



BOROUGH OF CONSHOHOCKEN

Office of the Borough Manager

MAYOR

Yaniv Aronson

BOROUGH COUNCIL

Tina Sokolowski, President
Kathleen Kingsley, Vice-President
Anita Barton, Senior Member
Alan Chmielewski, Member
Stacy Ellam, Member
Ralph Frey, Member
Adrian Serna, Member

Stephanie Cecco
Borough Manager

DECEMBER 12, 2024 PLANNING COMMISSION MEETING PACKET

101 Washington St SEPTA Surface Lot Project Waiver of LD Application

Page 2



October 30, 2024

Ms. Stephanie Cecco
Borough Manager
Borough of Conshohocken
400 Fayette Street, Suite 200
Conshohocken, PA 19428

Re: Request for a Waiver of Subdivision and Land Development

Dear Ms. Cecco:

Southeastern Pennsylvania Transportation Authority (SEPTA) is building a temporary parking lot to serve the new regional rail station in Conshohocken Borough. SEPTA requests a waiver from the Borough's full Subdivision and Land Development review and approval process for this project. In support of this request, SEPTA shall provide the information below.

Description of the temporary Conshohocken Parking Lot Project: SEPTA has acquired property to construct a temporary parking lot near the site of the new Conshohocken Regional Rail Station. SEPTA intends to build a temporary parking lot to the west of the new regional rail station. The temporary parking lot will include the following improvements:

- Temporary surface parking lot to include 183 parking spaces
- ADA accessibility including, ADA parking spaces, sidewalk ramps
- Stormwater management facilities
- Multi-use trail along south edge of site

Enclosures: The following documents are enclosed with this Request:

1. Five (5) sets of land development plans and reports describing all improvements to be installed as part of the temporary Parking Lot project. These include all of the information which the Borough would otherwise obtain pursuant to the Borough Subdivision and Land Development Ordinance (the SALDO) and the Borough Stormwater Management Ordinance (the SWMO). The stormwater plans have been submitted along with Municipal Notification Form for Conshohocken's Borough review and signature. The notification form was signed by the Borough on 4/26/2024.

Waiver Requests: SEPTA respectfully requests for this project: (A) a waiver from the full SALDO review and approval process, and; (B) substantive waivers as set forth below.

- A. **Review and Approval Waiver:** SEPTA requests a process waiver that would allow SEPTA to submit its transportation plans and reports in lieu of the traditional land development plans and processes which the SALDO and the SWMO mandate.¹ The waiver will also allow SEPTA to proceed with the Temporary Parking Lot project without providing Financial Security Agreements², or Stormwater BMP Operations and Maintenance Agreements. SEPTA will enter into a Professional Services Agreement to pay or reimburse the Borough for the costs of legal, engineering and other professional review costs required for analysis of SEPTA's plans and issuance of the necessary permits.

¹ SEPTA does not seek relief from the process of obtaining zoning relief in order to construct the new Temporary Parking Lot within the AE Area of the Floodplain Conservation District. In that regard, SEPTA recently appeared before the Borough Zoning Hearing Board and obtained the required variance relief.

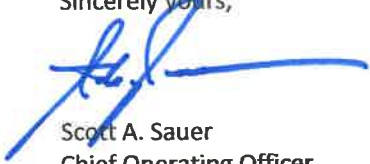
B. Substantive Waivers: SEPTA also requests substantive waivers from the following provisions of the SALDO.

1. A waiver of Section 22-404.3.F.(6) to permit parking stall size at the temporary Conshohocken parking lot to measure 8.5' x 18' rather than the SALDO's requirement of 9' x 18'; this waiver is appropriate because zoning ordinance allows for Parking Stall width to be 8.5' in SP-3 District.
2. A waiver of Section 22-405(1)(C) requiring a 15-foot sidewalk width in this area; the nature of SEPTA's use of the site as well as site constraints require this waiver request;
3. A waiver of Section 22-804 to permit the temporary Conshohocken parking lot to be constructed without dedication of land for park and recreational use or the payment of substitute fees; SEPTA's state and federal funding sources prohibit SEPTA from conveying property obtained with public money or paying fees in lieu of doing so.

SEPTA anticipates that it will complete the construction of the Temporary Parking Lot in early 2026. These waivers will ensure that SEPTA can comply with that timeline and deliver the benefits of the Temporary Parking Lot to its passengers.

Thank you for your consideration of SEPTA's requests. Please let me know of any further information that SEPTA can provide to the Borough.

Sincerely yours,



Scott A. Sauer
Chief Operating Officer

Enc.

Cc: Kate O'Connor, P.E. (w/o enc.)
Leonard Nardone, P.E. (w/o enc.)
Robert Tangi (w/o enc.)
Michael E. Peters, Esquire (w/o enc.)

BOROUGH OF CONSHOHOCKEN
MONTGOMERY COUNTY, PENNSYLVANIA

APPLICATION FOR SUBDIVISION/ LAND DEVELOPMENT

To be completed by the Borough:

Submission Information:	
File Number: <u>LD-2024-06</u>	File Date: <u>11/1/24</u>
Project Title: <u>SEPTA Surface Lot</u>	Date Complete: <u>11/1/24</u>
Received By: <u>B. Rogers</u>	90 Day Date: <u>Waived</u>

REQUIRED MATERIALS FOR ALL LAND DEVELOPMENT/SUBDIVISION APPLICATIONS

1. This form **MUST** be completed and submitted with the Borough's Land Development/Subdivision application.
2. A Land Development/Subdivision Application **MUST** include all of the items listed in the application checklist to be considered complete.

Incomplete applications will **NOT** be placed on a Planning Commission agenda. Incomplete applications will be returned to the applicant.
3. Complete applications must be received at least 38 DAYS (see schedule) prior to the Planning Commission meeting at which it will be heard.

It is highly encouraged to submit applications in a digital format.
4. One (1) digital copy plus seven (7) paper copies of the complete application are required if submitting digitally, or fifteen (15) paper copies of the complete application are required.

Applicant Information:

Name: Robert Tangi, SEPTA
Address: 1234 Market Street
Philadelphia, PA 19103
Phone: (215) 580-7853
Fax: _____
E-Mail*: RTangi@septa.org

Property Owner Information (if different):

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

Architect/Planner: N/A

Address: _____
E-mail*: _____ Phone/Fax: _____

Engineer/Surveyor: Kristian Bellotti, PE, McCormick Taylor Inc

Address: 1818 Market St, 16th Floor, Philadelphia, PA 19103
E-mail*: KBellotti@mccormicktaylor.com Phone/Fax: (215) 600-3940

Landscape Architect: Sheryl Bernardo, PLA, McCormick Taylor Inc

Address: 1501 S Clinton St, Suite 1150, Baltimore, MD 21224
E-mail*: SHBernardo@mccormicktaylor.com Phone/Fax: (410) 662-7400

Attorney: Carl N. Weiner, Esquire, Hamburg, Rubin, Mullin, Maxwell & Lupin, P.C.

Address: 123 S. Broad Street, Suite 2102, Philadelphia, PA 19109
E-mail*: CWeiner@HRMML.com Phone/Fax: (215) 616-1567

*All correspondence regarding this application from the Planning Commission and staff will be made via e-mail. All persons involved with this application should provide their e-mail addresses so that information including, but not limited to, meeting dates and plan reviews replaces revisions here, is distributed appropriately.

Application For: (See Section 22-305.A or the bottom of page 10 of the application packet for clarification)

- Minor Land Development
- Preliminary Major Land Development
- Final Major Land Development

- Minor Subdivision
- Preliminary Major Subdivision
- Final Major Subdivision

Project Information:

Location (Street Address): 101 Washington St, Conshohocken PA 19428

Tax Assessment Parcel No. 05-00-00040-00-9 County Deed Book No. 6100 Page No. 02086

Description of Proposed Work: Construction of a temporary surface parking lot by SEPTA. Also includes a multi-use trail, sidewalks, picnic areas, fire hydrants, stormwater inlets, and pipes.

Total Tract Acreage: 5.92 Project Acreage 4.37

Zoning District SP-3 Existing Number of Lots: 1 Proposed Number of Lots: 1

Proposed Land Use: Single-Family Detached Single-Family Semi-Detached Multi-Family
 Single-Family Attached Commercial Office Industrial

Other (Describe): _____

Existing Sewer Flows: 0 Proposed Sewer Flows: 0

Check List - Plans:
The applicant must provide all of the following plans for an application to be considered complete. Section 22, Part 3 of the SALDO outlines plan submission requirements and the criteria that must be met in order for submissions to be deemed complete. These requirements are listed on information sheets provided at the end of this application package. If the required plans listed below do not have sufficient information to allow for staff reviews, the application may be considered incomplete and returned, requesting additional information.

<input checked="" type="checkbox"/> Record Plan	<input checked="" type="checkbox"/> Landscape Plan
<input checked="" type="checkbox"/> Existing Features Site Plan	(sealed by a Landscape Architect)
<input checked="" type="checkbox"/> Grading Plan	<input checked="" type="checkbox"/> Demolition Plan
<input checked="" type="checkbox"/> Erosion and Sediment Control Plan	<input type="checkbox"/> Detail Sheets
<input checked="" type="checkbox"/> Lighting Plan_Major	<input checked="" type="checkbox"/> Traffic Study (if applicable)
<input checked="" type="checkbox"/> Circulation Plan_Major	<input checked="" type="checkbox"/> Post Construction Stormwater Management Plan
<input checked="" type="checkbox"/> Stormwater Calculations	<input checked="" type="checkbox"/> Utility Plan

Check List - Proof of ownership and zoning relief:
 Proof of equitable ownership or interest in the property - copy of the deed to the subject property
 Copy of adjudication of Zoning Hearing Board related to the application

Check List - Color Photographs of Site and Existing Conditions:
 Streetscape in all directions, showing subject property in each
N/A Façade and secondary elevations of existing building(s) on site
 Sidewalk and curb conditions
 Street trees
N/A Alley conditions, if present

Check List - Building Elevations:
N/A Architectural drawings and renderings of proposed building(s)

Check List - Setback of Proposed Building(s):
N/A Established building line for the block on which the property is located (eg: scale off an aerial)
(In plan, show setbacks of all existing buildings on same side of the street as project for entire block.)

List of Requested Waivers:

Section/Requirement:
 22-404.3.F.(6)
 22-405(1)(C)
 22-804

Relief Requested:
 Parking stall width less than 9'.
 Sidewalk less than 15' wide
 Construction without dedication of land for park and recreational use.

Have you met with the Zoning Officer regarding this plan? Yes ___ No
 Are there known variances/any zoning relief necessary for this project? Yes ___ No
 If YES, have you submitted an application for the Zoning Hearing Board? Yes ___ No
 Has this plan been reviewed by the Zoning Hearing Board? Yes ___ No

*Please be advised that if any variances are found to be necessary during the course of the review of this plan, you will be required to go to the Zoning Hearing Board prior to proceeding to the Planning Commission. In addition, you will be requested to grant the Borough a waiver to the 90-day action period or an immediate denial of this application will be made, and you will be required to resubmit the application.

The undersigned represents that to the best of his/her knowledge and belief, all the above statements are true, correct and complete.

Carl W. Wynn, Attorney for
 Signature of Applicant *SEPTA*
October 30, 2024
 Date

 Signature of Property Owner (if not the same as applicant)

 Date

ALL MAJOR subdivision/land use applications require a pre-submission meeting to discuss the project prior to full application submittal.

MINOR subdivision/land use applications may request a pre-submission meeting; if one is desired.

Meetings are held the second and fourth Tuesday of each month beginning at 1:30pm at the Borough Administrative Offices.

Applicants assume responsibility of any fees associated with this meeting.

Carl W. Wynn *10/30/2024*
 Applicant signature date

To schedule a pre-submission meeting, please contact the office of the Borough Manager
 ph: 610.828.1092
 e: landuse@conshohockenpa.gov

Borough Use Only:

___ Filing Fee	Amount \$ _____	Check No. _____
___ Pre-Construction Professional Services Escrow	Amount \$ _____	Check No. _____

Decision Information:

Approval _____ Denial _____ Decision Date: _____

Comments/Conditions:

BOROUGH OF CONSHOHOCKEN
MONTGOMERY COUNTY, PENNSYLVANIA

Planning Process Extension Agreement

The Pennsylvania Municipality Planning Code (MPC) and the Conshohocken Borough Subdivision and Land Development Ordinance state that action must be taken by the Borough within ninety (90) days after a complete application is filed with the Borough. In the Borough, larger and complicated projects have historically required additional time in order to complete a thorough review before being considered for approval. As such, an applicant may voluntarily waive the timing requirement at any time, but is encouraged to submit this waiver with the completed application.

I, the applicant, hereby voluntarily waive the timing requirement as set forth in the MPC (Section 509) and the Conshohocken Borough Subdivision and Land Development Ordinance (Section 22-308).

Robert Tangi
Applicant signature

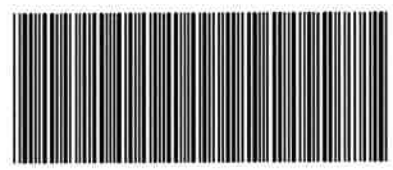
11/01/24
Date

Brittany Rogus
Received by (Borough)

11/1/24
Date



DEED BK 6308 PG 01621 to 01629.5
INSTRUMENT # : 2022104302
RECORDED DATE: 11/16/2022 03:23:41 PM



6169969-0020+

RECORDER OF DEEDS
MONTGOMERY COUNTY
Jeanne Sorg

One Montgomery Plaza
 Swede and Airy Streets ~ Suite 303
 P.O. Box 311 ~ Norristown, PA 19404
 Office: (610) 278-3289 ~ Fax: (610) 278-3869

MONTGOMERY COUNTY ROD

OFFICIAL RECORDING COVER PAGE


Page 1 of 14

Document Type: Deed	Transaction #: 6686884 - 1 Doc(s)
Document Date: 11/09/2022	Document Page Count: 8
Reference Info:	Operator Id: sford

RETURN TO: (Simplifile) Chicago Title Philadelphia Commercial - 1515 Market St Ste 1325 PA 19102-1930 1700 Market St Ste 2100 Philadelphia, PA 19103-3919 (215) 875-4146	PAID BY: CHICAGO TITLE PHILADELPHIA COMMERCIAL - 1515 MARKET ST STE 1325 PA 19102-1930
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* PROPERTY DATA:	
Parcel ID #:	05-00-00040-00-9
Address:	101 WASHINGTON ST
Municipality:	PA Conshohocken Borough (100%)
School District:	Colonial

*** ASSOCIATED DOCUMENT(S):**

CONSIDERATION/SECURED AMT: \$9,750,000.00	DEED BK 6308 PG 01621 to 01629.5	
TAXABLE AMOUNT: \$0.00	Recorded Date: 11/16/2022 03:23:41 PM	
FEES / TAXES:	I hereby CERTIFY that this document is recorded in the Recorder of Deeds Office in Montgomery County, Pennsylvania.  Jeanne Sorg Recorder of Deeds	
Recording Fee:Deed		\$86.75
Affidavit Fee		\$1.50
Additional Pages Fee		\$8.00
Affordable Housing Pages		\$8.00
Total:	\$104.25	

Rev1 2016-01-29

PLEASE DO NOT DETACH

THIS PAGE IS NOW PART OF THIS LEGAL DOCUMENT

NOTE: If document data differs from cover sheet, document data always supersedes.
 *COVER PAGE DOES NOT INCLUDE ALL DATA, PLEASE SEE INDEX AND DOCUMENT FOR ANY ADDITIONAL INFORMATION

Digitally signed 07/25/2024 by montgomery.county.rod@govos.com

Certified and Digitally Signed

Validation may require Adobe 'Windows Integration'

eCertified copy of recorded # 2022104302 (page 1 of 14)
 Montgomery County Recorder of Deeds



Prepared by:

Rosemary J. Loverdi, Esq.
 Dilworth Paxson LLP
 1500 Market Street, Suite 3500E
 Philadelphia, PA 19102
 (215) 575-7000

MONTGOMERY COUNTY COMMISSIONERS REGISTRY
 05-00-00040-00-9 CONSHOCKEN BOROUGH
 101 WASHINGTON ST
 NEVE SARA R 2015 RIVERFRONT PROPERTY TRUST \$15.00
 B 011 L U 005 2209 11/16/2022 JG

Return to:

Chicago Title Insurance Company
 1700 Market Street, Suite 2100
 Philadelphia, PA 19102
 (215) 732-9700
 Order No. PHI220647

Tax Parcel Number: 05-00-00040-00-9

DEED IN LIEU OF CONDEMNATION

THIS INDENTURE made the 9th day of November, 2022 between **MICHAEL V. SENCINDIVER, INDEPENDENT TRUSTEE OF THE SARA R. NEVE 2015 RIVERFRONT PROPERTY TRUST**, a Pennsylvania irrevocable trust, hereinafter called the Grantor, of the one part,

AND

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY, a body corporate and politic which exercises the public powers of the Commonwealth of Pennsylvania as an agency and instrumentality thereof, hereinafter called the Grantee, of the other part,

WHEREAS, Grantee is a metropolitan transportation authority created pursuant to the Metropolitan Authorities Transportation Act, 74 Pa. C.S.A. § 1701 *et seq.* and has the power of eminent domain pursuant to 74 Pa. C.S.A. § 1744; and

WHEREAS, pursuant to Resolution entitled "Acquisition from Sara R. Neve 2015 Riverfront Property Trust of a Parcel of Property located at 101 Washington Street in the Borough of Conshohocken, Montgomery County, for Use in SEPTA's ADA Station Upgrade Project and Construction of a New Parking Garage at Conshohocken Station" approved on April 28, 2022, the Board of the Southeastern Pennsylvania Transportation Authority, the Grantee hereunder, authorized the acquisition of the property described herein by condemnation or by a negotiated purchase price in lieu of condemnation; and

WHEREAS, Grantor and Grantee have agreed upon the negotiated purchase price for the transfer of the property described herein in lieu of condemnation, as set forth below.

WITNESSETH, That the said Grantor, for and in consideration of the sum of Nine Million and Seven Hundred Fifty Thousand Dollars (\$9,750,000.00), lawful money of the United States of America, unto it well and truly paid by the said Grantee, at or before the sealing and delivery,



hereof, the receipt whereof is hereby acknowledged, has granted, bargained and sold, released and confirmed, and by these presents does grant, bargain and sell, release and confirm unto the said Grantee, its successors and assigns,

ALL THAT CERTAIN PARCEL OF LAND as described on Exhibit "A" attached hereto,

UNDER AND SUBJECT, however, to the matters of record as of the date hereof.

TOGETHER with all and singular the structures, improvements, ways, streets, alleys, passages, waters, water-courses, mineral rights, gas and oil rights, liberties, privileges, hereditaments and appurtenances, whatsoever thereunto belonging, or in any wise appertaining, and the reversions and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, property, claim and demand whatsoever of it the said Grantor in law as in equity, or otherwise howsoever, of, in, and to the same and every part thereof.

TO HAVE AND TO HOLD the said parcel of land above described, with the improvements and structures thereon erected and the hereditaments and premises hereby granted, or mentioned and intended so to be, with the appurtenances, unto the said Grantee, its successors and assigns, to and for the only proper use and behoof of the said Grantee, its successors and assigns forever.

UNDER AND SUBJECT to matters of record, as aforesaid.

AND the said Grantor, for itself and its successors, does by these presents, covenant, grant and agree, to and with the said Grantee, its successors and assigns, that it, the said Grantor and its successors, all and singular the hereditaments and premises herein above described and granted, or mentioned and intended so to be, with appurtenances, unto the said Grantee, its successors and assigns, against the said Grantor and its successors, and against all and every person or persons whomsoever lawfully claiming or to claim the same or any part thereof, by, from or under Grantor, or any of them, shall and will, UNDER AND SUBJECT as aforesaid, WARRANT and forever DEFEND.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]



IN WITNESS WHEREOF, Grantor has hereunto set its hand and seal the day and year first above written.

GRANTOR:

THE SARA R. NEVE 2015 RIVERFRONT PROPERTY TRUST, a Pennsylvania irrevocable trust

By: [Signature]

Name: Michael V. Sencindiver

Title: Independent Trustee

STATE OF Pennsylvania
COUNTY OF Philadelphia

:
:
: ss.

On this, the 9th day of November, 2022, before me, a Notary Public, the undersigned officer personally appeared, Michael V. Sencindiver, known to me (or satisfactorily proven) to be the Independent Trustee of THE SARA R. NEVE 2015 RIVERFRONT PROPERTY TRUST, a Pennsylvania irrevocable trust, acknowledged that he as such Independent Trustee, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the Trust as such Independent Trustee.

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

[Signature]
Notary Public

Commonwealth of Pennsylvania - Notary Seal
KAREN C. MORRISSEY, Notary Public
Philadelphia County
My Commission Expires January 4, 2023
Commission Number 1116067



I hereby certify that the address of
the above Grantee is:

Southeastern Pennsylvania Transportation Authority
1234 Market Street
10th Floor
Philadelphia, PA 19107-3780

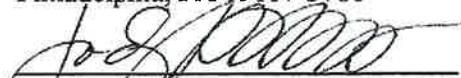

On behalf of Grantee



EXHIBIT "A"**LEGAL DESCRIPTION**

ALL THAT CERTAIN lot or piece of ground located in the Borough of Conshohocken, County of Montgomery, Commonwealth of Pennsylvania, identified as "Lot 2" on certain plan entitled "Lot Consolidation/Subdivision Plan" prepared by Bohler Engineering dated June 28, 2019 and last revised July 7, 2020, consisting of two sheets, which was recorded in the Office of the Montgomery County Recorder of Deeds in Plan Book 53 Page 401 as more particularly described as follows:

BEGINNING at a point on the dividing line between Block 13, Unit 49, lands now or formerly Sarah R. Neve 2015 Riverfront Property Trust and lands now or formerly SEPTA, said point being distant the following three (3) courses and distances from the common corner of Block 13, Unit 49 and Block 13, Unit 55, lands now or formerly 51 Washington Local LLC and from said point of beginning running, thence

The following three (3) courses and distances along the dividing line between Block 13, Unit 49 and lands now or formerly SEPTA:

A. North 53 degrees - 58 minutes - 55 seconds west, a distance of 70.21 feet to a point, thence

B. North 34 degrees - 56 minutes - 00 seconds East, a distance of 17.67 feet to a point, thence

C. North 52 degrees - 13 minutes - 00 seconds West, a distance of 29.76 feet to the true point and place of beginning and from said point of beginning running, thence;

The following twelve (12) courses and distances along the dividing line between proposed Lot 1 and proposed Lot 2;

1. South 37 degrees - 28 minutes - 22 seconds west, a distance of 35.69 feet to a point; thence

2. South 32 degrees - 24 minutes - 39 seconds East, a distance of 10.00 feet to a point, thence;

3. South 37 degrees - 28 minutes - 22 seconds West, a distance of 5.43 feet to a point of curvature; thence

4. along the arc of a circle curving to the right, having a radius of 10 feet, a central angle of 90 degrees - 18 minutes - 36 seconds, an arc length of 15.76 feet, a chord bearing South 82 degrees - 37 minutes - 40 seconds West and chord distance of 14.18 feet to a point tangency; thence

5. North 52 degrees - 13 minutes - 02 seconds West, a distance of 168.10 feet to point of curvature; thence



6. Along the arc of a circle curving to the right, having a radius of 76.00 feet, a central angle of 35 degrees - 14 minutes - 42 seconds, an arc length of 46.75 feet, a chord bearing North 34 degrees - 35 minutes - 41 seconds West and a chord distance of 46.02 feet to a point of reverse curvature; thence

7. Along the arc of a circle curving to the left, having a radius of 124.00 feet, a central angle of 35 degrees - 04 minutes - 32 seconds, an arc length of 75.91 feet, a chord bearing North 34 degrees - 30 minutes - 37 seconds West and a chord distance of 74.73 feet to a point of tangency; thence

8. North 52 degrees - 13 minutes - 02 seconds West, a distance of 436.94 feet to a point; thence

9. South 37 degrees - 46 minutes - 58 seconds West, a distance of 24.00 feet to a point; thence

10. North 52 degrees - 12 minutes - 58 seconds West, a distance of 68.67 feet to a point of curvature; thence

11. Along the arc of a circle curving to the left, having a radius of 15.00 feet, a central angle of 90 degrees - 00 minutes - 02 seconds, an arc length of 23.56 feet, a chord bearing South 82 degrees - 47 minutes - 01 seconds West and a chord distance of 21.21 feet to a point of tangency; thence

12. South 37 degrees - 47 minutes - 00 seconds West, a distance of 249.35 feet to a point on the title line on the Schuylkill River (navigable by law); thence

The following seven (7) courses and distances along the title line on the Schuylkill River

13. North 51 degrees - 25 minutes - 30 seconds West, a distance of 183.43 feet to a point; thence

14. North 45 degrees - 11 minutes - 55 seconds West, a distance of 336.02 feet to a point; thence

15. North 23 degrees - 44 minutes - 51 seconds West, a distance of 239.00 feet to a point; thence

16. North 29 degrees - 38 minutes - 35 seconds West, a distance of 125.59 feet to a point; thence

17. North 29 degrees - 44 minutes - 23 seconds East, a distance of 22.00 feet to a point, thence;

18. North 77 degrees - 26 minutes - 43 seconds West, a distance of 25.00 feet to a point, thence;

19. North 28 degrees - 37 minutes - 15 seconds West, a distance of 437.24 feet to a point; thence



The following twelve (12) courses and distances along the dividing line between Block 10, Unit 7; Block 10, Unit 9 and lands now or formerly SEPTA:

20. South 56 degrees - 05 minutes - 20 seconds East, a distance of 226.36 feet to a point; thence
21. South 40 degrees - 24 minutes - 00 seconds East, a distance of 237.00 feet to a point; thence;
22. South 36 degrees - 08 minutes - 58 seconds East, a distance of 111.22 feet to a point; thence;
23. South 46 degrees - 04 minutes - 50 seconds East, a distance of 144.70 feet to a point; thence;
24. South 48 degrees - 47 minutes - 00 seconds East, a distance of 217.93 feet to a point; thence
25. South 52 degrees - 57 minutes - 00 seconds East, a distance of 241.21 feet to a point; thence
26. South 52 degrees - 08 minutes - 00 seconds East, a distance of 250.04 feet to a point; thence;
27. South 51 degrees - 48 minutes - 00 seconds East, a distance of 250.24 feet to a point; thence;
28. South 53 degrees - 02 minutes - 00 seconds East, a distance of 182.57 feet to a point; thence;
29. South 52 degrees - 13 minutes - 00 seconds East, a distance of 222.77 feet to the point and place of beginning.

This description was written based upon a Map entitled "Conditional Use and Preliminary/Final Subdivision and Land Development Plans for High Street Conshohocken LLC, Matson Mill Apartments, Washington Street and Oak Street, Borough of Conshohocken, Montgomery County, Pennsylvania, Lot Consolidation/ Subdivision Plan (Record Plan 1 and 2 of 2)", prepared by Bohler Engineering, dated 06/28/2019, Project No. PC191274, Sheets C-204 and C-205, Revision No 11 dated 7/07/2020.

Being the same premises which Sarah R. Neve, widow of James J. Neve by Deed dated 7-31-2018 and recorded 7-31-2018 in Montgomery County in Deed Book 6100 page 2086 conveyed unto The Sarah R. Neve 2015 Riverfront Property Trust, under deed of trust dated 5-8-2015 of Sarah R. Neve, in fee.

Being the same premises which Michael V. Sencindiver, Independent Trustee of the Sara R. Neve 2015 Riverfront Property Trust by Deed of Consolidation dated 8-28-2020 and recorded



10-1-2020 in Montgomery County in Deed Book 6195 page 413 conveyed unto Michael V. Sencindiver, Independent Trustee of the Sara R. Neve 2015 Riverfront Property Trust, in fee.

BEING Tax ID/Parcel No. 05-00-00040-00-9





REV-183 BUREAU OF INDIVIDUAL TAXES PO BOX 280603 HARRISBURG, PA 17128-0603

1830019105

REALTY TRANSFER TAX STATEMENT OF VALUE COMPLETE EACH SECTION

RECORDER'S USE ONLY table with fields: State Tax Paid: \$0.00, Book: 6308, Instrument Number: 01621, Date Recorded: 11/16/2022 03:23:41 PM

SECTION I TRANSFER DATA

Form for Section I: Date of Acceptance of Document, Grantor(s)/Lessor(s) The Sara R. Neve 2015 Riverfront, Telephone Number (610) 804-9856, Grantee(s)/Lessee(s) Southeastern Pennsylvania, Telephone Number (215) 580-7619, Mailing Address c/o 717 Main Street, City Riverton, State NJ, ZIP Code 08077, Mailing Address 1234 Market Street, 10th Floor, City Philadelphia, State PA, ZIP Code 19107

SECTION II REAL ESTATE LOCATION

Form for Section II: Street Address 101 Washington Street, City, Township, Borough Conshohocken, County Montgomery, School District Colonial, Tax Parcel Number 05-00-00040-00-9

SECTION III VALUATION DATA

Form for Section III: Was transaction part of an assignment or relocation? NO, 1. Actual Cash Consideration 9,750,000.00, 2. Other Consideration + 0.00, 3. Total Consideration = 9,750,000.00, 4. County Assessed Value 155,080.00, 5. Common Level Ratio Factor x 2.53, 6. Computed Value = 392,352.40

SECTION IV EXEMPTION DATA - Refer to instructions for exemption status.

Form for Section IV: 1a. Amount of Exemption Claimed \$ 9,750,000.00, 1b. Percentage of Grantor's Interest in Real Estate 100 %, 1c. Percentage of Grantor's Interest Conveyed 100 %

- 2. Fill in the Appropriate Oval Below for Exemption Claimed. Will or intestate succession, Transfer to a trust, Transfer from a trust, Transfer between principal and agent/straw party, Transfers to the commonwealth, the U.S. and instrumentalities by gift, dedication, condemnation or in lieu of condemnation, Transfer from mortgagor to a holder of a mortgage in default, Corrective or confirmatory deed, Statutory corporate consolidation, merger or division, Other

SECTION V CORRESPONDENT INFORMATION - All inquiries may be directed to the following person:

Form for Section V: Name Gretchen Wisheart, Deputy General Counsel - Corporate - SEPTA, Telephone Number (215) 580-7619, Mailing Address 1234 Market Street, 5th Floor, City Philadelphia, State PA, ZIP Code 19107

Under penalties of law, I declare that I have examined this statement, including accompanying information, and to the best of my knowledge and belief, it is true, correct and complete.

Signature of Correspondent or Responsible Party and Date 11/8/22

FAILURE TO COMPLETE THIS FORM PROPERLY OR ATTACH REQUESTED DOCUMENTATION MAY RESULT IN THE RECORDER'S REFUSAL TO RECORD THE DEED.




1830019105

1830019105



CERTIFICATE

The undersigned, duly qualified and acting as Secretary of the Southeastern Pennsylvania Transportation Authority, certifies that the following is a true and correct copy of a Resolution adopted at a legally convened meeting of the Board of the Southeastern Pennsylvania Transportation Authority on April 28, 2022, which Resolution continues in full force and effect as of this date.



Carol R. Looby

Date: May 4, 2022

(Seal)



4/28/22

R E S O L U T I O N

re

ACQUISITION FROM SARA R. NEVE 2015 RIVERFRONT PROPERTY TRUST
OF A PARCEL OF PROPERTY LOCATED AT 101 WASHINGTON STREET IN
THE BOROUGH OF CONSHOHOCKEN, MONTGOMERY COUNTY, FOR USE IN
SEPTA'S ADA STATION UPGRADE PROJECT AND CONSTRUCTION
OF A NEW PARKING GARAGE AT CONSHOHOCKEN STATION

WHEREAS, SEPTA's existing Conshohocken Passenger Station ("Station") located at Mile Post 13.50 on the Norristown Regional Rail Line (Line Code 0329) is not compliant with the Americans with Disabilities Act (ADA) mandates, thereby requiring SEPTA to acquire additional property in order to construct the necessary improvements at the facility; and

WHEREAS, Sara R. Neve 2015 Riverfront Property Trust (the "Trust") owns a vacant parcel of property ("Parcel") located at 101 Washington Street in the Borough of Conshohocken, Montgomery County, consisting of 6.5 acres (283,140 +/- square feet) which is adjacent to the railroad right-of-way at the Station; and

WHEREAS, SEPTA desires to acquire the Parcel as part of its ADA Station Upgrade Project ("Project"), which will include the construction of a new Conshohocken Station and proposed parking garage that will accommodate approximately 500 motor vehicles; and

WHEREAS, a SEPTA commissioned independent appraisal determined that the fair market valuation (FMV) of Parcel (as of March 7,



2022) was \$9,500,000, which was supported by a subsequent in-house review appraisal; and

WHEREAS, following negotiations between the parties, an agreed upon consideration in the amount of \$9,750,000 was reached, with a closing date occurring on or before May 31, 2022; and

WHEREAS, acquisition of the Parcel is subject to completion by SEPTA of all necessary surface, environmental and geo-technical investigation of the subject property, and SEPTA obtaining any other consents, permits or assignment of rights in connection with the purchase of the Parcel; and

WHEREAS, SEPTA will also be responsible for payment of the customary charges incidental to the acquisition of the subject real estate, such as title insurance, closing costs and recording fees; and

WHEREAS, staff requested that the General Manager/Chief Executive Officer recommend that the Board authorize SEPTA to purchase from the Trust in lieu of condemnation or, if not successful, to acquire by condemnation the Parcel for a FMV or estimated just compensation capped at \$9,750,000, as required for the Project, under such terms as set forth above and more fully described in the pertinent staff summary; and

WHEREAS, the General Manager/Chief Executive Officer made the recommendation to the Board.



NOW, THEREFORE, BE IT RESOLVED, that the Board hereby authorizes SEPTA to purchase from Sara R. Neve 2015 Riverfront Property Trust, in lieu of condemnation or, if not successful, to acquire by condemnation the fee simple interests in the parcel of property located at 101 Washington Street in the Borough of Conshohocken, Montgomery County, under such terms as set forth within the pertinent staff summary, for a fair market value or estimated just compensation of \$9,750,000, plus costs that are incidental to the acquisition of real estate, or such alternative consideration as may be adjusted at the discretion of the General Manager/Chief Executive Officer to be in the best interests of the Authority.

FURTHER RESOLVED, that the Board hereby authorizes the General Manager/Chief Executive Officer or her designee, to execute all documents, in form approved by the Office of General Counsel, and to do any and all other things as shall be deemed necessary and proper in order to effectuate the purpose of this Resolution.

S/Corp/Resolutions/04-2022- Acquisition - Sara R. Neve 2015 Riverfront Property Trust - 101 Washington Street - ADA Station Upgrade Project at Conshohocken Station



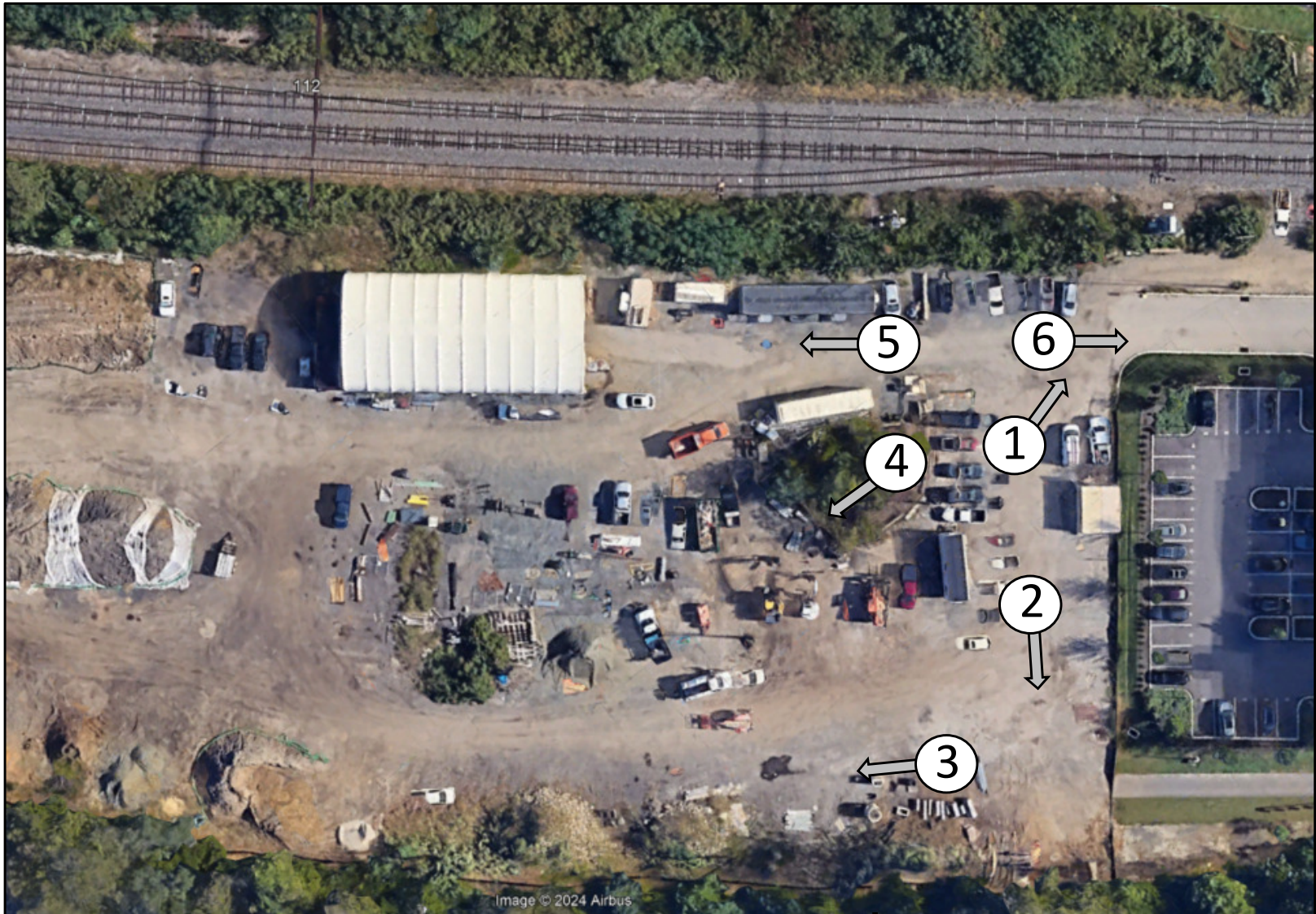


Image © 2024 Airbus



Base Mapping Source:
Google Maps

Photo Log Plan
SEPTA Conshohocken Train Station
101 Washington Street
Conshohocken, PA, 19428

Legend

→ Photograph Location and Direction

SEPTA Conshohocken
Surface Lot
101 Washington Street
Conshohocken, PA, 19428



Photo 1 – Looking East towards the Access Road entrance to the site

SEPTA Conshohocken
Surface Lot
101 Washington Street
Conshohocken, PA, 19428



Photo 2 – Looking South towards the Schuylkill River

SEPTA Conshohocken
Surface Lot
101 Washington Street
Conshohocken, PA, 19428



Photo 3 – Looking Southwest along the Schuylkill River

SEPTA Conshohocken
Surface Lot
101 Washington Street
Conshohocken, PA, 19428



Photo 4 – Looking West towards the Schuylkill River

SEPTA Conshohocken
Surface Lot
101 Washington Street
Conshohocken, PA, 19428



Photo 5 – Looking Northwest towards the Railroad Tracks

SEPTA Conshohocken
Surface Lot
101 Washington Street
Conshohocken, PA, 19428



Photo 6 – Looking East at the Access Road

Applicant Request for County Review



This request should be filled out by the applicant and submitted to the municipality where the application is being filed along with digital copies of all plan sets/information. Municipal staff will electronically file the application with the county, and a notice for the prompt payment of any fees will be emailed to the Applicant's Representative.

Date:
 Municipality:
 Proposal Name:

Applicant's
 Representative:
 Address:

Applicant Name:
 Address:
 City/State/Zip:
 Phone:
 Email:

City/State/Zip:
 Business Phone (required):
 Business Email (required):

Type of Review Requested:

(Check All Appropriate Boxes)

- Land Development Plan
- Subdivision Plan
- Residential Lot Line Change
- Nonresidential Lot Line Change
- Zoning Ordinance Amendment
- Zoning Map Amendment
- Subdivision Ordinance Amendment
- Curative Amendment
- Comprehensive / Other Plan
 Conditional Use
- Special Review*

**(Not included in any other category - includes parking lot or structures that are not associated with new building square footage)*

Type of Plan:

Tentative (Sketch)
 Preliminary / Final

Type of Submission:

- New Proposal
- Resubmission*

** A proposal is NOT a resubmission if A) The proposed land use changes, or B) The amount of residential units or square footage proposed changes more than 40%, or C) The previous submission was over 5 years ago.*

Zoning:

Existing District:
 Special Exception Granted Yes No
 Variance Granted Yes No For

Plan Information:

Tax Parcel Number(s)

Location
 Nearest Cross Street
 Total Tract Area
 Total Tract Area Impacted By Development

(If the development is a building expansion, or additional building on existing development, or only impacts a portion of the tract, please provide a rough estimate of the land impacted, including associated yards, drives, and facilities.)

Land Use(s)	Number of New		Senior Housing		Open Space Acres*	Nonresidential New Square Feet
	Lots	Units	Yes	No		
Single-Family						
Townhouses/Twins						
Apartments						
Commercial						
Industrial						
Office						
Institutional						
Other						

**Only indicate Open Space if it will be on a separate lot or deed restricted with an easement shown on the plan.*

Additional Information:



Edward Rudolph
Michael P. Clarke
Peter C. Amuso
Michael L. Barbiero*
Lauren A. Gallagher*
Alexander M. Glassman*

Gregory R. Heleniak*
Nicole L.M. Feight
Leslie Pregel DiNapoli
Melissa A. Osborne
Patrick F. Seymour*
Kenneth Ferris
Shaina P. Bethala
Michael P. Farrington
Elizabeth H. Naughton

*Member of PA & NJ Bars

OF COUNSEL:
Matthew D. Bradford
Steven J. Santarsiero
Benjamin V. Sanchez*
Maria Collett
Joseph W. Pizzo
Stephen G. Pollock

SEVEN NESHAMINY INTERPLEX
SUITE 215
TREVOSE, PA 19053
Phone 215-633-1890
Fax 215-633-1830

www.rudolphclarke.com
e-mail: pamuso@rudolphclarke.com

Please respond to: Fort Washington

Montgomery County Office
1300 Virginia Drive, Suite 405
Fort Washington, PA 19034
Phone 484-368-3808
Fax 215-633-1830

Delaware County Office
Radnor Financial Center
150 N. Radnor Chester Road
Suite F-200
Radnor, PA 19087
By appointment only
Phone 215-633-1890
Fax 215-633-1830

Chester County Office
101 Lindenwood Drive, Ste 225
Malvern, PA 19355
By appointment only
Phone 215-633-1890
Fax 215-633-1830

Burlington County Office
10000 Lincoln Drive East
1 Greentree Center, Ste 201
Marlton, NJ 08053
By appointment only
Phone 215-633-1890
Fax 215-633-1830

October 23, 2024

Via Electronic Mail Only- RTangi@septa.org

Attn: Robert Tangi
Southeastern Pennsylvania Transportation Authority
1234 Market Street
5th Floor
Philadelphia, PA 19103

NOTICE OF DECISION

**Re: *Borough of Conshohocken Zoning Hearing Board
Application Number Z-2024-22; 101 Washington Street***

To Whom it May Concern:

Please be advised that your application was heard by the Borough of Conshohocken Zoning Hearing Board at its meeting on October 21, 2024, seeking a variance from the Borough of Conshohocken Zoning Code, and based on the testimony and exhibits presented, was **GRANTED 5-0** to permit the construction of a surface parking lot.

Notice of Decision (Z-2024-22)

October 23, 2024

Page 2

Please note that the formal written decision will be issued, as required by the Pennsylvania Municipalities Planning Code and the Borough of Conshohocken Zoning Ordinance, as amended, within 45 days of the hearing date of October 21, 2024. In the interim, if you have any questions, please advise

Very truly yours,

A handwritten signature in blue ink that reads "Gregory R. Heleniak". The signature is fluid and cursive, with a large, sweeping flourish at the end.

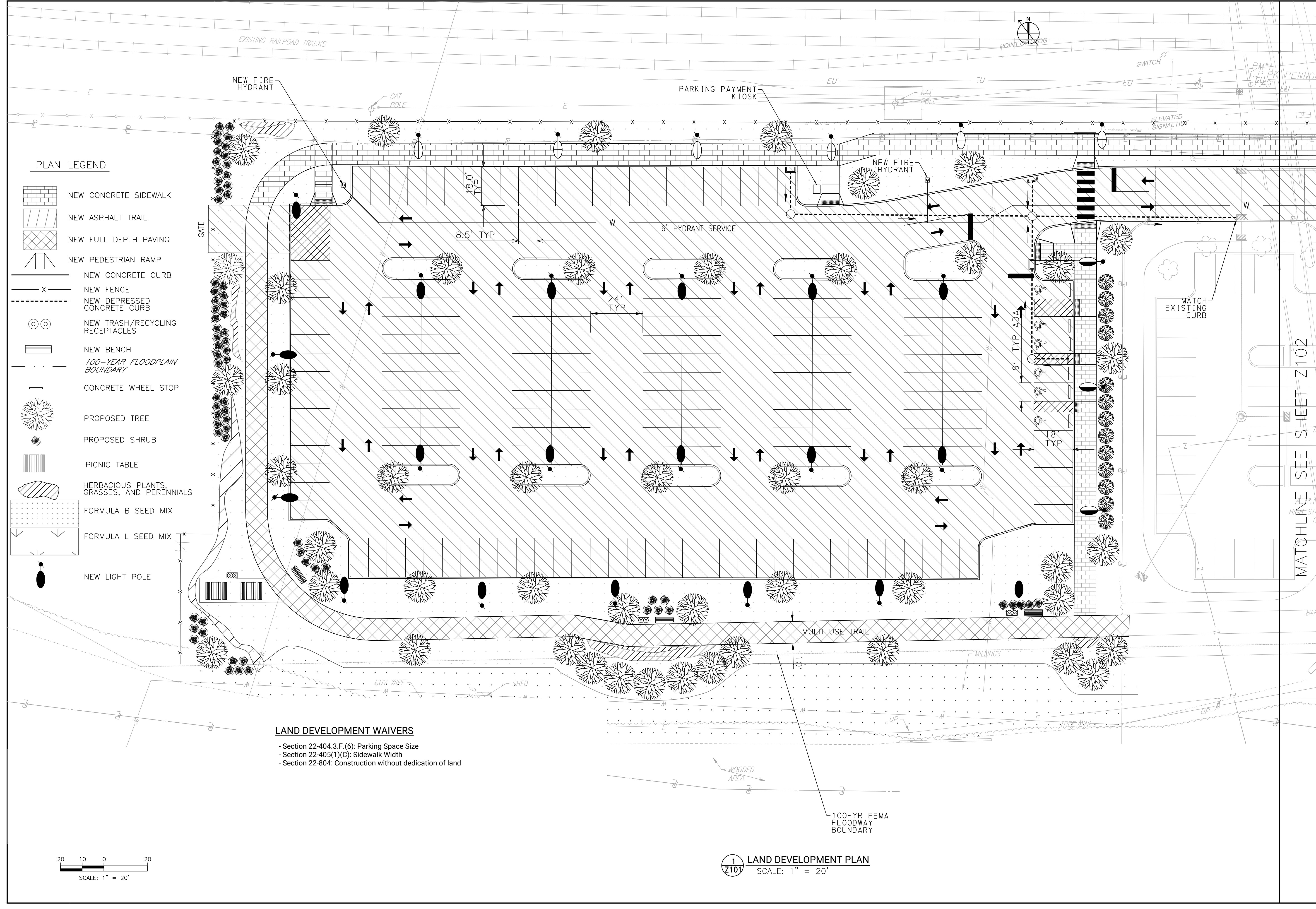
Gregory R. Heleniak

Cc: Carl N. Weiner, Esquire (*via email only*)- cweiner@hrmml.com
Brittany Rogers (*via email only*)
Allison Lee (*via email only*)

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
LAND DEVELOPMENT PLAN

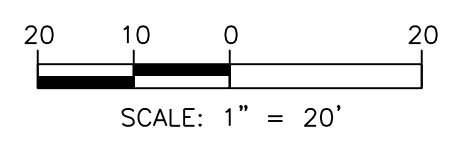
SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 6/7/2024	DRAWN BY: HLS
WORK ORDER NO.:	CHECKED BY: JAO
DRAWING NUMBER: Z101	
DWG. NO.:	Z001 OF Z004
SHT. NO.:	1 OF 4
COMPUTER FILE NO.:	REV. NO.:
	0



PLAN LEGEND

- NEW CONCRETE SIDEWALK
- NEW ASPHALT TRAIL
- NEW FULL DEPTH PAVING
- NEW PEDESTRIAN RAMP
- NEW CONCRETE CURB
- NEW FENCE
- NEW DEPRESSED CONCRETE CURB
- NEW TRASH/RECYCLING RECEPTACLES
- NEW BENCH
- 100-YEAR FLOODPLAIN BOUNDARY
- CONCRETE WHEEL STOP
- PROPOSED TREE
- PROPOSED SHRUB
- PICNIC TABLE
- HERBACIOUS PLANTS, GRASSES, AND PERENNIALS
- FORMULA B SEED MIX
- FORMULA L SEED MIX
- NEW LIGHT POLE

LAND DEVELOPMENT WAIVERS
 - Section 22-404.3.F.(6): Parking Space Size
 - Section 22-405(1)(C): Sidewalk Width
 - Section 22-804: Construction without dedication of land



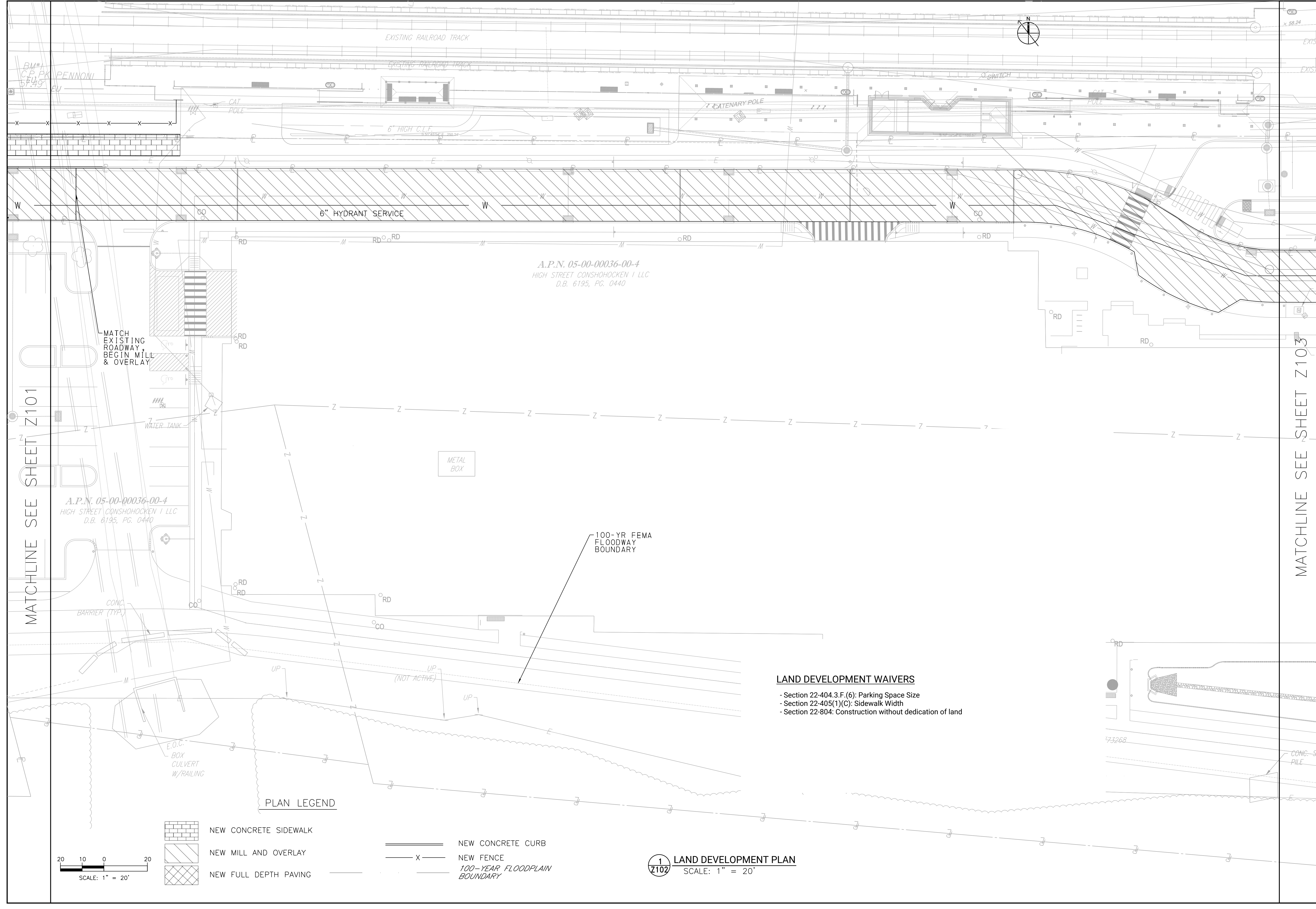
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Z101 LAND DEVELOPMENT PLAN
SCALE: 1" = 20'

