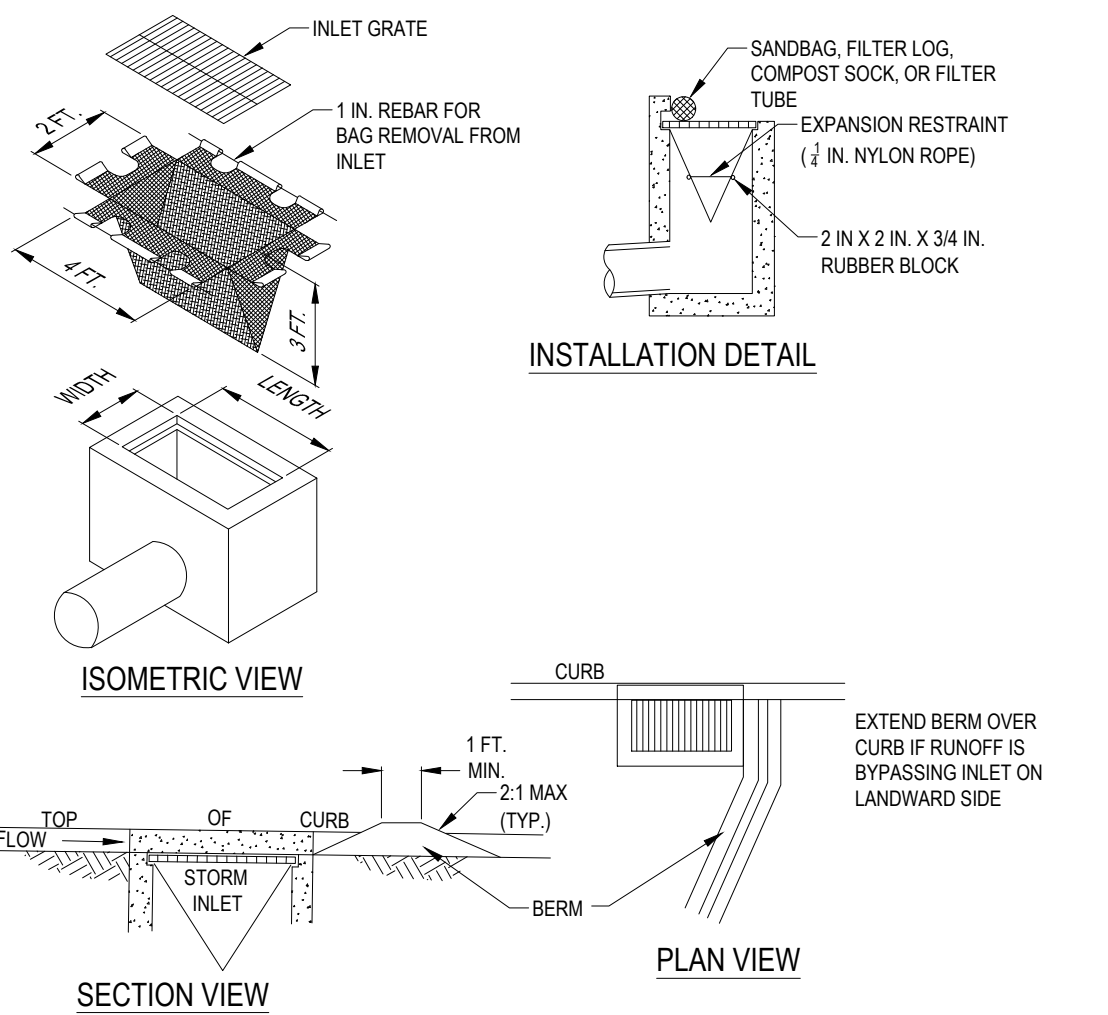
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

FOR SYSTEMS DISCHARGING TO HO OR EY SURFACE WATER, A 6 INCH THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

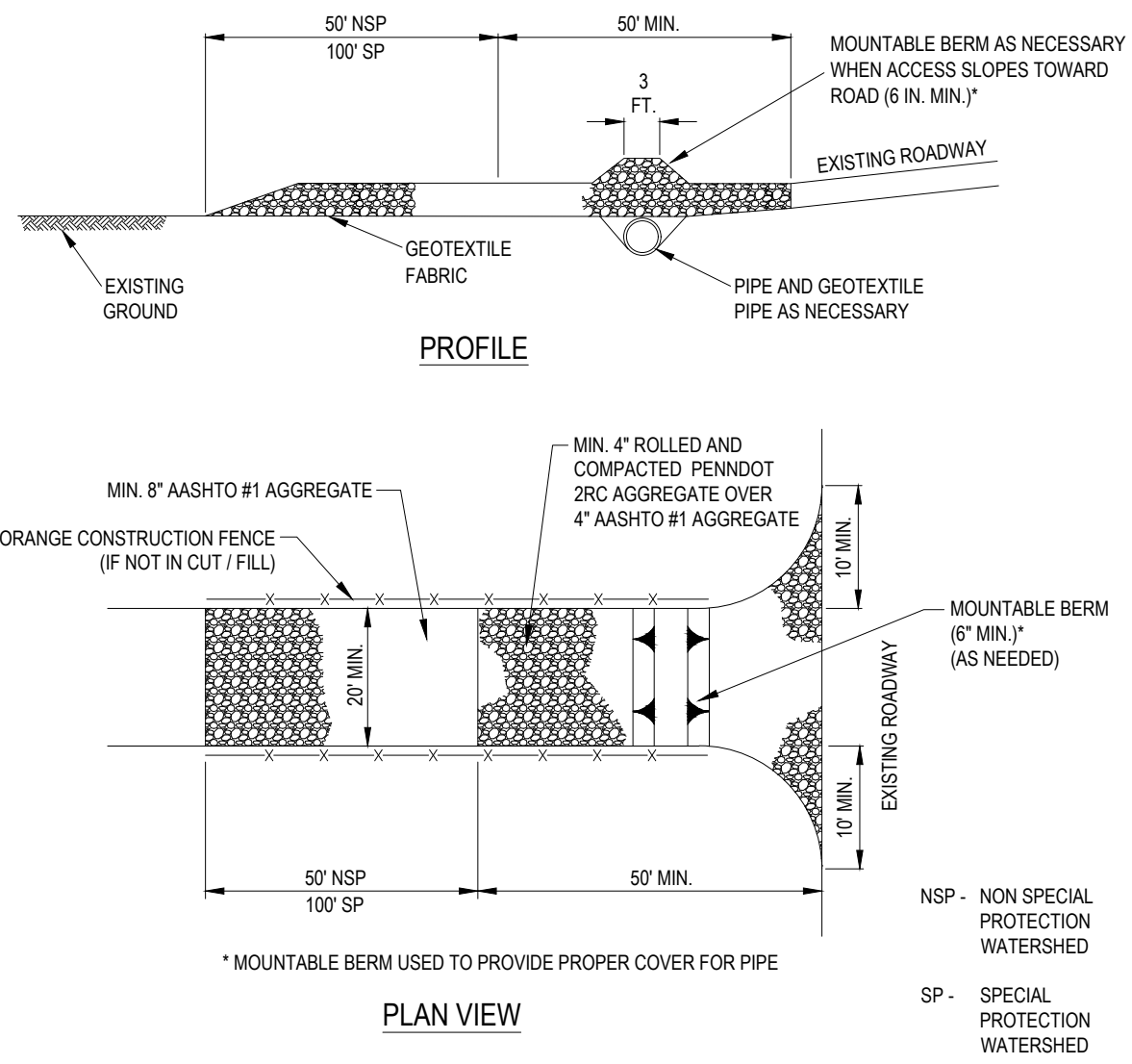
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL, OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.



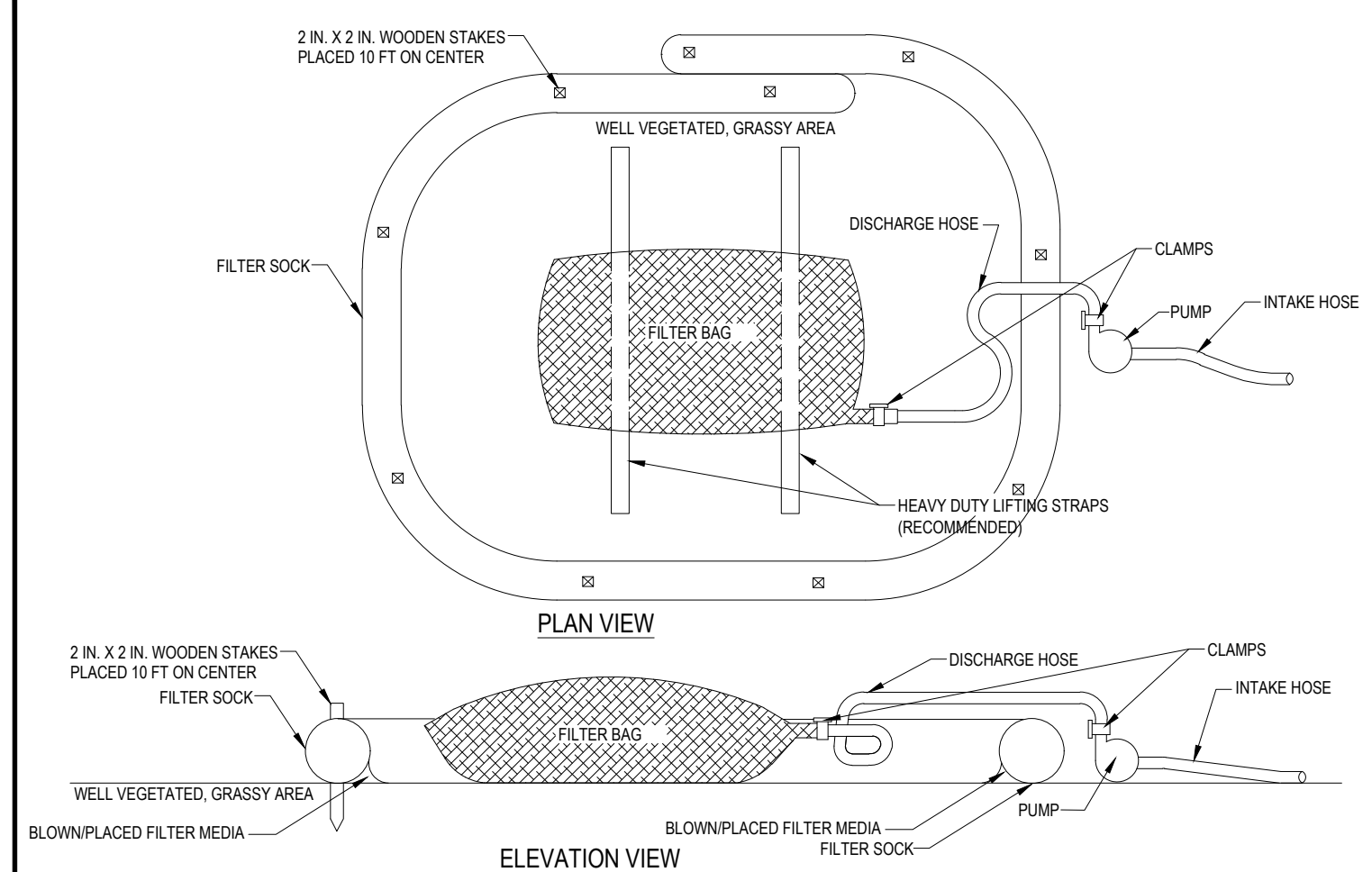
NOTES:

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

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

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

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



NOTES:

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

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LBN
GRAB TENSILE	ASTM D-4832	250 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
ACS % RETAINED	ASTM D-4751	80 SIEVE

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

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

AS THE PROPOSED DEVELOPMENT IS WITHIN AN IMPAIRED WATERSHED, ALL FILTER BAGS MUST BE SURROUNDED BY A COMPOST FILTER SOCK RING OR OPERATED IN CONJUNCTION WITH A PUMP PIT.

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

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

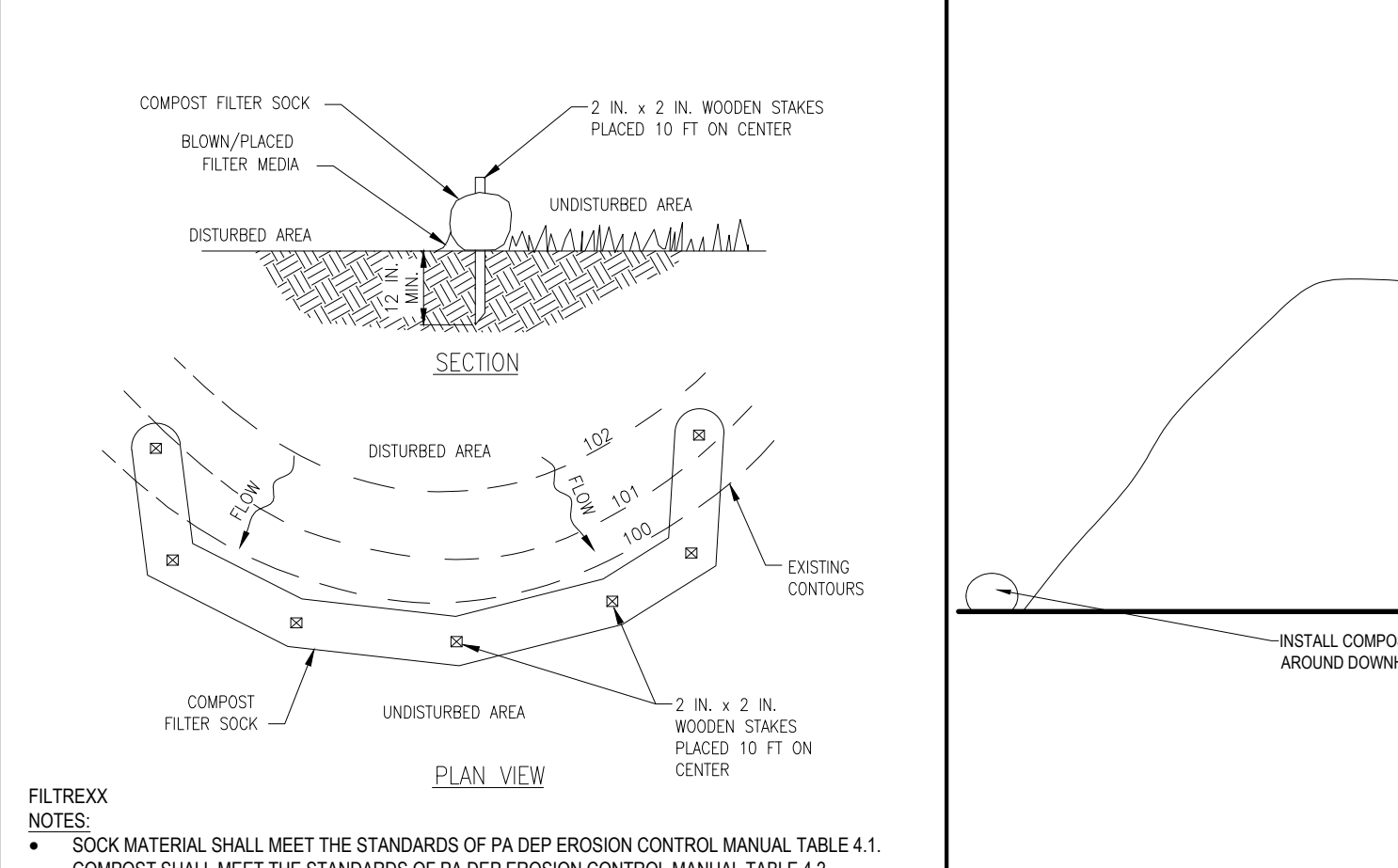
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

#4-17 **STANDARD CONSTRUCTION DETAIL #4-17 STONE AND CONCRETE BLOCK INLET PROTECTION - TYPE C INLET**
NOT TO SCALE

#4-15 **STANDARD CONSTRUCTION DETAIL #4-15 FILTER BAG INLET PROTECTION - TYPE C INLET**
NOT TO SCALE

#3-1 **STANDARD CONSTRUCTION DETAIL #3-1 (ABACT) ROCK CONSTRUCTION ENTRANCE**
NOT TO SCALE

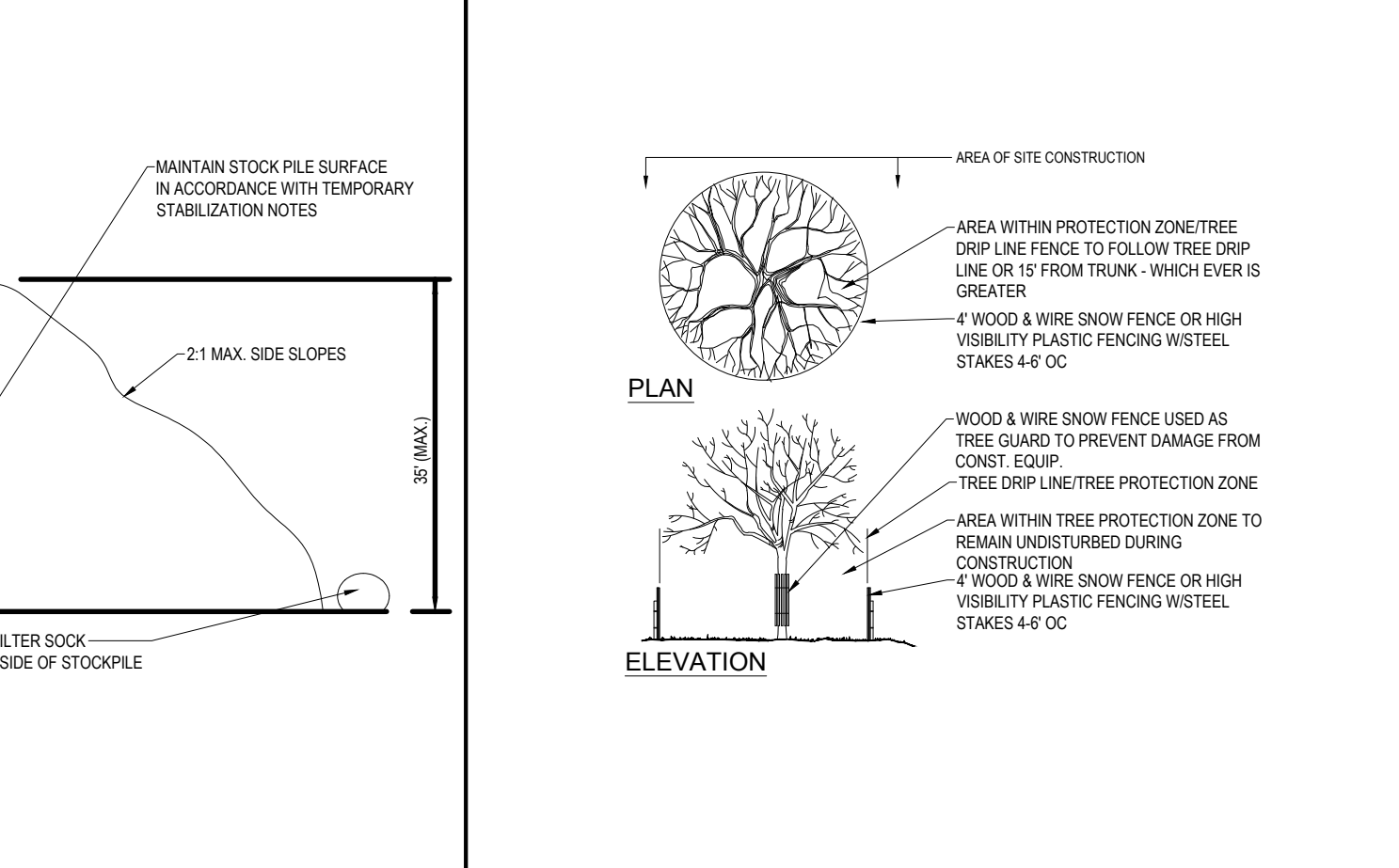
#3-16 **STANDARD CONSTRUCTION DETAIL #3-16 (ABACT) PUMPED WATER FILTER BAG**
NOT TO SCALE



FILTREXX NOTES:

- SOCK MATERIAL SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.1.
- COMPOST SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.2.
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST EIGHT (8) FEET UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT (PA DEP EROSION CONTROL MANUAL FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON PA DEP EROSION CONTROL MANUAL FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS. PHOTODEGRADABLE SOCKS AFTER ONE (1) YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

#4-1 **STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK**
NOT TO SCALE



CONCRETE WASHOUT NOTES:

UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS.

WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS.

SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 10 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS.

THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 1/8" THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND.

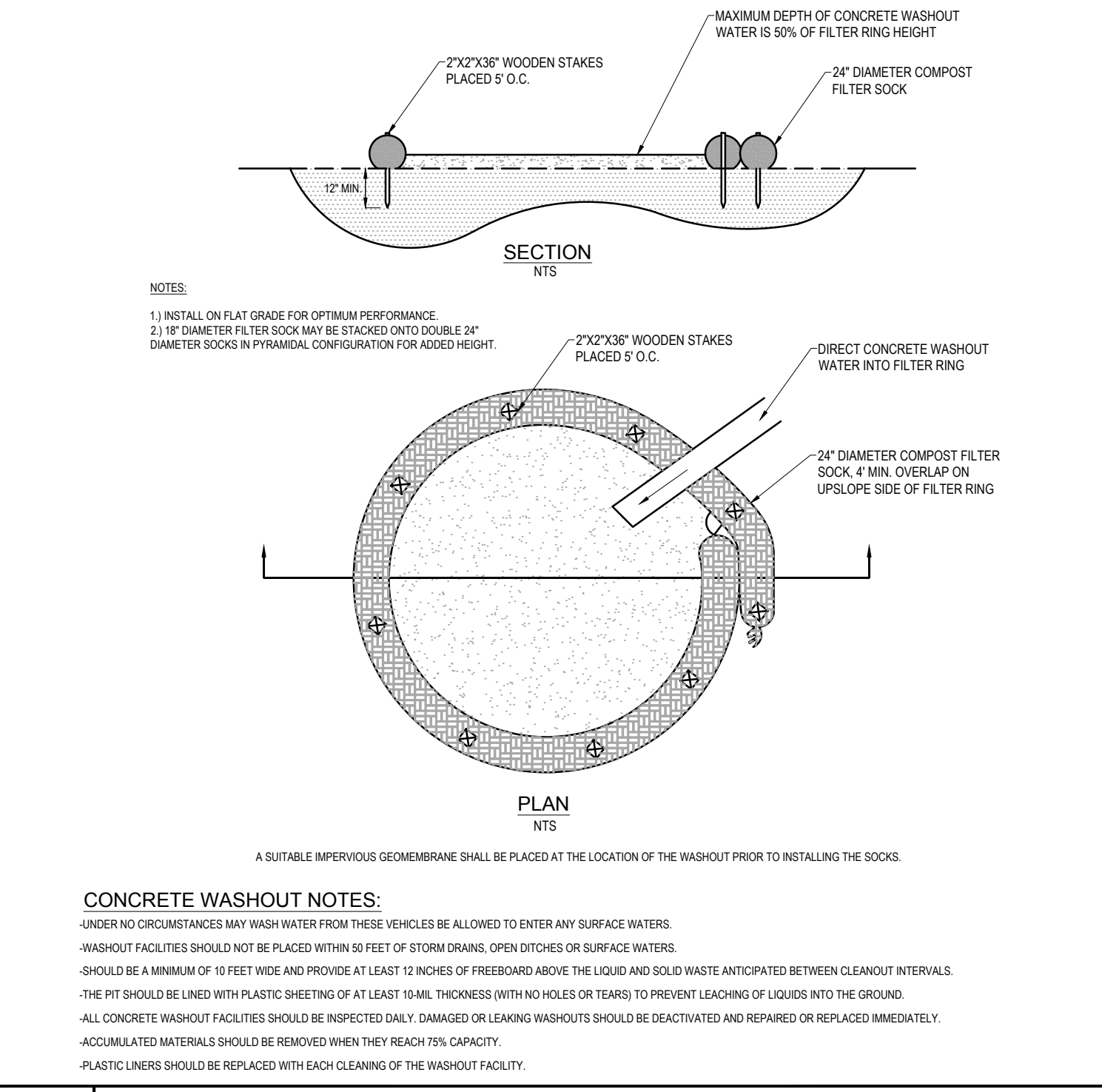
ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.

ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.

PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

X-8 **TEMPORARY SOIL STOCKPILE DETAIL**
NOT TO SCALE

X-11 **TREE PROTECTION DURING SITE CONSTRUCTION**
NOT TO SCALE



X-13 **TYPICAL COMPOST SOCK WASHOUT INSTALLATION**
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CAD I.D.: PP213264-X-TTLB-LDVP

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FOR
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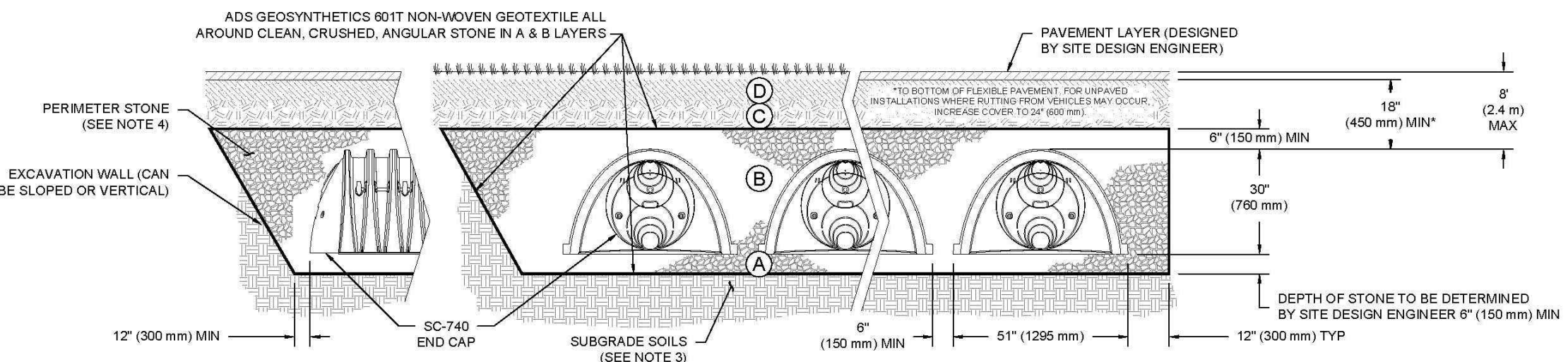
SHEET TITLE:
SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS
SHEET NUMBER:
C-604
REVISION 3 - 01/27/2023

R:\11\PP213264\CADD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PP213264-0205.JAN...LA\AYOUT - C-604 E&S DETAILS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M141* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 90% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kn). DYNAMIC FORCE NOT TO EXCEED 30,000 lbs (89 kn).
B EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE ^{2,3}

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION.
 4. ONCE LAYER 'C' IS PLACED, ANY SOLID MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



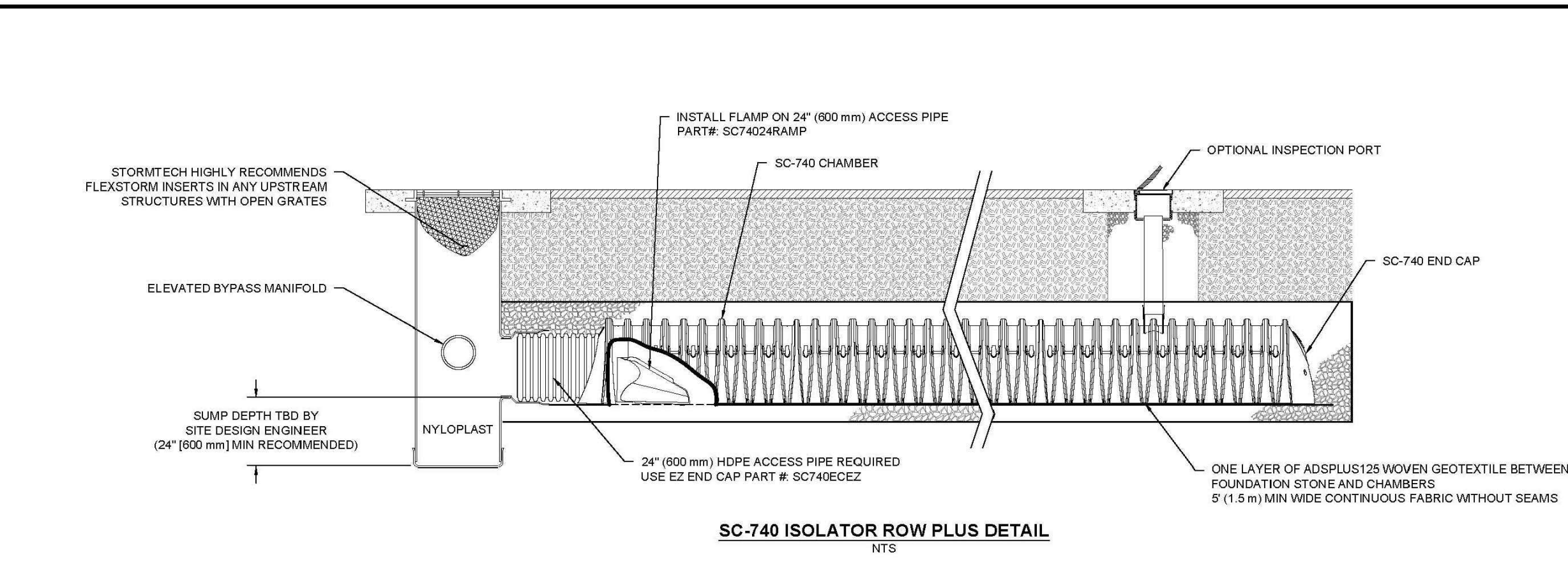
NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418. "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2737 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND (b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT OR ABOVE 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - ALL ISOLATOR PLUS ROWS
 - REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACUUMING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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PROJECT No.: PP213264
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 CHECKED BY: SU
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 CAD ID.: PP213264-X-TTL-LDVP

PROJECT:
PRELIMINARY/FINAL
LAND DEVELOPMENT DOCUMENTS
 FOR
TIDAL WAVE AUTO SPA STORE #004

PROPOSED DEVELOPMENT
 P.B. 50, PG. 39; UNIT 6, BLOCK 6
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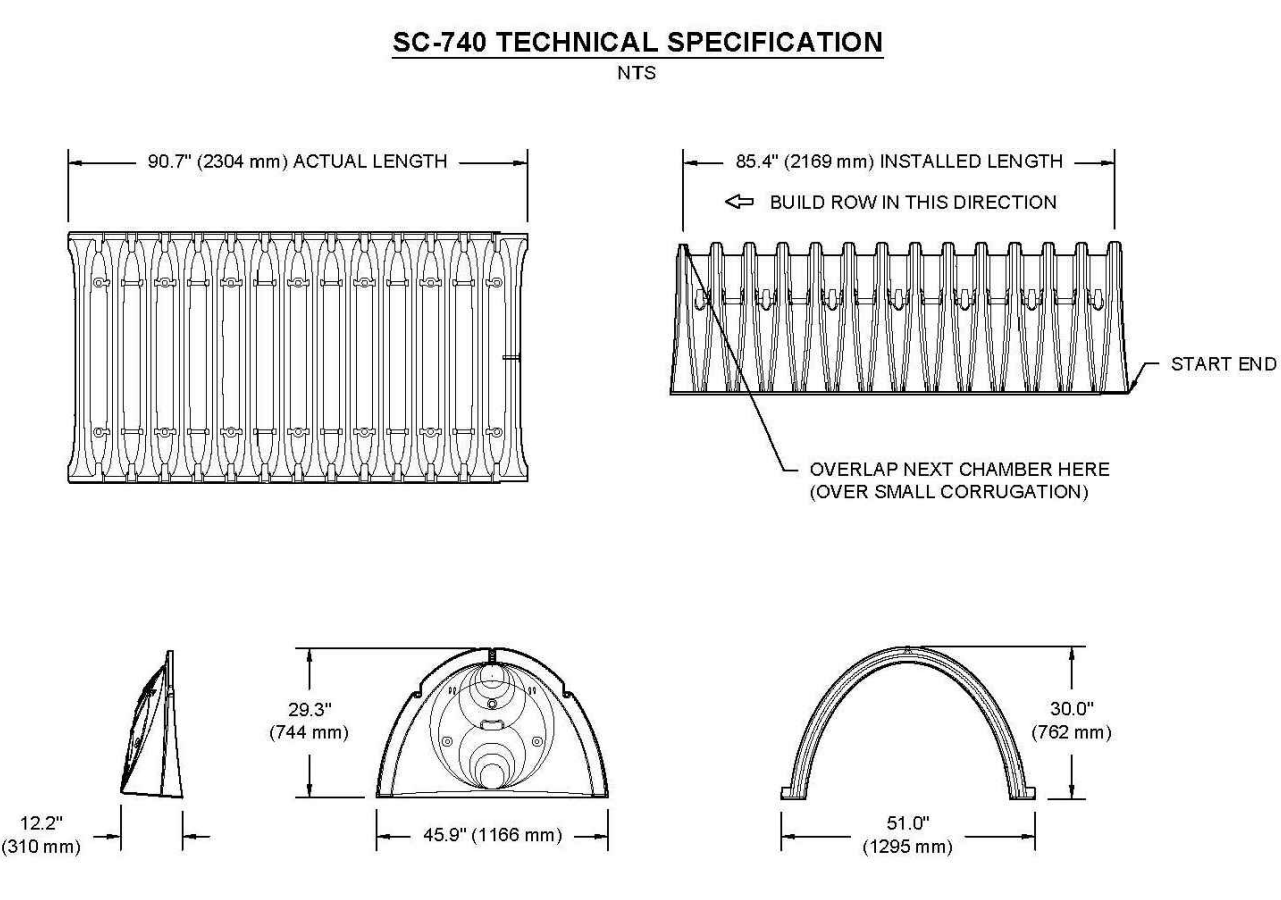
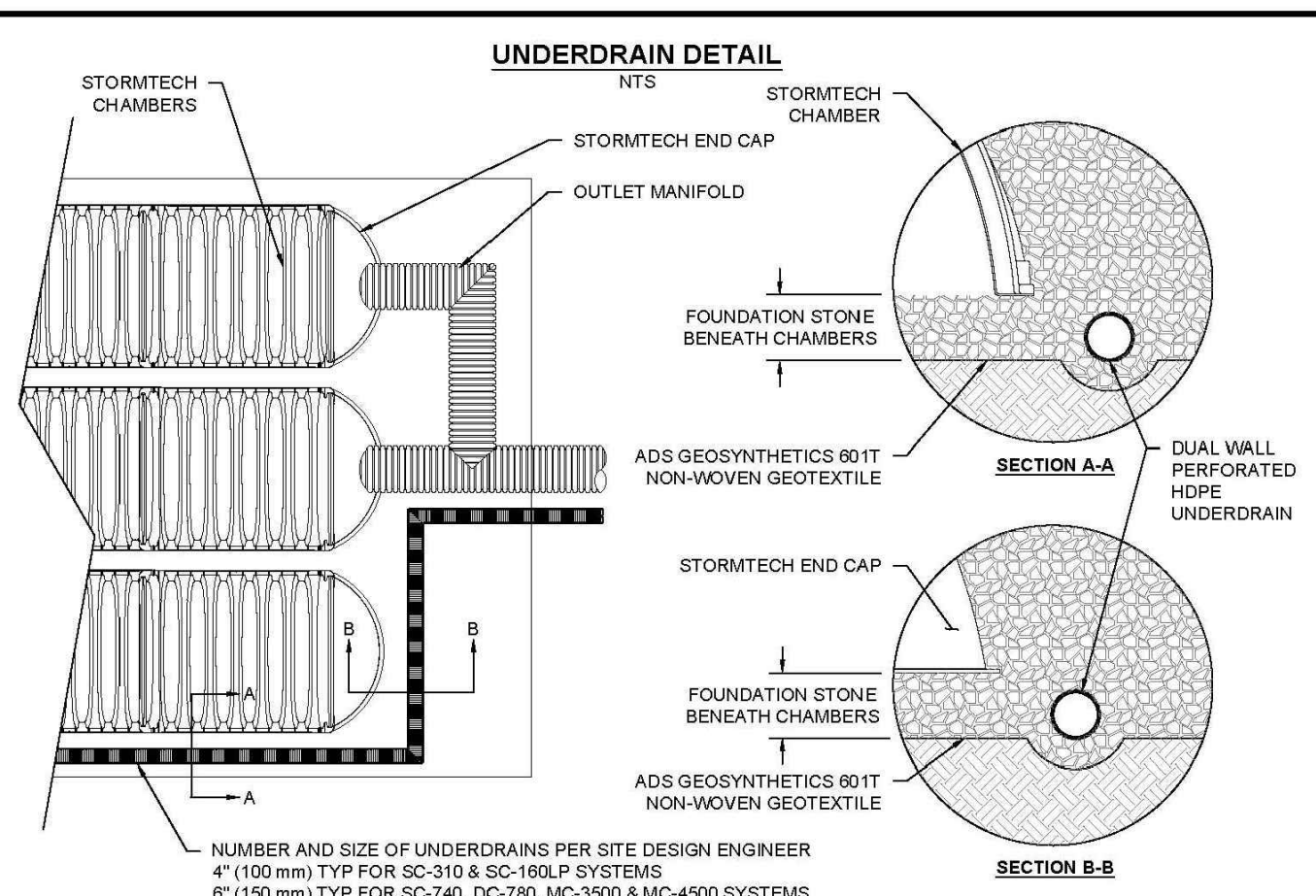
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SHEET TITLE:
POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

SHEET NUMBER:
C-608

REVISION 3 - 01/27/2023



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	CHAMBER STORAGE	MINIMUM INSTALLED STORAGE*	WEIGHT
51.0" X 30.0" X 85.4" (1295 mm X 762 mm X 2169 mm)	45.9 CUBIC FEET (1.30 m ³)	74.9 CUBIC FEET (2.12 m ³)	75.0 lbs. (33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

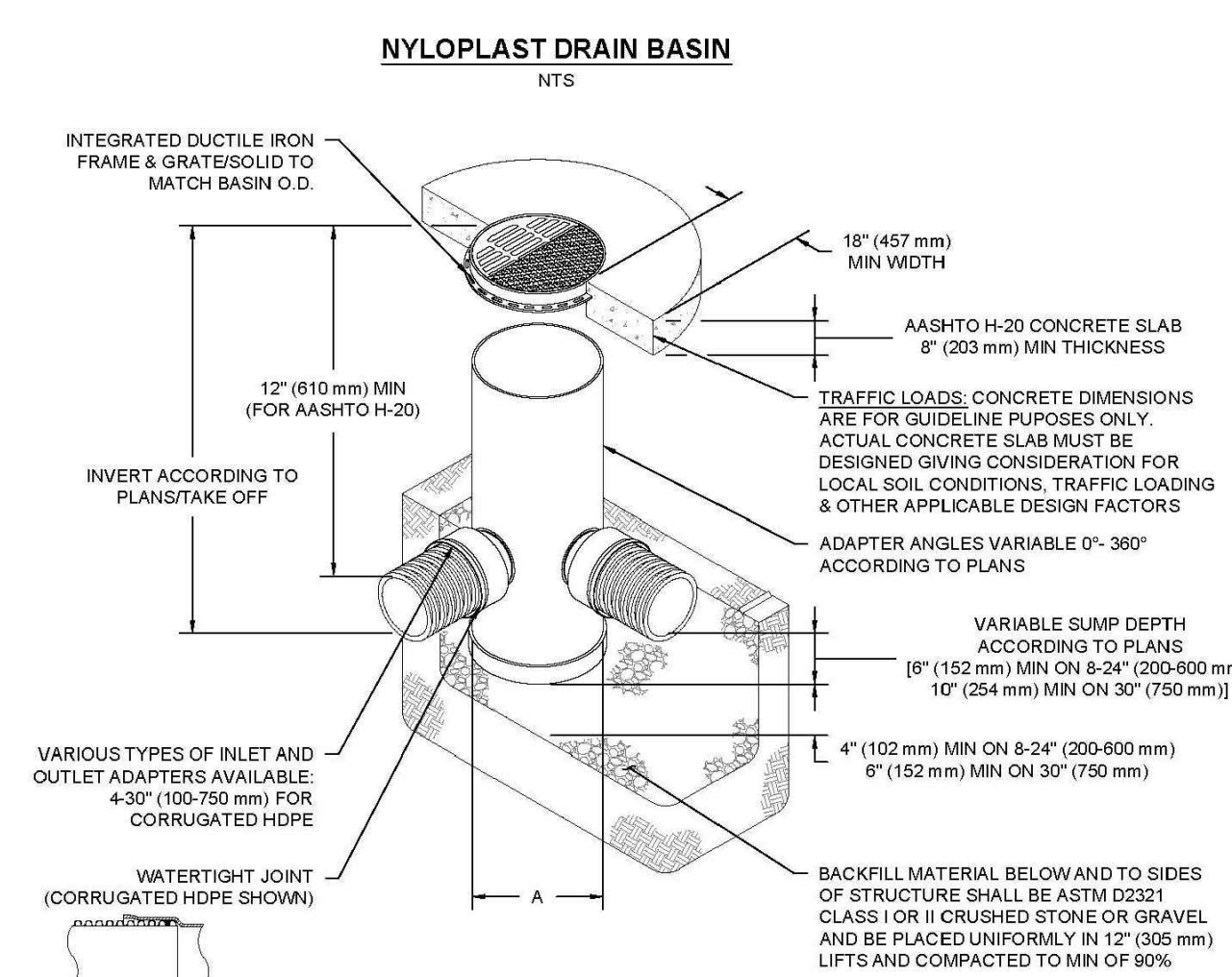
PART #	STUB	A	B	C
SC740EP001 / SC740EP001PC	0" (150 mm)	10.0" (277 mm)	18.5" (470 mm)	---
SC740EP008 / SC740EP008PC	8" (200 mm)	12.2" (310 mm)	18.5" (470 mm)	0.5" (13 mm)
SC740EP081 / SC740EP081PC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EP088 / SC740EP088PC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	0.6" (15 mm)
SC740EP101 / SC740EP101PC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EP108 / SC740EP108PC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	0.7" (18 mm)
SC740EP121 / SC740EP121PC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EP128 / SC740EP128PC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	1.2" (30 mm)
SC740EP151 / SC740EP151PC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EP158 / SC740EP158PC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EP181 / SC740EP181PC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EP188 / SC740EP188PC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.6" (41 mm)
SC740ECE2*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740ECE2 ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2894.
 *FOR THE SC740ECE2 THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE H-12 STUB SO THAT THE FITTING SITS LEVEL.
 NOTE: ALL DIMENSIONS ARE NOMINAL

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NOTES

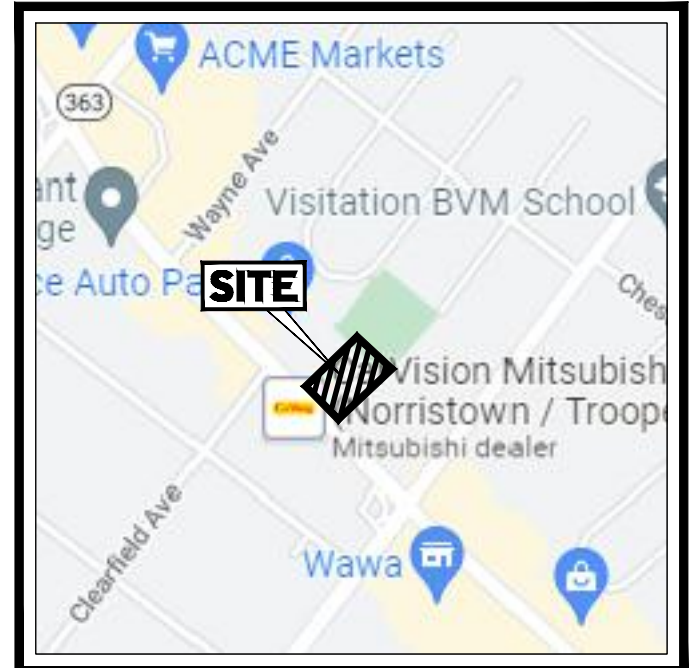
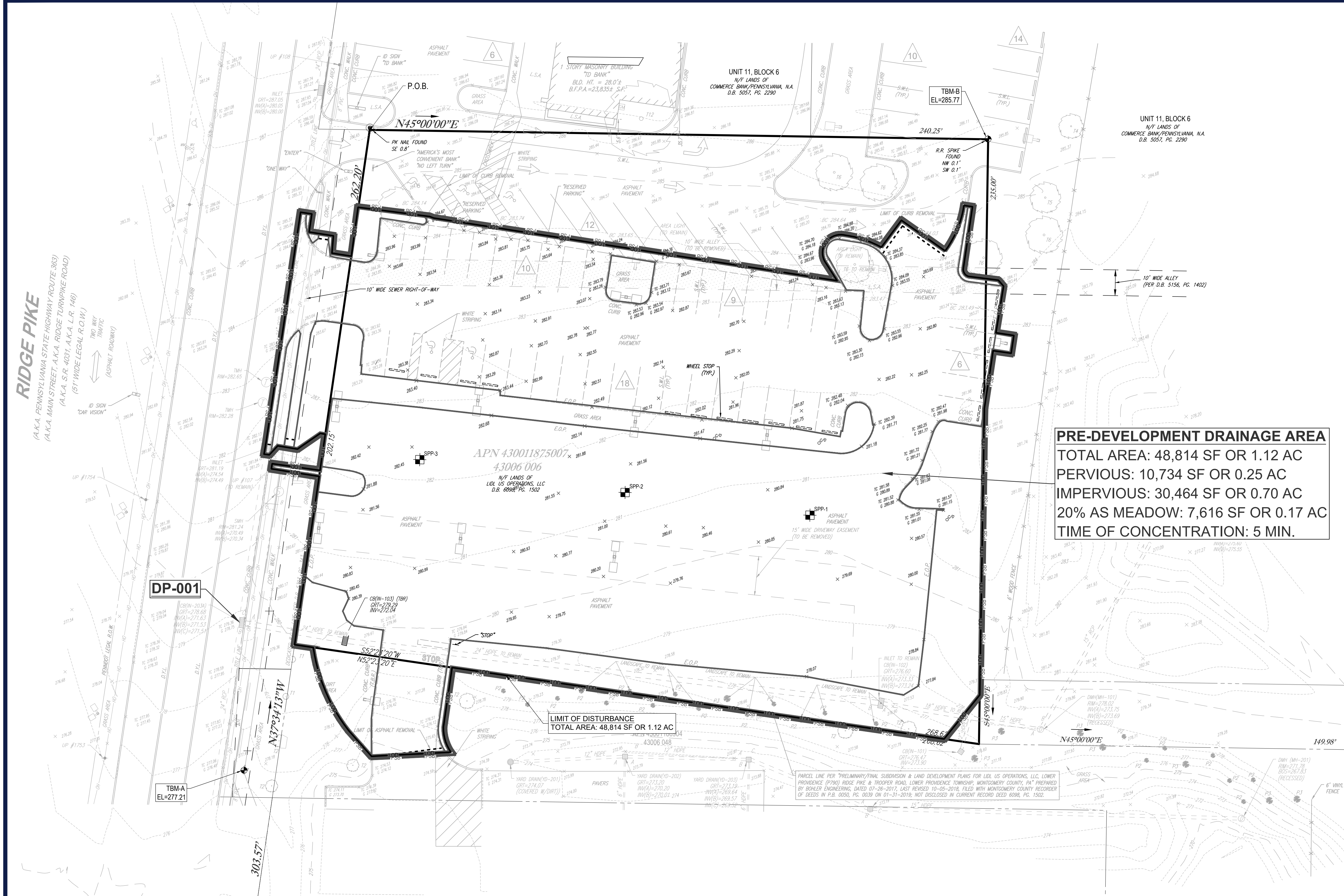
- 8-37" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOCK DUAL WALL) & SDR 35 PVC
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION, VISIT WWW.NYLOPLAST-US.COM
- TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS
8"	2808AG	PEDESTRIAN LIGHT DUTY
10"	2810AG	PEDESTRIAN LIGHT DUTY
12"	2812AG	PEDESTRIAN LIGHT DUTY
15"	2815AG	PEDESTRIAN LIGHT DUTY
18"	2818AG	PEDESTRIAN LIGHT DUTY
24"	2824AG	PEDESTRIAN LIGHT DUTY
30"	2830AG	PEDESTRIAN LIGHT DUTY

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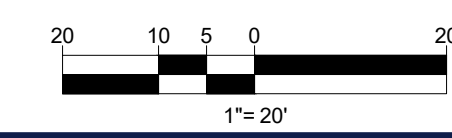
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FOR
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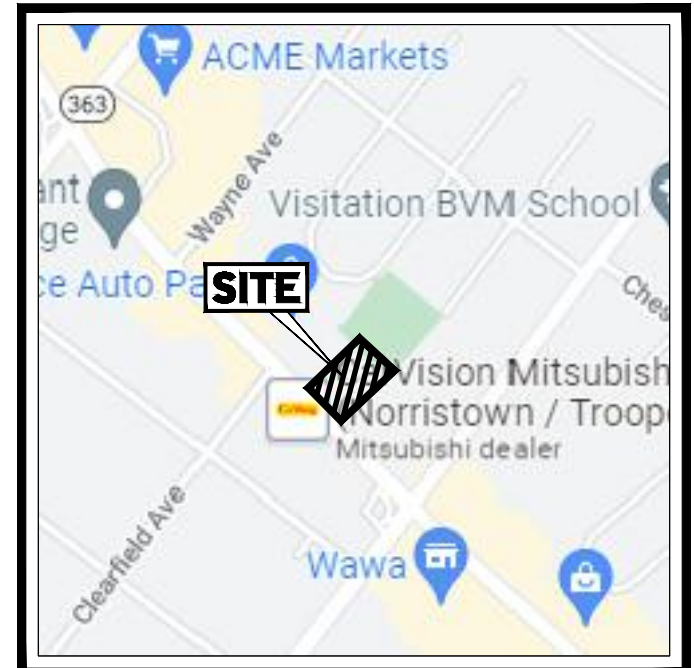
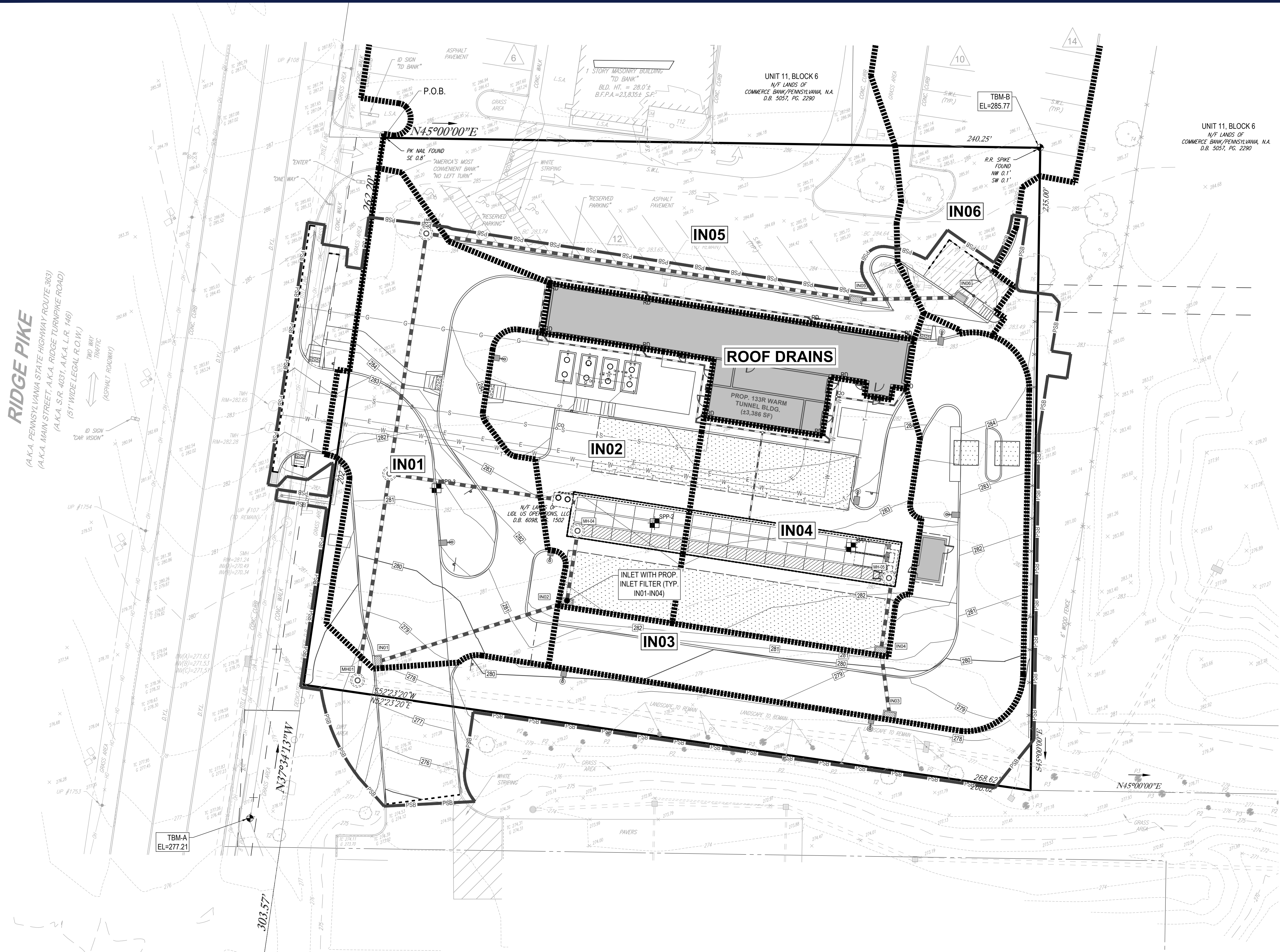
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SHEET TITLE:
PRE-DEVELOPMENT DRAINAGE PLAN
SHEET NUMBER:
C-609
REVISION 3 - 01/27/2023



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RIDGE PIKE
 (A.K.A. PENNSYLVANIA STATE HIGHWAY ROUTE 363)
 (A.K.A. MAIN STREET, A.K.A. RIDGE TURNPIKE ROAD)
 (51' WIDE LEGAL R.O.W.)