MATCHLINE SEE SHEET Z102

REV	DATE	DESCRIPTION	BY	CKD	APD

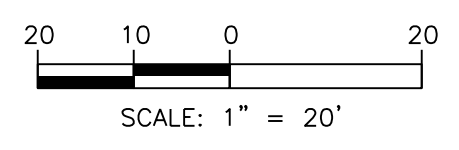
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
LAND DEVELOPMENT PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 6/7/2024	DRAWN BY: JJO
WORK ORDER NO.: GEC21D-24	CHECKED BY: KB
DWG. NO.: 2002	OF 2004
SHT. NO.: 2	OF 4
COMPUTER FILE NO.:	REV. NO.: 0



MATCHLINE SEE SHEET Z101

MATCHLINE SEE SHEET Z103



PLAN LEGEND

	NEW CONCRETE SIDEWALK		NEW CONCRETE CURB
	NEW MILL AND OVERLAY		NEW FENCE
	NEW FULL DEPTH PAVING		100-YEAR FLOODPLAIN BOUNDARY

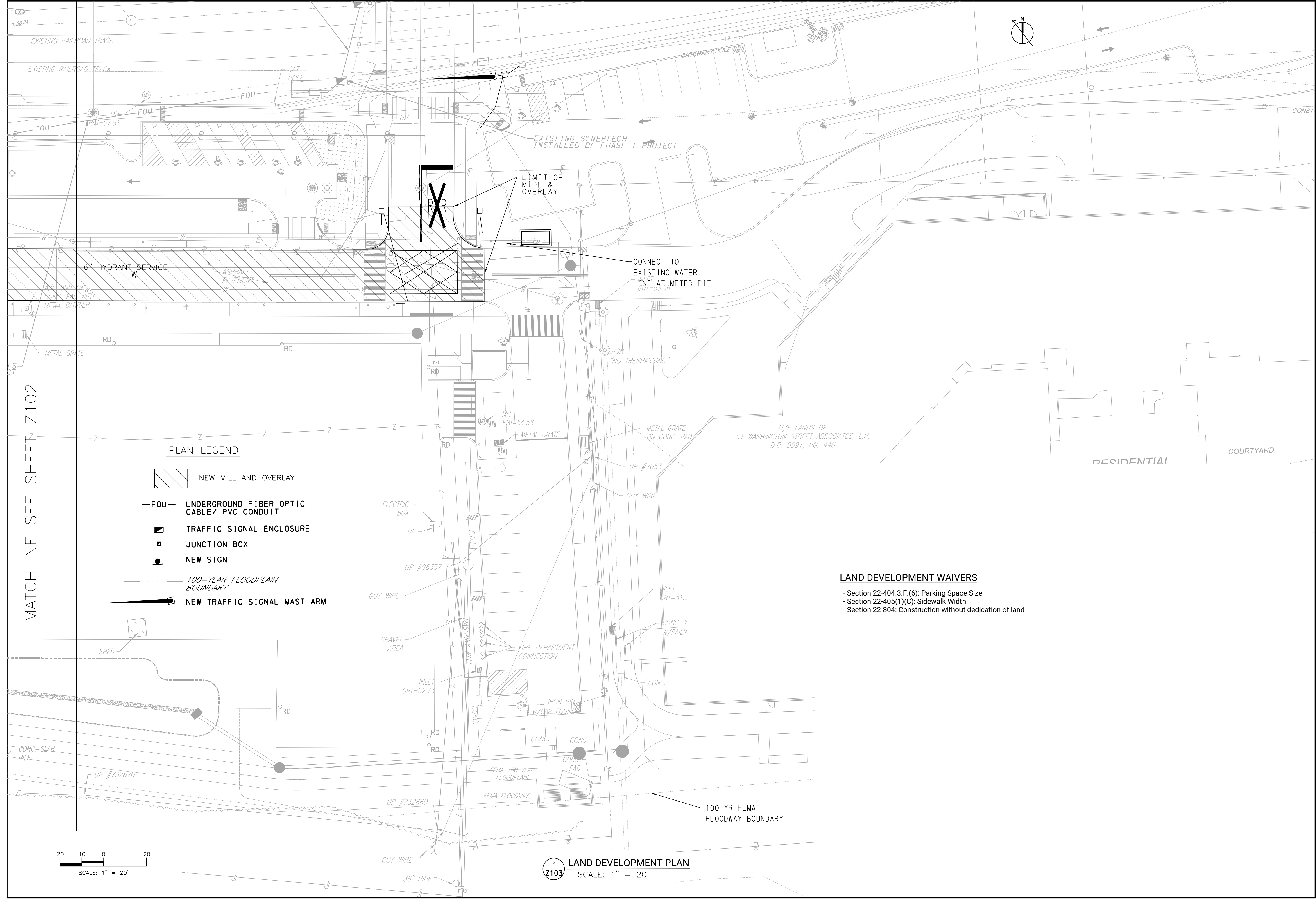
- LAND DEVELOPMENT WAIVERS**
- Section 22-404.3.F.(6): Parking Space Size
 - Section 22-405(1)(C): Sidewalk Width
 - Section 22-804: Construction without dedication of land

1
Z102 LAND DEVELOPMENT PLAN
SCALE: 1" = 20'

REV	DATE	DESCRIPTION	BY	CHKD	APD

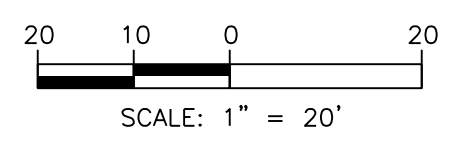
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
LAND DEVELOPMENT PLAN

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	6/7/2024	DRAWN BY:	JAG
WORK ORDER NO.:	GEC21D-24		
DRAWING NUMBER:	Z103		
DWG. NO.:	2003	OF	2004
SHT. NO.:	3	OF	4
COMPUTER FILE NO.:	REV. NO. 0		



MATCHLINE SEE SHEET Z102

- PLAN LEGEND**
- NEW MILL AND OVERLAY
 - UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
 - TRAFFIC SIGNAL ENCLOSURE
 - JUNCTION BOX
 - NEW SIGN
 - 100-YEAR FLOODPLAIN BOUNDARY
 - NEW TRAFFIC SIGNAL MAST ARM



1
Z103 LAND DEVELOPMENT PLAN
SCALE: 1" = 20'

LAND DEVELOPMENT WAIVERS

- Section 22-404.3.F.(6): Parking Space Size
- Section 22-405(1)(C): Sidewalk Width
- Section 22-804: Construction without dedication of land

RESIDENTIAL COURTYARD

N/F LANDS OF
51 WASHINGTON STREET ASSOCIATES, L.P.
D.B. 5591, PG. 448

100-YR FEMA
FLOODWAY BOUNDARY

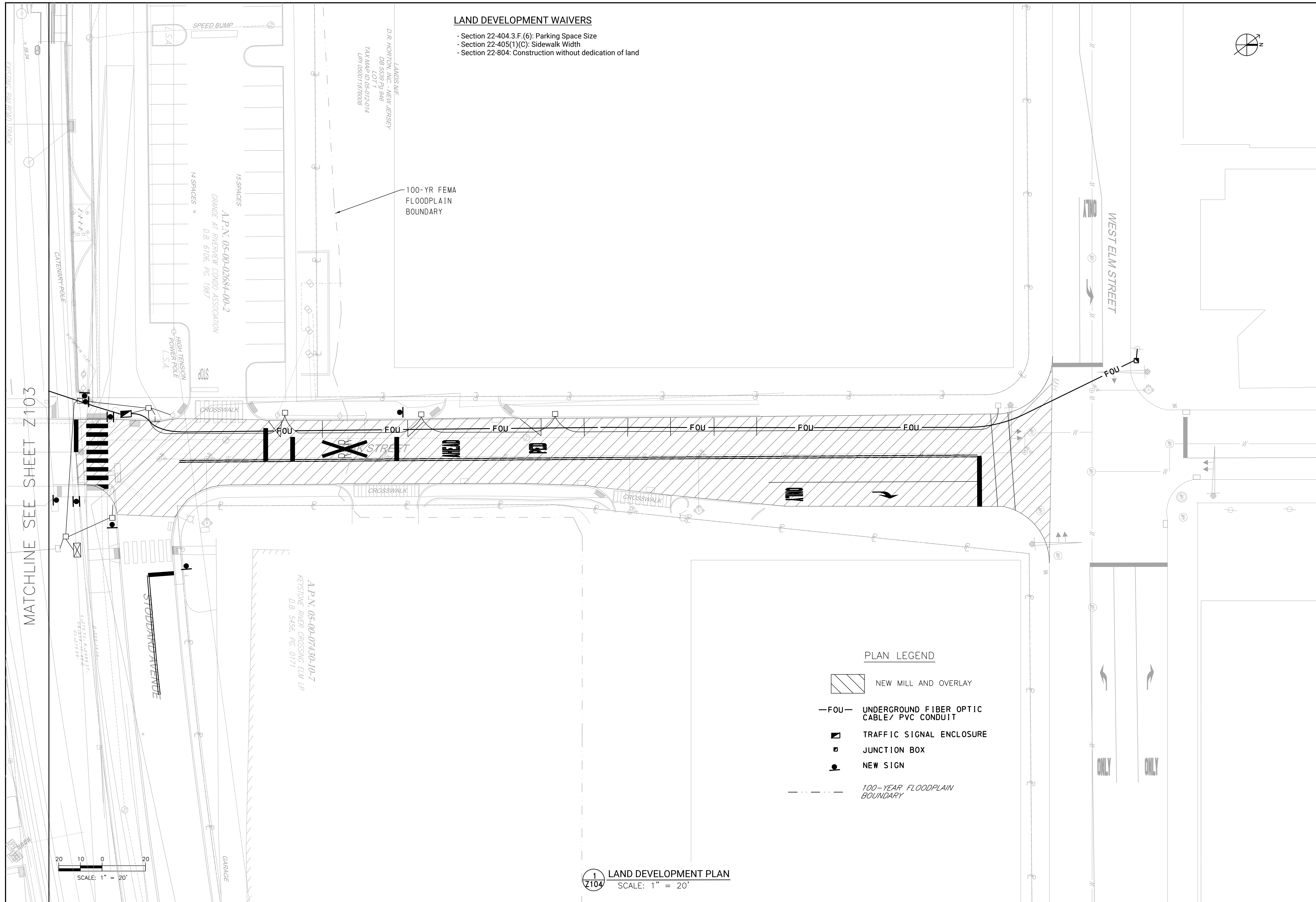
REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
LAND DEVELOPMENT PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 3/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: KB
DRAWING NUMBER: Z104	
DWG. NO.: 2004	OF 2004
SHEET NO.: 004	OF 004
COMPUTER FILE NO.: 21D-24-Z104	REV. NO.:

LAND DEVELOPMENT WAIVERS

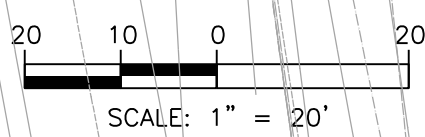
- Section 22-404.3.F.(6): Parking Space Size
- Section 22-405(1)(C): Sidewalk Width
- Section 22-804: Construction without dedication of land



PLAN LEGEND

- NEW MILL AND OVERLAY
- UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
- TRAFFIC SIGNAL ENCLOSURE
- JUNCTION BOX
- NEW SIGN
- 100-YEAR FLOODPLAIN BOUNDARY

MATCHLINE SEE SHEET Z103



1
Z104 LAND DEVELOPMENT PLAN
SCALE: 1" = 20'

MEMORANDUM

TO: Len Nardone, PE, Senior Program Manager
SEPTA EM&C, Rail Facilities

FROM: Erik Schmidt, PE, PTOE, McCormick Taylor

CC: Kris Bellotti, PE, McCormick Taylor

DATE: January 2, 2024

REFERENCE: SEPTA Conshohocken Train Station Parking Lot
SEPTA Project GEC 17D-29
MT Project #06181.024

SUBJECT: **Queue-Cutter Signal Analysis**

As requested by SEPTA, McCormick Taylor has prepared this memo presenting the updated analysis results of the proposed Oak Street queue-cutter signal, which is proposed as part of the Conshohocken Train Station Improvement Project. Since the proposed number of parking spaces has been reduced from 607 in the original Transportation Impact Assessment (TIA) to 262 in the current design, SEPTA-related traffic demand will be less than previously anticipated. However, despite this decrease in demand, it was found that only the PM peak hour queue is reduced; AM remains relatively unchanged. The queue-cutter signal is recommended to alleviate possible queues on Oak Street.

Overview & Context

In June 2022, a TIA was submitted to SEPTA detailing the projected traffic impacts to the roadway network surrounding the proposed SEPTA Conshohocken train station, which included a garage and a total of 607 spaces on SEPTA property. This study found that peak hour queues at the northbound approach to the Elm Street & Oak Street intersection often extended onto and beyond the existing railroad tracks. To remedy this issue, a queue-cutter signal was proposed, which would help to automatically clear the northbound queue.

In late 2023, the proposed SEPTA parking garage was removed from the project scope, and instead only 262 parking spaces are proposed on SEPTA property. Therefore, parking demand for this lot will be less than the demand for the previously proposed garage.

Analysis Methodology

Consistent with the TIA, trip generation for both AM and PM Peak Hours was assumed to be equivalent to 40% of the proposed lot size. The updated trips were applied to the same directional distributions used in the TIA to generate the Build traffic volumes. Updated volume figures can be found in **Attachment A**.

For consistency, only intersection traffic volumes were changed in the analysis, with all other values and inputs remaining the same as they were for the TIA.

The microsimulation software, SimTraffic was used for the queueing analysis to match the previous TIA. Times and durations of queues on the northbound approach at Elm Street & Oak Street were observed and recorded for two scenarios: when the queue passed the loop sensor located 275' back from the stop bar, and when the queue extended onto the railroad tracks south of Stoddard Avenue (400'+). Five runs of the simulation model were analyzed for both the weekday AM and weekday PM peak hours and the results were averaged and tabulated into **Table 1**.

Analysis Results

The results of the updated analysis found that queue lengths were reduced during the PM peak hour but remained relatively unchanged during the AM peak hour. While SEPTA trips were reduced and resulted in shorter PM queue lengths, the high volumes, delays, and queues in the study area from adjacent development continues to drive the excessive queues along Oak Street. As a result, the queue-cutter signal is recommended to help alleviate queuing over the tracks at the Oak Street crossing. **Table 1** shows a summary of the SimTraffic results. SimTraffic reports can be found in **Attachment B**.

Table 1: SimTraffic Queue Results Summary

	2028 Build AM Peak 7:00-8:00 AM	2028 Build PM Peak 4:00-5:00 PM
Average Queue (ft)	191	155
95th % Queue (ft)	400	306
Loop Sensor at 275'		
Frequency	6	3
Average Duration (min:sec)	01:45	00:42
Total Duration (min:sec)	10:51	02:19
% of Peak	18%	4%
Queue Reaching Tracks (400')		
Frequency	2	1
Average Duration (min:sec)	03:04	01:36
Total Duration (min:sec)	06:44	00:57
% of Peak	11%	2%

**SEPTA CONSHOHOCKEN RAILROAD
STATION SURFACE PARKING LOT**

**MONTGOMERY COUNTY, PA
CONSHOHOCKEN BOROUGH, PA**

***STORMWATER MANAGEMENT
CALCULATIONS***

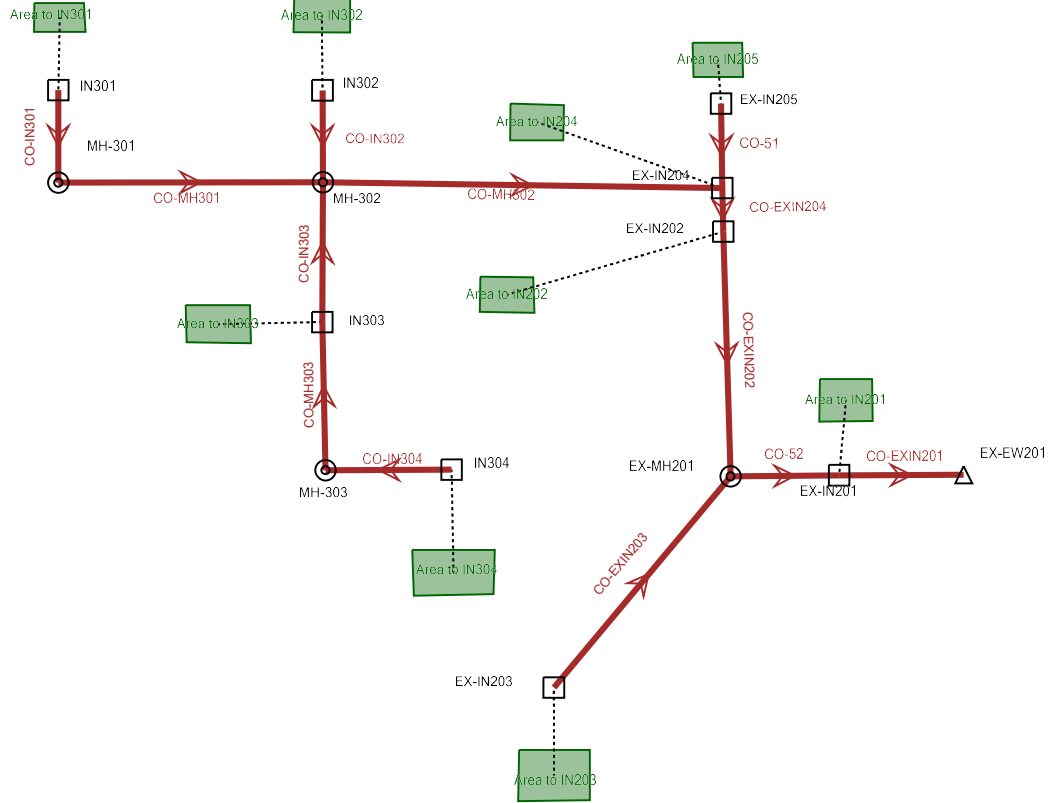
Prepared by:



1818 Market Street. 16th Floor
Philadelphia, PA 19103

November 2024

Scenario: 10 Year



StormCAD Analysis

Proposed Conditions: 10-yr

FlexTable: Catch Basin Table

Label	Inlet	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Capture Efficiency (Calculated) (%)	Flow (Captured) (cfs)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Spread / Top Width (ft)	Flow (Total Out) (cfs)
EX-IN204	PennDOT Type C Standard Box	59.98	56.04	100.0	0.02	57.02	57.02	1.54	6.46
EX-IN205	PennDOT Type C Standard Box	59.86	56.20	82.8	0.53	57.02	57.02	5.64	0.53
EX-IN202	PennDOT Type M Standard Box	60.69	55.84	100.0	0.04	56.83	56.83	2.05	6.49
EX-IN201	PennDOT Type M Standard Box	59.00	47.00	62.0	1.68	48.13	48.13	9.70	8.57
EX-IN203	PennDOT Type M Standard Box	58.00	54.30	82.1	0.55	54.62	54.62	5.74	0.55
IN302	PennDOT Type C Standard Box	60.72	57.30	64.7	1.44	57.75	57.75	8.90	1.44
IN301	PennDOT Type C Standard Box	61.40	58.00	53.9	2.53	58.60	58.60	11.90	2.53
IN303	PennDOT Type M Standard Box	60.67	56.83	86.0	0.51	57.76	57.76	6.84	2.14
IN304	PennDOT Type M Standard Box	60.56	57.31	65.3	1.65	57.80	57.80	10.57	1.65

FlexTable: Catchment Table

Label	Runoff Coefficient (Rational)	Catchment Intensity (in/h)	Area (User Defined) (acres)	Time of Concentration (min)	Flow (Total Out) (cfs)
Area to IN205	0.846	7.000	0.107	5.000	0.64
Area to IN204	0.950	7.000	0.003	5.000	0.02
Area to IN202	0.300	7.000	0.020	5.000	0.04
Area to IN201	0.894	7.000	0.430	5.000	2.71
Area to IN203	0.680	7.000	0.140	5.000	0.67
Area to IN301	0.910	7.000	0.730	5.000	4.69
Area to IN302	0.850	7.000	0.372	5.000	2.23
Area to IN303	0.908	7.000	0.093	5.000	0.60
Area to IN304	0.914	7.000	0.393	5.000	2.53

FlexTable: Conduit Table

Label	Diameter (in)	Invert (Start) (ft)	Invert (Stop) (ft)	Length (User Defined) (ft)	Slope (Calculated) (ft/ft)	Flow (cfs)	Capacity (Full Flow) (cfs)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
CO-EXIN203	18.0	54.30	53.74	84.00	0.007	0.55	7.43	2.46	54.62	54.61
CO-EXIN202	18.0	55.84	53.69	79.00	0.027	6.49	15.02	8.19	56.83	54.38
CO-EXIN204	18.0	56.04	55.94	7.00	0.014	6.46	10.88	6.42	57.02	56.82
CO-EXIN201	18.0	47.00	46.00	15.00	0.067	8.57	27.12	13.61	48.13	46.72
CO-51	18.0	56.20	56.12	20.00	0.004	0.53	5.76	2.03	57.02	57.02
CO-52	18.0	53.59	53.32	18.00	0.015	6.98	11.15	6.66	54.61	54.20
CO-IN301	18.0	58.00	57.80	17.60	0.011	2.53	11.20	5.12	58.60	58.30
CO-MH301	18.0	57.50	56.90	107.22	0.006	2.52	7.86	3.96	58.10	57.76
CO-MH302	18.0	56.70	56.28	92.27	0.005	6.01	7.09	4.50	57.76	57.23
CO-IN302	18.0	57.30	57.14	14.31	0.011	1.44	11.11	4.34	57.75	57.76
CO-IN303	18.0	56.83	56.74	18.41	0.005	2.14	7.34	3.60	57.76	57.76
CO-IN304	18.0	57.31	57.24	15.00	0.005	1.65	7.18	3.30	57.80	57.77
CO-MH303	18.0	57.14	56.94	39.50	0.005	1.65	7.47	3.40	57.77	57.76

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Hydraulic Grade Line (Out) (ft)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
EX-MH201	59.29	54.61	54.61	55.65	55.07
MH-302	60.84	57.76	57.76	57.80	58.08
MH-301	61.51	58.10	58.10	58.48	58.33
MH-303	60.86	57.77	57.77	57.91	57.85

FlexTable: Outfall Table

Label	Elevation (Invert) (ft)	Hydraulic Grade (ft)	Flow (Total Out) (cfs)
EX-EW201	46.00	46.72	8.57

StormCAD Analysis

Proposed Conditions: 100-yr

FlexTable: Catch Basin Table

Label	Inlet	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Capture Efficiency (Calculated) (%)	Flow (Captured) (cfs)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Spread / Top Width (ft)	Flow (Total Out) (cfs)
EX-IN204	PennDOT Type C Standard Box	59.98	56.04	100.0	0.03	57.12	57.12	1.68	7.75
EX-IN205	PennDOT Type C Standard Box	59.86	56.20	79.6	0.64	57.12	57.12	6.16	0.64
EX-IN202	PennDOT Type M Standard Box	60.69	55.84	99.9	0.05	56.92	56.92	2.24	7.79
EX-IN201	PennDOT Type M Standard Box	59.00	47.00	58.4	2.01	48.23	48.23	10.60	10.29
EX-IN203	PennDOT Type M Standard Box	58.00	54.30	78.9	0.67	54.72	54.72	6.28	0.67
IN302	PennDOT Type C Standard Box	60.72	57.30	61.1	1.73	57.89	57.89	9.72	1.73
IN301	PennDOT Type C Standard Box	61.40	58.00	50.5	3.00	58.66	58.66	13.01	3.00
IN303	PennDOT Type M Standard Box	60.67	56.83	83.5	0.63	57.93	57.93	7.47	2.59
IN304	PennDOT Type M Standard Box	60.56	57.31	61.9	1.99	57.94	57.94	11.55	1.99

FlexTable: Catchment Table

Label	Runoff Coefficient (Rational)	Catchment Intensity (in/h)	Area (User Defined) (acres)	Time of Concentration (min)	Flow (Total Out) (cfs)
Area to IN205	0.846	8.870	0.107	5.000	0.81
Area to IN204	0.950	8.870	0.003	5.000	0.03
Area to IN202	0.300	8.870	0.020	5.000	0.05
Area to IN201	0.894	8.870	0.430	5.000	3.44
Area to IN203	0.680	8.870	0.140	5.000	0.85
Area to IN301	0.910	8.870	0.730	5.000	5.94
Area to IN302	0.850	8.870	0.372	5.000	2.83
Area to IN303	0.908	8.870	0.093	5.000	0.75
Area to IN304	0.914	8.870	0.393	5.000	3.21

FlexTable: Conduit Table

Label	Diameter (in)	Invert (Start) (ft)	Invert (Stop) (ft)	Length (User Defined) (ft)	Slope (Calculated) (ft/ft)	Flow (cfs)	Capacity (Full Flow) (cfs)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
CO-EXIN203	18.0	54.30	53.74	84.00	0.007	0.67	7.43	2.61	54.72	54.71
CO-EXIN202	18.0	55.84	53.69	79.00	0.027	7.79	15.02	8.58	56.92	54.46
CO-EXIN204	18.0	56.04	55.94	7.00	0.014	7.75	10.88	6.68	57.12	56.92
CO-EXIN201	18.0	47.00	46.00	15.00	0.067	10.29	27.12	14.30	48.23	46.80
CO-51	18.0	56.20	56.12	20.00	0.004	0.64	5.76	2.15	57.12	57.12
CO-52	18.0	53.59	53.32	18.00	0.015	8.39	11.15	6.93	54.71	54.31
CO-IN301	18.0	58.00	57.80	17.60	0.011	3.00	11.20	5.37	58.66	58.35
CO-MH301	18.0	57.50	56.90	107.22	0.006	2.99	7.86	4.15	58.16	57.92
CO-MH302	18.0	56.70	56.28	92.27	0.005	7.20	7.09	4.57	57.92	57.32
CO-IN302	18.0	57.30	57.14	14.31	0.011	1.73	11.11	4.57	57.89	57.92
CO-IN303	18.0	56.83	56.74	18.41	0.005	2.59	7.34	3.80	57.93	57.92
CO-IN304	18.0	57.31	57.24	15.00	0.005	1.99	7.18	3.47	57.94	57.94
CO-MH303	18.0	57.14	56.94	39.50	0.005	1.98	7.47	3.57	57.94	57.93

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Hydraulic Grade Line (Out) (ft)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
EX-MH201	59.29	54.71	54.71	55.86	55.26
MH-302	60.84	57.92	57.92	57.97	58.26
MH-301	61.51	58.16	58.16	58.57	58.41
MH-303	60.86	57.94	57.94	58.03	58.00

FlexTable: Outfall Table

Label	Elevation (Invert) (ft)	Hydraulic Grade (ft)	Flow (Total Out) (cfs)
EX-EW201	46.00	46.80	10.29

Stormwater Runoff Volume Calculations

Total Site Change in Runoff Volume for 2-YR Storm Event

PROJECT:	SEPTA Conshohocken Surface Lot
Drainage Area:	3.22 acres
2-Year Rainfall:	3.59 inches
Total Site Area:	4.37 acres
Protected Site Area:	0 acres
Managed Area:	3.22 acres

Existing Conditions:

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	la (0.2*S)	Q Runoff ¹ (in)	Runoff Volume ² (ft ³)
<i>Impervious</i>	<i>B</i>	120,523	2.77					
<i>Impervious</i>	<i>D</i>	1,180	0.03					
<i>Impervious for Utilities (no 20%*)</i>	<i>D</i>	49,979	1.15					
Meadow	B	18,295	0.42	58	7.24	1.448	0.49	745
Meadow	D	394	0.01	78	2.82	0.564	1.57	51
Meadow (20%)	B	24,105	0.55	58	7.24	1.448	0.49	982
Meadow (20%)	D	236	0.01	78	2.82	0.564	1.57	31
Impervious (80%)	B	96,418	2.21	98	0.20	0.041	3.36	26,967
Impervious (80%)	D	944	0.02	98	0.20	0.041	3.36	264
TOTAL:		190,371	4.37					29,040

Developed Conditions

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	la (0.2*S)	Q Runoff ¹ (in)	Runoff Volume ² (ft ³)
<i>Impervious for Utilities (no 20%*)</i>	<i>D</i>	49,979	1.15					
Impervious	B	82,764	1.90	98	0.20	0.041	3.36	23,148
Impervious	D	1,307	0.03	98	0.20	0.041	3.36	365
Open Space	B	56,192	1.29	61	6.39	1.279	0.61	2,874
Open Space	D	436	0.01	80	2.50	0.500	1.71	62
TOTAL:		190,678	4.38					26,449

2-Year Volume Increase (ft³):	-2,591
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2-Year Volume Increase = Developed Conditions Runoff Volume – Existing Conditions Runoff Volume

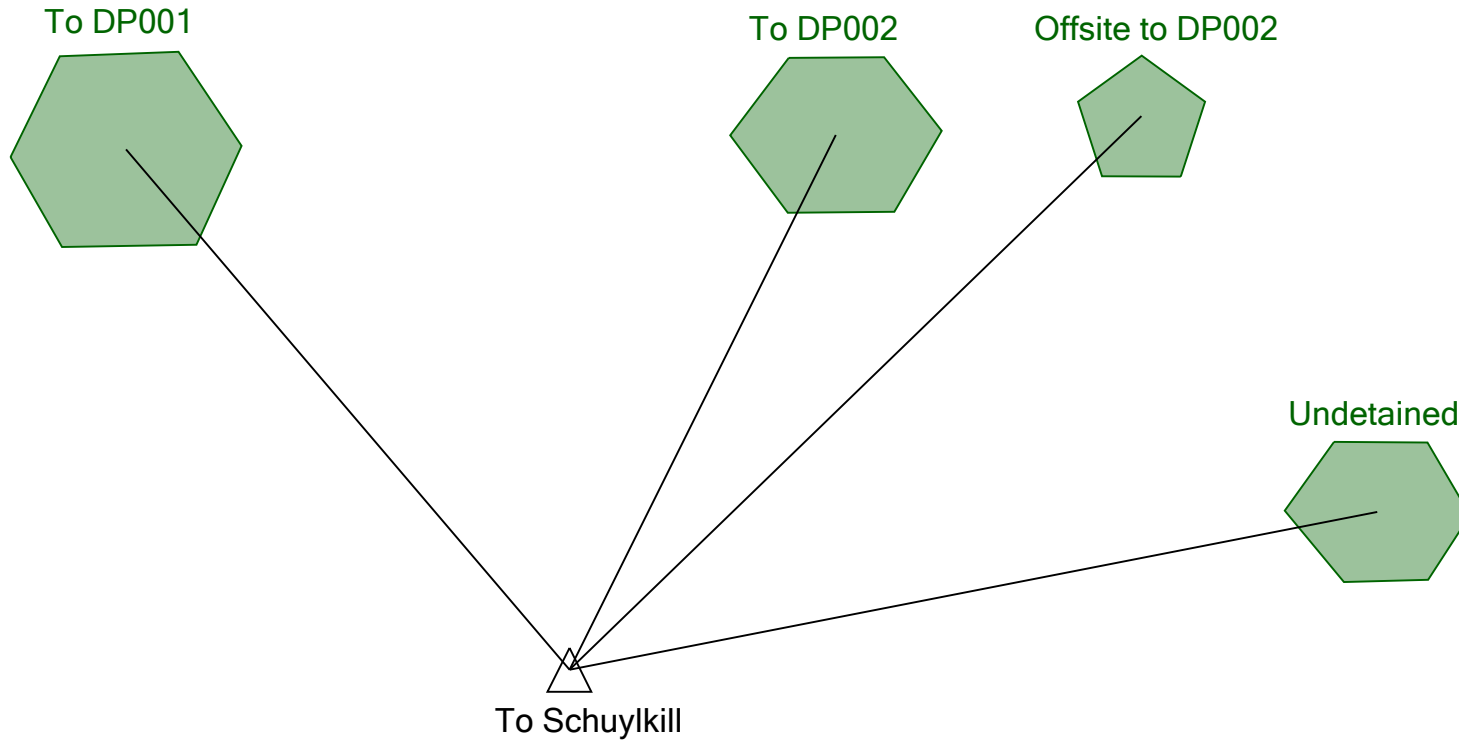
- Runoff (in) = $Q = (P - 0.2S)^2 / (P + 0.8S)$ where
 P = 2-Year Rainfall (in)
 S = (1000/ CN)-10
- Runoff Volume (CF) = Q x Area x 1/12
 Q = Runoff (in)
 Area = Land use area (sq. ft)

**Note: Runoff Volume must be calculated for EACH land use type/condition and HSGI.
 The use of a weighted CN value for volume calculations is not acceptable.**

*Not required to treat this area with the 20% impervious area as meadow rule due to it being restored back to its original conditions per 102.8.g.ii.

PondPack Analysis
Proposed Conditions

Scenario: 2-year



CN Area Collection - To DP001 (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil B	98.000	0.018	0.0	0.0
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil B	61.000	0.043	0.0	0.0

CN Area Collection - To DP002 (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil B	98.000	1.589	0.0	0.0
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil B	61.000	0.255	0.0	0.0

CN Area Collection - Offsite to DP002 (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil B	98.000	0.375	0.0	0.0
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil B	61.000	0.153	0.0	0.0
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	0.039	0.0	0.0
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	0.019	0.0	0.0

CN Area Collection - Undetained (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil B	98.000	0.285	0.0	0.0
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	0.031	0.0	0.0
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil B	61.000	1.000	0.0	0.0
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	0.005	0.0	0.0

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Proposed Schuylkill Pondpack Master Report

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
To DP001	1-year	1	0.003	11.950	0.05
To DP001	2-year	2	0.006	11.950	0.11
To DP001	5-year	5	0.007	11.950	0.13
To DP001	10-year	10	0.010	11.950	0.17
To DP001	25-year	25	0.013	11.950	0.24
To DP001	50-year	50	0.016	11.900	0.30
To DP001	100-year	100	0.020	11.900	0.36
To DP002	1-year	1	0.342	11.900	5.91
To DP002	2-year	2	0.433	11.900	7.40
To DP002	5-year	5	0.568	11.900	9.58
To DP002	10-year	10	0.682	11.900	11.40
To DP002	25-year	25	0.845	11.900	13.97
To DP002	50-year	50	0.984	11.900	16.14
To DP002	100-year	100	1.133	11.900	18.45
Undetained	1-year	1	0.079	11.950	1.34
Undetained	2-year	2	0.117	11.950	2.07
Undetained	5-year	5	0.187	11.950	3.38
Undetained	10-year	10	0.249	11.950	4.52
Undetained	25-year	25	0.344	11.950	6.22
Undetained	50-year	50	0.428	11.900	7.76
Undetained	100-year	100	0.521	11.900	9.47
Offsite to DP002	1-year	1	0.088	11.900	1.60
Offsite to DP002	2-year	2	0.115	11.900	2.08
Offsite to DP002	5-year	5	0.156	11.900	2.80
Offsite to DP002	10-year	10	0.191	11.900	3.41
Offsite to DP002	25-year	25	0.242	11.900	4.27
Offsite to DP002	50-year	50	0.285	11.900	5.00
Offsite to DP002	100-year	100	0.332	11.900	5.77

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
To Schuylkill	1-year	1	0.512	11.950	8.83
To Schuylkill	2-year	2	0.671	11.950	11.52
To Schuylkill	5-year	5	0.918	11.900	15.76
To Schuylkill	10-year	10	1.132	11.900	19.40
To Schuylkill	25-year	25	1.444	11.900	24.67
To Schuylkill	50-year	50	1.714	11.900	29.20
To Schuylkill	100-year	100	2.006	11.900	34.05

Proposed Schuylkill Pondpack Master Report

Subsection: Time of Concentration Calculations
 Label: To DP002
 Scenario: 2-year

Return Event: 2 years
 Storm Event: 2-year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.007 ft/ft
2 Year 24 Hour Depth	3.590 in
Average Velocity	0.96 ft/s
Segment Time of Concentration	0.029 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	381.00 ft
Is Paved?	True
Slope	0.007 ft/ft
Average Velocity	1.71 ft/s
Segment Time of Concentration	0.062 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.77 ft ²
Hydraulic Length	126.72 ft
Manning's n	0.012
Slope	0.081 ft/ft
Wetted Perimeter	4.71 ft
Average Velocity	18.38 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.093 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Time of Concentration Calculations

Label: To DP002

Scenario: 2-year

Return Event: 2 years

Storm Event: 2-year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where: $(L_f / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where: $(L_f / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

$$T_c = \frac{(0.007 * ((n * L_f)^{0.8}))}{((P^{0.5}) * (S_f^{0.4}))}$$

Where: Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Equations

Unit Hydrograph Method (Computational Notes)

Definition of Terms

At	Total area (acres): $At = Ai + Ap$
Ai	Impervious area (acres)
Ap	Pervious area (acres)
CNi	Runoff curve number for impervious area
CNp	Runoff curve number for pervious area
fLoss	f loss constant infiltration (depth/time)
gKs	Saturated Hydraulic Conductivity (depth/time)
Md	Volumetric Moisture Deficit
Psi	Capillary Suction (length)
hK	Horton Infiltration Decay Rate (time^{-1})
fo	Initial Infiltration Rate (depth/time)
fc	Ultimate(capacity)Infiltration Rate (depth/time)
Ia	Initial Abstraction (length)
dt	Computational increment (duration of unit excess rainfall) Default dt is smallest value of $0.1333Tc$, r_{tm} , and t_h (Smallest dt is then adjusted to match up with T_p)
UDdt	User specified override computational main time increment (only used if UDdt is $\Rightarrow .1333Tc$)
D(t)	Point on distribution curve (fraction of P) for time step t
K	$2 / (1 + (T_r/T_p))$: default $K = 0.75$: (for $T_r/T_p = 1.67$)
Ks	Hydrograph shape factor = Unit Conversions * $K = ((1\text{hr}/3600\text{sec}) * (1\text{ft}/12\text{in}) * ((5280\text{ft})^2/\text{sq.mi})) * K$ Default $K_s = 645.333 * 0.75 = 484$
Lag	Lag time from center of excess runoff (dt) to T_p : $\text{Lag} = 0.6T_c$
P	Total precipitation depth, inches
Pa(t)	Accumulated rainfall at time step t
Pi(t)	Incremental rainfall at time step t
qp	Peak discharge (cfs) for 1in. runoff, for 1hr, for 1 sq.mi. = $(K_s * A * Q) / T_p$ (where $Q = 1\text{in. runoff}$, $A = \text{sq.mi.}$)
Qu(t)	Unit hydrograph ordinate (cfs) at time step t
Q(t)	Final hydrograph ordinate (cfs) at time step t
Rai(t)	Accumulated runoff (inches) at time step t for impervious area
Rap(t)	Accumulated runoff (inches) at time step t for pervious area
Rii(t)	Incremental runoff (inches) at time step t for impervious area
Rip(t)	Incremental runoff (inches) at time step t for pervious area
R(t)	Incremental weighted total runoff (inches)
Rtm	Time increment for rainfall table
Si	S for impervious area: $S_i = (1000/CNi) - 10$
Sp	S for pervious area: $S_p = (1000/CNp) - 10$
t	Time step (row) number
Tc	Time of concentration
Tb	Time (hrs) of entire unit hydrograph: $T_b = T_p + T_r$
Tp	Time (hrs) to peak of a unit hydrograph: $T_p = (dt/2) + \text{Lag}$
Tr	Time (hrs) of receding limb of unit hydrograph: $T_r = \text{ratio of } T_p$

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Equations

Unit Hydrograph Method

Computational Notes

Precipitation

Column (1) Time for time step t
Column (2) $D(t)$ = Point on distribution curve for time step t
Column (3) $P_i(t) = P_a(t) - P_a(t-1)$: Col.(4) - Preceding Col.(4)
Column (4) $P_a(t) = D(t) \times P$: Col.(2) x P

Pervious Area Runoff (using SCS Runoff CN Method)

Column (5) $R_{ap}(t)$ = Accumulated pervious runoff for time step t
If $(P_a(t))$ is $\leq 0.2S_p$ then use: $R_{ap}(t) = 0.0$
If $(P_a(t))$ is $> 0.2S_p$ then use:
 $R_{ap}(t) = (Col.(4) - 0.2S_p) \times 2 / (Col.(4) + 0.8S_p)$
Column (6) $R_{ip}(t)$ = Incremental pervious runoff for time step t
 $R_{ip}(t) = R_{ap}(t) - R_{ap}(t-1)$
 $R_{ip}(t) = Col.(5)$ for current row - $Col.(5)$ for preceding row.

Impervious Area Runoff

Column (7 & 8)... Did not specify to use impervious areas.

Incremental Weighted Runoff

Column (9) $R(t) = (A_p/A_t) \times R_{ip}(t) + (A_i/A_t) \times R_{ii}(t)$
 $R(t) = (A_p/A_t) \times Col.(6) + (A_i/A_t) \times Col.(8)$

SCS Unit Hydrograph Method

Column (10) $Q(t)$ is computed with the SCS unit hydrograph method using $R(t)$ and $Q_u(t)$.

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Offsite to DP002
 Scenario: 1-year

Return Event: 1 years
 Storm Event: 1-year

Storm Event	1-year
Return Event	1 years
Duration	96.000 hours
Depth	2.977 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.586 acres
<hr/>	
Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	1.66 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	1.60 ft ³ /s
<hr/>	
Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	0.586 acres
Maximum Retention (Pervious)	1.364 in
Maximum Retention (Pervious, 20 percent)	0.273 in
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.798 in
Runoff Volume (Pervious)	0.088 ac-ft
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.088 ac-ft
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Offsite to DP002

Scenario: 1-year

Return Event: 1 years

Storm Event: 1-year

SCS Unit Hydrograph Parameters

Unit peak, qp	7.97 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Offsite to DP002
 Scenario: 2-year

Return Event: 2 years
 Storm Event: 2-year

Storm Event	2-year
Return Event	2 years
Duration	96.000 hours
Depth	3.586 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.586 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	2.15 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	2.08 ft ³ /s

Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	0.586 acres
Maximum Retention (Pervious)	1.364 in
Maximum Retention (Pervious, 20 percent)	0.273 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.347 in
Runoff Volume (Pervious)	0.115 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.115 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Offsite to DP002

Scenario: 2-year

Return Event: 2 years

Storm Event: 2-year

SCS Unit Hydrograph Parameters

Unit peak, qp	7.97 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Return Event: 5 years

Label: Offsite to DP002

Storm Event: 5-year

Scenario: 5-year

Storm Event	5-year
Return Event	5 years
Duration	96.000 hours
Depth	4.495 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.586 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	2.89 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	2.80 ft ³ /s

Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	0.586 acres
Maximum Retention (Pervious)	1.364 in
Maximum Retention (Pervious, 20 percent)	0.273 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.192 in
Runoff Volume (Pervious)	0.156 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.156 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Offsite to DP002

Scenario: 5-year

Return Event: 5 years

Storm Event: 5-year

SCS Unit Hydrograph Parameters

Unit peak, qp	7.97 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Offsite to DP002
 Scenario: 10-year

Return Event: 10 years
 Storm Event: 10-year

Storm Event	10-year
Return Event	10 years
Duration	96.000 hours
Depth	5.254 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.586 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	3.50 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	3.41 ft ³ /s

Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	0.586 acres
Maximum Retention (Pervious)	1.364 in
Maximum Retention (Pervious, 20 percent)	0.273 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.911 in
Runoff Volume (Pervious)	0.191 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.191 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Offsite to DP002

Scenario: 10-year

Return Event: 10 years

Storm Event: 10-year

SCS Unit Hydrograph Parameters

Unit peak, qp	7.97 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Offsite to DP002
 Scenario: 25-year

Return Event: 25 years
 Storm Event: 25-year

Storm Event	25-year
Return Event	25 years
Duration	96.000 hours
Depth	6.333 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.586 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	4.37 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	4.27 ft ³ /s

Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	0.586 acres
Maximum Retention (Pervious)	1.364 in
Maximum Retention (Pervious, 20 percent)	0.273 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.947 in
Runoff Volume (Pervious)	0.242 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.242 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Offsite to DP002

Scenario: 25-year

Return Event: 25 years

Storm Event: 25-year

SCS Unit Hydrograph Parameters

Unit peak, qp	7.97 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Offsite to DP002
 Scenario: 50-year

Return Event: 50 years
 Storm Event: 50-year

Storm Event	50-year
Return Event	50 years
Duration	96.000 hours
Depth	7.252 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.586 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	5.11 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	5.00 ft ³ /s

Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	0.586 acres
Maximum Retention (Pervious)	1.364 in
Maximum Retention (Pervious, 20 percent)	0.273 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.839 in
Runoff Volume (Pervious)	0.285 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.285 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Offsite to DP002

Scenario: 50-year

Return Event: 50 years

Storm Event: 50-year

SCS Unit Hydrograph Parameters

Unit peak, qp	7.97 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Offsite to DP002
 Scenario: 100-year

Return Event: 100 years
 Storm Event: 100-year

Storm Event	100-year
Return Event	100 years
Duration	96.000 hours
Depth	8.231 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.586 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	5.89 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	5.77 ft ³ /s

Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	0.586 acres
Maximum Retention (Pervious)	1.364 in
Maximum Retention (Pervious, 20 percent)	0.273 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.794 in
Runoff Volume (Pervious)	0.332 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.332 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Offsite to DP002

Scenario: 100-year

Return Event: 100 years

Storm Event: 100-year

SCS Unit Hydrograph Parameters

Unit peak, qp	7.97 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP001
 Scenario: 1-year

Return Event: 1 years
 Storm Event: 1-year

Storm Event	1-year
Return Event	1 years
Duration	96.000 hours
Depth	2.977 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.061 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.933 hours
Flow (Peak, Computed)	0.05 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	0.05 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	0.061 acres
Maximum Retention (Pervious)	3.889 in
Maximum Retention (Pervious, 20 percent)	0.778 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.747 in
Runoff Volume (Pervious)	0.003 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.003 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP001

Scenario: 1-year

Return Event: 1 years

Storm Event: 1-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.68 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP001
 Scenario: 2-year

Return Event: 2 years
 Storm Event: 2-year

Storm Event	2-year
Return Event	2 years
Duration	96.000 hours
Depth	3.586 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.061 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.933 hours
Flow (Peak, Computed)	0.11 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	0.11 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	0.061 acres
Maximum Retention (Pervious)	3.889 in
Maximum Retention (Pervious, 20 percent)	0.778 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.178 in
Runoff Volume (Pervious)	0.006 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.006 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP001

Scenario: 2-year

Return Event: 2 years

Storm Event: 2-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.83 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP001
 Scenario: 5-year

Return Event: 5 years
 Storm Event: 5-year

Storm Event	5-year
Return Event	5 years
Duration	96.000 hours
Depth	4.495 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.061 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.933 hours
Flow (Peak, Computed)	0.14 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	0.13 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	0.061 acres
Maximum Retention (Pervious)	3.889 in
Maximum Retention (Pervious, 20 percent)	0.778 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.743 in
Runoff Volume (Pervious)	0.007 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.007 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP001

Scenario: 5-year

Return Event: 5 years

Storm Event: 5-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.68 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP001
 Scenario: 10-year

Return Event: 10 years
 Storm Event: 10-year

Storm Event	10-year
Return Event	10 years
Duration	96.000 hours
Depth	5.254 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.061 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	0.18 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	0.17 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	0.061 acres
Maximum Retention (Pervious)	3.889 in
Maximum Retention (Pervious, 20 percent)	0.778 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.311 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP001

Scenario: 10-year

Return Event: 10 years

Storm Event: 10-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.68 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP001
 Scenario: 25-year

Return Event: 25 years
 Storm Event: 25-year

Storm Event	25-year
Return Event	25 years
Duration	96.000 hours
Depth	6.333 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.061 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	0.25 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	0.24 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	0.061 acres
Maximum Retention (Pervious)	3.889 in
Maximum Retention (Pervious, 20 percent)	0.778 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.169 in
Runoff Volume (Pervious)	0.013 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.013 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP001

Scenario: 25-year

Return Event: 25 years

Storm Event: 25-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.68 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP001
 Scenario: 50-year

Return Event: 50 years
 Storm Event: 50-year

Storm Event	50-year
Return Event	50 years
Duration	96.000 hours
Depth	7.252 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.061 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	0.31 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	0.30 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	0.061 acres
Maximum Retention (Pervious)	3.889 in
Maximum Retention (Pervious, 20 percent)	0.778 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.937 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.016 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP001

Scenario: 50-year

Return Event: 50 years

Storm Event: 50-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.68 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP001
 Scenario: 100-year

Return Event: 100 years
 Storm Event: 100-year

Storm Event	100-year
Return Event	100 years
Duration	96.000 hours
Depth	8.231 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	0.061 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	0.38 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	0.36 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	0.061 acres
Maximum Retention (Pervious)	3.889 in
Maximum Retention (Pervious, 20 percent)	0.778 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.780 in
Runoff Volume (Pervious)	0.020 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.020 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP001

Scenario: 100-year

Return Event: 100 years

Storm Event: 100-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.68 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP002
 Scenario: 1-year

Return Event: 1 years
 Storm Event: 1-year

Storm Event	1-year
Return Event	1 years
Duration	96.000 hours
Depth	2.977 in
Time of Concentration (Composite)	0.093 hours
Area (User Defined)	1.844 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	11.928 hours
Flow (Peak, Computed)	6.15 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	5.91 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	1.844 acres
Maximum Retention (Pervious)	0.753 in
Maximum Retention (Pervious, 20 percent)	0.151 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.232 in
Runoff Volume (Pervious)	0.342 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.342 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.093 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP002

Scenario: 1-year

Return Event: 1 years

Storm Event: 1-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	22.65 ft ³ /s
Unit peak time, T_p	0.061 hours
Unit receding limb, T_r	0.245 hours
Total unit time, T_b	0.307 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP002
 Scenario: 2-year

Return Event: 2 years
 Storm Event: 2-year

Storm Event	2-year
Return Event	2 years
Duration	96.000 hours
Depth	3.586 in
Time of Concentration (Composite)	0.093 hours
Area (User Defined)	1.844 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	11.927 hours
Flow (Peak, Computed)	7.68 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	7.40 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	1.844 acres
Maximum Retention (Pervious)	0.753 in
Maximum Retention (Pervious, 20 percent)	0.151 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.818 in
Runoff Volume (Pervious)	0.433 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.433 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.093 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP002

Scenario: 2-year

Return Event: 2 years

Storm Event: 2-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	22.56 ft ³ /s
Unit peak time, T_p	0.062 hours
Unit receding limb, T_r	0.247 hours
Total unit time, T_b	0.309 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP002
 Scenario: 5-year

Return Event: 5 years
 Storm Event: 5-year

Storm Event	5-year
Return Event	5 years
Duration	96.000 hours
Depth	4.495 in
Time of Concentration (Composite)	0.093 hours
Area (User Defined)	1.844 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	11.928 hours
Flow (Peak, Computed)	9.91 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	9.58 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	1.844 acres
Maximum Retention (Pervious)	0.753 in
Maximum Retention (Pervious, 20 percent)	0.151 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.703 in
Runoff Volume (Pervious)	0.568 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.568 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.093 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP002

Scenario: 5-year

Return Event: 5 years

Storm Event: 5-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	22.65 ft ³ /s
Unit peak time, T_p	0.061 hours
Unit receding limb, T_r	0.245 hours
Total unit time, T_b	0.307 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP002
 Scenario: 10-year

Return Event: 10 years
 Storm Event: 10-year

Storm Event	10-year
Return Event	10 years
Duration	96.000 hours
Depth	5.254 in
Time of Concentration (Composite)	0.093 hours
Area (User Defined)	1.844 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	11.928 hours
Flow (Peak, Computed)	11.77 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	11.40 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	1.844 acres
Maximum Retention (Pervious)	0.753 in
Maximum Retention (Pervious, 20 percent)	0.151 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.448 in
Runoff Volume (Pervious)	0.682 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.682 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.093 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP002

Scenario: 10-year

Return Event: 10 years

Storm Event: 10-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	22.65 ft ³ /s
Unit peak time, T_p	0.061 hours
Unit receding limb, T_r	0.245 hours
Total unit time, T_b	0.307 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP002
 Scenario: 25-year

Return Event: 25 years
 Storm Event: 25-year

Storm Event	25-year
Return Event	25 years
Duration	96.000 hours
Depth	6.333 in
Time of Concentration (Composite)	0.093 hours
Area (User Defined)	1.844 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	11.928 hours
Flow (Peak, Computed)	14.40 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	13.97 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	1.844 acres
Maximum Retention (Pervious)	0.753 in
Maximum Retention (Pervious, 20 percent)	0.151 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.511 in
Runoff Volume (Pervious)	0.845 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.845 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.093 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP002

Scenario: 25-year

Return Event: 25 years

Storm Event: 25-year

SCS Unit Hydrograph Parameters

Unit peak, qp	22.65 ft ³ /s
Unit peak time, Tp	0.061 hours
Unit receding limb, Tr	0.245 hours
Total unit time, Tb	0.307 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP002
 Scenario: 50-year

Return Event: 50 years
 Storm Event: 50-year

Storm Event	50-year
Return Event	50 years
Duration	96.000 hours
Depth	7.252 in
Time of Concentration (Composite)	0.093 hours
Area (User Defined)	1.844 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	11.928 hours
Flow (Peak, Computed)	16.63 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	16.14 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	1.844 acres
Maximum Retention (Pervious)	0.753 in
Maximum Retention (Pervious, 20 percent)	0.151 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.421 in
Runoff Volume (Pervious)	0.985 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.984 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.093 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP002

Scenario: 50-year

Return Event: 50 years

Storm Event: 50-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	22.65 ft ³ /s
Unit peak time, T_p	0.061 hours
Unit receding limb, T_r	0.245 hours
Total unit time, T_b	0.307 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: To DP002
 Scenario: 100-year

Return Event: 100 years
 Storm Event: 100-year

Storm Event	100-year
Return Event	100 years
Duration	96.000 hours
Depth	8.231 in
Time of Concentration (Composite)	0.093 hours
Area (User Defined)	1.844 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	11.928 hours
Flow (Peak, Computed)	18.99 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	18.45 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	1.844 acres
Maximum Retention (Pervious)	0.753 in
Maximum Retention (Pervious, 20 percent)	0.151 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.392 in
Runoff Volume (Pervious)	1.133 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.133 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.093 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: To DP002

Scenario: 100-year

Return Event: 100 years

Storm Event: 100-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	22.65 ft ³ /s
Unit peak time, T_p	0.061 hours
Unit receding limb, T_r	0.245 hours
Total unit time, T_b	0.307 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Undetained
 Scenario: 1-year

Return Event: 1 years
 Storm Event: 1-year

Storm Event	1-year
Return Event	1 years
Duration	96.000 hours
Depth	2.977 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	1.321 acres
<hr/>	
Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.933 hours
Flow (Peak, Computed)	1.35 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	1.34 ft ³ /s
<hr/>	
Drainage Area	
SCS CN (Composite)	70.063
Area (User Defined)	1.321 acres
Maximum Retention (Pervious)	4.273 in
Maximum Retention (Pervious, 20 percent)	0.855 in
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.710 in
Runoff Volume (Pervious)	0.079 ac-ft
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.079 ac-ft
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Undetained

Scenario: 1-year

Return Event: 1 years

Storm Event: 1-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	18.15 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Undetained
 Scenario: 2-year

Return Event: 2 years
 Storm Event: 2-year

Storm Event	2-year
Return Event	2 years
Duration	96.000 hours
Depth	3.586 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	1.321 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.933 hours
Flow (Peak, Computed)	2.11 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	2.07 ft ³ /s

Drainage Area	
SCS CN (Composite)	70.063
Area (User Defined)	1.321 acres
Maximum Retention (Pervious)	4.273 in
Maximum Retention (Pervious, 20 percent)	0.855 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.065 in
Runoff Volume (Pervious)	0.117 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.117 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Undetained

Scenario: 2-year

Return Event: 2 years

Storm Event: 2-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	17.96 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Undetained
 Scenario: 5-year

Return Event: 5 years
 Storm Event: 5-year

Storm Event	5-year
Return Event	5 years
Duration	96.000 hours
Depth	4.495 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	1.321 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.933 hours
Flow (Peak, Computed)	3.48 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	3.38 ft ³ /s

Drainage Area	
SCS CN (Composite)	70.063
Area (User Defined)	1.321 acres
Maximum Retention (Pervious)	4.273 in
Maximum Retention (Pervious, 20 percent)	0.855 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.684 in
Runoff Volume (Pervious)	0.187 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.187 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Undetained

Scenario: 5-year

Return Event: 5 years

Storm Event: 5-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	18.15 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Undetained
 Scenario: 10-year

Return Event: 10 years
 Storm Event: 10-year

Storm Event	10-year
Return Event	10 years
Duration	96.000 hours
Depth	5.254 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	1.321 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	4.70 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	4.52 ft ³ /s

Drainage Area	
SCS CN (Composite)	70.063
Area (User Defined)	1.321 acres
Maximum Retention (Pervious)	4.273 in
Maximum Retention (Pervious, 20 percent)	0.855 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.243 in
Runoff Volume (Pervious)	0.249 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.249 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Undetained

Scenario: 10-year

Return Event: 10 years

Storm Event: 10-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	18.15 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Undetained
 Scenario: 25-year

Return Event: 25 years
 Storm Event: 25-year

Storm Event	25-year
Return Event	25 years
Duration	96.000 hours
Depth	6.333 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	1.321 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	6.52 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.950 hours
Flow (Peak Interpolated Output)	6.22 ft ³ /s

Drainage Area	
SCS CN (Composite)	70.063
Area (User Defined)	1.321 acres
Maximum Retention (Pervious)	4.273 in
Maximum Retention (Pervious, 20 percent)	0.855 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.090 in
Runoff Volume (Pervious)	0.344 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.344 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Undetained

Scenario: 25-year

Return Event: 25 years

Storm Event: 25-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	18.15 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Undetained
 Scenario: 50-year

Return Event: 50 years
 Storm Event: 50-year

Storm Event	50-year
Return Event	50 years
Duration	96.000 hours
Depth	7.252 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	1.321 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	8.13 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	7.76 ft ³ /s

Drainage Area	
SCS CN (Composite)	70.063
Area (User Defined)	1.321 acres
Maximum Retention (Pervious)	4.273 in
Maximum Retention (Pervious, 20 percent)	0.855 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.849 in
Runoff Volume (Pervious)	0.428 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.428 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Undetained

Scenario: 50-year

Return Event: 50 years

Storm Event: 50-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	18.15 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary
 Label: Undetained
 Scenario: 100-year

Return Event: 100 years
 Storm Event: 100-year

Storm Event	100-year
Return Event	100 years
Duration	96.000 hours
Depth	8.231 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	1.321 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	11.922 hours
Flow (Peak, Computed)	9.88 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	11.900 hours
Flow (Peak Interpolated Output)	9.47 ft ³ /s

Drainage Area	
SCS CN (Composite)	70.063
Area (User Defined)	1.321 acres
Maximum Retention (Pervious)	4.273 in
Maximum Retention (Pervious, 20 percent)	0.855 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.686 in
Runoff Volume (Pervious)	0.521 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.521 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Proposed Schuylkill Pondpack Master Report

Subsection: Unit Hydrograph Summary

Label: Undetained

Scenario: 100-year

Return Event: 100 years

Storm Event: 100-year

SCS Unit Hydrograph Parameters

Unit peak, q_p	18.15 ft ³ /s
Unit peak time, T_p	0.056 hours
Unit receding limb, T_r	0.222 hours
Total unit time, T_b	0.278 hours

Proposed Schuylkill Pondpack Master Report

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Proposed Schuylkill Pondpack Master Report

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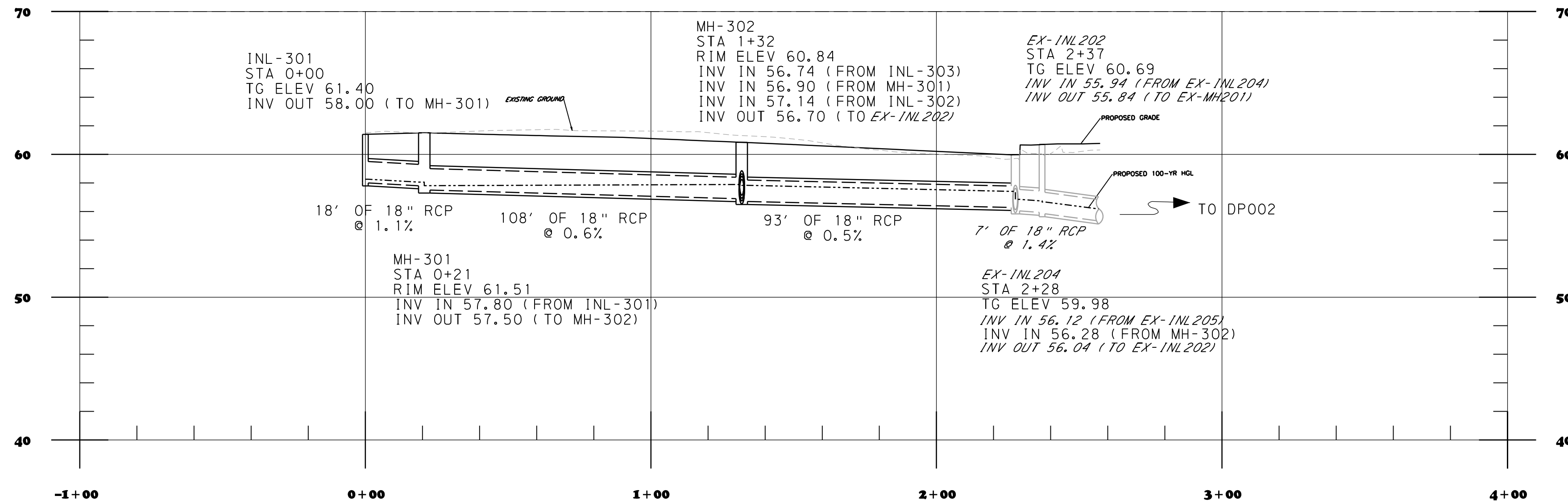
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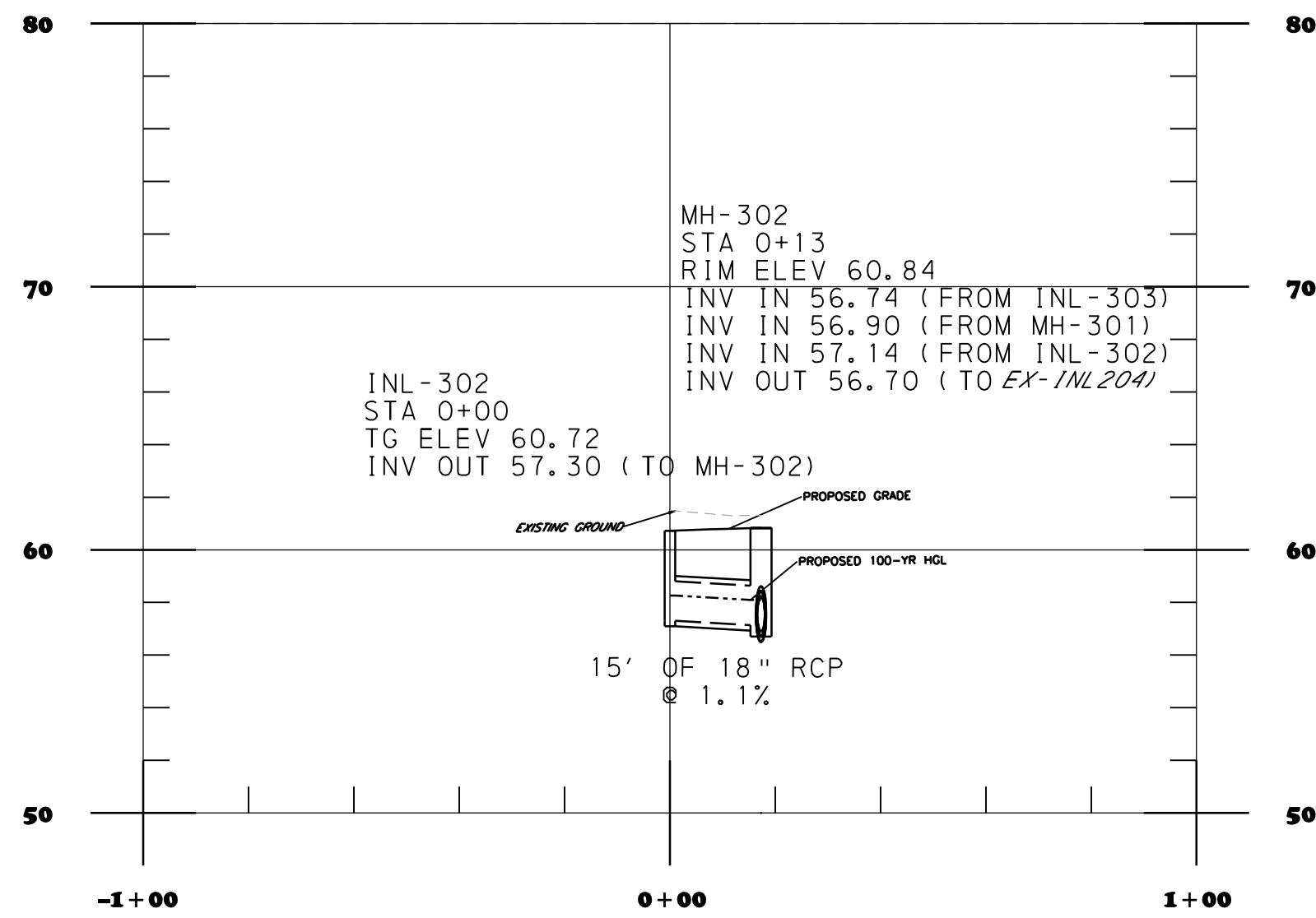
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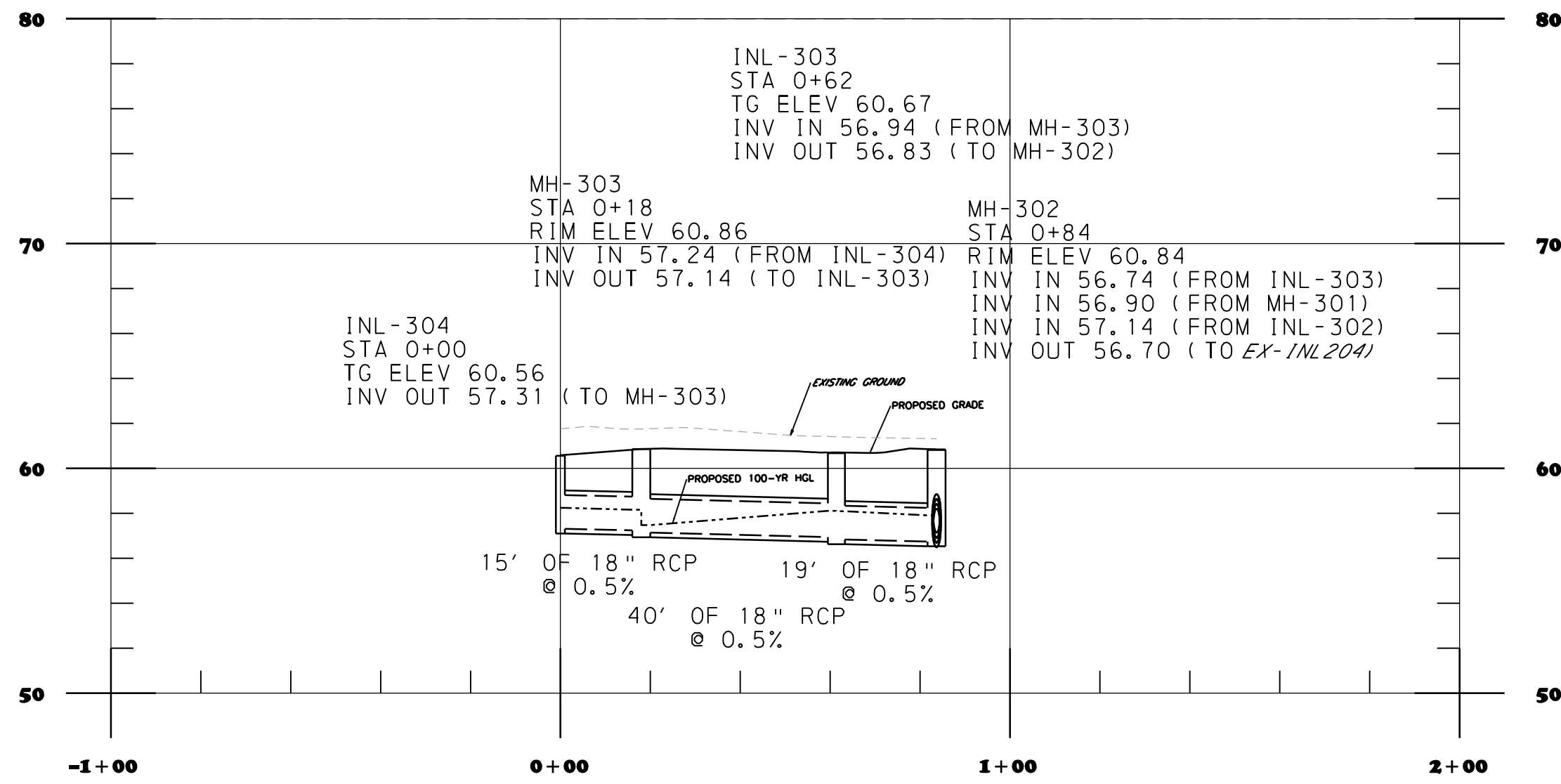
Pipe Profile Plans
Proposed Conditions



1
C716 PIPE PROFILE: INL-301 TO EX-INL202
SCALE: 1" = 1' HORIZONTAL
1" = 5' VERTICAL



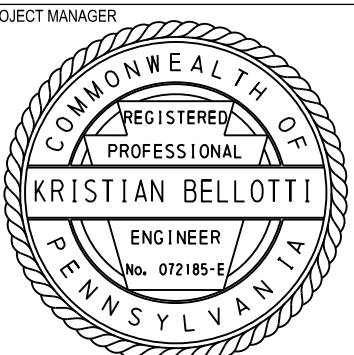
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C716 PIPE PROFILE: INL-302 TO MH-301
SCALE: 1" = 1' HORIZONTAL
1" = 5' VERTICAL



3
C716 PIPE PROFILE: INL-304 TO MH-301
SCALE: 1" = 1' HORIZONTAL
1" = 5' VERTICAL

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DRAINAGE PROFILES

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 9/19/2024	DRAWN BY: CAL
	CHECKED BY: CMA
WORK ORDER NO.: GEC21D-24	
DRAWING NUMBER: C716	
DWG. NO.: C070 OF C070	
SHT. NO.: 074 OF 079	
COMPUTER FILE NO.: 21D-24-C716	REV. NO.: 0

100% SUBMISSION

Peak Rate Analysis

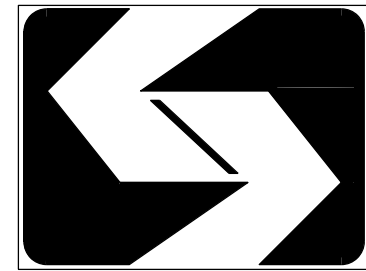


PROJECT NAME: SEPTA Conshohocken Railroad Station Surface Parking Lot
LOCATION: Conshohocken Borough
PREPARED BY: CAL **DATE:** 10/29/2024
CHECKED BY: CMA **DATE:** 10/29/2024

Peak Rate Calculations

Schuylkill River Watershed

Peak Discharge Rates (cfs)			
Storm Event	Existing	Proposed	Net Change
2-year	17.07	11.52	-5.55
10-year	26.29	19.40	-6.89
50-year	37.25	29.20	-8.05
100-year	42.63	34.05	-8.58



Southeastern Pennsylvania
Transportation Authority

ENGINEERING, MAINTENANCE, AND CONSTRUCTION DIVISION
BRIDGES AND BUILDINGS DEPARTMENT

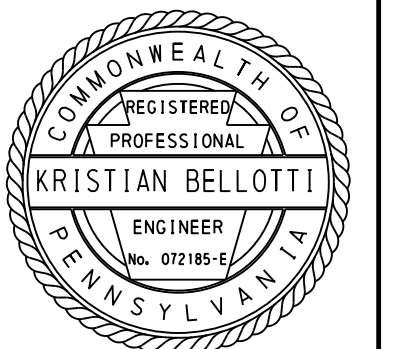
CONSHOHOCKEN RAILROAD STATION

MANAYUNK/NORRISTOWN LINE

SURFACE PARKING LOT

SOUTHEASTERN
PENNSYLVANIA
TRANSPORTATION
AUTHORITY
EM&C DIVISION
1234 MARKET ST, 12TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
CHIEF RTO OFFICER
CHIEF ENGINEER - B&B
SR PROGRAM MANAGER - B&B
PROJECT MANAGER



SEPTA PROJECT NO.: GEC 21D-24

FTA NO.: N/A

PENNDOT PROJECT NO.: N/A

LIST OF DRAWINGS

SEE SHEET NO. G002 FOR LIST OF DRAWINGS

LIST OF DRAWINGS / ACT NO. NOTIFICATION LIST

ACT NO. NOTIFICATION LIST

CALL BEFORE YOU DIG !!
PENNSYLVANIA LAW REQUIRES
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SERIAL NO.'S
20202062212

CONTACT PHONE LIST

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LOCATION



REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
GENERAL
COVER SHEET

SCALE: AS NOTED SCALE FACTOR: 1:1
DATE: 11/1/2024 DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24 CHECKED BY: HB
DRAWING NUMBER: G001
DWG. NO.: G001 OF G004
SHEET NO.: 1 OF 081
COMPUTER FILE NO.: 21D-24-G001 REV. NO.:

LAND DEVELOPMENT SUBMISSION

LIST OF DRAWINGS

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001	G001	COVER SHEET
002	G002	LIST OF DRAWINGS
003	G003	ABBREVIATIONS & LEGEND
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006	C002	GENERAL NOTES
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008	C101	EXISTING CONDITIONS PLAN
009	C102	EXISTING CONDITIONS PLAN
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011	C104	DEMOLITION PLAN
012	C105	DEMOLITION PLAN
013	C106	SITE LAYOUT PLAN
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024	C117	PAVEMENT MARKING PLAN
025	C118	TRAFFIC SIGNAL PLAN
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029	C122	ADA RAMP DETAILS
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032	C501	SIGNING AND PAVEMENT MARKING DETAILS
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037	C506	SITE DETAILS
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041	C602	EROSION AND SEDIMENT CONTROL NOTES
042	C603	EROSION AND SEDIMENT CONTROL BMP MAINTENANCE NOTES
043	C604	CONSTRUCTION SEQUENCE
044	C605	SITE SOILS INFORMATION
045	C606	EROSION AND SEDIMENT CONTROL DETAILS
046	C607	EROSION AND SEDIMENT CONTROL DETAILS
047	C608	EROSION AND SEDIMENT CONTROL DETAILS
048	C609	EROSION AND SEDIMENT CONTROL DETAILS
049	C610	EROSION AND SEDIMENT CONTROL DETAILS
050	C611	EROSION AND SEDIMENT CONTROL DETAILS
051	C612	EROSION AND SEDIMENT CONTROL DETAILS
052	C613	HAZARDOUS WASTE DETAILS
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054	C615	HAZARDOUS WASTE TESTING LOCATIONS
055	C616	EROSION AND SEDIMENT CONTROL PLAN
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065	C707	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
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068	C710	HAZARDOUS WASTE NOTES
069	C711	HAZARDOUS WASTE TESTING LOCATIONS
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SHEET NO.	DRAWING NO.	TRAFFIC SIGNAL PERMIT PLANS
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081	TS02	OAK & ELM ST TRAFFIC SIGNAL PLAN

MANAGER - ARCH / ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
LIST OF DRAWINGS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
WORK ORDER NO.:	GEC21D-24		
DRAWING NUMBER:	G002		
DWG. NO.:	G002	OF:	G004
SHT. NO.:	2	OF:	081
COMPUTER FILE NO.:	21D-24-G002	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

ABBREVIATIONS

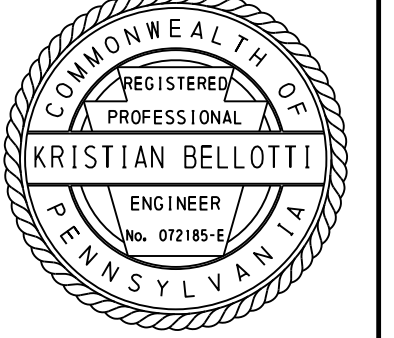
ADDL	ADDITIONAL
ADJ	ADJACENT
ACGR	AGGREGATE
ASPH	ASPHALT
AVE	AVENUE
AVG	AVERAGE
BETW	BETWEEN
BLDG	BUILDING
BM	BENCHMARK
BRG	BEARING
CI	CAST IRON
CIP	CAST-IRON PIPE
CL	CENTERLINE
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CTR	CENTER
D	DEPTH
DBL	DOUBLE
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DWG	DRAWING
E	EAST
EA	EACH
EL	ELEVATION
EQ	EQUAL
EXIST	EXISTING
EXP	EXPANSION
EXP JT	EXPANSION JOINT
FHY	FIRE HYDRANT
FT	FOOT
GOVT	GOVERNMENT
GR	GRADE
GRD	GROUND
GVL	GRAVEL
HORIZ	HORIZONTAL
HPT	HIGH POINT
HT	HEIGHT
ID	INSIDE DIAMETER
JT	JOINT
LG	LENGTH
LPT	LOW POINT
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
P/L	PROPERTY LINE
PERF	PERFORATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
R	RADIUS
REV	REVISION
S	SOUTH
SCHED	SCHEDULE
SF	SQUARE FOOT
SHT	SHEET
SI	INTERNATIONAL SYSTEM OF UNITS
SPEC	SPECIFICATION
SO	SQUARE
STD	STANDARD
TEMP	TEMPORARY
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WEST
W/	WITH
W/O	WITHOUT

LEGEND - SYMBOLS

1 PLAN A101 SCALE: 1/4" = 1'-0" FILE: - REF: -	DRAWING TITLE
	NORTH ARROW
	ELEVATION REFERENCE
	DETAIL REFERENCE
	SECTION REFERENCE
	ACCESSIBLE SYMBOL
	EXISTING SPOT ELEVATION
	NEW SPOT ELEVATION
	REVISION CLOUD
	SIGN SYMBOL SIGN NUMBER SIGN TYPE
	FENCE LINE
	EDGE OF BITUMINOUS PAVING
	EXISTING 2' CONTOUR
	EXISTING 10' CONTOUR
	SANITARY SEWER LINE
	SANITARY SEWER FORCE MAIN
	EXISTING RAILROAD
	EXISTING CATENARY STRUCTURE
	ELECTRIC MANHOLE
	ELECTRIC POLE
	GUY WIRE
	LIGHT POST/POLE
	FIRE HYDRANT
	WATER METER
	WATER MANHOLE
	WATER VALVE
	GAS MANHOLE
	GAS METER
	GAS VALVE
	STORM SEWER INLET
	STORM SEWER MANHOLE
	SANITARY SEWER MANHOLE
	UNKNOWN MANHOLE
	ELECTRICAL MANHOLE
	BENCH MARK
	ROAD SIGN
	DECIDUOUS TREE
	REFERENCE MONUMENT
	EXISTING SPOT ELEVATION
	STORMWATER PIPE
	PROPERTY LINE BEARING
	PROPERTY LINE DIMENSION
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION

	EXISTING UNDERGROUND ELECTRIC SERVICE
	EXISTING SANITARY SEWER
	EXISTING WATER SERVICE
	EXISTING GAS SERVICE
	EXISTING UNDERGROUND TELEPHONE SERVICE
	EXISTING ELECTRIC SERVICE
	EXISTING TELEPHONE SERVICE
	EXISTING CABLE TV SERVICE
	PROPOSED WATER SERVICE
	UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT
	EXISTING PROPERTY LINE
	EXISTING PROPERTY Z LINE
	COMPOST FILTER SOCK
	ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
	INLET FILTER BAG
	PUMPED WATER FILTER BAG WITH CFS RING
	TEMPORARY PROTECTIVE FENCE (ORANGE CONSTRUCTION FENCE)
	EXISTING CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
	SOIL BOUNDARY
	PROPOSED STORMWATER INLET
	PROPOSED STORMWATER MANHOLE
	PROPOSED STORMWATER PIPE
	PROPOSED FIRE HYDRANT
	FILL LINE
	CUT LINE
	EXISTING INLET
	EXISTING PIPE
	SITE LIGHTING LUMINAIRE "A" ON PROPOSED 25' WOOD POLE
	SITE LIGHTING LUMINAIRE "B" ON PROPOSED 25' WOOD POLE
	SITE LIGHTING LUMINAIRE "C" ON PROPOSED 25' WOOD POLE
	EXISTING ELECTRIC/UTILITY WOOD POLE
	AERIAL TRIPLEX SERVICE CABLE (LIGHTING)
	EXISTING CONDUIT/ SINGLE MODE FIBER OPTIC CABLE
	EXISTING AERIAL FIBER OPTIC CABLE
	SYNERTECH ENCLOSURE (36"x60")
	EXISTING SYNERTECH ENCLOSURE
	JUNCTION BOX (PENNDOT TYPE JB-27)
	EXISTING TRAFFIC SIGNAL JUNCTION BOX
	SINGLE MODE FIBER OPTIC CABLE

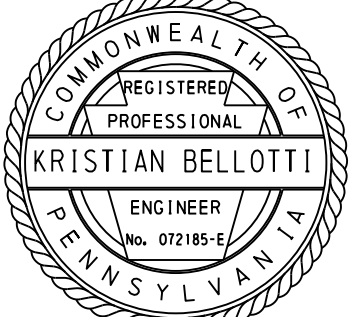
	REMOVE BITUMINOUS PAVING
	EXISTING FEATURES TO BE REMOVED
	NEW CONCRETE PAVING
	NEW ASPHALT PAVING
	NEW FULL DEPTH PAVING
	NEW PEDESTRIAN RAMP
	NEW CONCRETE CURB
	NEW FENCE
	NEW TRASH/RECYCLING RECEPTACLES
	NEW BENCH
	100-YEAR FLOODPLAIN BOUNDARY
	NEW SIGN
	FLEXIBLE DELINEATOR POST
	CONCRETE WHEEL STOP
	NEW DEPRESSED CONCRETE CURB
	PICNIC TABLE
	DECIDUOUS OR EVERGREEN TREE
	SHRUBS
	HERBACIOUS PLANTS, GRASSES, AND PERENNIALS
	FORMULA B SEED MIX (SEE SHEET C605)
	FORMULA L SEED MIX (SEE SHEET C605)



REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DWG_TITLE1

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: KB
DRAWING NUMBER: G003	
DWG. NO.: G003 OF G004	
SHT. NO.: 3 OF 081	
COMPUTER FILE NO.: 21D-24-G003	REV. NO.: 1

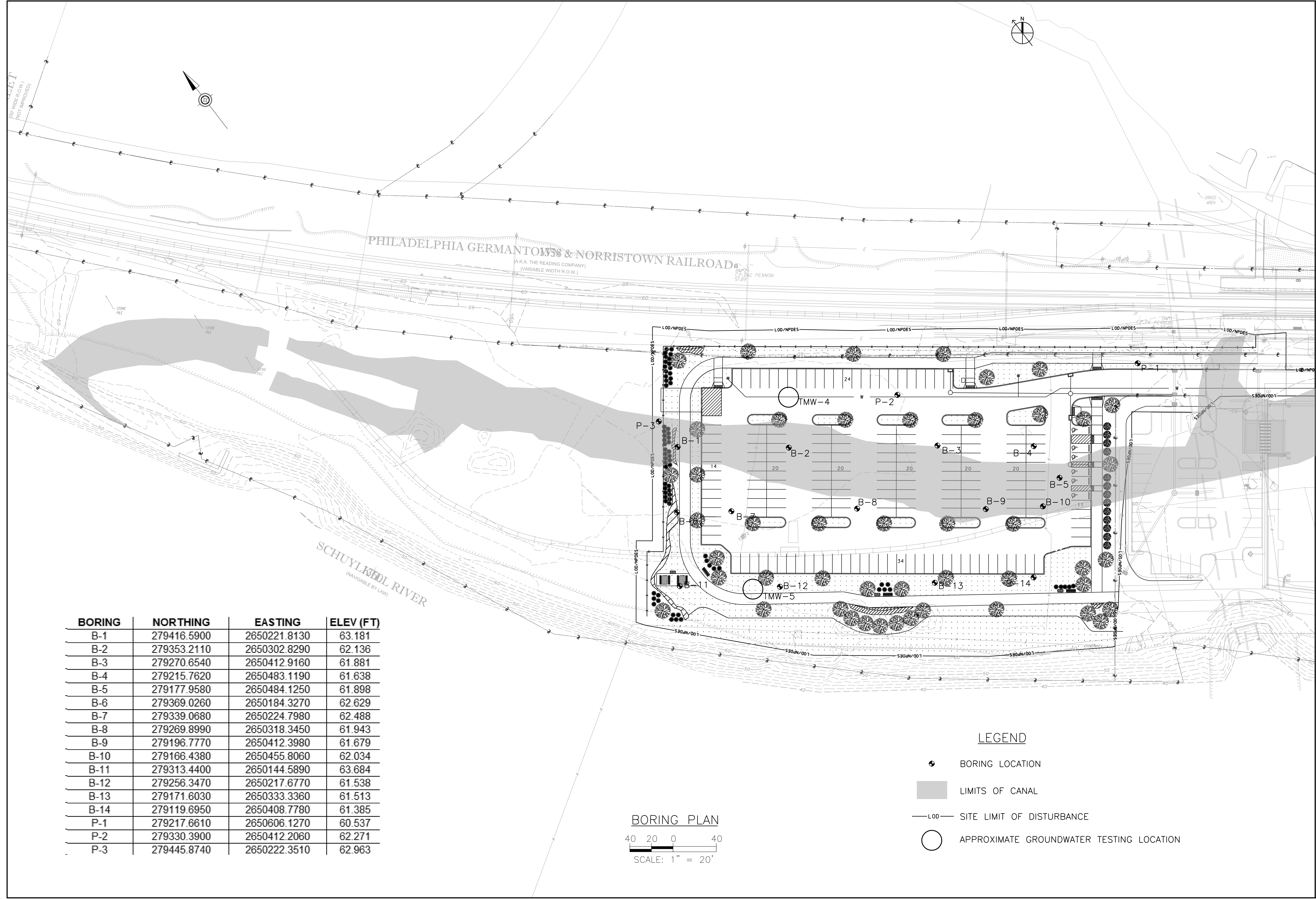


REV	DATE	DESCRIPTION	BY	CKD	APD

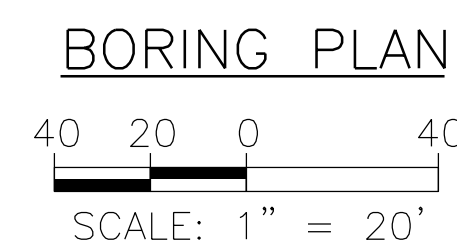
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
GENERAL
BORING LOCATION PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: JJO
WORK ORDER NO.: GEC21D-24	CHECKED BY: KB
DRAWING NUMBER: G004	
DWG. NO.: G004 OF G004	
SHT. NO.: 004 OF 081	
COMPUTER FILE NO.: 21D-24-G004	REV. NO.: 1

LAND DEVELOPMENT SUBMISSION



BORING	NORTHING	EASTING	ELEV (FT)
B-1	279416.5900	2650221.8130	63.181
B-2	279353.2110	2650302.8290	62.136
B-3	279270.6540	2650412.9160	61.881
B-4	279215.7620	2650483.1190	61.638
B-5	279177.9580	2650484.1250	61.898
B-6	279369.0260	2650184.3270	62.629
B-7	279339.0680	2650224.7980	62.488
B-8	279269.8990	2650318.3450	61.943
B-9	279196.7770	2650412.3980	61.679
B-10	279166.4380	2650455.8060	62.034
B-11	279313.4400	2650144.5890	63.684
B-12	279256.3470	2650217.6770	61.538
B-13	279171.6030	2650333.3360	61.513
B-14	279119.6950	2650408.7780	61.385
P-1	279217.6610	2650606.1270	60.537
P-2	279330.3900	2650412.2060	62.271
P-3	279445.8740	2650222.3510	62.963



- LEGEND**
- BORING LOCATION
 - LIMITS OF CANAL
 - SITE LIMIT OF DISTURBANCE
 - APPROXIMATE GROUNDWATER TESTING LOCATION

SURVEY NOTES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM ELECTRONIC FILES PROVIDED BY THE SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY (SEPTA). SURVEY INFORMATION PROVIDED BY PENNONI ASSOCIATES DATED JAN 20, 2019.
- SUPPLEMENTAL TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY KMA CONSULTING ENGINEERS INC. IN NOVEMBER 2020. TOPOGRAPHICAL PLAN UPDATES WERE MADE ALONG THE RIVER SIDE AREA OF THE SITE AND ALONG THE RAILWAY.
- THIS SURVEY HAS BEEN PREPARED AND COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, EXCEPTIONS OR RESTRICTIONS OF RECORD THAT A TITLE SEARCH MAY DISCLOSE.
- THE HORIZONTAL DATUM FOR THIS PLAN IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83. THE VERTICAL DATUM FOR THIS PLAN IS BASED ON NAVD88.
- A PENNSYLVANIA ONECALL WAS COMPLETED ON JULY 24, 2020 SERIAL NO. 20202062212
- THE PROJECT UNITS ARE IN U.S. SURVEY FEET.
- BENCHMARKS
 BM#1 - CONTROL POINT FROM PENNONI ASSOCIATES - ELEV 57.49'
 BM#2 - CONTROL POINT FROM PENNONI ASSOCIATES - ELEV 57.89'
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL SURVEY DATA & INFORMATION PROVIDED.

GENERAL NOTES

- ALL CONSTRUCTION WILL BE IN ACCORDANCE WITH THE FOLLOWING CURRENT STANDARDS, AS APPLICABLE: CONSHOHOCKEN BOROUGH ZONING ORDINANCE, SEPTA STANDARD DETAILS AND SPECIFICATIONS, PENNDOT SPECIFICATIONS (PUB 408), PENNDOT ROADWAY CONSTRUCTION STANDARDS.
- THE PROJECT IS LOCATED WITHIN FEMA DESIGNATED FLOODPLAIN.
- BASED ON REVIEW OF THE EXISTING SITE CONDITIONS, NO PORTION OF THE PROJECT WOULD BE CONSIDERED AS A JURISDICTIONAL WETLAND OR WATERWAY; THEREFORE PERMITS UNDER DEP CHAPTER 105/ USACOE SECTION 404 WILL NOT BE REQUIRED.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN APPROVED FOR THIS PROJECT. A COPY OF THE APPROVED PLAN MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL EROSION CONTROL MEASURES THAT MAY BE REQUIRED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR IS REQUIRED TO CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO IMPLEMENT ANY REVISIONS TO THE APPROVED PLAN.
- NO OBJECTS SHALL BE PLACED, PLANTED, OR SET WITHIN THE AREA OF ANY EASEMENT OR RIGHT-OF-WAY THAT WOULD ADVERSELY IMPACT THE FUNCTION OF THE EASEMENT OR RIGHT-OF-WAY.
- ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE BUILDING. SPOT ELEVATIONS REFERENCE THE BOTTOM OF THE CURB AND FINISHED GROUND SURFACES UNLESS OTHERWISE NOTED.
- CONTRACTOR WILL REMOVE ANY TEMPORARY STORAGE BOXES ON SITE AT THE BEGINNING OF WORK AND RETURN TO SEPTA.
- CONTRACTOR WILL USE EXTREME CARE NOT TO DAMAGE EXISTING RAIL DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR WILL PROTECT NEW RAIL AND EXISTING RAIL WHILE IN USE.
- REMOVE ALL TRASH BINS, CLEAN AND RETURN TO SEPTA FOR REUSE.
- REMOVE ALL BENCHES, ADVERTISEMENT BILLBOARDS, AND WIND SCREENS, CLEAN AND RETURN TO SEPTA FOR REUSE.

CONSHOCKEN BOROUGH ZONING VARIANCES

- 27- 1714

CONSHOCKEN BOROUGH LAND DEVELOPMENT VARIANCES

- 22-405.1.C
 - 22-405.1.E

OWNERS

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
 1234 MARKET STREET, 12TH FLOOR
 PHILADELPHIA, PA 19107
 PHONE: (215) 580-7800

SITE ADDRESS

103 WASHINGTON ST
 CONSHOHOCKEN, PA 19428

NOTICE

PURSUANT TO THE REQUIREMENTS OF PA ACT 287 OF 1974 (THE UNDERGROUND UTILITY LINE PROTECTION ACT), AS AMENDED BY PA ACT 199 OF 2004, THE CONTRACTOR SHALL CONTACT THE PENNSYLVANIA ONE CALL SYSTEM AT 811 OR 1-800-242-1776, 3 TO 10 WORKING DAYS PRIOR TO EXCAVATION.

HIGHWAY DISTRICT NO. 6 WARD NO. N/A
 SURVEY DISTRICT NO. N/A DRAINAGE SHT. NO. N/A
 ONE CALL NO. 20202062212 OUTFALL NO. N/A

CONSTRUCTION NOTES

- THE CONTRACTOR WILL CONTACT THE PA ONE CALL SYSTEM (800-242-1776) NO LESS THAN THREE (3) AND NO MORE THAN TEN (10) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. ANY DISCREPANCY FOUND IS TO BE BROUGHT TO THE ATTENTION OF THE SEPTA SITE PROJECT MANAGER PRIOR TO THE START OF WORK.
- THE CONTRACTOR WILL VERIFY ALL BASELINES AND POINTS OF CONSTRUCTION, THE LOCATION OF ALL NEW CONSTRUCTION, AND VERIFY ALL SETBACKS, OFFSETS, AND CLEARANCES.
- THE CONTRACTOR WILL MAINTAIN ALL UTILITY SERVICES TO PERMANENT AND TEMPORARY FACILITIES THROUGHOUT CONSTRUCTION. THE CONTRACTOR WILL PROVIDE A WRITTEN CONSTRUCTION SEQUENCE PLAN AND COORDINATE ANY REQUIRED BREAKS IN UTILITY SERVICE WITH SEPTA AND THE APPROPRIATE UTILITY PRIOR TO COMMENCING ANY WORK REQUIRING A BREAK IN UTILITY SERVICE.
- THE CONTRACTOR MUST PROVIDE AND MAINTAIN SAFE PEDESTRIAN ACCESS FROM ALL OPERATIONAL AREAS TO ACTIVE PLATFORMS AND OPERATIONAL STATION BUILDING AT ALL TIMES DURING CONSTRUCTION. ACCESS MUST BE ADA COMPLIANT.
- THE CONTRACTOR MUST MAINTAIN MINIMUM 10'-WIDE ENTRANCE AND EXIT LANES TO/FROM THE SITE AT ALL TIMES.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY ON-SITE AND OFF-SITE TEMPORARY TRAFFIC CONTROL AND DIRECTIONAL SIGNAGE AND MARKINGS TO ALLOW SAFE MOVEMENT THROUGH CONSTRUCTION AREAS AND TO AND FROM ALL TEMPORARY AREAS.
- THE CONTRACTOR WILL ESTABLISH AND MAINTAIN TEMPORARY BENCHMARKS ON-SITE TO PERFORM OPERATIONS DURING CONSTRUCTION.
- THE CONTRACTOR WILL SAWCUT ALL OPENINGS IN EXISTING PAVEMENT FOR DEMOLITION AND TRENCH OPENINGS WHEN SURROUNDING EXISTING PAVEMENT IS TO REMAIN IN PLACE.
- THE CONTRACTOR WILL LIMIT THE AMOUNT OF EARTH DISTURBANCE DURING CONSTRUCTION.
- THE CONTRACTOR WILL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR WILL PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ELEMENTS. ADJUST PROPOSED GRADES AND/ OR SAW CUT EXISTING PAVEMENTS TO PROVIDE A SMOOTH FIT AND CONTINUOUS GRADE.
- ALL STORM AND UTILITY STRUCTURE TOPS ARE TO BE FLUSH WITH FINISH GRADE. ADJUST TOPS OF EXISTING STRUCTURES TO PROVIDE FLUSH FINISH. ALL RAINWATER IS TO DRAIN TO INLETS WITHOUT ON-SITE PONDING.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION WASTE FROM THE SITE. ANY MATERIAL REMOVED FROM THE SITE IS TO BE LEGALLY DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL PROVIDE EVIDENCE OF LEGAL DISPOSAL.
- NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERCEDE ANY DISCREPANCY IN THE SCALING OF THE DRAWINGS.
- UTILITY AND STORM LINES ARE TO BE CLEANED BY THE CONTRACTOR PRIOR TO PLACING THE LINES IN SERVICE. THE CLEANING METHOD IS TO ELIMINATE ANY CONSTRUCTION MATERIAL AND DEBRIS FROM THE SYSTEM. CONTRACTOR TO OBTAIN APPROVAL OF CLEANING METHOD FROM SEPTA PROJECT MANAGER. EXISTING INLETS AND EXISTING STORM DRAIN PIPES NOT SCHEDULED FOR REMOVAL WITHIN THE SITE AREA / LIMIT OF DISTURBANCE DEPICTED ON THIS PLAN WILL BE CLEANED. DEBRIS IN INLETS WILL BE REMOVED TO THE BOTTOM OF THE STRUCTURE.
- THE CONTRACTOR WILL SUBMIT JOINT LAYOUT PLANS AND A SEQUENCE OF POURS 30 DAYS PRIOR TO PLACING CONCRETE. THE PLAN AND SEQUENCE WILL BE REVIEWED BY THE SEPTA PROJECT MANAGER.
- NO MATERIALS OR CONSTRUCTION DEBRIS/ TRASH WILL BE STORED OUTSIDE THE LIMIT OF DISTURBANCE.

EARTHWORK, EXCAVATION, AND BACKFILLING

- ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWINGS ARE BASED ON LIMITED FIELD INSPECTIONS. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL AND SHALL BE FIELD VERIFIED.
- EXCAVATIONS WHICH UNDERMINE EXISTING STRUCTURES TO REMAIN SHALL BE BRACED BY A SUITABLE EXCAVATION SUPPORT SYSTEM. NOTIFY PROJECT MANAGER WHERE UNCOVERED.
- PRIOR TO CONSTRUCTION, LOCATE ALL UNDERGROUND UTILITIES AND CONTACT THE PENNSYLVANIA ONE-CALL SYSTEM AT (800) 242-1776.
- ALL OVEREXCAVATED AND FILL AREAS UNDER AND ADJACENT TO FOUNDATIONS SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DRY DENSITY PER ASTM D1557 PRIOR TO PLACEMENT OF CONCRETE. REFER TO PROJECT SPECIFICATIONS FOR COMPACTION TESTING REQUIREMENTS.
- REMOVE UNSUITABLE MATERIALS UNDER FOUNDATIONS AND REPLACE WITH PENNDOT 2A COMPACTED FILL OR FLOWABLE FILL. REFER TO NOTE 4.

UTILITY CONTACTS

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 (610) 828-0979

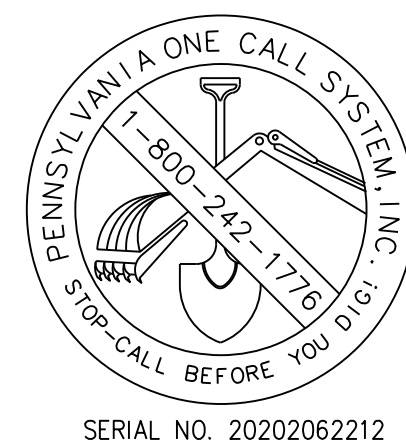
PECO ENERGY
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 CONTACT: DIPEN PATEL

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 2301 MARKET ST
 PHILADELPHIA, PA 19103
 CONTACT: ALESHA WILLIAMS
 (215) 841-5126

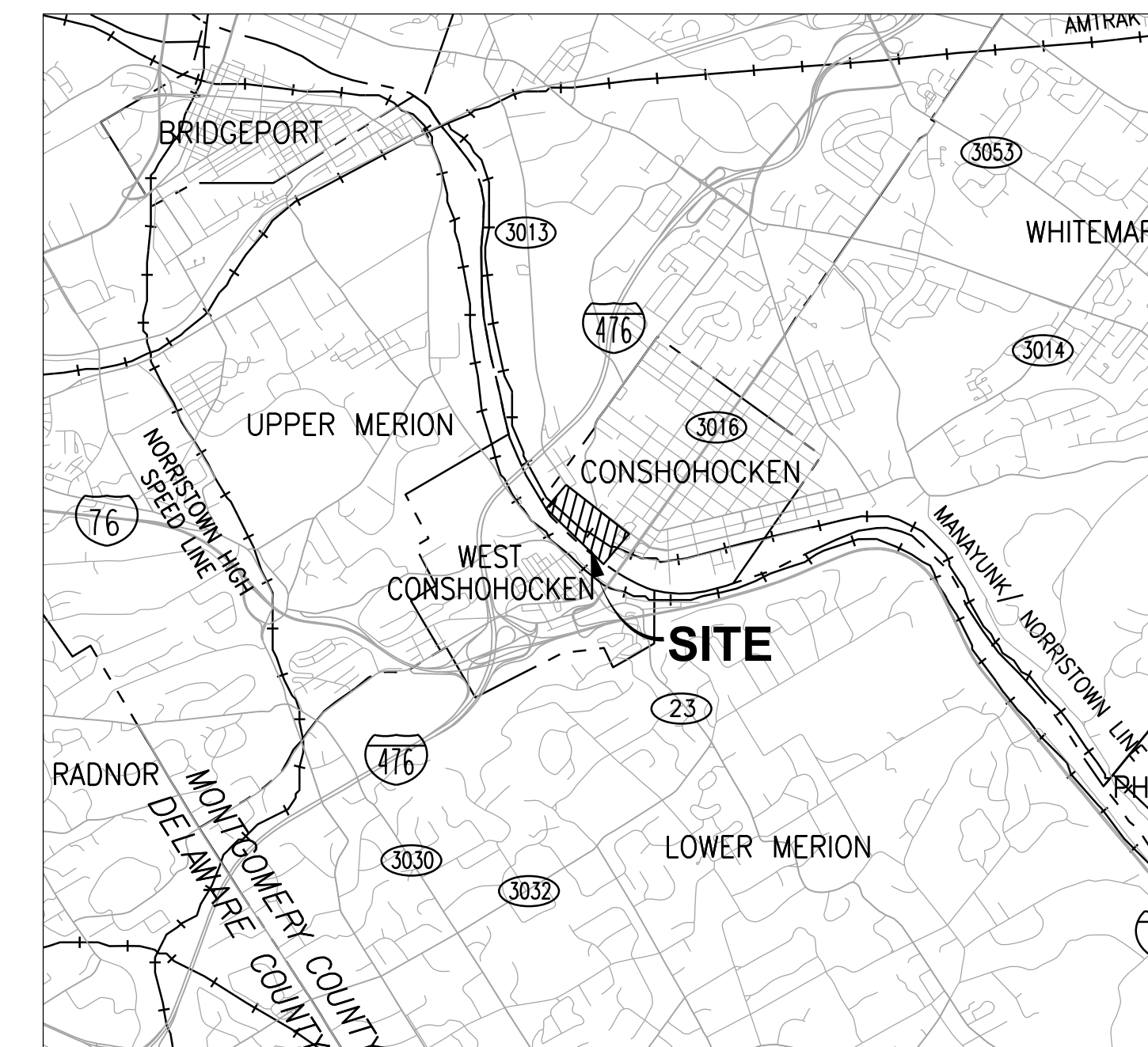
CALL BEFORE YOU DIG !!