SITE LOCATION MAP
 SCALE: 1"=1000'
 SOURCE: GOOGLE MAPS

LEGEND
 INLET DRAINAGE AREA
 DRAINAGE AREA TO INLET

INLET DRAINAGE AREAS

INLET	TOTAL AREA	PERVIOUS AREA	IMPERVIOUS AREA
INLET 01	10,801 SF	3,782 SF	7,019 SF
INLET 02	6,150 SF	1,868 SF	4,282 SF
INLET 03	9,065 SF	1,921 SF	7,144 SF
INLET 04	6,866 SF	395 SF	6,471 SF
INLET 05	32,563 SF*	5,012 SF	27,551 SF
INLET 06	12,536 SF*	2,707 SF	9,829 SF

*AREA INCLUDES OFF-SITE DRAINAGE FROM NEIGHBORING PROPERTY

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**PRELIMINARY/FINAL
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 FOR
**TIDAL WAVE
 AUTO SPA
 STORE #004**

 PROPOSED DEVELOPMENT
 P.B. 50, PG. 39; UNIT 6, BLOCK 6
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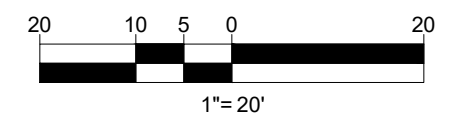
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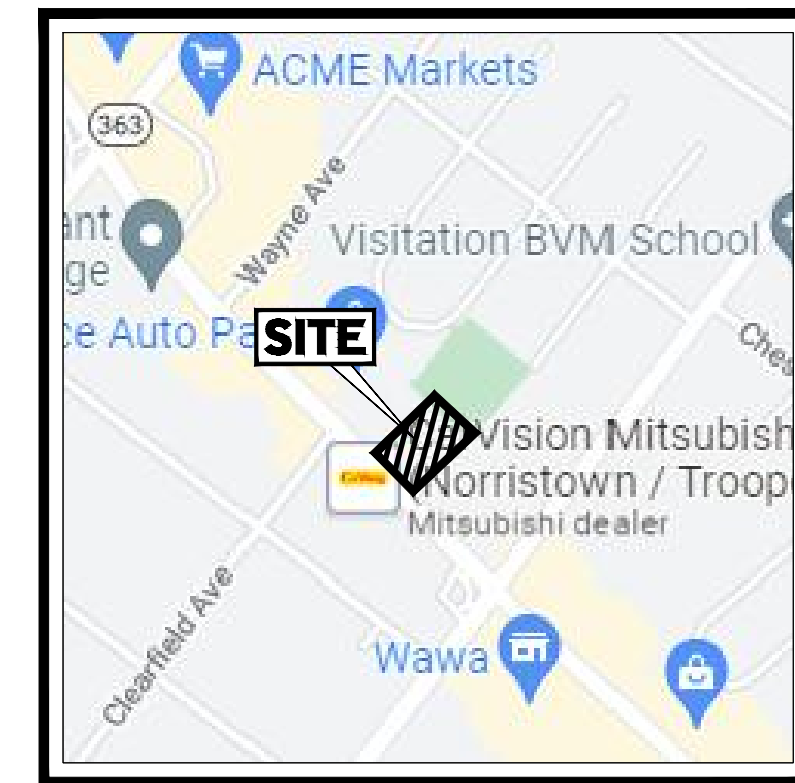
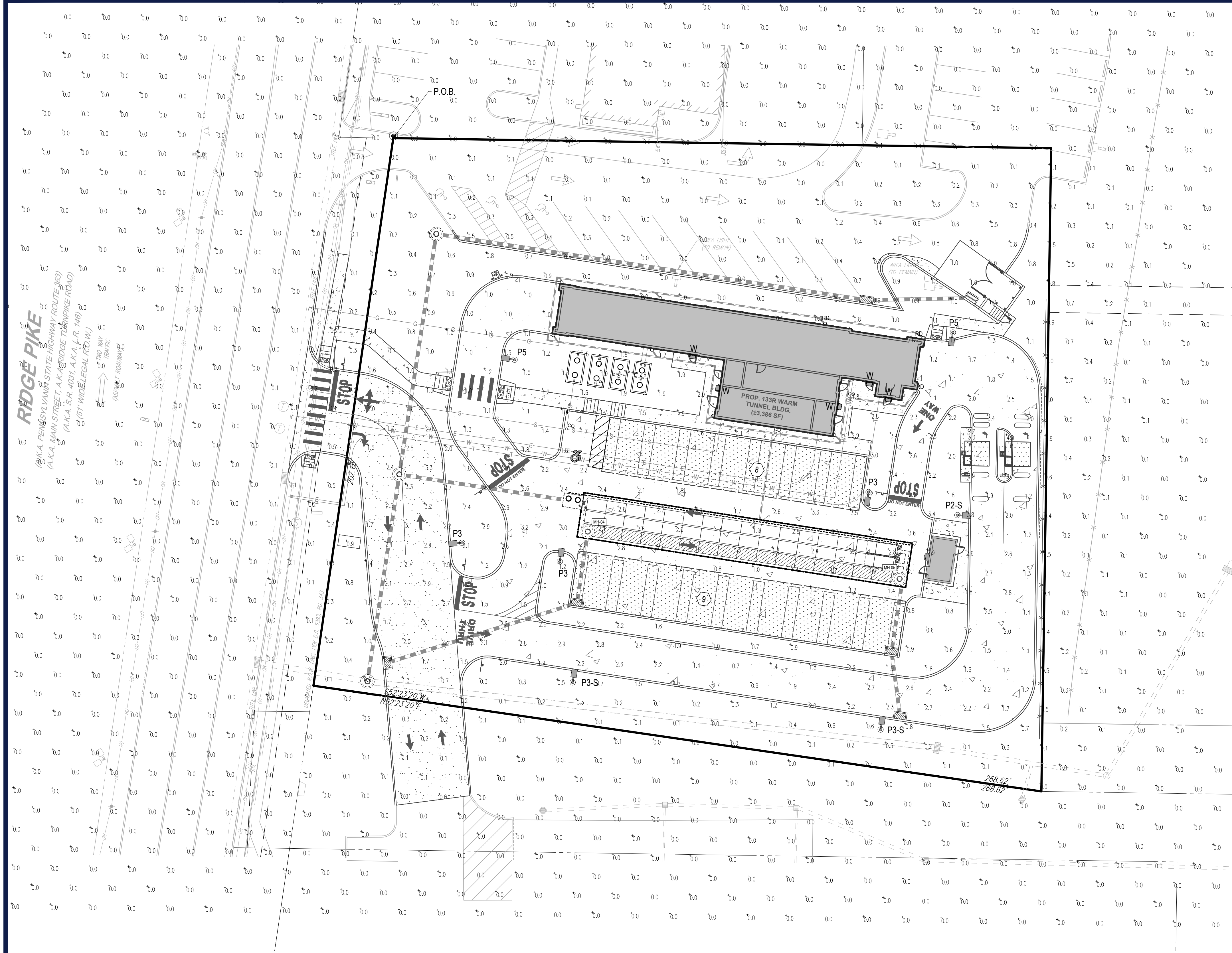
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**INLET
 DRAINAGE
 AREAS PLAN**

SHEET NUMBER:
C-611

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SITE LOCATION MAP
SCALE: 1"=1000'
SOURCE: GOOGLE MAPS



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PROJECT No.: PP213264
 DRAWN BY: RG
 DATE: 08/29/2022
 CAD ID: PP213264-X-TTLB-LDVP

**PRELIMINARY/FINAL
 LAND
 DEVELOPMENT
 DOCUMENTS**
 FOR
**TIDAL WAVE
 AUTO SPA
 STORE #004**

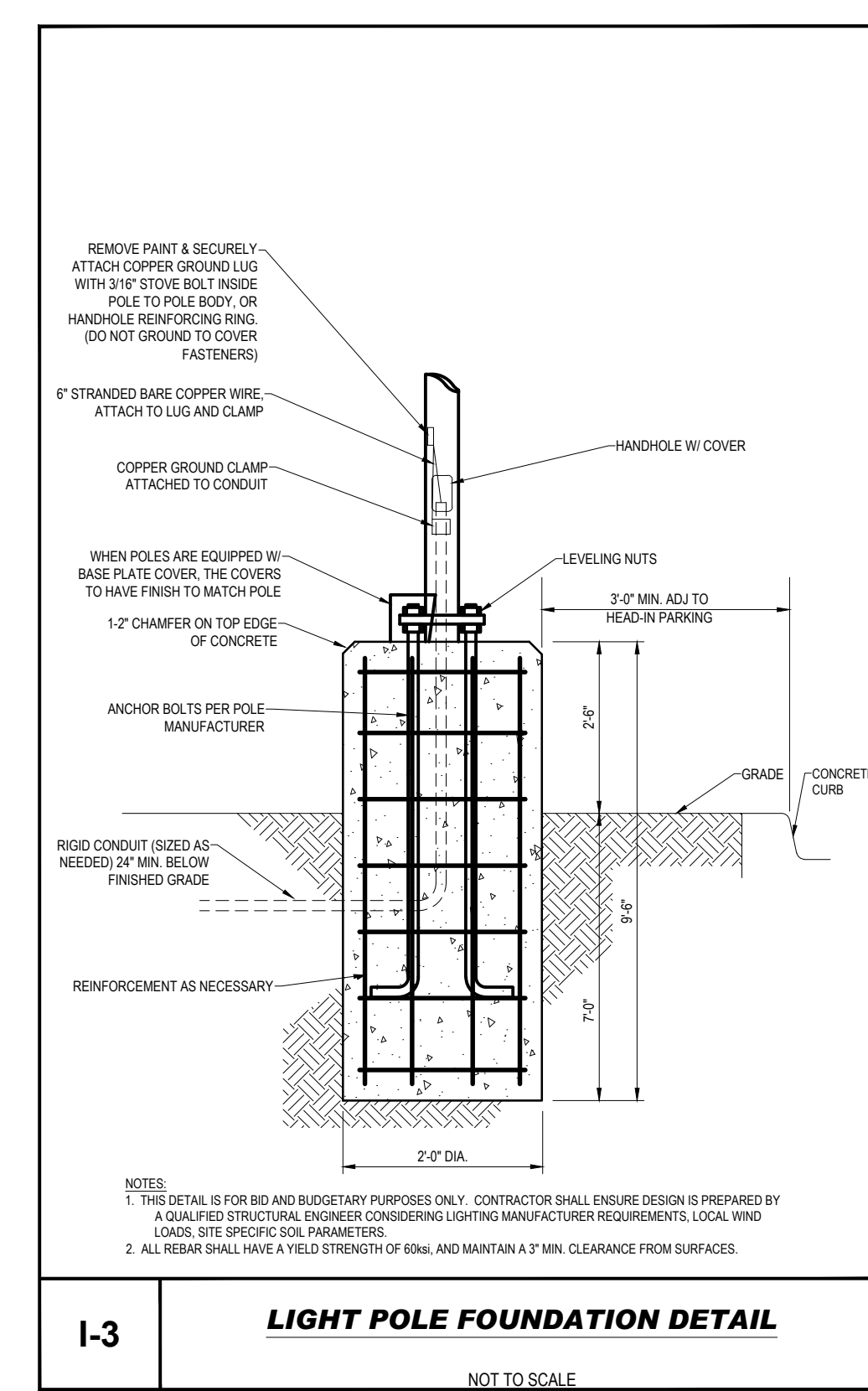
 PROPOSED DEVELOPMENT
 P.B. 50, PG. 39; UNIT 6, BLOCK 6
 2619 RIDGE PIKE
 LOWER PROVIDENCE TOWNSHIP
 MONTGOMERY COUNTY, PA 19403

BOHLER
 1515 MARKET STREET, SUITE 920
 PHILADELPHIA, PA 19102
 Phone: (267) 402-3400
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 www.BohlerEngineering.com

D.T. NORTH

 REGISTERED LANDSCAPE ARCHITECT
 PENNSYLVANIA LICENSE No. LA002729

SHEET TITLE:
LIGHTING PLAN
 SHEET NUMBER:
C-701
 REVISION 3 - 01/27/2023



1-3 LIGHT POLE FOUNDATION DETAIL
 NOT TO SCALE

GENERAL LIGHTING NOTES

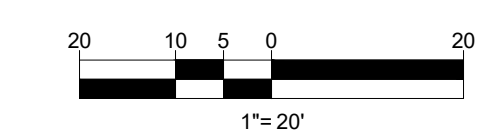
- THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE ELECTRICAL CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY, THE ELECTRICAL CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
- THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE PLANS, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL AGENCY AND GOVERNMENTAL REGULATIONS.
- THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER. ACTUAL, SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOT-CANDELES (FC).
- THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE BUT IS NOT LIMITED TO VISUAL OBSERVATION, CLEANING OF LENSES, AND RELAMPING ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN. UPON COMPLETION AND OWNER'S ACCEPTANCE OF THE WORK, THE ABOVE RESPONSIBILITIES BECOMES SOLELY THE OWNER'S.
- THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, POWER SYSTEM, CONDUITS, WIRING AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, MECHANICAL ENGINEERS AND/OR ELECTRICAL CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES.
- THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES TO THE ENGINEER OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED.
- UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.
- THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80 OR TESTING. THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE PROJECT ENGINEER (BOHLER) FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.

LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUM. LUMENS	LLF	DESCRIPTION	POLE
P2-S	1	20'-0" AFG	SINGLE	5502	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE 2 WITH BACKLIGHT SHIELD, ZERO UP-LIGHT (RAR1-160L-70-9K7-2-xx-ASQ-BLT-6C)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
P3	3	20'-0" AFG	SINGLE	9559	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE 3, ZERO UP-LIGHT (RAR1-160L-70-9K7-3-xx-ASQ-BLT)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
P3-S	2	20'-0" AFG	SINGLE	6598	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE 3 WITH BACKLIGHT SHIELD, ZERO UP-LIGHT (RAR1-160L-70-9K7-3-xx-ASQ-BLT-6C)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
P5	2	20'-0" AFG	SINGLE	9610	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE SQW, ZERO UP-LIGHT (RAR1-160L-70-9K7-SQW-xx-ASQ-BLT)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
W4	5	15'-0" AFF	SINGLE	3679	0.900	CURRENT LIGHTING, RATIO SERIES LED WALLPACK, TYPE 4W, ZERO UP-LIGHT (RWL-148L-25-9K7-4W-x-BLT-PC)	-----

CALCULATION SUMMARY

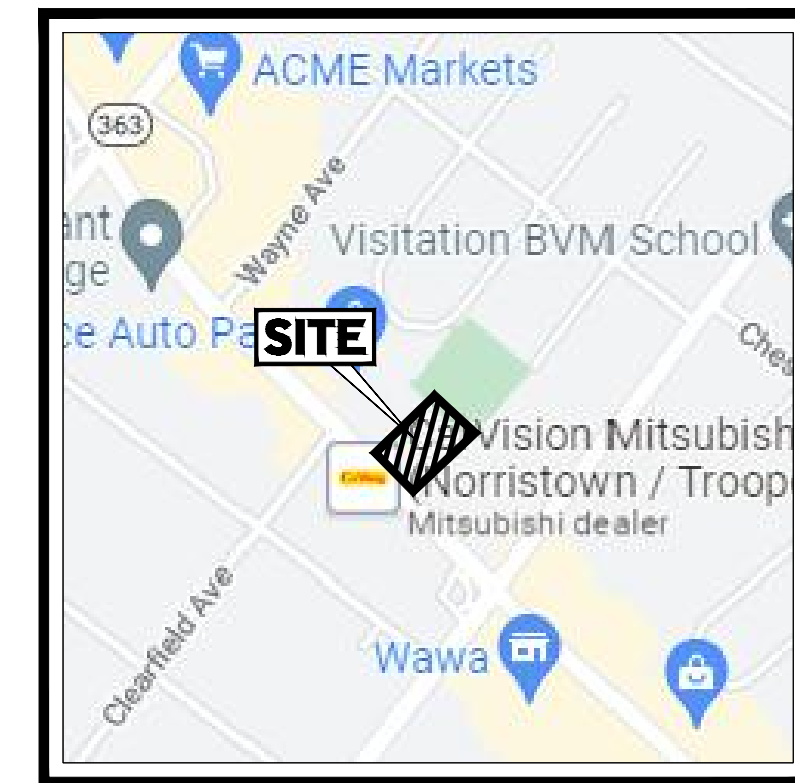
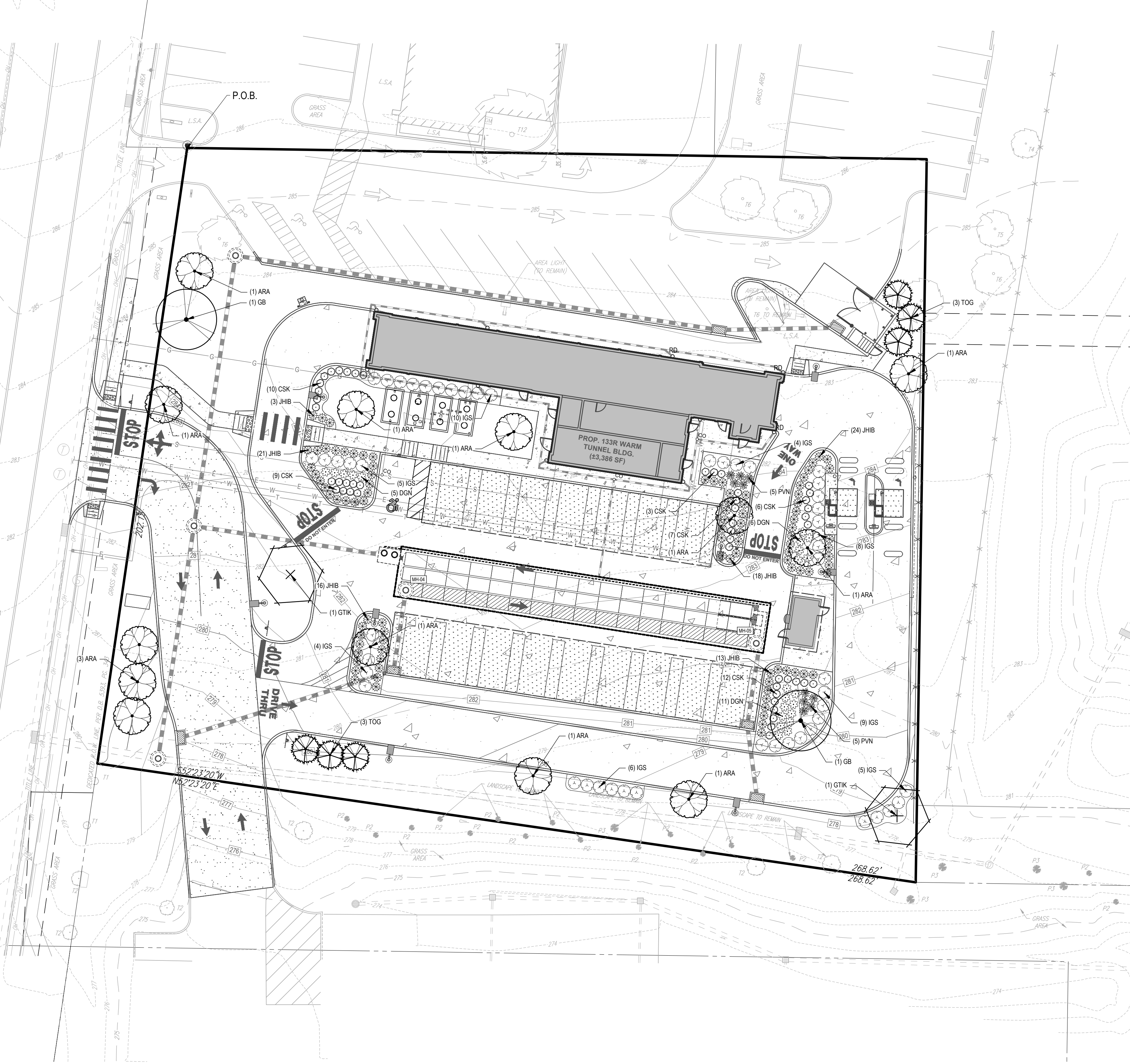
LABEL	CALCTYPE	Units	AVG	MAX	Min	AVGMIN	MAXMIN
ALL POINTS	ILLUMINANCE	Fc	0.40	4.0	0.0	N.A.	N.A.
DRIVE THRU	ILLUMINANCE	Fc	1.88	4.0	0.5	3.76	8.00
PARKING	ILLUMINANCE	Fc	2.22	3.6	0.8	2.78	4.50



R:\01\PP213264\CADD\DRAWINGS\PLAN SET\CIVIL SITE PLAN\PP213264-L107-CA.dwg

RIDGE PIKE
 (A.K.A. PENNSYLVANIA STATE HIGHWAY ROUTE 363)
 (A.K.A. MAIN STREET, A.K.A. RIDGE TURNPIKE ROAD)
 (A.K.A. S.R. 4031, A.K.A. L.R. 140)
 (51' WIDE LEGAL R.O.W.)

7.50' MIN. WIDE
 ASPHALT ROADWAY



SITE LOCATION MAP
SCALE: 1"=1000'
SOURCE: GOOGLE MAPS

COMPLIANCE CHART

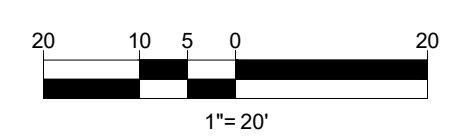
SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
ZONING 143-262 DIMENSIONAL REGULATIONS FOR ALL USES.	E.(3) A MINIMUM OF ONE THREE-INCH CALIPER TOWNSHIP-QUALIFIED STREET TREE AS REQUIRED IN THE LOWER PROVIDENCE TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, HAVING A MINIMUM OF SIX FEET HIGH PLANTED ON THE BACK SIDE OF THE PUBLIC SIDEWALK FOR EVERY 25 FEET OF THE PROPERTY LOT FRONTAGE WIDTH.	TOTAL LENGTH ALONG RIDGE PIKE = 165 ± LF (EXCLUDING DRIVEWAY WIDTH) REQUIRED: 165 / 25 = 6.6 OR 7 STREET TREES PROVIDED: 1 GB, 5 ARA, PLUS ONE EXISTING TREE TO REMAIN TO MEET THIS REQUIREMENT. (7 TREES)	COMPLIES
SALDO: 123-37 PARKING AND LOADING AREAS	4. A LANDSCAPE DESIGN STANDARDS, THE FOLLOWING STANDARDS APPLY TO ALL PARKING LOT LANDSCAPING: (1) THESE TREES SHALL BE PLANTED IN THE PLANTING STRIPS A MINIMUM OF 30 FEET AND A MAXIMUM OF 40 FEET APART. EACH LANDSCAPED ISLAND SHALL CONTAIN AT LEAST ONE CANOPY TREE. (2) THE MINIMUM SIZE OF TREES WHEN PLANTED SHALL BE BETWEEN FIVE FEET TO EIGHT FEET IN HEIGHT AND A CALIPER OF 2 1/2 INCHES FOR SHADE TREES AND EIGHT FEET IN HEIGHT FOR EVERGREENS	REQUIRED: 1 CANOPY TREE PER ISLAND PROVIDED: A CANOPY TREE HAS BEEN PROVIDED IN EACH ISLAND, WHERE FEASIBLE. WHERE TREES CONFLICT WITH UNDERGROUND UTILITIES, THE REQUIRED TREE HAS BEEN PLANTED IN CLOSE PROXIMITY.	COMPLIES
123-50 LANDSCAPING	A.(3) THE MINIMUM NUMBER OF TREES AND SHRUBS REQUIRED SHALL BE AS FOLLOWS: (a) ONE SHADE TREE AND ONE EVERGREEN TREE PER 5,000 SQUARE FEET OF PAVED AREA USED AS PARKING, LOADING AND DRIVEWAYS. (b) ONE FLOWERING OR EVERGREEN SHRUB PER 1,500 SQUARE FEET OF PAVED AREA USED AS PARKING, LOADING AND DRIVEWAYS. (c) GROUND COVER PLANTS, GROWING TO LESS THAN ONE FOOT IN HEIGHT, SHALL NOT COUNT TOWARD THE MINIMUM REQUIRED NUMBER OF PLANTS. B.(2) ALONG PROPERTY LINES ABUTTING SIMILAR MULTIFAMILY OR NONRESIDENTIAL DISTRICTS OR DEVELOPMENTS, THE MINIMUM NUMBER OF TREES AND SHRUBS SHALL BE AS FOLLOWS: (a) ONE SHADE TREE PER 100 FEET OF PROPERTY LINE. (b) ONE EVERGREEN TREE AND ONE FLOWERING TREE OR THREE FLOWERING OR EVERGREEN SHRUBS PER 150 FEET OF PROPERTY LINE.	TOTAL PAVED AREA = 22,205 ± SF REQUIRED: 22,205 / 5,000 = 4.44 OR 5 SHADE TREES 22,205 / 1,500 = 14.80 OR 15 SHRUBS PROVIDED: 4 ARA, 1 GB (5 SHADE TREES); 5 TOG (5 EVERGREEN TREES); 15 IGS (15 SHRUBS) LENGTH ALONG NORTHWEST PROPERTY LINE = 240 ± LF REQUIRED: 240 / 100 = 2.4 OR 3 TREES (240 / 150) x 3 = 4.88 OR 5 SHRUBS PROVIDED: NONE (EXISTING NON-CONFORMITY) LENGTH ALONG NORTHEAST PROPERTY LINE = 235 ± LF REQUIRED: 235 / 100 = 2.35 OR 3 TREES (235 / 150) x 3 = 4.68 OR 5 SHRUBS PROVIDED: 5 IGS (5 SHRUBS); 1 ARA, 1 GTK, PLUS ONE EXISTING SHADE TREE TO REMAIN TO MEET THIS REQUIREMENT. (3 TREES) LENGTH ALONG SOUTHEAST PROPERTY LINE = 268 ± LF REQUIRED: 268 / 100 = 2.68 OR 3 TREES (268 / 150) x 3 = 5.36 OR 6 SHRUBS PROVIDED: 6 IGS (6 SHRUBS); 2 ARA, PLUS ONE EXISTING SHADE TREE TO REMAIN TO MEET THIS REQUIREMENT. (3 TREES)	COMPLIES
123-52 SHADE TREES	SHADE TREES SHALL BE PLANTED ALONG BOTH SIDES OF ALL NEW OR EXISTING STREETS AT INTERVALS OF NO LESS THAN 40 FEET AND NO MORE THAN 50 FEET, EXCEPT WHERE TREE MASSES HAVE BEEN PRESERVED WHERE SHADE TREES WOULD OTHERWISE BE LOCATED. TREES SHALL BE PLACED BACK OF THE RIGHT-OF-WAY LINE OF STREET, SO AS NOT TO INTERFERE WITH THE INSTALLATION AND MAINTENANCE OF SIDEWALKS, DRAINAGE FACILITIES AND/OR UTILITIES AND SHALL BE OF TWO-INCH CALIPER, BALLED AND SURKAPPED, AND GUARANTEED FOR 18 MONTHS AFTER PLANTING. SPECIES SELECTION SHALL BE AT THE DISCRETION OF THE BOARD OF SUPERVISORS OR AS RECOMMENDED BY THE PLANNING COMMISSION. THE TYPES OF SHADE TREES SHALL BE SUCH THAT WHEN GROWN TO FULL MATURITY THE TREES SHALL NOT IMPED THE UTILIZATION OF SOLAR ENERGY BY NEIGHBORING STRUCTURES.	PLANT MATERIAL PROVIDED FOR ZONING 143-262 E.(3), ABOVE.	COMPLIES

GENERAL NOTES:

- THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
- ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C., UNLESS OTHERWISE STATED ON THIS PLAN.
- SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
- IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCTS MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM.
- PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER ENGINEERING AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
- WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE: RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.

PLANT SCHEDULE

CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
ARA	13	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	2.5" CAL.	B&B
GB	2	GINKGO BILOBA 'PRINCETON SENTRY' (MALE ONLY)	PRINCETON SENTRY GINKGO TREE	2.5" CAL.	B&B
GTK	2	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
TOG	6	THUJA OCCIDENTALIS 'GREEN GIANT'	GREEN GIANT ARBORVITAE	6"	B&B
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CSK	47	CORNUS SERICEA 'KELSEY'	KELSEY DOGWOOD	15-18"	CONTAINER
DGN	22	DEUTZIA GRACILIS 'NKKO'	SLENDER DEUTZIA	18-24"	CONTAINER
IGS	51	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	30" MIN.	CONTAINER
JHB	95	JUNIPERUS HORIZONTALIS 'MONBER'	ICEE BLUE JUNIPER	15-18" SPRD	CONTAINER
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
PVN	10	PANICUM VIRGATUM 'NORTH WIND'	NORTHWIND SWITCH GRASS	1 GAL.	CONTAINER



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 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG
2	01/05/2023	PER COMPLETENESS REVIEW	SU
3	01/27/2023	PER PENNDOT COMMENTS	RG

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LAND DEVELOPMENT DOCUMENTS
 FOR
TIDAL WAVE AUTO SPA STORE #004

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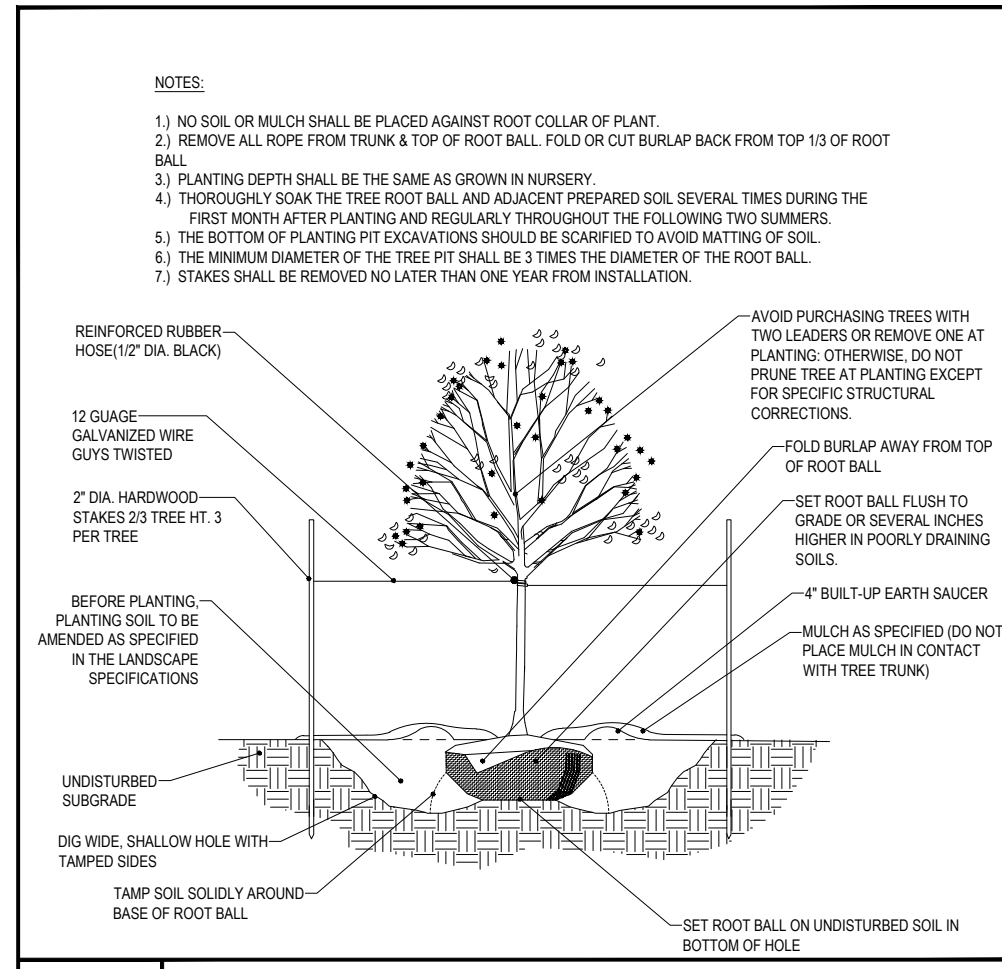
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LANDSCAPE PLAN

SHEET NUMBER:
C-702

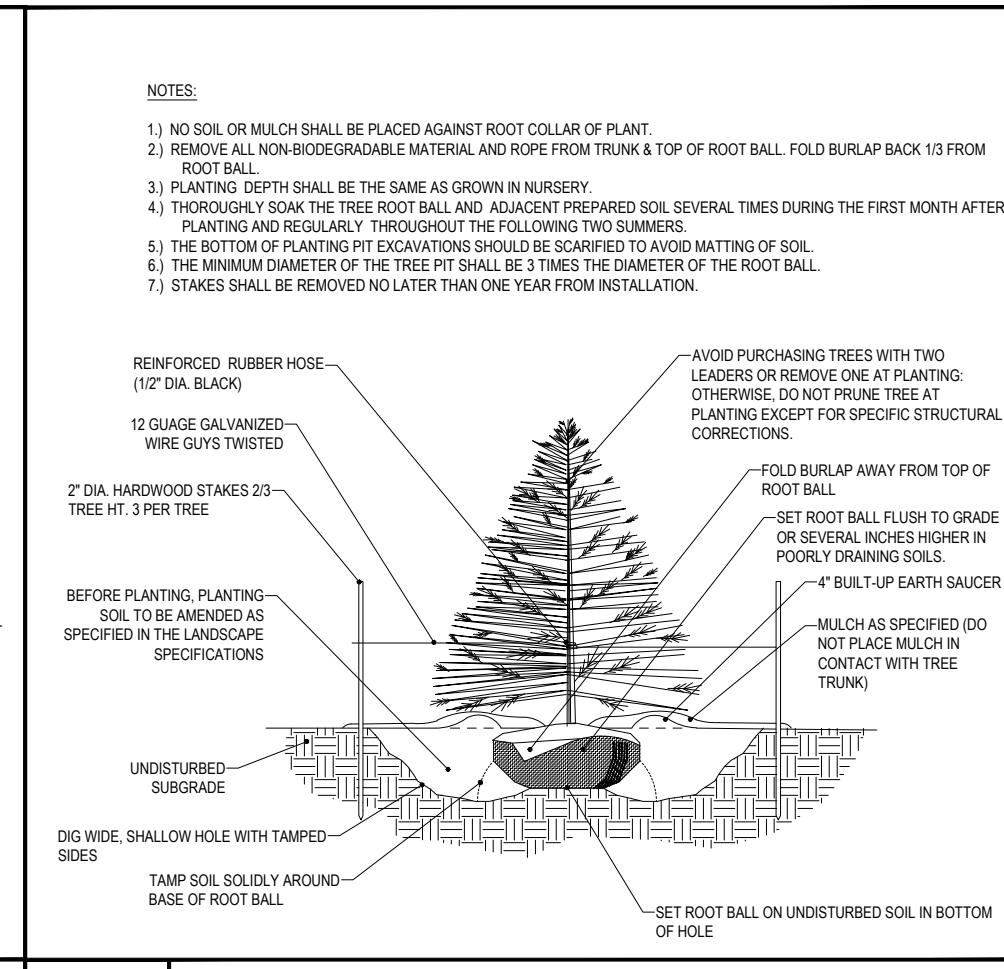
REVISION 3 - 01/27/2023

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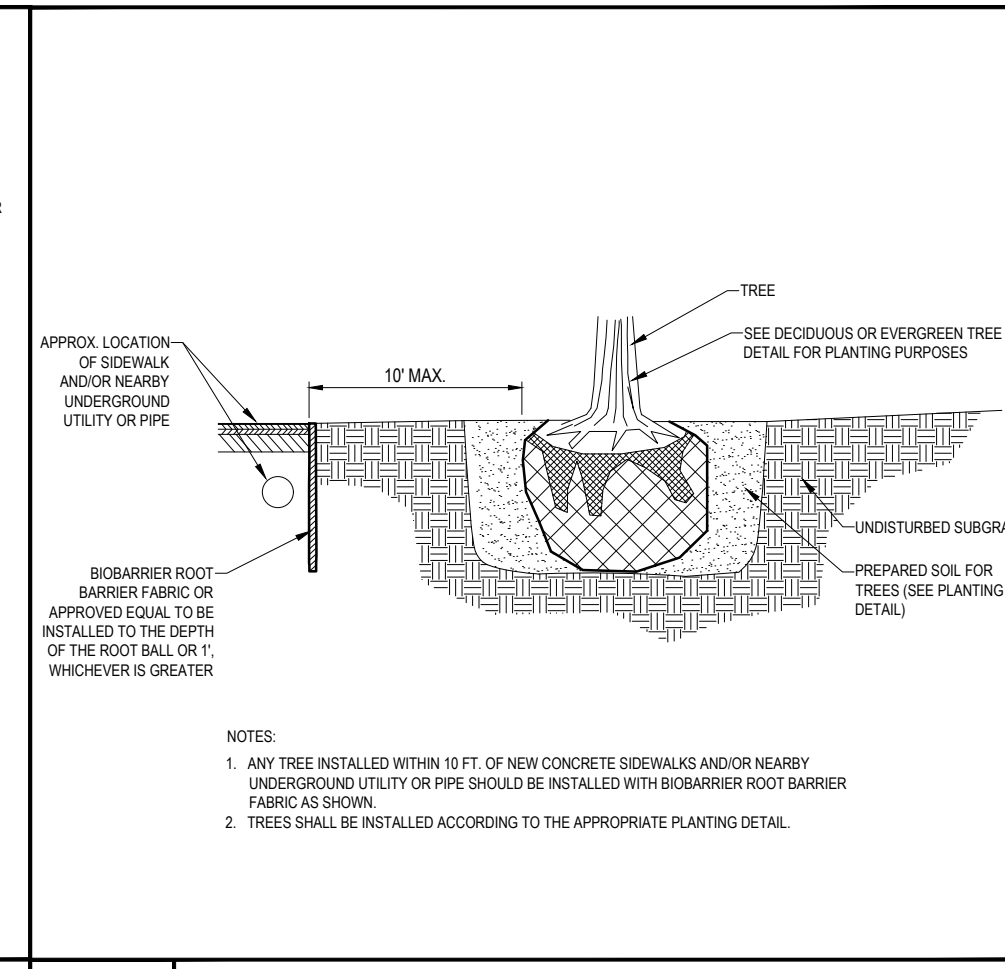
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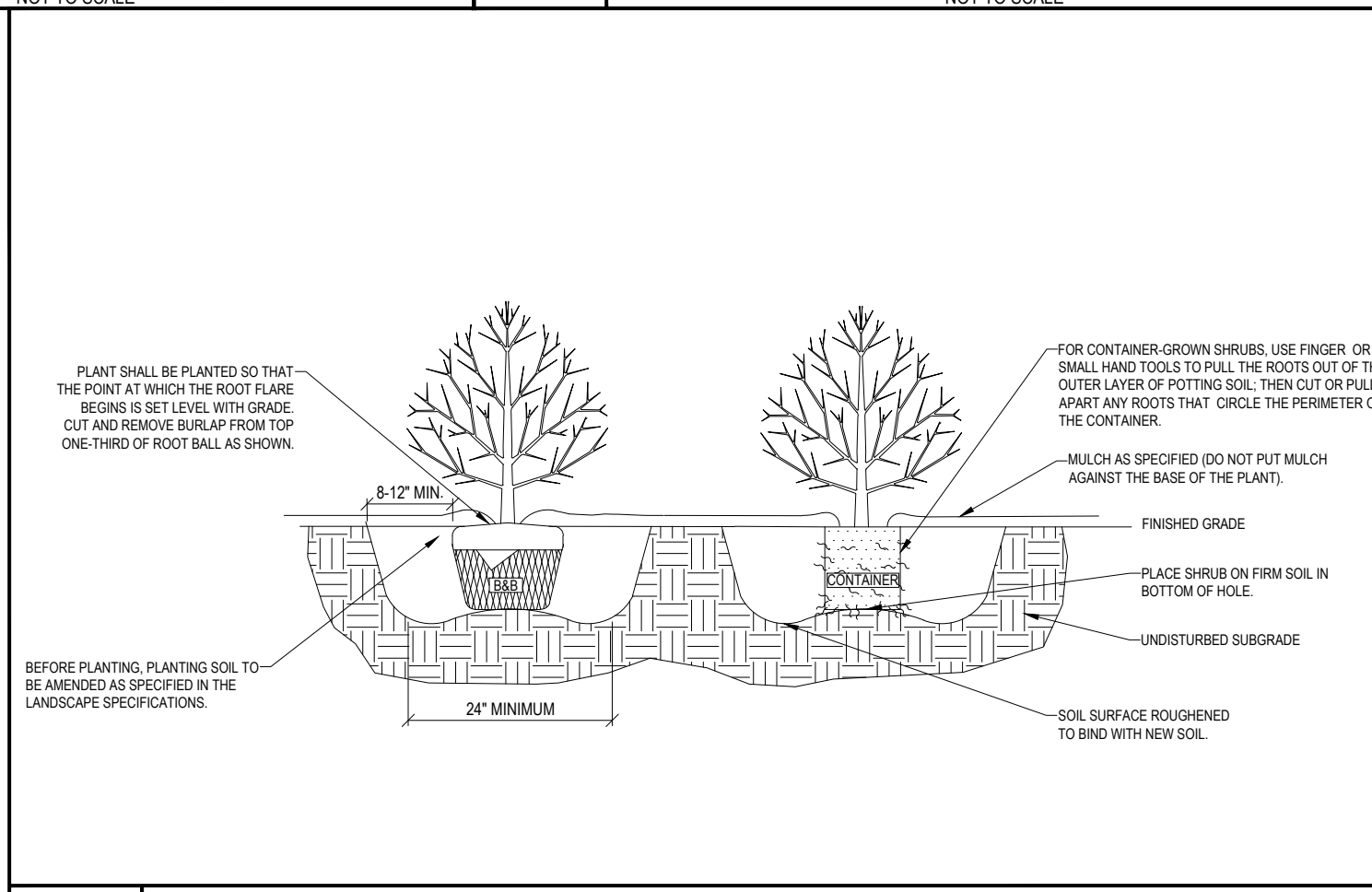
L-3 STAKED DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



L-4 STAKED EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



L-12 BIOBARRIER ROOT BARRIER DETAIL
NOT TO SCALE



L-5 SHRUB PLANTING DETAIL
NOT TO SCALE

1. SCOPE OF WORK:
THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SOAKING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS:
A. GENERAL: ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
B. TOPSOIL: NATURAL, FRAGILE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5% A PH RANGE BETWEEN 6.5 TO 7.5 SHALL BE USED. DEBRIS, ROCKS LARGER THAN ONE (1) INCH, WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
C. LAWN: LAWN AREAS SHALL BE SEEDED OR SODED ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO ITEM 18 BELOW.
D. MULCH: ALL PLANTING BEDS SHALL BE MULCHED WITH A 1\"/>

3. GENERAL WORK PROCEDURES:
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE TO BE LEFT IN CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATION:
A. BEFORE ANY OTHER PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DIGG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE CLIMB OF ANY DAMAGED BRANCH SHALL BE CUT AT THE BRANCH LINE. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AGAINST AND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

5. SOIL MODIFICATIONS:
A. CONTRACTOR SHALL ATAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.
B. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE CONTRACTOR DEPENDING ON SITE CONDITIONS.
C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR GUIDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
I. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS: THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6\"/>

6. FINISHED GRADING:
A. UNLESS OTHERWISE CONTRACTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE GRADING WITHIN THE DISTURBED AREA OF THE SITE.
B. CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1\"/>

7. PLANT MATERIAL:
A. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1) LATEST EDITION, AS PUBLISHED BY AMERICAN HORTICULTURAL SOCIETY AND LANDSCAPE ASSOCIATION.
B. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES.
C. PLANTS SHALL BE LEGALLY TAGGED WITH THE PROPER NAME AND TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
D. TREES WITH ABRASSION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1\"/>

8. PLANTING PITS:
A. ALL PLANTING PITS SHALL BE DIGG WITH LEVEL OR CONVEY BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED SOIL. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL: 1. 1 PART PEAT MOSS 2. 1 PART COMPOSTED COV MANURE BY VOLUME 3. 3 PARTS TOPSOIL BY VOLUME 4. 2 TABLETS PER 1 GALLON PLANT 5. 3 TABLETS PER 1 GALLON PLANT 6. 4 TABLETS PER 15 GALLON PLANT 7. LARGER PLANTS: 2 TABLETS PER 1\"/>

9. PLANTING PROCEDURE:
A. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT BALL BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
B. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MANTAINED TO A MINIMUM BRANCHING HEIGHT OF 7\"/>

10. TRANSPORTING (WHEN REQUIRED):
A. ALL TRANSPORTERS SHALL BE DIGG WITH INACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE SPECIFICATION 2.F. ABOVE)
B. IF PLANTS ARE TO BE STOCKPILED BEFORE RE-PLANTING, THEY SHALL BE HEADED IN WITH MULCH OR SOIL, INSULATED (WATERED) AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
C. PLANTS SHALL NOT BE DUG FOR TRANSPORTING BETWEEN APRIL 15TH AND JUNE 30TH.
D. UPON RE-PLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
E. TRANSPORTERS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
F. IF TRANSPORTERS (DE SHRUBS AND TREES LESS THAN SIX INCHES (6\"/>

11. WATERING:
A. ALL PLANTING AREAS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.
B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE, INSTEAD CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.
C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE:
A. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIALS SHALL BE CONDUCTED BY THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" IF MORE THAN 50% OF ITS BRANCHES ARE DEAD.
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPAIRING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF EXPOSED OR BARE AREAS.