PENNSYLVANIA LAW REQUIRES
 (3) WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND
 (10) WORKING DAYS IN DESIGN STAGE
 -- STOP & CALL --

Pennsylvania One Call System, Inc.
 1-800-242-1776



SERIAL NO. 20202062212



VICINITY MAP
 SCALE: 1"=4000'

CONCRETE CURB, SIDEWALK, AND UTILITY NOTES

- ALL REINFORCED AND PLAIN CONCRETE SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH ACI 301 AND 318.
 - CAST-IN-PLACE STRUCTURAL CONCRETE REQUIREMENTS:
 A) MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI @ 28 DAYS
 B) MINIMUM AIR CONTENT OF 6±1.5%
 C) COARSE AGGREGATE SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33. THE NOMINAL MAXIMUM COARSE AGGREGATE SIZE IS 1½" FOR GENERAL WORK. THE NOMINAL COARSE AGGREGATE IS ¾" FOR 8" OR LESS THICKNESS.
- ALL CONCRETE REINFORCEMENT SIZES ARE IN ENGLISH UNITS. ALL REINFORCEMENT BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED, GALVANIZED.
- MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3±1" FOR CONCRETE CAST AND PERMANENTLY EXPOSED TO EARTH AND 2" FOR ALL OTHER LOCATIONS.
- CONCRETE FINISHES: EXPOSED SURFACES ARE TO BE SMOOTH FINISH. ALL EXPOSED CORNERS, EDGES, SHALL BE CHAMFERED ¾" x ¾".
- ALL CAST-IN-PLACE CONCRETE SHALL BE WET CURED FOR A MINIMUM OF 7 DAYS OR APPLY A CURING MEMBRANE PER PENNDOT STANDARD SPECIFICATIONS.
- REINFORCEMENT SHALL BE FREE OF MUD, OIL, OR OTHER DEBRIS AT THE TIME OF PLACEMENT.
- REINFORCEMENT SHALL BE PLACED PRIOR TO START OF CONCRETING.
- FORM ALL ABOVE-GRADE CONCRETE. CONTRACTOR TO DESIGN FORMWORK.
- PLACE CONCRETE IN ONE CONTINUOUS OPERATION.
- ALL BAR SPLICES SHALL BE CLASS B PER ACI 318.
- DETAIL, FABRICATE, AND INSTALL REINFORCEMENT BARS PER ACI 315.
- ALL GROUT SHALL BE NON-METALLIC, NON-SHRINKAGE TYPE.
- CEMENT GROUT (AS MENTIONED ABOVE) SHALL BE USED UNDER STATIC LOAD CONDITIONS, COMPLY WITH ASTM C1107, HAVE MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AFTER ONE DAY, AND 6000 PSI AT 28 DAYS. REFER TO PROJECT SPECIFICATIONS FOR TESTING REQUIREMENTS.
- EPOXY GROUT (NON-METALLIC, NON-SHRINKAGE) SHALL BE USED UNDER DYNAMIC LOAD CONDITIONS, COMPLY WITH ASTM C579B, HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7000 PSI AFTER ONE DAY, AND 14000 PSI AT 7 DAYS. REFER TO PROJECT SPECIFICATIONS FOR TESTING REQUIREMENTS.
- WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.
- SLUMP SHALL BE VERIFIED AT SITE OR AT PLANT PRIOR TO ADDING ANY MIXTURES. CONCRETE SLUMP SHALL BE MAINTAINED WITHIN 1½ INCHES OF THE SELECTED TARGET SLUMP VALUE. IF ANY OF THE UPPER SLUMP LIMITS BELOW ARE EXCEEDED ON ANY SLUMP TEST, THE CONCRETE MIX SHALL BE REJECTED.
 - CONCRETE MIX WITHOUT WATER REDUCING ADMIXTURES - 4 INCHES
 - CONCRETE MIX WITH WATER REDUCING ADMIXTURES - 6½ INCHES
 - CONCRETE MIX WITH HIGH RANGE WATER REDUCING ADMIXTURES (SUPERPLASTICIZERS) - 8 INCHES
- THE WATER CEMENT RATIO SHALL BE A MINIMUM OF 0.37 LBS./LBS. AND A MAXIMUM OF 0.45 LBS./LBS.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
 EM&C DIVISION
 1234 MARKET ST., 13TH FL.
 PHILADELPHIA, PA 19107

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

McCormick Taylor

REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/NORRISTOWN LINE

SURFACE PARKING LOT
 NEW CONSTRUCTION

CIVIL
 GENERAL NOTES

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO: GEC21D-24	CHECKED BY: HB
DRAWING NUMBER: C001	
DWG. NO.: C001	OF: C070
SHT. NO.: 5	OF: 081
COMPUTER FILE NO.: 21D-24-C001	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION

TOLERANCES:

1. THE LONGITUDINAL SLOPES OF ALL BUILT-UP RAMPS SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN THIRTEEN UNITS HORIZONTAL (7.69% SLOPE). THE FLARES OF ALL BUILT-UP RAMPS SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN TEN UNITS HORIZONTAL (10.00% SLOPE).
2. SIDEWALKS AND WALKING SURFACES SHALL NOT BE SLOPED STEEPER THAN ONE UNIT VERTICAL IN TWENTY UNITS HORIZONTAL (5% SLOPE) IN DIRECTION OF TRAVEL.
3. LANDINGS SHALL NOT BE SLOPED STEEPER THAN ONE UNIT VERTICAL IN FIFTY UNITS HORIZONTAL (2% SLOPE) IN DIRECTION OF TRAVEL.
4. THE WALKING SURFACE OF WALKS AND LANDINGS SHALL NOT BE CROSS SLOPED STEEPER THAN ONE UNIT VERTICAL IN FIFTY UNITS HORIZONTAL (2% SLOPE) IN DIRECTION PERPENDICULAR TO TRAVEL.

EXISTING CONDITIONS

1. ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWING FOR THE EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS, CERTAIN DESIGN DRAWINGS FOR ORIGINAL CONSTRUCTION AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE, AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.
2. THE EXACT EXTENT OF CONSTRUCTION OR RESTORATION WORK CANNOT BE NECESSARILY OR ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS, MATERIAL QUANTITIES, AND EXTENT OF THE MODIFICATION WORK SHOWN ON DRAWINGS. PERFORM THE WORK TO MEET FIELD CONDITIONS ENCOUNTERED.
3. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE PROJECT MANAGER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE SHOP AND ERECTION PLANS, INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED.

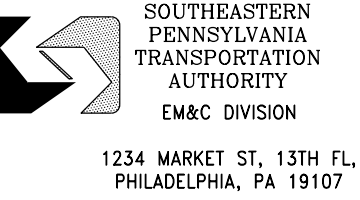
LANDSCAPING

1. WORK CONSISTS OF ALL MATERIAL, LABOR, AND EQUIPMENT TO INSTALL ALL THE LANDSCAPING WORK IN ACCORDANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS AS STATED HEREIN.
2. THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO SEPTA NOT LESS THAN FIFTEEN (15) WORKING DAYS IN ADVANCE OF WHEN THEY WILL WANT TO START INSTALLATION. ALL WORK SHALL BE PERFORMED IN A MANNER SATISFACTORY TO SEPTA'S PROJECT MANAGER.
3. ALL OPERATIONS SHALL BE CONDUCTED SO AS NOT TO INTERFERE WITH, INTERRUPT, OR ENDANGER THE OPERATIONS OF NEITHER TRAINS NOR DAMAGE, DESTROY, OR ENDANGER THE INTEGRITY OF RAILROAD FACILITIES. ALL WORK ON OR NEAR SEPTA PROPERTY SHALL BE CONDUCTED IN ACCORDANCE WITH SEPTA SAFETY RULES AND REGULATIONS. THE CONTRACTOR SHALL SECURE AND COMPLY WITH SEPTA'S SAFETY RULES AND REGULATIONS AND SHALL GIVE WRITTEN ACKNOWLEDGMENT TO SEPTA THAT THEY HAVE BEEN RECEIVED, READ, AND UNDERSTOOD BY THE CONTRACTOR AND ITS EMPLOYEES. OPERATIONS WILL BE SUBJECT TO SEPTA INSPECTIONS AT ANY AND ALL TIMES.
4. MAKE ARRANGEMENTS FOR LEGALLY DISPOSING OF CONTAMINATED EXCAVATED MATERIALS OFF THE WORK SITE AND PAY ALL COSTS THEREOF.
5. NOTIFY THE PROJECT MANAGER AT LEAST (7) DAYS IN ADVANCE OF THE DATE THE ENTIRE WORK WILL BE SUBSTANTIALLY COMPLETE AND READY FOR INSPECTION.
6. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION ON SITE WITH THE SUBCONTRACTORS.
7. THE WORK SPECIFIED (IN THIS SECTION) CONSISTS OF FURNISHING AND PLACING TOPSOIL TO FINAL GRADE, TREES, SHRUBS, GROUND COVERS, SEEDING AND SOIL SUPPLEMENTS, INOCULATES, MULCHING, WATER COURSE, AND SLOPE EROSION PROTECTION, BED PREPARATION, TREE BACKINGS, AND TREE PROTECTION FOR EXISTING TREES.
8. NURSERY: COMPANY SPECIALIZING IN GROWING AND CULTIVATING THE PLANTS WITH FIVE YEARS' EXPERIENCE.
9. INSTALLER: COMPANY SPECIALIZING IN INSTALLING AND PLANTING THE PLANTS WITH FIVE YEARS' EXPERIENCE. THE LANDSCAPE CONTRACTOR SHALL PROVIDE PROOF TO SEPTA THAT HE/SHE SUCCESSFULLY INSTALLED FIVE DIFFERENT JOBS OF SIMILAR OR LARGER SIZE IN THE PAST.
10. MAINTENANCE SERVICES: PERFORMED BY INSTALLER.
11. MAINTAIN PLANT LIFE IMMEDIATELY AFTER PLACEMENT UNTIL PLANTS ARE WELL ESTABLISHED AND EXHIBIT A VIGOROUS GROWING CONDITION. CONTINUE MAINTENANCE UNTIL TERMINATION OF WARRANTY PERIOD WHICH SHALL BEGIN AFTER ACCEPTANCE OF FINAL WORK.
12. ALL TREES, SHRUBS, AND PLANTINGS SHOWN IN THE CONTRACT DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH PENNDOT STANDARD SPECIFICATIONS, SECTION 808 - PLANTS, PLANTING, & TRANSPLANTING. ALL TREES, SHRUBS, AND PLANTINGS SHALL BE MATURE AND MEET MINIMUM SIZE REQUIREMENTS STATED IN CONTRACT DOCUMENTS.
13. THE LANDSCAPING CONTRACTOR SHALL BE QUALIFIED AND EXPERIENCED FOR LANDSCAPING INSTALLATION IN ACCORDANCE WITH CONTRACT DRAWINGS AND STANDARD SPECIFICATIONS. ALSO REFER TO PENNDOT PUBLICATION 72, STANDARDS FOR ROADWAY CONSTRUCTION PLATE RC-91 FOR COMPLETE DETAILS.
14. FURNISH MAINTENANCE OF SEEDED AREAS IMMEDIATELY AFTER PLACEMENT UNTIL IT IS WELL ESTABLISHED AND EXHIBITS A VIGOROUS GROWING CONDITION FOR FOUR CUTTINGS.
15. LANDSCAPE EDGING SHALL BE PROVIDED BETWEEN PLANTING BEDS OF DIFFERENT GROUND COVERS AND BETWEEN THE PLANTING BEDS AND THE BALLAST.
16. FURNISH AND PLACE TOPSOIL AS REQUIRED AND AS SHOWN ON THE DRAWINGS.
17. IN EXISTING AREAS TO BE PLANTED, LOOSEN EXISTING TOPSOIL TO A DEPTH OF 12 INCHES.
18. DO NOT PLACE TOPSOIL IN A WET OR FROZEN CONDITION.
19. ALL LANDSCAPING AREAS SHALL GET 6" TOPSOIL AND 3" SHREDDED MULCH, UNLESS OTHERWISE NOTED.

ACT 287/181 UNDERGROUND UTILITY PROTECTION ACT

SEPTA HEREBY STATES THAT, PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF 1974, AS AMENDED BY ACT 181 OF 2006, OF THE PENNSYLVANIA LEGISLATURE, IT HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS REQUIRING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) OR LAND DEVELOPMENT(S) SHOWN ON THE DRAWINGS:

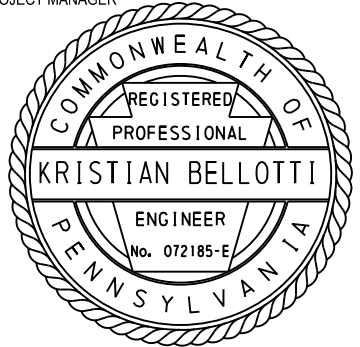
1. PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, McCORMICK TAYLOR, INC. REQUESTED FROM EACH USER'S OFFICE DESIGNATED ON SUCH LIST PROVIDED BY THE ONE CALL SYSTEM NOTIFICATION, THE INFORMATION PRESCRIBED BY SECTION 2, CLAUSE (4) OF SAID ACT, NOT LESS THAN (10) NOR MORE THAN (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED.
2. PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, McCORMICK TAYLOR, INC. HAS SHOWN UPON THESE DRAWINGS "THE POSITION AND TYPE OF EACH LINE", AS DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY CLAUSE (2), THE SERIAL NUMBER PROVIDED BY THE ONE CALL SYSTEM.
3. PURSUANT TO SECTION 4, CLAUSE (5) OF SAID ACT, McCORMICK TAYLOR, INC. HAS MET THEIR OBLIGATIONS OF CLAUSE (2) BY CALLING THE ONE CALL SYSTEM SERVING THE LOCATION WHERE EXCAVATION IS TO BE PERFORMED.



1234 MARKET ST. 13TH FL. PHILADELPHIA, PA 19107

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APPD

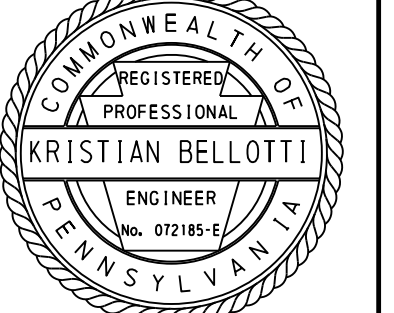
CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 GENERAL NOTES

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
		CHECKED BY:	HB
WORK ORDER NO.:	GEC21D-24		
DRAWING NUMBER:	C002		
DWG. NO.:	C002	OF	C067
SHT. NO.:	6	OF	081
COMPUTER FILE NO.:	21D-24-C002	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

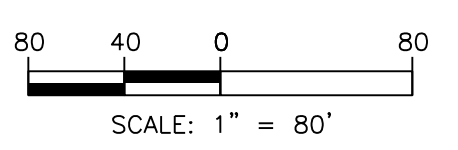
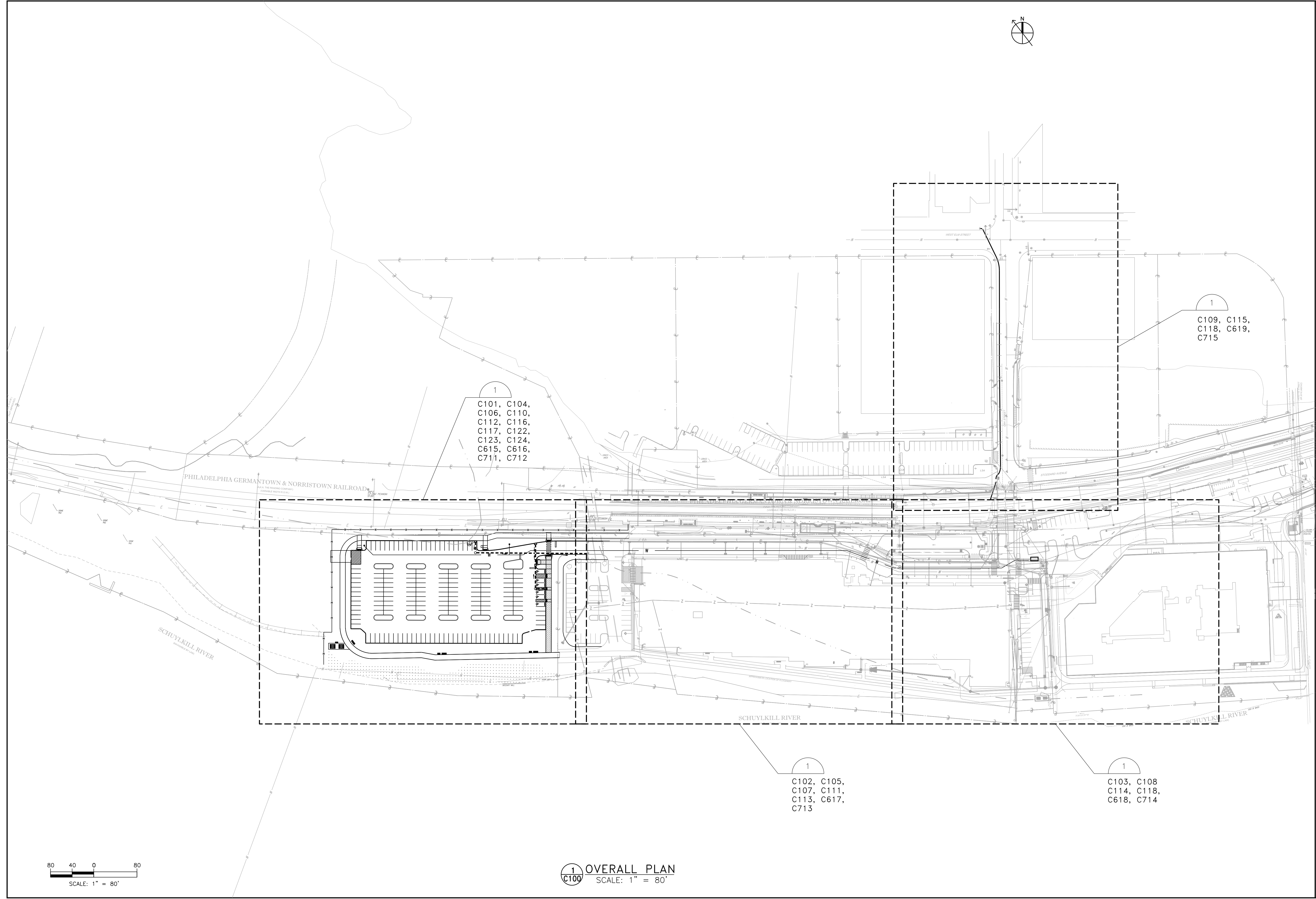


REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOCKEN RAILROAD STATION
MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
OVERALL PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB CHECKED BY: KB
WORK ORDER NO.: GEC21D-24	
DRAWING NUMBER C100	
DWG. NO.: C003	OF C070
SHT. NO.: 7	OF 081
COMPUTER FILE NO.: 21D-24-C100	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION



1 OVERALL PLAN
SCALE: 1" = 80'

MANAGER - ARCH / ENGINEERING
PROJECT MANAGER

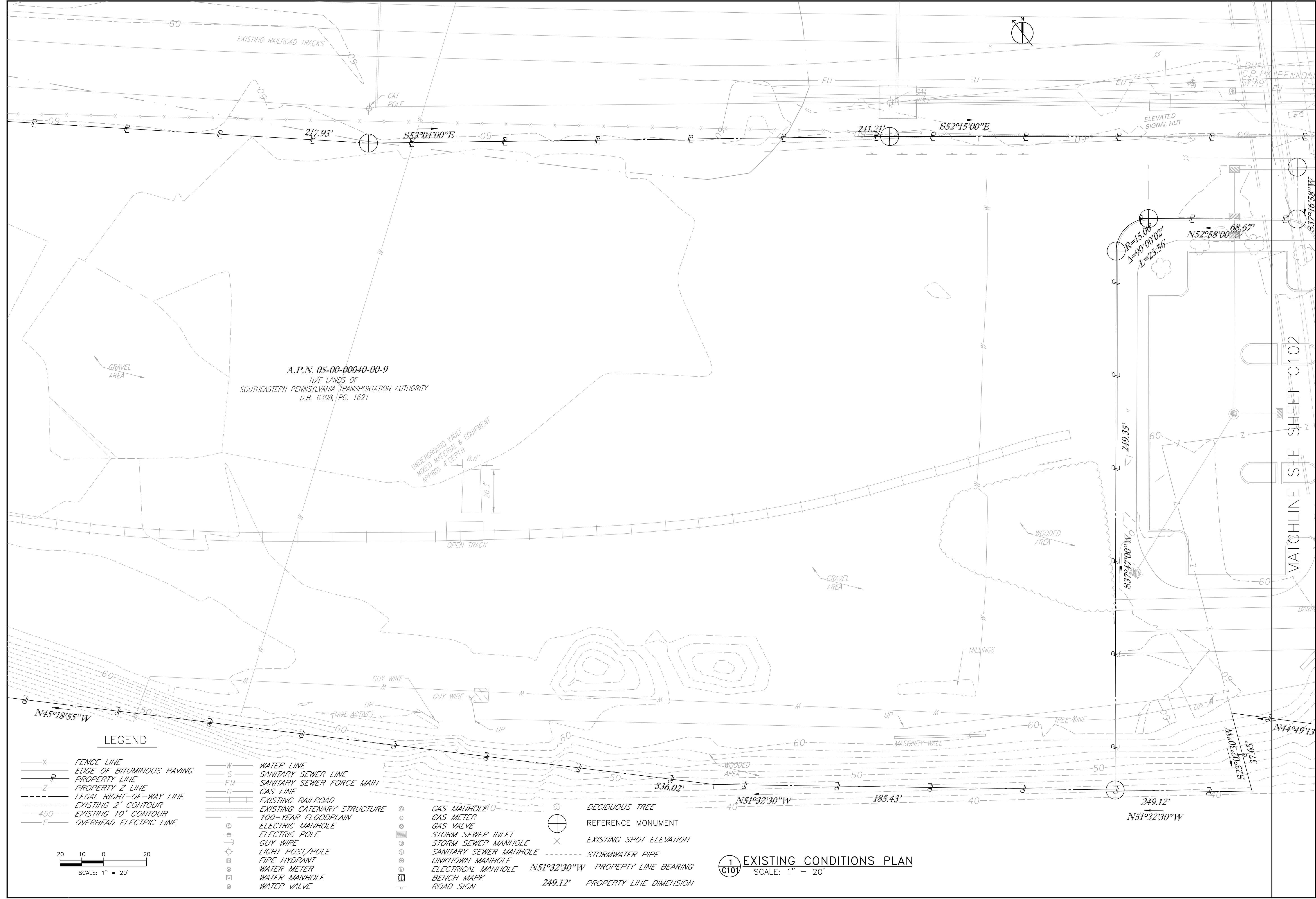


REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION LOT
CIVIL
EXISTING CONDITIONS PLAN

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HLB
DRAWING NUMBER:	C101		
DWG. NO.:	C004	OF:	C070
SHT. NO.:	8	OF:	081
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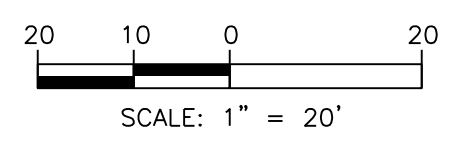
LAND DEVELOPMENT SUBMISSION



A.P.N. 05-00-00040-00-9
N/F LANDS OF
SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
D.B. 6308, PG. 1621

LEGEND

- | | | | |
|--|---|---|--|
| <ul style="list-style-type: none"> —X— FENCE LINE —E— EDGE OF BITUMINOUS PAVING —P— PROPERTY LINE —Z— PROPERTY Z LINE —- - - LEGAL RIGHT-OF-WAY LINE ---450--- EXISTING 2' CONTOUR ---E--- EXISTING 10' CONTOUR ---E--- OVERHEAD ELECTRIC LINE | <ul style="list-style-type: none"> —W— WATER LINE —S— SANITARY SEWER LINE —FM— SANITARY SEWER FORCE MAIN —G— GAS LINE —R— EXISTING RAILROAD —S— EXISTING CATENARY STRUCTURE —F— 100-YEAR FLOODPLAIN —E— ELECTRIC MANHOLE —P— ELECTRIC POLE —G— GUY WIRE —L— LIGHT POST/POLE —H— FIRE HYDRANT —M— WATER METER —W— WATER MANHOLE —V— WATER VALVE | <ul style="list-style-type: none"> ⊙ GAS MANHOLE ⊙ GAS METER ⊙ GAS VALVE ⊙ STORM SEWER INLET ⊙ STORM SEWER MANHOLE ⊙ SANITARY SEWER MANHOLE ⊙ UNKNOWN MANHOLE ⊙ ELECTRICAL MANHOLE ⊙ BENCH MARK ⊙ ROAD SIGN | <ul style="list-style-type: none"> ⊙ DECIDUOUS TREE ⊙ REFERENCE MONUMENT ⊙ EXISTING SPOT ELEVATION — — — — — STORMWATER PIPE — — — — — PROPERTY LINE BEARING — — — — — PROPERTY LINE DIMENSION |
|--|---|---|--|



1 EXISTING CONDITIONS PLAN
SCALE: 1" = 20'

PHILADELPHIA GERMANTOWN & NORRISTOWN RAILROAD

(A.K.A. THE READING COMPANY)
(VARIABLE WIDTH R.O.W.)



1234 MARKET ST., 13TH FL.
PHILADELPHIA, PA 19107

MANAGER - ARCH / ENGINEERING

PROJECT MANAGER



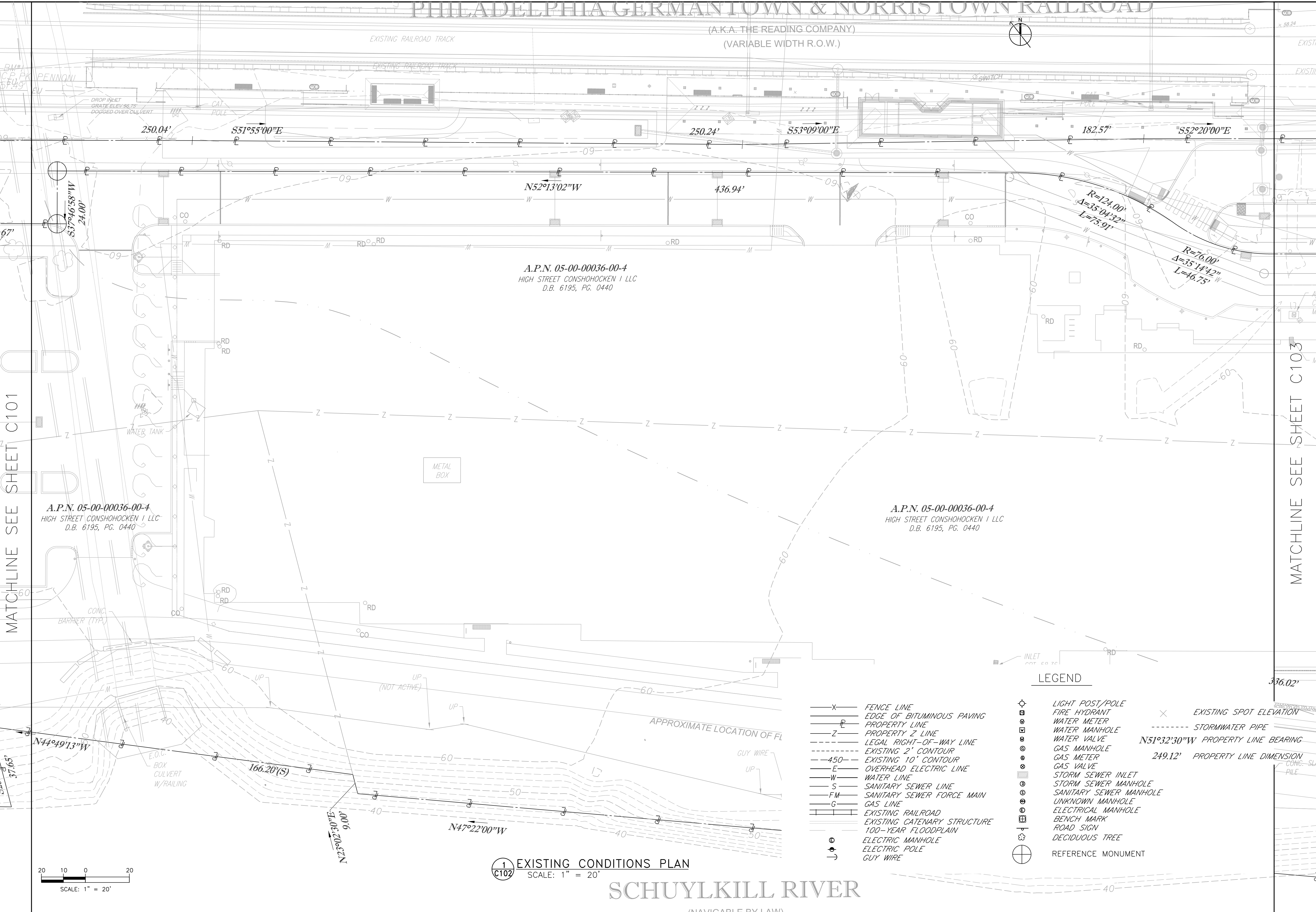
REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EXISTING CONDITIONS PLAN

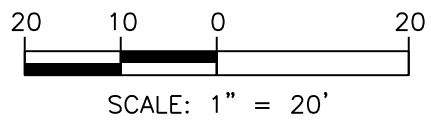
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WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HLB
DRAWING NUMBER:	C102	REV. NO.:	0
DWG. NO.:	C005	OF:	C070
SHT. NO.:	9	OF:	081
COMPUTER FILE NO.:	21D-24-C102	REV. NO.:	0

MATCHLINE SEE SHEET C101

MATCHLINE SEE SHEET C103



- LEGEND**
- X- FENCE LINE
 - E- EDGE OF BITUMINOUS PAVING
 - P- PROPERTY LINE
 - Z- PROPERTY Z LINE
 - L- LEGAL RIGHT-OF-WAY LINE
 - D- EXISTING 2' CONTOUR
 - 450- EXISTING 10' CONTOUR
 - E- OVERHEAD ELECTRIC LINE
 - W- WATER LINE
 - S- SANITARY SEWER LINE
 - FM- SANITARY SEWER FORCE MAIN
 - G- GAS LINE
 - R- EXISTING RAILROAD
 - S- EXISTING CATENARY STRUCTURE
 - F- 100-YEAR FLOODPLAIN
 - M- ELECTRIC MANHOLE
 - P- ELECTRIC POLE
 - G- GUY WIRE
 - LIGHT POST/POLE
 - FIRE HYDRANT
 - WATER METER
 - WATER MANHOLE
 - WATER VALVE
 - GAS MANHOLE
 - GAS METER
 - GAS VALVE
 - STORM SEWER INLET
 - STORM SEWER MANHOLE
 - SANITARY SEWER MANHOLE
 - UNKNOWN MANHOLE
 - ELECTRICAL MANHOLE
 - BENCH MARK
 - ROAD SIGN
 - DECIDUOUS TREE
 - REFERENCE MONUMENT
 - × EXISTING SPOT ELEVATION
 - - - - - STORMWATER PIPE
 - - - - - N51°32'30\"/>



1 EXISTING CONDITIONS PLAN
SCALE: 1" = 20'

SCHUYLKILL RIVER

(NAVIGABLE BY LAW)

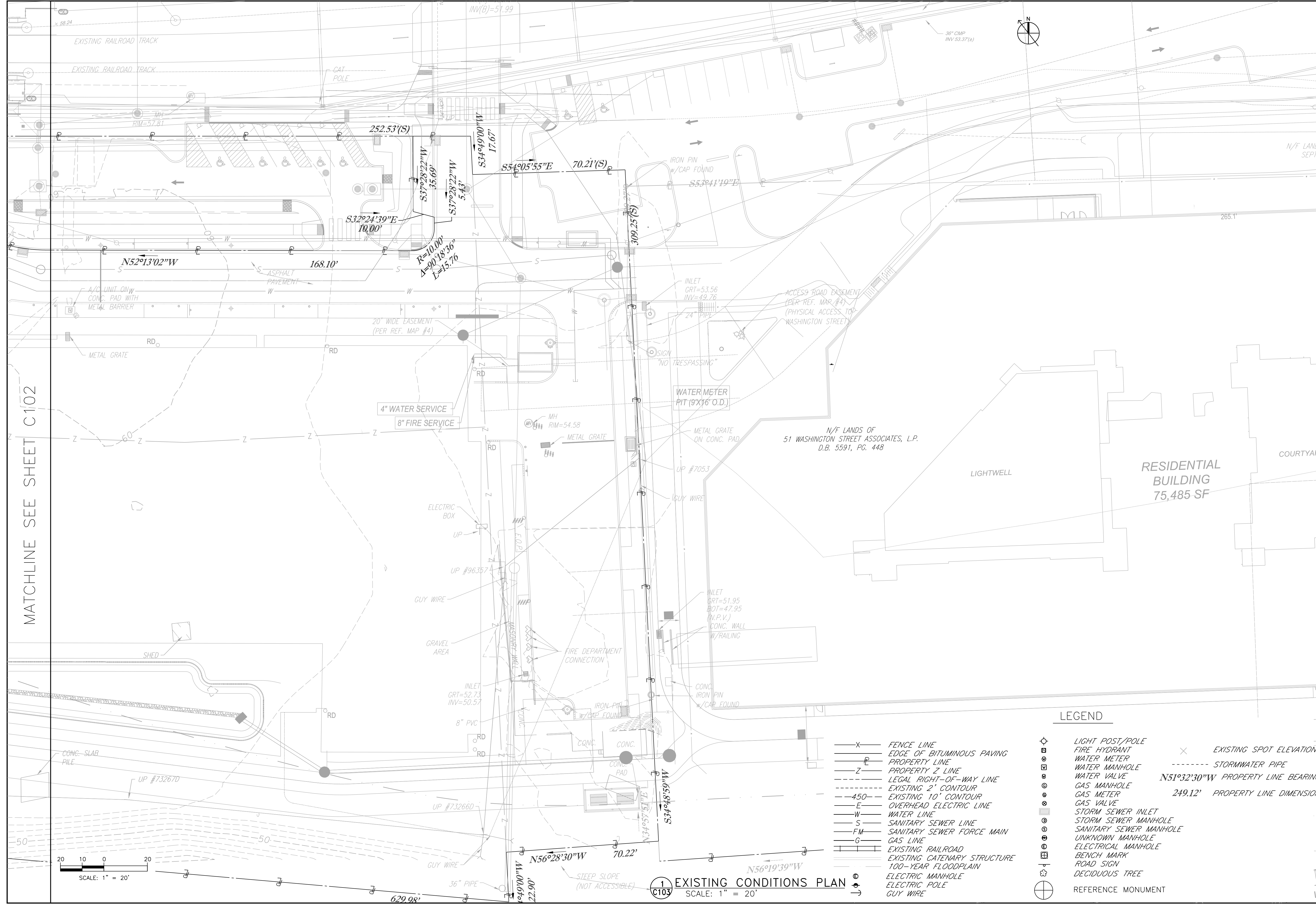
LAND DEVELOPMENT SUBMISSION

REV	DATE	DESCRIPTION	BY	CHKD	APD

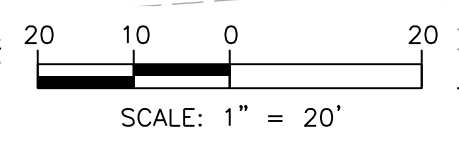
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EXISTING CONDITIONS PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: HB
DRAWING NUMBER: C103	
DWG. NO.: C006 OF C070	
SHEET NO.: 10 OF 081	
COMPUTER FILE NO.: 21D-24-C103	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION



MATCHLINE SEE SHEET C102



- X FENCE LINE
- E— EDGE OF BITUMINOUS PAVING
- P— PROPERTY LINE
- Z— PROPERTY Z LINE
- LEGAL RIGHT-OF-WAY LINE
- - - - - EXISTING 2' CONTOUR
- - - - - 450' EXISTING 10' CONTOUR
- E OVERHEAD ELECTRIC LINE
- W WATER LINE
- S SANITARY SEWER LINE
- FM SANITARY SEWER FORCE MAIN
- G GAS LINE
- EXISTING RAILROAD
- EXISTING CATENARY STRUCTURE
- 100-YEAR FLOODPLAIN
- ELECTRIC MANHOLE
- ELECTRIC POLE
- GUY WIRE

LEGEND

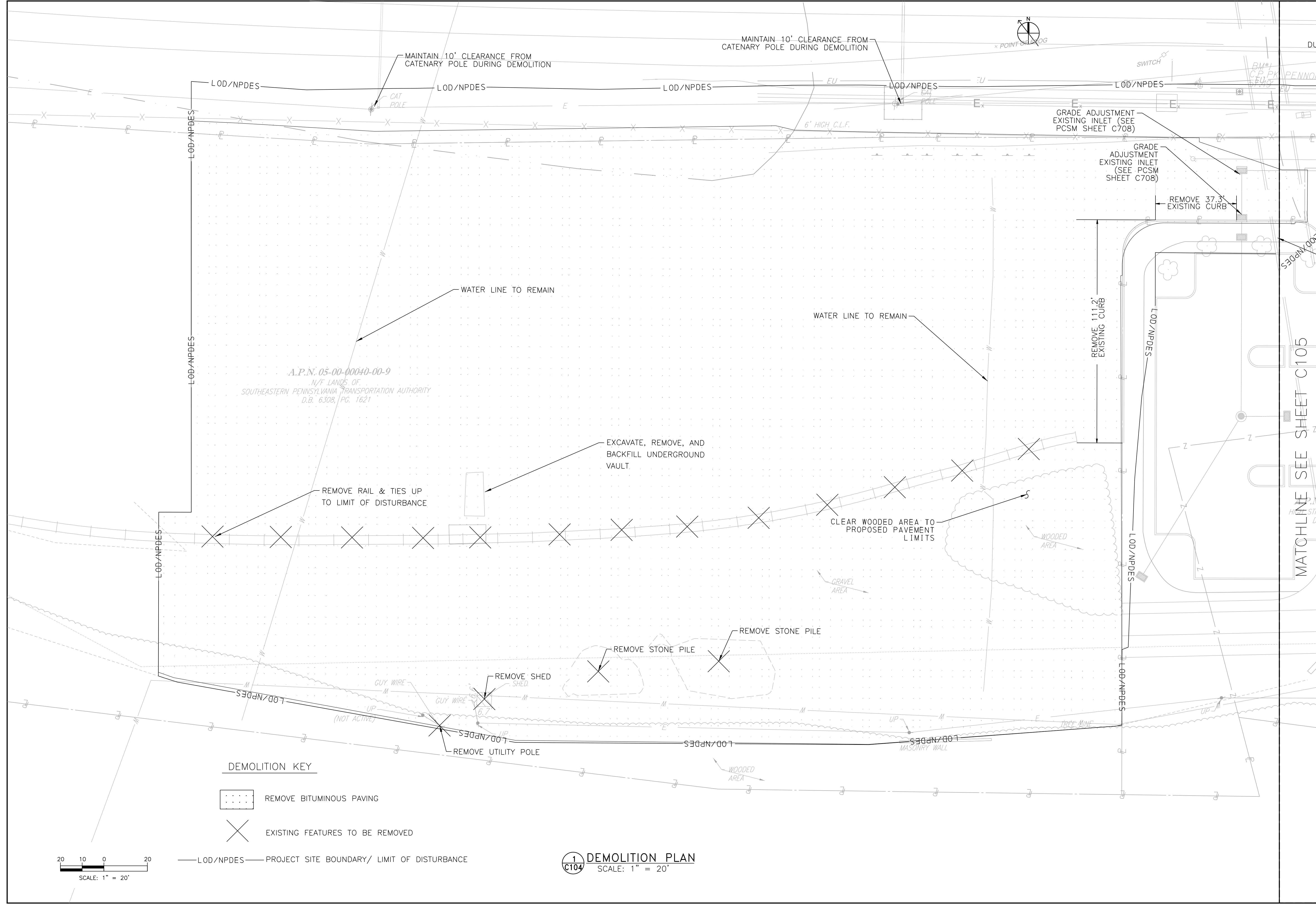
- LIGHT POST/POLE
- FIRE HYDRANT
- WATER METER
- WATER MAINHOLE
- WATER VALVE
- GAS MANHOLE
- GAS METER
- GAS VALVE
- STORM SEWER INLET
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- UNKNOWN MANHOLE
- ELECTRICAL MANHOLE
- BENCH MARK
- ROAD SIGN
- DECIDUOUS TREE
- REFERENCE MONUMENT
- X EXISTING SPOT ELEVATION
- - - - - STORMWATER PIPE
- N51°32'30"W PROPERTY LINE BEARING
- 249.12' PROPERTY LINE DIMENSION

1
C103
EXISTING CONDITIONS PLAN
SCALE: 1" = 20'

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DEMOLITION PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: HB
DWG. NO.: C007	OF: C070
SHT. NO.: 11	OF: 081
COMPUTER FILE NO.: 21D-24-C104	REV. NO.: 0



DEMOLITION KEY

	REMOVE BITUMINOUS PAVING
	EXISTING FEATURES TO BE REMOVED

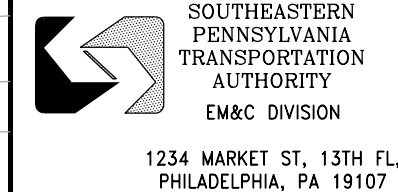
— LOD/NPDES — PROJECT SITE BOUNDARY/ LIMIT OF DISTURBANCE

SCALE: 1" = 20'

1
C104 DEMOLITION PLAN
SCALE: 1" = 20'

PHILADELPHIA GERMANTOWN & NORRISTOWN RAILROAD

(A.K.A. THE READING COMPANY)
(VARIABLE WIDTH R.O.W.)



MANAGER - ARCH / ENGINEERING

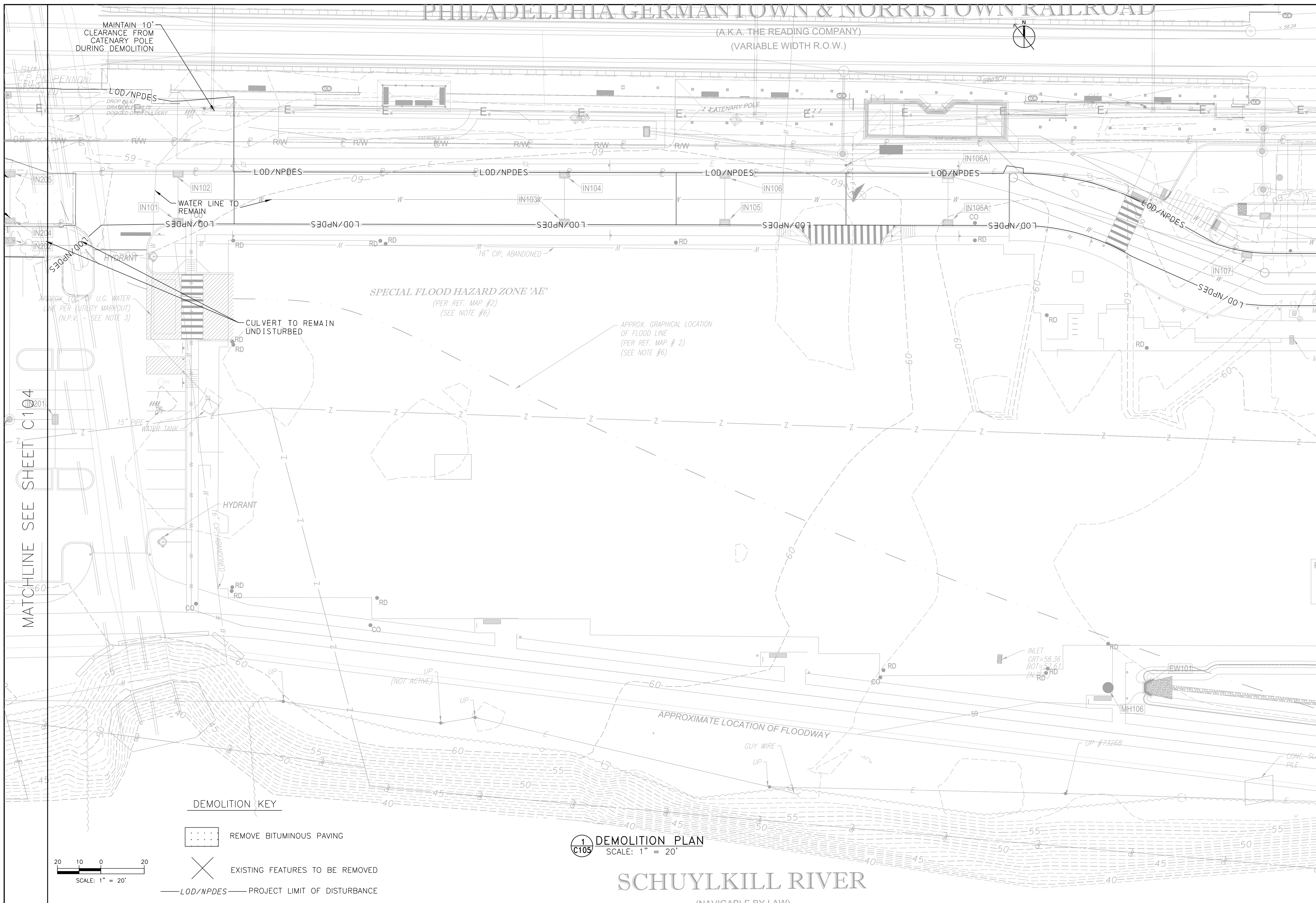
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CKD	APD

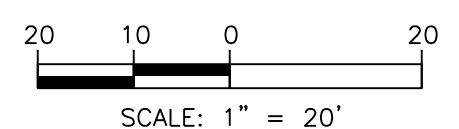
CONSHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DEMOLITION PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: HB
DRAWING NUMBER: C105	
DWG. NO.: C008 OF C070	
SHT. NO.: 12 OF 081	
COMPUTER FILE NO.: 21D-24-C105	REV. NO.: 0



DEMOLITION KEY

- REMOVE BITUMINOUS PAVING
- EXISTING FEATURES TO BE REMOVED
- LOD/NPDES - PROJECT LIMIT OF DISTURBANCE



1 DEMOLITION PLAN
SCALE: 1" = 20'

SCHUYLKILL RIVER

(NAVIGABLE BY LAW)

MATCHLINE SEE SHEET C104

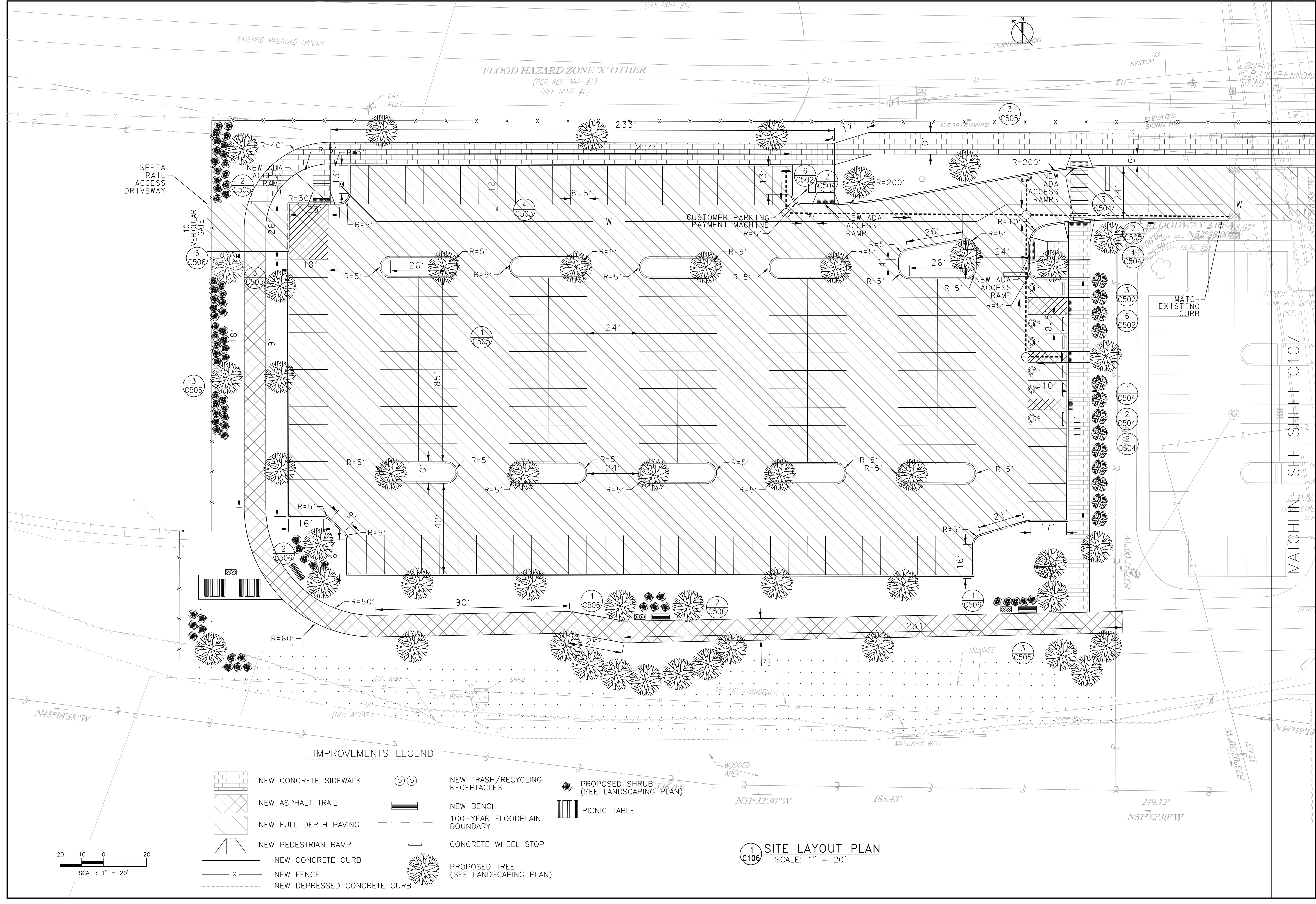
LAND DEVELOPMENT SUBMISSION

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SITE LAYOUT PLAN

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HB
DRAWING NUMBER:	C106		
DWG. NO.:	C009	OF:	C070
SHT. NO.:	13	OF:	081
COMPUTER FILE NO.:	21D-24-C106	REV. NO.:	0

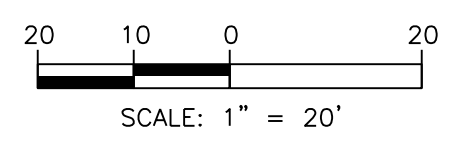
LAND DEVELOPMENT SUBMISSION



IMPROVEMENTS LEGEND

- | | | | |
|--|-----------------------------|--|---------------------------------------|
| | NEW CONCRETE SIDEWALK | | NEW TRASH/RECYCLING RECEPTACLES |
| | NEW ASPHALT TRAIL | | NEW BENCH |
| | NEW FULL DEPTH PAVING | | 100-YEAR FLOODPLAIN BOUNDARY |
| | NEW PEDESTRIAN RAMP | | CONCRETE WHEEL STOP |
| | NEW CONCRETE CURB | | PROPOSED TREE (SEE LANDSCAPING PLAN) |
| | NEW FENCE | | PROPOSED SHRUB (SEE LANDSCAPING PLAN) |
| | NEW DEPRESSED CONCRETE CURB | | PICNIC TABLE |

1 SITE LAYOUT PLAN
SCALE: 1" = 20'



PHILADELPHIA GERMANTOWN & NORRISTOWN RAILROAD

(A.K.A. THE READING COMPANY)
(VARIABLE WIDTH R.O.W.)