13. CLEANUP:
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PLANTED AREAS ARE TO BE CLEANED.
B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

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REVISIONS

REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG	SU
2	01/05/2023	PER COMPLETENESS REVIEW	RG	SU
3	01/27/2023	PER REENNOT COMMENTS	RG	SU

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PROJECT No.: PP213264
DRAWN BY: RG
DATE: 08/29/2022
CHECKED BY: SU
CAD ID: PP213264-X-TTLB-LDVP

PROJECT: **PRELIMINARY/FINAL LAND DEVELOPMENT DOCUMENTS**
FOR
TIDAL WAVE AUTO SPA STORE #004

PROPOSED DEVELOPMENT
P.B. 50, PG. 39; UNIT 6, BLOCK 6
2619 RIDGE PIKE
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PA 19403

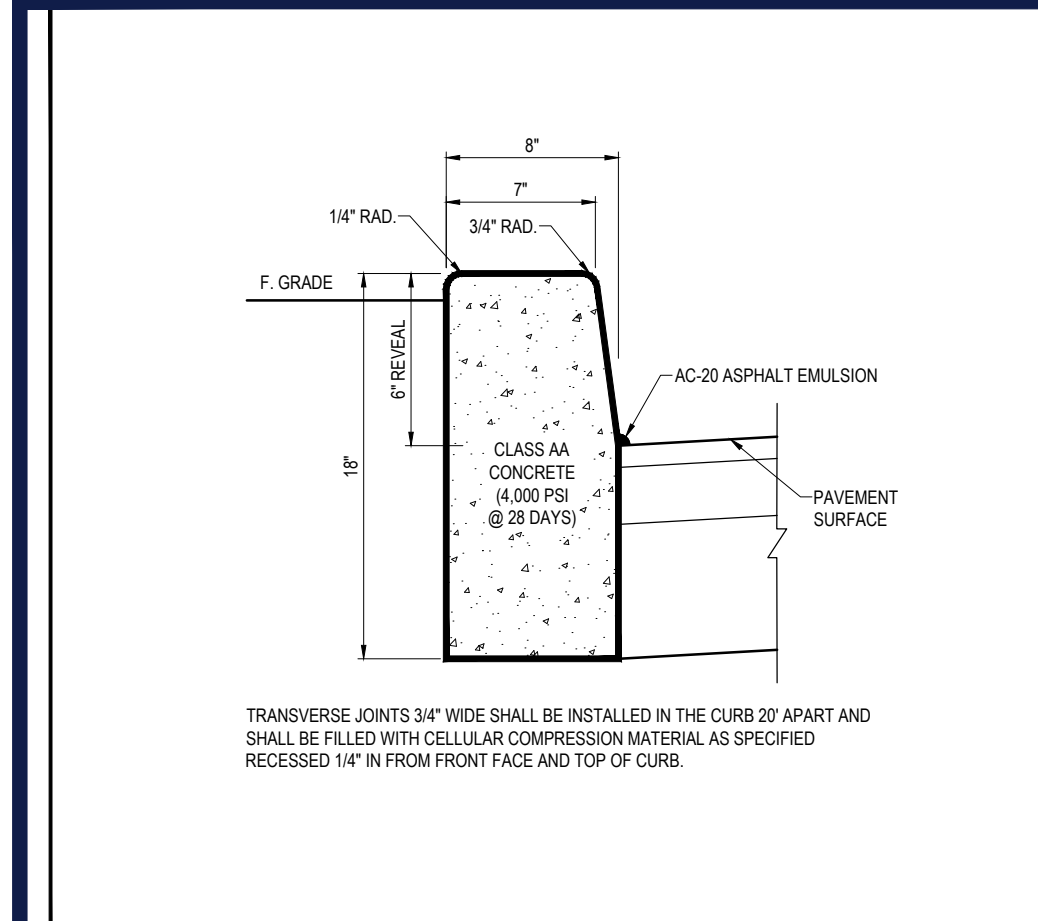
BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

D.T. NORTH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002729

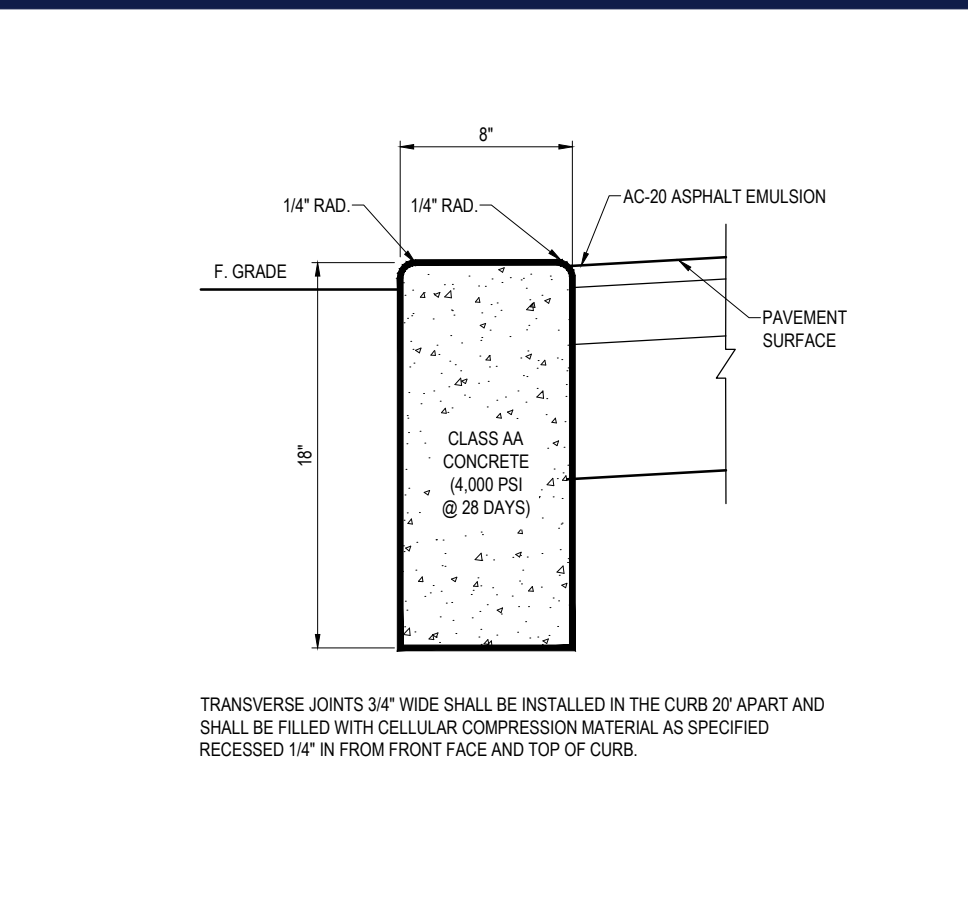
SHEET TITLE:
LANDSCAPE DETAILS

SHEET NUMBER:
C-703

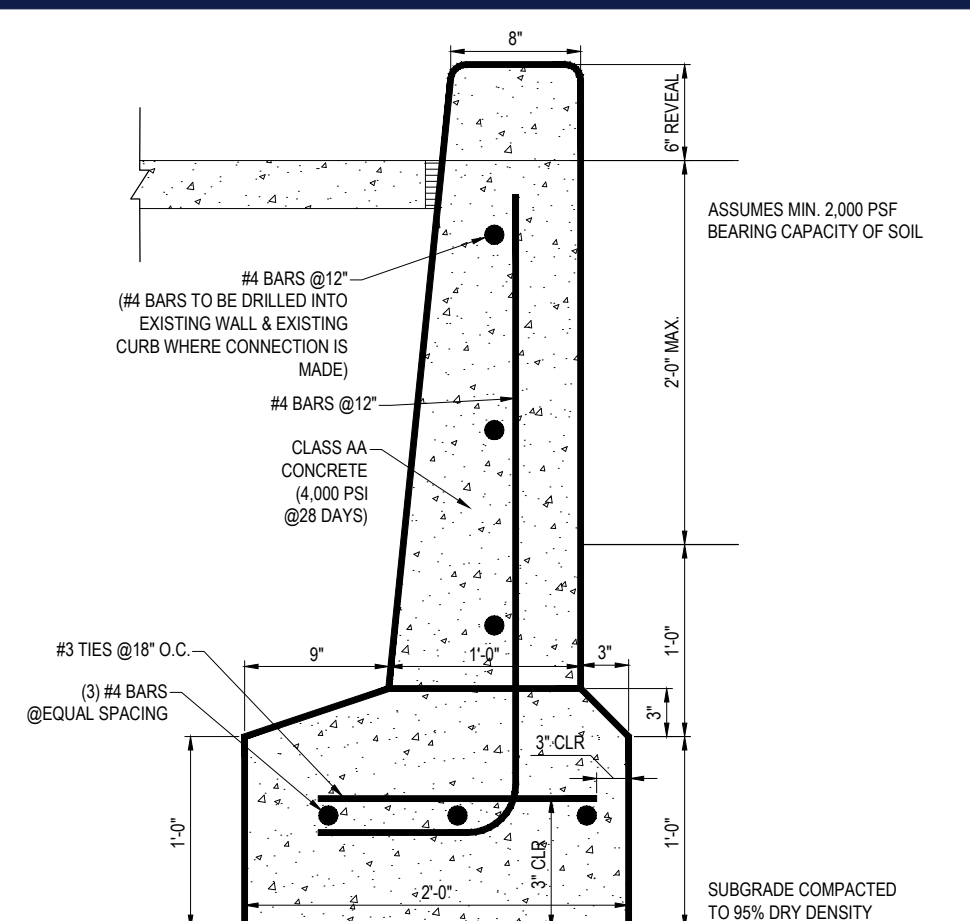
REVISION 3 - 01/27/2023



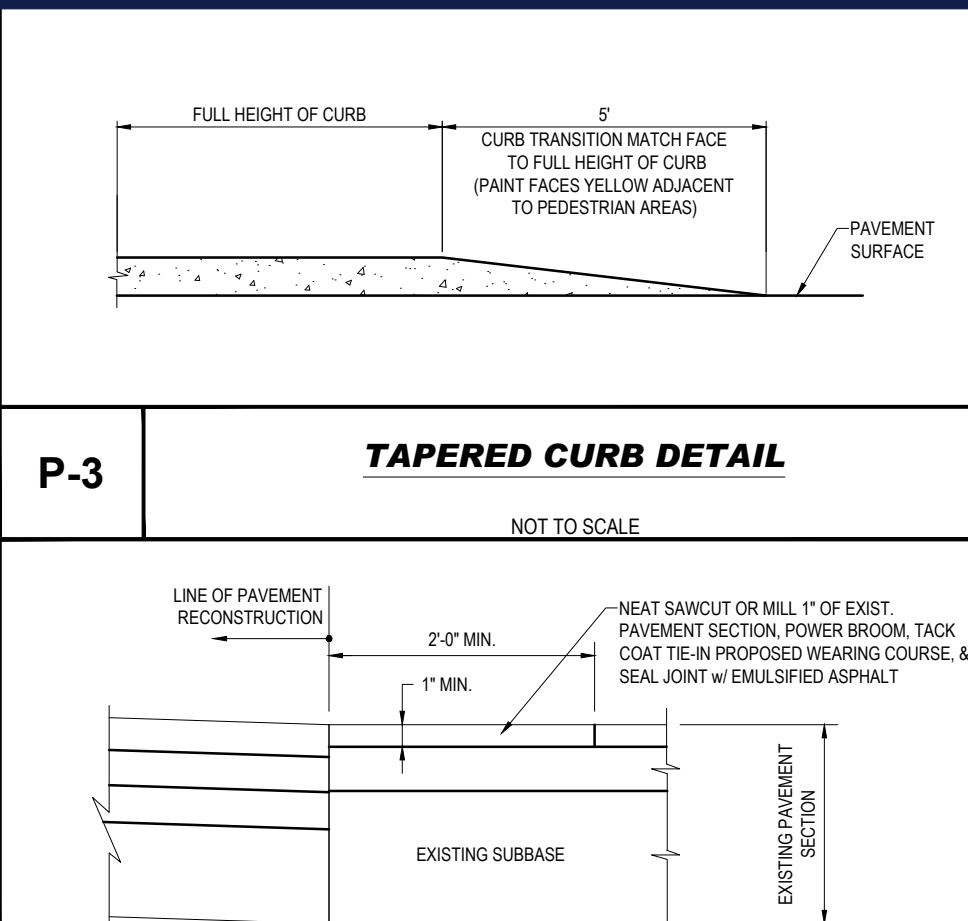
P-1 TYPICAL CONCRETE CURB DETAIL
NOT TO SCALE



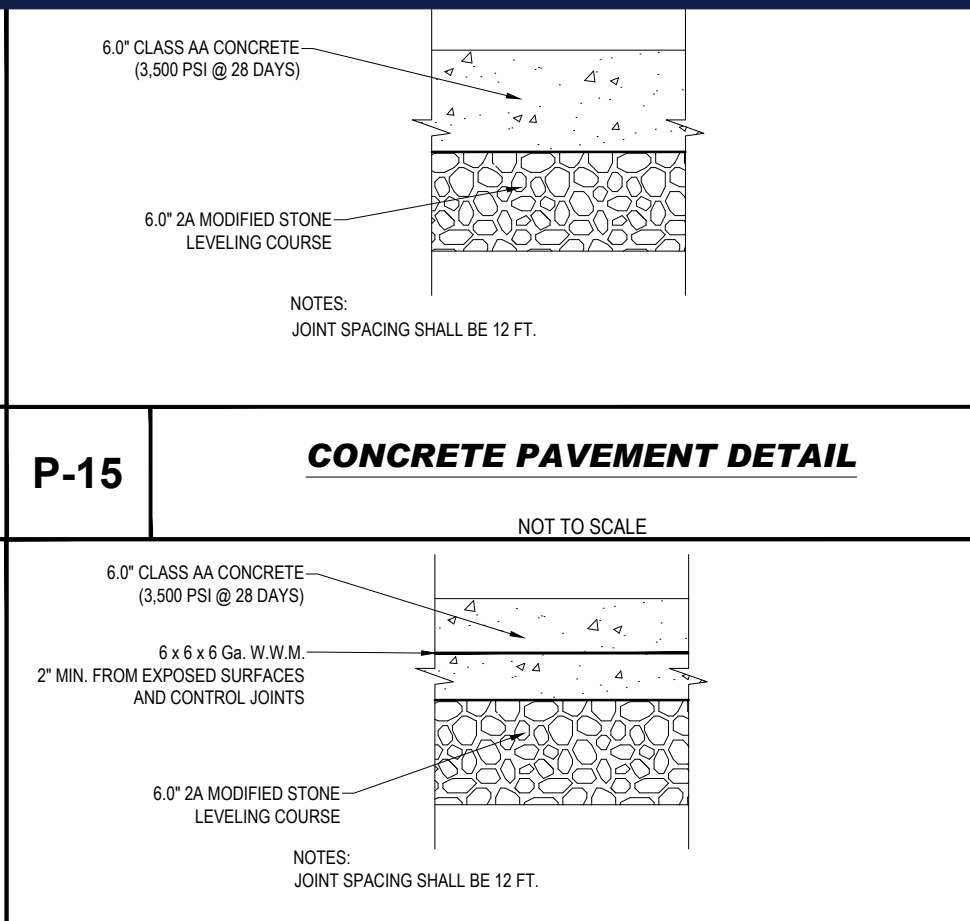
P-2 TYPICAL FLUSH CONCRETE CURB DETAIL
NOT TO SCALE



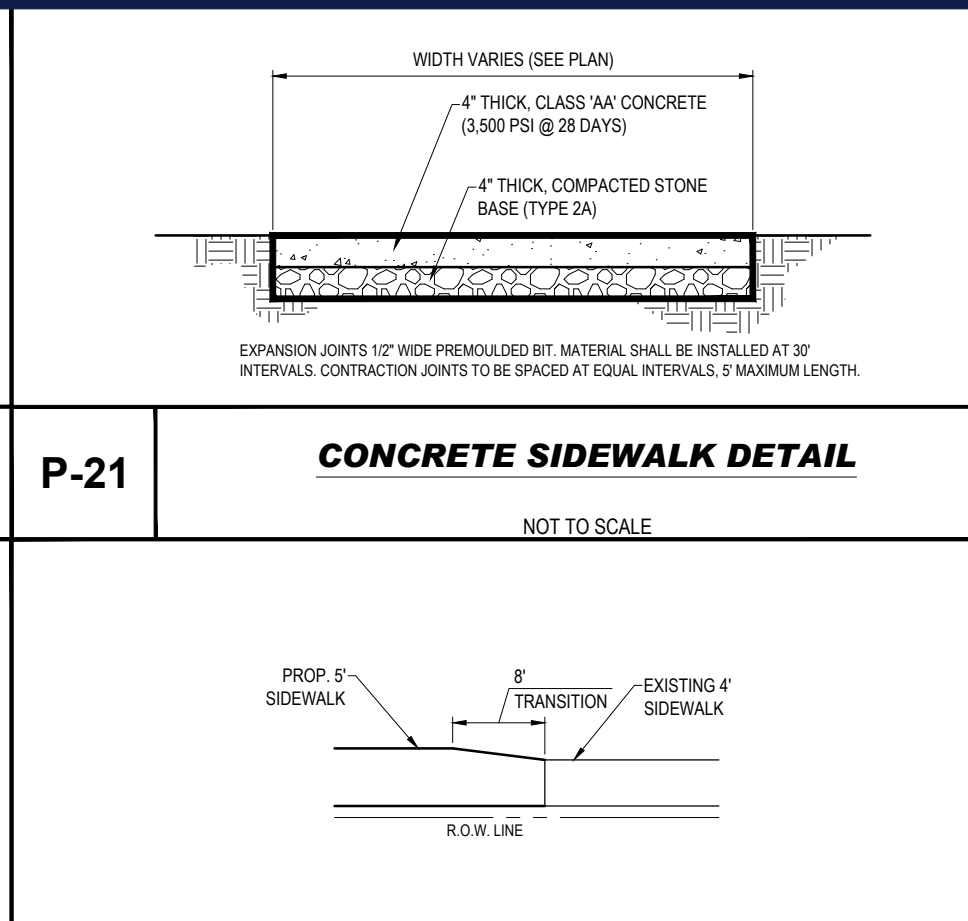
P-4 TYPICAL EXTENDED CONCRETE CURB DETAIL
NOT TO SCALE



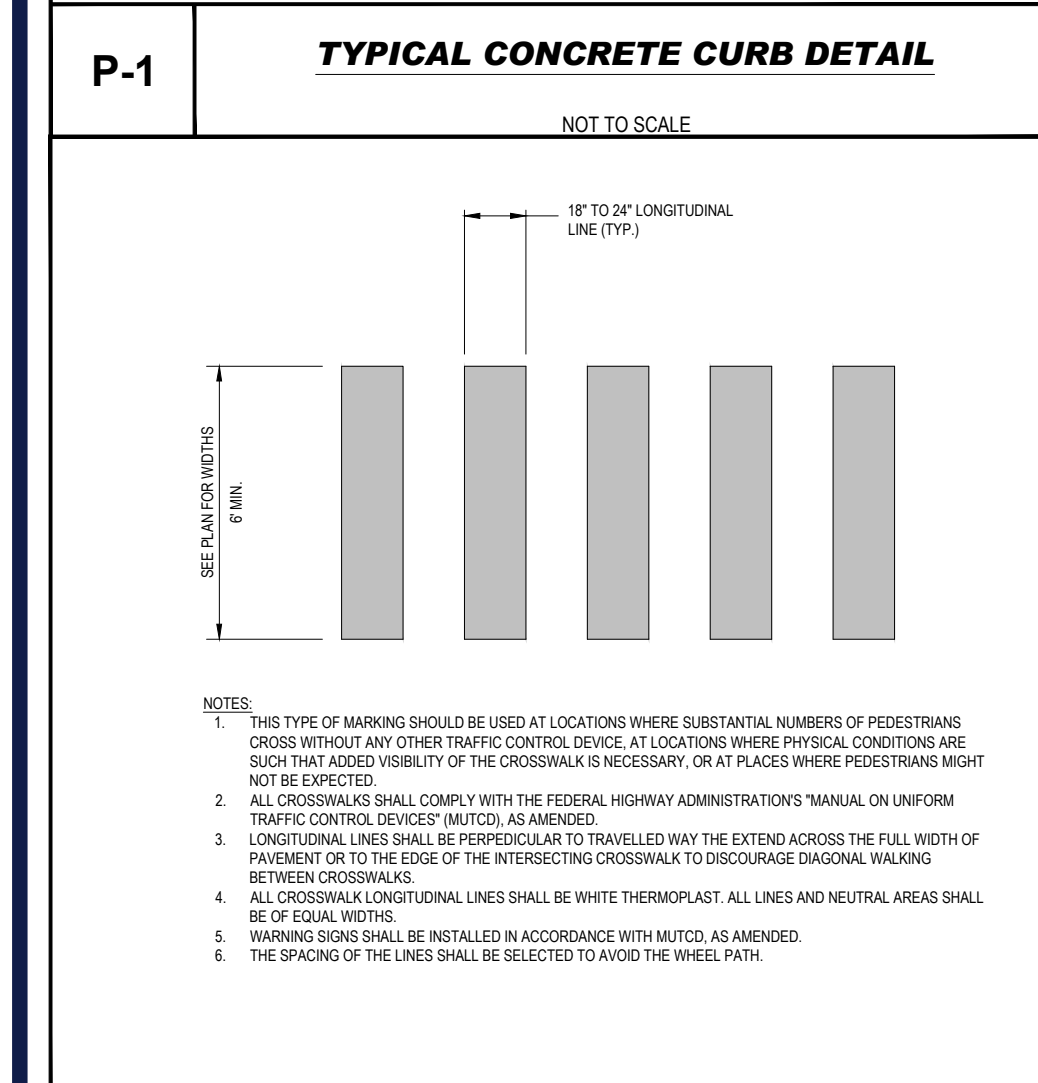
P-13 PAVEMENT TIE-IN DETAIL
NOT TO SCALE



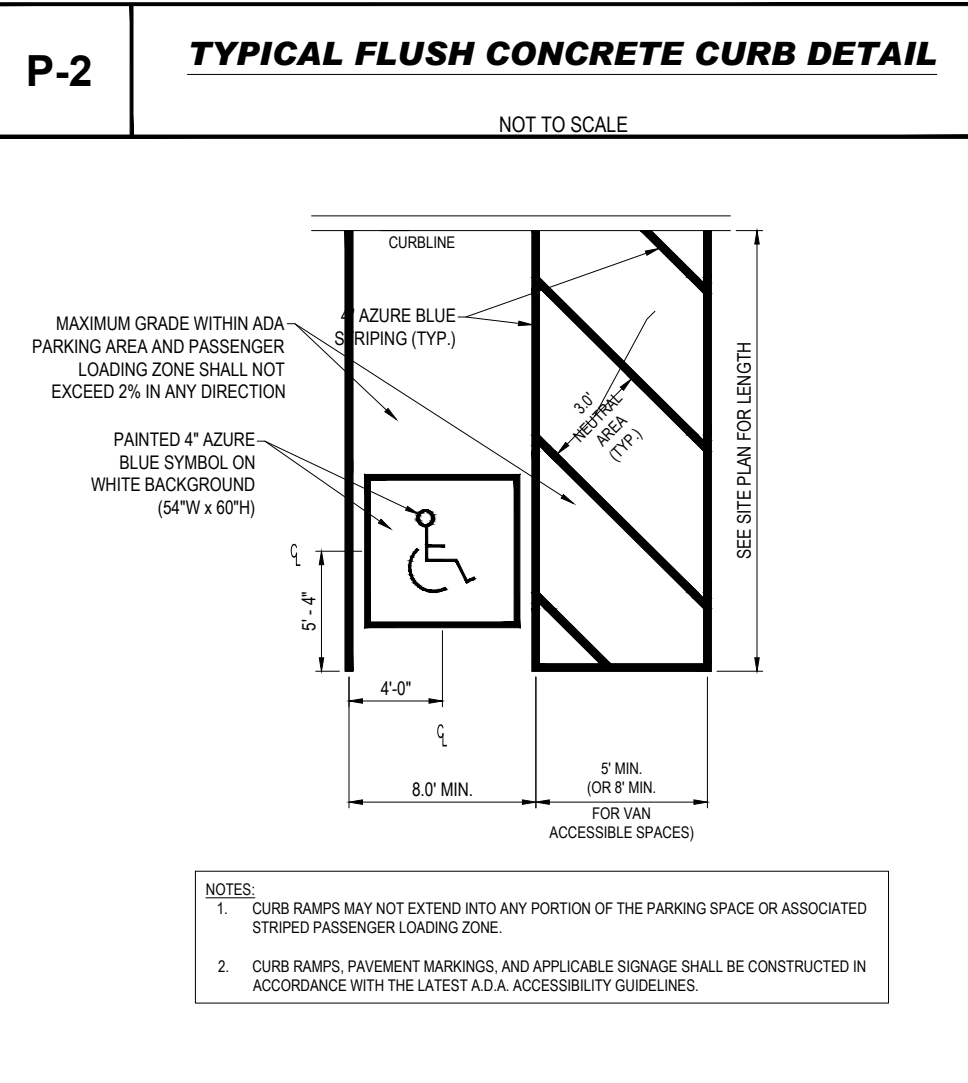
P-15 CONCRETE PAVEMENT DETAIL
NOT TO SCALE



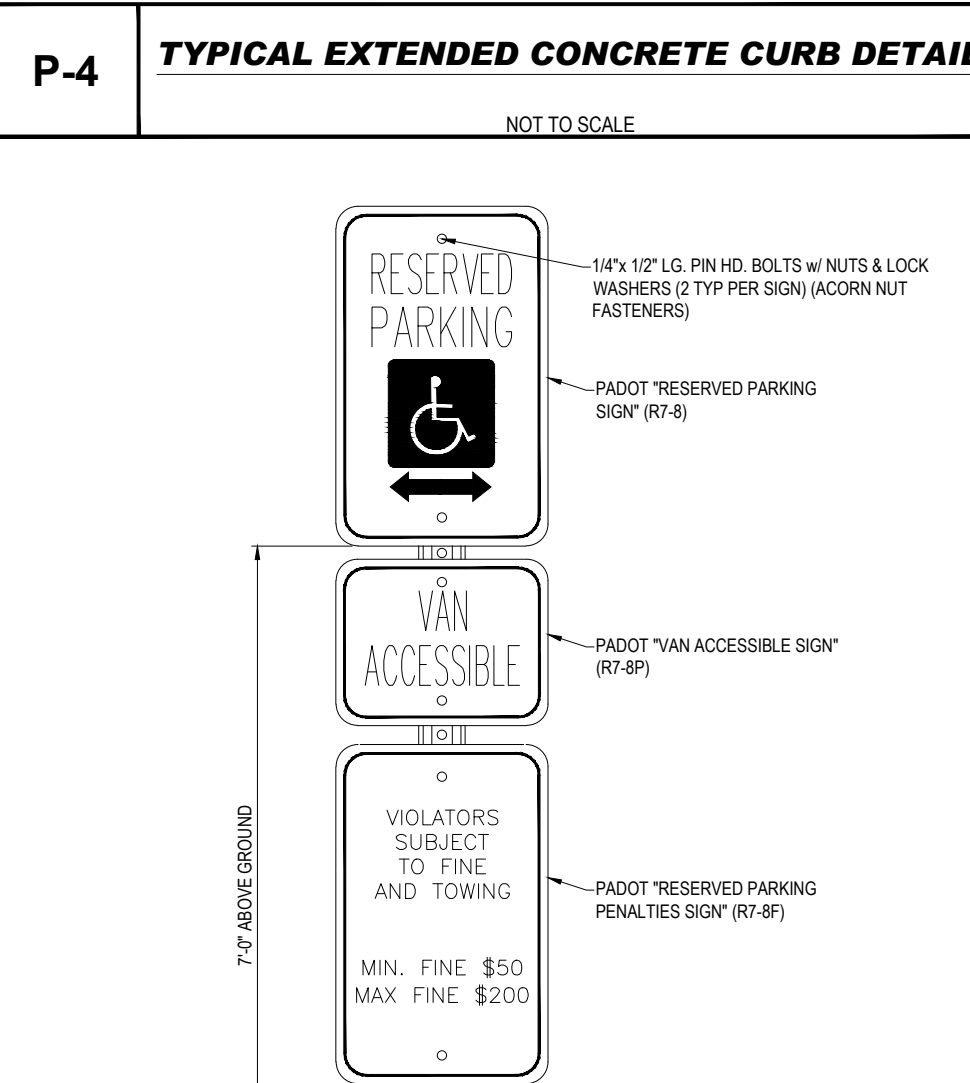
P-21 CONCRETE SIDEWALK DETAIL
NOT TO SCALE



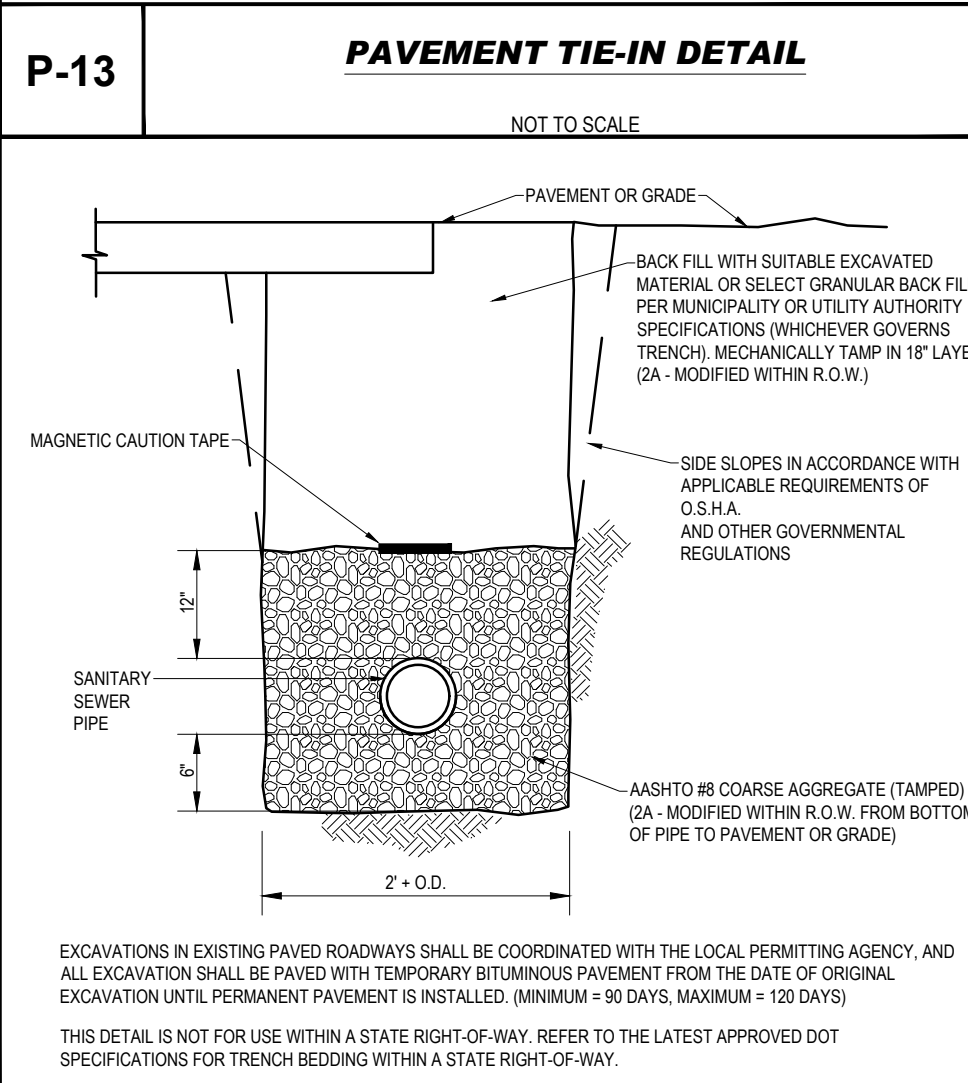
T-22 HIGH VISIBILITY CROSSWALK (PERPENDICULAR TO INTERSECTION)
NOT TO SCALE



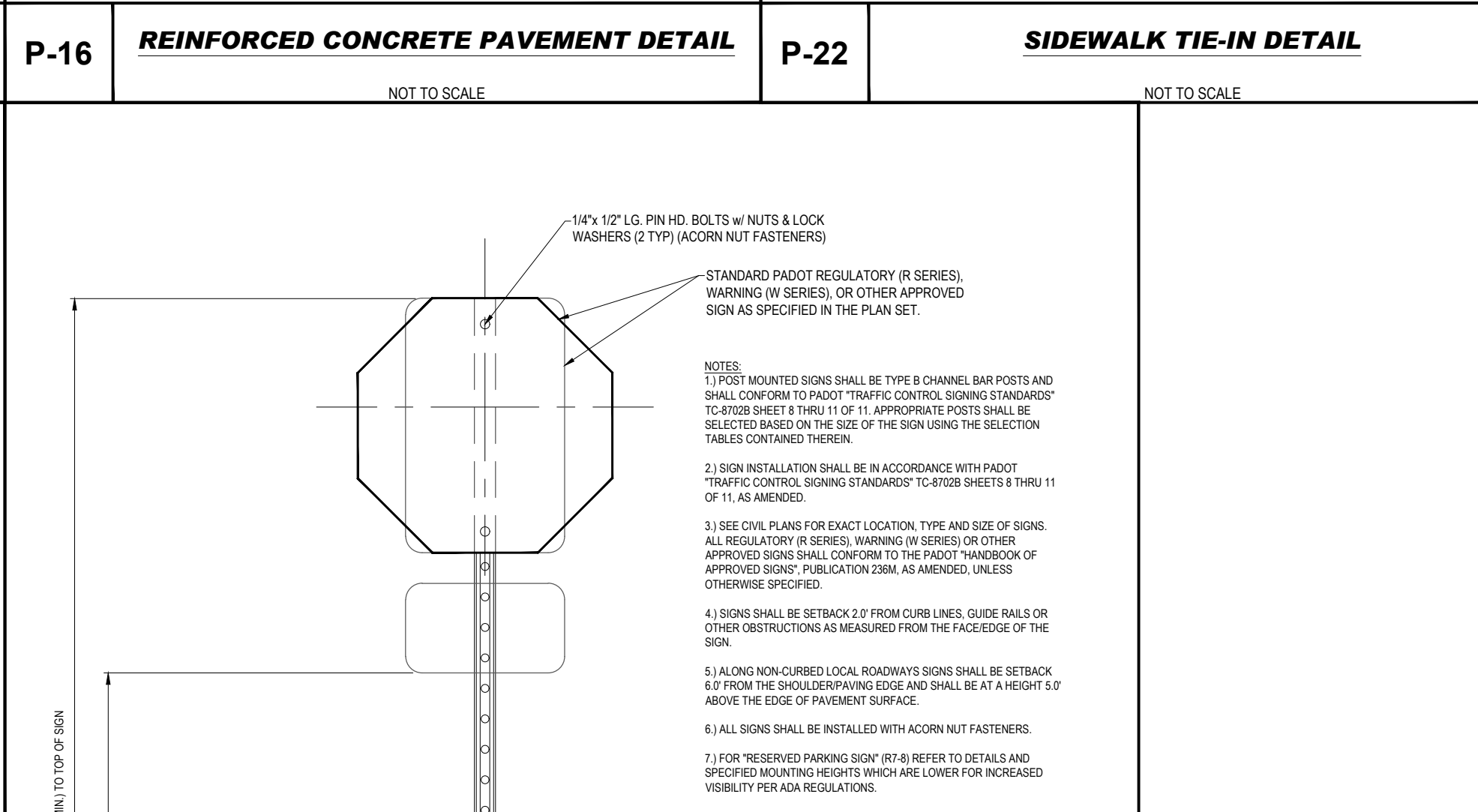
T-13 ADA ACCESSIBLE PARKING SPACE STRIPING (1 SPACE)
NOT TO SCALE



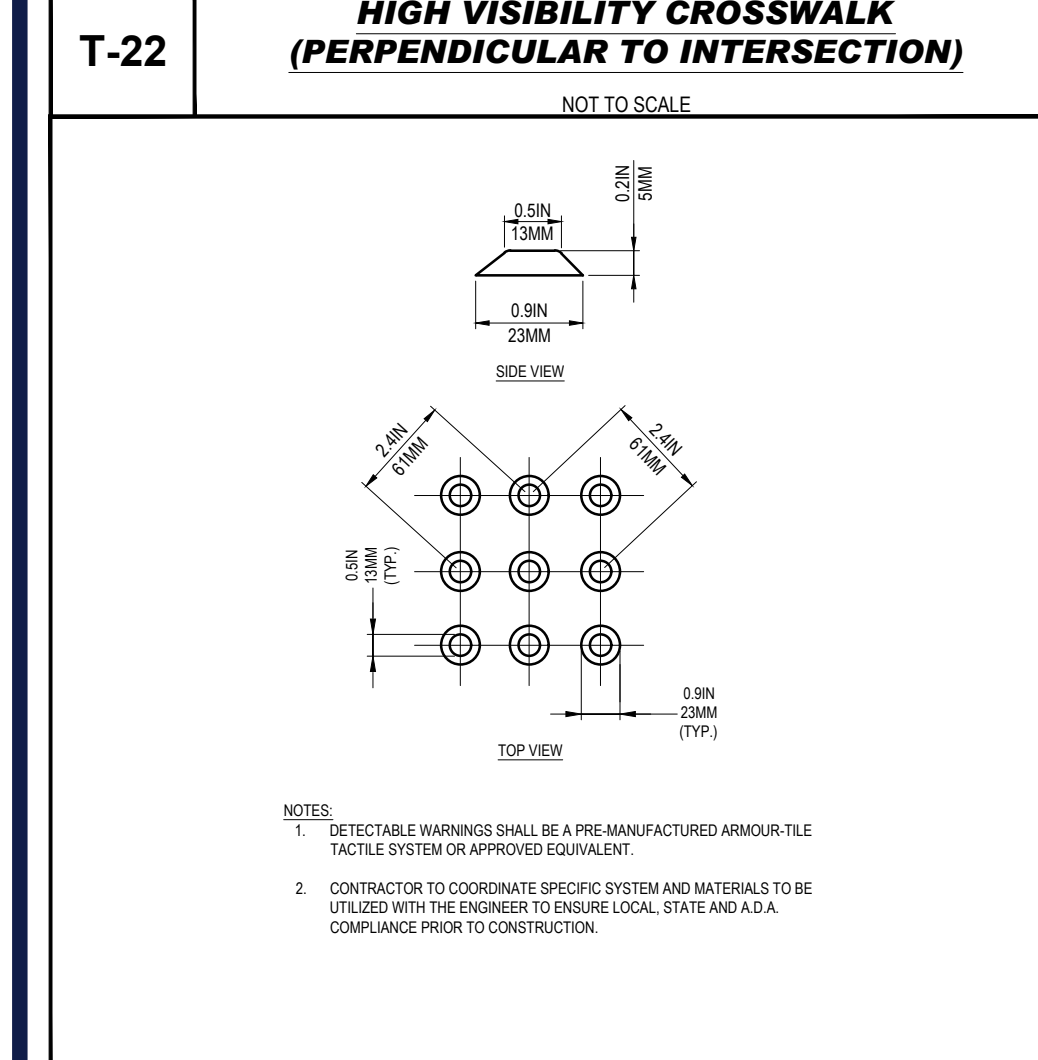
T-14 RESERVED PARKING SPACE WITH PENALTIES & VAN ACCESSIBLE SIGNS
NOT TO SCALE



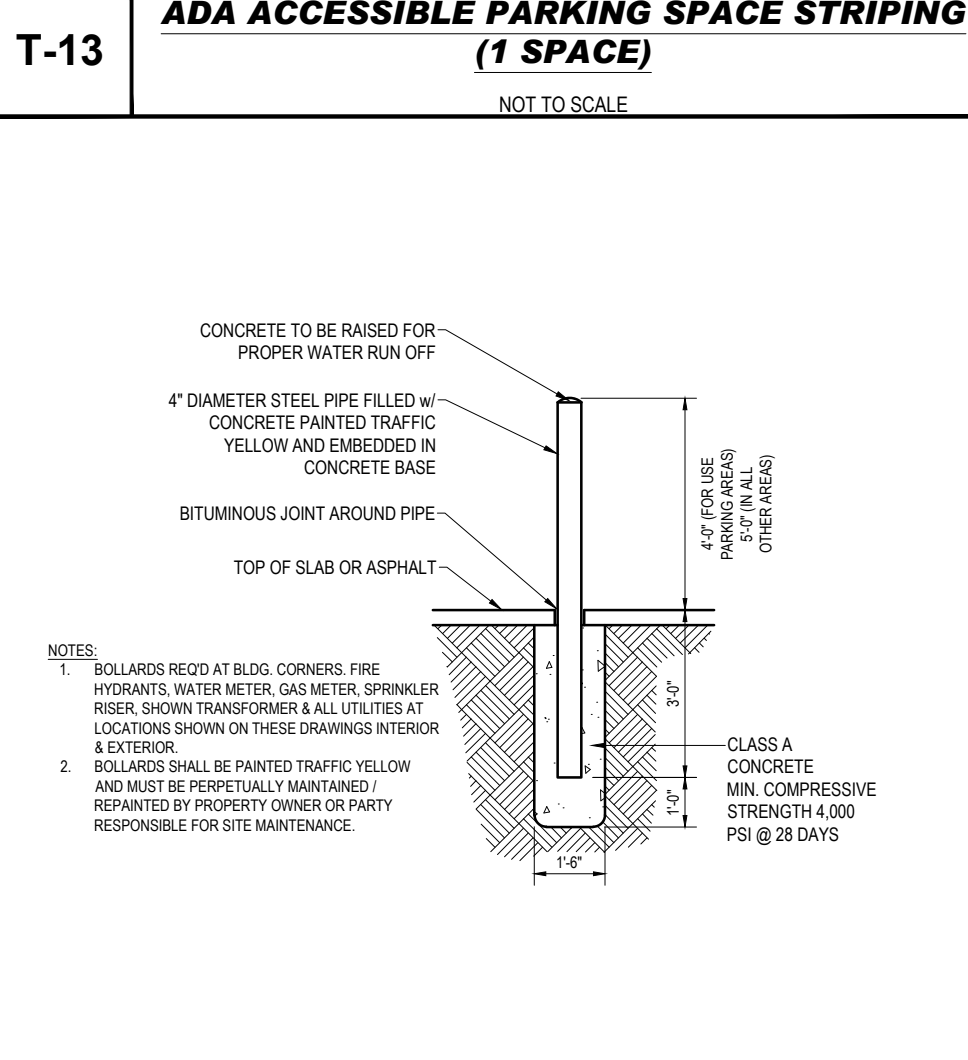
S-8 TRENCH BEDDING CLASSIFICATION (SANITARY MAIN)
NOT TO SCALE



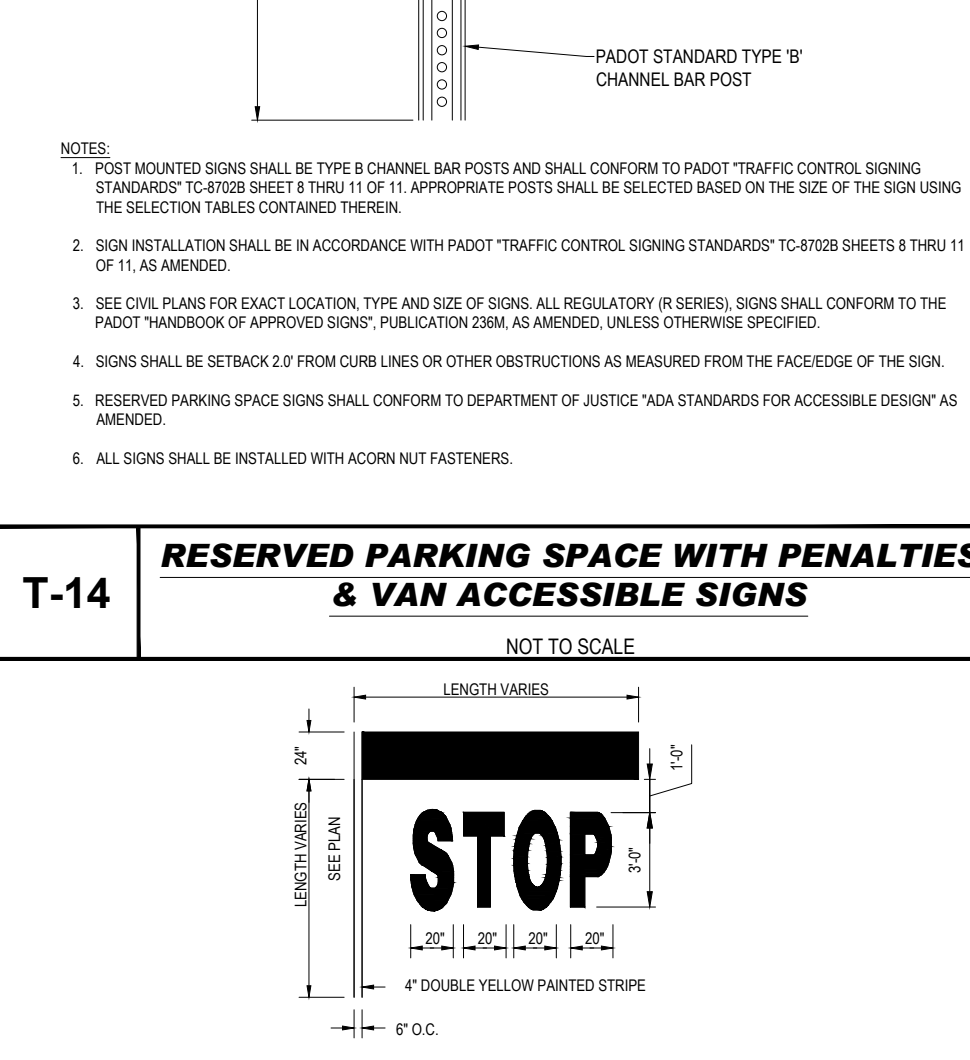
T-11 STANDARD POLE MOUNTED SIGN INSTALLATION DETAIL
NOT TO SCALE



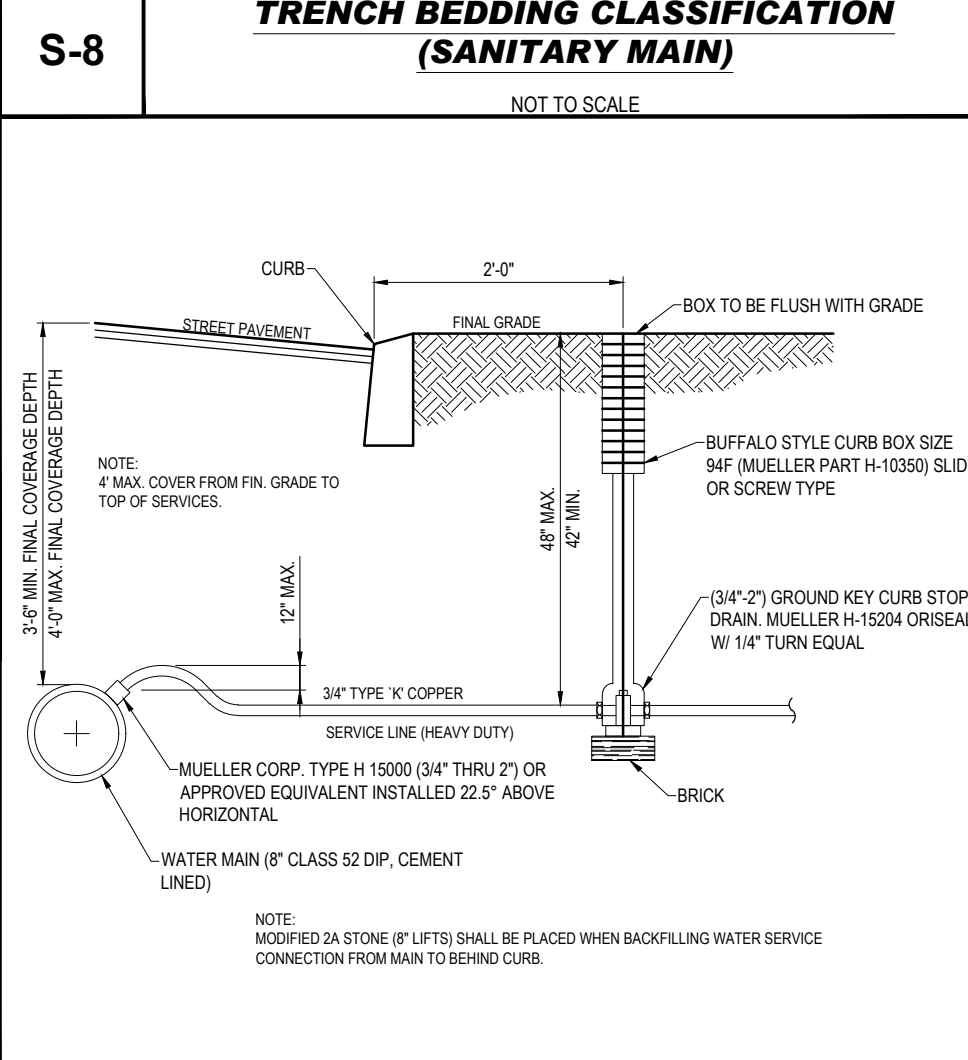
T-16 INDICATED DOME PATTERN FOR ADA DETECTABLE WARNING SURFACES (FOR USE IN DOT ROADWAYS)
NOT TO SCALE