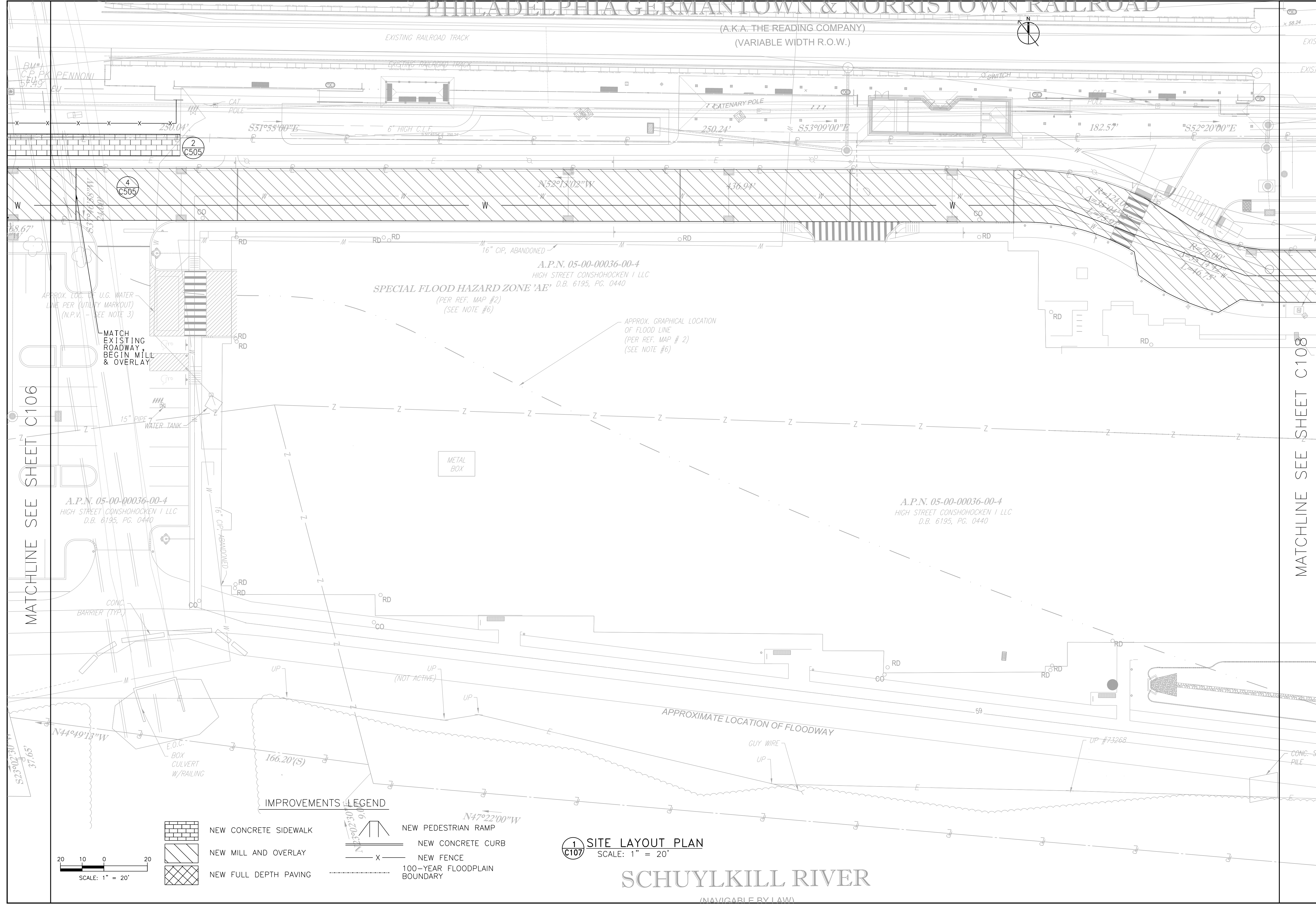
MANAGER: ARCH / ENGINEERING
PROJECT MANAGER:



REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SITE LAYOUT PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: KB
DRAWING NUMBER: C107	
DWG. NO.: C010 OF C070	
SHT. NO.: 14 OF 081	
COMPUTER FILE NO.: 21D-24-C107	REV. NO.: 0



MATCHLINE SEE SHEET C106

MATCHLINE SEE SHEET C108

IMPROVEMENTS LEGEND

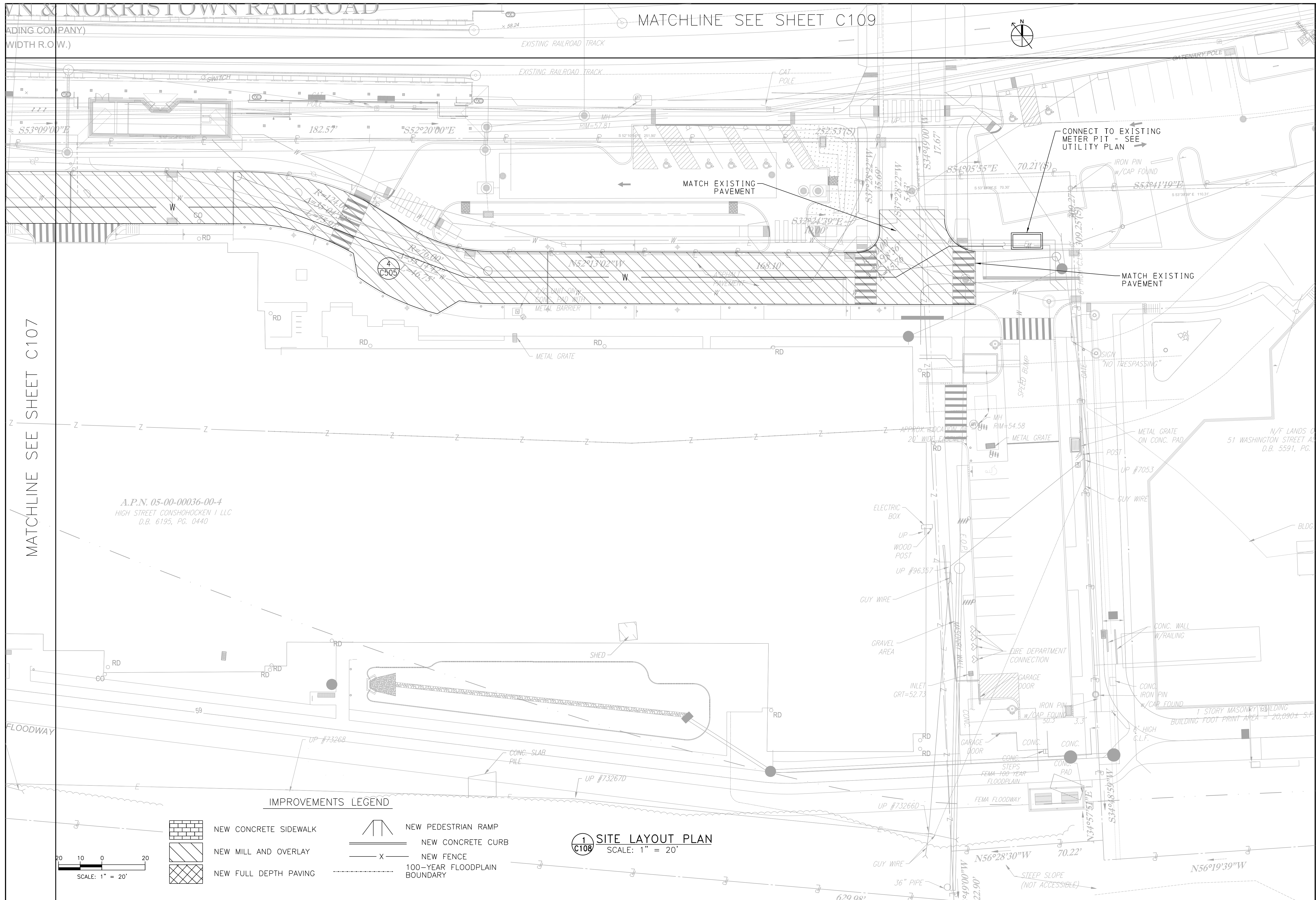
	NEW CONCRETE SIDEWALK		NEW PEDESTRIAN RAMP
	NEW MILL AND OVERLAY		NEW CONCRETE CURB
	NEW FULL DEPTH PAVING		NEW FENCE
			100-YEAR FLOODPLAIN BOUNDARY

1 SITE LAYOUT PLAN
SCALE: 1" = 20'

SCHUYLKILL RIVER

(NAVIGABLE BY LAW)

LAND DEVELOPMENT SUBMISSION



MATCHLINE SEE SHEET C107

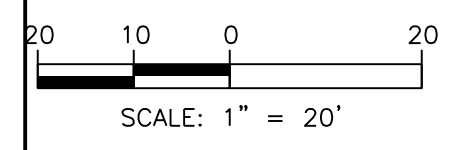
MATCHLINE SEE SHEET C109

A.P.N. 05-00-00036-00-4
HIGH STREET CONSHOHOCKEN I LLC
D.B. 6195, PG. 0440

IMPROVEMENTS LEGEND

- | | | | |
|--|-----------------------|--|------------------------------|
| | NEW CONCRETE SIDEWALK | | NEW PEDESTRIAN RAMP |
| | NEW MILL AND OVERLAY | | NEW CONCRETE CURB |
| | NEW FULL DEPTH PAVING | | NEW FENCE |
| | | | 100-YEAR FLOODPLAIN BOUNDARY |

1 SITE LAYOUT PLAN
SCALE: 1" = 20'



REV	DATE	DESCRIPTION	BY	CHKD	APD

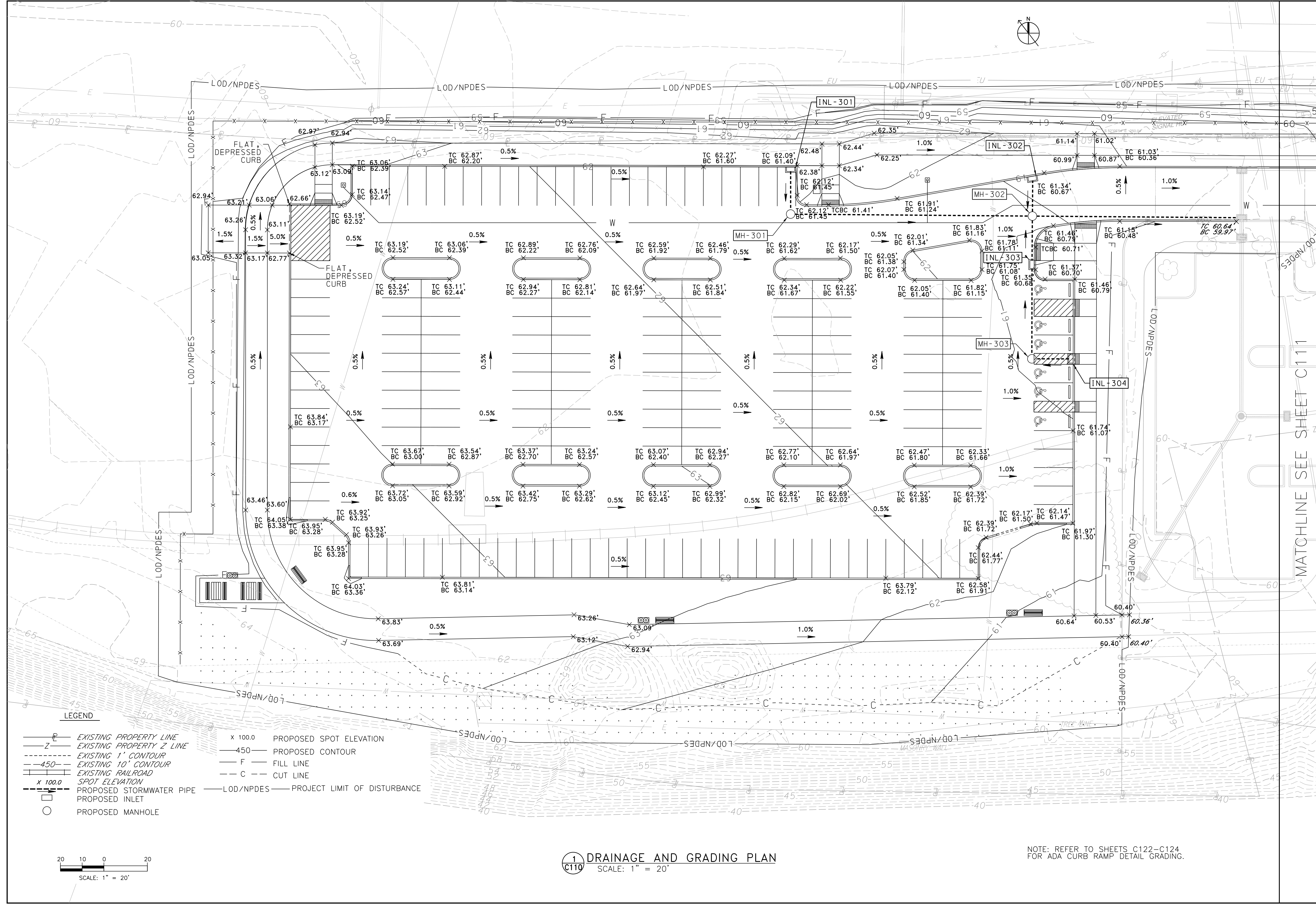
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SITE LAYOUT PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: KB
DRAWING NUMBER: C108	
DWG. NO.: C011 OF C070	
SHT. NO.: 15 OF 081	
COMPUTER FILE NO.: 21D-24-C108	REV. NO.: 0

REV	DATE	DESCRIPTION	BY	CKD	APD

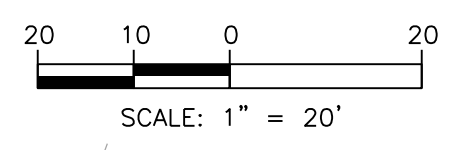
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DRAINAGE AND GRADING PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: HB
DRAWING NUMBER: C110	
DWG. NO.: C013	OF: C070
SHT. NO.: 17	OF: 081
COMPUTER FILE NO.: 21D-24-C110	REV. NO.: 0



LEGEND

- EXISTING PROPERTY LINE
- EXISTING PROPERTY Z LINE
- EXISTING 1' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING RAILROAD
- SPOT ELEVATION
- PROPOSED STORMWATER PIPE
- PROPOSED INLET
- PROPOSED MANHOLE
- x 100.0 PROPOSED SPOT ELEVATION
- 450 PROPOSED CONTOUR
- F FILL LINE
- C CUT LINE
- LOD/NPDES PROJECT LIMIT OF DISTURBANCE



1 DRAINAGE AND GRADING PLAN
SCALE: 1" = 20'

NOTE: REFER TO SHEETS C122-C124 FOR ADA CURB RAMP DETAIL GRADING.

MATCHLINE SEE SHEET C111

PHILADELPHIA GERMANTOWN & NORRISTOWN RAILROAD

(A.K.A. THE READING COMPANY)
(VARIABLE WIDTH R.O.W.)

MANAGER - ARCH / ENGINEERING

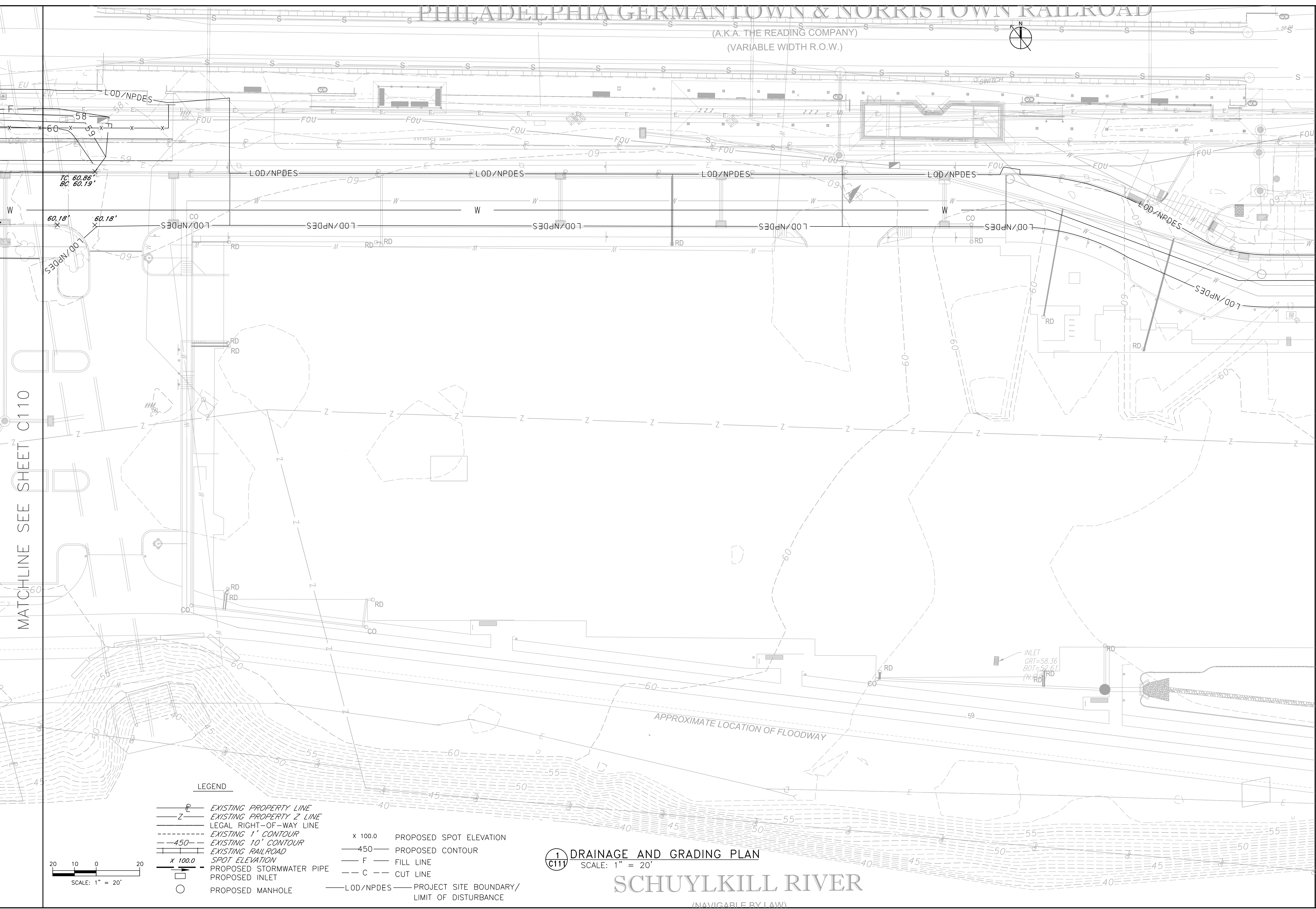
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DRAINAGE AND GRADING PLAN

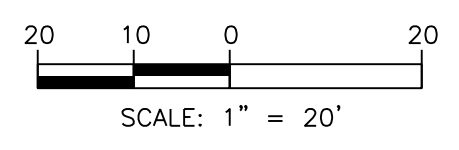
SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: HB
DRAWING NUMBER: C111	
DWG. NO.: C014 OF C070	
SHT. NO.: 18 OF 081	
COMPUTER FILE NO.: 21D-24-C111	REV. NO.: 0



MATCHLINE SEE SHEET C110

LEGEND

- EXISTING PROPERTY LINE
- EXISTING PROPERTY Z LINE
- LEGAL RIGHT-OF-WAY LINE
- EXISTING 1' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING RAILROAD
- SPOT ELEVATION
- PROPOSED STORMWATER PIPE
- PROPOSED INLET
- PROPOSED MANHOLE
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- FILL LINE
- CUT LINE
- PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE



DRAINAGE AND GRADING PLAN
SCALE: 1" = 20'

SCHUYLKILL RIVER
(NAVIGABLE BY LAW)

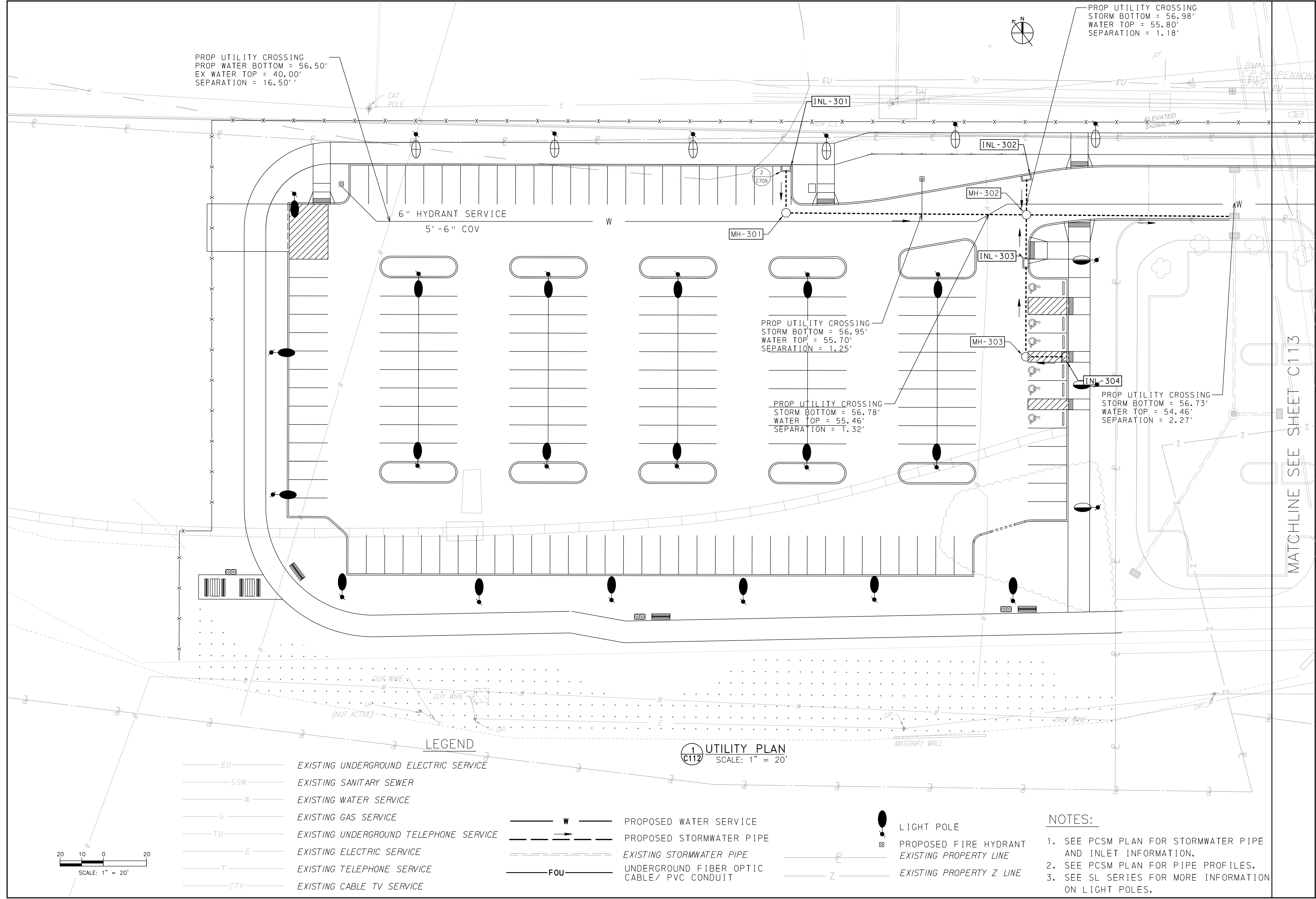
LAND DEVELOPMENT SUBMISSION

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
UTILITY PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: HB
DRAWING NUMBER: C112	
DWG. NO.: C015	OF: C070
SHT. NO.: 19	OF: 081
COMPUTER FILE NO.: 21D-24-C112	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION



PROP UTILITY CROSSING
PROP WATER BOTTOM = 56.50'
EX WATER TOP = 40.00'
SEPARATION = 16.50'

PROP UTILITY CROSSING
STORM BOTTOM = 56.98'
WATER TOP = 55.80'
SEPARATION = 1.18'

PROP UTILITY CROSSING
STORM BOTTOM = 56.95'
WATER TOP = 55.70'
SEPARATION = 1.25'

PROP UTILITY CROSSING
STORM BOTTOM = 56.78'
WATER TOP = 55.46'
SEPARATION = 1.32'

PROP UTILITY CROSSING
STORM BOTTOM = 56.73'
WATER TOP = 54.46'
SEPARATION = 2.27'

LEGEND

— EU —	EXISTING UNDERGROUND ELECTRIC SERVICE
— SSW —	EXISTING SANITARY SEWER
— W —	EXISTING WATER SERVICE
— G —	EXISTING GAS SERVICE
— TU —	EXISTING UNDERGROUND TELEPHONE SERVICE
— E —	EXISTING ELECTRIC SERVICE
— T —	EXISTING TELEPHONE SERVICE
— CTV —	EXISTING CABLE TV SERVICE

— W —	PROPOSED WATER SERVICE
— —> —	PROPOSED STORMWATER PIPE
— — —	EXISTING STORMWATER PIPE
— FOU —	UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT

●	LIGHT POLE
⊠	PROPOSED FIRE HYDRANT
— P —	EXISTING PROPERTY LINE
— Z —	EXISTING PROPERTY Z LINE

- NOTES:**
- SEE PCSM PLAN FOR STORMWATER PIPE AND INLET INFORMATION.
 - SEE PCSM PLAN FOR PIPE PROFILES.
 - SEE SL SERIES FOR MORE INFORMATION ON LIGHT POLES.

MATCHLINE SEE SHEET C113

1 UTILITY PLAN
SCALE: 1" = 20'

PHILADELPHIA GERMANTOWN & NORRISTOWN RAILROAD

(A.K.A. THE READING COMPANY)
(VARIABLE WIDTH R.O.W.)

MANAGER - ARCH / ENGINEERING

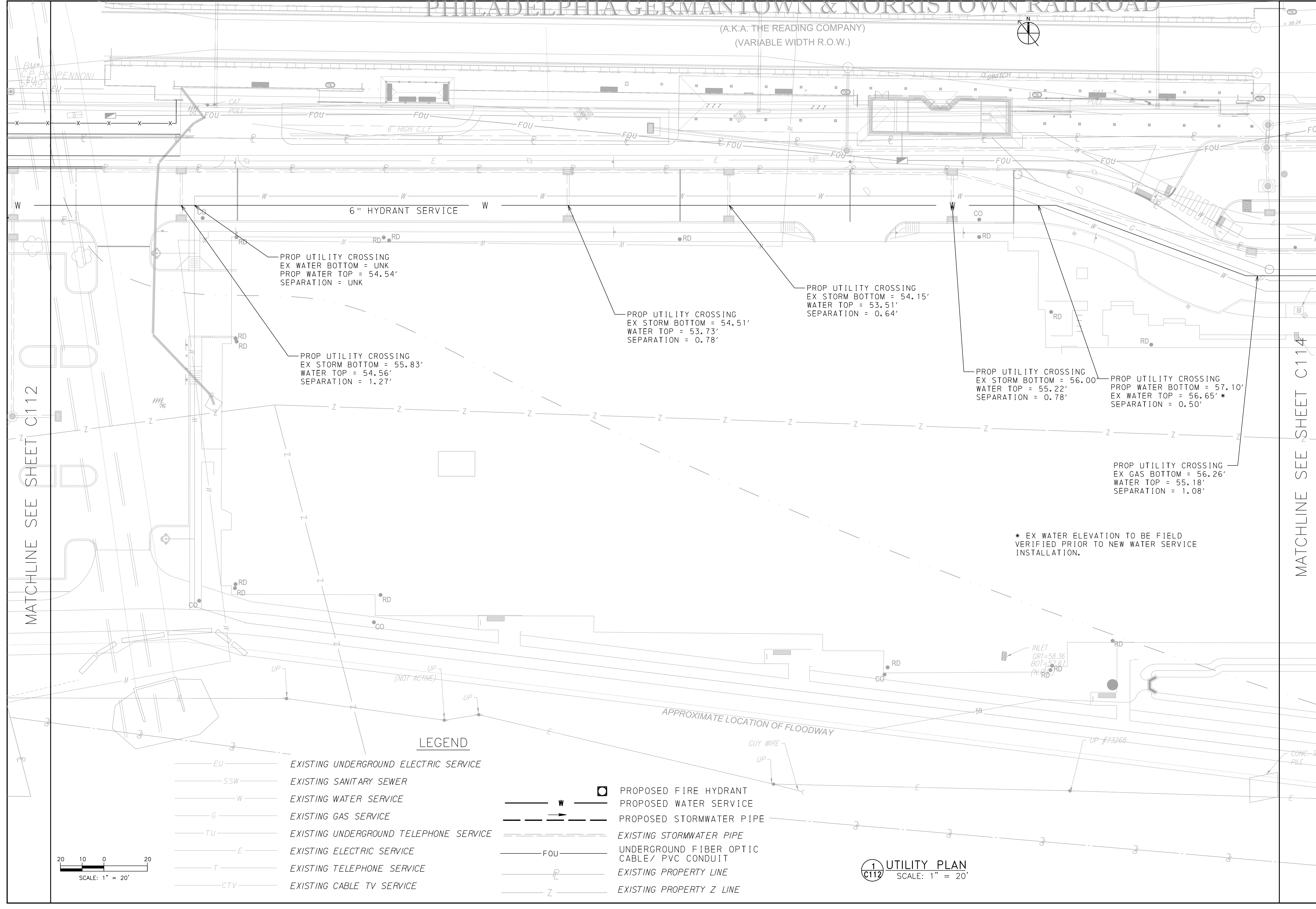
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CKD	APD

MATCHLINE SEE SHEET C112

MATCHLINE SEE SHEET C114



CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
UTILITY PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24	CHECKED BY: HB
DRAWING NUMBER: C113	
DWG. NO.: C016 OF C070	
SHT. NO.: 20 OF 081	
COMPUTER FILE NO.: 21D-24-C113	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION

MATCHLINE SEE SHEET C115

BLOCK 13
UNIT 55
APN 05-00-00028-00-3
N/F LANDS SEPTA
MANAGER - ARCH / ENGINEERING
PROJECT MANAGER

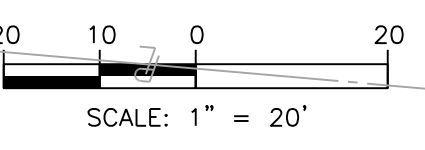
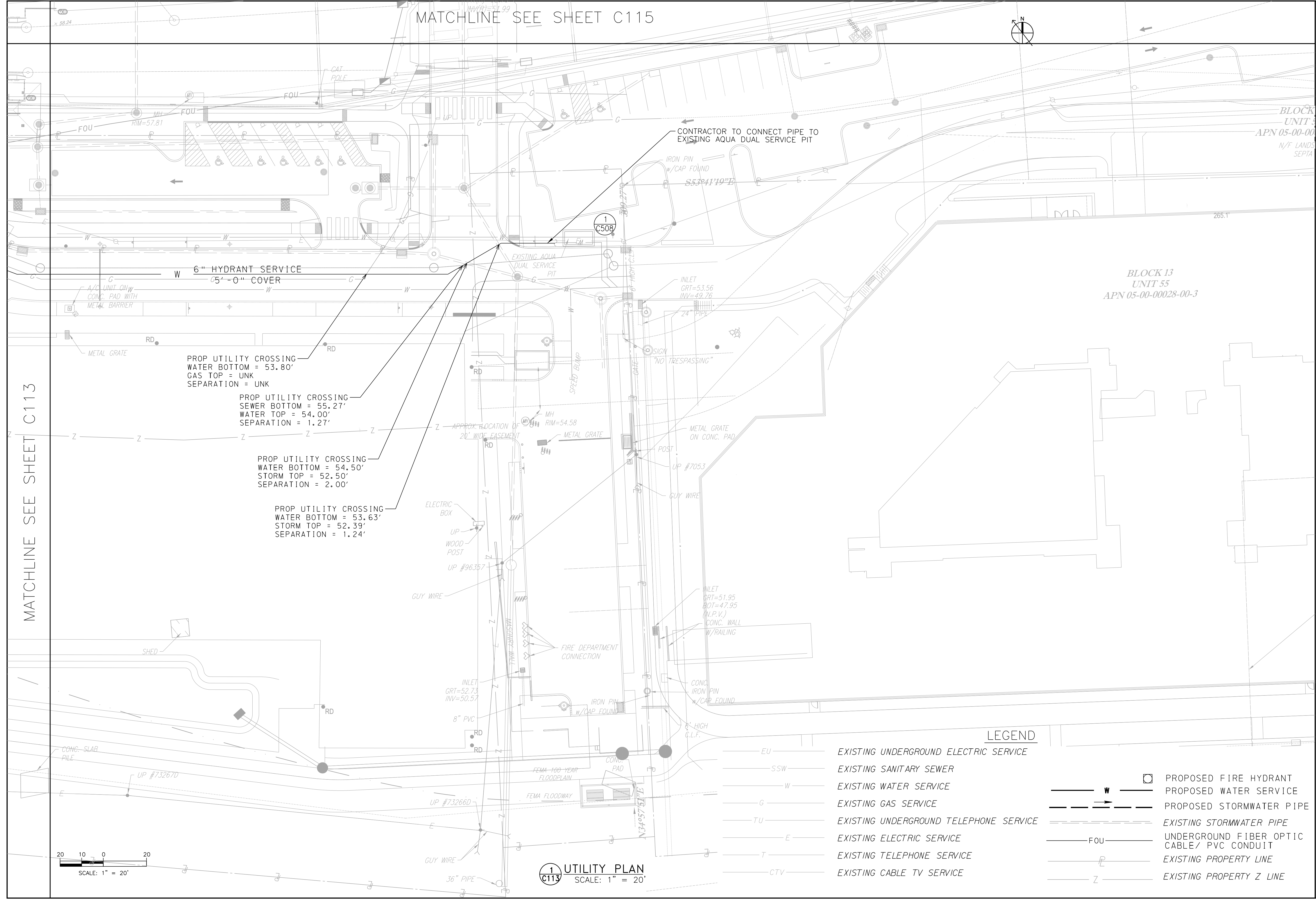


REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
UTILITY PLAN

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HB
DRAWING NUMBER:	C114		
DWG. NO.:	C017	OF:	C070
SHT. NO.:	21	OF:	081
COMPUTER FILE NO.:	21D-24-C114		
REV. NO.:	0		

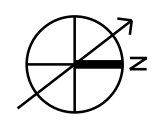
MATCHLINE SEE SHEET C113



1 C113 UTILITY PLAN
SCALE: 1" = 20'

LEGEND

- | | | | |
|--|--|--|---|
| | EXISTING UNDERGROUND ELECTRIC SERVICE | | PROPOSED FIRE HYDRANT |
| | EXISTING SANITARY SEWER | | PROPOSED WATER SERVICE |
| | EXISTING WATER SERVICE | | PROPOSED STORMWATER PIPE |
| | EXISTING GAS SERVICE | | EXISTING STORMWATER PIPE |
| | EXISTING UNDERGROUND TELEPHONE SERVICE | | UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT |
| | EXISTING ELECTRIC SERVICE | | EXISTING PROPERTY LINE |
| | EXISTING TELEPHONE SERVICE | | EXISTING PROPERTY Z LINE |
| | EXISTING CABLE TV SERVICE | | |



MANAGER - ARCH / ENGINEERING

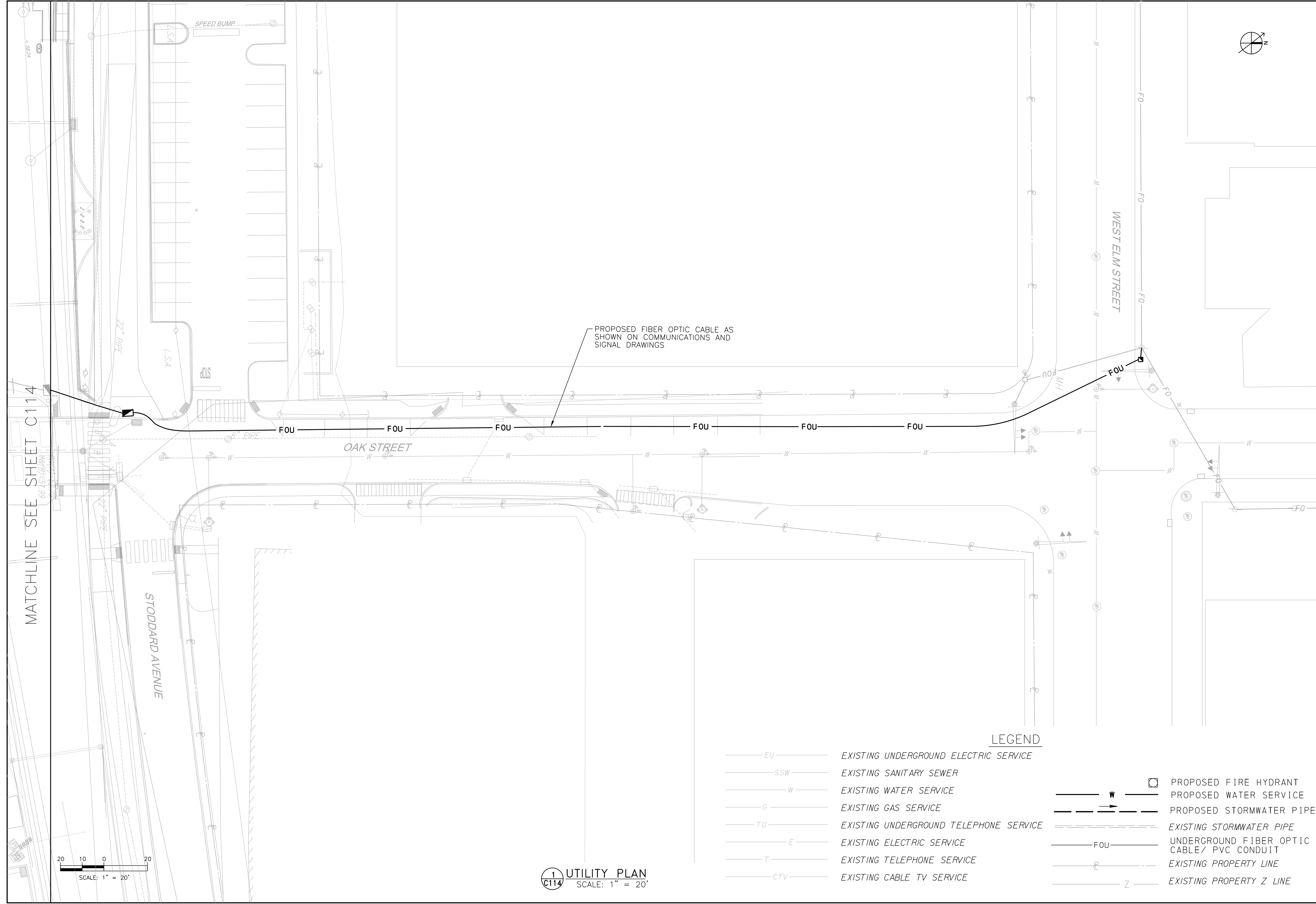
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APD

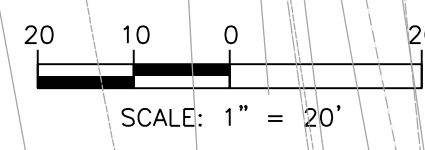
CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
UTILITY PLAN

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HLB
DRAWING NUMBER:	C115		
DWG. NO.:	C018	OF:	C070
SHT. NO.:	22	OF:	081
COMPUTER FILE NO.:	21D-24-C115	REV. NO.:	0



PROPOSED FIBER OPTIC CABLE AS SHOWN ON COMMUNICATIONS AND SIGNAL DRAWINGS

MATCHLINE SEE SHEET C114

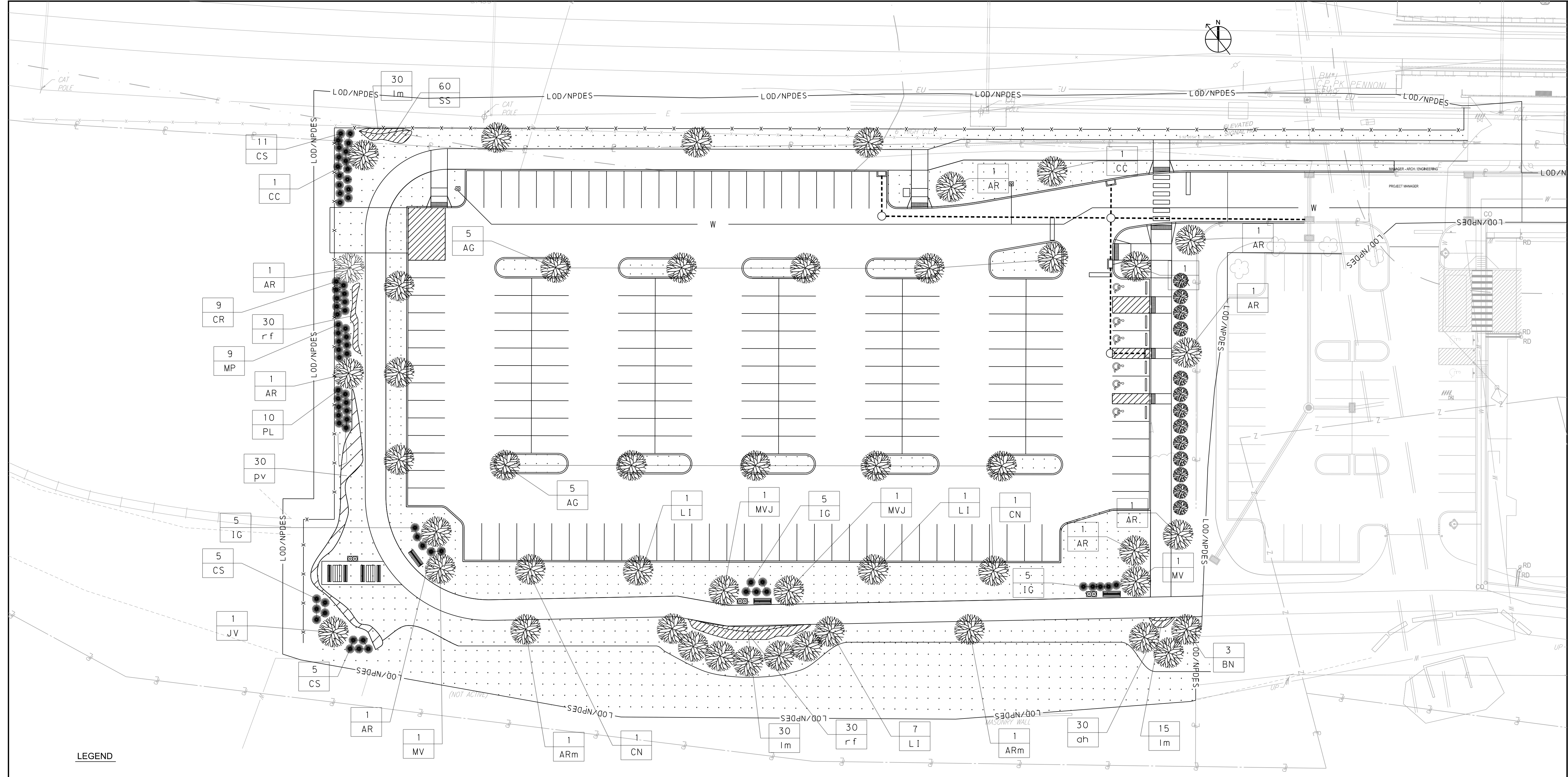


1 UTILITY PLAN
SCALE: 1" = 20'

LEGEND

- EU — EXISTING UNDERGROUND ELECTRIC SERVICE
- SSW — EXISTING SANITARY SEWER
- W — EXISTING WATER SERVICE
- G — EXISTING GAS SERVICE
- TU — EXISTING UNDERGROUND TELEPHONE SERVICE
- E — EXISTING ELECTRIC SERVICE
- T — EXISTING TELEPHONE SERVICE
- CTV — EXISTING CABLE TV SERVICE
- W — PROPOSED FIRE HYDRANT
- W — PROPOSED WATER SERVICE
- W — PROPOSED STORMWATER PIPE
- W — EXISTING STORMWATER PIPE
- FOU — UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
- P — EXISTING PROPERTY LINE
- Z — EXISTING PROPERTY Z LINE

LAND DEVELOPMENT SUBMISSION



- LEGEND**
- DECIDUOUS OR EVERGREEN TREE
 - SHRUBS
 - HERBACIOUS PLANTS, GRASSES, AND PERENNIALS
 - FORMULA B SEED MIX (SEE SHEET C605)
 - FORMULA L SEED MIX (SEE SHEET C605)
 - LOD/NPDES PROJECT SITE BOUNDARY/ LIMIT OF DISTURBANCE
 - FLHA FLOODWAY LIMIT

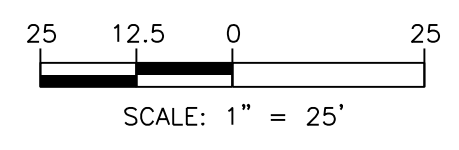
NOTES:

- SEE SHEET C110 FOR GRADING AND LAYOUT OF PARKING LOT, WALKS, FENCING AND SITE FURNITURE.
- SEE C507 FOR PLANTING DETAILS
- QUANTITIES PROVIDED IN PLAN SCHEDULE IS PROVIDED FOR REFERENCE ONLY. IF THERE IS ANY DISCREPANCY BETWEEN THE QUANTITIES SHOWN IN THE PLAN AND THE PLAN SCHEDULE, CONTRACTOR SHALL PROVIDE WHAT WAS SHOWN ON THE PLAN. SEE SPECIFICATIONS FOR TURF AND SPECIALTY SEEDING. ALL DISTURBED AREA UNLESS OTHERWISE SPECIFIED SHALL BE SEEDDED WITH ONE OF THE SEED MIXES SPECIFIED. CHECK W/ LANDSCAPE ARCHITECT TO VERIFY WHICH SEED MIX TO BE USED.

PLANT SCHEDULE

QTY	KEY	SCIENTIFIC NAME	COMMON NAME	ROOT	SIZE	REMARKS
DECIDUOUS TREES						
9	AR	Acer Rubrum 'Red Sunset'	Red Sunset Maple	B& B	3'-3 1/2" Cal.	
2	ARm	Acer Rubrum 'Red Sunset'	Red Sunset Maple	B& B	14'-16"Ht.	Multi-stem
3	BN	Betula nigra 'Heritage'	Heritage River Birch	B& B	14'-16"Ht.	Multi-stem
1	CC	Cercis canadensis	Easter Redbud	B& B	2'-2 1/2" Cal.	
2	CN	Carpinus caroliniana 'Native Flame'	Native Flame Hornbeam	B& B	3'-3 1/2" Cal.	
9	LI	Lagerstroemia indica 'X fauriei' 'Soiux'	Crape Myrtle Sioux	B& B	8-10"Ht.	
10	AG	Armstrong Gold Acer Rubrum 'JFS-KW78'	Armstrong Gold Maple	B& B	6-7"Ht.	
2	MVJ	Magnolia virginiana JN8 Emerald Tower	Sweet Bay Magnolia	B& B	3'-3 1/2" Cal.	
EVERGREEN TREES						
1	JV	Juniperus virginiana 'Hillspire'	Hillspire Eastern Red Cedar	B& B	6-7' Ht.	
2	MV	Magnolia virginiana 'Jim Wilson'	Moonglow Sweetbay Magnolia	B& B	6-7' Ht.	Multi-stem Tree Form

QTY	KEY	SCIENTIFIC NAME	COMMON NAME	ROOT	SIZE	REMARKS
SHRUBS						
9	CR	Clethra alnifolia 'Ruby Spice'	Ruby Spice Summersweet	Cont	18-24" Ht.	3' O.C.
21	CS	Cornus sanguinea 'Cato'	Arctic Sun Bloodtwig Dogwood	Cont	18-24" Ht.	3' O.C.
14	IG	Ilex glabra 'Shamrock'	Shamrock Inkberry	Cont	18-24" Ht.	3' O.C.
10	PL	Prunus laurocerasus 'Otto Luyken'	Cherry Lau	Cont	18-24" Ht.	3' O.C.
9	MP	Myrica pensylvanica	Northern Bayberry	Cont	18-24" Ht.	5' O.C.
HERBACEOUS PLANTS (GRASSES AND PERENNIALS)						
30	ah	Amsonia hubrichtii	Arkansas Bluestar	Cont	1 Gal.	3' O.C.
75	Im	Liriope muscari 'Variegata'	Lilly Turf	Cont	1 Gal.	18" O.C.
30	pV	Panicum virgatum 'Northwind'	Northwind Switchgrass	Cont	2 Gal.	3' O.C.
60	rf	Rudbeckia fulgida	Orange Coneflower	Cont	1 Gal.	18" O.C.
60	ss	Schizachyrium scoparium	Little Bluestem	Cont	2 Gal.	2' O. C.



LANDSCAPING PLAN
SCALE: 1" = 25'



REV	DATE	DESCRIPTION	BY	CKD	APD

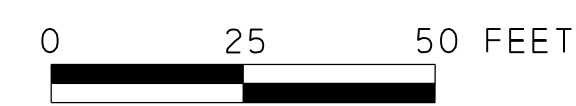
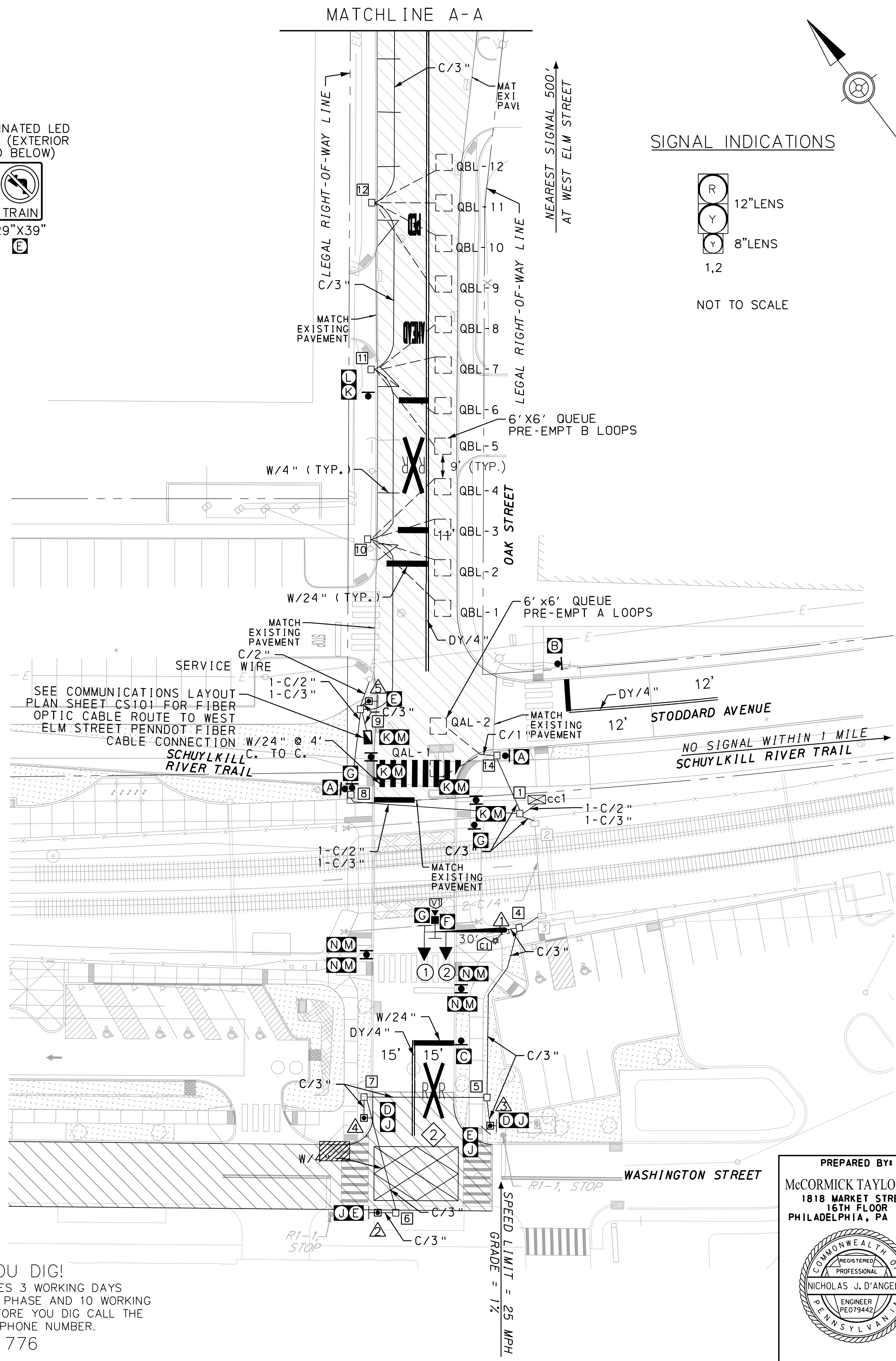
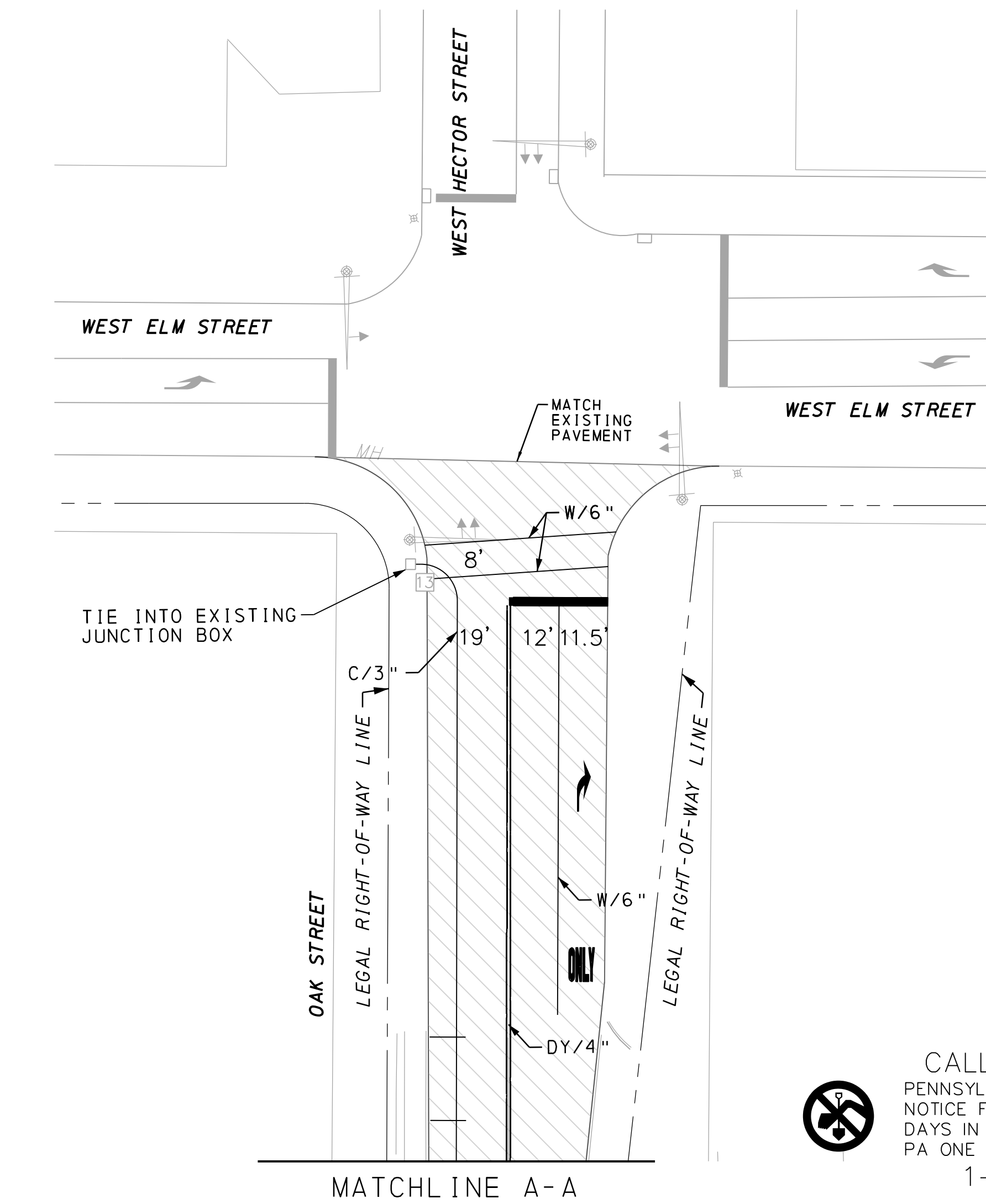
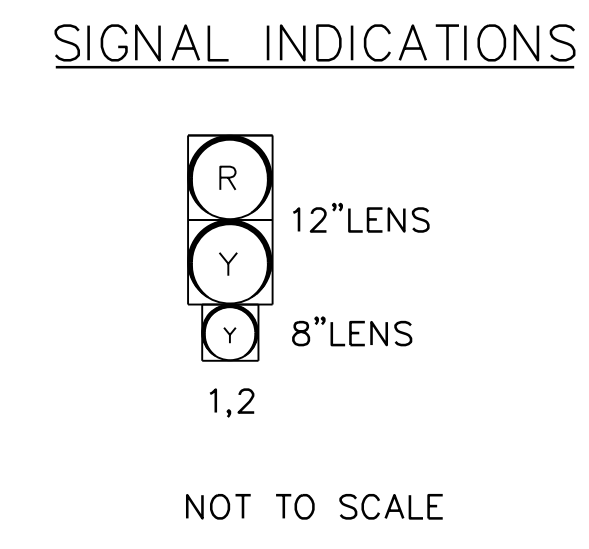
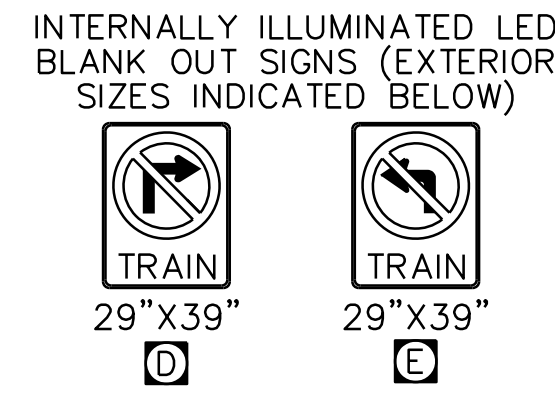
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
LANDSCAPING PLAN

SCALE: AS NOTED SCALE FACTOR: 1:1
DATE: 11/1/2024 DRAWN BY: HLB
WORK ORDER NO.: GEC21D-24 CHECKED BY: HB
DRAWING NUMBER: **C116**
DWG. NO.: C019 OF C070
SHT. NO.: 23 OF 081
COMPUTER FILE NO.: 21D-24-C116 REV. NO.: 0

LAND DEVELOPMENT SUBMISSION

OPERATOR: h:\bcoz
 FILE NAME: \\hghdat1\Projects\5951_PA_Septra_GEC\29_Conshohocken_Park.ing_Des.ign\300_CADD\p_lan_Set\Civil\595129-b-cv-p\in117.rsp1.dgn
 9/11/2024
 12:31:22 PM
 PLOTTED:

SIGNS			
PLAN SYMBOL	SERIES NUMBER	SIZE	REMARKS
A	R1-1	18"x18"	STOP
B	R1-1	30"x30"	STOP
C	R10-6A(L)	24"x30"	STOP HERE ON RED
D	R3-1	29"x39"	NO RIGHT TURN (BLANK OUT WITH TRAIN LEGEND)
E	R3-2	29"x39"	NO LEFT TURN (BLANK OUT WITH TRAIN LEGEND)
F	R8-8	24"x30"	DO NOT STOP ON TRACKS (BLANK OUT)
G	R8-8	24"x30"	DO NOT STOP ON TRACKS
J	R10-7	24"x30"	DO NOT BLOCK INTERSECTION
K	W11-15	30"x30"	COMBINED BICYCLE/PEDESTRIAN SIGN
L	W16-9P	24"x12"	AHEAD PLAQUE
M	W16-7P	24"x12"	DIAGONAL DOWNWARD POINTING ARROW PLAQUE
N	W11-2	30"x30"	PEDESTRIAN SIGN



CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS
 NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE BEFORE YOU DIG CALL THE
 PA ONE CALL SYSTEM TELEPHONE NUMBER.
 1-800-242-1776

PREPARED BY:
MCCORMICK TAYLOR, INC
 1818 MARKET STREET
 16TH FLOOR
 PHILADELPHIA, PA 19103

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY			C118

TRAFFIC SIGNAL NOTES

DO NOT MODIFY INSTALLATION WITHOUT PRIOR WRITTEN APPROVAL.

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH PUBLICATION 212.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND FACE OF CURB OR EDGE OF SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

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EXISTING	PROPOSED	DESCRIPTION
		MAST ARM
		STRAIN POLE/PEDESTAL
		VEHICULAR SIGNAL HEAD
		POST MOUNTED SIGN
		MAST ARM MOUNTED SIGN
		JUNCTION BOX
		VIDEO CAMERA
		CCTV CAMERA
		LOOP DETECTOR
		CONTROLLER CABINET
		CONDUIT/SIZE
		SOLID WHITE LINE/WIDTH
		BROKEN WHITE LINE/WIDTH
		BROKEN YELLOW LINE/WIDTH
		SOLID YELLOW LINE/WIDTH
		DOUBLE YELLOW LINE/WIDTH
		DOTTED WHITE LINE/WIDTH
		DETECTABLE WARNING SURFACE
		MILL AND OVERLAY AREA

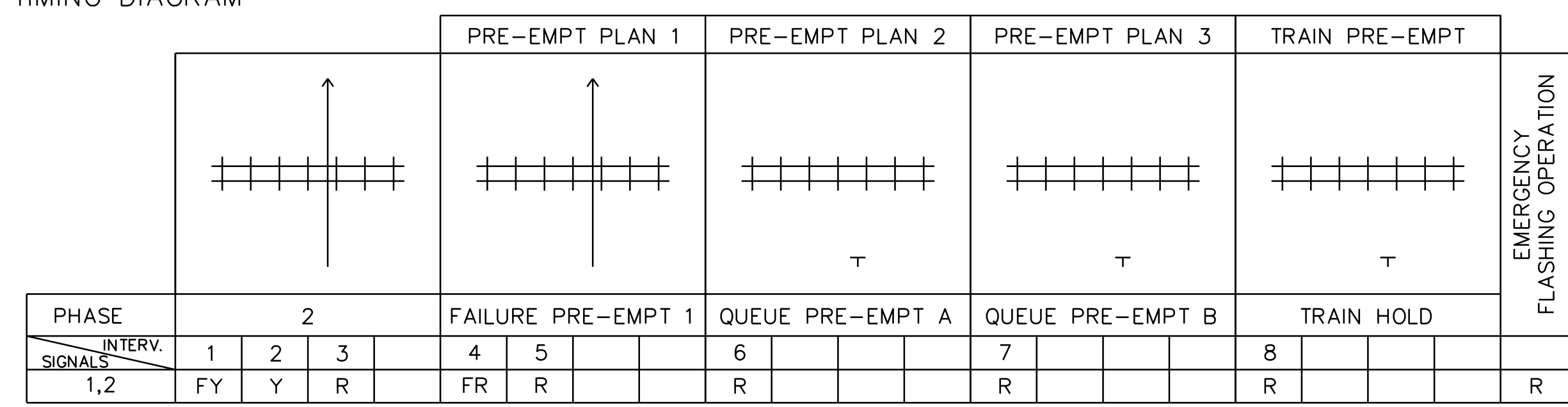
COUNTY:	MONTGOMERY
MUNICIPALITY:	BOROUGH OF CONSHOHOCKEN
INTERSECTION:	OAK STREET AND STODDARD AVENUE
REVIEWED:	
MUNICIPAL OFFICIAL	DATE
RECOMMENDED:	
DISTRICT TRAFFIC ENGINEER	DATE
FILE #	4052
SYSTEM FILE #	

TRAFFIC SIGNAL PLAN

LAND DEVELOPMENT SUBMISSION

OPERATOR: h1booz
 FILE NAME: \\highdat1\Projects\5951_PA_Septra_GEA\29_Conshohocken_Park.ing_Des.ign\300_CADD\p lan_Set\Civ1\595129-b-cv-p\in118_rsp2.dgn
 9/11/2024
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 PLOTTED:

MOVEMENT, SEQUENCE AND TIMING DIAGRAM



FIXED		4	4		**	4								***				
MINIMUM										38				25				
(TURN SYMBOL)	OFF	OFF	OFF		OFF	OFF				ON				ON				OFF
(TURN SYMBOL AND TRAIN)	OFF	OFF	OFF		OFF	OFF				OFF				OFF				OFF
(F)	OFF	ON	ON		ON	ON				ON				ON				ON
MEMORY	NL																	

- * * * FOR DURATION OF LOOP DETECTOR HEALTH FAIL OR RAILROAD INTERCONNECTION SUPERVISION FAILURE.
- * * * FOR DURATION OF TRAIN PREEMPTION
 - CONTROLLER TO DWELL IN PHASE 2 UNTIL ACTIVATED BY PRE-EMPT 1, QUEUE PRE-EMPT A, B, OR TRAIN HOLD.

TRAIN PRE-EMPTION NOTES:

1. THE MAXIMUM SEPTA TRAIN OPERATION SPEED APPROACHING AND CROSSING OAK STREET IS 55 MPH.
2. THE TRAFFIC SIGNAL CONTROLLER IS TO BE INTERCONNECTED WITH THE SEPTA RAILROAD CROSSING DEVICES. UPON ACTIVATION OF TRAIN PRE-EMPTION, THE TRAFFIC SIGNAL CONTROLLER IS TO PROVIDE THE TRAIN PREEMPTION PHASE AS SHOWN.
3. THE SIGNALS, WHEN ACTIVATED BY A TRAIN, SHALL TIME OUT ALL YELLOW AND RED INDICATIONS, FOLLOWED BY THE TRAIN PREEMPTION INTERVAL 8.
4. UPON COMPLETION OF "TRAIN PREEMPTION" PHASE, IN RETURNING TO NORMAL OPERATION, PHASE 2 INTERVAL 1 SHALL FOLLOW.
5. IF THE SIGNALS, WHEN ACTIVATED BY TRAIN PREEMPTION, ARE FLASHING, ALL SIGNALS SHALL REMAIN FLASHING.
6. SIGN D AND SIGN E SHALL ONLY ILLUMINATE THE "TRAIN" TEXT IN ADDITION TO THE TURN PROHIBITION SYMBOL WHEN TRAIN PREEMPTION IS ACTIVATED.
7. A MAXIMUM PREEMPTION TIMER SHALL BE PROVIDED. IF THE MAXIMUM PREEMPTION TIME IS EXCEEDED, THE QUEUE CUTTER SIGNAL SHALL ENTER FAILURE PRE-EMPT 1.

NOTE:

1. MINIMUM TIMINGS TO BE IMPLEMENTED WHEN THE SIGNAL IS TURNED ON. USING THE VIDEO MONITORING SYSTEM, 7 DAYS OF QUEUE MONITORING TO BE USED TO ADJUST THESE TIMES AS NEEDED TO ADJUST QUEUE PREEMPTION.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY			C119
BOROUGH OF CONSHOHOCKEN				
REVISION NUMBER	REVISIONS			DATE BY

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—	—	MAST ARM MOUNTED SIGN
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—	—	VIDEO CAMERA
—	—	CCTV CAMERA
—	—	LOOP DETECTOR
—	—	CONTROLLER CABINET
—	—	CONDUIT/SIZE
—	—	SOLID WHITE LINE/WIDTH
—	—	BROKEN WHITE LINE/WIDTH
—	—	BROKEN YELLOW LINE/WIDTH
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—	—	DOUBLE YELLOW LINE/WIDTH
—	—	DOTTED WHITE LINE/WIDTH
—	—	DETECTABLE WARNING SURFACE
—	—	MILL AND OVERLAY AREA
—		PHASE NUMBER

COUNTY: MONTGOMERY

MUNICIPALITY: BOROUGH OF CONSHOHOCKEN

INTERSECTION: OAK STREET AND STODDARD AVENUE

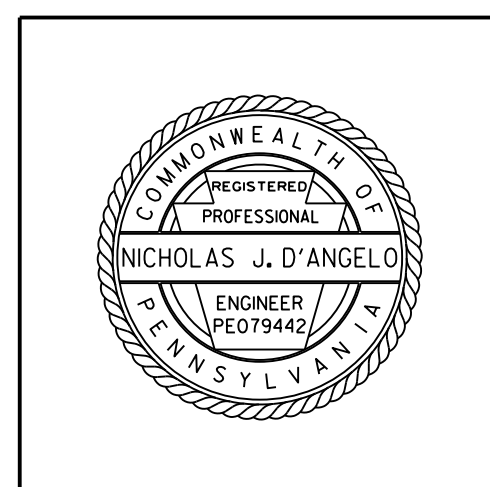
REVIEWED: _____

MUNICIPAL OFFICIAL _____ DATE _____

RECOMMENDED: _____

DISTRICT TRAFFIC ENGINEER _____ DATE _____

FILE # 4052 SYSTEM FILE # _____



TRAFFIC SIGNAL PLAN

LAND DEVELOPMENT SUBMISSION

OPERATOR: h:\beoz
 FILE NAME: \\highdat1\Projects\5951_PA_Sep10_GEA\29_Conshohocken_Park.ign\300_CADD\Plan_Set\Civil\595129-b-cv-p\in119_rsp3.dgn
 9/11/2024
 12:11:24 PM
 PLOTTED:

WARNING

Highway – Rail Grade Crossing
Warning System and Highway
Traffic Signals are
Interconnected.

BEFORE MODIFICATION is made to any operation which connects to or controls the timing of an active railroad warning system and/or timing and phasing of a traffic signal the appropriate party(ies) shall be notified and, if necessary, a joint inspection

U.S. DOT/AAR Crossing Number: XXXXXXX

- Highway Agency: Pennsylvania Dept. of Transportation
Phone Number: (610) 205-6700
- Railroad: S.E.P.T.A.
Phone Number: (215) 580-8232
- Other: Borough of Conshohocken
Phone Number: (610) 828-1092

U.S. Department of Transportation
 Federal Railroad Administration
 Federal Highway Administration
 Federal Transit Administration
 National Highway Traffic Safety Administration

QUEUE PRE-EMPT A

- QUEUE PRE-EMPT A LOOPS (QAL-1 & QAL-2) AT THE INTERSECTION OF OAK STREET AND STODDARD AVENUE OUTPUT CALL AT THIS INTERSECTION AND THE INTERSECTION OF OAK STREET AND WEST ELM STREET FOR QUEUE PRE-EMPT A AFTER 4 SECONDS OF CONSTANT DETECTION OF EITHER LOOP.
- UPON ACTUATION OF QUEUE PRE-EMPT A, ALL FLASHING YELLOW INTERVALS SHALL TERMINATE, INTERVAL 4 TO FOLLOW.
- ANY YELLOW INDICATIONS SHALL TIME OUT BEFORE GOING TO QUEUE PRE-EMPT A INTERVAL 4.
- IF QUEUE PRE-EMPT A PRE-EMPTION OCCURS DURING EMERGENCY FLASHING OPERATION, THE SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF QUEUE PRE-EMPT A, PHASE 2 INTERVAL 1 SHALL FOLLOW.

QUEUE PRE-EMPT B

- AFTER 4 SECONDS OF CONSTANT DETECTION BY QUEUE PRE-EMPT B LOOPS, SIGNAL HEADS 1 AND 2 SHALL GO Y, R IMMEDIATELY.
- UPON COMPLETION OF QUEUE PRE-EMPT B, PHASE 2, INTERVAL 1 SHALL FOLLOW.

INTERCONNECTION CIRCUITS

- THE FOLLOWING TERMINALS SHALL BE PROVIDED IN THE INTERCONNECTION JUNCTION BOX ON THE SIDE OF THE INSTRUMENT HOUSE (PREFERRED) OR AS PROVIDED BY THE RAILROAD STANDARDS FOR THE TERMINATION OF THE TRAFFIC SIGNAL INTERCONNECTION CABLES

- AP - FRONT
- AP - HEEL
- AP - BACK

PRE-EMPTION PRIORITY LOGIC

PRE-EMPT 1 → TRAIN PRE-EMPTION
 PRE-EMPT 2 → FAILURE PRE-EMPT 1
 PRE-EMPT 3 → QUEUE PRE-EMPT A
 PRE-EMPT 4 → QUEUE PRE-EMPT B

RAILROAD PRE-EMPTION PARAMETERS (SECONDS)		
	DESCRIPTION	VALUE
MT	REQUIRED MINIMUM TIME	20
CT	CLEARANCE TIME	10
APT	ADVANCE PRE-EMPTION TIME	8
	MAXIMUM PRE-EMPTION TIME	38

RAILROAD PRE-EMPTION TIMING SEQUENCE	
RIGHT OF WAY TRANSFER TIME:	9 SECONDS
QUEUE CLEARANCE TIME:	25 SECONDS
DESIRED MINIMUM SEPARATION TIME:	4 SECONDS
MAXIMUM PRE-EMPTION TIME:	38 SECONDS
<hr/>	
RAILROAD LIGHTS FLASH AFTER:	19 SECONDS
RAILROAD GATES START DESCENDING AFTER:	24 SECONDS
RAILROAD GATES DOWN AFTER:	34 SECONDS
FASTEST TRAIN CROSSES AFTER:	38 SECONDS

QUEUE CLEARANCE TIME CALCULATIONS PARAMETERS		
	DESCRIPTION	VALUE
CSD	CLEAR STORAGE DISTANCE	0
MTCD	MINIMUM TRACK CLEARANCE DISTANCE	38
DVL	DESIGN VEHICLE LENGTH (SCHOOL BUS)	40
L	QUEUE START-UP DISTANCE, ALSO STOP-LINE DISTANCE	80
DVCD	DESIGN VEHICLE CLEARANCE	120

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY			C120

BOROUGH OF CONSHOHOCKEN				
REVISION NUMBER	REVISIONS	DATE	BY	

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COUNTY: MONTGOMERY

MUNICIPALITY: BOROUGH OF CONSHOHOCKEN

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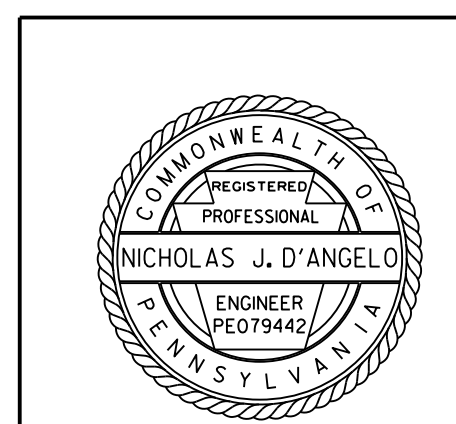
REVIEWED: _____

MUNICIPAL OFFICIAL _____ DATE _____

RECOMMENDED: _____

DISTRICT TRAFFIC ENGINEER _____ DATE _____

FILE # 4052 SYSTEM FILE # _____



TRAFFIC SIGNAL PLAN

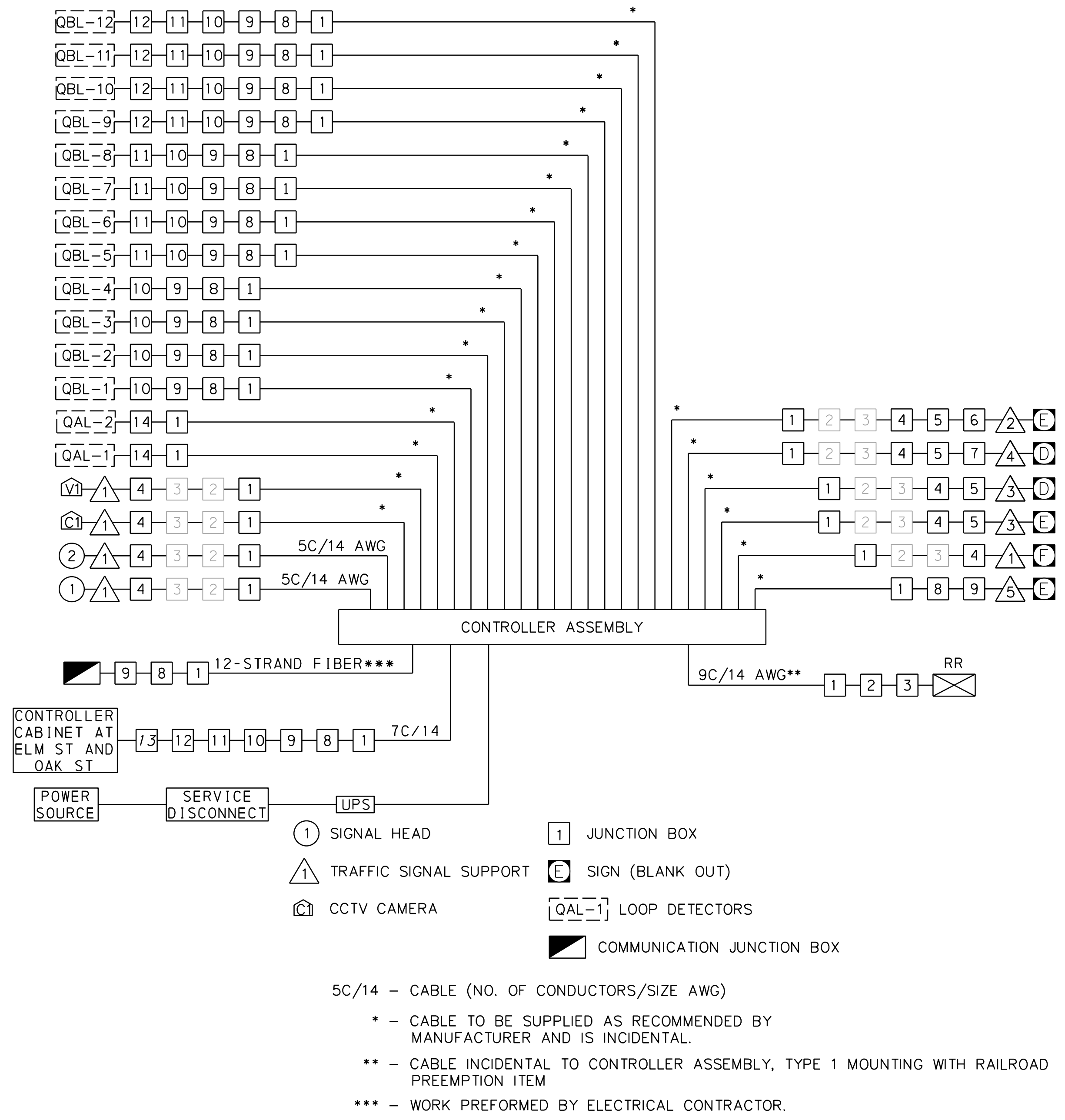
LAND DEVELOPMENT SUBMISSION

OPERATOR: h:\boc2
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MATERIALS LIST

DESCRIPTION
QUEUE DETECTION AND MONITORING SYSTEM
POST MOUNTED SIGNS, TYPE B
POST MOUNTED SIGNS, TYPE F
STRUCTURE MOUNTED FLAT SHEET ALUMINUM SIGNS
LED BLANK OUT SIGN
1 INCH CONDUIT
2 INCH CONDUIT
3 INCH CONDUIT
TRENCH AND BACKFILL, TYPE I
TRENCH AND BACKFILL, TYPE II
TRENCH AND BACKFILL, TYPE III
SIGNAL CABLE, 14 AWG, 5 CONDUCTOR
SIGNAL CABLE, 14 AWG, 7 CONDUCTOR
SIGNAL CABLE, 14 AWG, 9 CONDUCTOR
JUNCTION BOX, JB-26
JUNCTION BOX, JB-27
JUNCTION BOX, JB-30
ELECTRICAL SERVICE, TYPE C
UNINTERRUPTIBLE POWER SUPPLY (UPS)
4" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS
4" YELLOW HOT THERMOPLASTIC PAVEMENT MARKINGS
6" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS
24" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS
WHITE HOT THERMOPLASTIC LEGEND, "ONLY", 8' - 0"
WHITE HOT THERMOPLASTIC LEGEND, "PED", 8' - 0"
WHITE HOT THERMOPLASTIC LEGEND, "RR CROSSING", 6' - 6", 12' LANE WIDTH (INCLUDES "X", "RR", AND 2 TRANSVERSE BANDS)
WHITE HOT THERMOPLASTIC LEGEND, "AHEAD", 8' - 0"
WHITE HOT THERMOPLASTIC LEGEND, "RIGHT ARROW", 12' - 0" X 3' - 0"
VEHICULAR SIGNAL HEAD, TWO 12" SECTIONS, ONE 8" SECTION
12-STRAND FIBER OPTIC CABLE
CONTROLLER ASSEMBLY, TYPE 1 MOUNTING WITH RAILROAD PREEMPTION
MANAGED NETWORK SWITCH (SIGNAL CABINET)
FIBER OPTIC TERMINATION PANEL

WIRING DIAGRAM

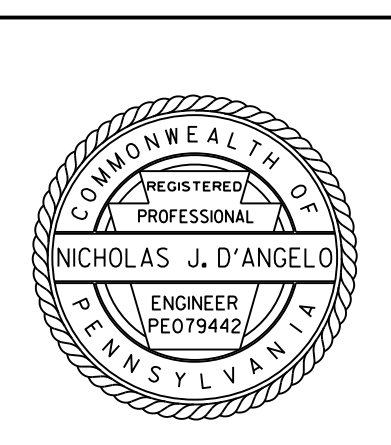


TRAFFIC SIGNAL/SIGN SUPPORTS

STRUC. NO.	DESCRIPTION	STATION	SIDE	OFFSET	MAST ARM															PEDESTAL SHAFT				
					H	K	ARM "A"					ARM "C"					VIDEO DETECTOR	RADAR DETECTOR	W	H	N			
							L	M	N	O	P	Q	R	S	T	U						Y	G	X
1	TRAFFIC SIGNAL SUPPORT, 30' MAST ARM, POWDER COATED	100+92	R	24	19	30	30	22					30	26						24				
2	TRAFFIC SIGNAL SUPPORT, 14' PEDESTAL, POWDER COATED	99+87	L	13																	14	10		
3	TRAFFIC SIGNAL SUPPORT, 14' PEDESTAL, POWDER COATED	100+16	R	29																	14	10		
4	TRAFFIC SIGNAL SUPPORT, 14' PEDESTAL, POWDER COATED	100+22	L	18																	14	10		
5	TRAFFIC SIGNAL SUPPORT, 12' PEDESTAL, POWDER COATED	101+81	L	20																	12	7		
6																								
7																								
8																								
9																								
10																								

VERTICAL POLES AND MAST ARMS TO BE DESIGNED BY MANUFACTURER TO ADEQUATELY SUPPORT LOADS AS SHOWN ON THE PLAN OR MAXIMUM LOAD REQUIREMENTS ESTABLISHED BY AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WHICH EVER IS GREATER.

TRAFFIC SIGNAL PLAN



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY			C 121

BOROUGH OF CONSHOHOCKEN

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COUNTY: MONTGOMERY

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REVIEWED: _____

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RECOMMENDED: _____

DISTRICT TRAFFIC ENGINEER: _____ DATE: _____

FILE # 4052 SYSTEM FILE # _____

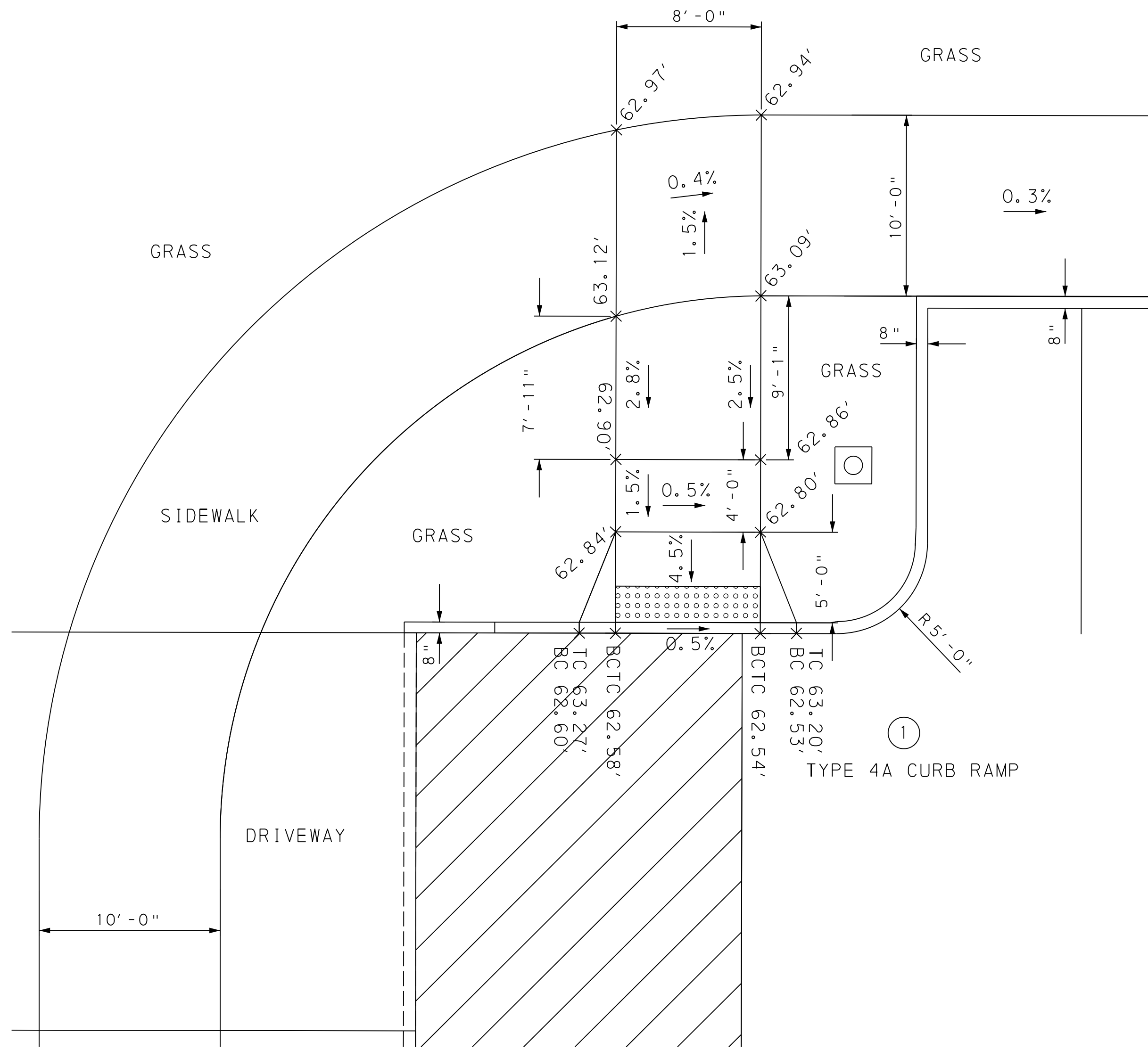
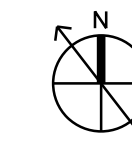
LAND DEVELOPMENT SUBMISSION

REV	DATE	DESCRIPTION	BY	CKD	APD

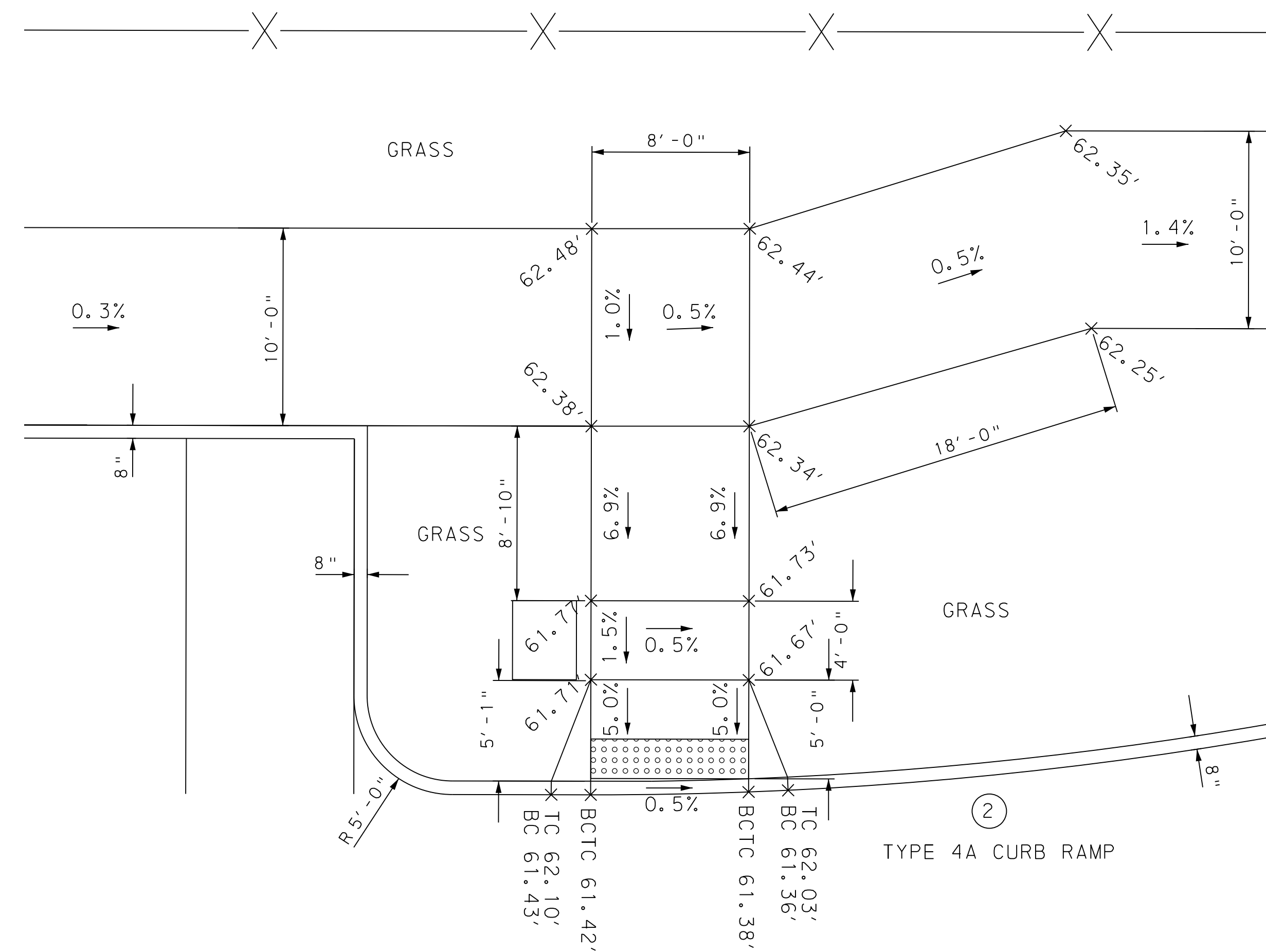
CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
ADA RAMP DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	JH
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	KB
DRAWING NUMBER:	C122		
DWG. NO.:	C025	OF:	C070
SHT. NO.:	29	OF:	081
COMPUTER FILE NO.:	21D-24-C122	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION



1 ACCESSIBLE RAMP 1 DETAIL
SCALE: 1" = 5'



2 ACCESSIBLE RAMP 2 DETAIL
SCALE: 1" = 5'

MANAGER - ARCHITECTURE/ENGINEERING

PROJECT MANAGER

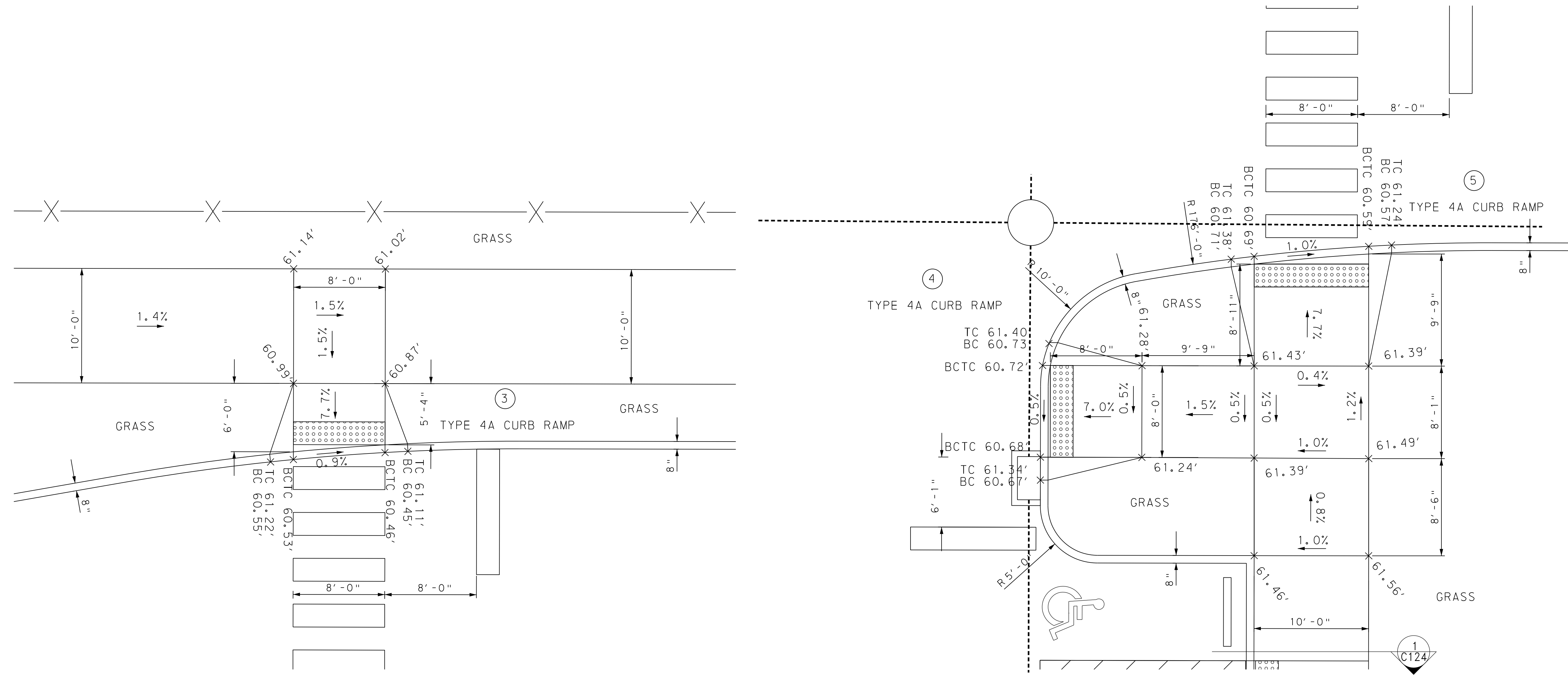
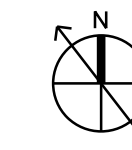


NO.	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
ADA RAMP DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	JH
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	KB
DRAWING NUMBER:	C123		
DWG. NO.:	C026	OF:	C070
SHT. NO.:	30	OF:	081
COMPUTER FILE NO.:	21D-24-C123	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION



1 ACCESSIBLE RAMP 3 DETAIL
SCALE: 1" = 5'

2 ACCESSIBLE RAMPS 4 & 5 DETAILS
SCALE: 1" = 5'

MANAGER - ARCHITECTURE/ENGINEERING

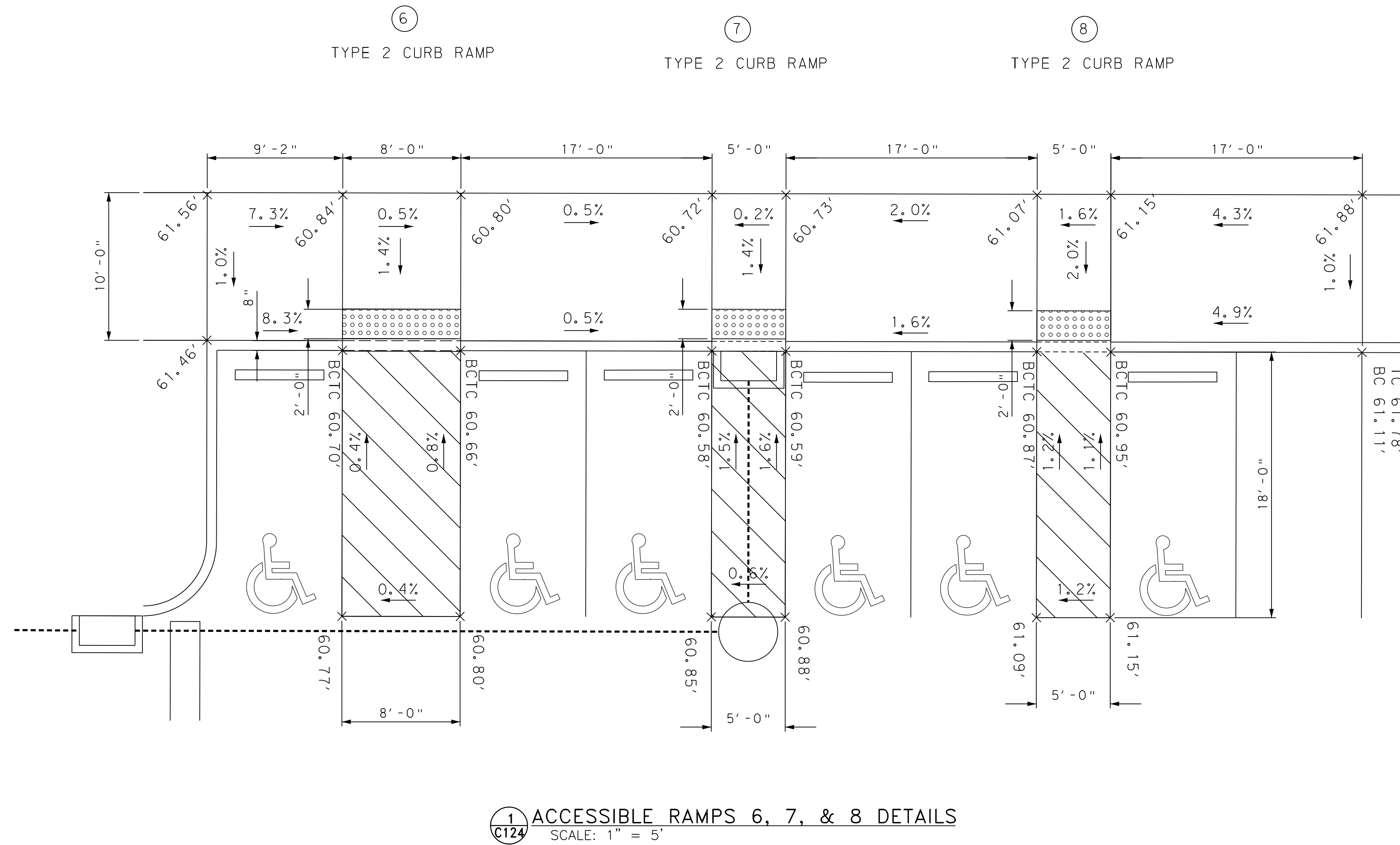
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
ADA RAMP DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	JH
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	KB
DRAWING NUMBER:	C124		
DWG. NO.:	C027	OF	C070
SHT. NO.:	31	OF	081
COMPUTER FILE NO.:	21D-24-C124	REV. NO.:	0



1 ACCESSIBLE RAMPS 6, 7, & 8 DETAILS
SCALE: 1" = 5'

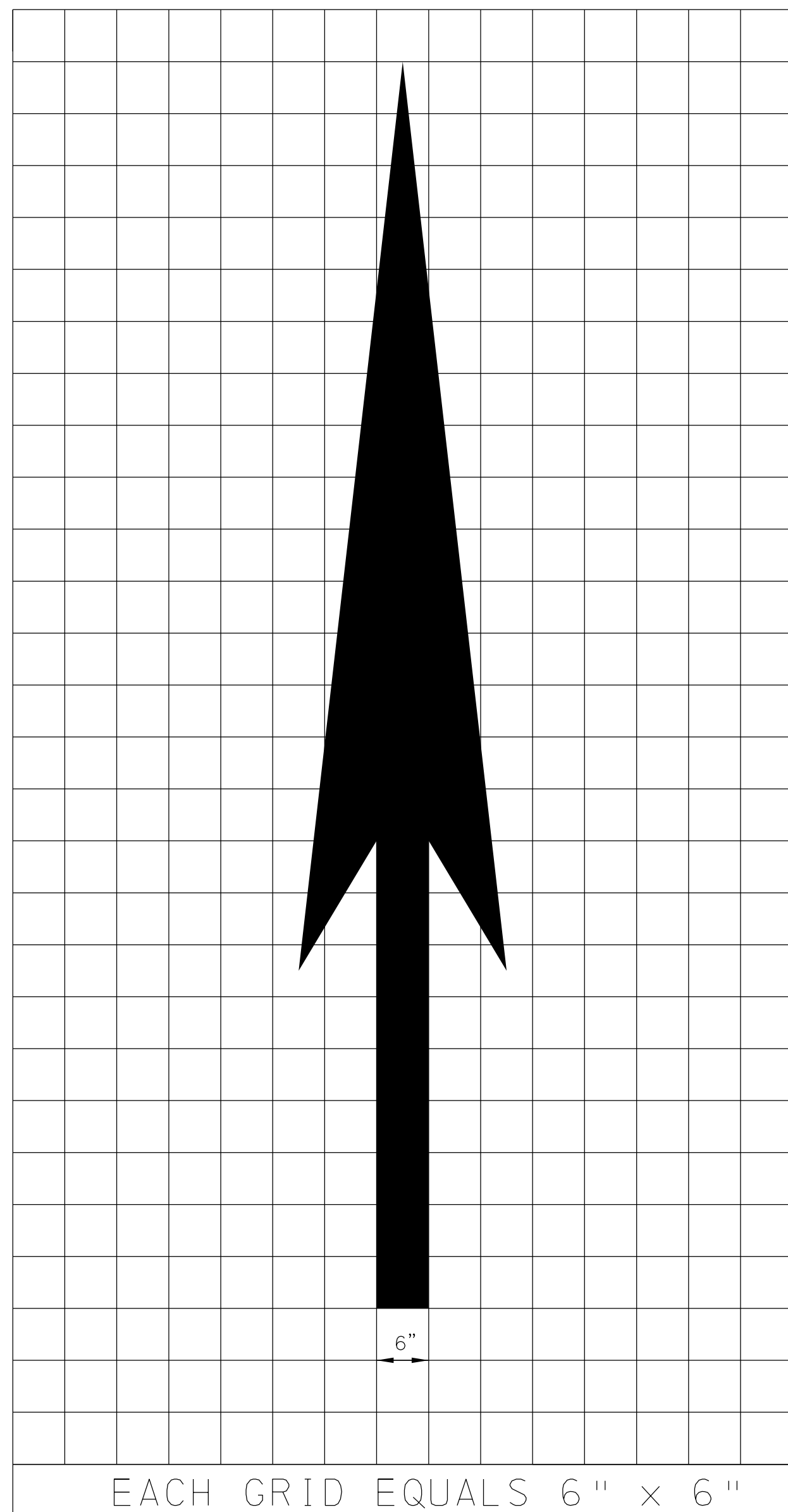


PEDESTRIAN SIGN
PADOT W11-2 (30"x30")
ARROW PLAQUE
PADOT W16-7P
(24"x12")

NOTES

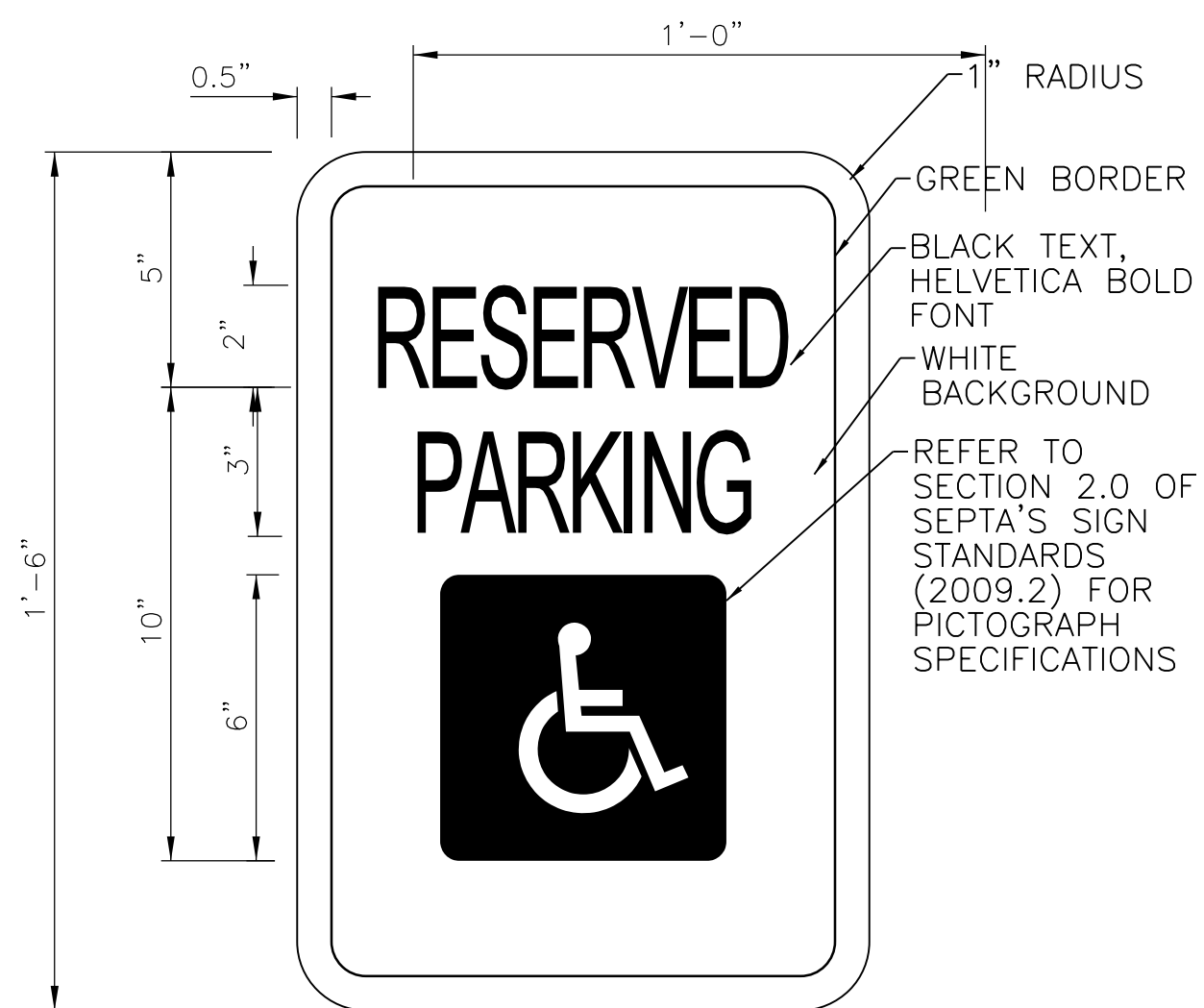
1. INSTALL SIGN WITH 7'-0" CLEAR FROM BOTTOM OF SIGN TO GROUND LEVEL.
2. INSTALL SIGN USING PADOT TYPE B INSTALLATION (SQUARE STEEL POST).
3. SIGN DIMENSIONS AND COLORS PER PADOT HANDBOOK OF APPROVED SIGNS.