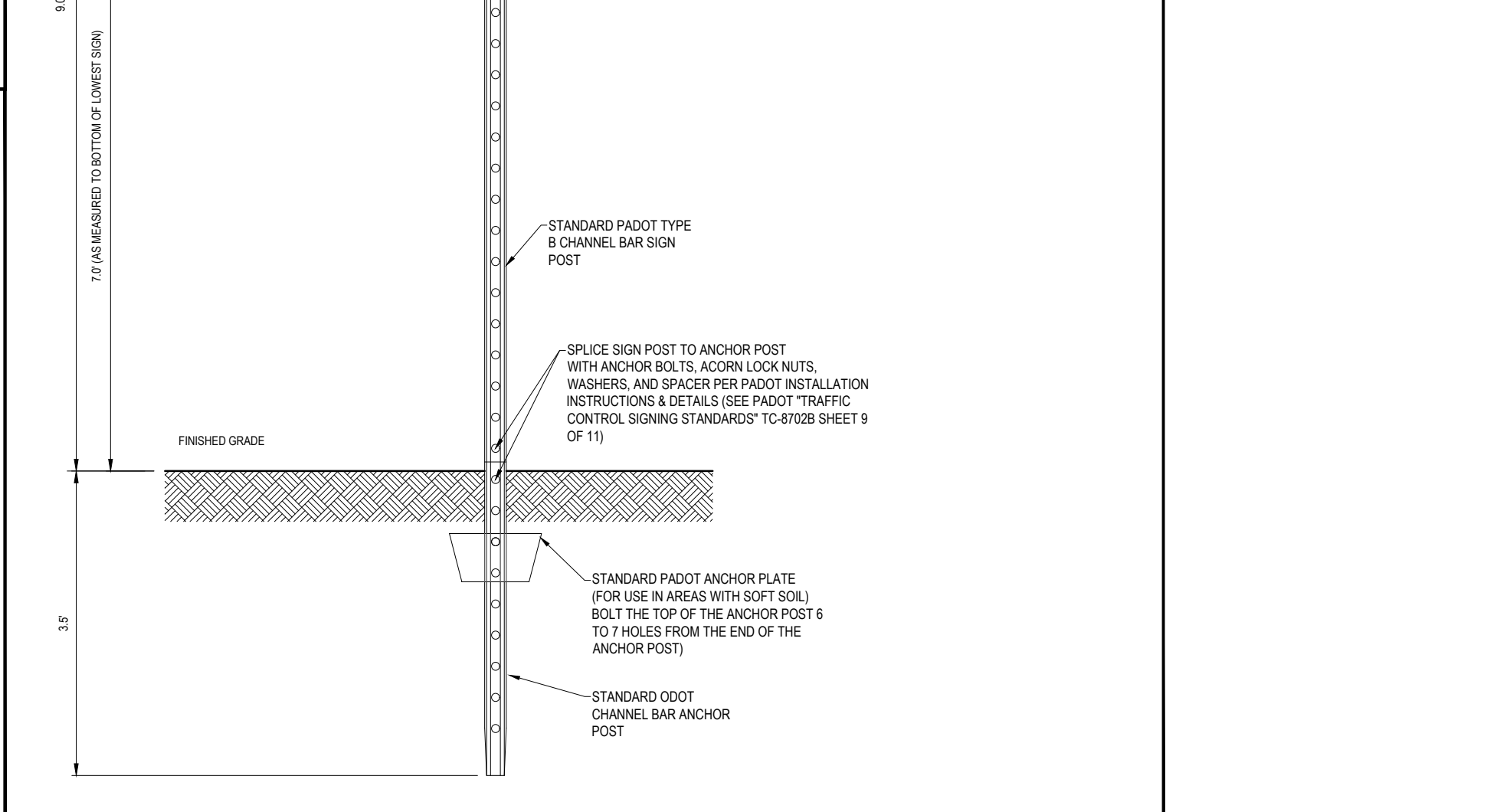
T-20 BOLLARD DETAIL
NOT TO SCALE



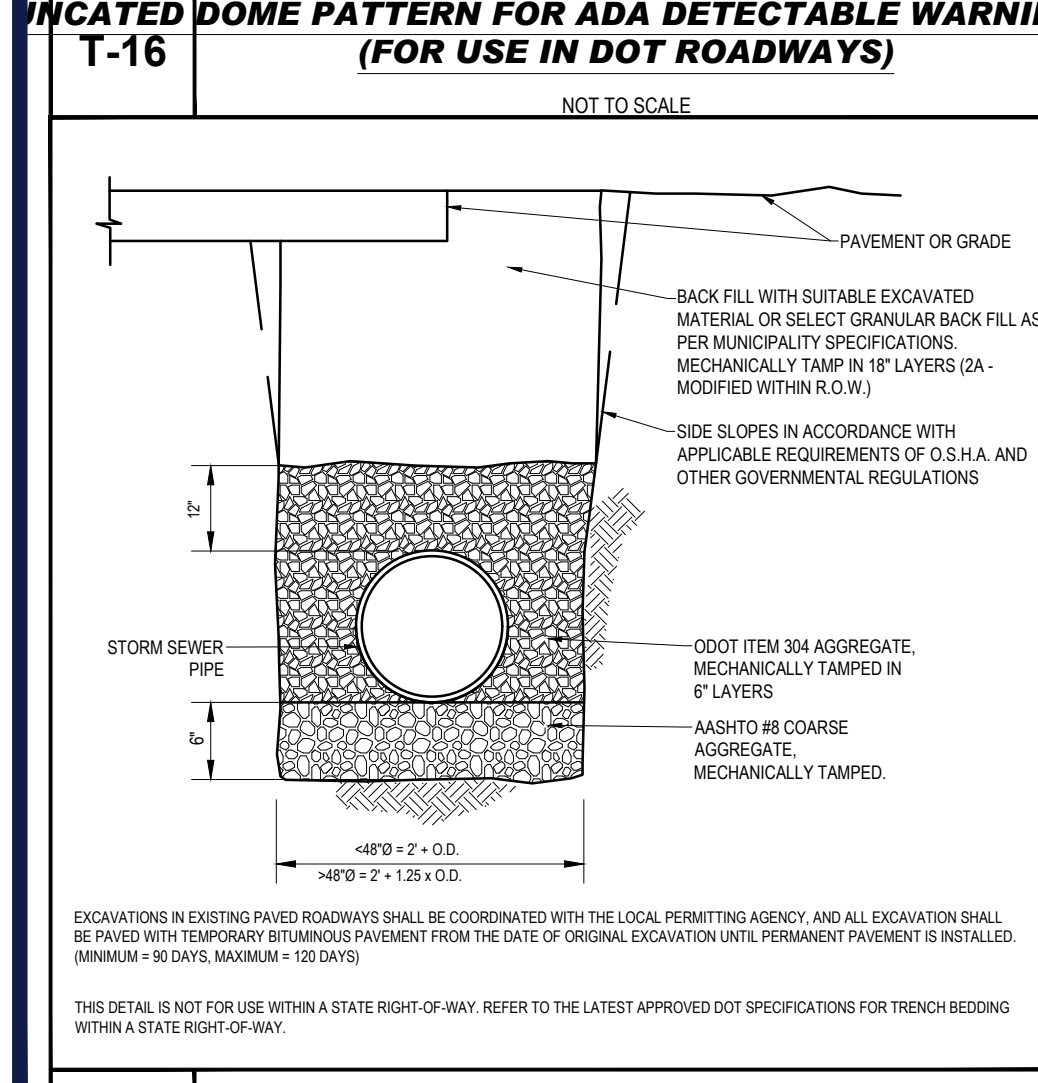
T-5 WHITE PAINTED STOP BAR & 'STOP' LETTERING DETAIL
NOT TO SCALE



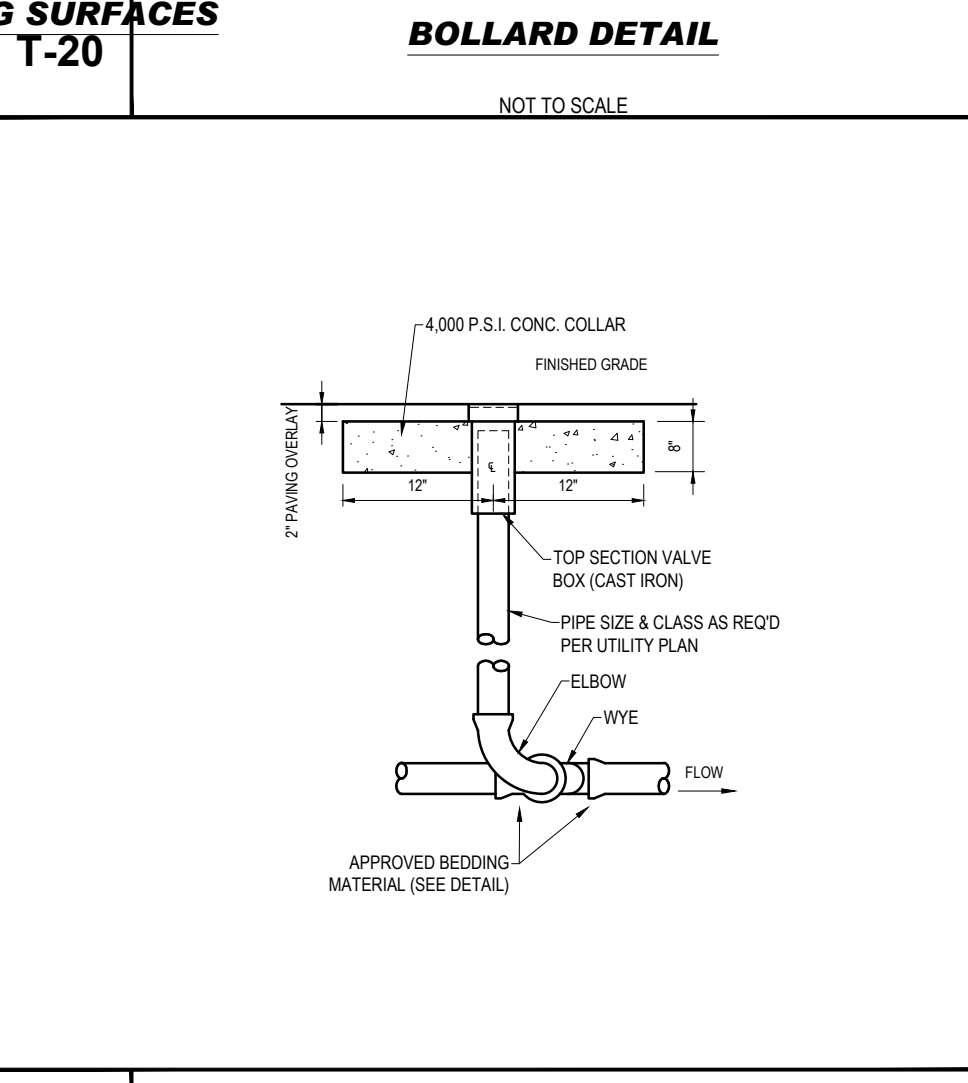
W-2 WATER SERVICES CONNECTION DETAIL
NOT TO SCALE



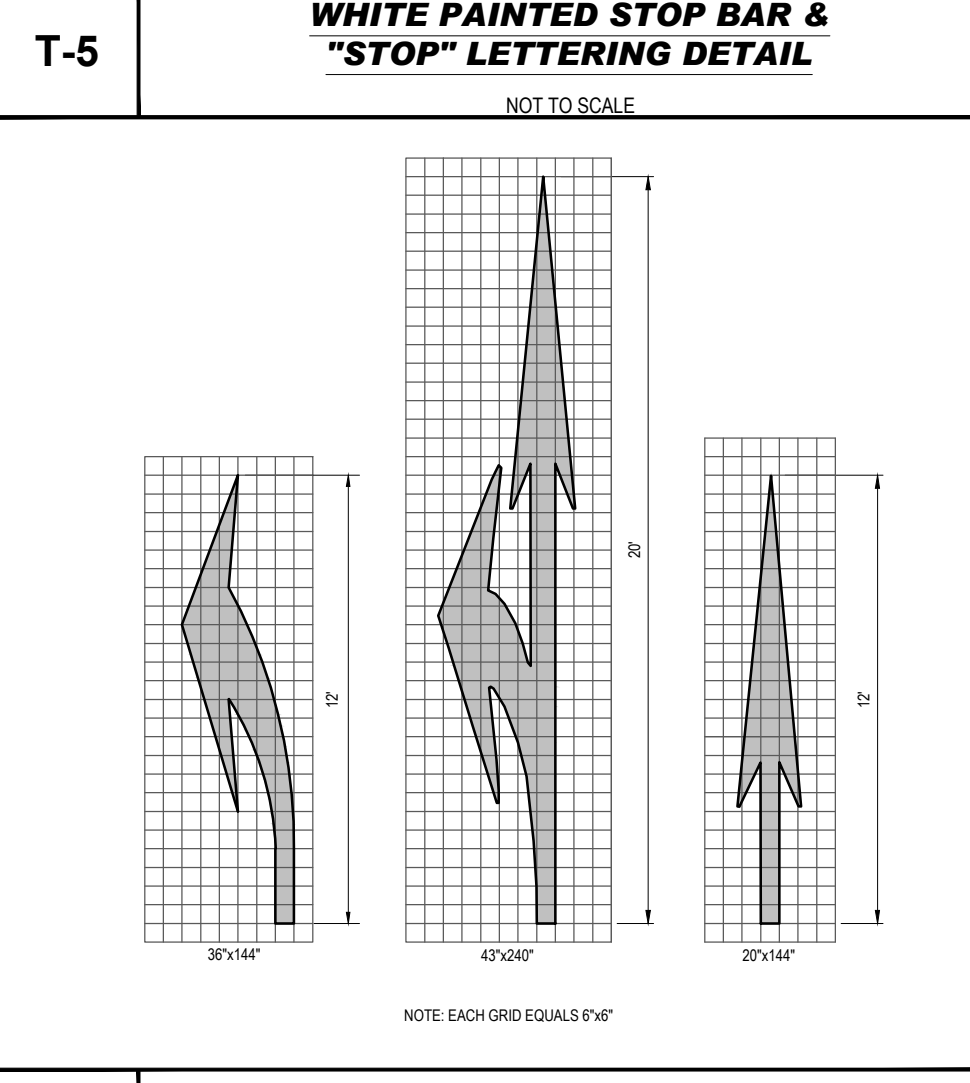
T-11 STANDARD POLE MOUNTED SIGN INSTALLATION DETAIL
NOT TO SCALE



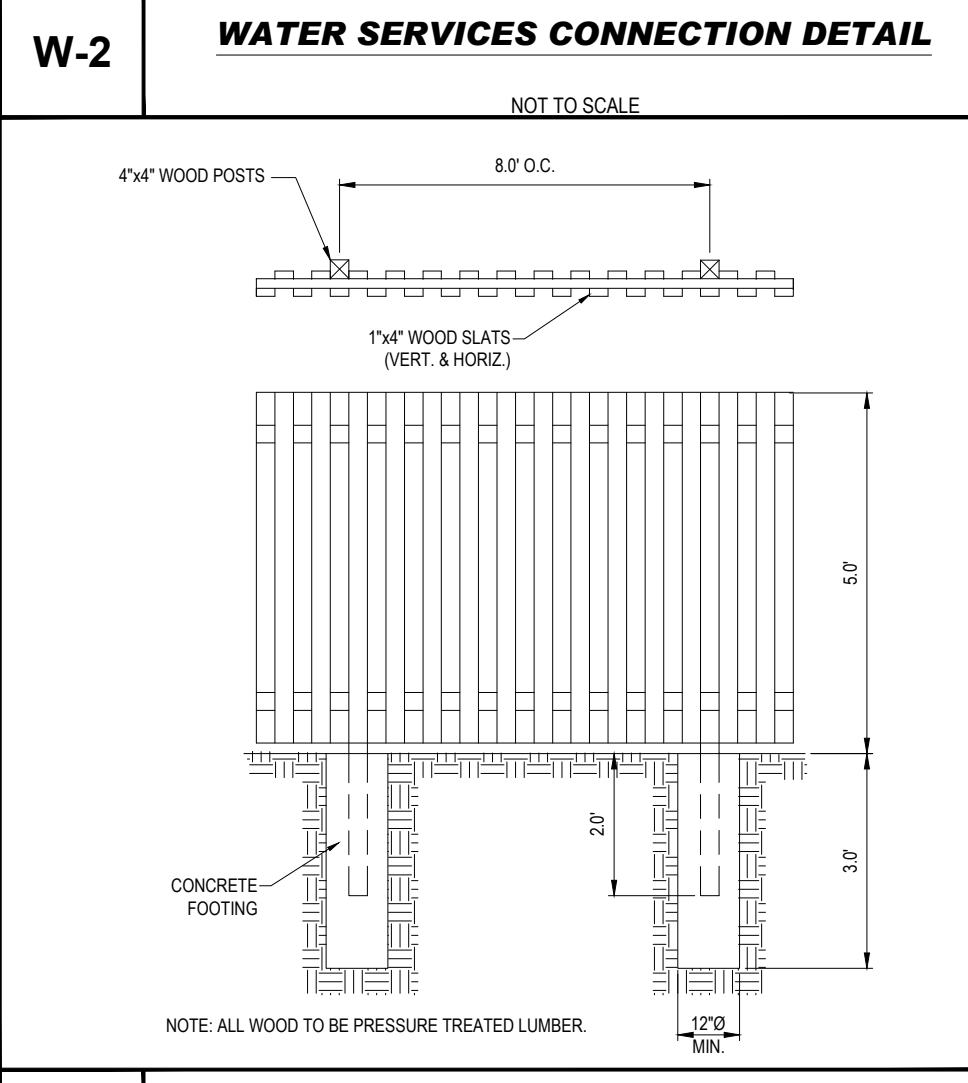
R-11 TRENCH BEDDING CLASSIFICATION (STORM)
NOT TO SCALE



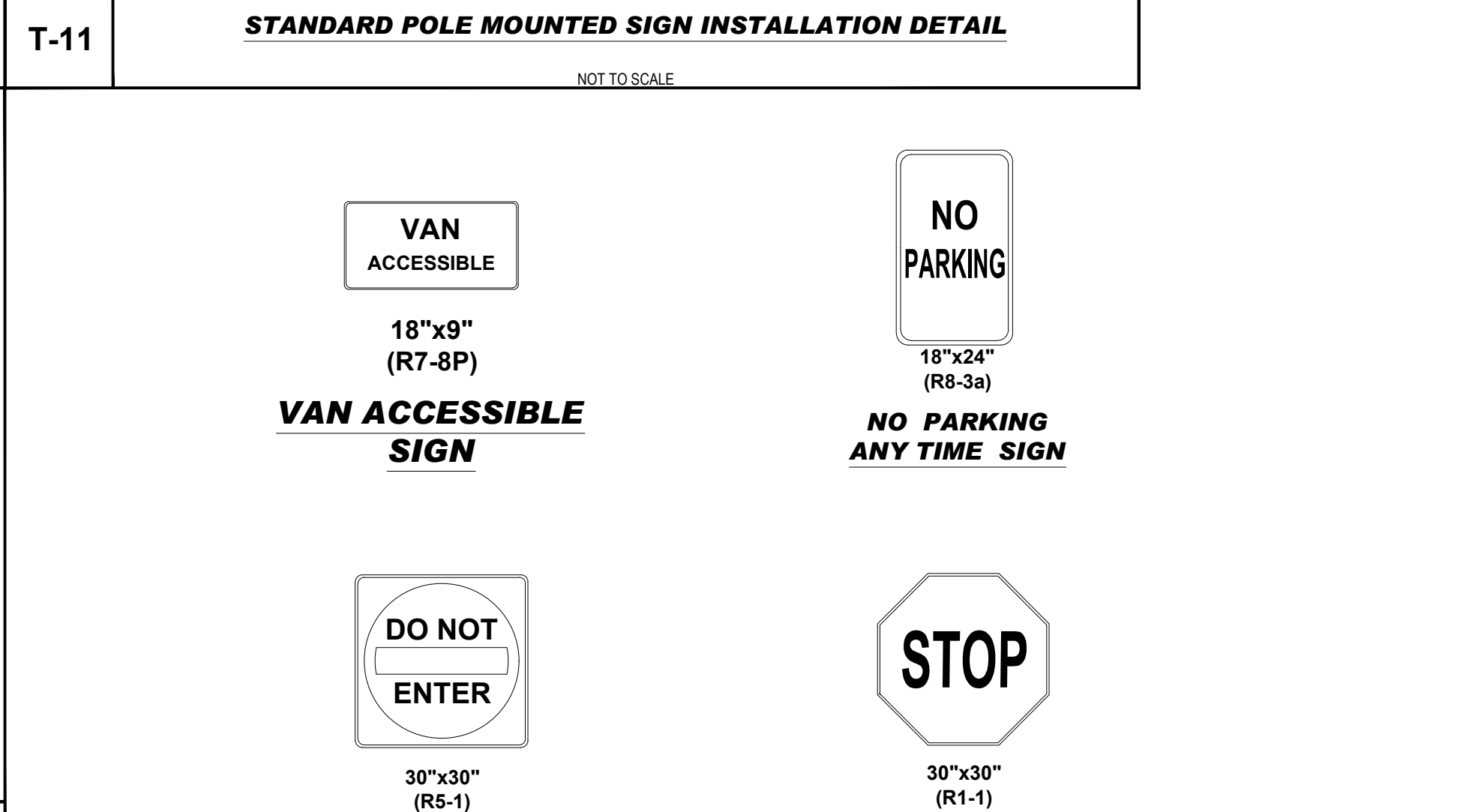
S-12 TYPICAL CLEANOUT DETAIL (PAVED AREAS)
NOT TO SCALE



T-10 WHITE PADOT PAVEMENT MARKING ARROW DETAIL
NOT TO SCALE



A-5 BOARD ON BOARD FENCE DETAIL
NOT TO SCALE



Sign Details
NOT TO SCALE

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M. KEARSE
PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
STATE OF PENNSYLVANIA

SHEET TITLE: **DETAILS**
SHEET NUMBER: **C-901**
REVISION 3 - 01/27/2023

R:\03\PP213264\DRAWINGS\PLAN SET\CIVIL SITE PLAN\PP213264-02DS-3A.dwg - LAYOUT: C-901 DETAILS



March 30, 2023

E.J. Mentry, Manager
Lower Providence Township
100 Parklane Drive
Eagleville, PA 19408

Subject: 2023 Lower Providence Road Improvements Project

Dear E.J.:

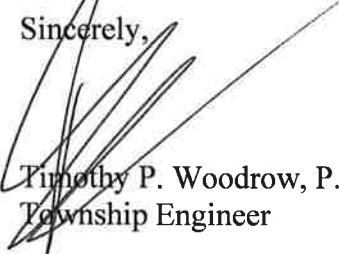
We have been working in cooperation with the public works staff in the preparation and review of bid documents that will provide for the repaving of certain roads in our community. I am happy to report that the Township received three bids and this year the lowest bidder is Glasgow, Inc. with the total value of the contract being six hundred seventy-eight thousand, six hundred seventy-one dollars and 40/cents (\$678,671.40.) Their bid included all the required documentation and bonds for consideration.

I have attached a spreadsheet which memorializes the bid results. If there are no questions, I recommend that the Board of Supervisors award this year's contract to Glasgow, Inc.

2023 Lower Providence Road Improvements Project - Bid Summary

	<u>Glasgow</u>	<u>H&K</u>	<u>Innovative</u>
Base Bid "A"	\$ 420,082.00	\$ 447,859.75	\$ 416,510.50
Alternate "A"	\$ 149,779.10	\$ 145,575.35	\$ 229,359.30
Alternate "B"	\$ 108,810.30	\$ 117,746.45	\$ 113,014.50
Total Bid	\$ 678,671.40	\$ 711,181.55	\$ 758,884.30

Sincerely,


Timothy P. Woodrow, P.E.
Township Engineer

TPW/del

Cc: Joe Chillano, Public Works Foreman – Lower Providence Township

REIMBURSEMENT AND INDEMNITY AGREEMENT

This Reimbursement and Indemnity Agreement (hereinafter "Reimbursement Agreement") is made and entered into this _____ day of _____, 2023, by and between LOWER PROVIDENCE TOWNSHIP, a township of the second class, organized and existing in accordance with the laws of the Commonwealth of Pennsylvania (hereinafter the "Township") and AUDUBON WATER COMPANY, a private utility organized and existing in accordance with the laws of the Commonwealth of Pennsylvania (hereinafter (hereinafter the "Utility").

WITNESSETH

WHEREAS, the Township plans to undertake a project known as SR 4004, Sec. MTF-Park Ave, Eagleville Road and Crawford Road Intersection Improvement Project in Lower Providence Township, Montgomery County (hereinafter the "Project"), requiring the relocation of facilities owned by the Utility (hereinafter the "Water Facilities"), said Water Facilities being temporary and permanent service connections (hereinafter the Water Service Connections") to certain privately owned properties within the Project limits; and,

WHEREAS, the Utility has requested and the Township has agreed to coordinate the adjustment of said Water Facilities with the Project; and

WHEREAS, the Project is subject to the competitive bidding requirements of the Pennsylvania Second Class Township Code, and the Township is prohibited from incurring expenses in excess of the lowest cost for the Water Service Connections proposed by a responsible and qualified contractor; and

WHEREAS, the Township is willing to reimburse the Utility for the cost of the Water Service Connections in accordance with the terms and conditions set forth in this Reimbursement Agreement and subject to applicable competitive bidding requirements and applicable laws and regulations.

NOW THEREFORE, In consideration of the foregoing premises and the mutual covenants hereinafter set forth, and with the intent to be legally bound hereby, the Parties agree as follows:

1. The associated Water Service Connections are identified on a plan set for the Project. A listing of listing of work to be performed by the Utility and reimbursed by the Township, along with corresponding cost estimates provided by the Utility, dated December 28, 2022, are attached hereto and collectively identified as Exhibit A.. However, the estimate provided by the Utility having been derived from a one-time proposal from a private plumbing contractor, the terms and conditions of this Agreement are subject to the Utility's obtaining formal proposals for the work from qualified contractors in order to ensure compliance with applicable competitive bidding requirements for a Second Class Township, and shall be further subject to the Township's approval of both the selection process employed by the Utility and the selection of the contractor who will perform the work. Such procedures are a prerequisite to the obligation of the Township to reimburse the Utility for the cost of the Water Service Connections.
2. The Township shall reimburse the Utility for the costs incurred by the Utility for the Water Service Connections, in an amount not to exceed One Hundred Eighty-One Thousand Five Hundred Dollars (\$181,500.00), but in no event shall the Township be responsible for payment in excess of the actual cost of the work, as that amount may be adjusted in accordance with paragraph 3 hereof.
3. In the event the actual number of Water Service Connections required to be completed during the Project changes from the number estimated in Exhibit A, the Township agrees to reimburse the _____ Utility for the actual number of Water

Service Connections made based on the unit costs as set forth in the accepted bid or proposal for the project as set forth in Paragraph 1 hereof. The actual quantity of adjustments made to the number of Water Service Connections during construction of the Project shall be determined by the Township through its designated representative, who shall have unrestricted access for the purpose of inspection of the work on the Water Service Connections. The Township and the Utility shall coordinate efforts to approve any necessary change order to effectuate the provisions of this Paragraph.

4. Upon completion of the Water Service Connections to the satisfaction of the Utility and Township, the Utility shall invoice the Township for the cost of installation of the Water Service Connections. The Township agrees to pay the Utility within sixty (60) days of receipt of an invoice from the Utility.
5. All work performed pursuant to this Agreement must comply with all applicable state and Federal laws and regulations, including but not limited to the Buy America provisions in 23 U.S.C. §313 and 23 CFR §635.410; the Steel Products Procurement Act, 73 P.S. §1881 et seq.; the Pennsylvania Prevailing Wage Act of 1961, P.L. 987, No. 442; and in particular all applicable regulations promulgated by the Pennsylvania Department of Transportation.
6. The Utility agrees to indemnify, defend, and hold harmless the Township, along with its officials, officers, employees, agents and permitted assigns, from and against any and all claims, losses, liabilities, damages, expenses and costs, including reasonable attorneys' fees and court costs, of any character relating to personal injury or property damage, loss liability, or expense received, sustained, or incurred by the Township arising out of the installation of the Water Service Connections or from the performance of said work. The Utility shall provide the Township with prompt written notice of any claim and give complete control of the defense and settlement to the Township, and shall reasonably cooperate with the Township, its insurance company and its legal counsel in its defense of such claim(s), at the Utility's sole cost and expense. The Utility shall not settle any potential suit or litigation hereunder without the Township's prior written approval.
7. All disputes arising from or concerning this Reimbursement Agreement shall be brought in the Court of Common Pleas of Montgomery County, Pennsylvania.
8. Any notice required by or contemplated by this Reimbursement Agreement shall be sent by overnight mail or courier, addressed as follows:

If to Utility:

Audubon Water Company
c/o: JH Russell
2650 Eisenhower Ave, #103A
Eagleville, PA 19403

If to Township:

E.J. Mentry, Manager
Lower Providence Township
100 Parkland Drive
Eagleville, PA 19403

8. This Reimbursement Agreement constitutes the entire agreement between the Utility and the Township. No prior written or prior, contemporaneous or subsequent oral promises or representations shall be binding. This Reimbursement Agreement shall not be amended or changed except by written instrument signed by authorized representatives of the parties hereto. The provisions of this Reimbursement Agreement shall be binding upon and inure to the benefit of the heirs, executors, administrators, successors and assigns of the parties.

GENERAL NOTES

- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL 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.
- THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED VEGETATED SWALES, MANAGE RELEASE CONCEPT BASINS, AND RAIN GARDEN. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMPs SHALL CONDUCT THE OVERSIGHT.
- CONTACT THE DESIGN ENGINEER AND THE LOCAL COUNTY CONSERVATION DISTRICT IF GROUNDWATER OR BEDROCK ARE ENCOUNTERED DURING THE INSTALLATION OF THE PROPOSED VEGETATED SWALES, MANAGE RELEASE CONCEPT BASINS, AND RAIN GARDEN.
- UPON FINAL STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER PA CODE 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPs IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH PA CODE 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS; AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.
 THE NOTICE OF TERMINATION MUST INCLUDE:
 - THE FACILITY NAME, ADDRESS, AND LOCATION.
 - THE OPERATOR NAME AND ADDRESS.
 - THE PERMIT NUMBER.
 - THE REASON FOR THE PERMIT TERMINATION.
 - IDENTIFICATION OF THE PERSONS RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs IN ACCORDANCE WITH PA CODE 102.8(M) AND PROOF OF COMPLIANCE WITH PA CODE 102.8(M)(2).
 PRIOR TO ACCEPTING THE NOTICE OF TERMINATION, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION.
- THE RESPONSIBLE PARTY FOR OPERATIONS AND MAINTENANCE SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE RESPONSIBLE PARTY SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE. BUILDING MATERIALS AND WASTE MAY INCLUDE ASPHALT, CONCRETE, AND SOIL, AND DEBRIS FROM STORMWATER BMPs SUCH AS TRASH, PLASTICS, AND ORGANIC MATERIAL (i.e. TWIGS AND LEAVES).
- NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS HAVING THE POTENTIAL TO CAUSE POLLUTION HAVE BEEN OBSERVED.
- THE PROJECT'S RECEIVING WATERCOURSES ARE MINE RUN AND UNNAMED TRIBUTARY TO MINE RUN, WHICH HAVE A CHAPTER 93 DESIGNATION OF TSF-MF.

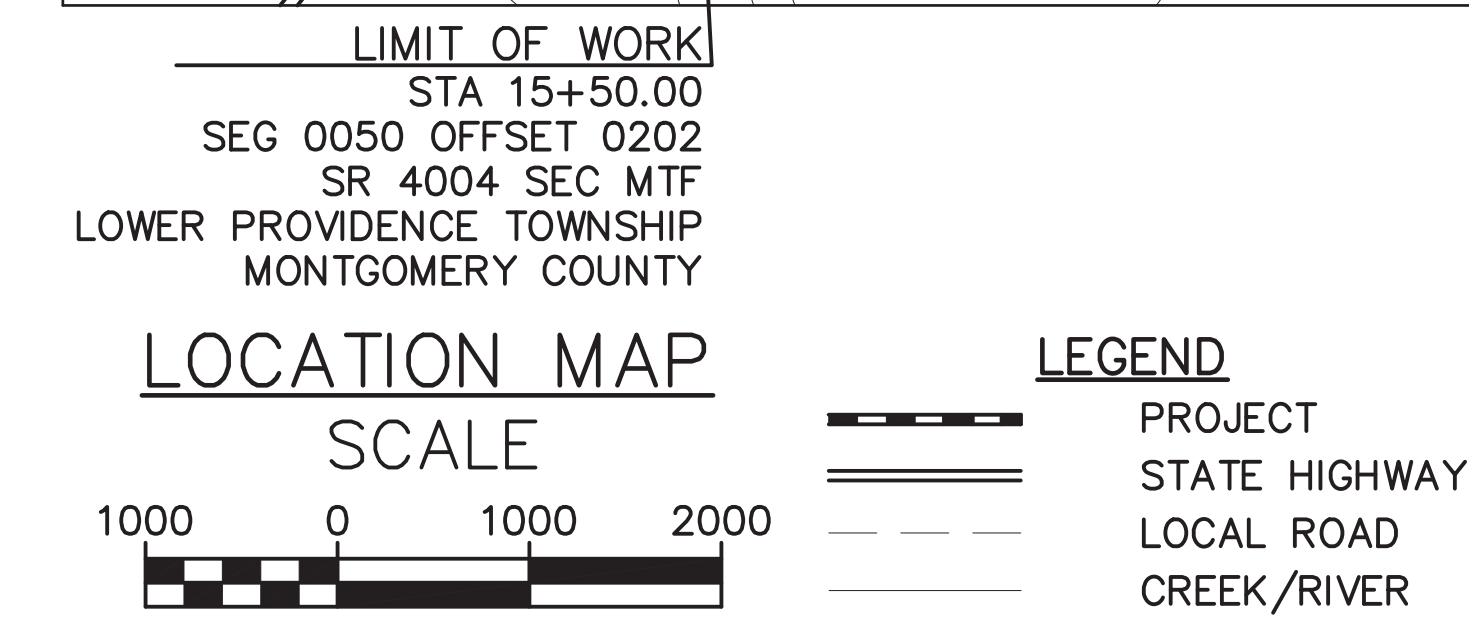
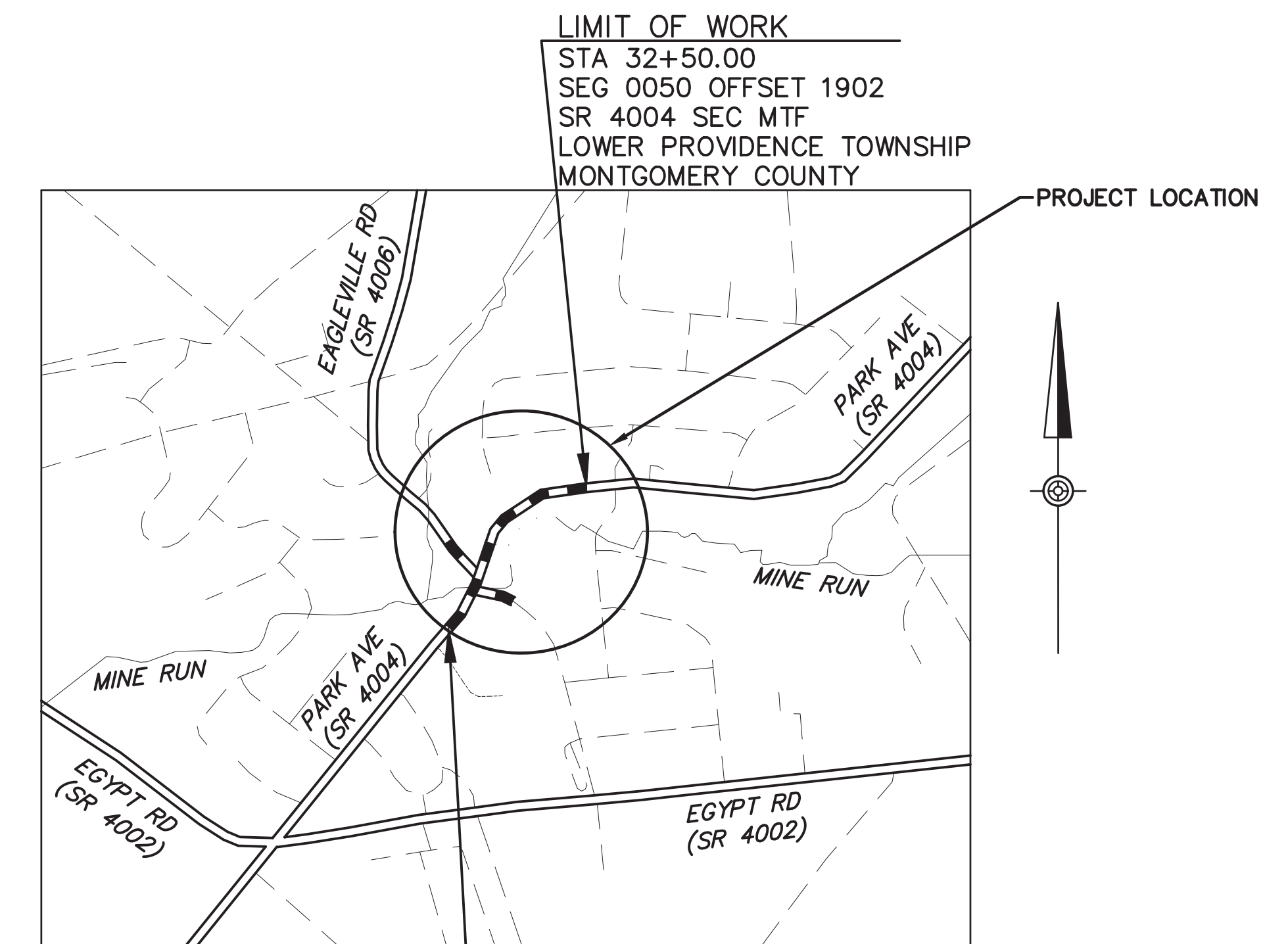
SYMBOL LEGEND

- | | | |
|---|--------------------------------------|---|
| —TU— EXISTING TELEPHONE CONDUIT | ◦ WV EXISTING WATER VALVE | EXISTING HEAVY VEGETATION |
| —G— EXISTING GAS LINE | ◦ GV EXISTING GAS VALVE | AMENDED SOILS |
| —S— EXISTING SANITARY SEWER LINE | ◦ IP EXISTING IRON PIN FOUND | ROADWAY MAINTENANCE ACTIVITIES |
| —W— EXISTING WATER LINE | ◦ MB EXISTING MAILBOX | ROCK, CLASS AS INDICATED |
| —EU— EX. UNDERGROUND ELECTRIC LINE | ◦ MH EXISTING MANHOLE | PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A |
| —TU— PROPOSED TELEPHONE CONDUIT | ◦ MH EXISTING MANHOLE TO BE RESET | WATERS OF THE US |
| —G— PROPOSED GAS LINE | ◦ MH PROPOSED MANHOLE | CHAPTER 105 PERMIT LIMITS |
| —S— PROPOSED SANITARY SEWER LINE | ◻ FH EXISTING FIRE HYDRANT | —1260— FINAL 5 FOOT CONTOUR |
| —W— PROPOSED WATER LINE | ◆ EXISTING TRAFFIC SIGNAL | — FINAL 1 FOOT CONTOUR |
| —EU— PROPOSED UNDERGROUND ELECTRIC LINE | — EXISTING GUY WIRE | -----1260----- EXISTING 5 FOOT CONTOUR |
| ===== EXISTING STORMWATER PIPE | — EXISTING UTILITY POLE | ----- EXISTING 1 FOOT CONTOUR |
| ----- PROPOSED STORMWATER PIPE | ● PROPOSED OR RELOCATED UTILITY POLE | — SOIL DELINEATION LINE |
| ----- EXISTING EDGE OF PAVEMENT | ▣ EXISTING STORM INLET | ===== LIMIT OF DISTURBANCE |
| ----- PROPOSED EDGE OF PAVEMENT | ▣ PROPOSED STORM INLET | — NPDES — NPDES BOUNDARY/ WORK AREA |
| ----- EXISTING RIGHT-OF-WAY | ← SWALE/PIPE FLOW ARROW | ----- 100 YEAR FLOODPLAIN |
| ----- PROPOSED CONSTRUCTION BASELINE | ✂ TREE REMOVAL | ▲TP-RG# INFILTRATION TEST LOCATION |
| -----P EXISTING PROPRTY LINE | —X— EXISTING FENCE | |
| | ○—○ PROPOSED FENCE | |
| | —=— PROPOSED DITCH LINE | |
| | ===== DRAINAGE AREA | |

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
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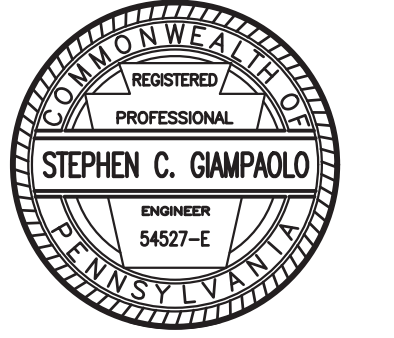
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NPDES MINOR AMENDMENT 6-13-2022

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

PREPARED BY:
MCAHON ASSOCIATES, INC.
840 SPRINGDALE DRIVE
EXTON, PA. 19341



Stephen C. Giampolo

DATE: 6/13/22

SECTION 804 – SEEDING AND SOIL SUPPLEMENTS

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	2 OF 18
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FORMULA AND SPECIES	% BY WEIGHT	MINIMUM %		MAX % WEED SEED	SEEDING RATE LB/1000 YD ²
		PURITY	GERMINATION		
FORMULA B (MIX)					44.0 TOTAL
PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT.	20	97	90	0.10	8.5
CREeping RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED)	30	97	85	0.10	12.5
KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT.	45	97	80	0.15	21.0
ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	5	95	90	0.10	2.0
FORMULA N (CONSERVATION MIX)					30.0 TOTAL
HARD FESCUE MIXTURE (FESTUCA LONGIFOLIA). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL HARD FESCUE COMPONENT.	30	97	85	0.10	9.0
CREeping RED FESCUE (FESTUCA RUBRA) (IMPROVED AND CERTIFIED)	30	97	85	0.10	9.0
LITTLE BLUESTEM (ANDROPOGON SCOPARIUS)	4	80	70	0.20	1.2
CANADA WILD RYE (ELYMUS CANADEIS)	6	85	70	0.20	1.8
VIRGINIA WILD RYE (ELYMUS VIRGINICUS)	4	85	70	0.20	1.2
INDIANGRASS (SORGHASTRUM NUTANS)	3	85	70	0.20	0.9
ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	10	95	90	0.10	3.0
BLACK EYED SUSAN (RUDBECKIA HIRTA)	5	80	60	0.20	1.5
NEW ENGLAND ASTER (SYMPHYOTRICHUM NOVAE-ANGLIE)	3	80	50	0.20	0.9
OX-EYE SUNFLOWER (HELIOPSIS HELIANTHOIDES)	5	80	60	0.20	1.5

- PULVERIZED AGRICULTURAL LIMESTONE --- 800 LB/1000 YD²
 - 10-20-20 ANALYSIS COMMERCIAL FERTILIZER --- 140 LB/1000 YD²
 - 38-0-0 UREAFORM FERTILIZER --- 50 LB/1000 YD²
 - 32-0-0 TO 38-0-0 SULFUR COATED UREA FERTILIZER --- 59 LB/1000 YD² TO 50 LB/1000 YD² AS DIRECTED
 - OR
 - 31-0-0 IBDU FERTILIZER --- 61 LB/1000 YD²
- D. INOCULATING LEGUMES. INOCULATE LEGUMINOUS SEED, SUCH AS CROWNVELTCH AND BIRDSFOOT TREFOIL, WITH PROPER CULTURES, ACCORDING TO THE MANUFACTURER'S DIRECTIONS. PROTECT INOCULATED SEED FROM PROLONGED EXPOSURE TO SUNLIGHT BEFORE SOWING. REINOCULATE SEED NOT SOWN WITHIN 24 HOURS. IF USING HYDRAULIC SEEDERS, USE INOCULANT FOUR TIMES THE MANUFACTURER'S RECOMMENDED RATE. IF INOCULATED SEED IS HELD IN A SLURRY WITH FERTILIZERS FOR MORE THAN 1 HOUR, REINOCULATE OR APPLY LEGUMES SEPARATELY.
- E. SEEDING. AT THE RATES SPECIFIED IN TABLE A, OR AS INDICATED SOW SEEDS UNIFORMLY ON THE PREPARED AREAS BY THE HELICOPTER, HYDRAULIC PLACEMENT, BROADCASTING, DRILLING, OR HAND SEEDING METHODS. INSPECT SEEDING EQUIPMENT AND ADJUST THE EQUIPMENT, IF REQUIRED, TO ENSURE THE SPECIFIED APPLICATION RATES. PERIODICALLY PERFORM A CHECK ON THE RATE AND UNIFORMITY OF APPLICATION, AS DIRECTED. PRIOR TO SEED APPLICATION OF EACH DESIGNATED SEED FORMULA, THOROUGHLY CLEAN-OUT SEED TANK BY RINSING WITH CLEAN WATER TO PREVENT CONTAMINATION FROM ONE SEED FORMULA TO THE NEXT. REPEAT RINSING CYCLE UNTIL TANK IS CLEAN. COLLECT ALL NON-APPLIED SEED DERIVED FROM EACH CLEAN-OUT EVENT AND REMOVE AS WASTE FROM THE PROJECT.
- F. ROLLING. AFTER SEEDING, ROLL TOPSOILED AREAS THAT ARE TO BE MOWED. USE A ROLLER WITH A WEIGHT NOT MORE THAN 65 POUNDS PER FOOT. IF SOIL IS WET OR FROZEN, ROLL ONLY WHEN DIRECTED.

804.3 CONSTRUCTION CONT'D

- G. MULCHING. APPLY AS SPECIFIED IN SECTION 805.3(A).
- H. HERBICIDES. APPLY HERBICIDES AS DIRECTED, TO AREAS THAT ARE TO BE MOWED AND WHERE WEED GROWTH IS PROMINENT. THE REPRESENTATIVE WILL DESIGNATE EXISTING PLANTS OR GROUPS OF PLANTS TO BE SAVED WITHIN THESE AREAS BEFORE HERBICIDE APPLICATION. IF DIRECTED, MORE THAN ONE APPLICATION MAY BE REQUIRED TO CONTROL UNDESIRABLE GROWTH. APPLY MATERIAL WITH APPLICATION PERSONNEL CERTIFIED BY THE DEPARTMENT OF AGRICULTURE AND WITH EQUIPMENT SPECIFIED IN SECTION 108.05(C).
- I. LIABILITY AND REJECTION. FINAL ACCEPTANCE OF SEEDING AND SOIL SUPPLEMENT MATERIALS AND INSTALLATION ARE SUBJECT TO THE RESULTS OF OFFICIAL SAMPLING AND TESTING AS SPECIFIED BEFORE USE AND INSTALLATION AND THE RESULTANT ESTABLISHMENT OF THE SPECIFIED VEGETATION. REMOVE NON-APPROVED MATERIALS FROM THE PROJECT.
1. LIABILITY. RESEED REJECTED AREAS WITH ADDITIONAL APPLICATIONS OF THE SPECIFIED SEED AND SOIL SUPPLEMENT MATERIALS. REDRESS SOIL SURFACES WHEN DIRECTED. PERFORM REAPPLICATION OF SEED AND SOIL SUPPLEMENTS WITHIN THE NEXT APPLICABLE SEEDING DATE IF NECESSARY OR AS DIRECTED. WHEN DIRECTED, RESEED AREAS DAMAGED BY HERBICIDE APPLICATIONS AND MOWING OPERATIONS. NOTE: RESEED AREAS WILL ALSO REQUIRE THE APPLICATION OF APPROPRIATE MULCH AS SPECIFIED IN SECTION 805.
2. REJECTION CRITERIA. SEEDED AREAS MAY BE REJECTED BASED ON THE LACK OF ACTUAL GRASS SEEDLING ESTABLISHMENT EXHIBITED IN THE AREA FOR THE SPECIFIED SEED FORMULA.
- 2.A TABLE A SEED FORMULAS. TABLE A FORMULA SEEDED AREAS THAT EXHIBIT LESS THAN 70% SURFACE AREA COVERAGE WITH THE SPECIFIED GERMINATED GRASS SEEDLINGS AFTER 90 DAYS OF GROWTH MAY BE REJECTED UPON VISUAL INSPECTION. THE SEED GERMINATION AND GROWTH PERIOD IS DETERMINED FROM THE DATE OF THE SEEDING OPERATION FOR THE AREA WHEN THESE OPERATIONS ARE PERFORMED WITHIN THE SPECIFIED SEEDING DATES.
- 2.B SPECIAL SEED FORMULAS. SPECIAL SEED FORMULA PLANTED AREAS (SEED MIXTURES NOT INDICATED IN TABLE A) MAY BE REJECTED BASED ON THE LACK OF THE SPECIFIED SEED GERMINATION AND GROWTH OF LESS THAN 9 SEEDLINGS/SQUARE YARD AFTER 120 DAYS OF GROWTH DETERMINED BY VISUAL INSPECTION. THE SEED GERMINATION AND GROWTH PERIOD IS DETERMINED FROM THE DATE OF THE SEEDING OPERATION OF THE AREA WHEN THESE OPERATIONS ARE PERFORMED WITHIN THE SPECIFIED SEEDING DATES.
- 2.C ERODED AREAS. SEEDED AREAS EXHIBITING SOIL SURFACE EROSION RILLS OR GULLIES DEEPER THAN 1-INCH MAY BE REJECTED UPON VISUAL INSPECTION. REDRESS AND RESEED DESIGNATED ERODED AREAS WITH SPECIFIED MATERIALS AND APPLICATION RATES AS DIRECTED.

- J. MAINTENANCE. MAINTAIN GRASS AND LEGUME GROUND COVER AREAS, WITHIN THE GRADING LIMITS, UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. MOW AS SPECIFIED IN SECTION 804.3(K). CONTROL ANY NOXIOUS WEED GROWTH FOUND WITHIN THE RIGHT OF WAY, BY HERBICIDE SPRAYING AND CUTTING. THESE PLANTS ARE DEFINED BY THE PENNSYLVANIA WEED CONTROL ACT OF 1982, P.L. 228, NO. 74 AND AS AMENDED BY FURTHER LEGISLATION. SUBMIT FOR APPROVAL, A SCHEDULE OF WORK AND LIST OF HERBICIDE MATERIAL TO BE USED BEFORE STARTING THIS OPERATION. IF A SLOPE FAILURE OCCURS ON A SLOPE PREVIOUSLY COMPLETED, AND REQUIRES FURTHER EXCAVATION AND REDRESSING TO REESTABLISH THE SLOPE, REAPPLY THE SEEDING AND SOIL SUPPLEMENT WORK AS SPECIFIED FOR THE ORIGINAL SLOPE.
- K. MOWING. MAINTAIN TURF GRASS AREAS WITHIN THE GRADING LIMITS, BY MOWING WITH APPROVED EQUIPMENT UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. SUBMIT A PROPOSED SCHEDULE OF MOWING OPERATIONS THAT COVERS THE LENGTH OF THE CONSTRUCTION PROJECT FOR APPROVAL.
1. ROADSIDE TURF AREAS. TURF GRASS AREAS ESTABLISHED WITH FORMULA D REQUIRES A DIFFERENT DEGREE OF MOWING MAINTENANCE THAN AREAS ESTABLISHED WITH FORMULAS B AND L. THREE MOWING CYCLES PER YEAR, SCHEDULED BETWEEN APRIL AND OCTOBER, ARE ANTICIPATED FOR MOWING AREAS SEEDED WITH FORMULA D. THE NUMBER OF CYCLES MAY BE ADJUSTED BASED ON THE DEGREE OF TURF ESTABLISHMENT, PROJECT LENGTH, WEATHER CONDITIONS, OR OTHER FACTORS. CONSULT THE DISTRICT ROADSIDE MANAGER FOR SCHEDULE, SAFETY REQUIREMENTS, AND MOWING EQUIPMENT APPROVALS. SCHEDULE THE FIRST MOWING CYCLE EARLY IN THE GROWTH FLUSH PERIOD BEFORE ALL SEED HEADS HAVE EMERGED. SCHEDULE THE SECOND MOWING APPROXIMATELY 3 TO 4 WEEKS AFTER THE FIRST CUT TO REMOVE THE REMAINING SEED HEADS. SCHEDULE THE LAST MOWING CYCLE IN THE FALL, AS DIRECTED. DO NOT MOW GRASS SHORTER THAN 4 INCHES TO ALLOW A LOW GROWING, COMPETITIVE GROUND COVER. DO NOT MOW UNDER THE FOLLOWING CONDITIONS:
- WHEN SOIL AND GRASS BLADES ARE WET.
 - DURING DROUGHT CONDITIONS, OR DURING SUMMER MONTHS WHEN THE TEMPERATURES ARE CONSISTENTLY OVER 90F, AND WHEN THE GRASS EXHIBITS DORMANCY.
 - WITHIN 7 DAYS OF ANY SCHEDULED HERBICIDE APPLICATION OR 7 DAYS AFTER A HERBICIDE TREATMENT.
2. LAWN TURF AREAS. MAINTAIN FORMULAS B AND L TURF GRASS AREAS AT A DESIRED HEIGHT OF 2 INCHES. INITIATE MOWING OPERATIONS WHEN GRASS SEEDLINGS REACH A HEIGHT OF 3 INCHES. CONTINUE MOWING OPERATIONS DURING THE ACTIVE GROWING SEASON THROUGHOUT THE LENGTH OF THE PROJECT. FOLLOW THE NON-MOW REQUIREMENTS INDICATED FOR FORMULA D GRASS. MOW AT A NORMAL FREQUENCY WHEN THE GRASS REACHES THE 3-INCH HEIGHT, UNLESS DIRECTED OTHERWISE.

NOTES:

1. INSTALL SEEDING AND SOIL SUPPLEMENTS – FORMULA B ON ALL SLOPES.
INSTALL SEEDING AND SOIL SUPPLEMENTS – FORMULA N ON BOTTOMS OF ALL RAIN GARDENS.

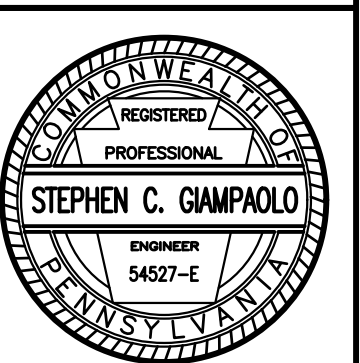
804.3 CONSTRUCTION

- A. GENERAL. SPREAD SEEDS WHERE INDICATED AND AT THE RATES SPECIFIED IN TABLE A, OR AS OTHERWISE INDICATED. SPREAD SEEDS WITHIN THE FOLLOWING DATES, OR AS OTHERWISE INDICATED OR DIRECTED.
- FORMULA B --- MARCH 15 TO JUNE 1
AUGUST 1 TO OCTOBER 15
 - FORMULA E --- MARCH 15 TO OCTOBER 15
 - FORMULA N --- MARCH 15 TO OCTOBER 15

EXTEND SEEDING DATES WHERE PROJECT CONDITIONS WARRANT. APPLY FULL TREATMENT OR APPLY ONLY 50% OF THE PERMANENT SEEDING AND SOIL SUPPLEMENTS AND APPLY THE REMAINING 50% WITHIN THE NEXT SEEDING DATES, AS DIRECTED IN WRITING. USE TILLAGE AND SOIL SUPPLEMENTS BEFORE PERMANENT SEEDING ON TOPSOILED AREAS, WHERE TEMPORARY SEEDING OR MULCHING HAS BEEN APPLIED. THE CONTRACTOR MAY APPLY PERMANENT SEED AND/OR SOIL SUPPLEMENTS WITHOUT TILLING ON UNTOPSOILED AREAS, WHERE TEMPORARY SEEDING OR MULCHING HAS BEEN APPLIED.

- B. TILLAGE. ON TOPSOILED AREAS, 3:1 AND FLATTER, LOOSEN THE SURFACE TO A DEPTH OF AT LEAST 2 INCHES BY DISKING, HARROWING, OR OTHER ACCEPTABLE METHODS UNTIL THE TILLAGE IS SATISFACTORY. ON UNTOPSOILED AREAS, 3:1 AND FLATTER, TILL ONLY AS DIRECTED. ALSO, TILL OR SCARIFY AREAS IF THE SURFACE IS GLAZED OR CRUSTED. CORRECT SURFACE IRREGULARITIES BY FILLING DEPRESSIONS AND LEVELING ROUGH OR UNEVEN AREAS. REMOVE METAL OBJECTS, STONES LARGER THAN 2 INCHES IN ANY DIMENSION, AND OTHER DEBRIS OR OBJECTS DEEMED DETRIMENTAL TO MAINTENANCE OPERATIONS.
- C. SOIL SUPPLEMENTS. PREPARE AREAS FOR SEEDING BY UNIFORMLY APPLYING SUPPLEMENTS, EXCEPT IN AREAS THAT WILL RECEIVE FORMULA E SEED. DOCUMENT BULK DELIVERY AS SPECIFIED IN SECTION 804.2(A)2. BLEND THE INITIAL SOIL SUPPLEMENTS INTO THE SOIL AT LEAST 2 INCHES, ON TOPSOILED AREAS, BY RAKING, DISKING, HARROWING, OR OTHER ACCEPTABLE METHODS. BLEND THE SUPPLEMENTS INTO THE SOIL DURING TILLAGE OPERATIONS. APPLY SLOW-RELEASE NITROGEN FERTILIZER TO THE SURFACE OF FORMULA B, D, L, W, AND S SEEDED AREAS BEFORE PROJECT COMPLETION. DO NOT APPLY SLOW-RELEASE NITROGEN FERTILIZER SUPPLEMENT TO FORMULA C SEEDED AREAS. APPLY SOIL SUPPLEMENTS AS FOLLOWS, UNLESS OTHERWISE INDICATED:

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805.3 CONSTRUCTION

A. MULCHING SEEDED AREAS. PLACE MULCH, OF THE TYPE INDICATED, IMMEDIATELY AFTER SEEDING OR WITHIN 48 HOURS AFTER SEEDING IS COMPLETED. UNLESS OTHERWISE INDICATED, PLACE ONLY STRAW OR WOOD FIBER OVER TOPSOILED AREAS. USE HAY, STRAW, OR WOOD FIBER IN OTHER AREAS, AS INDICATED OR SPECIFIED. PLACE HAY OR STRAW UNIFORMLY, IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 1,200 POUNDS PER 1,000 SQUARE YARDS OR AS OTHERWISE INDICATED. IF DIRECTED, INCREASE THE RATE OF APPLICATION, DEPENDING UPON THE MATERIAL USED, SEASON, SOIL CONDITIONS, OR METHOD OF APPLICATION. AN ACCEPTABLE MECHANICAL BLOWER MAY BE USED TO APPLY MULCH. DO NOT USE MACHINES THAT CUT MULCH INTO SHORT PIECES. ANCHOR MULCH WITH SPECIFIED MULCH BINDERS APPLIED AT THE FOLLOWING RATES:

- RECYCLED CELLULOSE FIBER--160 POUNDS PER 1,000 SQUARE YARDS
- WOOD FIBER--160 POUNDS PER 1,000 SQUARE YARDS
- NONASPHALTIC EMULSION--AT MANUFACTURER'S RECOMMENDED RATE
- POLYVINYL ACETATE--AT MANUFACTURER'S RECOMMENDED RATE
- RECYCLED CELLULOSE FIBER/WOOD FIBER MIXTURE--160 POUNDS PER 1,000 SQUARE YARDS

THE MULCH BINDER APPLICATION IS INCIDENTAL TO THE APPLICATION OF STRAW AND HAY MULCH. APPLY WOOD FIBER MULCH HYDRAULICALLY ACCORDING TO THE MANUFACTURER'S TANK-MIXING INSTRUCTIONS. IT MAY BE INCORPORATED AS AN INTEGRAL PART OF THE SLURRY AFTER THE SEED AND SOIL SUPPLEMENTS HAVE BEEN THOROUGHLY MIXED. APPLY UNIFORMLY AT THE RATE OF 320 POUNDS PER 1,000 SQUARE YARDS UNLESS OTHERWISE INDICATED. MULCH TEMPORARY SEEDED AREAS WITH HAY.