1 PEDESTRIAN CROSSING SIGN
SCALE: NO SCALE

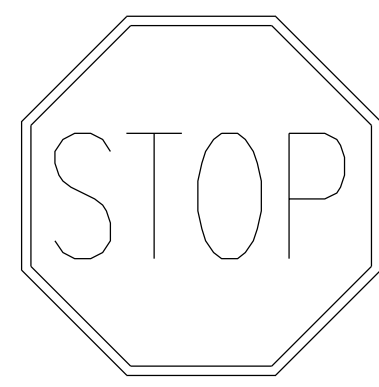


WHITE WATERBORNE PAVEMENT LEGEND,
"THRU ARROW"

5 PAVEMENT MARKING DETAILS
NOT TO SCALE



2 HANDICAP RESERVED PARKING SIGN
SCALE: NO SCALE

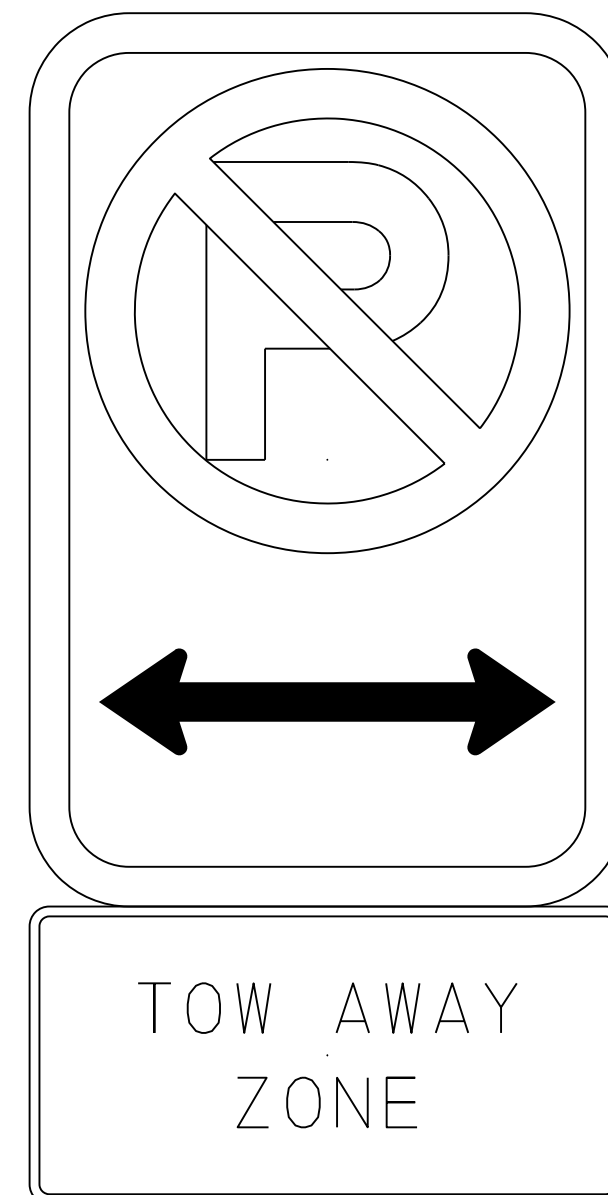


STOP SIGN
PADOT R1-1 (30"x30")

NOTES

1. INSTALL SIGN WITH 7'-0" CLEAR FROM BOTTOM OF SIGN TO GROUND LEVEL.
2. INSTALL SIGN USING PADOT TYPE B INSTALLATION (SQUARE STEEL POST).
3. SIGN DIMENSIONS AND COLORS PER PADOT HANDBOOK OF APPROVED SIGNS.

3 PENNDOT STOP SIGN - R1-1
SCALE: NO SCALE

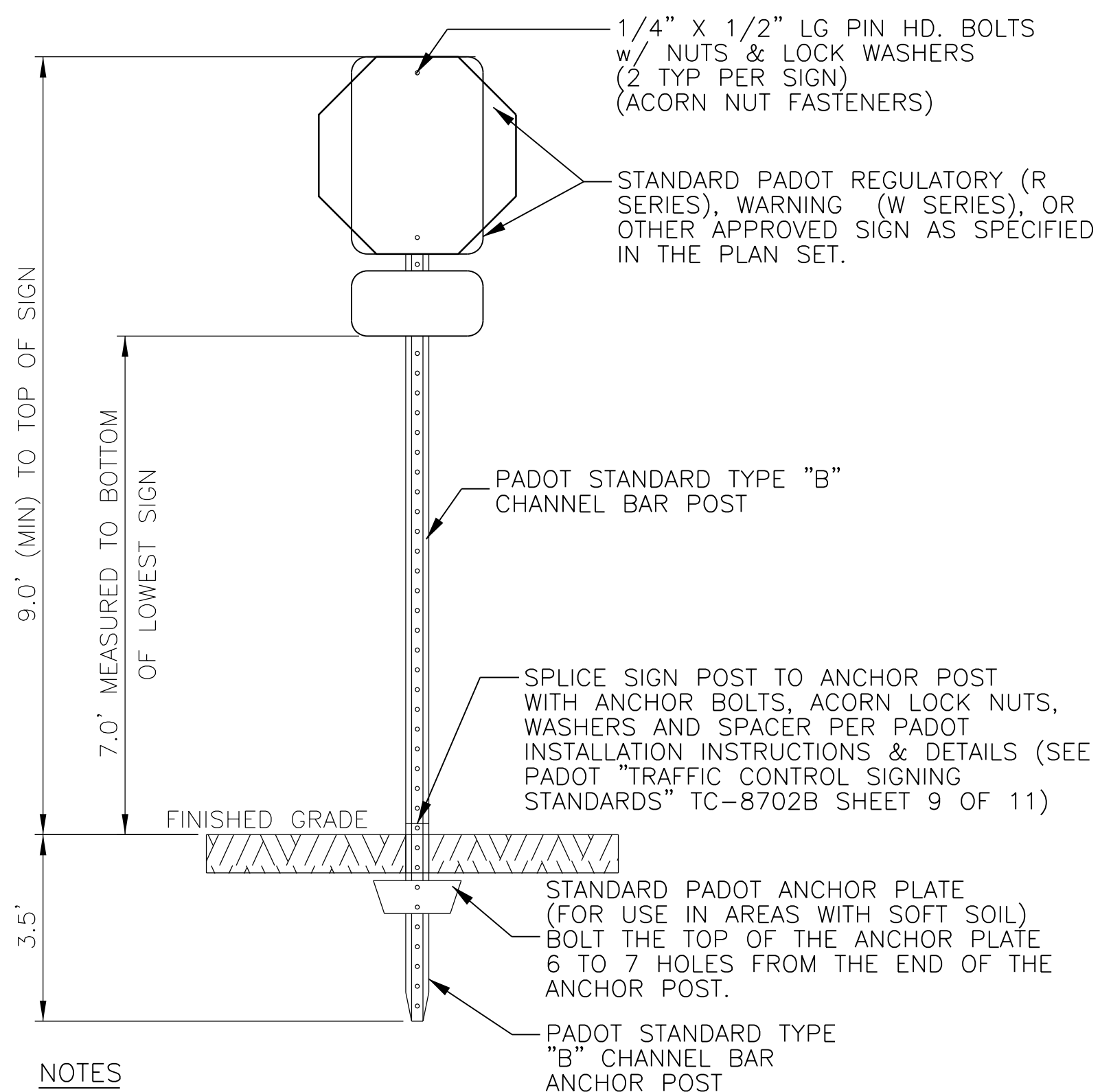


NO PARKING SYMBOL/ARROW SIGN
PADOT R7-302
(12"x18")
TOW-AWAY ZONE SIGN
PADOT R7-201AP
(12"x6")

NOTES

1. INSTALL SIGN WITH 7'-0" CLEAR FROM BOTTOM OF SIGN TO GROUND LEVEL.
2. INSTALL SIGN USING PADOT TYPE B INSTALLATION (SQUARE STEEL POST).
3. SIGN DIMENSIONS AND COLORS PER PADOT HANDBOOK OF APPROVED SIGNS.

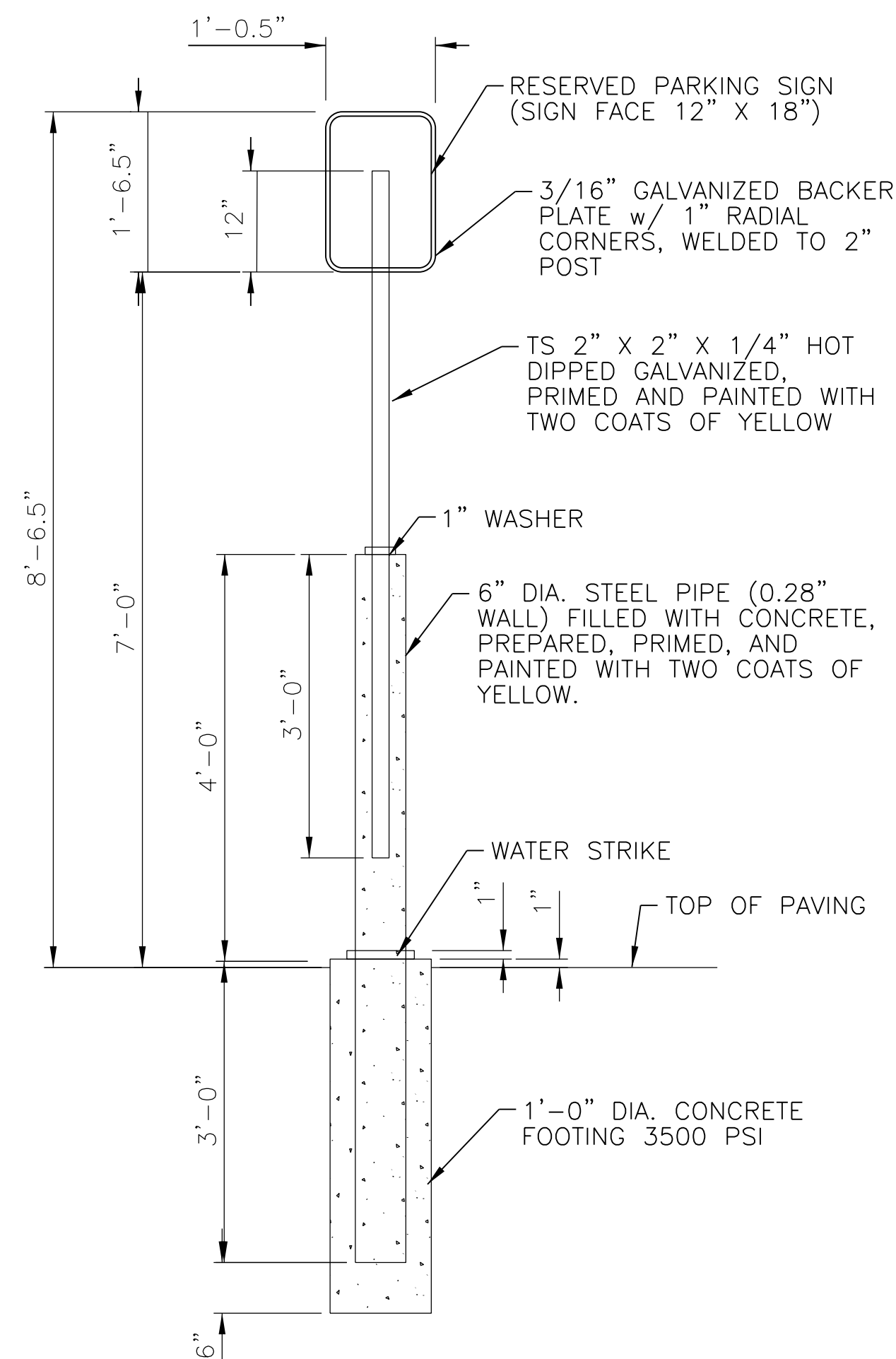
4 NO PARKING / TOW-AWAY SIGN ASSEMBLY
SCALE: NO SCALE



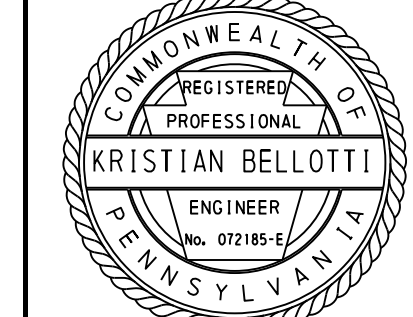
NOTES

1. POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B SHEET 8 THRU 11 OF 11. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN.
2. SIGN INSTALLATION SHALL BE IN ACCORDANCE WITH PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B SHEETS 8 THRU 11 OF 11, AS AMENDED.
3. SEE CIVIL PLANS FOR EXACT LOCATION, TYPE AND SIZE OF SIGNS, ALL REGULATORY (R SERIES), WARNING (W SERIES), OR OTHER APPROVED SIGNS SHALL CONFORM TO THE PADOT "HANDBOOK OF APPROVED SIGNS", PUBLICATION 236M, AS AMENDED, UNLESS OTHERWISE SPECIFIED.
4. SIGNS SHALL BE SETBACK 2.0' FROM CURB LINES, GUIDE RAILS OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.
5. ALONG NON-CURBED LOCAL ROADWAYS SIGNS SHALL BE SETBACK 6.0' FROM THE SHOULDER/PAVING EDGE AND SHALL BE AT A HEIGHT 5.0' ABOVE THE EDGE OF PAVEMENT SURFACE.
6. ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.
7. FOR "RESERVED PARKING SIGN" (R7-8) REFER TO DETAIL AND SPECIFIED MOUNTING HEIGHTS WHICH ARE LOWER FOR INCREASED VISIBILITY PER ADA REGULATIONS.

6 STANDARD POLE MOUNTED SIGN INSTALLATION DETAIL
SCALE: NO SCALE



7 RESERVED PARKING SIGN: MOUNTING DETAIL
SCALE: NO SCALE



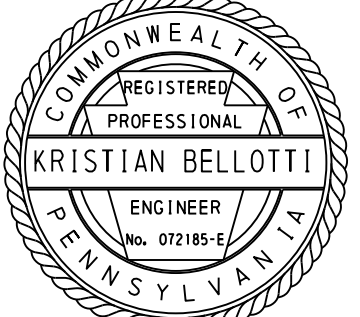
REV	DATE	BY	DESCRIPTION

CONSHOCKEN RAILROAD STATION
MANAYUNK/RRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SIGNING AND PAVEMENT MARKING DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	JJO
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HE
DRAWING NUMBER:	C501	COMPUTER FILE NO.:	21D-24-C501
DWG. NO.:	C028	OF:	C070
SHT. NO.:	32	OF:	081
REV. NO.:	0		

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

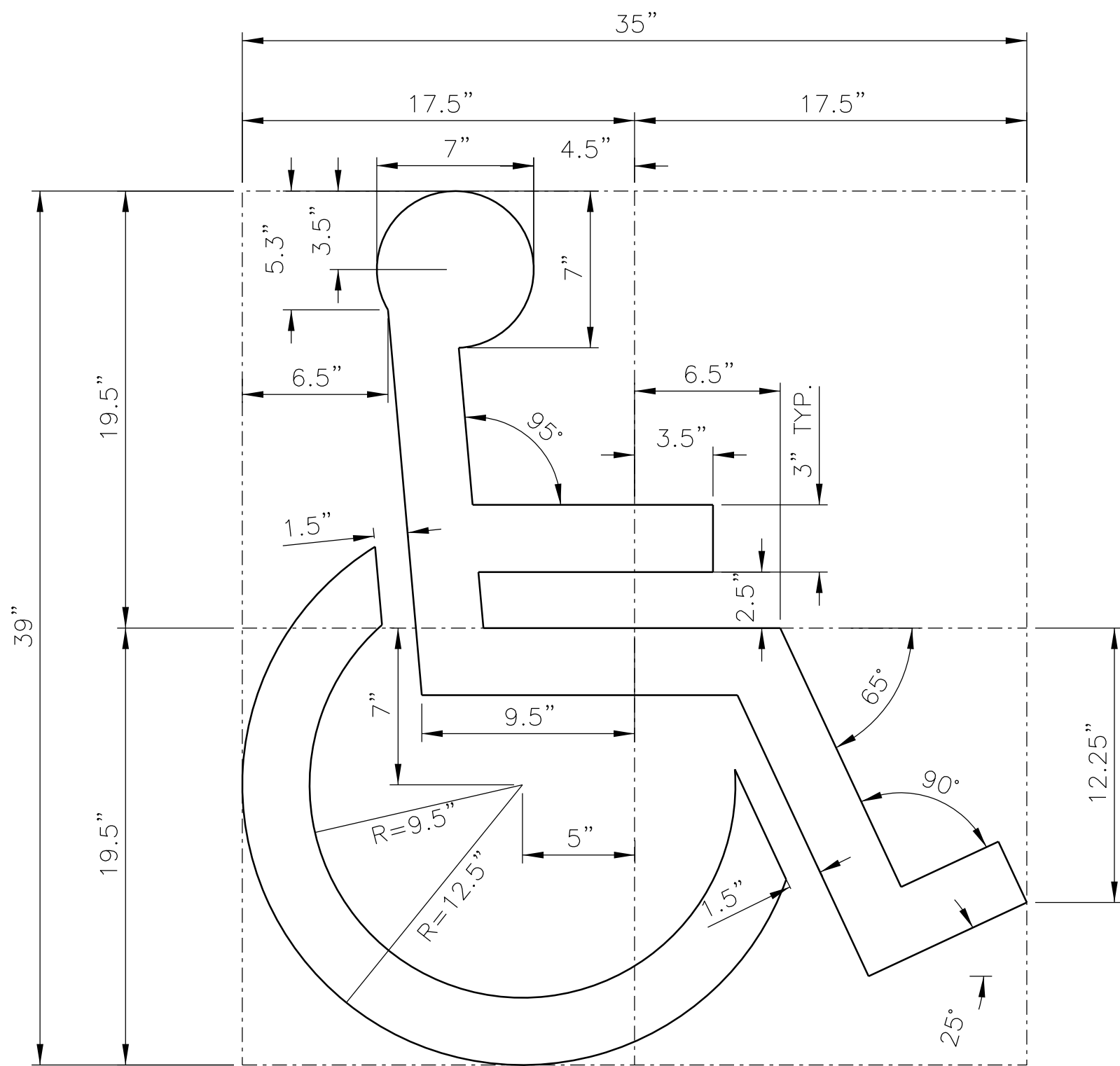


MCCORMICK TAYLOR

REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOCKEN RAILROAD STATION
MANAYUNK/ROSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SIGNING AND PAVEMENT MARKING DETAILS

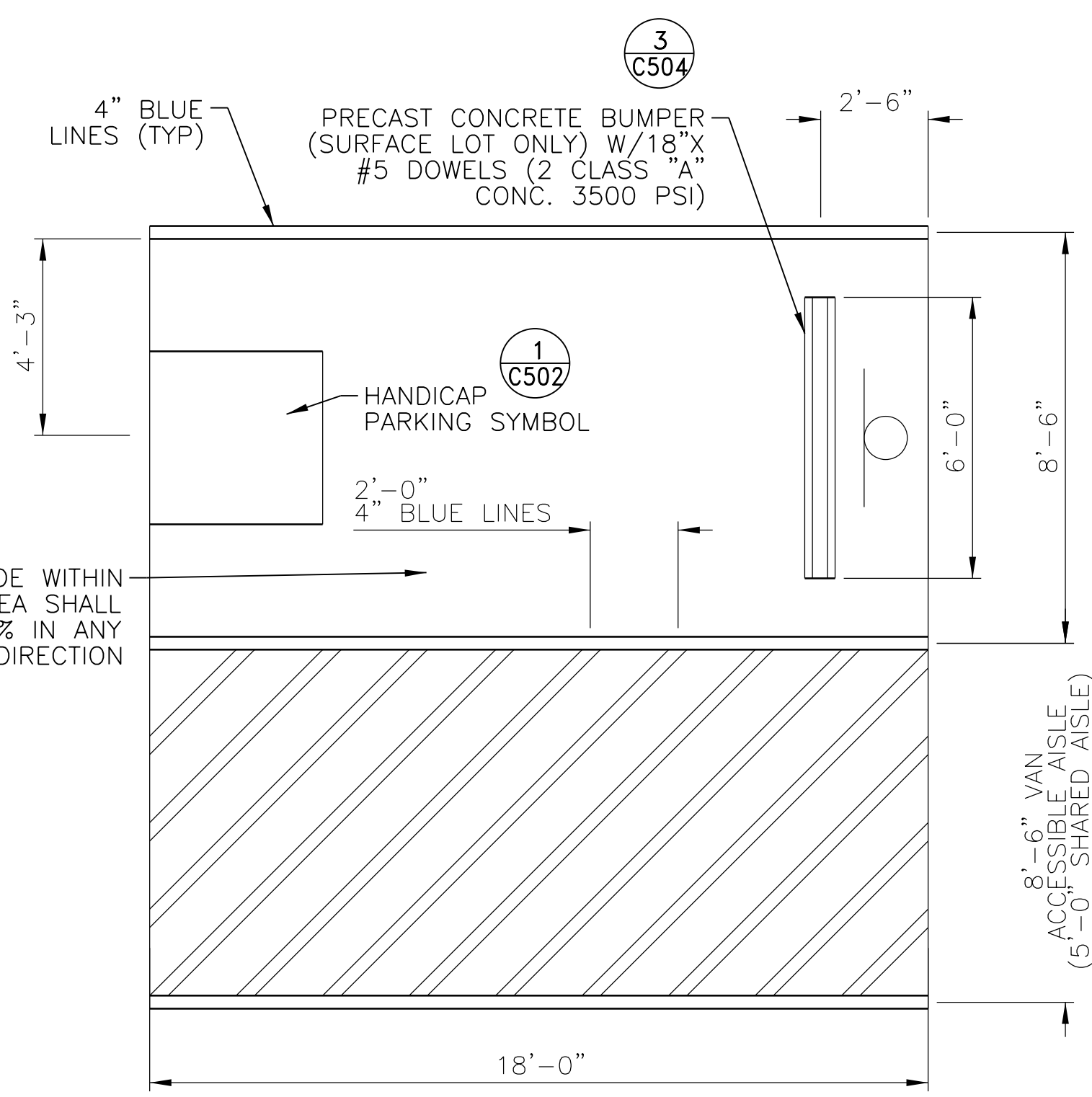
SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	JJO
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	KE
DRAWING NUMBER:	C502		
DWG. NO.:	C029	OF:	C070
SHT. NO.:	33	OF:	081
COMPUTER FILE NO.:	21D-24-C502	REV. NO.:	0



HANDICAP PARKING SPACE PAINTED SYMBOL NOTES:

- HANDICAP SYMBOL SHALL BE WHITE. IT MAY BE INSTALLED ALONE OR WITH A BLUE BACKGROUND WHICH EXTENDS A MINIMUM OF 3" BEYOND THE SYMBOL. IF MATERIAL THICKNESS OF SYMBOL IS GREATER THAN 20 MILS THE BLUE BACKGROUND MUST BE USED.
- ANY REDUCTION IN DIMENSIONS MUST BE APPROVED BY THE DEPARTMENT OF TRANSPORTATION.

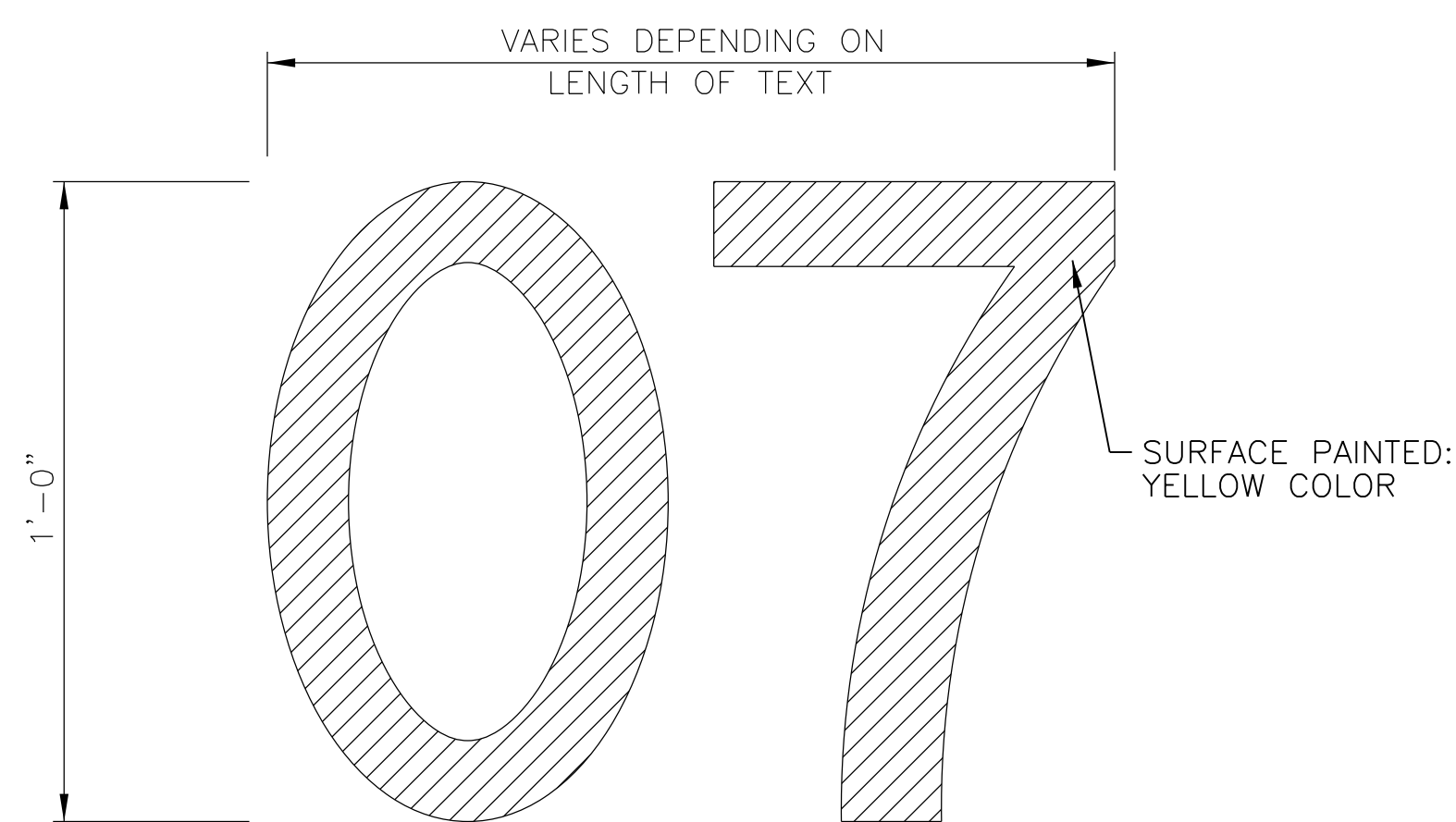
1 C502 HANDICAP PARKING SPACE PAINTED SYMBOL
SCALE: NO SCALE



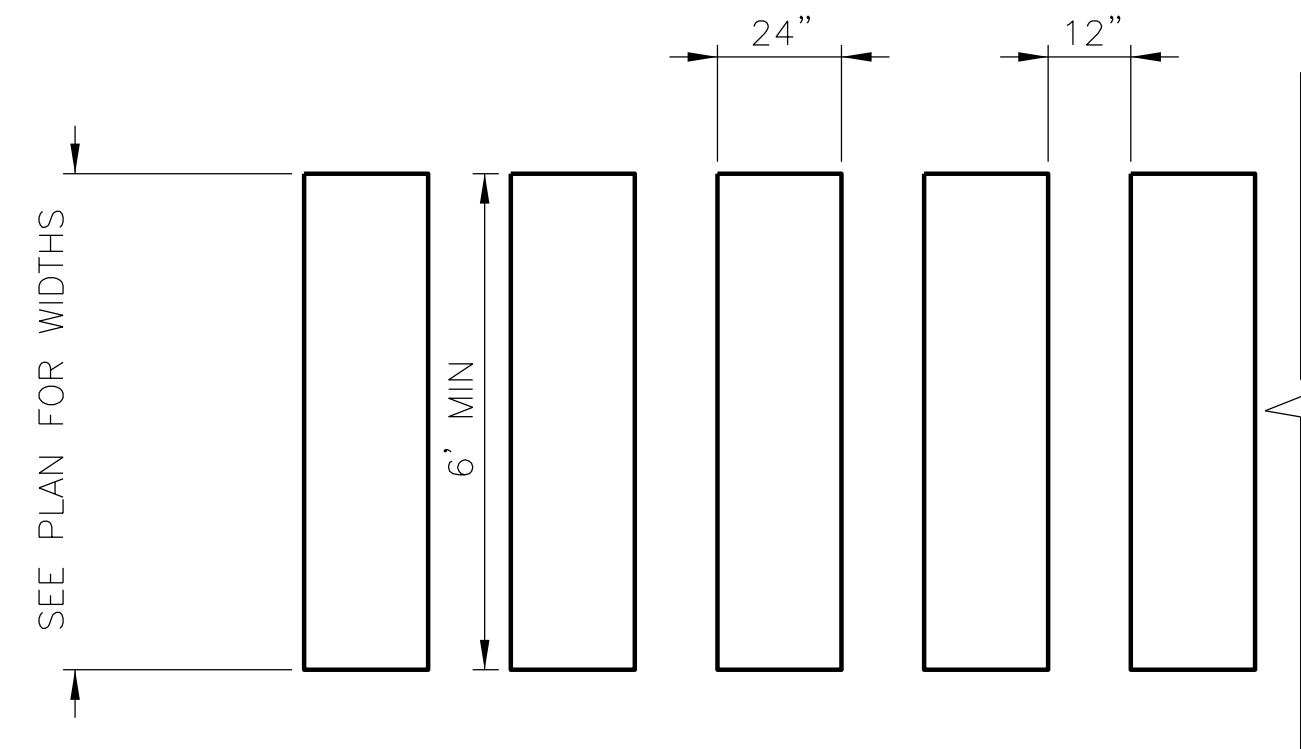
NOTES:

- CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED ISLAND.
- CURB RAMPS, PAVEMENT MARKINGS, AND APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

2 C502 ACCESSIBLE PARKING SPACE DETAIL
SCALE: NO SCALE



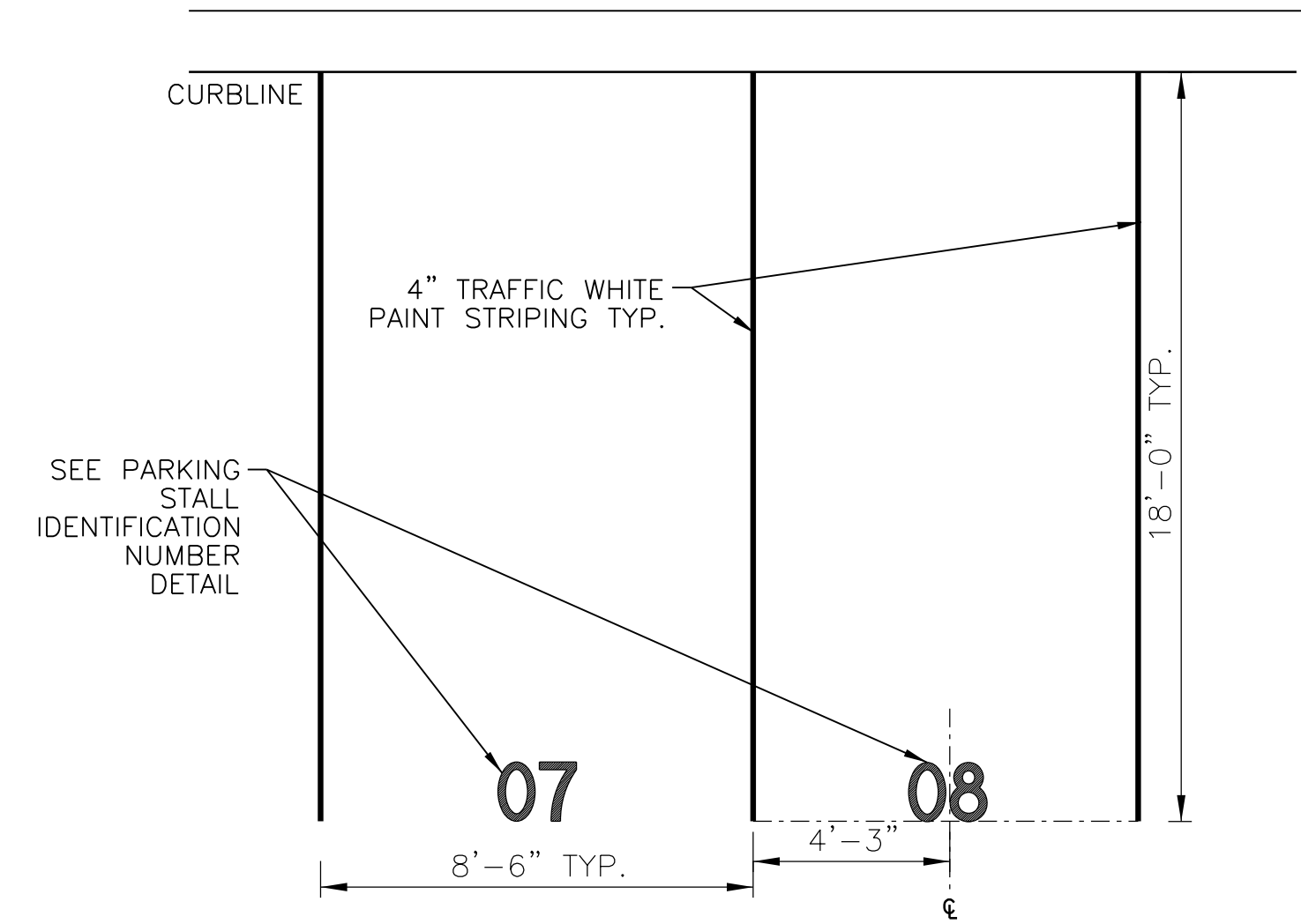
4 C502 PARKING STALL IDENTIFICATION NUMBER
SCALE: NO SCALE



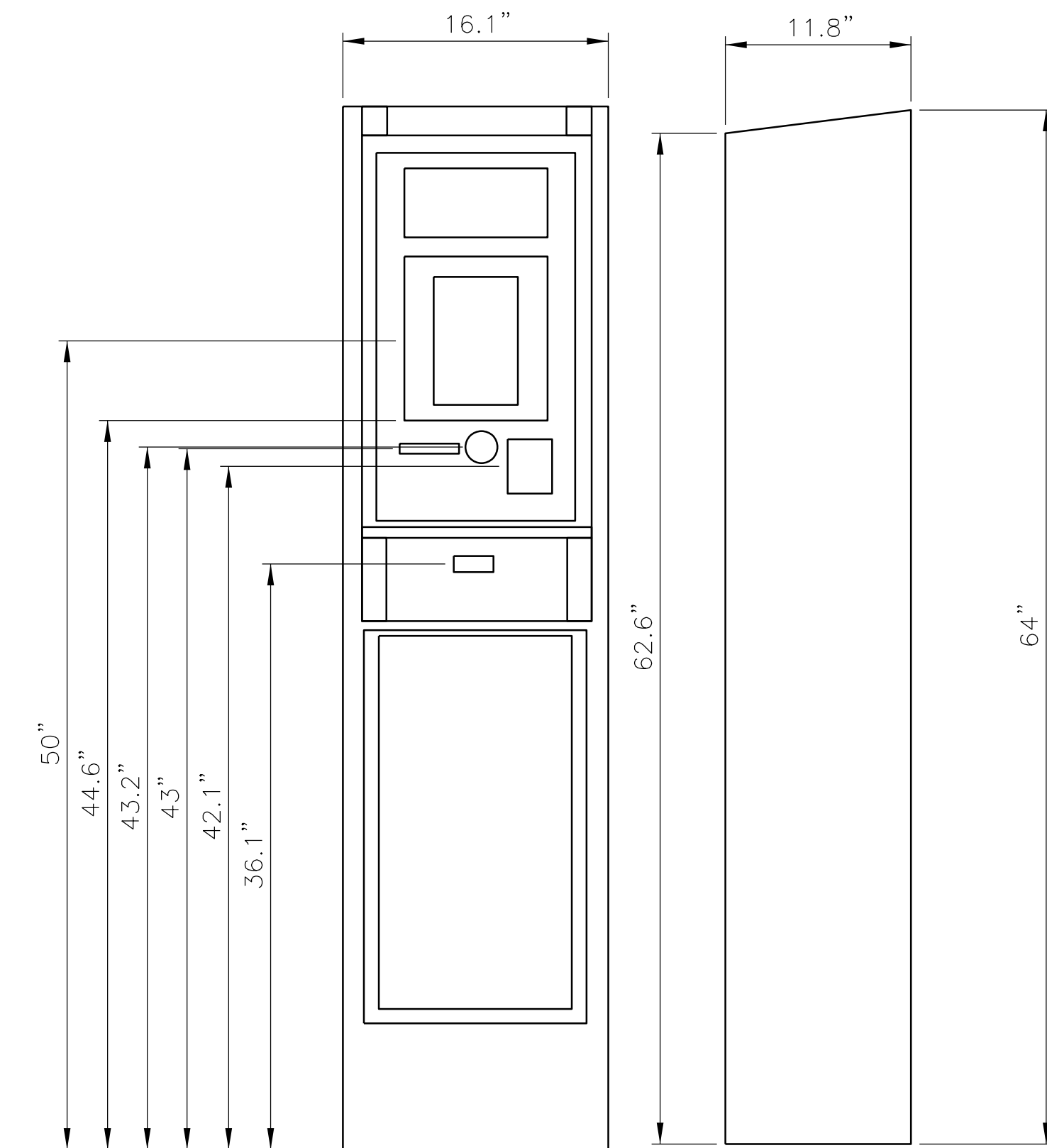
NOTES:

- ALL CROSSWALKS SHALL COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATIONS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS AMENDED.
- LONGITUDINAL LINES SHALL EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
- ALL CROSSWALK LINES SHALL BE WHITE EPOXY BASED PAINT.

5 C502 HIGH VISIBILITY CROSSWALK DETAIL (PERPENDICULAR TO INTERSECTION)
SCALE: NO SCALE



3 C502 PARKING STALL IDENTIFICATION - PLAN VIEW
SCALE: NO SCALE



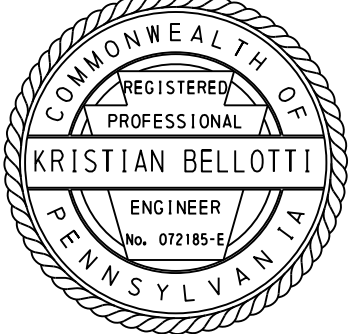
NOTES:

- PROVIDE AND INSTALL FLOWBIRD MODEL NO. "CWT COMPACT S4 TOUCH" SOLAR POWERED PAY STATION TERMINAL.
- COORDINATE WITH SEPTA REPRESENTATIVE TO CONFIRM LATEST MODEL NUMBER UPDATES, FINAL LOCATION OF THE PAY STATION, CELLULAR COMMUNICATION CONNECTIVITY AND TESTING OF THE SYSTEM.

6 C502 PAY STATION
SCALE: NO SCALE

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

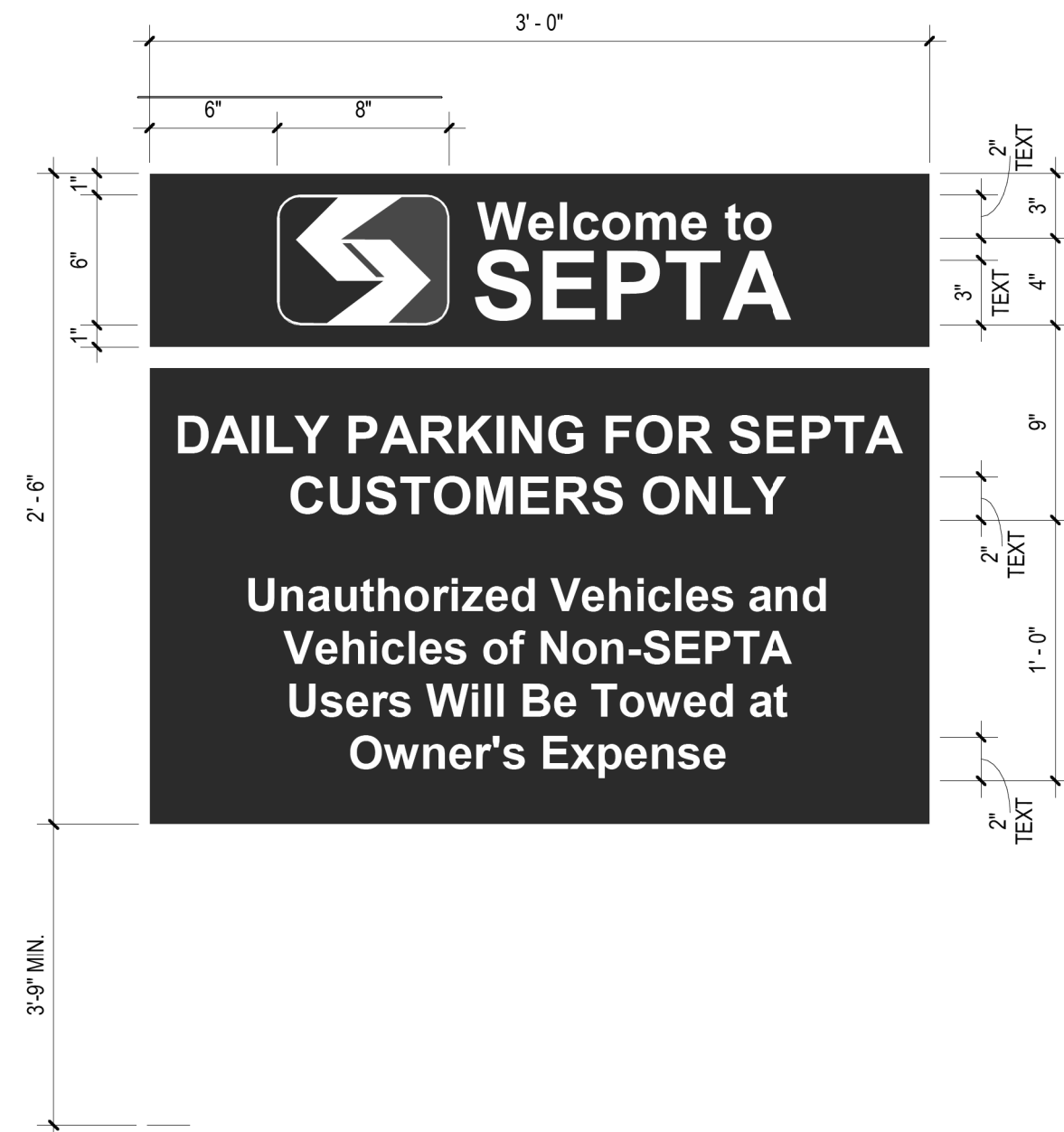


REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SIGNING AND PAVEMENT MARKING DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: DMH
WORK ORDER NO.: GEC21D-24	CHECKED BY: CJB
DRAWING NUMBER: C503	
DWG. NO.: C030	OF: C070
SHT. NO.: 34	OF: 081
COMPUTER FILE NO.: 21D-24-C503	REV. NO.: 0

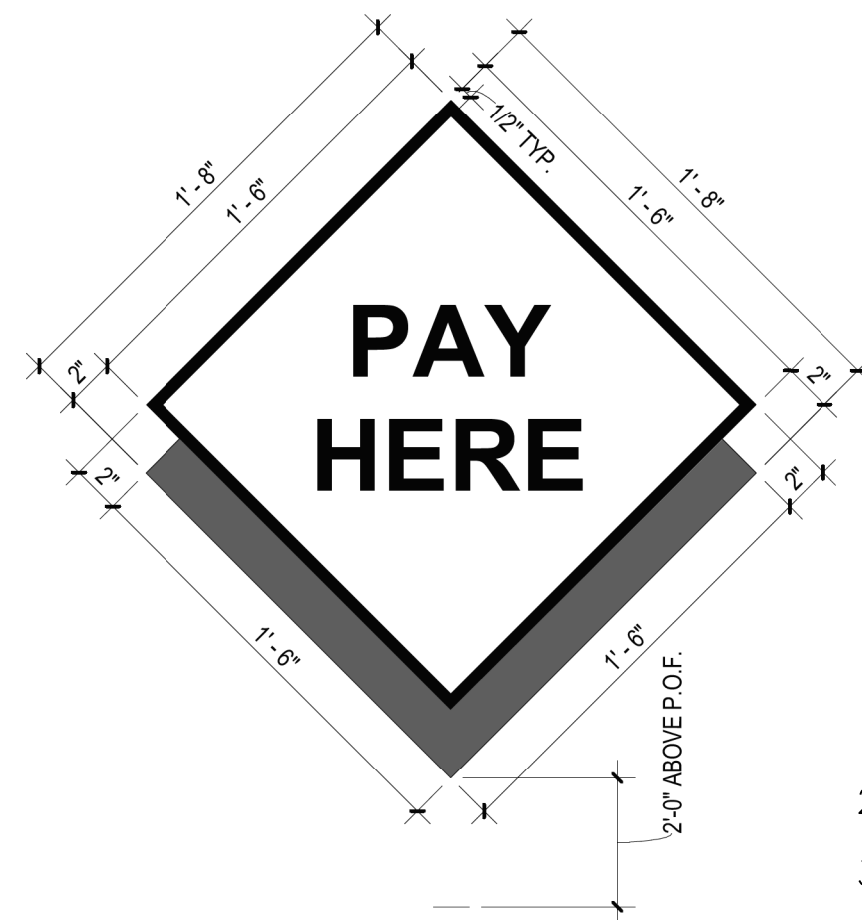
LAND DEVELOPMENT SUBMISSION



1 B04: WELCOME TO SEPTA
C503 SCALE: NO SCALE

SIGN NOTES:

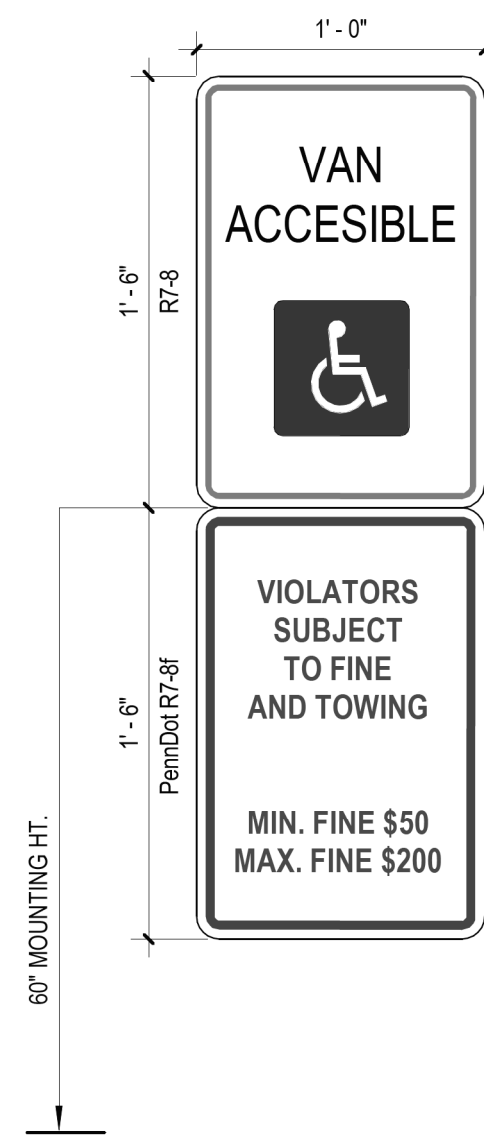
- MATERIAL: 0.080 PRE-FINISHED ALUMINUM
- SIGN COLORS:
A. (BACKGROUND) PMS REFLEX BLUE
B. (TEXT) REFLECTIVE WHITE
C. PANTONE 185C
- TEXT: HELVETICA
- POST MOUNTED USING 2 POSTS ATTACHED TO THE INTERIOR OF SPANDREL. SEE DETAIL 5/GA201, SIGN MESSAGE FACING EXTERIOR OF GARAGE



4 C13: PAY ON FOOT
C503 SCALE: NO SCALE

SIGN NOTES:

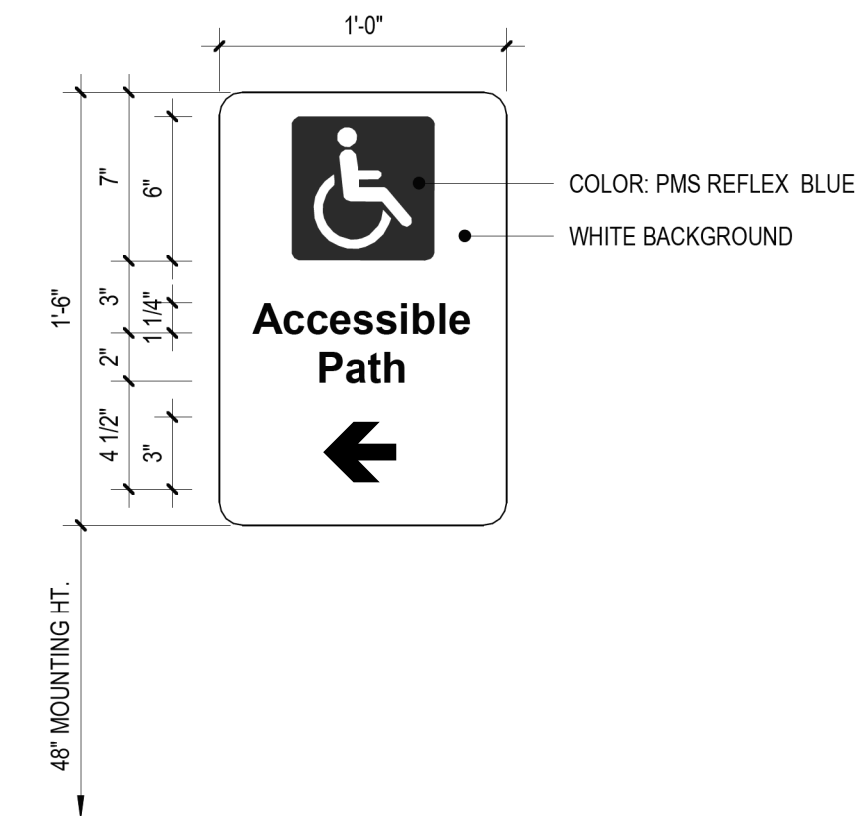
- MATERIAL: 1/4" EXTERIOR GRADE PHOTOPOLYMER
- BACKGROUND COLOR: WHITE
- CHEVRON COLOR: PANTON COOL GRAY 1C
- TEXT FONT: HELVETICA BOLD
- TEXT COLOR: BLACK
- HEIGHT: 3"
- CENTER ALL TEXT HOR.