1. MEDIAN AREAS. ON SLOPES 6:1 OR FLATTER, PLACE PELLET MULCH BY HAND OR USING A MECHANICAL SPREADER IMMEDIATELY AFTER SEEDING. APPLY UNIFORMLY AT APPLICATION RATE OF 540 POUNDS PER 1,000 SQUARE YARDS. THOROUGHLY WET PELLET MULCH WITH WATER WITHOUT DISLODGING MULCH.

B. MULCH CONTROL NETTING.

1. PLASTIC. INSTALL NETTING OVER DESIGNATED MULCH SURFACE. STAPLE UPSLOPE ENDS, EDGES, BOTTOM, AND OVERLAPS AT 24-INCH INTERVALS. OVERLAP ADJACENT FABRIC TO OUTSIDE EDGES. SECURE REMAINING FABRIC AREAS BY PUTTING IN APPROXIMATELY 1 STAPLE PER 1 SQUARE YARD OF AREA.
2. COCONUT COIR. INSTALL NETTING OVER DESIGNATED MULCH SURFACE. STRETCH FABRIC TIGHTLY AND ANCHOR WITH WOOD STAKES ALONG ALL EDGES AT 7-FOOT MAXIMUM INTERVAL. OVERLAP ADJACENT FABRIC WIDTHS BY NOT LESS THAN 8 INCHES.

C. MULCHING PLANTED AREAS.

1. INDIVIDUAL PLANT PITS. UNIFORMLY APPLY A DESIGNATED MULCH SPECIFIED IN SECTION 805.2(A)2 TO THE ENTIRE PLANT PIT TO A LOOSE DEPTH OF 3 INCHES AND AS SHOWN ON THE STANDARD DRAWING. APPLY MULCH WITHIN 48 HOURS AFTER COMPLETION OF THE PLANTING OPERATION.
2. PLANTING BEDS. COVER DESIGNATED SHRUB BEDS WITH MULCH OR MULCH AND WEED BARRIER MAT OR MULCH AND WEED CONTROL MAT AS INDICATED. CUT MAT AROUND THE PLANT STEM TO ENSURE MAT WILL NOT EXTEND ABOVE THE MULCH. SECURE MAT TO THE SOIL SURFACE WITH STAPLES OR OTHER APPROVED ANCHORING DEVICES AT A MAXIMUM INTERVAL SPACING OF 3 FEET AND ALONG ALL EDGES AND OVERLAPS. OVERLAP MAT EDGE WITH 2-INCH MINIMUM. UNIFORMLY APPLY A DESIGNATED MULCH SPECIFIED IN SECTION 805.2(A)2 OVER THE ENTIRE BED AREA TO A LOOSE DEPTH OF 3 INCHES. REDISTRIBUTE EXCESSIVE MULCH DEPTH. TAPER MULCH DEPTH AT PLANT PIT AS SHOWN ON THE STANDARD DRAWING. APPLY MAT AND MULCH WITHIN 48 HOURS AFTER COMPLETION OF THE PLANTING OPERATION.

D. MAINTENANCE. PROPERLY MAINTAIN MULCHED AREAS UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. PROMPTLY REAPPLY MULCH MATERIALS, WHICH BECOME DISLODGED OR LOST DUE TO WIND, RAIN, OR OTHER CAUSES, AT INITIAL OR MODIFIED RATES, AS DIRECTED. AFTER MULCHING WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF A SLOPE FAILURE OCCURS, ONE THAT REQUIRES REDRESSING, EXCAVATION, OR THE ESTABLISHMENT OF A NEW SLOPE, REPLACE THE MULCH, AS DIRECTED.

E. BONDED FIBER MATRIX.

1. GENERAL. PREPARE SURFACES AS SPECIFIED IN SECTION 804.3(B). SCARIFY ALL SLOPES GREATER THAN 3:1 TO ENSURE A ROUGH TEXTURE TO THE SOIL SURFACE FOR LODGING OF SEED AND BFM. APPLY SEED AT TWICE THE RATE SPECIFIED IN SECTION 804.2(B)2 TABLE A. APPLY SOIL SUPPLEMENTS AS SPECIFIED IN SECTION 804.3(C).
2. APPLICATION. APPLY BONDED FIBER MATRIX COMPONENTS HYDRAULICALLY WITH HYDROMULCHING (HYDROSEED) EQUIPMENT MANUFACTURED FOR THIS PURPOSE. FOLLOW MANUFACTURER'S MIXING AND APPLICATION INSTRUCTIONS. THE BONDED FIBER MATRIX COMPONENTS MAY BE INCORPORATED AS AN INTEGRAL PART OF THE SEEDING AND SOIL SUPPLEMENT APPLICATION IF SEEDING AND SOIL SUPPLEMENTS ARE APPLIED HYDRAULICALLY. APPLY POLYMER BINDER OR HYDROCOLLOID BINDER MATRIXES AT AN APPLICATION RATE OF 3,000 POUNDS PER ACRE OR AS INDICATED TO PROVIDE A UNIFORM SOIL SURFACE COVERAGE THICKNESS OF 0.16 INCH MAXIMUM AFTER DRYING. TEST APPLICATION PROCEDURES TO ENSURE A UNIFORM APPLICATION RATE. DO NOT APPLY WITHIN 24 HOURS OF ANTICIPATED RAINFALL. MIX GYPSUM BINDER MATRIX COMPONENTS IN A HOMOGENOUS SLURRY IN THE FOLLOWING PROPORTIONS FOR EACH 100 GALLONS OF WATER: GYPSUM BINDER--150 POUNDS; WOOD FIBER--40 POUNDS; AND SYNTHETIC FIBER--0.6 POUNDS. APPLY GYPSUM BINDER MATRIX AT AN APPLICATION RATE OF 6,000 POUNDS PER ACRE OR AS INDICATED SO THAT THE SOIL SURFACE IS COVERED UNIFORMLY. DO NOT APPLY WITHIN 12 HOURS OF ANTICIPATED RAINFALL. PLACE BFM MATERIAL AT LEAST 18 INCHES BEYOND THE TOE AND TOP OF ALL SLOPES. APPLY MATERIAL IN AT LEAST TWO DIFFERENT DIRECTIONS TO PROVIDE AS MUCH UNIFORM COVERAGE WITH NO GAPS OR SPACES GREATER THAN 0.04 INCH.

SECTION 802 – TOPSOIL FURNISHED AND PLACED

802.2 MATERIAL

SECTION 801.2 AND CONTAINING NOT LESS THAN 2.0% NOR MORE THAN 10.0% ORGANIC MATTER, AS DETERMINED ACCORDING TO AASHTO T 194. CERTIFY AS SPECIFIED IN SECTION 106.03(B)3. PROVIDE TOPSOIL MEETING THE FOLLOWING GRADING ANALYSIS:

SIEVE	MINIMUM PERCENT PASSING
2 INCHES	100
NO. 4	75
NO. 10	60

SAND, SILT AND CLAY MATERIAL PASSING THE 2MM (NO. 10) SIEVE, AS DEFINED BY AASHTO T 88 AND WITHIN THE FOLLOWING RANGES:

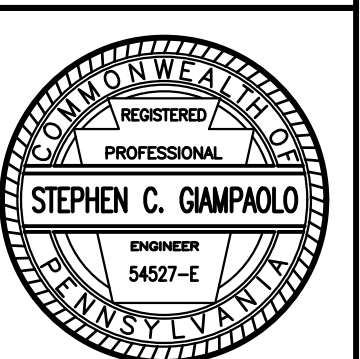
	MINIMUM PERCENT	MAXIMUM PERCENT
SAND	5	70
SILT	10	70
CLAY	5	36

PROVIDE INDEPENDENT TESTING TO CONFIRM THAT THE TOPSOIL MEETS THE ABOVE REQUIREMENTS. INDEPENDENT TESTING MUST BE LESS THAN 12 MONTHS OLD AT THE TIME TOPSOIL IS FURNISHED TO THE PROJECT. SUBMIT FOR PROJECT-SPECIFIC, LOCAL APPROVAL BY THE REPRESENTATIVE (I.E. AT THE DISTRICT OR PROJECT LEVEL) AS SPECIFIED IN SECTION 106.02(A)2.C. OBTAIN TOPSOIL FROM OUTSIDE THE RIGHT OF WAY, WHERE THE SOIL QUALITY HAS PROVEN THE ABILITY TO GROW VEGETATION. BEFORE TOPSOIL REMOVAL, OBTAIN ACCEPTANCE FOR THE QUALITY OF THE SOURCE, FOR THE DEPTH OF THE TOPSOIL TO BE REMOVED, AND FOR THE METHOD OF REMOVAL. RECONDITION AREAS FROM WHICH TOPSOIL WAS OBTAINED, AS SPECIFIED IN SECTION 105.14

802.3 CONSTRUCTION

- A. PREPARATION OF AREAS TO BE TOPSOILED. GRADE THE AREAS TO BE COVERED BY TOPSOIL USING ACCEPTABLE METHODS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE PLACING TOPSOIL. REMOVE STONES AND OTHER FOREIGN MATERIAL 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE AND SATISFACTORILY DISPOSE OF UNSUITABLE AND SURPLUS MATERIAL.
- B. PLACING AND SPREADING TOPSOIL. PLACE TOPSOIL ON THE PREPARED AREAS AND, UNLESS OTHERWISE INDICATED, SPREAD AND COMPACT TO A 4-INCH UNIFORM DEPTH ±1 1/2 INCHES. COMPACT WITH A ROLLER HAVING A WEIGHT NOT OVER 120 POUNDS PER FOOT WIDTH OF ROLLER OR BY OTHER ACCEPTABLE METHODS, AS DIRECTED. REMOVE OVERDEPTH TOPSOIL, UNLESS OTHERWISE AGREED UPON IN WRITING. DO NOT PLACE TOPSOIL IN A WET OR FROZEN CONDITION.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	3 OF 18
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OWNERSHIP, OPERATIONS AND MAINTENANCE PROCEDURES

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	4 OF 18
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REVISION NUMBER	REVISIONS			DATE

- THE OPERATIONS AND MAINTENANCE RESPONSIBILITIES WILL BE SHARED BETWEEN THE FOLLOWING ENTITIES:
 1. (DISTRICT) THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DISTRICT 6-0, LOCATED AT 7000 GEERDES BLVD, KING OF PRUSSIA, PA 19406
 2. (TOWNSHIP) LOWER PROVIDENCE TOWNSHIP, LOCATED AT 100 PARKLANE DRIVE, EAGLEVILLE, PA 19403.

- PERFORM MAINTENANCE ACTIVITIES FOR THE STORMWATER CONTROL MEASURES (SCMs) IN ACCORDANCE WITH PENNDOT PUBLICATION 888 STORMWATER CONTROL MEASURE MAINTENANCE MANUAL.

RIP RAP APRONS (TOWNSHIP):

- MAINTENANCE OF THE RIP RAP APRONS SHOULD BE PERFORMED ANNUALLY.
- THE RIP RAP AND DOWNSTREAM RECEIVING AREA SHOULD BE INSPECTED FOR DAMAGE DUE TO FLOODS AND/OR VEHICULAR TRAFFIC, SEDIMENT BUILD UP, AND ACCUMULATION OF DEBRIS OR TRASH. REPLACE ANY DISPLACED OR MISSING STONES. REPAIR ANY EROSION WITHIN THE DOWNSTREAM RECEIVING AREA.

SUMPED INLETS:

MAINTENANCE TO BE PERFORMED TWO TIMES PER YEAR BY TOWNSHIP:

- REMOVE TRASH, DEBRIS, AND/OR SEDIMENT FROM THE SURFACE
- REMOVE SEDIMENT, TRASH, AND DEBRIS BUILDUP FROM THE SUMP AREA USING A VACUUM TRUCK OR OTHER APPROPRIATE METHOD. REMOVE SEDIMENT COLLECTED IN WEEP HOLES.
- REMOVE VEGETATION IMPEDING FLOW INTO THE INLET GRATE.
- REMOVE ANIMAL CARCASSES FROM VICINITY OF INLET AND WITHIN INLET BOXES.

MAINTENANCE TO BE PERFORMED EVERY THREE (3) YEARS BY DISTRICT (STARTING IN YEAR 4 AFTER CONSTRUCTION):

- PERFORM VISUAL SCREENING INSPECTION TO DETERMINE INLET IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF STRUCTURE. ADDRESS PROBLEMS AFFECTING THE FUNCTION OF THE INLET IN ACCORDANCE WITH PENNDOT PUBLICATION 888.

MAINTENANCE TO BE PERFORMED AFTER FIRST YEAR AND YEAR 10 AFTER CONSTRUCTION BY DISTRICT (CONTINUING ON 10 YEAR CYCLE):

- PERFORM CONDITION ASSESSMENT INSPECTION TO DETERMINE INLET IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF STRUCTURE AND RESTORE TO ORIGINAL CONDITION. IN ADDITION, A THOROUGH INVESTIGATION OF THE SCM IS TO BE PERFORMED INCLUDING INSPECTION OF THE INFLOW AND OUTFLOW OF THE STRUCTURE. ADDRESS ALL DEFICIENCIES IN ACCORDANCE WITH PENNDOT PUBLICATION 888.

AMENDED SOILS:

- (TOWNSHIP) THE SOIL AMENDMENT PROCESS MAY NEED TO BE REPEATED OVER TIME DUE TO COMPACTION BY AND/OR SETTLING.

RAIN GARDEN

- (TOWNSHIP) WHILE VEGETATION IS BEING ESTABLISHED, WATER ALL SEEDED/PLANTED AREAS TWICE WEEKLY FOR 6 WEEKS FOLLOWING PLANTING. WATERING MAY BE SKIPPED IF 1/4" OF RAINFALL HAS OCCURRED WITHIN 24 HOURS OF SCHEDULED WATERING. PRUNING AND WEEDING MAY ALSO BE REQUIRED.

MAINTENANCE ACTIVITIES TO BE DONE TWICE A YEAR BY TOWNSHIP:

- MOW EMBANKMENT AND SURROUNDING AREAS TO A HEIGHT OF 5 TO 8 INCHES. MOW ONLY WHEN GROUND IS DRY.
- THE VEGETATION OF THE RAIN GARDEN SHOULD BE MAINTAINED IN GOOD CONDITION AND ANY BARE SPOTS BE RE-VEGETATED AS SOON AS POSSIBLE. REPLACE DISEASED OR DEAD PLANTS. IF SPECIFIC SPECIES MORTALITY IS REOCCURRING, ASSESS CAUSE AND REPLACE WITH APPROPRIATE ALTERNATE SPECIES.
- REMOVE WOODY VEGETATION, INVASIVE/UNDESIRABLE SPECIES, AND UNCONTROLLED GROWTH.
- DURING PERIODS OF EXTENDED DROUGHT, BIORETENTION AREAS MAY REQUIRE WATERING.

MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY BY TOWNSHIP:

- MOW AND TRIM VEGETATION ON THE BED BOTTOM. MOW ONLY WHEN BED IS DRY TO AVOID RUTTING. CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. HAND OPERATED EQUIPMENT IS PREFERRED. INSPECT FOR LITTER AND REMOVE PRIOR TO MOWING.
- PERENNIAL PLANTINGS MAY BE CUT DOWN AT THE END OF THE GROWING SEASON.

MAINTENANCE TO BE PERFORMED EVERY THREE (3) YEARS BY DISTRICT (STARTING IN YEAR 4 AFTER CONSTRUCTION):

- PERFORM VISUAL SCREENING INSPECTION TO DETERMINE IF SCM IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF SCM. ADDRESS PROBLEMS AFFECTING THE FUNCTION OF THE SCM IN ACCORDANCE WITH PENNDOT PUBLICATION 888.

MAINTENANCE TO BE PERFORMED AFTER FIRST YEAR AND YEAR 10 AFTER CONSTRUCTION BY DISTRICT (CONTINUING ON 10 YEAR CYCLE):

- PERFORM CONDITION ASSESSMENT INSPECTION TO DETERMINE SCM IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF STRUCTURES AND RESTORE TO ORIGINAL CONDITION. IN ADDITION, A THOROUGH INVESTIGATION OF THE SCM IS TO BE PERFORMED INCLUDING INSPECTION OF THE INFLOW AND OUTFLOW OF THE STRUCTURE, CONTRIBUTING DRAINAGE AREA, AND EMBANKMENTS. ADDRESS ALL DEFICIENCIES IN ACCORDANCE WITH PENNDOT PUBLICATION 888.
- ENSURE RUNOFF DRAINS DOWN WITHIN THE DESIGN PARAMETERS. WHEN THE FILTERING CAPACITY OF THE RAIN GARDEN DIMINISHES SUBSTANTIALLY (E.G. WHEN WATER PONDS ON THE SURFACE FOR MORE THAN 72 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHOULD BE DISPOSED IN AN ACCEPTABLE MANNER. SILT/SEDIMENT SHOULD BE REMOVED FROM THE BED WHEN THE ACCUMULATION EXCEEDS ONE INCH.

MAINTENANCE ACTIVITIES TO BE DONE AS NEEDED BY TOWNSHIP:

- REMOVE ACCUMULATED SEDIMENT AS REQUIRED TO MAINTAIN INFILTRATION THROUGH THE SOIL MEDIA AND TO MAINTAIN WATER QUALITY FUNCTIONALITY. RESTORE ORIGINAL CROSS SECTION. PROPERLY DISPOSE OF SEDIMENT.

MANAGE RELEASE CONCEPT BASIN:

- (TOWNSHIP) WHILE VEGETATION IS BEING ESTABLISHED, WATER ALL SEEDED/PLANTED AREAS TWICE WEEKLY FOR 6 WEEKS FOLLOWING PLANTING. WATERING MAY BE SKIPPED IF 1/4" OF RAINFALL HAS OCCURRED WITHIN 24 HOURS OF SCHEDULED WATERING. PRUNING AND WEEDING MAY ALSO BE REQUIRED.

MAINTENANCE ACTIVITIES TO BE DONE TWICE A YEAR BY TOWNSHIP:

- MOW EMBANKMENT AND SURROUNDING AREAS TO A HEIGHT OF 5 TO 8 INCHES. MOW ONLY WHEN GROUND IS DRY.
- THE VEGETATION OF THE RAIN GARDEN SHOULD BE MAINTAINED IN GOOD CONDITION AND ANY BARE SPOTS BE RE-VEGETATED AS SOON AS POSSIBLE.
- REMOVE WOODY VEGETATION, INVASIVE/UNDESIRABLE SPECIES, AND UNCONTROLLED GROWTH.
- DURING PERIODS OF EXTENDED DROUGHT, BIORETENTION AREAS MAY REQUIRE WATERING.
- REMOVE DEBRIS AND TRASH.

MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY BY TOWNSHIP:

- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION. DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY. MOW ONLY WHEN BED IS DRY TO AVOID RUTTING. CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. INSPECT FOR LITTER AND REMOVE PRIOR TO MOWING.
- REMOVE LEAF LITTER.

MAINTENANCE TO BE PERFORMED EVERY THREE (3) YEARS BY DISTRICT (STARTING IN YEAR 4 AFTER CONSTRUCTION):

- PERFORM VISUAL SCREENING INSPECTION TO DETERMINE IF SCM IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF SCM. ADDRESS PROBLEMS AFFECTING THE FUNCTION OF THE SCM IN ACCORDANCE WITH PENNDOT PUBLICATION 888.

MAINTENANCE TO BE PERFORMED AFTER FIRST YEAR AND YEAR 10 AFTER CONSTRUCTION BY DISTRICT (CONTINUING ON 10 YEAR CYCLE):

- PERFORM CONDITION ASSESSMENT INSPECTION TO DETERMINE SCM IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF STRUCTURES AND RESTORE TO ORIGINAL CONDITION. IN ADDITION, A THOROUGH INVESTIGATION OF THE SCM IS TO BE PERFORMED INCLUDING INSPECTION OF THE INFLOW AND OUTFLOW OF THE STRUCTURE, CONTRIBUTING DRAINAGE AREA, AND EMBANKMENTS. ADDRESS ALL DEFICIENCIES IN ACCORDANCE WITH PENNDOT PUBLICATION 888.
- ENSURE RUNOFF DRAINS DOWN WITHIN THE DESIGN PARAMETERS. WHEN THE FILTERING CAPACITY OF THE RAIN GARDEN DIMINISHES SUBSTANTIALLY (E.G. WHEN WATER PONDS ON THE SURFACE FOR MORE THAN 72 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHOULD BE DISPOSED IN AN ACCEPTABLE MANNER. SILT/SEDIMENT SHOULD BE REMOVED FROM THE BED WHEN THE ACCUMULATION EXCEEDS ONE INCH.

MAINTENANCE ACTIVITIES TO BE DONE AS NEEDED BY TOWNSHIP:

- REMOVE ACCUMULATED SEDIMENT AS REQUIRED TO MAINTAIN INFILTRATION THROUGH THE SOIL MEDIA AND TO MAINTAIN WATER QUALITY FUNCTIONALITY. RESTORE ORIGINAL CROSS SECTION. PROPERLY DISPOSE OF SEDIMENT.

VEGETATED SWALE:

MAINTENANCE ACTIVITIES TO BE DONE TWICE A YEAR BY TOWNSHIP:

- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION. DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY. MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING.

- REMOVE LITTER PRIOR TO MOWING.

MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY BY TOWNSHIP:

- REMOVE WOODY VEGETATION, INVASIVE/UNDESIRABLE SPECIES, AND UNCONTROLLED GROWTH.
- REMOVE LITTER, DEBRIS, AND TRASH.

MAINTENANCE TO BE PERFORMED EVERY THREE (3) YEARS (STARTING IN YEAR 4 AFTER CONSTRUCTION) (INSPECTION PERFORMED BY TOWNSHIP FOR SWALES 5 & 6, AND BY DISTRICT FOR SWALES 1, 2, 3, 4, & 7):

- PERFORM VISUAL SCREENING INSPECTION TO DETERMINE IF SCM IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF SCM. ADDRESS PROBLEMS AFFECTING THE FUNCTION OF THE SCM IN ACCORDANCE WITH PENNDOT PUBLICATION 888.

MAINTENANCE TO BE PERFORMED AFTER FIRST YEAR AND YEAR 10 AFTER CONSTRUCTION (CONTINUING ON 10 YEAR CYCLE) (INSPECTION PERFORMED BY TOWNSHIP FOR SWALES 5 & 6, AND BY DISTRICT FOR SWALES 1, 2, 3, 4, & 7):

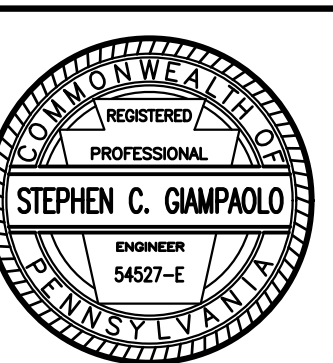
- PERFORM CONDITION ASSESSMENT INSPECTION TO DETERMINE SCM IS FUNCTIONING PROPERLY. INSPECT FOR DEBRIS AND TRASH, EROSION, PONDING, DAMAGE AND/OR DETERIORATION OF STRUCTURES AND RESTORE TO ORIGINAL CONDITION. IN ADDITION, A THOROUGH INVESTIGATION OF THE SCM IS TO BE PERFORMED INCLUDING INSPECTION OF THE INFLOW AND OUTFLOW OF THE STRUCTURE, CONTRIBUTING DRAINAGE AREA, AND EMBANKMENTS. INSPECT FOR UNIFORMITY IN CROSS SECTION AND LONGITUDINAL SLOPE. ADDRESS ALL DEFICIENCIES IN ACCORDANCE WITH PENNDOT PUBLICATION 888.
- ENSURE RUNOFF DRAINS DOWN WITHIN THE DESIGN PARAMETERS. WHEN THE FILTERING CAPACITY OF THE RAIN GARDEN DIMINISHES SUBSTANTIALLY (E.G. WHEN WATER PONDS ON THE SURFACE FOR MORE THAN 72 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHOULD BE DISPOSED IN AN ACCEPTABLE MANNER. SILT/SEDIMENT SHOULD BE REMOVED FROM THE BED WHEN THE ACCUMULATION EXCEEDS ONE INCH.

MAINTENANCE ACTIVITIES TO BE PERFORMED AS NEEDED BY TOWNSHIP:

- PLANT ALTERNATIVE GRASS SPECIES IN THE EVENT OF UNSUCCESSFUL ESTABLISHMENT.
- RESEED BARE AREAS AND INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION CHANNELS ARE FORMING.
- WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY WHEN ABSOLUTELY NECESSARY.

ADDITIONAL MAINTENANCE FOR WINTER CONDITIONS (TOWNSHIP):

- INSPECT SWALE IMMEDIATELY AFTER THE SPRING MELT, REMOVE RESIDUALS (E.G. SAND) AND REPLACE DAMAGED VEGETATION WITHOUT DISTURBING REMAINING VEGETATION.
- IF ROADSIDE OR PARKING LOT RUNOFF IS DIRECTED TO THE SWALE, MULCHING AND/OR SOIL AERATION/MANIPULATION MAY BE REQUIRED IN THE SPRING TO RESTORE SOIL STRUCTURE AND MOISTURE CAPACITY AND TO REDUCE THE IMPACTS OF DEICING AGENTS.
- USE SALT-TOLERANT VEGETATION IN SWALES.



SEQUENCE OF CONSTRUCTION

GENERAL NOTES:

- ALL EARTH DISTURBANCE ACTIVITIES ARE TO PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. LIMIT CLEARING AND GRUBBING TO THOSE AREAS DESCRIBED IN EACH STAGE. DEVIATION FROM THAT SEQUENCE REQUIRES WRITTEN APPROVAL FROM THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO IMPLEMENTATION.
- A BMP SEQUENCE CAN BE CHANGED BY NOTIFYING LOCAL COUNTY CONSERVATION DISTRICT. METHODS OF COMMUNICATING CHANGES INCLUDE THE FOLLOWING:
 - A. GET VERBAL APPROVAL.
 - B. MODIFY THE E&S PLAN (RED-LINE DRAWING) AND GET A SIGNATURE OR INITIALS WHEN AN INSPECTOR ARRIVES AT THE SITE.
 - C. FAX/EMAIL THE MODIFIED SEQUENCE TO CONSERVATION DISTRICT.
- AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), INVITE ALL CONTRACTORS, A TOWNSHIP REPRESENTATIVE, THE MONTGOMERY COUNTY CONSERVATION DISTRICT, AND A REPRESENTATIVE FROM THE PA DEP SOUTHEASTERN REGION TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- PERFORM PRE-PROJECT SITE EVALUATION AND DETERMINE IF THERE ARE ANY AREAS WITHIN THE LIMIT OF DISTURBANCE THAT SHOULD NOT BE DISTURBED DURING THE LIFE OF THE PROJECT.
- INSTALL APPROPRIATE INLET PROTECTION ON ALL NEW INLETS ONCE THE INLET INSTALLATION IS COMPLETE.
- 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.
- ACTIVITIES LABELED AS "CRITICAL ACTIVITY" HAVE SPECIFIC TASKS WHICH REQUIRE THE OVERSIGHT OF A LICENSED PROFESSIONAL.
- MARK E&S LIMITS OF DISTURBANCE PRIOR TO DISTURBANCE ACTIVITIES (I.E. SURVEY STAKES, POST & ROPE, CONSTRUCTION FENCE, ETC.)
- CONSTRUCT ALL DRAINAGE FACILITIES FROM DOWNSTREAM TO UPSTREAM UNLESS OTHERWISE NOTED.
- ANY VEGETATED AREA WHICH HAS REACHED FINAL GRADE AND EXCEEDS 15,000 SQUARE FEET MUST BE IMMEDIATELY STABILIZED.
- CESSATION OF ACTIVITY FOR 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.
- TEMPORARY EXTENDED-TERM ROLLED EROSION CONTROL PRODUCT, TYPE 3B = TREC-3B
- PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A = PREC-5A
- THE FOLLOWING IS A BREAKDOWN OF THE WORK TO BE COMPLETED DURING EACH STAGE:

PREPARATION WORK FOR UTILITIES

- 1) CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT 72 HOURS PRIOR TO START OF ANY ACTIVITY.
- 2) INSTALL STAGE 1A EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR UTILITY WORK, INCLUDING COMPOST FILTER SOCK AND INLET PROTECTION.
- 3) CLEAR AND GRUB FOR UTILITY POLE RELOCATION AND INSTALLATION OF SEWER MAIN AND WATER MAIN. PLACE COMPACTED BERMS WHERE INDICATED TO SET PROPOSED UTILITY POLES AT FINAL GRADE. PLACE FORMULA E SEEDING.
- 4) PERFORM INCORPORATED UTILITY WORK TO INSTALL SANITARY SEWER MAIN UNDER SR 4004 AND TO RELOCATE SEWER UNDER CRAWFORD ROAD. ABANDON OLD SEWER MAIN AND REMOVE MANHOLES. REFER TO UTILITY LINE STREAM CROSSING DETAIL FOR MINE RUN CROSSING. IMMEDIATELY STABILIZE ANY GRASS DISTURBED AREAS WITH FORMULA E SEEDING. RESTORE ANY DISTURBED AREAS WITH TEMPORARY PAVEMENT.
- 5) INSTALL PORTION OF PROPOSED WATER MAIN ON T-324 ALONG OLD ROADWAY AND ON SR 4004 SOUTH OF THE T-324 INTERSECTION.

STAGE 1A

- 1) CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT 72 HOURS PRIOR TO START OF ANY ACTIVITY.
- 2) INSTALL TRAFFIC CONTROL INCLUDING CLOSURE OF CRAWFORD ROAD IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN.
- 3) DELINEATE ALL LIMITS OF DISTURBED AREA IN THE FIELD. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING INLET PROTECTION, COMPOST FILTER SOCKS, AND ROCK CONSTRUCTION ENTRANCES 1 AND 2 (WITH COMPOST SOCK SEDIMENT TRAP 1). INSTALL STREAM DIVERSION SYSTEM AND DEWATER WITH PUMPED WATER FILTER BAG.
- 4) CLEAR AND GRUB AREA WITHIN STAGE 1A WORK ZONE INCLUDING AREA FOR SEDIMENT TRAP IN STAGE 3.
- 5) EXCAVATE FOR TEMPORARY DIVERSION CHANNEL. MAINTAIN STABILITY OF CREEK BANK AT ALL TIMES. LINE CHANNEL WITH FORMULA E SEEDING AND PREC-5A.
- 6) EXCAVATE WITHIN STAGE 1A LIMITS AND REMOVE EXISTING STONE WALL FROM STA. 55+50 RT TO 56+06 RT. REMOVE ABANDONED SEWER MAIN AS NEEDED.
- 7) INSTALL FILL TO RAISE ROADWAY AND PREPARE SUBGRADE AND EMBANKMENT FROM 54+50 TO 56+75. INSTALL DRAINAGE SYSTEM FROM I-14 TO EW-6.
- 8) CONSTRUCT TEMPORARY RAMBO PROPERTY DRIVEWAY. REMOVE ROCK CONSTRUCTION ENTRANCE 2 AND COMPOST SOCK SEDIMENT TRAP 1. MAINTAIN ACCESS TO EXISTING RAMBO DRIVEWAY UNTIL TEMPORARY DRIVEWAY IS COMPLETE. IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED. IMMEDIATELY STABILIZE TEMPORARY EMBANKMENT ON CRAWFORD ROAD AT STA. 56+75 WITH FORMULA E SEEDING AND TREC-3B.

STAGE 1B

- 1) INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN. MAINTAIN CRAWFORD ROAD CLOSURE.
- 2) INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING INLET PROTECTION, COMPOST FILTER SOCKS, AND ROCK CONSTRUCTION ENTRANCE 3. MAINTAIN ROCK CONSTRUCTION ENTRANCE 1.
- 3) RECONFIGURE STREAM DIVERSION SYSTEM TO DIVERT FLOW INTO TEMPORARY DIVERSION CHANNEL. DEWATER AS NEEDED WITH PUMPED WATER FILTER BAG.
- 4) CLEAR AND GRUB, INSTALL TEMPORARY EXCAVATION SUPPORT SYSTEM AND EXCAVATE WITHIN STAGE 1B WORK AREA.

- 5) INSTALL CRAWFORD ROAD BOX CULVERT AND RETAINING WALL. BACKFILL, GRADE RELOCATED MINE RUN CHANNEL, AND PLACE ROCK LINING AND TREC-3A AS INDICATED. REMOVE TEMPORARY EXCAVATION SUPPORT. BACKFILL TO RAISE ROADWAY AND PREPARE SUBGRADE AND EMBANKMENT.
- 6) INSTALL WATER MAIN ON CRAWFORD ROAD FROM STA 54+50 TO 57+15.
- 7) CONSTRUCT CURB AND PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 56+75 TO STA. 57+15 INCLUDING CURB AND FINAL RAMBO PROPERTY DRIVEWAY ADJUSTMENT. REMOVE TEMPORARY RAMBO PROPERTY DRIVEWAY. PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED. (CRITICAL ACTIVITY) INSTALL VEGETATED SWALE 5 AND LINE WITH FORMULA N SEEDING AND PERC-5A. PLACE ROCK FILTER 1 AND OUTLET PROTECTION FOR EW-6. REMOVE ROCK FILTER 1 ONCE CHANNEL LINING IS INSTALLED. IMMEDIATELY STABILIZE TEMPORARY EMBANKMENT NEAR STA. 57+15 WITH FORMULA E SEEDING AND TREC-3B.

STAGE 1C

- 1) INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN. MAINTAIN CRAWFORD ROAD CLOSURE.
- 2) INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING COMPOST FILTER SOCKS. MAINTAIN CONSTRUCTION ENTRANCES 1 AND 3.
- 3) RECONFIGURE STREAM DIVERSION SYSTEM AND BACKFILL TEMPORARY DIVERSION CHANNEL WITH SUITABLE MATERIAL AND COMPACT.
- 4) INSTALL FILL TO RAISE THE INTERSECTION APPROACH AND PREPARE THE SUBGRADE AND EMBANKMENT. INSTALL DRAINAGE SYSTEM FROM COS-2 TO EW-5 INCLUDING ANTI-SEEP COLLARS AND OUTLET PROTECTION. REMOVE TEMPORARY STREAM DIVERSION.
- 5) INSTALL WATER MAIN ON CRAWFORD ROAD FROM STA 57+15 TO 59+10.
- 6) INSTALL PORTION OF MRC BASIN 2 INCLUDING CLAY CORE. DO NOT INSTALL UNDERDRAIN UNTIL STAGE 5. REMOVE ROCK CONSTRUCTION ENTRANCES 1 AND 3 WHEN NEEDED. STABILIZE DISTURBED AREA OF ROCK CONSTRUCTION ENTRANCE 3 WITH TOPSOIL, MULCH, SEEDING AND TREC-3B, AND INSTALL COMPOST FILTER SOCK WHERE INDICATED ALONG THE TEMPORARY SLOPE.
- 7) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 57+15 TO STA. 59+10 AND PORTION OF FINAL MYCEK PROPERTY DRIVEWAY. PERFORM FINAL GRADING AND PLACE REMAINING STREAM CHANNEL ROCK LINING. IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED. (CRITICAL ACTIVITY) INSTALL VEGETATED SWALE 4 AND LINE WITH FORMULA N SEEDING AND PREC-5A. PLACE ROCK FILTER 2. REMOVE ROCK FILTER 2 ONCE CHANNEL LINING IS INSTALLED. IMMEDIATELY STABILIZE TEMPORARY EMBANKMENT ALONG SR 4004 WITH FORMULA E SEEDING AND TREC-3B.

STAGE 2

- 1) INSTALL TRAFFIC CONTROL INCLUDING EAGLEVILLE ROAD CLOSURE IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN. MAINTAIN CRAWFORD ROAD CLOSURE.
- 2) INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING INLET PROTECTION, COMPOST FILTER SOCKS AND ROCK CONSTRUCTION ENTRANCE 4 (WITH COMPOST SOCK SEDIMENT TRAP 2).
- 3) CLEAR, GRUB, AND EXCAVATE WITHIN STAGE 2 LIMITS. REMOVE EXISTING STONE WALL ALONG SOUTH SIDE OF EAGLEVILLE ROAD.
- 4) INSTALL FILL TO RAISE THE INTERSECTION APPROACH AND PREPARE SUBGRADE AND EMBANKMENT. INSTALL DRAINAGE SYSTEM FROM I-8 TO EW-4 INCLUDING I-6, I-7 AND OUTLET PROTECTION. UTILIZE TEMPORARY COFFERDAM TO PERFORM WORK WITHIN MINE RUN. PLACE COMPOST SOCK SEDIMENT TRAP 3
- 5) INSTALL WATER MAIN ON SR 4006 FROM 60+65 TO 63+00.
- 6) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 60+65 TO STA. 63+00 INCLUDING INSTALLATION OF SINGLE FACE BARRIER, CURB, AND DRIVEWAY ADJUSTMENTS. CONSTRUCT TEMPORARY DRIVEWAY FOR PARK 901 LLC PROPERTY. REMOVE ROCK CONSTRUCTION ENTRANCE 4 AND COMPOST SOCK SEDIMENT TRAPS 2 AND 3. PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED. IMMEDIATELY STABILIZE TEMPORARY EMBANKMENT ALONG SR 4004 WITH FORMULA E SEEDING AND TREC-3B.

STAGE 3

(CONSTRUCT STAGES 3, 4A, 4D, & 5A CONCURRENTLY.)

- 1) INSTALL TRAFFIC CONTROL INCLUDING SR 4004 CLOSURE IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN. MAINTAIN EAGLEVILLE ROAD AND CRAWFORD ROAD CLOSURES.
- 2) INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING INLET PROTECTION AND COMPOST FILTER SOCKS.
- 3) INSTALL REMAINDER OF FINAL MYCEK PROPERTY DRIVEWAY AND REMOVE EXISTING DRIVEWAY.
- 4) INSTALL REMAINDER OF TEMPORARY MRC BASIN 2 CONFIGURATION AS SEDIMENT TRAP 1 INCLUDING SKIMMER CONFIGURATION, SILT FENCE, AND CLAY CORE.
- 5) CLEAR, GRUB, AND EXCAVATE WITHIN STAGE 3 LIMITS.
- 6) REMOVE SECTION OF EXISTING PAVEMENT AND CONSTRUCT TEMPORARY SWALE 1 AND LINE WITH R-5 ROCK.
- 7) INSTALL VEGETATED SWALE 6 AS GRASS SWALE AND LINE WITH FORMULA E SEEDING AND PERC-5A. PERFORM TEMPORARY GRADING ALONG SR 4004 TO ALLOW FLOW INTO VEGETATED SWALE 6 FROM ROADWAY AND PLACE FORMULA E SEEDING.
- 8) INSTALL FILL TO RAISE THE INTERSECTION AND PREPARE SUBGRADE AND EMBANKMENT. INSTALL DRAINAGE CONNECTION FROM I-9 TO I-8.
- 9) INSTALL WATER MAIN WITHIN THE INTERSECTION OF SR 4004/SR 4006/T-324
- 10) (CRITICAL ACTIVITY) EXCAVATE TO BOTTOM OF MRC BASIN 1 AND SCARIFY BOTTOM. DO NOT COMPACT THE SUBGRADE. INSTALL DRAINAGE FACILITIES FOR MRC BASIN 1 INCLUDING CLEANOUT STRUCTURES, PERFORATED PIPES, AND AGGREGATE (PIPE BEDDING). PREVENT RUNOFF FROM ENTERING THE CLEANOUTS. PLACE UNIFORMLY GRADED AGGREGATE IN MAXIMUM 8" LIFTS AND LIGHTLY COMPACT.
- 11) AFTER AGGREGATE IS COMPLETELY INSTALLED, ALL HEAVY CONSTRUCTION EQUIPMENT IS PROHIBITED FROM THE MRC BASIN 1 AREA TO ELIMINATE IMPACTS AND/OR COMPACTION. IN THE EVENT THAT ANY IMPACT COMPROMISE THE FUNCTIONALITY OF THE AGGREGATE, IT MUST BE IMMEDIATELY REPAIRED OR REPLACED TO THE PROJECT SPECIFICATIONS. (CRITICAL ACTIVITY) PLACE SOIL MEDIA GENTLY. DO NOT COMPACT SOIL MEDIA OR DRIVE HEAVY EQUIPMENT OVER SOIL MEDIA.
- 12) PLACE APPROPRIATE SEEDING AND TREC-3B IN MRC BASIN 1, AND INSTALL COMPOST FILTER SOCK ALONG BASIN SLOPES TO PREVENT SEDIMENT FROM ENTERING THE BASIN. SURROUND BASIN WITH TEMPORARY PROTECTIVE FENCE.
- 13) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER WITHIN INTERSECTION ON SR 4004 FROM STA. 24+55 TO STA. 25+90 AND REMAINING SECTIONS ON EAGLEVILLE ROAD AND CRAWFORD ROAD FROM STA. 59+10 TO STA. 60+65 INCLUDING FINAL DRIVEWAY FOR PARK 901 LLC PROPERTY. INSTALL SIGNAL CONDUIT AND SIGNAL FOUNDATIONS. REMOVE TEMPORARY DRIVEWAY FOR PARK 901 LLC PROPERTY. PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED. IMMEDIATELY STABILIZE TEMPORARY EMBANKMENT ALONG NORTH AND SOUTH

APPROACHES OF SR 4004 WITH FORMULA E SEEDING AND TREC-3B.
14) REOPEN EAGLEVILLE ROAD AND CRAWFORD ROAD TO TRAFFIC

STAGE 4A

- 1) INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN. MAINTAIN SR 4004 CLOSURE.
- 2) INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING COMPOST FILTER SOCKS.
- 3) INSTALL STREAM DIVERSION SYSTEM AND REMOVE EXISTING SUPERSTRUCTURE AND SOUTH ABUTMENT.

STAGE 4B

- 1) MAINTAIN SR 4004 CLOSURE.
- 2) INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING COMPOST FILTER SOCKS. MAINTAIN TEMPORARY COFFERDAM SYSTEM FROM STAGE 4A.
- 3) INSTALL STREAM DIVERSION SYSTEM AND REMOVE EXISTING NORTH ABUTMENT.

STAGE 4C

- 1) MAINTAIN SR 4004 CLOSURE.
- 2) MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES.
- 3) INSTALL TEMPORARY STREAM BYPASS SYSTEM AND REMOVE STREAM DIVERSION SYSTEMS FROM STAGES 4A AND 4B. INSTALL SR 4004 CULVERT AND BACKFILL. REMOVE PORTION OF EXISTING PAVEMENT AND INSTALL TEMPORARY SWALE 2 AND LINE WITH R-5 ROCK. GRADE AND LINE CHANNEL BANKS AND REMOVE TEMPORARY STREAM BYPASS SYSTEM.

STAGE 4D

- 1) MAINTAIN SR 4004 CLOSURE.
- 2) INSTALL EROSION AND SEDIMENT CONTROL MEASURES ALONG SR 4004 FROM STA 16+00 TO STA. 24+00, INCLUDING COMPOST FILTER SOCKS AND ROCK CONSTRUCTION ENTRANCE 5 (WITH COMPOST SOCK SEDIMENT TRAP 4).
- 3) CLEAR, GRUB, AND EXCAVATE ALONG SR 4004 FROM STA 20+50 TO 23+50.
- 4) INSTALL FILL TO RAISE ROADWAY AND PREPARE SUBGRADE AND EMBANKMENT. INSTALL CROSS PIPE AT STA 22+10 INCLUDING OUTLET PROTECTION UTILIZING TEMPORARY STREAM BYPASS SYSTEM. INSTALL DRAINAGE SYSTEM FROM I-3A TO EW-1 INCLUDING OUTLET PROTECTION. RESET SEWER MANHOLES TO FINAL GRADE.
- 5) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 20+50 TO STA. 24+55 INCLUDING GRAVEL ACCESS DRIVEWAY. (CRITICAL ACTIVITY) INSTALL AMENDED SOILS ADJACENT TO ACCESS DRIVEWAY. REMOVE TEMPORARY SWALE 2. IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED.

STAGE 4E

- 1) MAINTAIN SR 4004 CLOSURE AND OPEN LEFT SIDE TO LOCAL TRAFFIC.
- 2) MAINTAIN STAGE 4D EROSION AND SEDIMENT CONTROL MEASURES ALONG SR 4004 FROM STA 16+00 TO STA. 24+00, INCLUDING COMPOST FILTER SOCKS AND ROCK CONSTRUCTION ENTRANCE 5 (WITH COMPOST SOCK SEDIMENT TRAP 4).
- 3) CLEAR, GRUB, AND EXCAVATE ALONG RIGHT SIDE OF SR 4004 FROM STA 16+00 TO 20+50.
- 4) INSTALL DRAINAGE SYSTEM FROM I-1 TO I-3A.
- 5) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 16+11 TO STA. 20+50 RT INCLUDING T-546 RECONSTRUCTION AND DRIVEWAY ADJUSTMENTS.
- 6) PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED.
- 7) (CRITICAL ACTIVITY) INSTALL VEGETATED SWALE 2 AND LINE WITH FORMULA N SEEDING AND PREC-5A. PLACE ROCK FILTER 4. REMOVE ROCK FILTER ONCE CHANNEL LINING IS INSTALLED.
- 8) (CRITICAL ACTIVITY) INSTALL RAIN GARDEN 1 INCLUDING OUTLET STRUCTURE, PIPE, AND OUTLET PROTECTION. SURROUND RAIN GARDEN WITH TEMPORARY PROTECTIVE FENCE. DO NOT CONSTRUCT VEGETATED SWALE 1 UNTIL RAIN GARDEN SEEDING IS ESTABLISHED.
- 9) (CRITICAL ACTIVITY) INSTALL VEGETATED SWALE 1 AND LINE WITH FORMULA N SEEDING AND PREC-5A. PLACE ROCK FILTER 3. REMOVE ROCK FILTER ONCE CHANNEL LINING HAS BEEN INSTALLED.

STAGE 4F

- 1) MAINTAIN SR 4004 CLOSURE AND SHIFT LOCAL TRAFFIC TO RIGHT SIDE OF SR 4004.
- 2) MAINTAIN STAGE 4D EROSION AND SEDIMENT CONTROL MEASURES ALONG SR 4004 FROM STA 16+00 TO STA. 24+00, INCLUDING COMPOST FILTER SOCKS AND ROCK CONSTRUCTION ENTRANCE 5 (WITH COMPOST SOCK SEDIMENT TRAP 4).
- 3) CLEAR, GRUB, AND EXCAVATE ALONG LEFT SIDE OF SR 4004 FROM STA 20+50 TO 23+50.
- 4) INSTALL DRIVEWAY PIPE CROSSING AT STA. 19+00 LT. MAINTAIN DRIVEWAY ACCESS.
- 5) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 16+11 TO STA. 20+50 LT INCLUDING DRIVEWAY ADJUSTMENTS. REMOVE ROCK CONSTRUCTION ENTRANCE 5 AND COMPOST SOCK SEDIMENT TRAP 4.
- 6) PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED.
- 7) (CRITICAL ACTIVITY) INSTALL VEGETATED SWALE 3 AND LINE WITH FORMULA N SEEDING AND PREC-5A. PLACE ROCK FILTER 5. REMOVE ROCK FILTER ONCE CHANNEL LINING HAS BEEN INSTALLED.
- 8) INSTALL FINAL SIGNAL FOUNDATIONS AND EQUIPMENT.

STAGE 5A

- 1) MAINTAIN SR 4004 CLOSURE.
- 2) INSTALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING COMPOST FILTER SOCKS AND ROCK CONSTRUCTION ENTRANCE 6.
- 3) CLEAR, GRUB, AND EXCAVATE FROM STA. 25+75 TO 26+82.
- 4) INSTALL FILL TO RAISE THE INTERSECTION APPROACH AND PREPARE SUBGRADE. REMOVE TEMPORARY SWALE 1. INSTALL DRAINAGE SYSTEM FROM I-10 TO I-9 AND DIRECT SHOULDER RUNOFF TO I-10.
- 5) INSTALL WATER MAIN FROM STA. 25+85 TO 31+70
- 6) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 25+75 TO STA. 26+82. PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	MONTGOMERY	SR 4004	MTF	5 OF 18	
LOWER PROVIDENCE TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

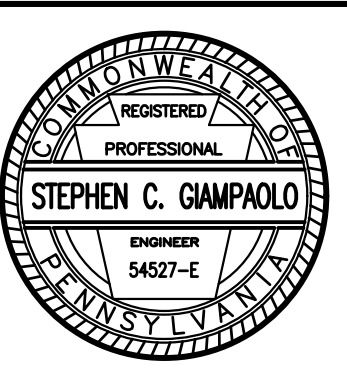
STAGE 5B

- 1) MAINTAIN SR 4004 CLOSURE AND OPEN LEFT SIDE TO LOCAL TRAFFIC.
- 2) MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES FROM STAGE 5A, INCLUDING COMPOST FILTER SOCKS AND ROCK CONSTRUCTION ENTRANCE 6.
- 3) CLEAR, GRUB, AND EXCAVATE ALONG THE RIGHT SIDE OF SR 4004 FROM STA. 26+82 TO 31+70.
- 4) INSTALL GEOSYNTHETIC REINFORCED SLOPE FROM STA. 29+57 RT TO STA. 30+92 RT.
- 5) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 26+82 RT TO STA. 31+70 RT. PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED.

STAGE 5C

- 1) MAINTAIN SR 4004 CLOSURE AND OPEN RIGHT SIDE TO LOCAL TRAFFIC.
- 2) MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES FROM STAGE 5A, INCLUDING COMPOST FILTER SOCKS AND ROCK CONSTRUCTION ENTRANCE 6.
- 3) CLEAR, GRUB, AND EXCAVATE ALONG THE LEFT SIDE OF SR 4004 FROM STA. 26+82 TO 31+70.
- 4) INSTALL DRAINAGE FROM I-12 TO I-10 AND CONNECT TO I-9 SYSTEM.
- 5) CONSTRUCT PAVEMENT UP TO AND INCLUDING BINDER FROM STA. 26+82 LT TO STA. 31+70 RT INCLUDING DRIVEWAY ADJUSTMENTS. PERFORM FINAL GRADING AND IMMEDIATELY STABILIZE DISTURBED AREAS AT FINAL GRADE WITH FINAL TOPSOIL, MULCH, SEEDING, AND TREC-3B WHERE INDICATED.
- 6) (CRITICAL ACTIVITY) PRIOR TO CONVERSION OF SEDIMENT TRAP, EXCAVATE SWALE BOTTOM OF VEGETATED SWALE 6 AND SCARIFY BOTTOM AND SIDES. PLACE AMENDED SOILS AS DIRECTED ON PCSM PLAN. DO NOT COMPACT AMENDED SOILS. RE-LINE CHANNEL WITH PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A AND FORMULA N SEEDING.
- 7) (CRITICAL ACTIVITY) DEWATER, CLEAN, AND RESTABILIZE SEDIMENT TRAP 1 PRIOR TO CONVERTING TO MRC BASIN 2.
- 8) EXCAVATE TO BOTTOM OF MRC BASIN 2. DO NOT COMPACT THE SUBGRADE. (CRITICAL ACTIVITY) INSTALL DRAINAGE FACILITIES FOR MRC BASIN 1 INCLUDING CLEANOUT STRUCTURES, PERFORATED PIPES, AND AGGREGATE (PIPE BEDDING). PREVENT RUNOFF FROM ENTERING THE CLEANOUTS. PLACE UNIFORMLY GRADED AGGREGATE IN MAXIMUM 8" LIFTS AND LIGHTLY COMPACT.
- 9) AFTER AGGREGATE IS COMPLETELY INSTALLED, ALL HEAVY CONSTRUCTION EQUIPMENT IS PROHIBITED FROM THE MRC BASIN 2 AREA TO ELIMINATE IMPACTS AND/OR COMPACTION. IN THE EVENT THAT ANY IMPACT COMPROMISE THE FUNCTIONALITY OF THE AGGREGATE, IT MUST BE IMMEDIATELY REPAIRED OR REPLACED TO THE PROJECT SPECIFICATIONS. (CRITICAL ACTIVITY) PLACE SOIL MEDIA GENTLY FROM OUTSIDE THE BMP FOOTPRINT TO AVOID COMPACTION. DO NOT COMPACT SOIL MEDIA OR DRIVE EQUIPMENT OVER SOIL MEDIA.
- 10) PLACE APPROPRIATE SEEDING AND TREC-3B IN MRC BASIN 2, AND INSTALL COMPOST FILTER SOCK ALONG BASIN SLOPES TO PREVENT SEDIMENT FROM ENTERING THE BASIN. SURROUND BASIN WITH TEMPORARY PROTECTIVE FENCE.
- 11) ONCE STAGES 4F AND THE PAVING OF 5C ARE COMPLETE, INSTALL FINAL WEARING COURSE, FINAL PAVEMENT MARKINGS, AND SIGNS.
- 12) (CRITICAL ACTIVITY) ONCE VEGETATION HAS REACHED 70% ESTABLISHMENT, CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT. THE LICENSED PROFESSIONAL MUST PERFORM A FINAL CHECK OF ALL PCSM AND REMOVAL OF E&S BMPs. UPON COMPLETION, SUBMIT THE NOTICE OF TERMINATION.

NPDES MINOR AMENDMENT 6-13-2022



PCSM BMP SEQUENCING

A LICENSED PROFESSIONAL OR DESIGNER MUST BE PRESENT ON SITE AND BE RESPONSIBLE DURING CRITICAL ACTIVITIES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN. THE CRITICAL ACTIVITIES MAY INCLUDE THE INSTALLATION OF UNDERGROUND TREATMENT OR STORAGE BMPs, STRUCTURALLY ENGINEERED BMPs, OR OTHER BMPs AS DEEMED APPROPRIATE BY THE TOWNSHIP OR THE CONSERVATION DISTRICT.

RIP RAP APRON:

INSTALL IN STAGES 1B, 1C, 2, & 4D. (REFER TO E&S PLAN)

AS DIRECTED IN PENNDOT PUBLICATION 408:

1. PREPARE THE AREA REQUIRED FOR PLACING THE GEOTEXTILE AND ROCK. THIS PREPARATION MAY INCLUDE, BUT NOT BE LIMITED TO EXCAVATING, REMOVING UNSUITABLE MATERIAL, BACKFILLING, PLACING EMBANKMENT, AND CLEARING AND GRUBBING, AS SPECIFIED IN SECTION 201.3. PLACE THE GEOTEXTILES, AS SPECIFIED IN SECTION 212.3(D)2.
2. CAREFULLY PLACE THE ROCK ON THE GEOTEXTILES TO PRODUCE AN EVEN DISTRIBUTION OF PIECES, WITH A MINIMUM OF VOIDS AND WITHOUT TEARING THE GEOTEXTILE. PLACE THE FULL COURSE THICKNESS IN ONE OPERATION IN A MANNER TO PREVENT SEGREGATION AND TO AVOID DISPLACEMENT OF THE UNDERLYING MATERIAL. DO NOT PLACE ROCK LAYERS BY DUMPING INTO CHUTES OR BY SIMILAR METHODS LIKELY TO CAUSE SEGREGATION OR GEOTEXTILE DAMAGE. REARRANGE INDIVIDUAL ROCKS, IF NECESSARY, TO ENSURE UNIFORM DISTRIBUTION.

SUMPED INLETS:

INSTALL IN STAGES 1B, 1C, 2, 3, 4D, & 5. (REFER TO E&S PLAN)

1. STABILIZE ALL CONTRIBUTING AREAS BEFORE INSTALLING AND CONNECTING PIPES TO THESE INLETS.
2. DRILL FOUR (4) 3/4" WEEP HOLES IN THE BOTTOM OF THE BOX TO PREVENT STANDING WATER FOR LONG PERIODS OF TIME.

VEGETATED SWALE:

INSTALL VEGETATED SWALES 1, 2, 3 & 7 IN STAGE 4D.
INSTALL VEGETATED SWALE 4 IN STAGE 1C.
INSTALL VEGETATED SWALE 5 IN STAGE 1B.
INSTALL VEGETATED SWALE 6 IN STAGE 3.

1. PREVENT RUNOFF FROM ENTERING THE SWALE UNTIL ALL TRIBUTARY AREAS ARE STABILIZED.
2. **(CRITICAL ACTIVITY)** ROUGH GRADE THE VEGETATED SWALE. AVOID OVER-COMPACTION OF SUBGRADE.
3. FINE GRADE THE VEGETATED SWALE AND PLACE AMENDED SOILS, IF INDICATED.
4. SEED WITH VEGETATED SWALE SEEDING AND STABILIZE WITH PERMANENT ROLLED EROSION CONTROL PRODUCT.

RAIN GARDEN

INSTALL RAIN GARDEN 1 IN STAGE 4D.

1. PREVENT RUNOFF FROM ENTERING RAIN GARDEN UNTIL ALL TRIBUTARY AREAS ARE STABILIZED.
2. **(CRITICAL ACTIVITY)** EXCAVATE TO SPECIFIED DEPTH BELOW PROPOSED PONDING ELEVATION. AVOID OVER-COMPACTION OF RAIN GARDEN SUBGRADE.
3. **(CRITICAL ACTIVITY)** SCARIFY BOTTOM AND SIDES OF EXCAVATION.
4. CONSTRUCT SIDE SLOPES AND SPILLWAY (WHERE INDICATED) WITH SPECIFIED LINING.
5. **(CRITICAL ACTIVITY)** INSTALL GEOTEXTILE AND PLACE BIORETENTION SOIL MIXTURE TO SPECIFIED DEPTH.
6. INSTALL FORMULA N SEEDING AND SOIL SUPPLEMENTS ON BOTTOM OF RAIN GARDEN AND FORMULA B SEEDING AND SOIL SUPPLEMENTS ON SIDE SLOPES. INSTALL EROSION CONTROL MULCH BLANKET ALONG SIDE SLOPES.

AMENDED SOILS:

1. **(CRITICAL ACTIVITY)** PREPARE AREAS INDICATED ON THE PLAN TO BE PLACED WITH AMENDED SOILS. REMOVE TEN (10) INCHES BELOW FINISHED GRADE. WHILE SOIL IS DRY, LOOSEN AN ADDITIONAL TEN (10) INCHES BELOW BOTTOM OF EXCAVATED AREA THROUGH A SUBSOILING PROCESS SUCH AS RIPPING OR TILLING. A SOLID-SHANK RIPPER OR ROTOTILL SHOULD BE USED. REMOVE STONES AND OTHER FOREIGN MATERIAL TWO INCHES OR LARGER. REMOVE AND SATISFACTORILY DISPOSE OF UNSUITABLE AND SURPLUS MATERIAL.
2. SPREAD THREE (3) INCHES OF COMPOST ON TWO (2) INCHES OF TOPSOIL. TILL WITH ROTARY TILLER SET AT A DEPTH OF FIVE (5) INCHES UNTIL COMPOST IS INCORPORATED INTO SOIL. ON THE TILLED SOIL/COMPOST MIXTURE, SPREAD A SECOND LIFT OF THREE (3) INCHES OF COMPOST ON TWO (2) INCHES OF TOPSOIL AND TILL TO A DEPTH OF FIVE (5) INCHES. PLACE ADDITIONAL TOPSOIL IF NEEDED TO MEET THE FINAL GRADE.
3. DO NOT COMPACT AMENDED SOILS DURING INSTALLATION OR WHEN PLACING SEEDING.

MANAGED RELEASE CONCEPT (MRC) BASIN:

INSTALL MRC BASIN 1 IN STAGE 3
INSTALL MRC BASIN 2 AS A SEDIMENT TRAP DURING STAGE 3 (REFER TO E&S PLAN). BASIN WILL BE CONVERTED TO A PERMANENT MANAGED RELEASE CONCEPT BASIN UPON STABILIZATION OF TRIBUTARY AREA.

1. CLEAR EXCAVATION AREA OF ALL VEGETATION, TREE ROOTS, ROCKS, AND BOULDERS, AND UNSUITABLE MATERIAL AS NECESSARY FOR CONSTRUCTION.
2. EXCAVATE BOTTOM OF BASIN TO DESIRED ELEVATION. AVOID OVER-COMPACTION OF THE BASIN BOTTOM.
3. INSTALL SURROUNDING EMBANKMENTS, END SECTIONS, OUTLET CONTROL STRUCTURE, REINFORCED SPILLWAY AND TEMPORARY E&SC MEASURES FOR SEDIMENT TRAP.
4. **(CRITICAL ACTIVITY)** GRADE SUBSOIL IN BOTTOM OF BASIN, TAKING CARE TO PREVENT OVER-COMPACTION. COMPACT SURROUNDING EMBANKMENT AREAS AND AROUND INLET AND OUTLET STRUCTURE.
5. APPLY AND GRADE TOPSOIL.
6. SEED WITH TEMPORARY SEEDING AND STABILIZE WITH EROSION CONTROL MULCH BLANKET. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE THE BASIN IS FULLY STABILIZED AS A SEDIMENT TRAP.
7. **(CRITICAL ACTIVITY)** DEWATER, CLEAN AND RE-STABILIZED THE BASIN PRIOR TO CONVERTING TO THE MANAGED RELEASE CONCEPT BASIN.

CONVERT TO MANAGED RELEASE CONCEPT BASIN DURING STAGE 5 (REFER TO E&S PLAN)

1. EXCAVATE BOTTOM OF BASIN TO DESIRED ELEVATION FOR MANAGED RELEASE SYSTEM, OR TO AN UN-COMPACTED SUBGRADE FREE OF ROCKS AND DEBRIS. DO NOT COMPACT THE SUBGRADE.
2. **(CRITICAL ACTIVITY)** INSTALL DRAINAGE FACILITIES, INCLUDING CLEANOUT STRUCTURES, PERFORATED PIPE, AND AGGREGATE (PIPE BEDDING). PREVENT RUNOFF FROM ENTERING THE CLEANOUTS AND TRENCH AREA UNTIL THE UPSTREAM AREA IS FULLY STABILIZED. UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN MAXIMUM 8" LIFTS AND LIGHTLY COMPACTED. (REFER TO BASIN DETAIL).
3. AFTER AGGREGATE IS COMPLETELY INSTALLED, ALL HEAVY CONSTRUCTION EQUIPMENT IS PROHIBITED FROM THE BASIN AREA TO ELIMINATE IMPACTS AND/OR COMPACTION. IN THE EVENT THAT ANY IMPACTS COMPROMISE THE FUNCTIONALITY OF THE AGGREGATE, IT MUST BE IMMEDIATELY REPAIRED OR REPLACED TO THE PROJECT SPECIFICATIONS.
4. PLACE SOIL MEDIA GENTLY. DO NOT COMPACT SOIL MEDIA. THE PLACEMENT OF SOIL MEDIA SHOULD BE DONE FROM OUTSIDE THE BMP FOOTPRINT TO AVOID COMPACTION BY CONSTRUCTION EQUIPMENT. EQUIPMENT SHOULD NEVER DRIVE OVER PLACED SOIL MEDIA.
5. SEED AND STABILIZE DISTURBED AREA. VEGETATE WITH NATIVE PLANTINGS.
6. MAINTAIN INLET PROTECTION AND OTHER E&S BMPs UNTIL THE SITE IS FULLY STABILIZED.

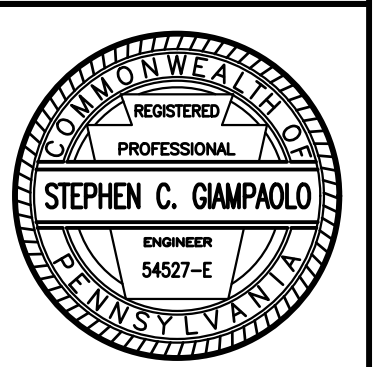
SOIL LIMITATIONS

SOIL TYPE	SOIL LIMITATIONS*	SPECIAL CONSIDERATIONS
Bo	• CUTBANKS CAVE	TRENCHING AND EXCAVATION ACTIVITIES MUST ADHERE TO PENNDOT PUB 408 AND ALL OSHA STANDARDS AND REGULATIONS
	• CORROSIVE TO CONCRETE/STEEL	PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE
	• DROUGHTY	ADDITIONAL WATERING MAY BE REQUIRED FOR SEEDING
	• FLOODING	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED.
	• DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED
	• HYDRIC INCLUSIONS	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED SUBBASE OVEREXCAVATION MAY BE REQUIRED TO PROVIDE PROPER COMPACTION
	• LOW STRENGTH/LANDSLIDE PRONE	TRENCHING AND EXCAVATION ACTIVITIES MUST ADHERE TO PENNDOT PUB 408 AND ALL OSHA STANDARDS AND REGULATIONS PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE
	• SLOW PERCOLATION	SOIL INFILTRATION IS NOT PROPOSED ON THIS PROJECT
	• PIPING	PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE, ANTI-SEEP COLLARS ARE TO BE INSTALLED ON BASIN OUTLET PIPE
	• POOR SOURCE OF TOPSOIL	EXCAVATED MATERIAL OF THIS SOIL TYPE IS NOT TO BE USED AS TOPSOIL. IT MAY BE USED AS FILL MATERIAL
PIC	• FROST ACTION	FROST HEAVE IS ACCOUNTED FOR IN PAVEMENT DESIGN
	• WETNESS	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED, SUBBASE OVEREXCAVATION MAY BE REQUIRED TO PROVIDE PROPER COMPACTION
	• CUTBANKS CAVE	TRENCHING AND EXCAVATION ACTIVITIES MUST ADHERE TO PENNDOT PUB 408 AND ALL OSHA STANDARDS AND REGULATIONS
	• CORROSIVE TO CONCRETE	PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE
	• DROUGHTY	ADDITIONAL WATERING MAY BE REQUIRED FOR SEEDING
	• HYDRIC INCLUSIONS	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED SUBBASE OVEREXCAVATION MAY BE REQUIRED TO PROVIDE PROPER COMPACTION
	• LOW STRENGTH/LANDSLIDE PRONE	TRENCHING AND EXCAVATION ACTIVITIES MUST ADHERE TO PENNDOT PUB 408 AND ALL OSHA STANDARDS AND REGULATIONS PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE
	• PIPING	PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE, ANTI-SEEP COLLARS ARE TO BE INSTALLED ON BASIN OUTLET PIPE
	• POOR SOURCE OF TOPSOIL	EXCAVATED MATERIAL OF THIS SOIL TYPE IS NOT TO BE USED AS TOPSOIL. IT MAY BE USED AS FILL MATERIAL
	• FROST ACTION	FROST HEAVE IS ACCOUNTED FOR IN PAVEMENT DESIGN
ReB & ReC	• CUTBANKS CAVE	TRENCHING AND EXCAVATION ACTIVITIES MUST ADHERE TO PENNDOT PUB 408 AND ALL OSHA STANDARDS AND REGULATIONS
	• CORROSIVE TO CONCRETE/STEEL	PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE
	• EASILY ERODIBLE	TOPSOIL, SEED, AND MULCH IMMEDIATELY AFTER FINISHED GRADE IS ESTABLISHED. PLACE EROSION CONTROL MULCH BLANKET ON ALL SLOPES 3:1 OR STEEPER
	• DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED.
	• HYDRIC INCLUSIONS	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED SUBBASE OVEREXCAVATION MAY BE REQUIRED TO PROVIDE PROPER COMPACTION
	• LOW STRENGTH/LANDSLIDE PRONE	TRENCHING AND EXCAVATION ACTIVITIES MUST ADHERE TO PENNDOT PUB 408 AND ALL OSHA STANDARDS AND REGULATIONS PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE
	• SLOW PERCOLATION	SOIL INFILTRATION IS NOT PROPOSED ON THIS PROJECT
	• PIPING	PIPES ARE TO BE PLACED WITHIN STONE TRENCH WHERE POSSIBLE, ANTI-SEEP COLLARS ARE TO BE INSTALLED ON BASIN OUTLET PIPE
	• POOR SOURCE OF TOPSOIL	EXCAVATED MATERIAL OF THIS SOIL TYPE IS NOT TO BE USED AS TOPSOIL. IT MAY BE USED AS FILL MATERIAL
	• FROST ACTION	FROST HEAVE IS ACCOUNTED FOR IN PAVEMENT DESIGN
• WETNESS	WATER ENCOUNTERED DURING CONSTRUCTION IS TO BE PUMPED THROUGH A "PUMPED WATER FILTER BAG" AS NEEDED, SUBBASE OVEREXCAVATION MAY BE REQUIRED TO PROVIDE PROPER COMPACTION	

* - SOIL LIMITATIONS ARE PER TABLE E.1 OF THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL".
NOTE: NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS HAVING THE POTENTIAL TO CAUSE POLLUTION HAVE BEEN OBSERVED.
SOIL TYPES NOT LISTED ARE NOT DISTURBED DURING CONSTRUCTION.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	6 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

NPDES MINOR AMENDMENT 6-13-2022

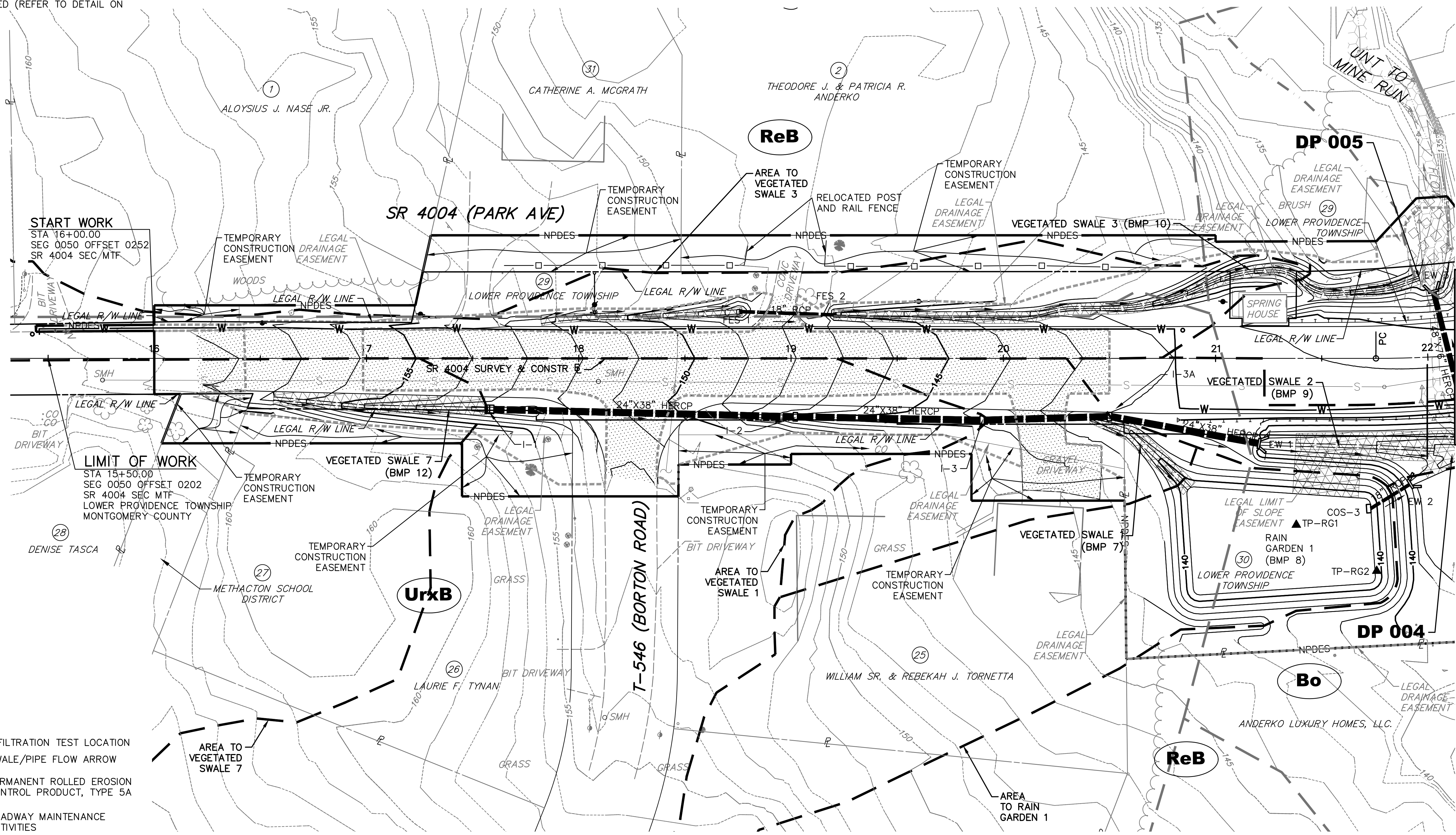


DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	7 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

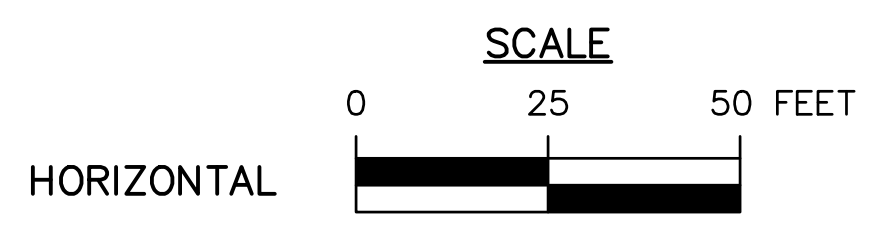
SOIL TYPES
 Bo - BOWMANVILLE-KNAUERS SILT LOAMS
 ReB - READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES
 UrxB - URBAN LAND-PENN COMPLEX, 0 TO 8 PERCENT SLOPES

INFILTRATION TEST DEPTHS:
 TP-RG1: 24" BGE, 1.4 IN/HR, TEST ELEV. 138.6
 TP-RG2: 18" BGE, 1.3 IN/HR, TEST ELEV. 138.1

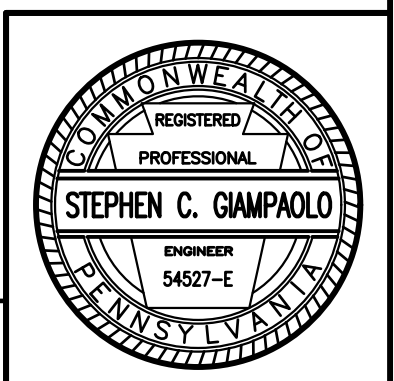
SUMPED INLETS
 THE FOLLOWING INLETS/MANHOLES ARE TO BE SUMPED (REFER TO DETAIL ON SHEET 18):
 I-1, I-2,
 I-3, I-3A



- LEGEND**
- ▲TP-RG# INFILTRATION TEST LOCATION
 - SWALE/PIPE FLOW ARROW
 - [Cross-hatched box] PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A
 - [Dotted box] ROADWAY MAINTENANCE ACTIVITIES
 - [Wavy line box] WATERS OF THE US
 - DRAINAGE AREA
 - - - SOIL DELINEATION LINE
 - 100 YEAR FLOODPLAIN
 - LIMIT OF DISTURBANCE/NPDES BOUNDARY



POST CONSTRUCTION STORMWATER MANAGEMENT PLAN



NPDES MINOR AMENDMENT 6-13-2022

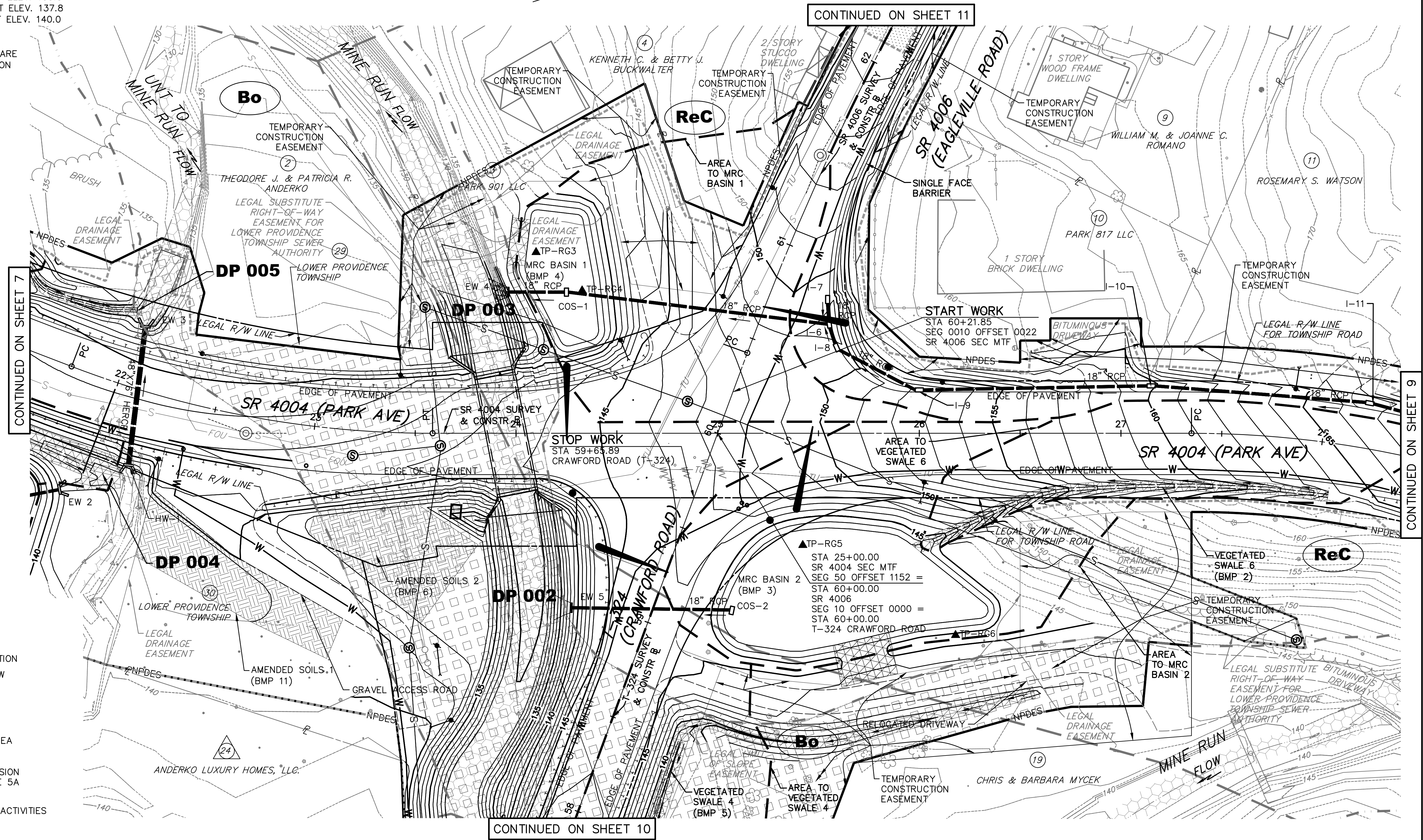
CONTINUED ON SHEET 8

SOIL TYPES
 Bo - BOWMANVILLE-KNAUERS SILT LOAMS
 ReC - READINGTON SILT LOAM, 8 TO 15 PERCENT SLOPES

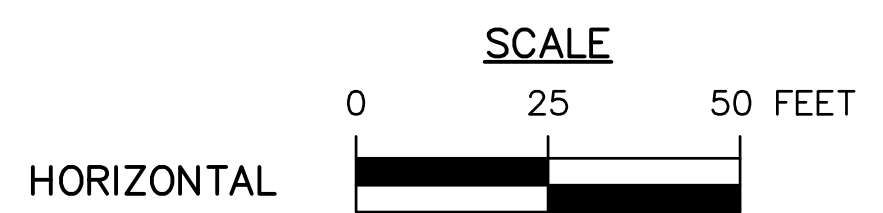
INFILTRATION TEST DEPTHS:
 TP-RG3: 24" BGE, 8.0 IN/HR, TEST ELEV. 135.0
 TP-RG4: 24" BGE, 6.1 IN/HR, TEST ELEV. 135.8
 TP-RG5: 24" BGE, 5.3 IN/HR, TEST ELEV. 137.8
 TP-RG6: 18" BGE, 1.8 IN/HR, TEST ELEV. 140.0

WATER QUALITY INLETS
 THE FOLLOWING INLETS/MANHOLES ARE TO BE SUMPED (REFER TO DETAIL ON SHEET 18):
 I-6, I-9, I-10, I-11

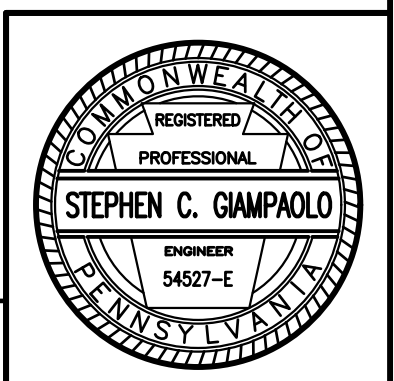
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	8 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



- LEGEND**
- ▲ TP-RG# INFILTRATION TEST LOCATION
 - SWALE/PIPE FLOW ARROW
 - [Hatched Box] AMENDED SOILS
 - [Grid Box] CHAPTER 105 PERMIT AREA
 - [Cross-hatched Box] PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A
 - [Dotted Box] ROADWAY MAINTENANCE ACTIVITIES
 - [Hexagonal Box] WATERS OF THE US
 - DRAINAGE AREA
 - SOIL DELINEATION LINE
 - - - 100 YEAR FLOODPLAIN
 - LIMIT OF DISTURBANCE/NPDES BOUNDARY



POST CONSTRUCTION STORMWATER MANAGEMENT PLAN



NPDES MINOR AMENDMENT 6-13-2022

CONTINUED ON SHEET 7

CONTINUED ON SHEET 11

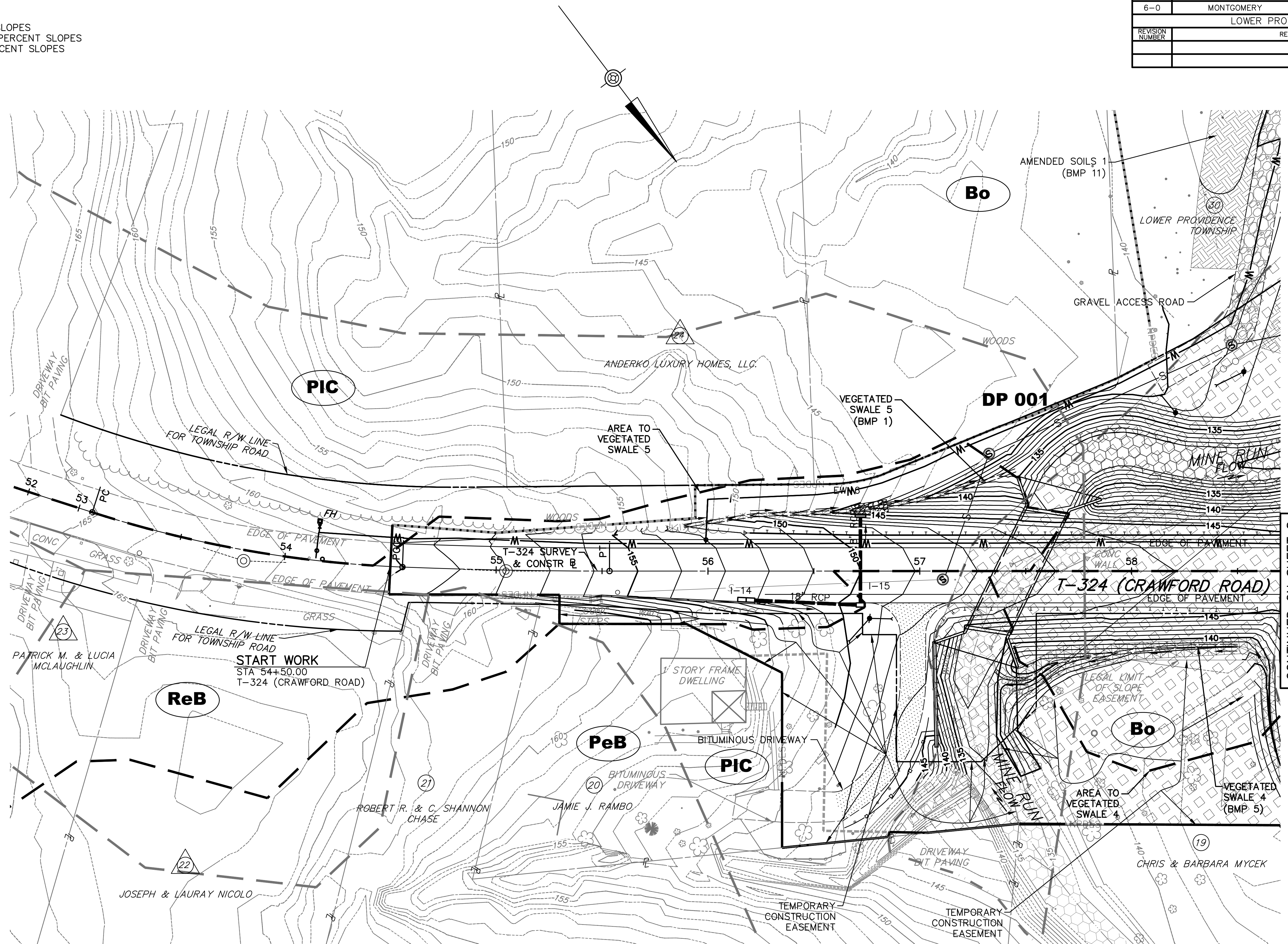
CONTINUED ON SHEET 10

CONTINUED ON SHEET 9

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	10 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

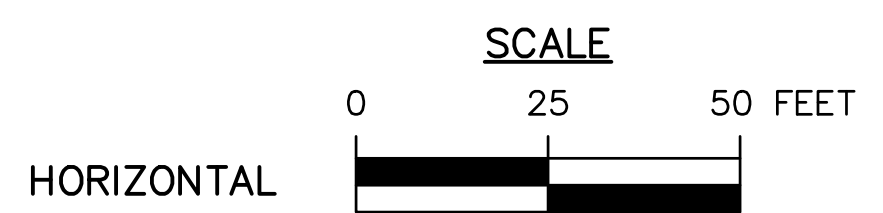
SOIL TYPES
 Bo - BOWMANVILLE-KNAUERS SILT LOAMS
 PeB - PENN SILT LOAM, 3 TO 8 PERCENT SLOPES
 PIC - PENN-LANSDALE COMPLEX, 8 TO 15 PERCENT SLOPES
 ReB - READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES

SUMPED INLETS
 THE FOLLOWING INLETS/MANHOLES ARE TO BE SUMPED (REFER TO DETAIL ON SHEET 18):
 I-15

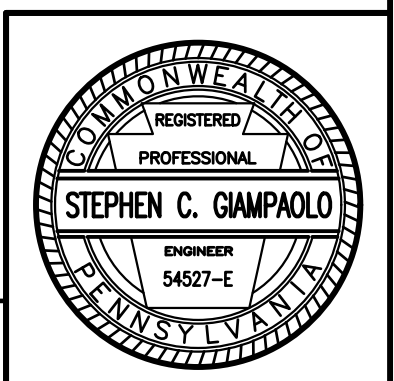


CONTINUED ON SHEET 8

- LEGEND**
- ▲TP-RG# INFILTRATION TEST LOCATION
 - SWALE/PIPE FLOW ARROW
 - [Hatched Box] AMENDED SOILS
 - [Grid Box] CHAPTER 105 PERMIT AREA
 - [Cross-hatched Box] PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A
 - [Dotted Box] ROADWAY MAINTENANCE ACTIVITIES
 - [Hexagonal Box] WATERS OF THE US
 - DRAINAGE AREA
 - - - SOIL DELINEATION LINE
 - 100 YEAR FLOODPLAIN
 - LIMIT OF DISTURBANCE/NPDES BOUNDARY



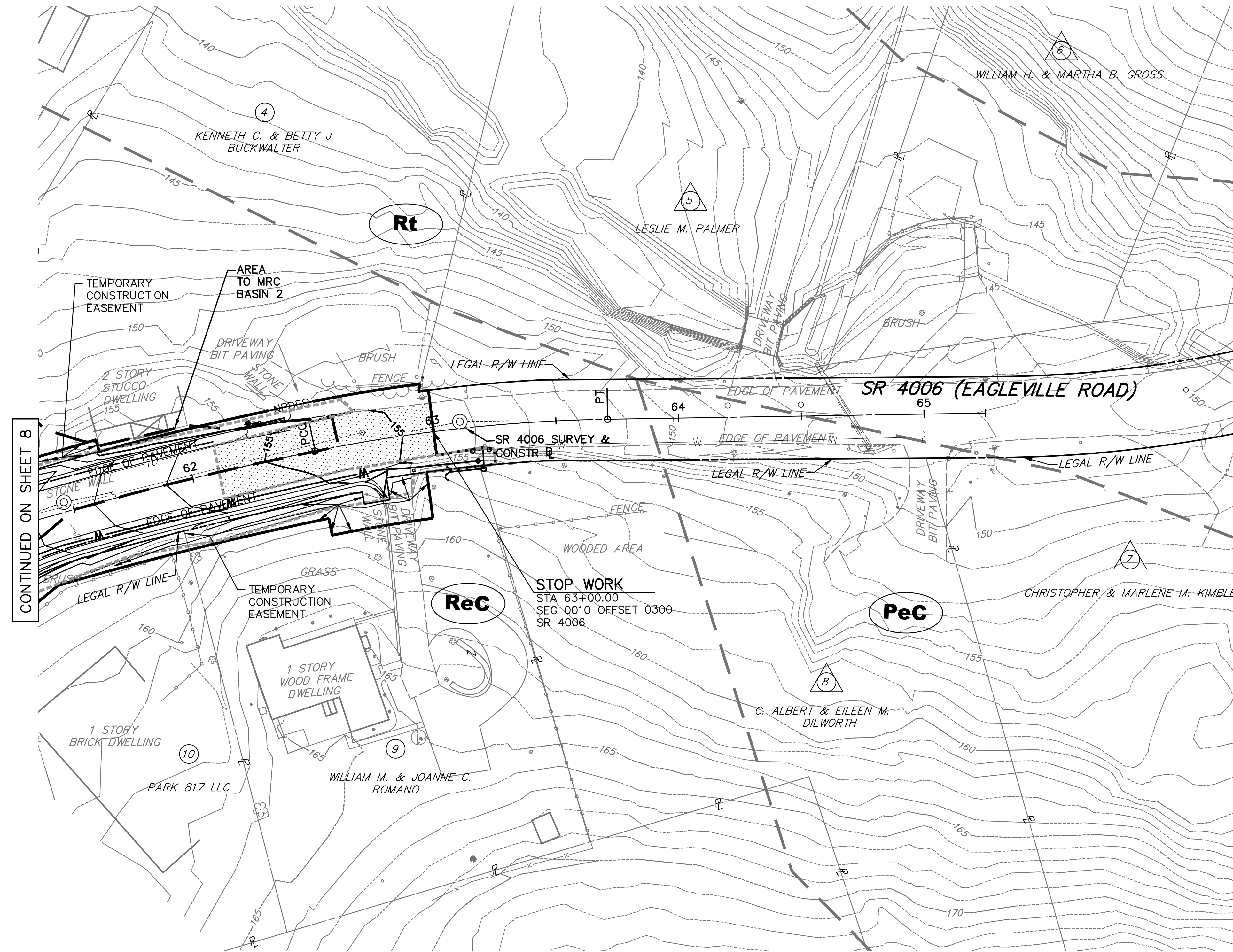
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN



NPDES MINOR AMENDMENT 6-13-2022

SOIL TYPES
 PeC - PENN SILT LOAM, 8 TO 15 PERCENT SLOPES
 ReC - READINGTON SILT LOAMS, 8 TO 15 PERCENT SLOPES
 Rt - ROWLAND SILT LOAM, TERRACE

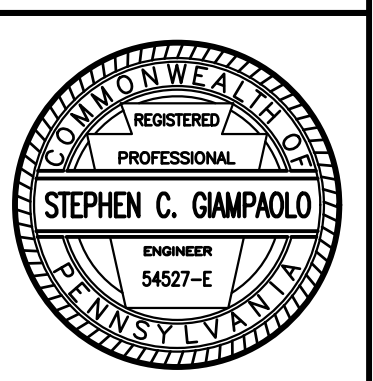
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	11 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



- LEGEND**
- ▲TP-RG# INFILTRATION TEST LOCATION
 - SWALE/PIPE FLOW ARROW
 - [Cross-hatched box] PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A
 - [Dotted box] ROADWAY MAINTENANCE ACTIVITIES
 - [Hexagonal box] WATERS OF THE US
 - DRAINAGE AREA
 - SOIL DELINEATION LINE
 - - - 100 YEAR FLOODPLAIN
 - ⋯ LIMIT OF DISTURBANCE/NPDES BOUNDARY



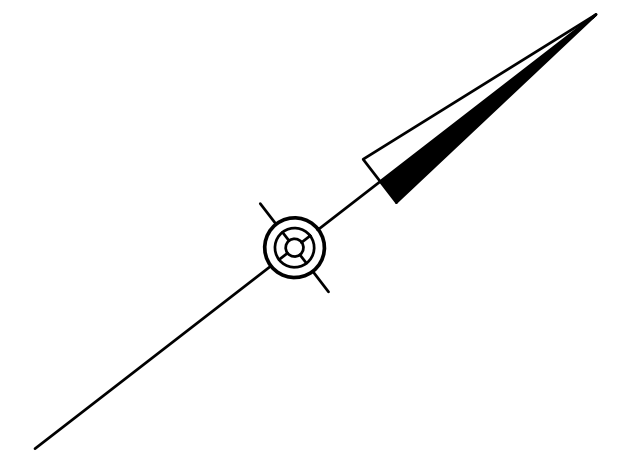
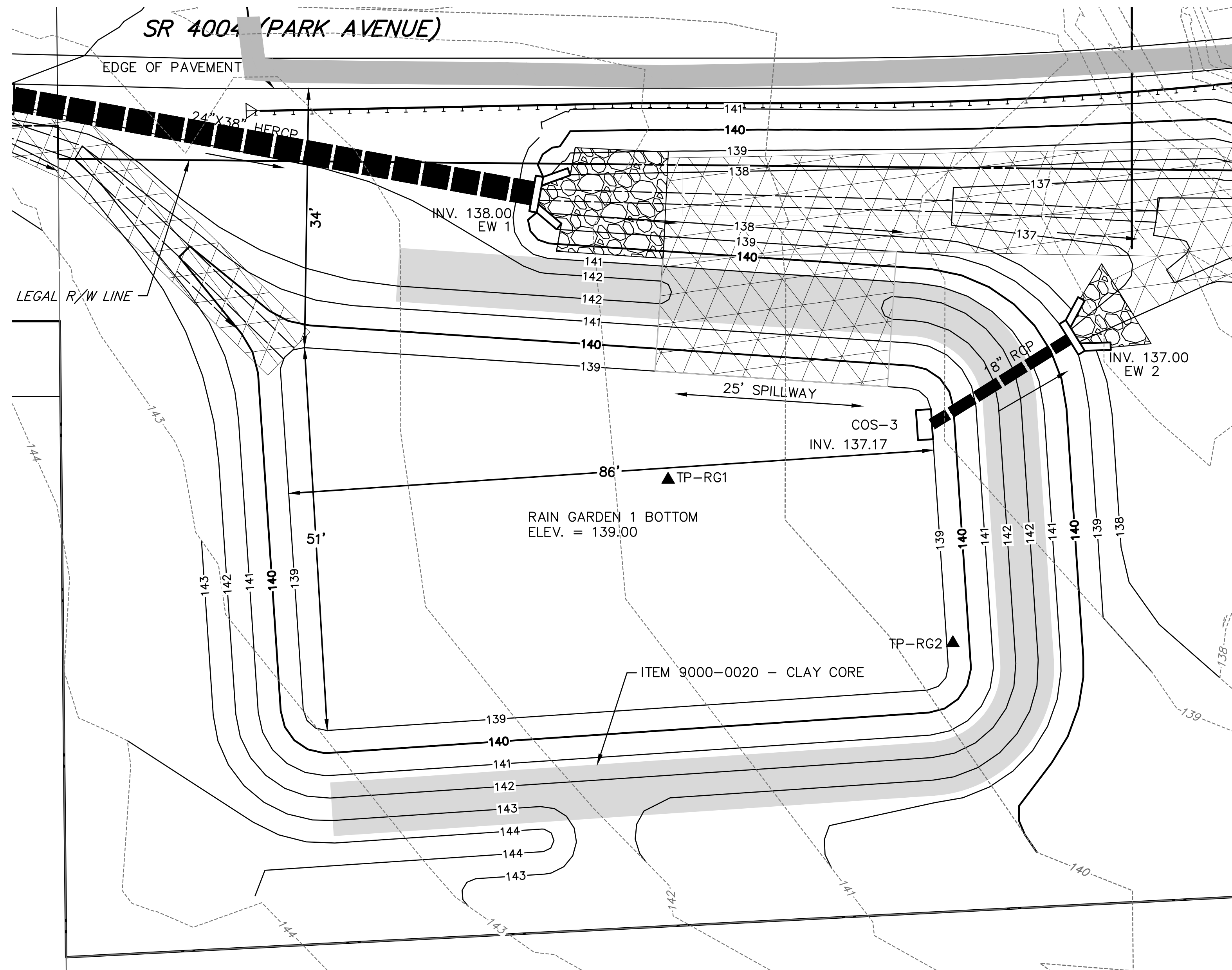
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN



NPDES MINOR AMENDMENT 6-13-2022

CONTINUED ON SHEET 8

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	12 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

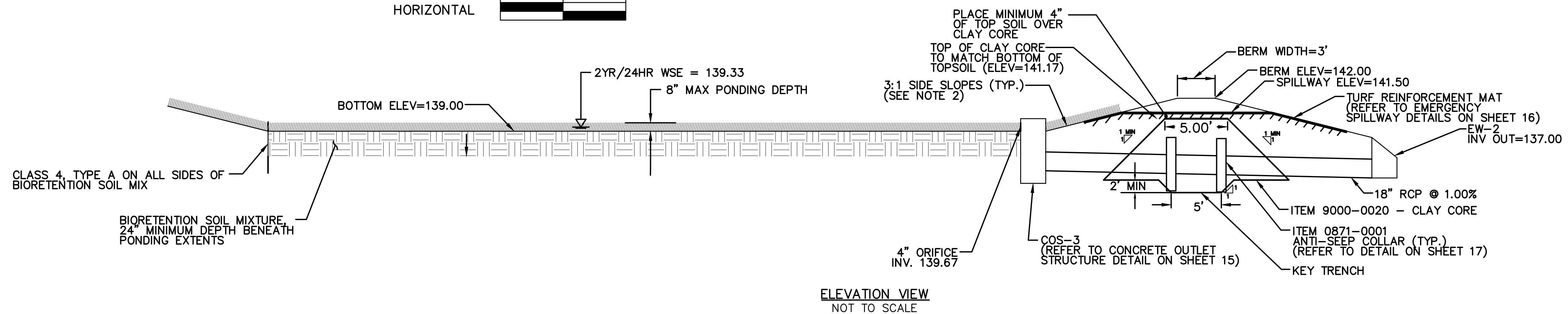


NOTES:

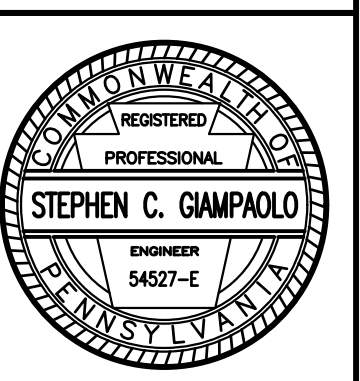
1. BIORETENTION SOIL MIXTURE SHALL BE LEFT UNCOMPACTED. THE TYPE OF EQUIPMENT USED DURING THE PREPARATION OF THE RAIN GARDEN MUST NOT CAUSE OVER-COMPACTION OF THE PLANTING SOIL SUBGRADE.
2. UTILIZE FORMULA B SEEDING AND SOIL SUPPLEMENT MIX ON THE SLOPES OF THE RAIN GARDEN AND FORMULA N SEEDING AND SOIL SUPPLEMENTS ON THE BOTTOM.
3. EMBANKMENT MATERIAL SHALL CONSIST OF SUITABLE MATERIAL FREE OF ALL ROOTS, SOD, FROZEN SOIL, ROCK OVER 4" IN DIAMETER, AND ANY OTHER MATERIAL NOT APPROVED BY THE ENGINEER.
4. BIORETENTION SOIL MIXTURE (ITEM 9000-0027) SHALL CONSIST OF 50% SAND, 25% SOIL (SANDY LOAM) AND 25% COMPOST. THE MAXIMUM CLAY CONTENT OF THE MIX CANNOT EXCEED 5%.
5. ONCE CONSTRUCTED, SURROUND RAIN GARDEN IN TEMPORARY PROTECTIVE FENCE.

INFILTRATION TEST DEPTHS:

TP-RG1: 24" BGE, 1.4 IN/HR, TEST ELEV. 138.6
 TP-RG2: 18" BGE, 1.3 IN/HR, TEST ELEV. 138.1

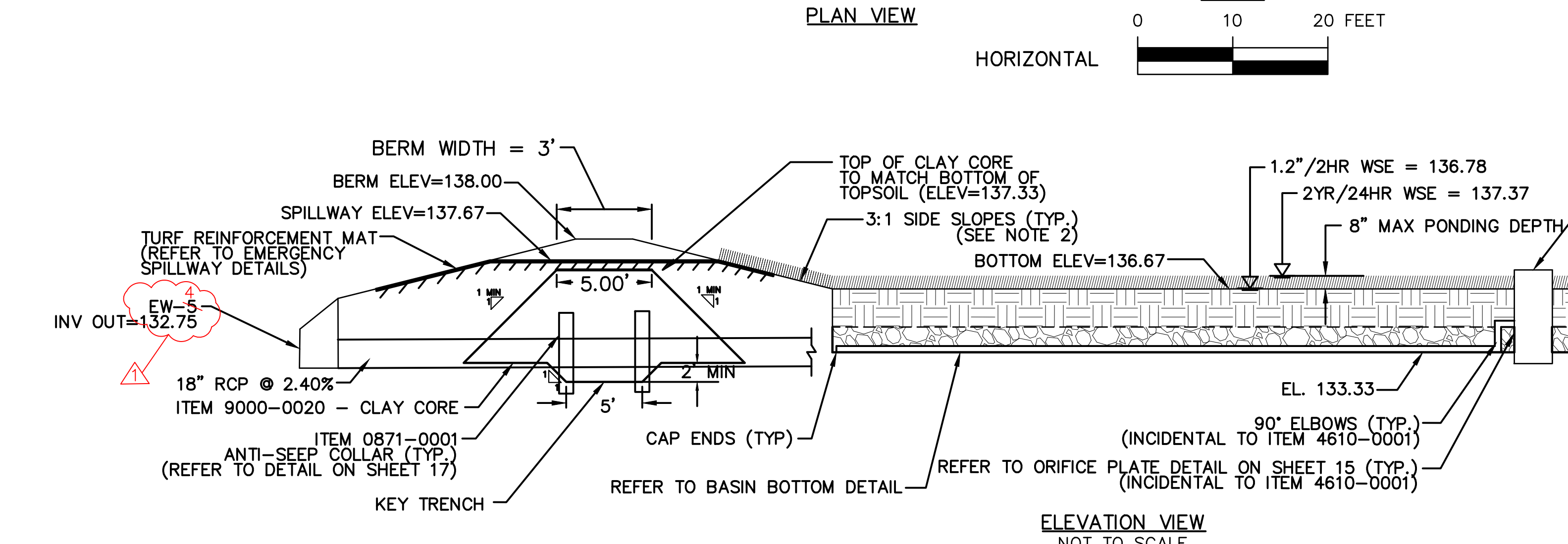
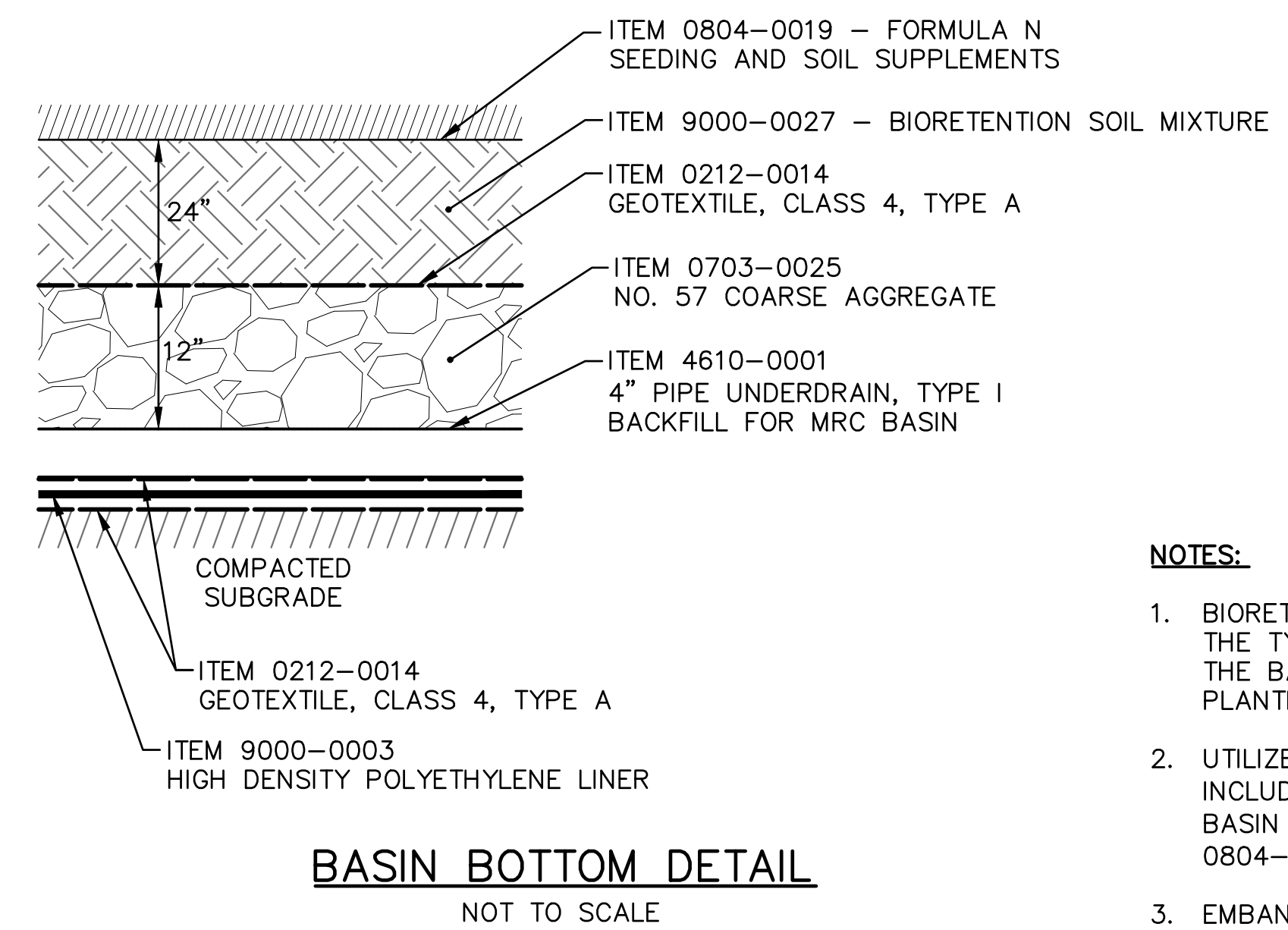
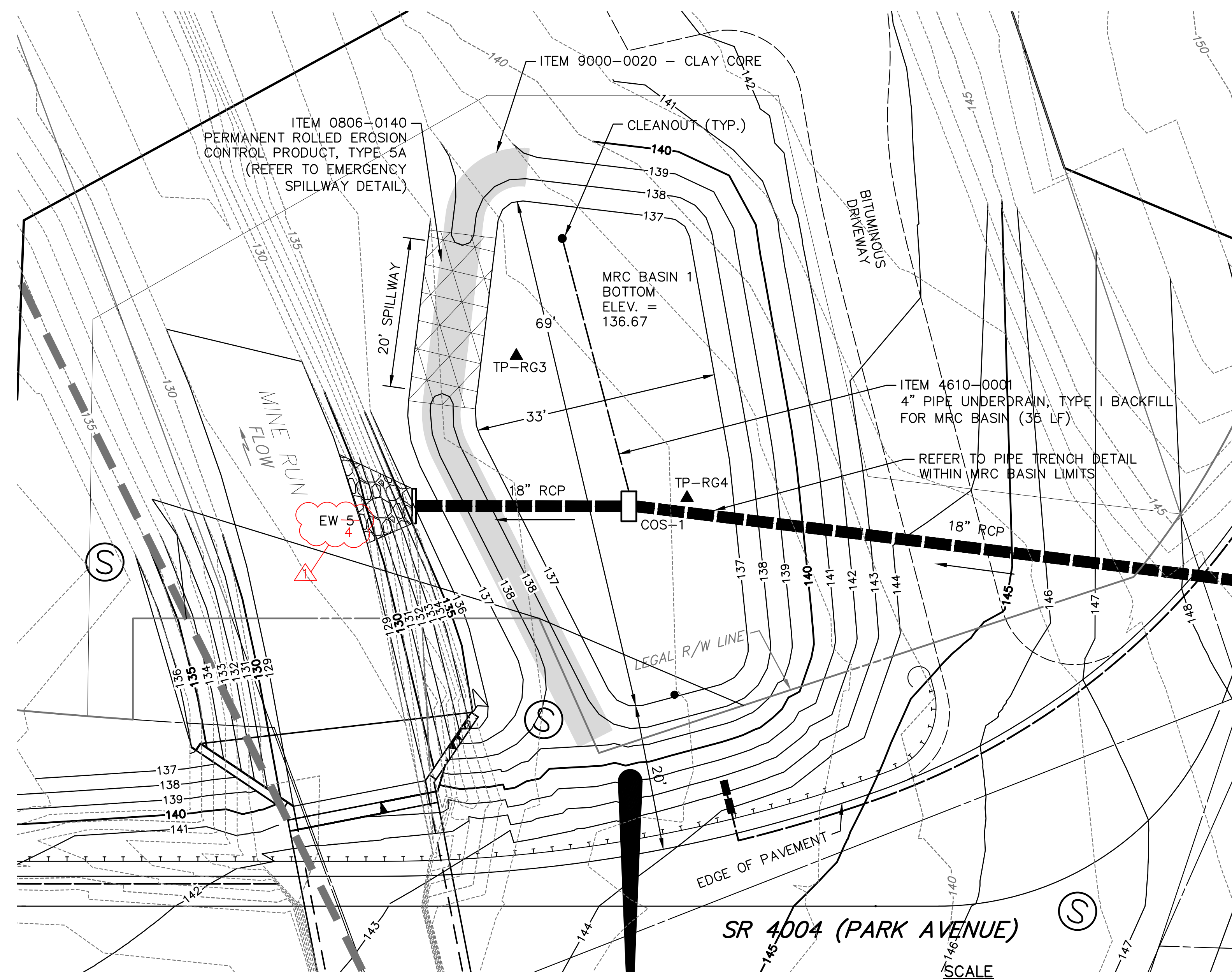


RAIN GARDEN 1 (BMP 8) DETAIL
 ITEM 0212-0014, ITEM 0806-0140, ITEM 0875-0001
 ITEM 9000-0020, ITEM 9000-0027
 SR 4004 STA. 20+87 RT. TO 21+75 RT.



NPDES MINOR AMENDMENT 6-13-2022

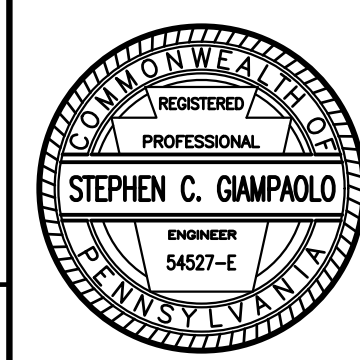
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	13 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	
△	ADDENDUM #1	02/24/23	DLS	



MRC BASIN 1 (BMP 4) DETAIL
 ITEM 0212-0014, ITEM 4610-0001, ITEM 0703-0025,
 ITEM 0806-0140, ITEM 0871-0001, ITEM 9000-0003,
 ITEM 9000-0020, ITEM 9000-0027
 SR 4004 STA. 24+05 RT. TO 24+41 RT.

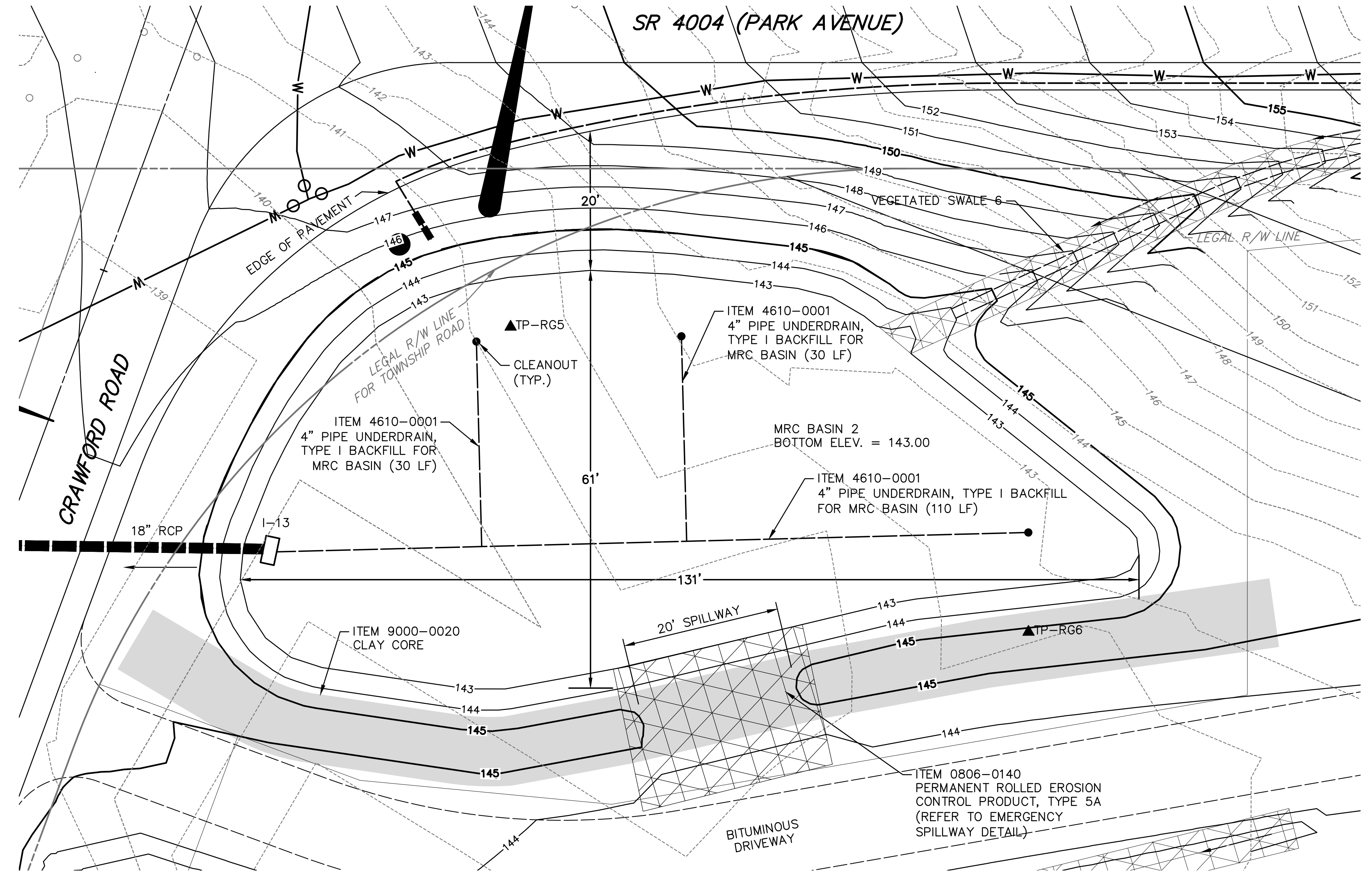
- NOTES:**
- BIORETENTION SOIL MIXTURE SHALL BE LEFT UNCOMPACTED. THE TYPE OF EQUIPMENT USED DURING THE PREPARATION OF THE BASIN MUST NOT CAUSE OVER-COMPACTION OF THE PLANTING SOIL SUBGRADE.
 - UTILIZE SEEDING AND SOIL SUPPLEMENTS - FORMULA B, INCLUDING MULCH (ITEM 0804-0001) ON THE SLOPES OF THE BASIN AND FORMULA N SEEDING AND SOIL SUPPLEMENTS (ITEM 0804-0019) ON THE BOTTOM.
 - EMBANKMENT MATERIAL SHALL CONSIST OF SUITABLE MATERIAL FREE OF ALL ROOTS, SOD, FROZEN SOIL, ROCK OVER 4" IN DIAMETER, AND ANY OTHER MATERIAL NOT APPROVED BY THE ENGINEER.
 - BIORETENTION SOIL MIXTURE (ITEM 9000-0027) SHALL CONSIST OF 50% SAND, 25% SOIL (SANDY LOAM) AND 25% COMPOST. THE MAXIMUM CLAY CONTENT OF THE MIX CANNOT EXCEED 5%.
 - ONCE CONSTRUCTED, SURROUND BASIN IN TEMPORARY PROTECTIVE FENCE.
 - HIGH DENSITY POLYETHYLENE LINER MUST BE FROM A MANUFACTURER LISTED IN BULLETIN 15. ALL SPECIFICATIONS MUST BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SECTION 736.
 - REMOVE ROCKS AND OTHER DEBRIS WHICH MAY PUNCTURE THE FABRIC PRIOR TO PLACEMENT. AS DIRECTED, PLACE SAND BETWEEN ANY ROCK FRAGMENT AREAS AND THE FLOOR FABRICS. THIS IS INCIDENTAL TO ITEM 9000-0003.
 - EXTEND BOTTOM FABRICS ALONG SIDES OF UNDERDRAIN AND SOIL MIXTURE AND 1 FOOT UP SIDE SLOPES.

INFILTRATION TEST DEPTHS:
 TP-RG3: 24" BGE, 8.0 IN/HR, TEST ELEV. 135.0
 TP-RG4: 24" BGE, 6.1 IN/HR, TEST ELEV. 135.8

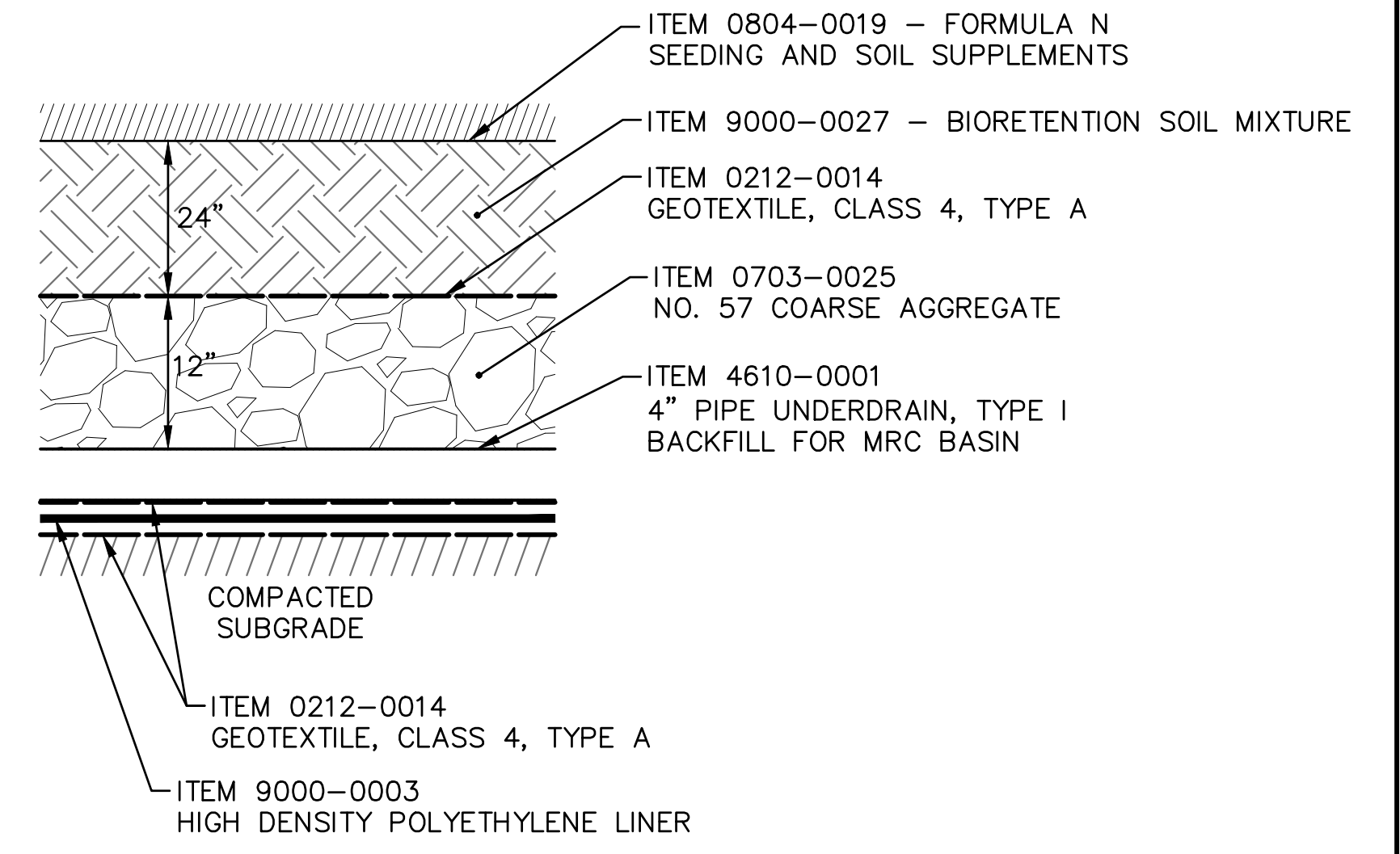
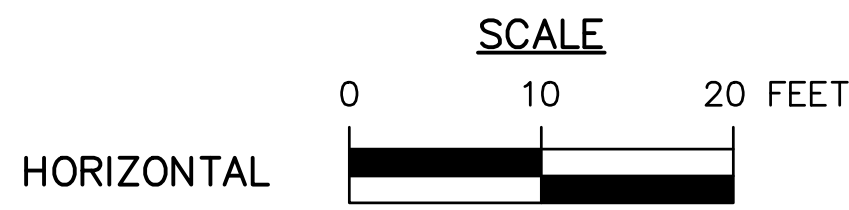


NPDES MINOR AMENDMENT 6-13-2022

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	14 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



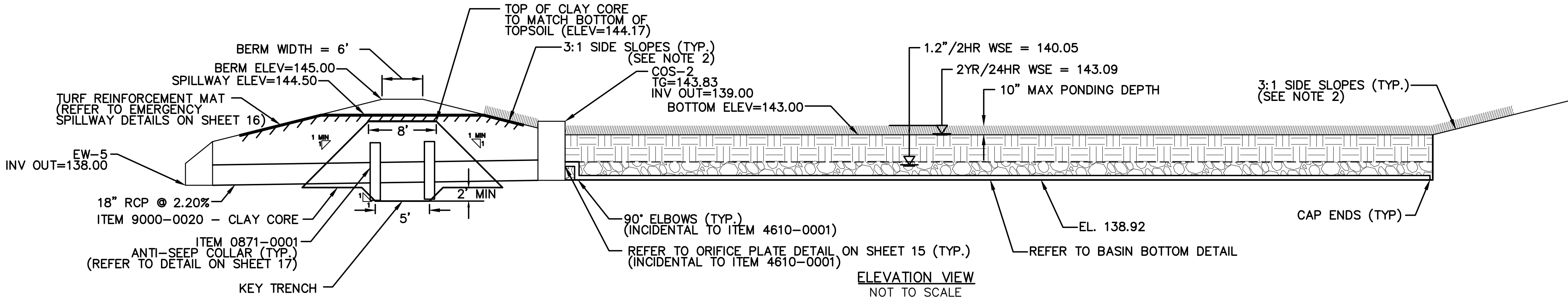
PLAN VIEW



BASIN BOTTOM DETAIL
NOT TO SCALE

NOTES:

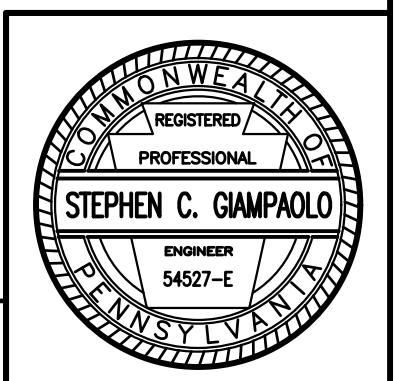
- BIORETENTION SOIL MIXTURE SHALL BE LEFT UNCOMPACTED. THE TYPE OF EQUIPMENT USED DURING THE PREPARATION OF THE BASIN AND FORMULA N SEEDING AND SOIL SUPPLEMENTS (ITEM 0804-0019) ON THE BOTTOM.
- UTILIZE SEEDING AND SOIL SUPPLEMENTS - FORMULA B, INCLUDING MULCH (ITEM 0804-0001) ON THE SLOPES OF THE BASIN AND FORMULA N SEEDING AND SOIL SUPPLEMENTS (ITEM 0804-0019) ON THE BOTTOM.
- EMBANKMENT MATERIAL SHALL CONSIST OF SUITABLE MATERIAL FREE OF ALL ROOTS, SOD, FROZEN SOIL, ROCK OVER 4" IN DIAMETER, AND ANY OTHER MATERIAL NOT APPROVED BY THE ENGINEER.
- BIORETENTION SOIL MIXTURE (ITEM 9000-0027) SHALL CONSIST OF 50% SAND, 25% SOIL (SANDY LOAM) AND 25% COMPOST. THE MAXIMUM CLAY CONTENT OF THE MIX CANNOT EXCEED 5%.
- ONCE CONSTRUCTED, SURROUND RAIN GARDEN IN TEMPORARY PROTECTIVE FENCE.
- HIGH DENSITY POLYETHYLENE LINER MUST BE FROM A MANUFACTURER LISTED IN BULLETIN 15. ALL SPECIFICATIONS MUST BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SECTION 736.
- REMOVE ROCKS AND OTHER DEBRIS WHICH MAY PUNCTURE THE FABRIC PRIOR TO PLACEMENT. AS DIRECTED, PLACE SAND BETWEEN ANY ROCK FRAGMENT AREAS AND THE FLOOR FABRICS. THIS IS INCIDENTAL TO ITEM 9000-0003.
- EXTEND BOTTOM FABRICS ALONG SIDES OF UNDERDRAIN AND SOIL MIXTURE AND 1 FOOT UP SIDE SLOPES.



MRC BASIN 2 (BMP 3) DETAIL

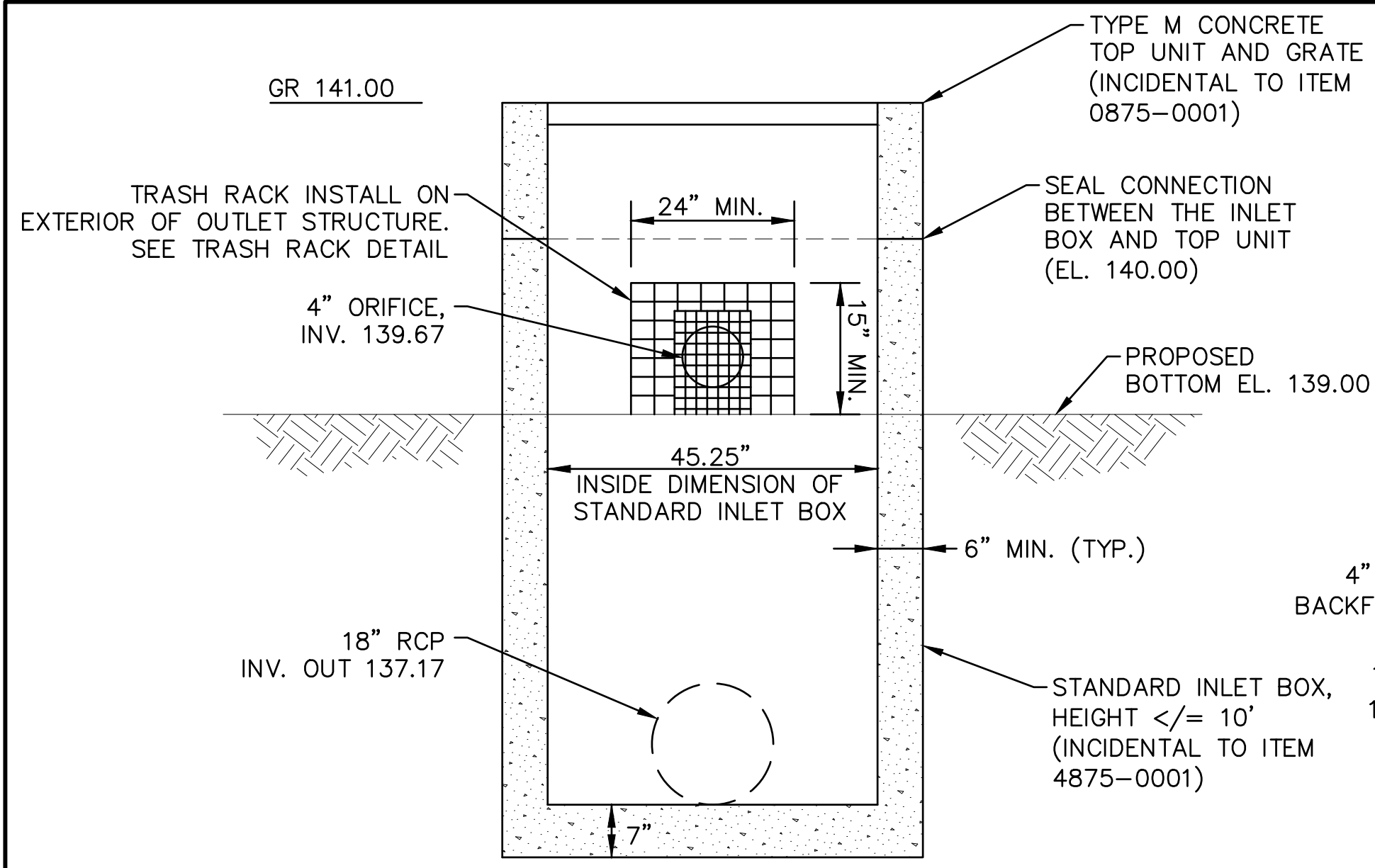
ITEM 0212-0014, ITEM 4610-0001, ITEM 0703-0025, ITEM 0806-0140, ITEM 0871-0001, ITEM 9000-0003, ITEM 9000-0027
SR 4004 STA. 25+03 RT. TO 26+37 RT.

INFILTRATION TEST DEPTHS:
TP-RG5: 24" BGE, 5.3 IN/HR, TEST ELEV. 137.8
TP-RG6: 18" BGE, 1.8 IN/HR, TEST ELEV. 140.0



NPDES MINOR AMENDMENT 6-13-2022

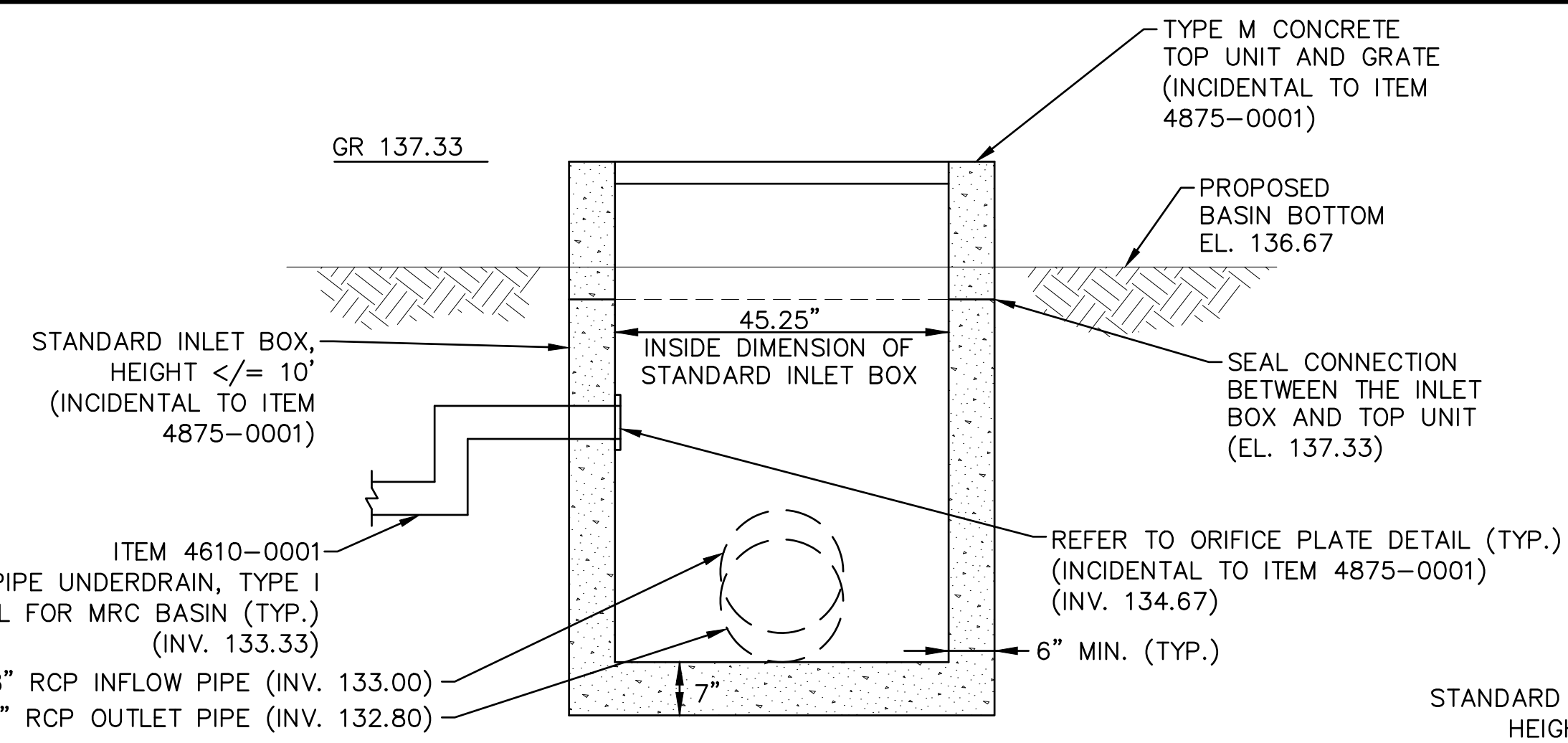
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	15 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	
1	ADDENDUM #1	02/24/23	DLS	



CONCRETE OUTLET STRUCTURE FOR RAIN GARDEN (COS-3)

ITEM 0875-0001
NOT TO SCALE

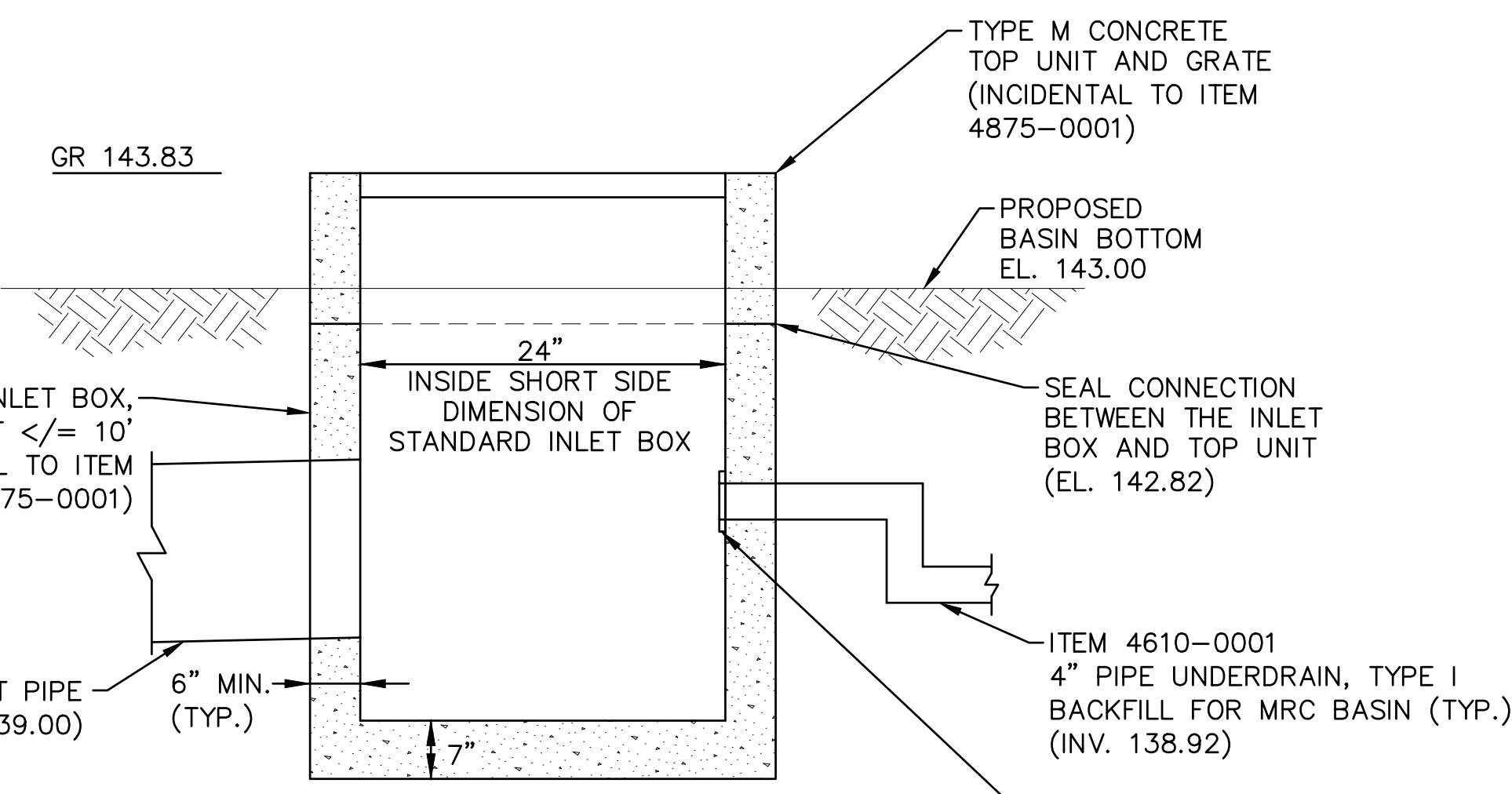
- NOTES:
1. MATERIALS AND CONSTRUCTION METHODS ARE TO BE PER RC-39M AND RC-46M
 2. ALL JOINTS MUST BE WATERTIGHT.



MRC BASIN 1 (COS-1)

NOT TO SCALE

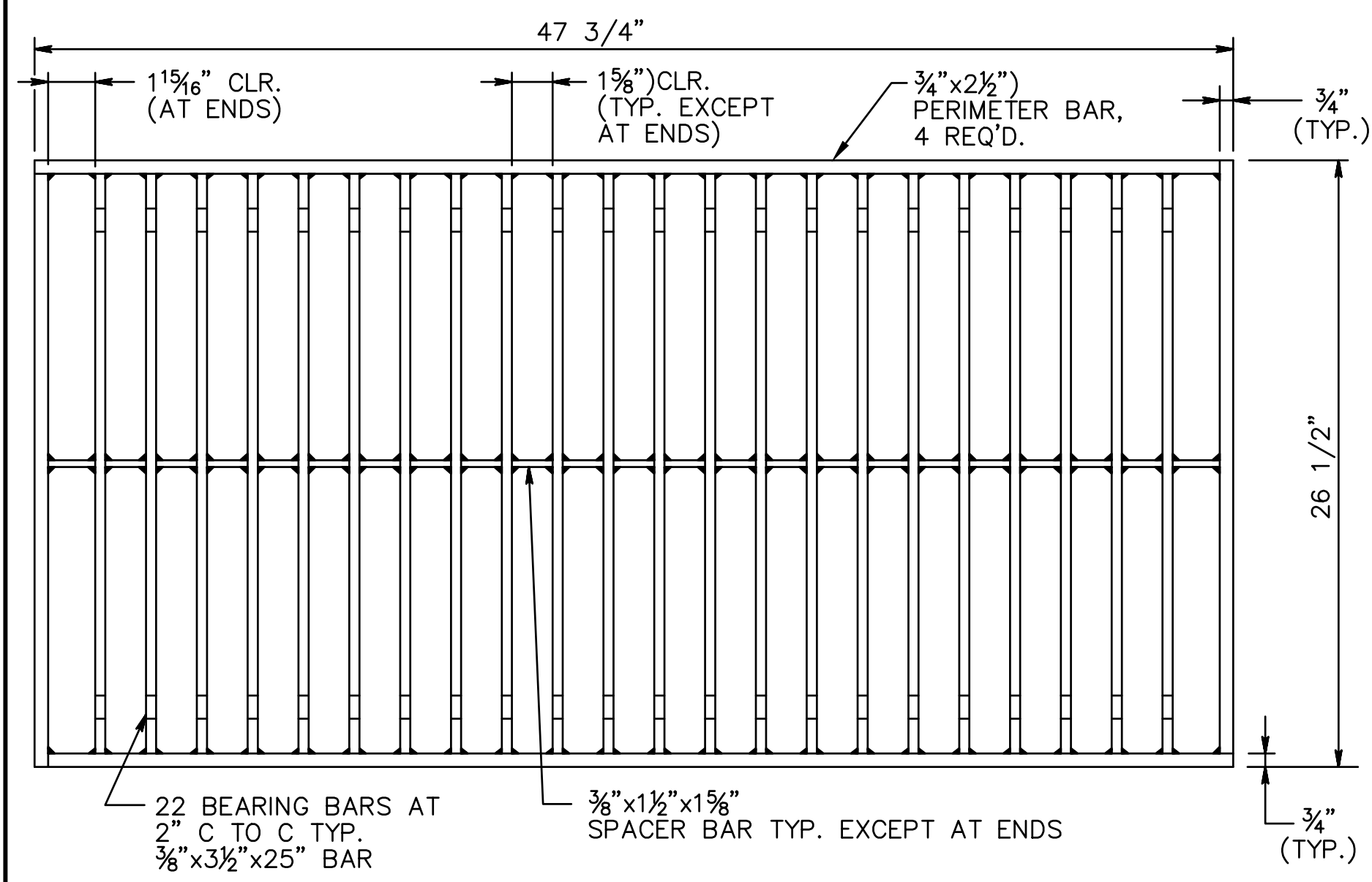
- NOTES:
1. MATERIALS AND CONSTRUCTION METHODS ARE TO BE PER RC-39M AND RC-46M
 2. ALL JOINTS MUST BE WATERTIGHT.



MRC BASIN 2 (COS-2)

NOT TO SCALE

- NOTES:
1. MATERIALS AND CONSTRUCTION METHODS ARE TO BE PER RC-39M AND RC-46M
 2. ALL JOINTS MUST BE WATERTIGHT.



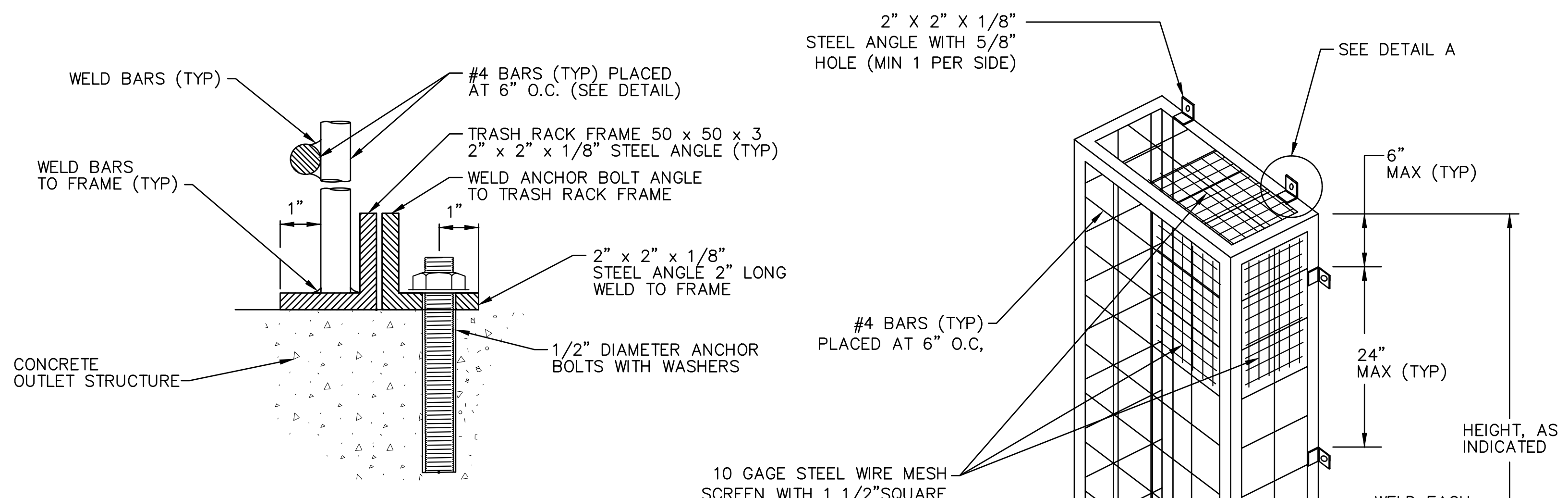
STRUCTURAL STEEL GRATE

INCIDENTAL TO ITEM 0875-0001
NOT TO SCALE

- NOTES:
1. MATERIAL AND CONSTRUCTION METHODS ARE TO BE IN ACCORDANCE WITH RC-45M AND SECTION 605 OF PENNDOT PUBLICATION 408.

CONCRETE OUTLET STRUCTURE W/ ORIFICE PLATE

ITEM 4875-0001



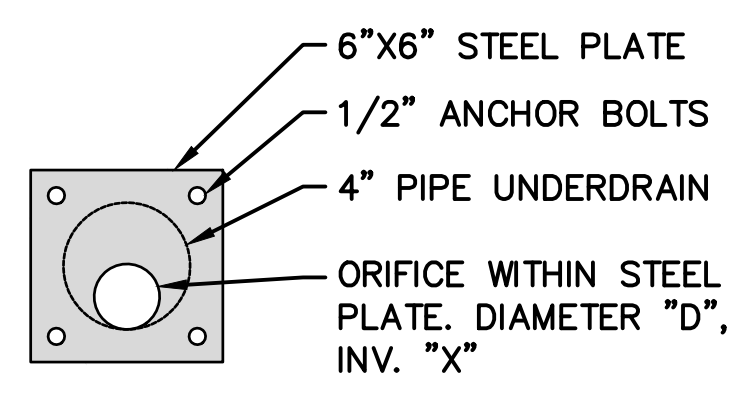
DETAIL A

NOT TO SCALE

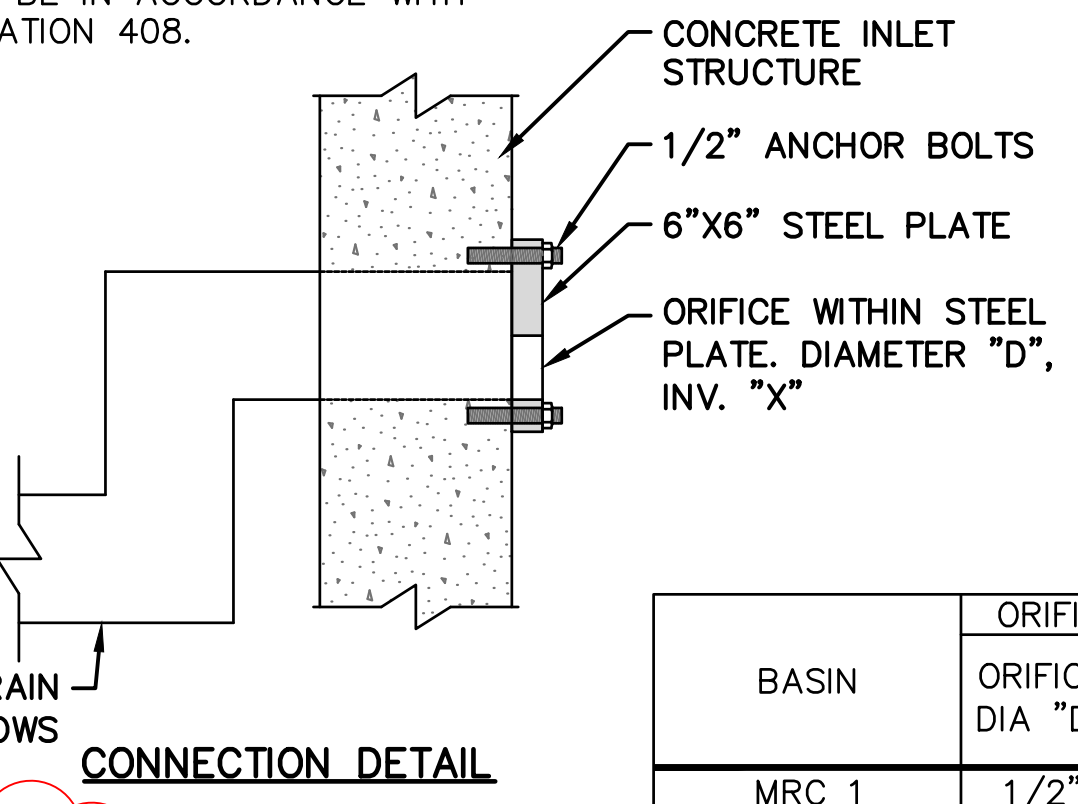
TRASH RACK

INCIDENTAL TO ITEM 0875-0001
NOT TO SCALE

- NOTES:
1. MATERIAL AND CONSTRUCTION METHODS ARE TO BE IN ACCORDANCE WITH RC-71M AND SECTION 875 OF PENNDOT PUBLICATION 408.
 2. FABRICATE TRASH RACK OR PROVIDE FROM A MANUFACTURER LISTED IN BULLETIN 15.
 3. TRASH RACK TO MEET THE REQUIRED DIMENSION OF THE OUTLET STRUCTURES.
 4. PROVIDE A SHOP DRAWING FOR REVIEW AND APPROVAL.



STEEL PLATE CONFIGURATION



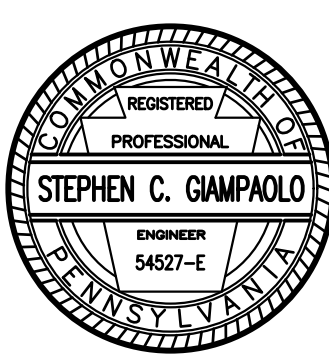
CONNECTION DETAIL

ORIFICE PLATE DETAIL

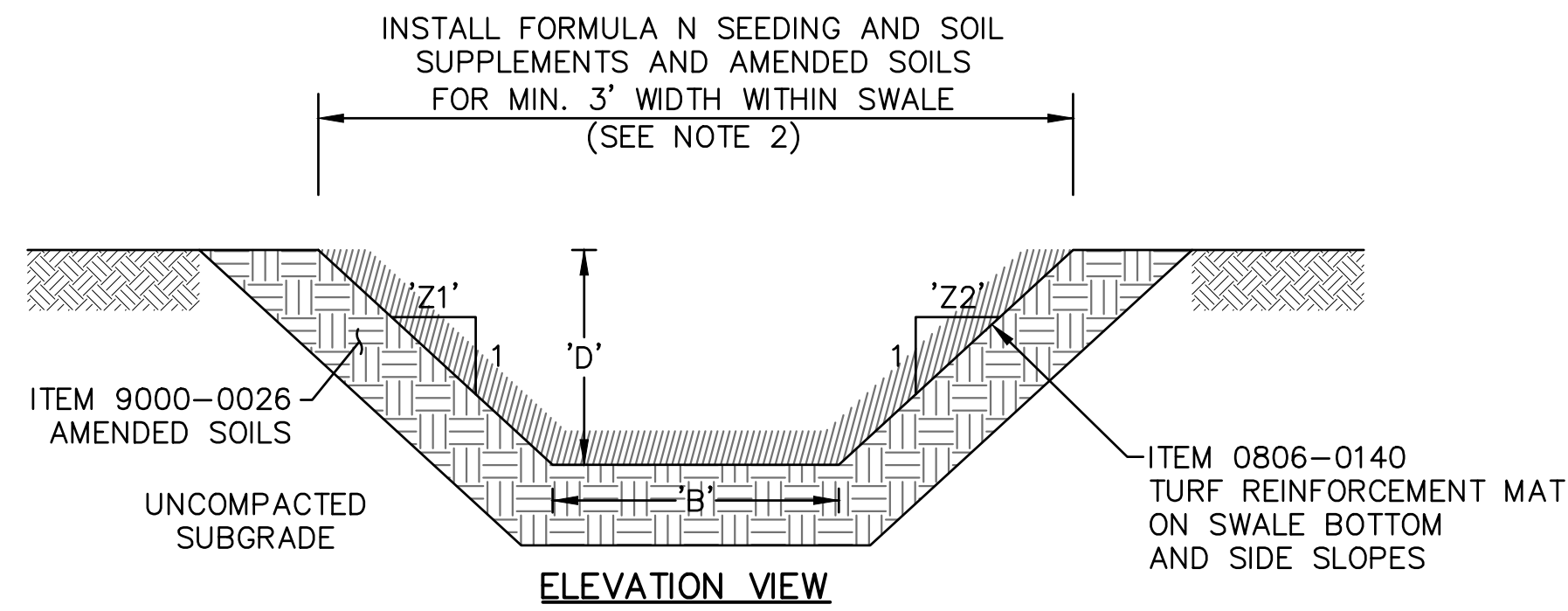
INCIDENTAL TO ITEM 4605-2850
NOT TO SCALE 4875-0001

BASIN	ORIFICE DIA "D"	ORIFICE INV "X"
MRC 1	1 1/2"	134.67
MRC 2	1"	140.25

NPDES MINOR AMENDMENT 6-13-2022



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	16 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



NOTES:

- MULCH AND PLANTING SOIL SHALL BE LEFT UNCOMPACTED. THE TYPE OF EQUIPMENT USED DURING THE PREPARATION OF THE VEGETATED SWALE MUST NOT CAUSE OVER-COMPACTION OF THE PLANTING SOIL SUBGRADE.
- UTILIZE FORMULA N SEEDING MIX (ITEM 0804-0019) WITHIN THE BOTTOM AND SLOPES OF THE VEGETATED SWALE.
- EMBANKMENT MATERIAL SHALL CONSIST OF SUITABLE MATERIAL FREE OF ALL ROOTS, SOD, FROZEN SOIL, ROCK OVER 4" IN DIAMETER, AND ANY OTHER MATERIAL NOT APPROVED BY THE ENGINEER.

CHANNEL	CHANNEL ID	LOCATION	BOTTOM WIDTH	MIN DEPTH*	SIDE SLOPE	SIDE SLOPE	LINING
			'B'	'D'	'Z1'	'Z2'	
			FT	FT			
VEGETATED SWALE 1 (BMP 7)	VEG-1	STA. 20+41 TO STA. 20+87	2.00	1.00	2	2	PERMANENT RECP, TYPE 5A
VEGETATED SWALE 2 (BMP 9)	VEG-2	STA. 21+21 TO STA. 22+16	5.00	4.00	2	2	PERMANENT RECP, TYPE 5A
VEGETATED SWALE 3 (BMP 10)	VEG-3	STA. 17+99 TO STA. 21+98	2.00	1.00	2	2	PERMANENT RECP, TYPE 5A
VEGETATED SWALE 4 (BMP 5)	VEG-4	CRAWFORD RD STA. 57+56 TO STA. 58+55	0.00	1.00	2	2	PERMANENT RECP, TYPE 5A
VEGETATED SWALE 5 (BMP 1)	VEG-5	CRAWFORD RD STA. 55+79 TO STA. 57+47	0.00	1.50	2	2	PERMANENT RECP, TYPE 5A
VEGETATED SWALE 6 (BMP 2)	VEG-6	STA. 26+00 TO STA. 28+00	2.00	1.50	2	2	PERMANENT RECP, TYPE 5A
VEGETATED SWALE 7 (BMP 12)	VEG-7	STA 16+56 TO STA 17+55	2.00	1.50	2	2	PERMANENT RECP, TYPE 5A

AMENDED SOILS

DESCRIPTION - THIS WORK IS THE FURNISHING AND PLACING AMENDED SOILS FOR POST CONSTRUCTION STORM WATER MANAGEMENT PURPOSES AS INDICATED.

MATERIAL -

- TOPSOIL - SECTION 802.2
- COMPOST IN ACCORDANCE SECTION 808.2(f).4 AND AS FOLLOWS:

REFER TO TABLE BELOW FOR RECOMMENDED BULK DENSITY. VERY COARSE COMPOST SHOULD BE AVOIDED.

SOIL TEXTURE	IDEAL BULK DENSITIES	BULK DENSITIES THAT MAY AFFECT ROOT GROWTH	BULK DENSITIES THAT RESTRICT ROOT GROWTH
	g/cm3	g/cm3	g/cm3
SANDS, LOAMY SANDS	< 1.60	1.69	1.8
SANDY LOAMS, LOAMS	< 1.40	1.63	1.8
SANDY CLAY LOAMS, LOAMS, CLAY LOAMS	< 1.40	1.6	1.75
SILT, SILT LOAMS	< 1.30	1.6	1.75
SILT LOAMS, SILTY CLAY LOAMS	<1.10	1.55	1.65
SANDY CLAYS, SILTY CLAYS, SOME CLAY LOAMS (35-45% CLAY)	< 1.10	1.49	1.58
CLAYS (> 45% CLAY)	< 1.10	1.39	1.47

RECOMMENDED BULK DENSITIES FOR COMPOST

ORGANIC MATTER CONTENT	25%-100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5-8.0
MOISTURE CONTENT	35%-55%
PARTICLE SIZE	PASS 1-INCH STANDARD SCREEN
SOLUBLE SALT CONCENTRATION	3.0 dS MAXIMUM

COMPOST STANDARDS

CONSTRUCTION -

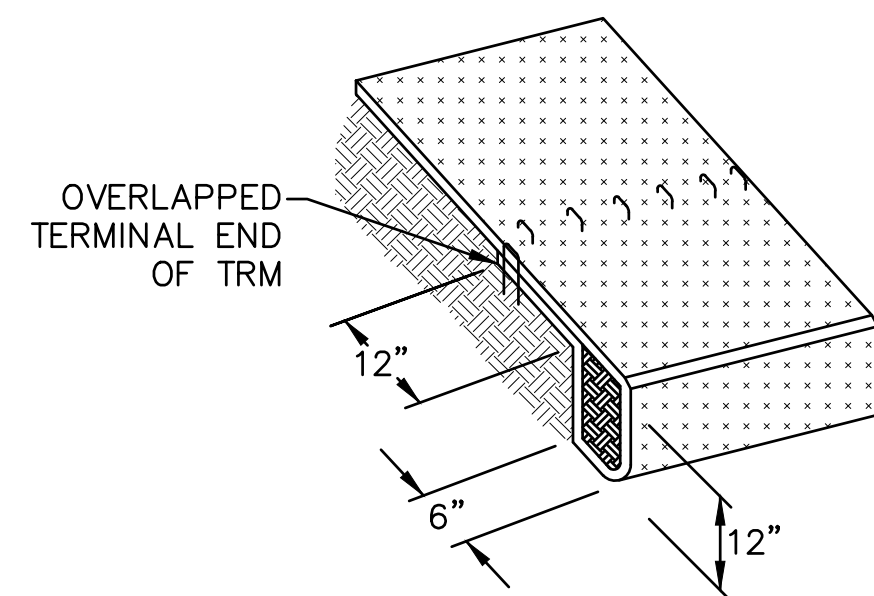
- PREPARE AREAS INDICATED ON THE PLAN TO BE PLACED WITH AMENDED SOILS. REMOVE TEN (10) INCHES BELOW FINISHED GRADE. WHILE SOIL IS DRY, LOOSEN AN ADDITIONAL TEN (10) INCHES BELOW BOTTOM OF EXCAVATED AREA THROUGH A SUBSOILING PROCESS SUCH AS RIPPING OR TILLING. A SOLID-SHANK RIPPER OR ROTOTILL SHOULD BE USED. REMOVE STONES AND OTHER FOREIGN MATERIAL TWO INCHES OR LARGER. REMOVE AND SATISFACTORILY DISPOSE OF UNSUITABLE AND SURPLUS MATERIAL.
- SPREAD THREE (3) INCHES OF COMPOST ON TWO (2) INCHES OF TOPSOIL. TILL WITH ROTARY TILLER SET AT A DEPTH OF FIVE (5) INCHES UNTIL COMPOST IS INCORPORATED INTO SOIL. ON THE TILLED SOIL/COMPOST MIXTURE, SPREAD A SECOND LIFT OF THREE (3) INCHES OF COMPOST ON TWO (2) INCHES OF TOPSOIL AND TILL TO A DEPTH OF FIVE (5) INCHES. PLACE ADDITIONAL TOPSOIL IF NEEDED TO MEET THE FINAL GRADE.
- DO NOT COMPACT AMENDED SOILS DURING INSTALLATION OR WHEN PLACING SODDING.

MEASUREMENT AND PAYMENT - CUBIC YARD. INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT FOR SOIL REMOVAL AND DISPOSAL, SUBSOILING, PLACEMENT, AND TILLING.

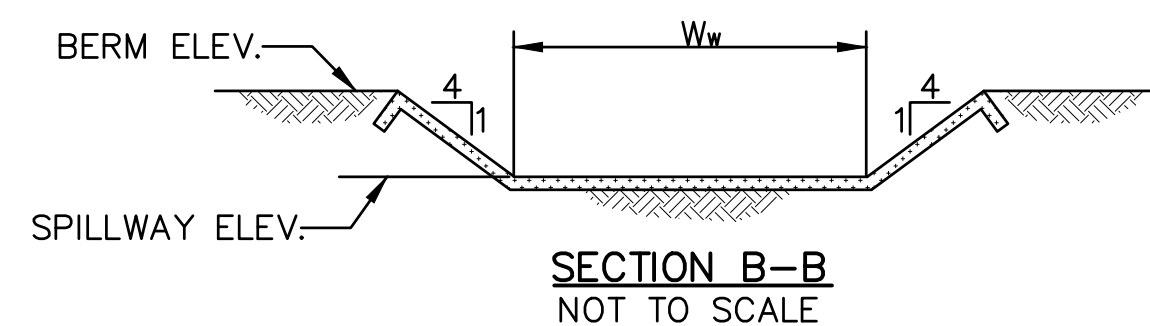
AMENDED SOILS
ITEM 9000-0026

VEGETATED SWALE DETAIL

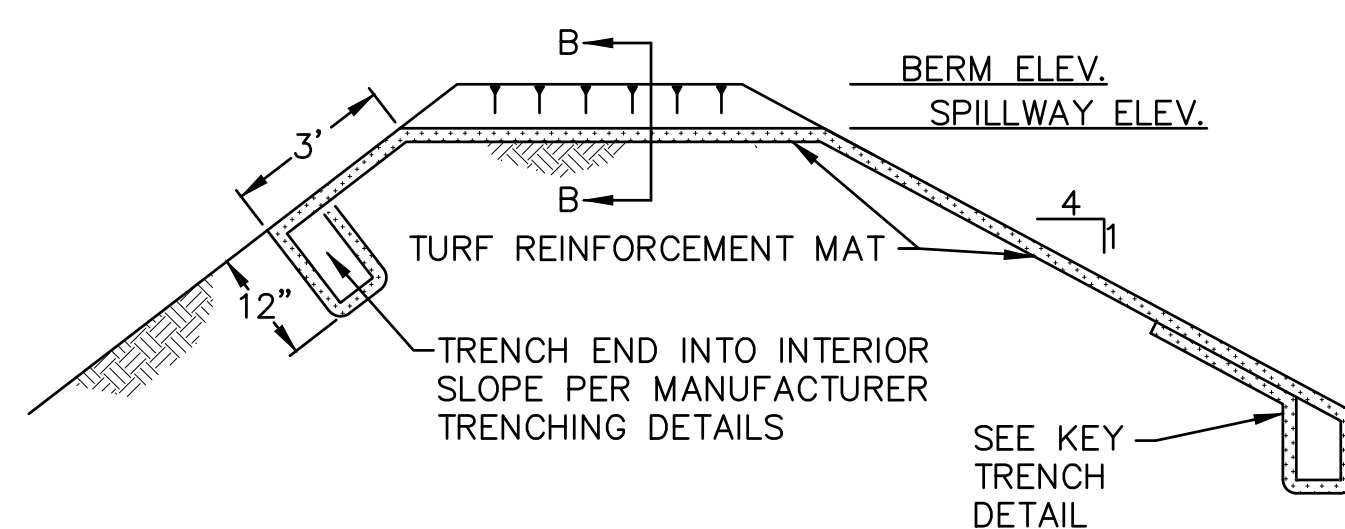
ITEM 9000-0026, ITEM 0804-0019,
ITEM 0806-0140
NOT TO SCALE



KEY TRENCH AT TOE OF SLOPE OF SPILLWAY
NOT TO SCALE



SECTION B-B
NOT TO SCALE

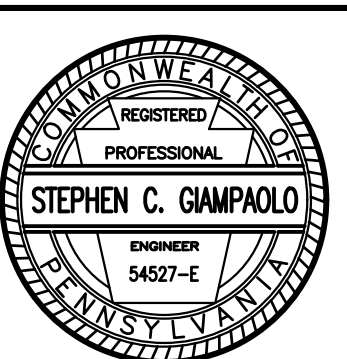


EMBANKMENT SECTION ALONG EMERGENCY SPILLWAY
NOT TO SCALE

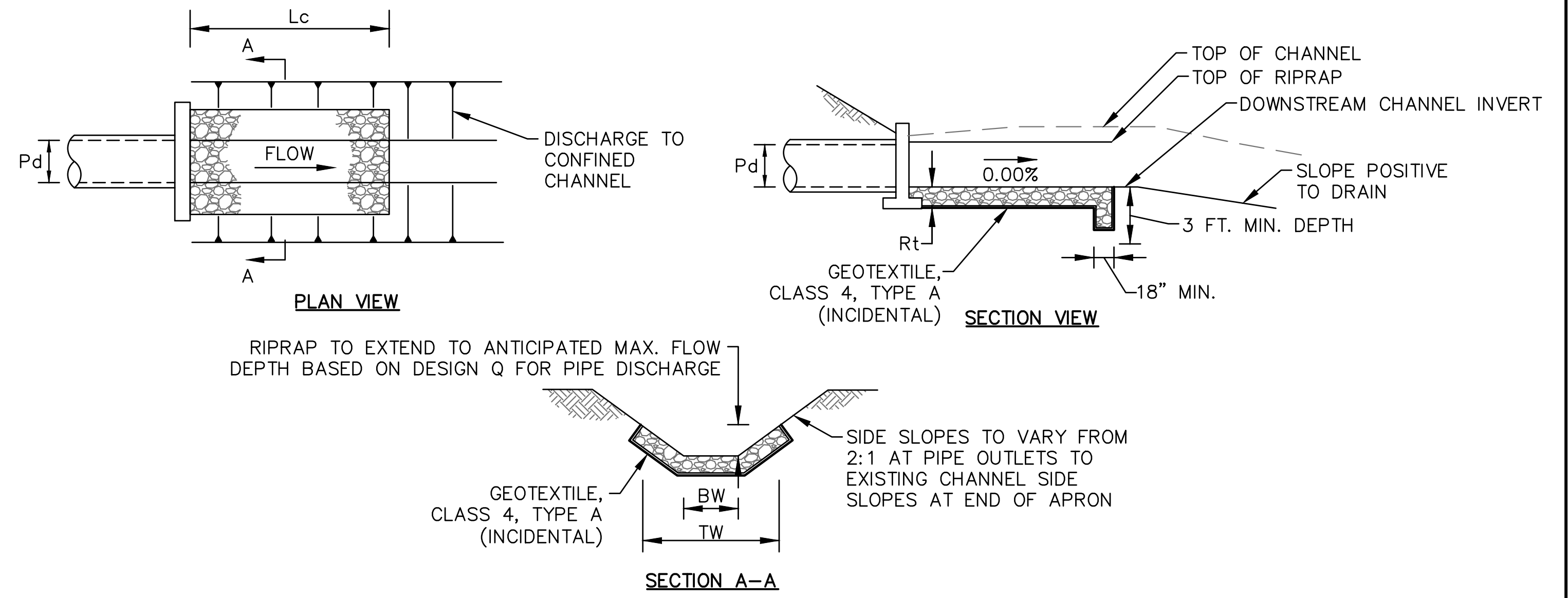
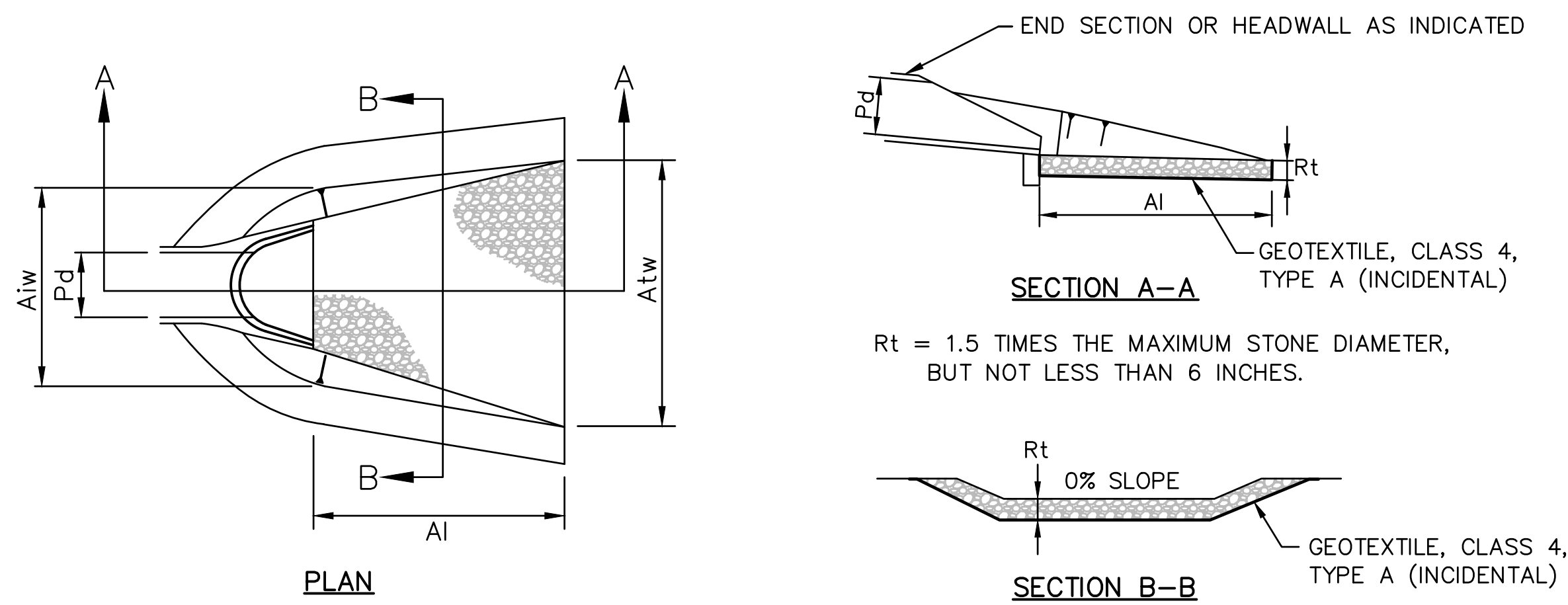
BASIN	SPILLWAY	
	WIDTH (X)	ELEVATION (Y)
RAIN GARDEN 1	25'	141.50
MRC BASIN 1	20'	137.67
MRC BASIN 2	20'	144.50

EMERGENCY SPILLWAY DETAIL - TRM LINING
ITEM 0806-0140

NPDES MINOR AMENDMENT 6-13-2022



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	SR 4004	MTF	17 OF 18
LOWER PROVIDENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



OUTLET	SR	STATION	SIDE	PIPE DIAMETER Do (IN)	TAILWATER CONDITION (MAX OR MIN)	Q (CFS)	V (FPS)	RIPRAP SIZE (R-)	LENGTH AI (FT)	WIDTH AT OUTLET AIW (FT)	TERMINUS WIDTH AtW (FT)	DEPTH Rt (IN)	MANNING "n" VALUE	PIPE SLOPE (FT/FT)
EW-2	4004	21+90	RT	18	MIN	0.31	2.54	R-4	8	4.5	12.5	18	0.012	0.008
EW-4	4004	23+95	LT	18	MIN	9.37	9.00	R-5	8	4.5	12.5	24	0.012	0.036
EW-5	T-324	58+94	LT	18	MIN	0.06	1.85	R-6	8	4.5	12.5	30	0.012	0.022
EW-6	T-324	56+72	LT	18	MIN	5.00	5.31	R-4	8	4.5	12.5	18	0.012	0.009

NOTES:

1. PROVIDE GEOTEXTILE MATERIAL ALONG ALL INTERFACE AREAS WITH GROUND CONTACT.
2. SLOPE SHOULD BE LEVEL OR AS CLOSE TO LEVEL AS REASONABLY POSSIBLE BASED ON SITE CONDITIONS.
3. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
4. ALL APRONS SHALL BE INSPECTED AT LEAST TWICE PER YEAR. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

ROCK APRON DETAIL
NOT TO SCALE

NOTES:

1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
2. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

* - GROUTED ENERGY DISSIPATOR. REFER TO PENNDOT PUB 408, SECTION 851.

ROCK APRON AT PIPE OUTLET TO EXISTING CHANNEL DETAIL
NOT TO SCALE

OUTLET NO.	SR	STATION	SIDE	PIPE SIZE Pd (IN)	RIPRAP		APRON					SIDE SLOPES H:V
					SIZE	THICKNESS Rt (IN)	LENGTH Lc (FT)	BW AT ENDWALL (FT)	END BW (FT)	TW AT ENDWALL (FT)	END TW (FT)	
EW-1	4004	21+21	RT	24X38	R-5	24	16	5	5	14	14	2:1
EW-3	4004	22+04	LT	48X76	R-7	36	37	6.3	6.3	12.5	12.5	2:1 TO 5:1

ROCK APRON
ITEM 0851-0003

TURF REINFORCEMENT MAT SPECIFICATIONS:

PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A:
INSTALL WITHIN SWALES AND ON BASIN SPILLWAYS AS INDICATED.

SECTION 806.2(B) - TURF REINFORCEMENT MAT:
COMPOSED OF NON-DEGRADABLE SYNTHETIC FIBERS, FILAMENTS, NETS, WIRE MESH AND/OR OTHER MATERIALS PROCESSED INTO A THREE-DIMENSIONAL MATRIX. ADHERE TO FOLLOWING REQUIREMENTS (ALL VALUES ARE FOR VEGETATED CONDITION UNLESS NOTED):

- MAXIMUM SLOPE (H:V): 1:1
- MAXIMUM SHEAR STRESS (LB/FT²): 6 (4 UNVEGETATED)
- MINIMUM TENSILE STRENGTH (LB/FT): 125
- MINIMUM SEED GERMINATION ENHANCEMENT: 200%
- MINIMUM WEIGHT PER UNIT AREA (OZ/YD²): 8

(ALL MATERIALS MUST BE FROM A BULLETIN 15 APPROVED MANUFACTURER.)

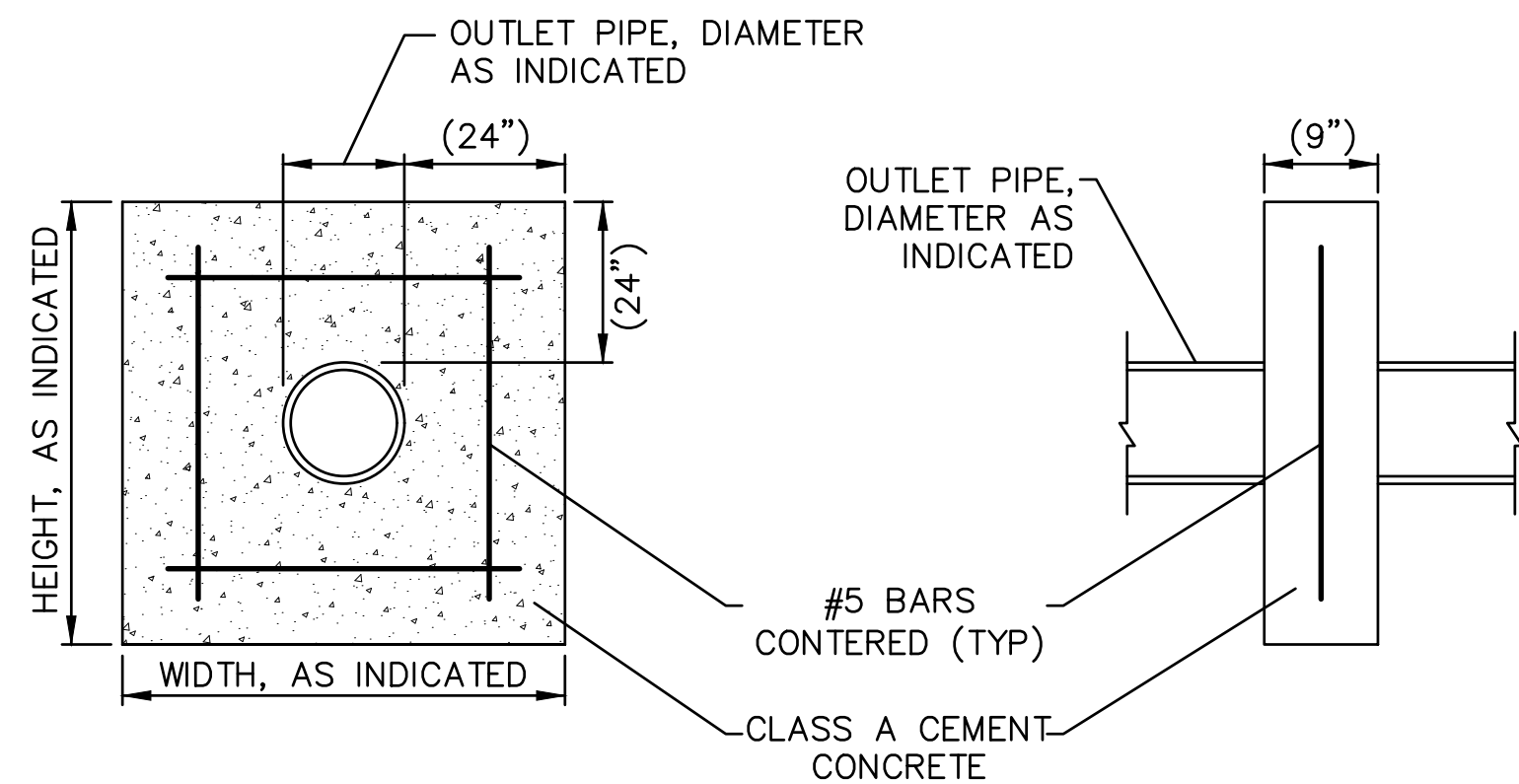
CLASS 4 GEOTEXTILE SPECIFICATIONS:

PERMANENT ROLLED EROSION CONTROL PRODUCT, TYPE 5A:
INSTALL WITHIN SWALES AND ON BASIN SPILLWAYS AS INDICATED.

SECTION 735.1(d):
COMPOSED OF NON-WOVEN NEEDLE PUNCHED FABRIC STRUCTURE. ADHERE TO FOLLOWING REQUIREMENTS:

- MINIMUM WEIGHT (OZ/SY): 12.0
- MINIMUM GRAB TENSILE STRENGTH (LBS): 305 MIN (MACHINE DIRECTION AND CROSS MACHINE DIRECTION)
- MINIMUM GRAB TENSILE ELONGATION (%): 50
- MINIMUM PUNCTURE (LBS): 830
- MINIMUM TRAPEZOID TEAR STRENGTH (LBS): 110
- MAXIMUM APPARENT OPENING SIZE (MM): 0.15
- MINIMUM PERMITTIVITY (SEC⁻¹): 0.70
- MINIMUM ULTRAVIOLET RESISTANCE STRENGTH RETENTION (%): 70 @ 500 HOURS

(ALL MATERIALS MUST BE FROM A BULLETIN 15 APPROVED MANUFACTURER.)

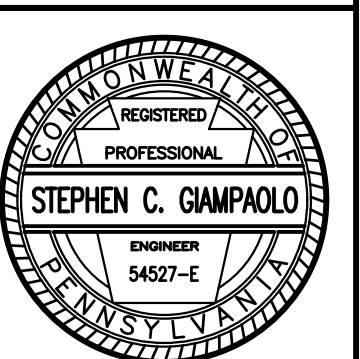


NOTES:

1. ANTI-SEEP COLLARS AND PIPE CONNECTIONS MUST BE WATERTIGHT.
2. PIPE JOINTS MUST BE A MINIMUM 2 FEET FROM ANTI-SEEP COLLARS.

CONCRETE ANTI-SEEP COLLAR
ITEM 0871-0001
NOT TO SCALE

BASIN	COLLAR	
	WIDTH (X)	HEIGHT (Y)
RAIN GARDEN 1	3'-5"	3'-5"
MRC BASIN 1	3'-6"	3'-6"
MRC BASIN 2	3'-7"	3'-7"

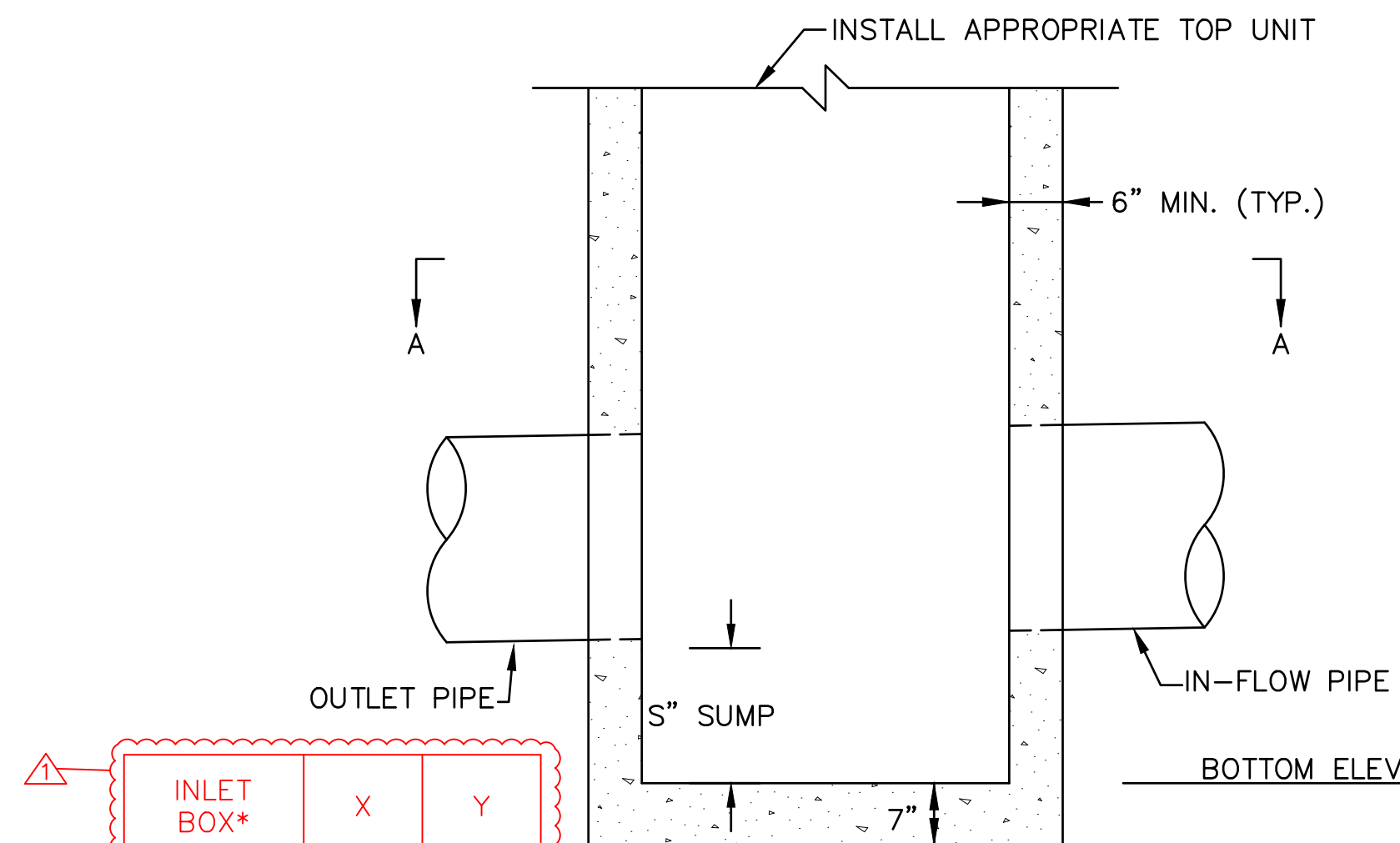


NOTES:

- MATERIALS AND CONSTRUCTION METHODS ARE TO BE PER RC-39M AND RC-46M.
- DRILL ~~FOUR (4)~~ ^{EIGHT (8)} 3/4" WEEP HOLES IN THE BOTTOM OF THE BOX TO PREVENT STANDING WATER FOR LONG PERIODS OF TIME.

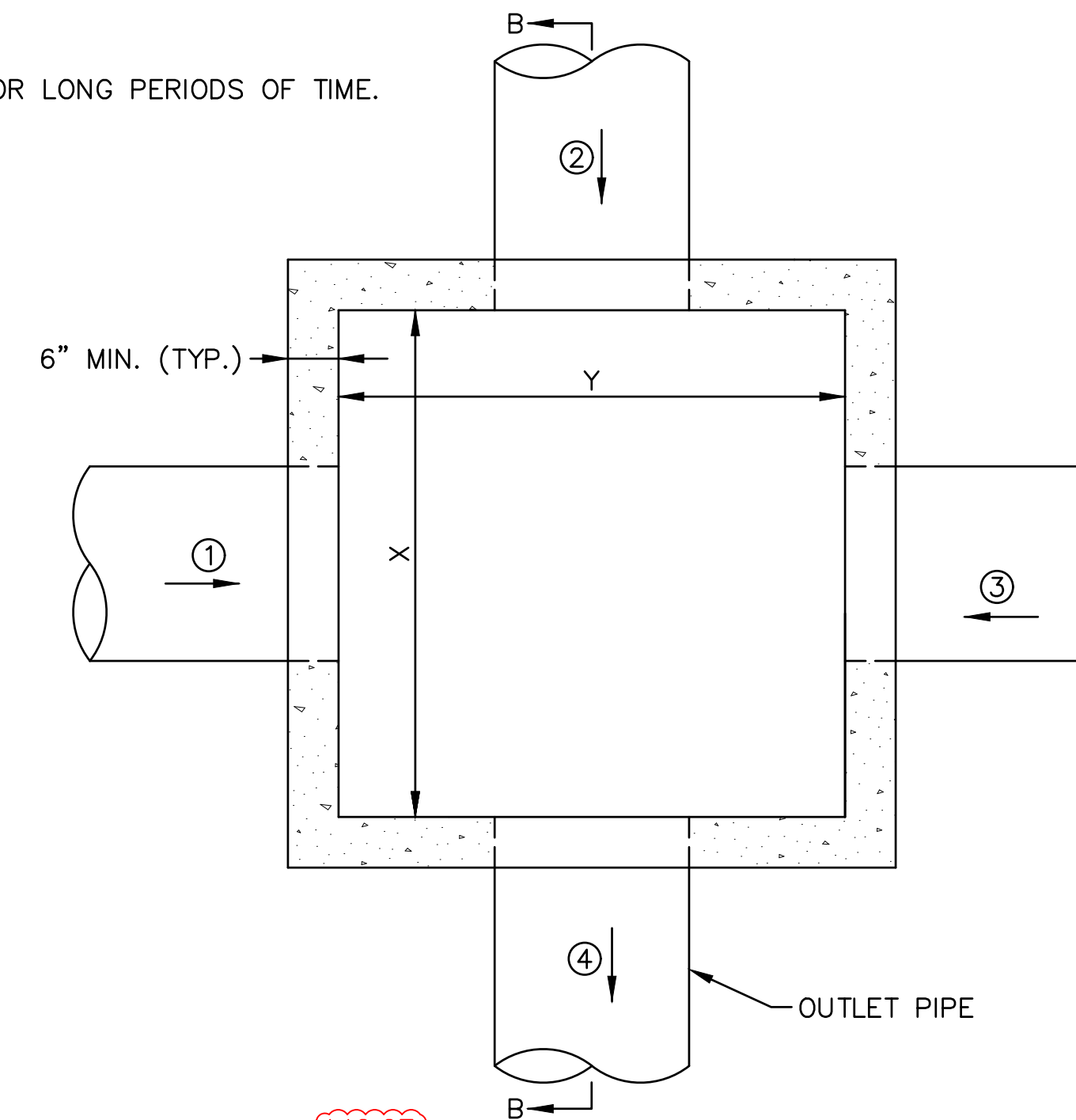
* - SUMPED INLET BOXES:

- ITEM 4605-2850 - STANDARD INLET BOX, HEIGHT \leq 10' WITH SUMP
- ITEM 4605-2858 - TYPE 5 INLET BOX, HEIGHT \leq 10' WITH SUMP



ELEVATION VIEW, B-B
NOT TO SCALE

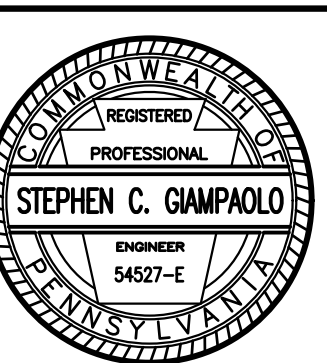
INLET BOX*	X	Y
4605-2858	60"	49"
4605-2858	60"	49"
4605-2858	60"	60"



PLAN VIEW, A-A
NOT TO SCALE

INLET ID	SR	STATION	INLET BOX*	X	Y	GR ELEV.	SUMP DEPTH (S)	①			②			③			④		
								SIZE	FROM	INV	SIZE	FROM	INV	SIZE	FROM	INV	SIZE	TO	INV
I-1	4004	17+58.00 RT	4605-2858	60"	48"	151.89	12"	-	-	-	-	-	-	-	-	-	24"X38"	I-2	145.01
I-2	4004	19+02.00 RT	4605-2850	24"	45.25"	146.00	12"	-	-	-	24"X38"	I-1	142.85	-	-	-	24"X38"	I-3	142.65
I-3	4004	19+90.00 RT	4605-2850	24"	45.25"	143.69	12"	-	-	-	24"X38"	I-2	140.62	-	-	-	24"X38"	I-3A	140.42
I-3A	4004	20+50.00 RT	4605-2850	24"	45.25"	142.00	12"	-	-	-	24"X38"	I-3	138.94	-	-	-	24"X38"	EW-1	138.74
I-6	4006	60+70.76 RT	4605-2850	24"	45.25"	148.84	12"	18"	I-7	144.50	-	-	-	18"	I-8	144.50	18"	COS-1	144.30
I-9	4004	26+00.00 LT	4605-2850	45.25"	24"	152.24	12"	-	-	-	18"	I-10	148.56	-	-	-	18"	I-8	148.36
I-10	4004	27+15.00 LT	4605-2850	45.25"	24"	159.63	12"	-	-	-	18"	I-11	156.63	-	-	-	18"	I-9	156.43
I-11	4004	28+20.00 LT	4605-2850	45.25"	24"	165.57	12"	-	-	-	18"	I-12	163.36	-	-	-	18"	I-10	163.16
I-15	T-324	56+72.00 RT	4605-2850	45.25"	24"	149.56	15"	-	-	-	-	-	-	18"	I-14	145.56	18"	EW-5	145.36

STANDARD INLET BOX, HEIGHT \leq 10' WITH SUMP
TYPE 5 INLET BOX, HEIGHT \leq 10' WITH SUMP
 ITEM 4605-2850, ITEM 4605-2858
 NOT TO SCALE



Prepared By:

Lauren A. Gallagher, Esq.
Rudolph Clarke, LLC
Seven Neshaminy Interplex
Suite 200
Trevose, PA 19053

Return To:

Lauren A. Gallagher, Esq.
Rudolph Clarke, LLC
Seven Neshaminy Interplex
Suite 200
Trevose, PA 19053

**DECLARATION OF POST CONSTRUCTION STORMWATER
MANAGEMENT BMP OPERATION AND MAINTENANCE RESPONSIBILITY**

This Declaration of Post Construction Stormwater Management BMP Operation and Maintenance Responsibility (this "Declaration") is made as of this _____ day of _____, 20_____, by **THE TOWNSHIP OF LOWER PROVIDENCE**, a second-class township of the Commonwealth of Pennsylvania (the "Declarant") having an address at 100 Parklane Drive, Eagleville, PA 19403.

WITNESSETH:

WHEREAS, pursuant to the plans entitled "Lower Providence Township Drawings Authorizing Acquisition of Right of Way" prepared by McMahon Associates, Inc. for the Declarant, dated June 30, 2020 (the "Right of Way Plans"), the Declarant will undergo a project to reconstruct and realign portions of certain rights of way known as "Park Avenue," "Eagleville Road," and "Crawford Road" also identified as State Routes 4004, 4006 and Township Road T-324, respectively (the "Project"); and

WHEREAS, the Project included the design and implementation of certain post construction stormwater management best management practices located within the right of way of Park Road ("PCSM BMPs"); and

WHEREAS, upon completion of the Project, the Declarant is responsible for the ongoing operation and maintenance of the PCSM BMPs in accordance with the plans entitled "Post Construction Stormwater Management Plan" prepared by McMahon Associates, Inc. for the Declarant, dated June 13, 2022, amended February 23, 2023 (the "PCSM Plans"), such plans attached hereto as Exhibit "A"; and

WHEREAS, in connection with the Project, the Declarant was issued an Individual National Pollution Discharge Elimination System (NPDES) Permit for Discharges of Stormwater Associated with Construction Activities, Permit No. PAD150076 (the "NPDES Permit") by the Pennsylvania Department of Environmental Protection (the "PaDEP"); and

WHEREAS, prior to allowing the Declarant to terminate the NPDES Permit by filing the requisite Notice of Termination, the PaDEP requires that the Declarant record this Declaration providing for the operation and maintenance of the PCSM BMPs by the Declarant.

NOW THEREFORE, in consideration of the above and the mutual covenants, terms, conditions, and restrictions hereinafter set forth in this Declaration, and other good and valuable consideration, receipt of which is hereby acknowledged, the Declarant provides and files this Declaration:

1. Purpose. The purpose of this Declaration is to provide notice and to ensure the operation and maintenance, and necessary access for operation and maintenance of the PCSM BMPs as reflected on the PCSM Plans by the Declarant, its successors and assigns, and to prevent the use or development of Park Avenue, Crawford Road or Eagleville Road in any manner that may impair or conflict with the operation and maintenance of the PCSM BMPs. Per 25 Pa. Code §102.8(m)(2), this Declaration identifies the PCSM BMPs, provides for the necessary access related to long-term operation and maintenance of the PCSM BMPs and provides notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees.

2. Declaration of Restrictions and Covenants. Declarant hereby declares that the portion(s) of Park Avenue, Crawford Road and Eagleville Road on which the PCSM BMPs are constructed shall be held, transferred, conveyed, leased, occupied or otherwise disposed of and used subject to this Declaration which shall run with the land and be binding on all heirs, successors, assigns, occupiers, and lessees.

3. Perpetual Duration. The provisions of this Declaration shall remain in effect in perpetuity, shall be deemed covenants running with the land regardless of ownership or use,

and be binding upon all subsequent property owners; and the personal representatives, heirs, successors, or assigns of the Declarant.

4. Reserved Rights. Declarant reserves and accepts unto itself and the successors or assigns of the Declarant, all rights accruing from ownership of the portion(s) of Park Avenue, Crawford Road and Eagleville Road on which the PCSM BMPs are constructed, including the right to engage in or permit or invite others to engage in all uses of the portion(s) of Park Avenue, Crawford Road and Eagleville Road on which the PCSM BMPs are constructed that are not inconsistent with the purpose of this Declaration.

5 Subsequent Transfers. The terms of this Instrument shall be incorporated by reference into any deed or other legal instrument by which Declarant divests itself by dedication, sale, or exchange of the portion(s) of Park Avenue, Crawford Road and Eagleville Road on which the PCSM BMPs are constructed. Failure of Declarant to perform any act required by this Declaration shall not impair the validity of this Declaration or limit its enforceability in any way. Upon valid sale or transfer of Declarant's ownership interest to a successor or assign and notice as required by this paragraph, Declarant shall be released from any responsibility for any violation of the terms of this Declaration caused by Declarant's successors or assigns or any third party which occurs subsequent to such sale or transfer.

6. Recordation. Declarant shall record this Declaration in the Office of the Recorder of Deeds for Montgomery County.

7. Miscellaneous Provisions.

(a) Severability. If any provision of this Declaration or the application of it to any person or circumstance is found to be invalid, the remainder of the provisions of this Declaration and the application of the provisions to persons or circumstances other than those as to which it is found to be invalid, shall not be affected by the invalid provision.

(b) Amendment. This Declaration shall not be amended, terminated or in any way modified by the Declarant without the express prior written approval of the PaDEP. After receiving approval from the PaDEP, the Declarant shall record any such amendment, termination or modification of this Declaration as described in Paragraph 6, above.

(c) Controlling Law. The interpretation and performance of this Declaration shall be governed by the laws of the Commonwealth of Pennsylvania.

(d) Captions. The captions in this Declaration have been inserted solely for convenience of reference and are not a part of this Declaration and shall have no effect upon construction or interpretation.

(e) Rights of the PaDEP. The rights of the PaDEP shall be preserved under the laws of the Commonwealth of Pennsylvania, and include, but not be limited to, the following:

- (i) To identify, to preserve and to protect in perpetuity the PCSM BMPs in a manner consistent with the PCSM Plan.
- (ii) To enter upon the portion(s) Park Avenue, Crawford Road and Eagleville Road on which the PCSM BMPs are constructed in a reasonable manner and at reasonable intervals and times for the purpose of monitoring compliance with this Declaration.
- (iii) To proceed at law or in equity to enforce the provisions of this Declaration, and to prevent the occurrence of any of the prohibited activities hereinafter set forth.
- (iv) To approve or disapprove a request for an amendment submitted under Paragraph 8(b), above.

IN WITNESS WHEREOF, the undersigned Declarant has hereunto executed this Declaration on the day and year first above written.

ATTEST:

DECLARANT

LOWER PROVIDENCE TOWNSHIP

WITNESS: _____
E.J. Mentry, Secretary

BY: _____
Cara Coless, Chair

COMMONWEALTH OF PENNSYLVANIA :
 : SS
COUNTY OF MONTGOMERY :

On this, the ____ day of _____, 2023, before me, a Notary Public for the Commonwealth of Pennsylvania, residing in the County of Montgomery, the undersigned officer, personally appeared **CARA COLESS**, Chair of the Board of Supervisors of Lower Providence Township, known to me or satisfactorily proven to be, the person who executed the foregoing instrument for the purposes therein contained by signing his name.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

NOTARY PUBLIC

EXHIBIT "A"

PCSM PLAN



MONTGOMERY COUNTY CONSERVATION DISTRICT

143 Level Road • Collegeville, PA 19426-3313 • 610-489-4506 • Fax: 610-489-9795
www.montgomeryconservation.org

November 24, 2020

Lower Providence Township
Attn: Donald Delamater
100 Parklane Drive
Eagleville, PA 19403-1199

Re: PAG-02 NPDES General Permit Coverage Approval
SR 4004 Section MTF
NPDES Permit No. PAC460503
Lower Providence Township, Montgomery County, PA

Dear Mr. Delamater:

Under the authority of the federal Clean Water Act and Pennsylvania's Clean Streams Law, the Montgomery County Conservation District has approved your request for new coverage under the PAG-02 NPDES General Permit for Discharges of Stormwater Associated with Construction Activities ("PAG-02 General Permit"). The latest versions of the Notice of Intent (NOI) and all supporting documents, including the Erosion and Sediment Control (E&S) Plan and Post-Construction Stormwater Management (PCSM) Plan, are incorporated into this approval, including the following plan drawings:

- The E&S Plan drawings, for SR 4004 Section MTF, dated 11/21/2020 and last revised 11/21/2020.
- The PCSM Plan drawings for SR 4004 Section MTF, dated 11/21/2020, and last revised 11/21/2020.

Your coverage under the PAG-02 General Permit, which has been assigned NPDES Permit No. PAC460479, is effective on **November 24, 2020** and will expire on **December 7, 2024**. If stormwater discharges associated with construction activities are expected to continue beyond the expiration date of PAG-02 General Permit coverage, you must apply to renew your coverage at least 180 days prior to the expiration date, unless otherwise approved by the Department of Environmental Protection (DEP) or the District.

Please review the PAG-02 General Permit and the enclosed attachments carefully and contact this office if you have any questions. Please pay particular attention to the following requirements of the General Permit:

- In accordance with 25 Pa. Code § 102.5(h), operators who are not the permittee shall be co-permittees. An operator is a person who either has oversight responsibility of an earth disturbance activity on a project site who has the ability to make modifications to the E&S

Plan, PCSM Plan or site specifications, or has day to day operational control over an earth disturbance activity on a project site. Please be advised that after an operator (contractor) has been selected for the project, the operator must be made a co-permittee and enter into an agreement with the permittee. Please use the enclosed Co-Permittee Acknowledgement Form for Chapter 102 Permits form (3800-FM-BCW0271a) to add a co-permittee.

- A pre-construction meeting is required as specified in 25 Pa. Code § 102.5(e), unless otherwise notified in writing by this office. The purpose of this meeting is to review all aspects of the permit with the permittee, co-permittees, operators, consultants, inspectors and licensed professionals or their designees who will be responsible for the implementation of the critical stages of the approved PCSM Plan. You must provide at least seven days notice of the pre-construction meeting to all invited attendees.
- You must conduct inspections of all best management practices (BMPs) on a weekly basis and after each measurable stormwater event (i.e., precipitation in an amount of 0.25 inch or greater over a 24-hour period) to ensure effective and efficient operation. The Visual Site Inspection Report Form (3800-FM-BCW0271d) is enclosed along with instructions. This form (or an equivalent electronic form providing the same information) must be used to document the required site inspections.
- For any property containing a PCSM BMP, the permittee or co-permittee must record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must identify the PCSM BMP, provide for necessary access related to long-term operation and maintenance (O&M) for PCSM BMPs, and provide notice that the responsibility for long-term O&M of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees. **You must record an instrument with the Recorder of Deeds within 45 days and provide proof of the recording at the time an application to transfer permit coverage is submitted, if applicable, and at the time a Notice of Termination (NOT) is submitted to this office.**
- If there are any changes to the PCSM BMPs or long-term operation and maintenance plan after the initial instrument recording and prior to permit termination, the permittee(s) will need to amend the initial recorded instrument at the recorder of deeds office prior to permit termination. Please note, most Recorder of Deeds Offices require that the land owner (at the time of actual recording) signs the instrument to be recorded. If the land owner changes and an amended instrument needs to be recorded, the Recorder of Deeds office will likely require the new land owner's signature on the amended instrument. It is recommended that for any sale or transfer of property to a new owner before this permit is terminated that the permittee seek legal counsel on how to structure the sale or transfer to allow the recorded instrument to be amended.
- The NOT form (3800-PM-BCW0229b) is also enclosed and must be completed and filed when construction activities have ceased and final stabilization has been achieved. The NOT must identify the responsible person(s) for the long-term O&M of the PCSM BMPs. Please

be advised that the permittee and any co-permittees remain responsible for all operational maintenance for this project site until the NOT has been filed and acknowledged. **It is important that you fulfill your obligations under the General Permit and submit a complete NOT to this office upon final stabilization of the site.**

Persons aggrieved by an action of a conservation district under 25 Pa. Code Chapter 102 may request an informal hearing with DEP within 30 days of publication of this notice in the *Pennsylvania Bulletin*, pursuant to 25 Pa. Code § 102.32(c). DEP will schedule this informal hearing within 30 days of the request. After this informal hearing, any final determination by DEP may be appealed to the Environmental Hearing Board as provided below.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board), pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://ehb.courtapps.com> or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

November 24, 2020

If you have questions, please contact Cody Schmoyer by e-mail at cschmoyer@montgomeryconservation.org or by telephone at 610-489-4506 ext. 19 and refer to Permit No. PAC460479.

Sincerely,



Jessica Buck
District Manager
Montgomery County Conservation District

cc: Stephen C. Giampaolo, P.E., McMahon Associates, Inc. (approval letter and page 1 of General Permit only)
DEP Permits Section Chief (approved NOI, approval letter, and page 1 of General Permit only)
Lower Providence Township (approval letter and page 1 of General Permit only)

Enclosures: PAG-02 General Permit
Visual Site Inspection Report Form and Instructions
Co-Permittee Acknowledgement Form for Chapter 102 Permits and Instructions
Notice of Termination Form

bcc: File
DEP Bureau of Clean Water (approved NOI, approval letter and page 1 of General Permit)