2 C01A: ADA PARKING
C503 SCALE: NO SCALE

SIGN NOTES:

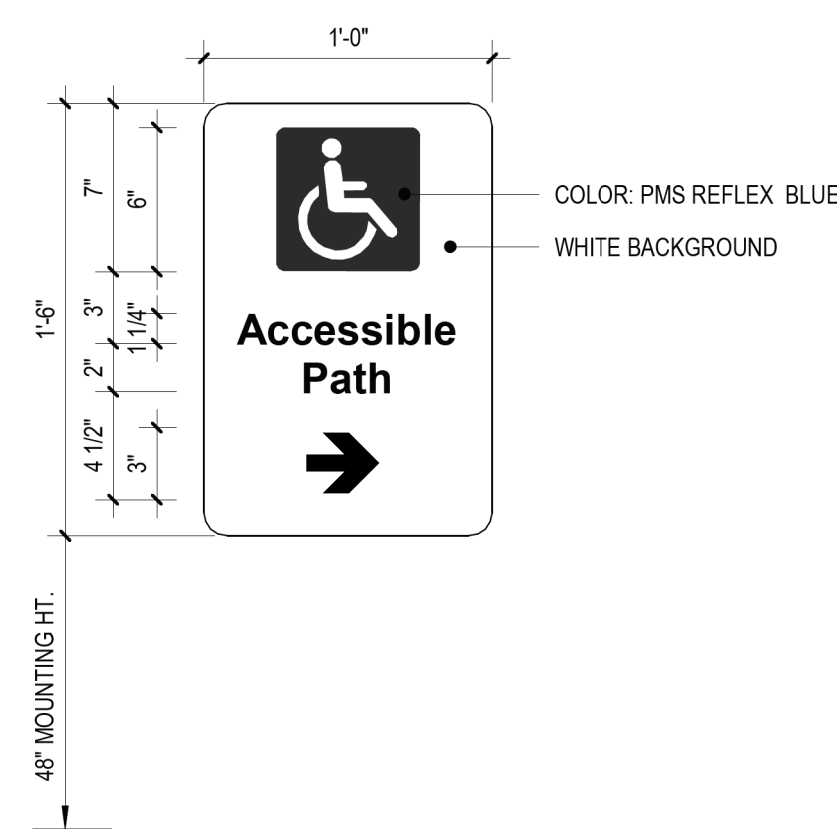
- SIGN BE 0.080" THICK ALUMINUM, SEE SIGNAGE GENERAL NOTES C.4.
- BACKGROUND OF SIGN SHALL BE NONREFLECTIVE SILK SCREEN, COLOR: WHITE
- CENTER TEXT HORIZONTALLY ON SIGN
- TEXT:
A. FONT: HELVETICA BOLD
B. COLOR: BLACK
C. HEIGHT: AS NOTED



3 B13L: ACCESSIBLE PATH
C503 SCALE: NO SCALE

SIGN NOTES:

- FONT: HELVETICA
- CORNERS: 1" RADIAL



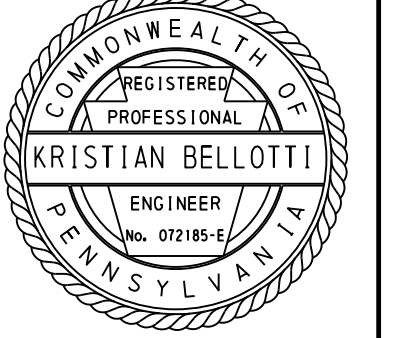
5 B13R: ACCESSIBLE PATH
C503 SCALE: NO SCALE

SIGN NOTES:

- FONT: HELVETICA
- CORNERS: 1" RADIAL

MANAGER - ARCHITECTURE

PROJECT MANAGER

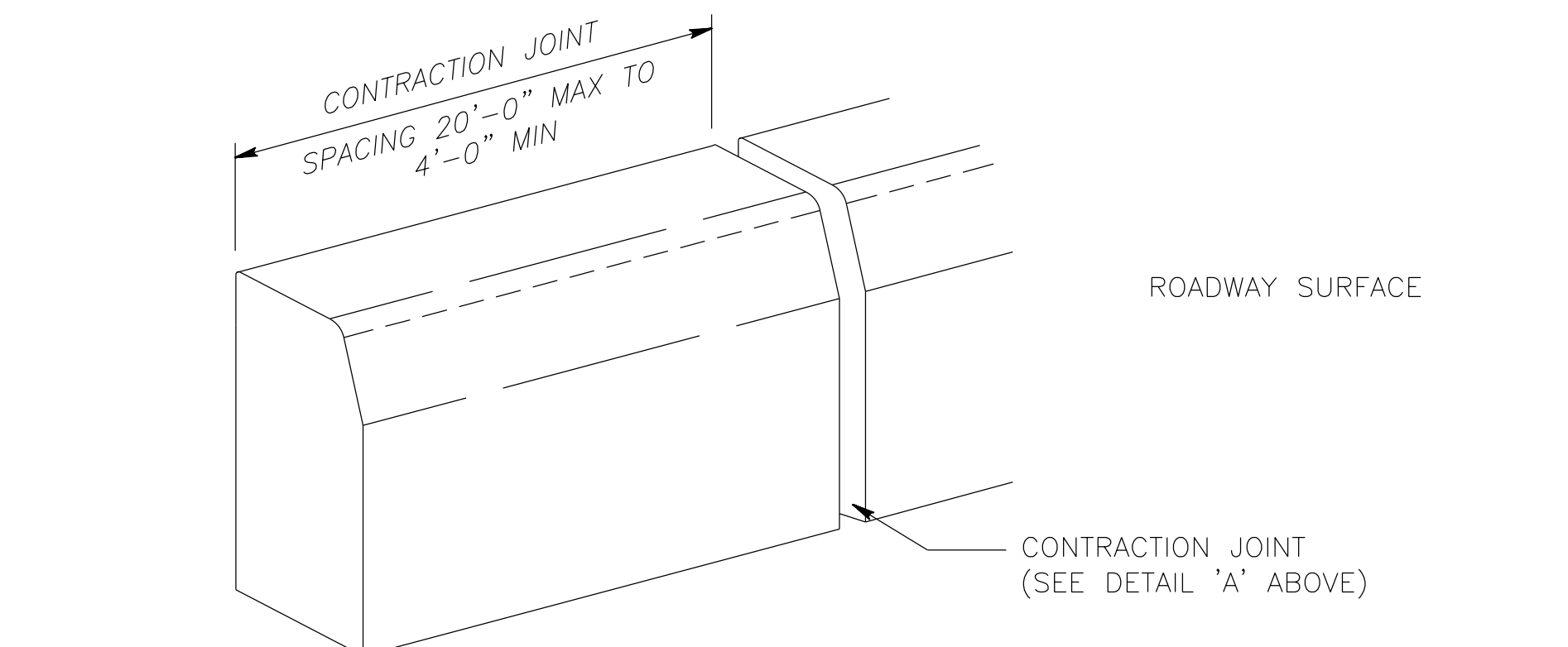
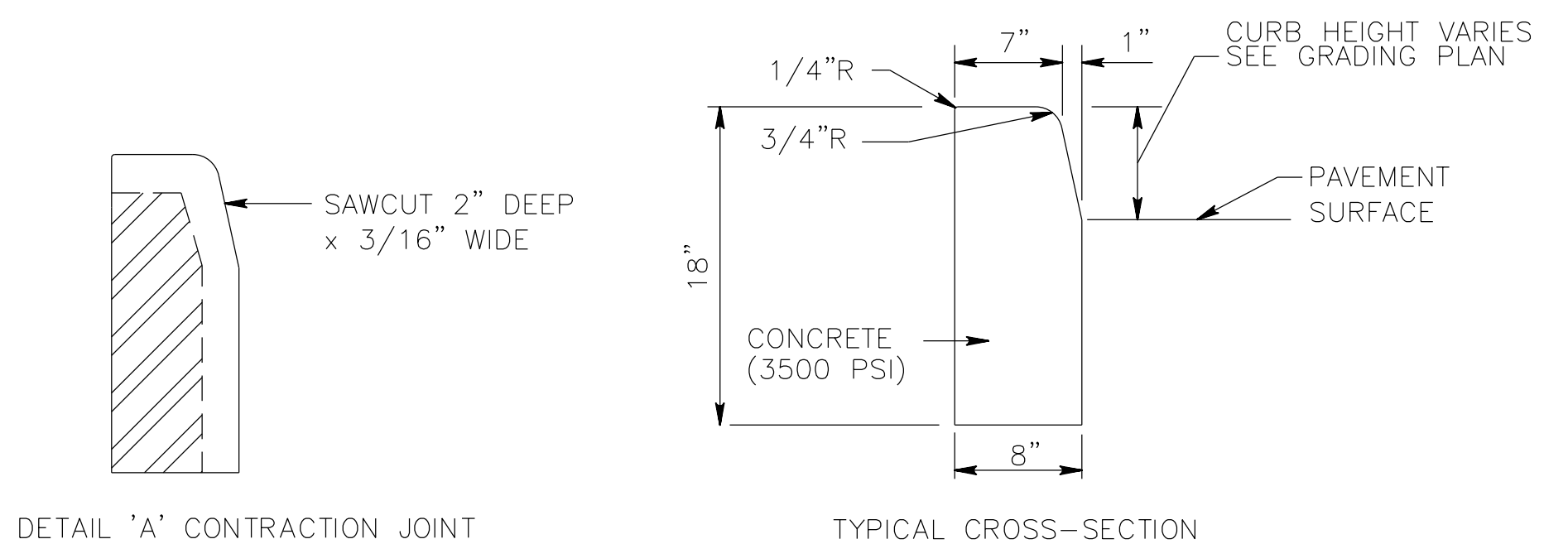


REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SITE DETAILS

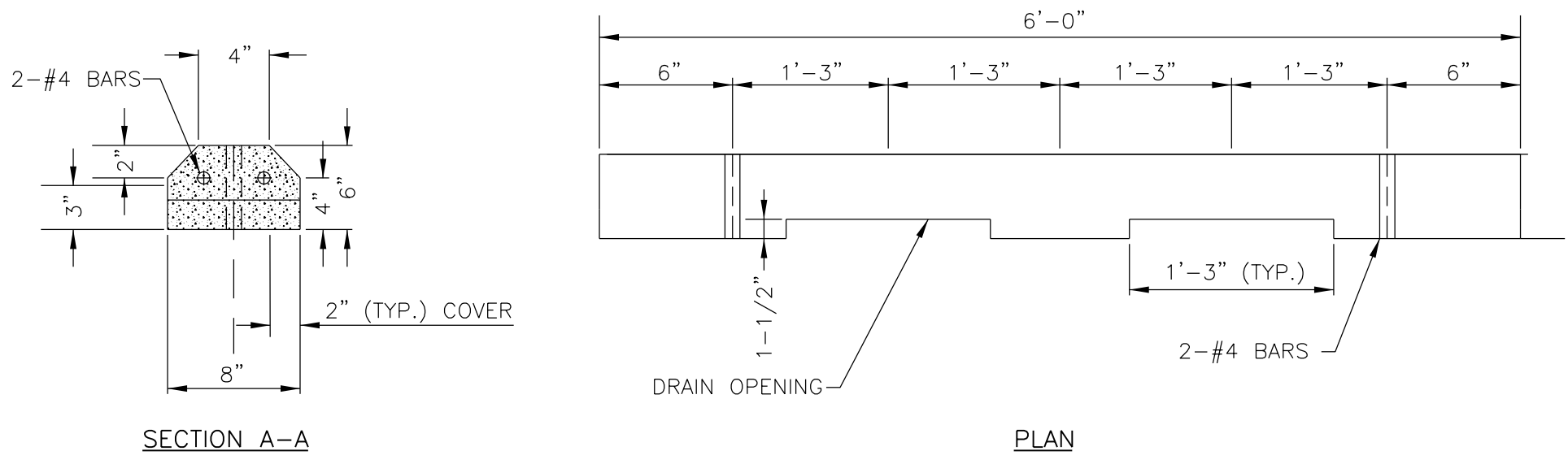
SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HB
DRAWING NUMBER:	C504		
DWG. NO.:	C031	OF	C070
SHT. NO.:	35	OF	081
COMPUTER FILE NO.:	21D-24-C504	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

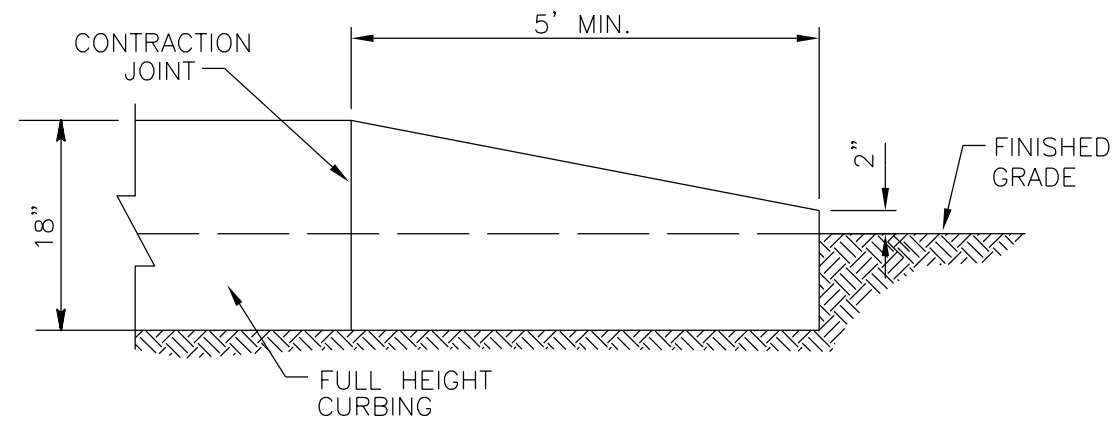


- NOTES:
- CONTRACTION JOINTS SHALL BE SPACED BETWEEN 4' (MIN) AND 20' (MAX) SPACING. CONTRACTION JOINTS SHALL BE PROVIDED AT UNIFORM LENGTHS OR SECTIONS.
 - PLACE PREMOLDED EXPANSION JOINT FILLER MATERIAL AT 20' MAXIMUM SPACING, AT ALL STRUCTURE, AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
 - SEAL BOTTOM OF CURB JOINT NEATLY WITH AC. 20 BIT SEALER IN 12" WIDTH

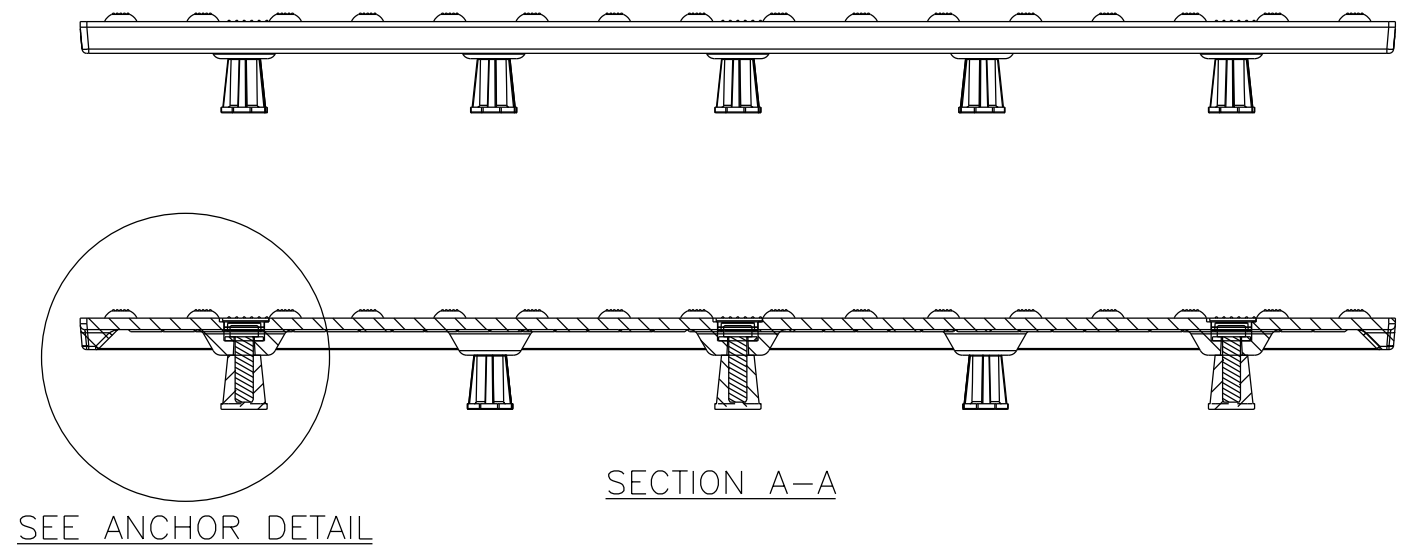
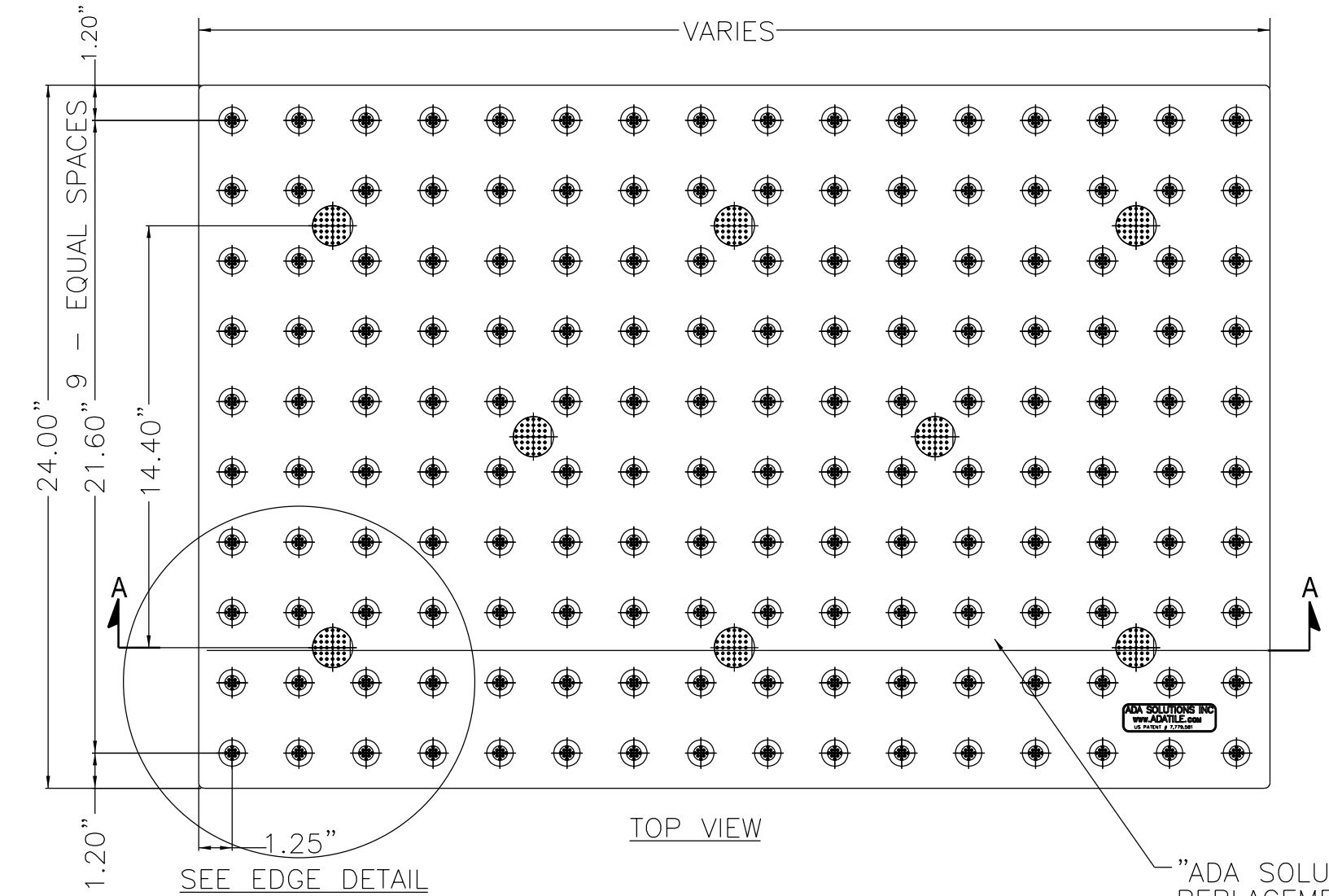
1
C504 CONCRETE CURB DETAIL
SCALE: NO SCALE



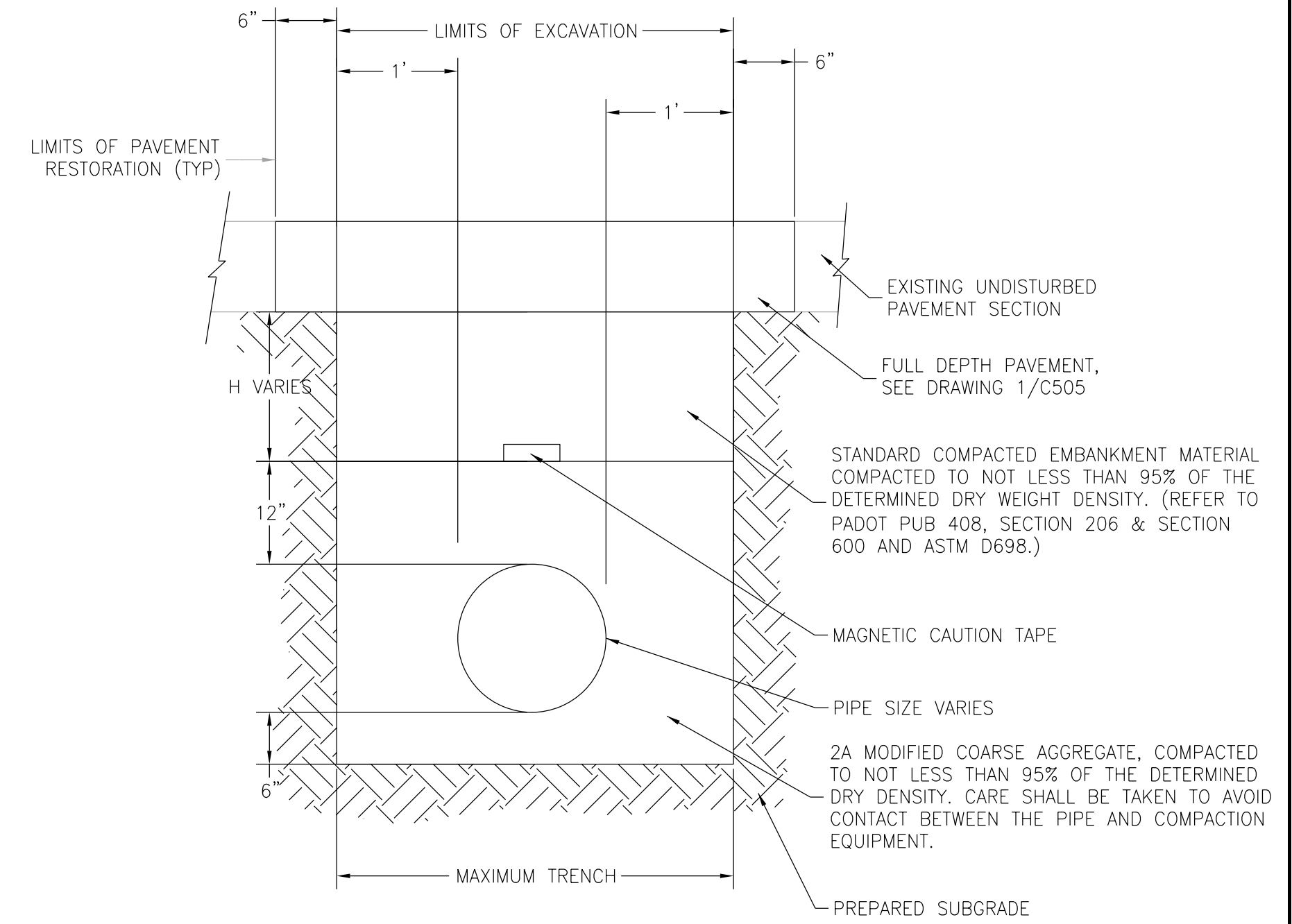
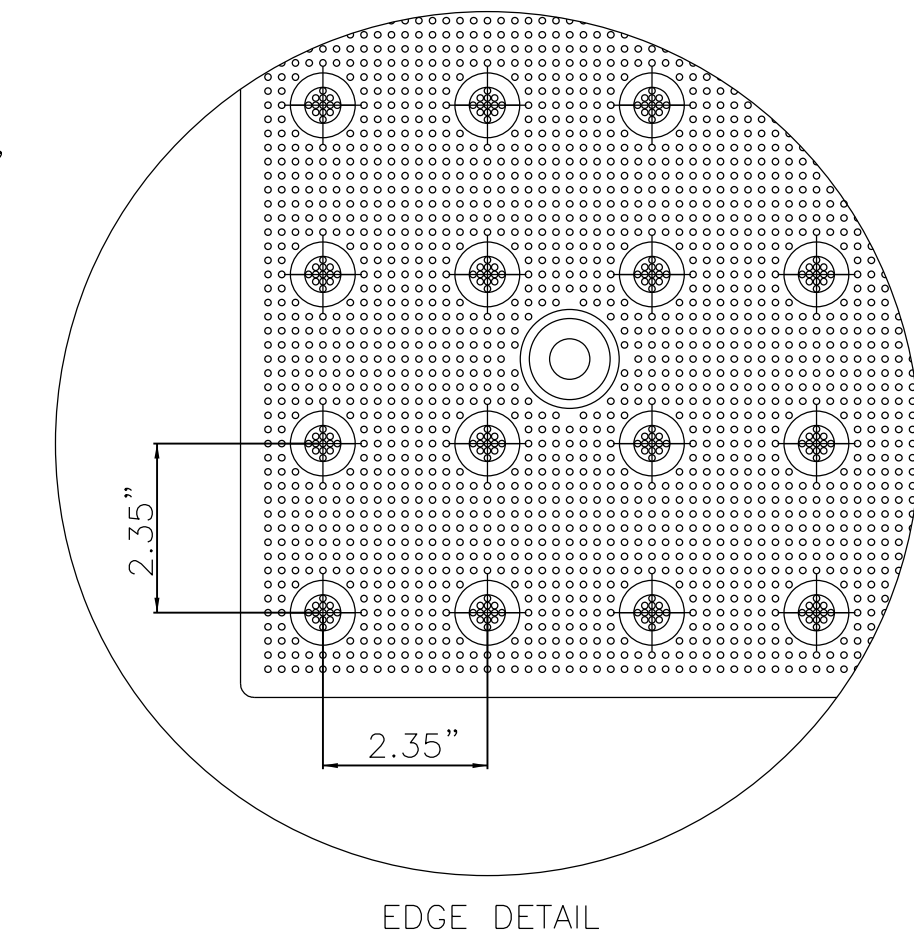
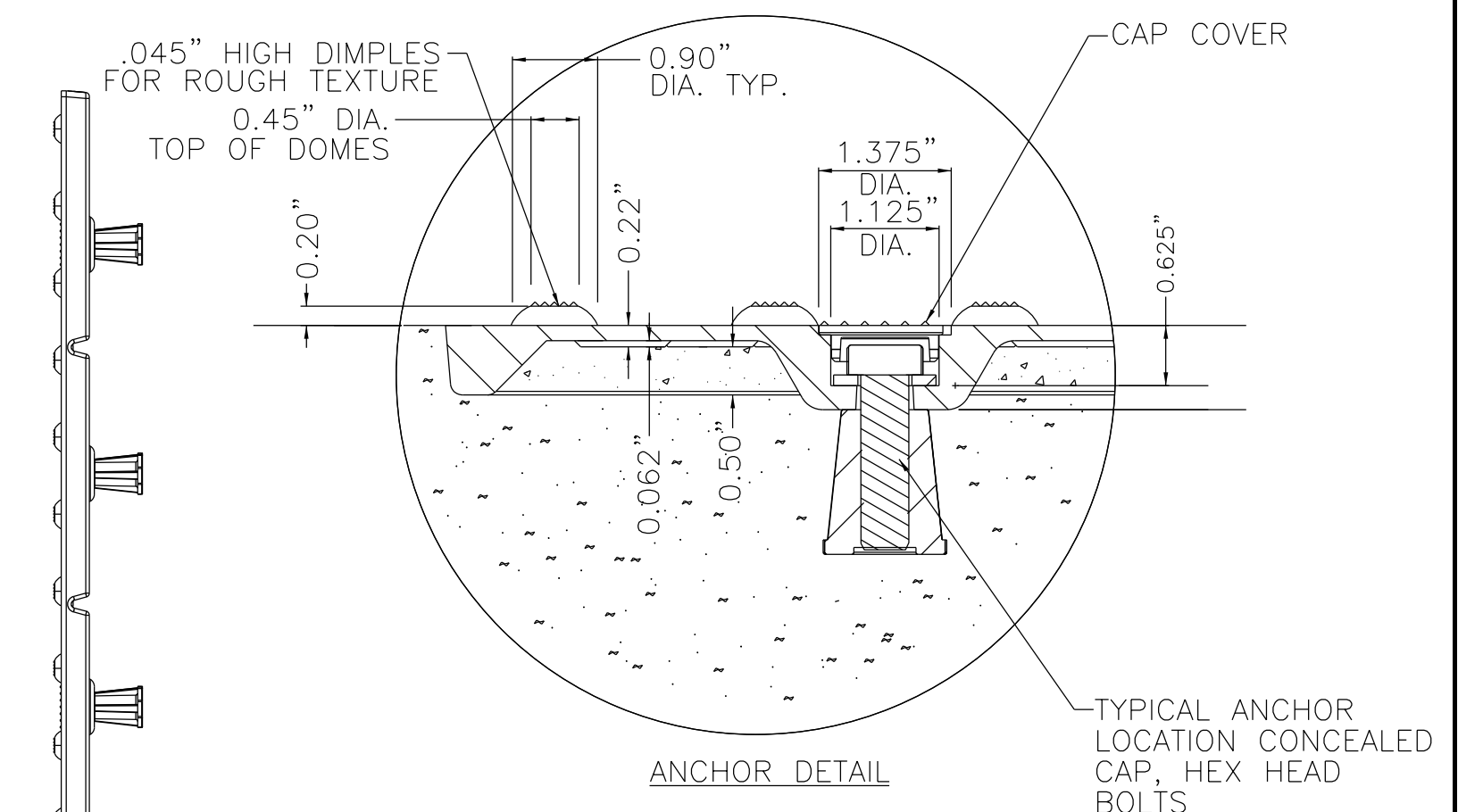
3
C504 CONCRETE WHEEL STOP DETAIL
SCALE: NO SCALE



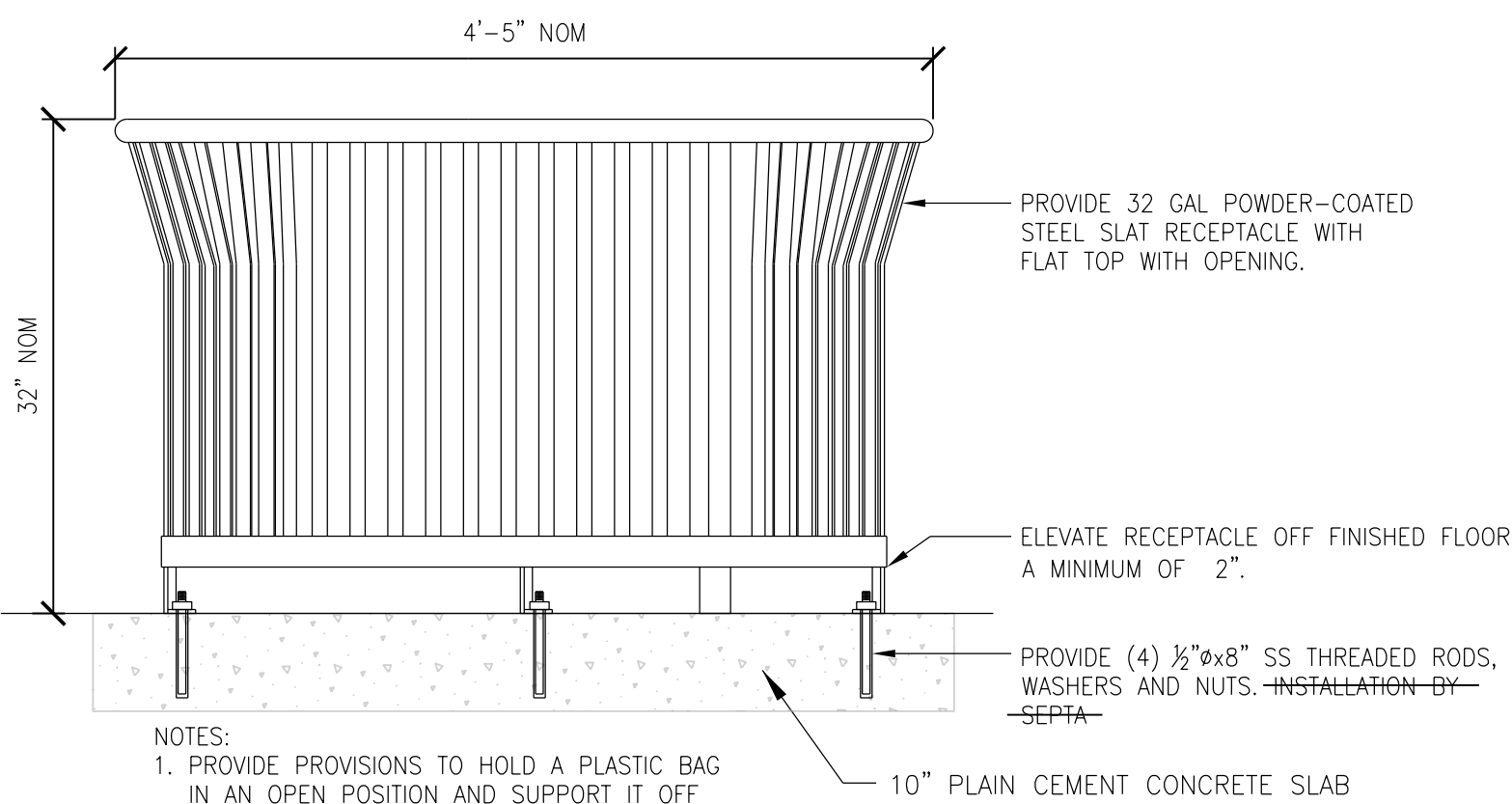
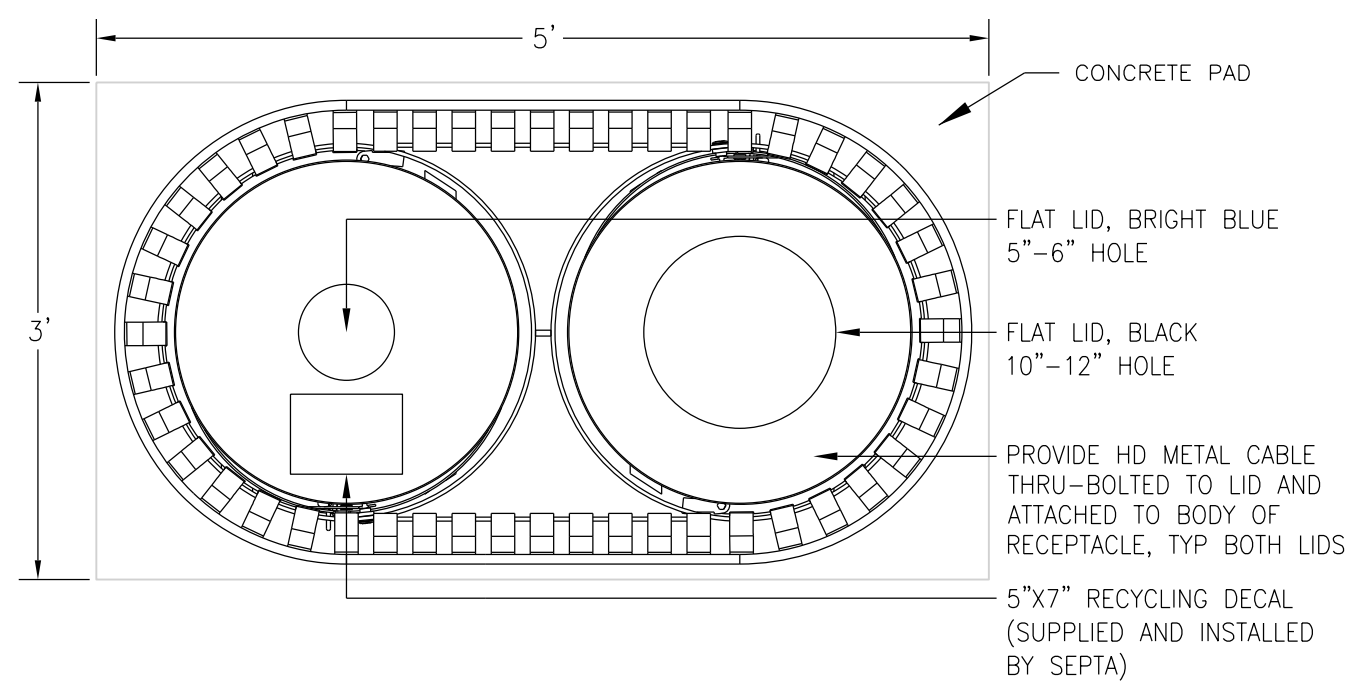
4
C504 CURB TRANSITION DETAIL
SCALE: NO SCALE



2
C504 DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAILS
SCALE: NO SCALE

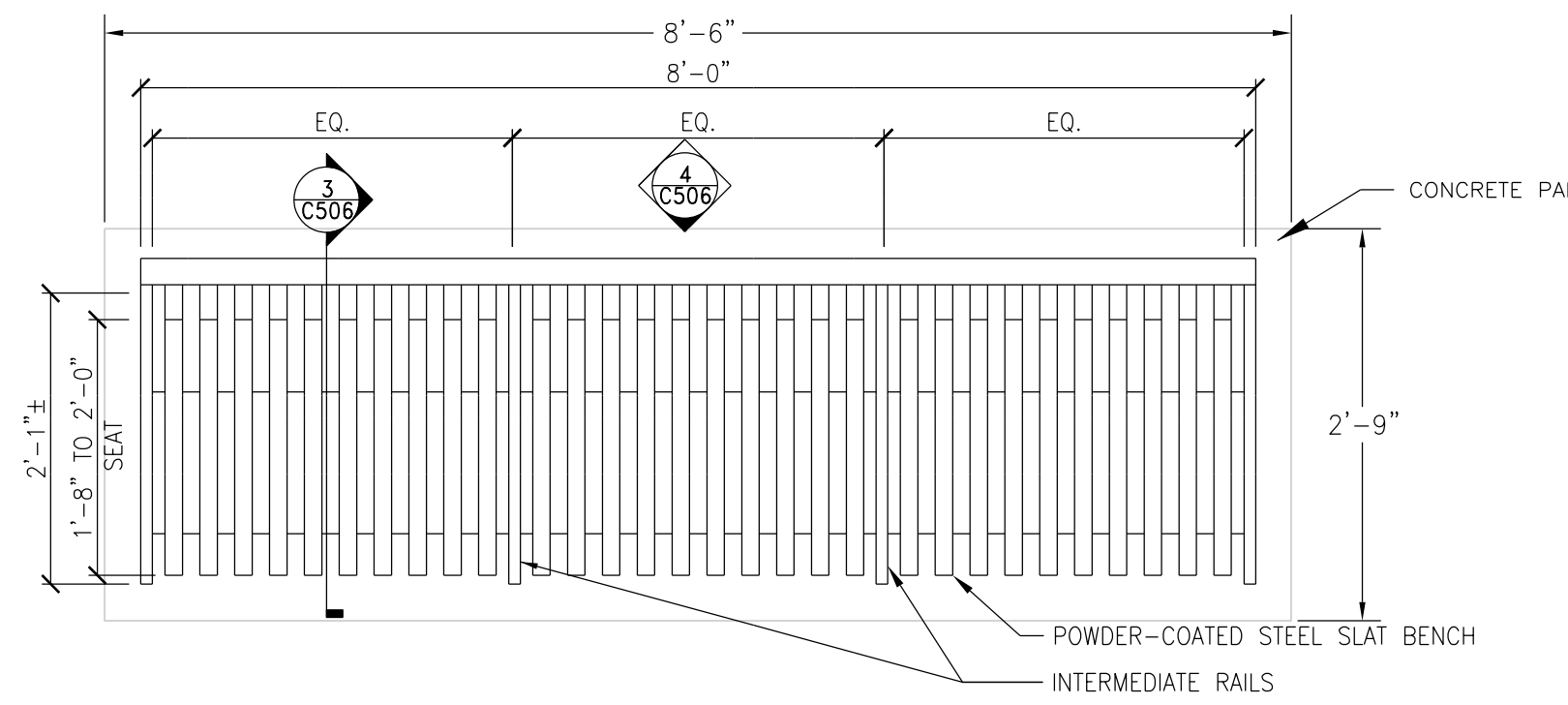


5
C504 STANDARD PIPE TRENCH DETAIL
SCALE: NO SCALE

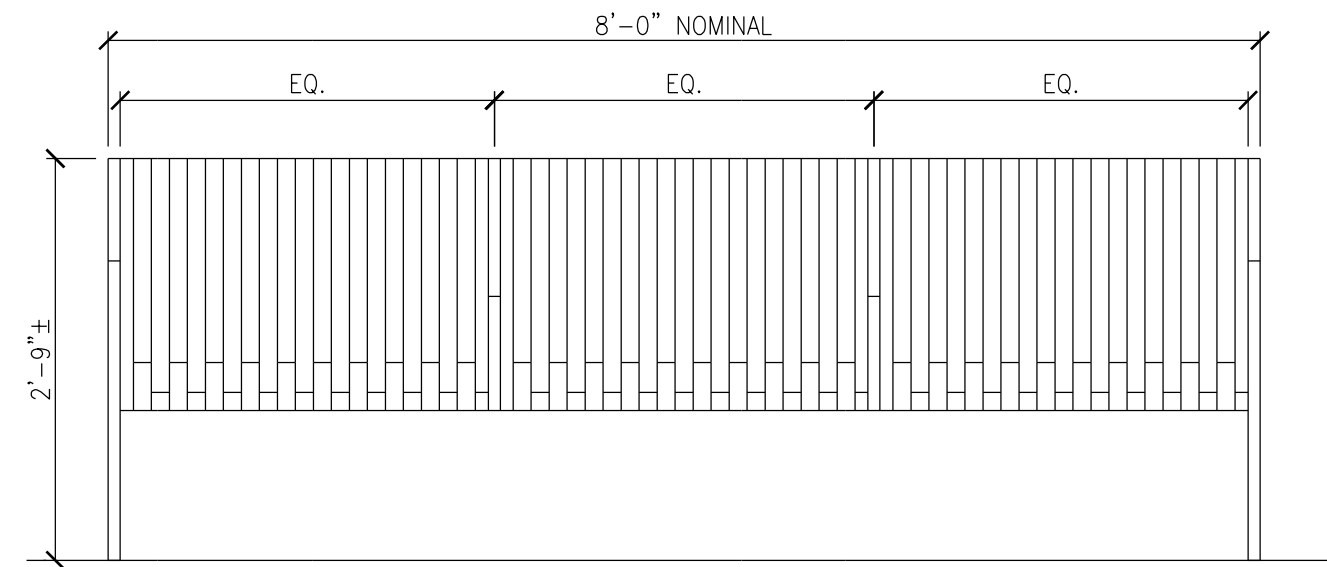


NOTES:
 1. PROVIDE PROVISIONS TO HOLD A PLASTIC BAG IN AN OPEN POSITION AND SUPPORT IT OFF OF THE GROUND WHEN FULLY LOADED.
 2. RECEPTACLE SHALL BE ELEVATED OFF OF FLOOR SURFACE A MINIMUM OF 2".

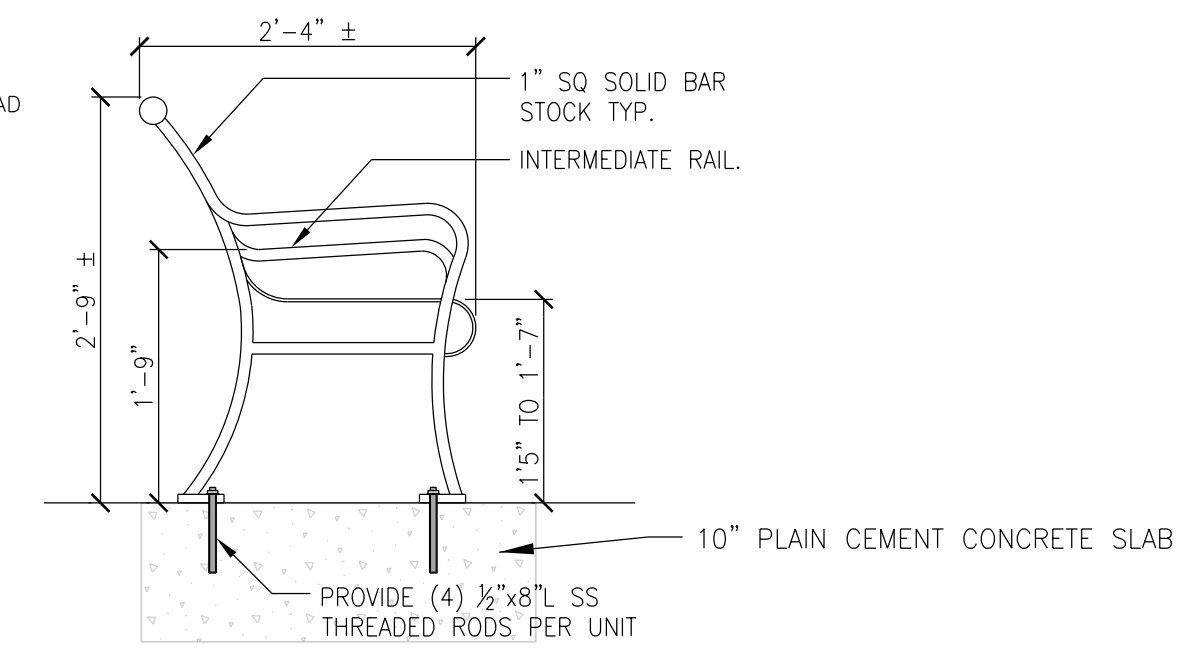
1 TRASH CAN AND RECYCLING CAN
 SCALE: NO SCALE



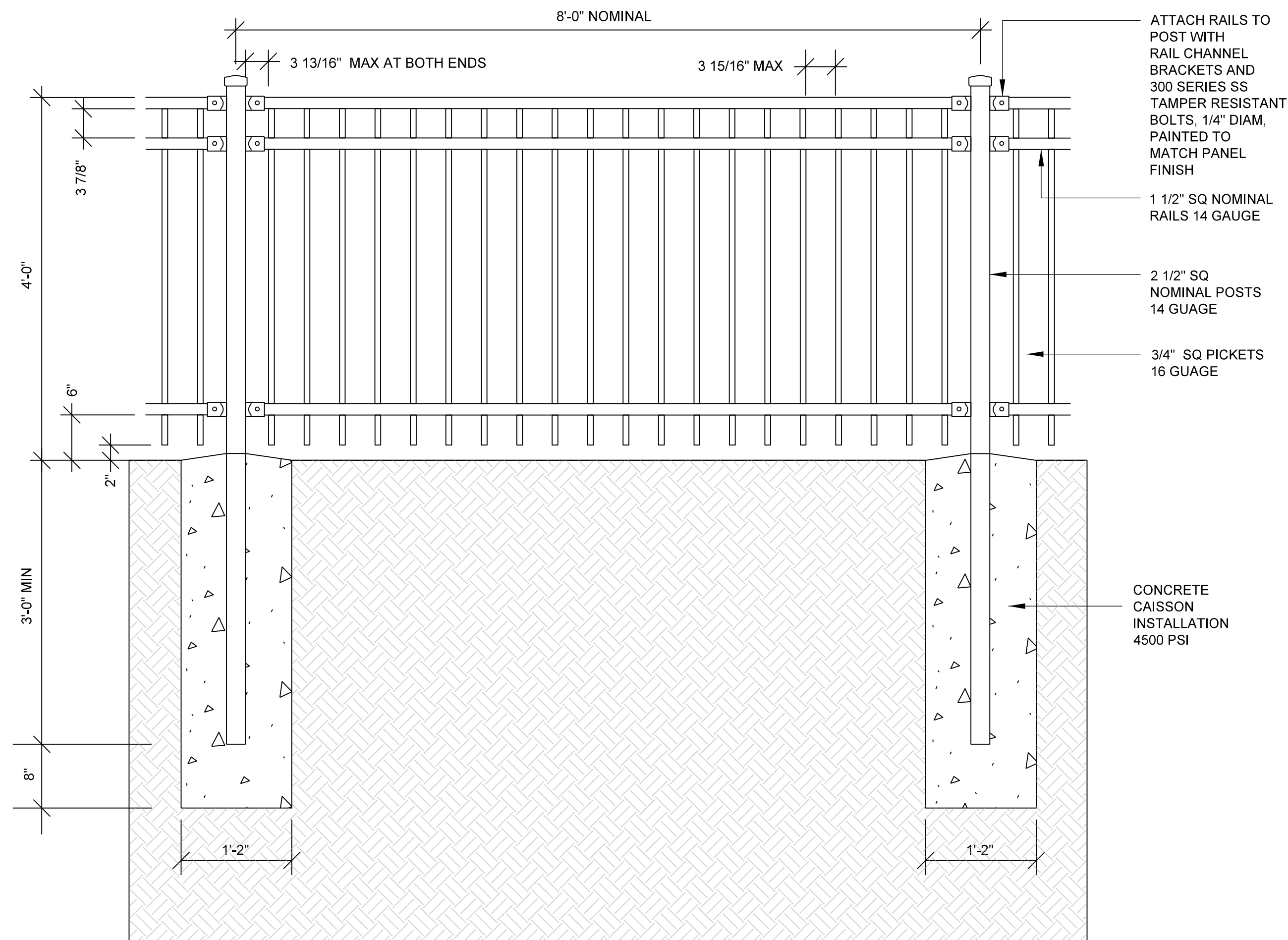
2 8' BACKED BENCH
 SCALE: NO SCALE



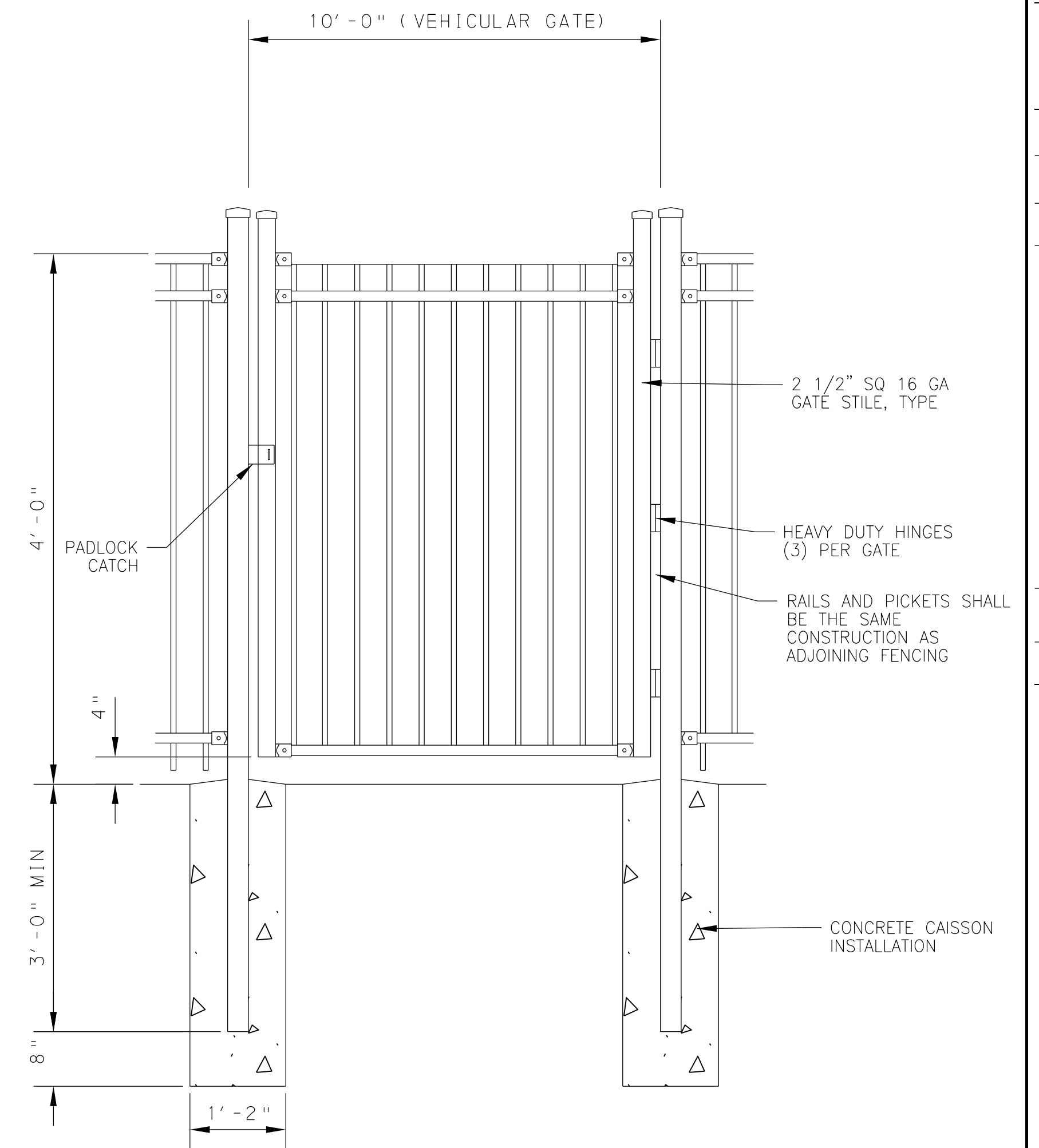
4 8' BACKED BENCH BACK VIEW
 SCALE: NO SCALE



3 8' BACKED BENCH SECTION DETAIL
 SCALE: NO SCALE



5 4' ESTATE FENCE - EMBEDDED MOUNT
 SCALE: NO SCALE



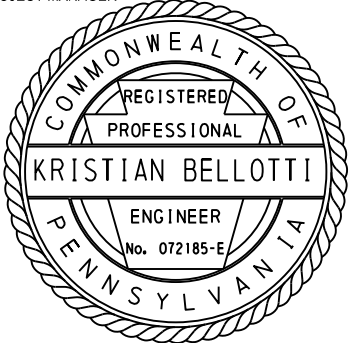
6 ESTATE FENCE GATE - EMBEDDED MOUNT
 SCALE: NO SCALE

NOTES:

- ALL POSTS, RAILS, PICKETS, FITTINGS, HARDWARE, ETC. ARE TO BE GALVANIZED AND POWDER COATED.
- ADEQUATE GROUNDING WHERE REQUIRED BY THE SEPTA POWER DEPARTMENT, SHALL BE DESIGNED FOR PROJECT SPECIFIC LOCATIONS.

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APPD

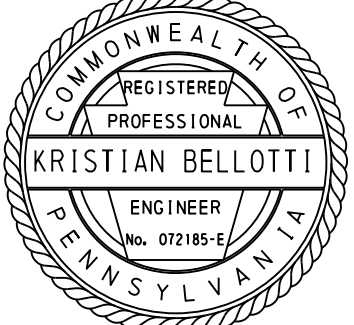
CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
 NEW CONSTRUCTION
 CIVIL
 SITE DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HJB
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	HB
DRAWING NUMBER:	C506		
DWG. NO.:	C033	OF:	C070
SHT. NO.:	037	OF:	081
COMPUTER FILE NO.:	21D-24-C506	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

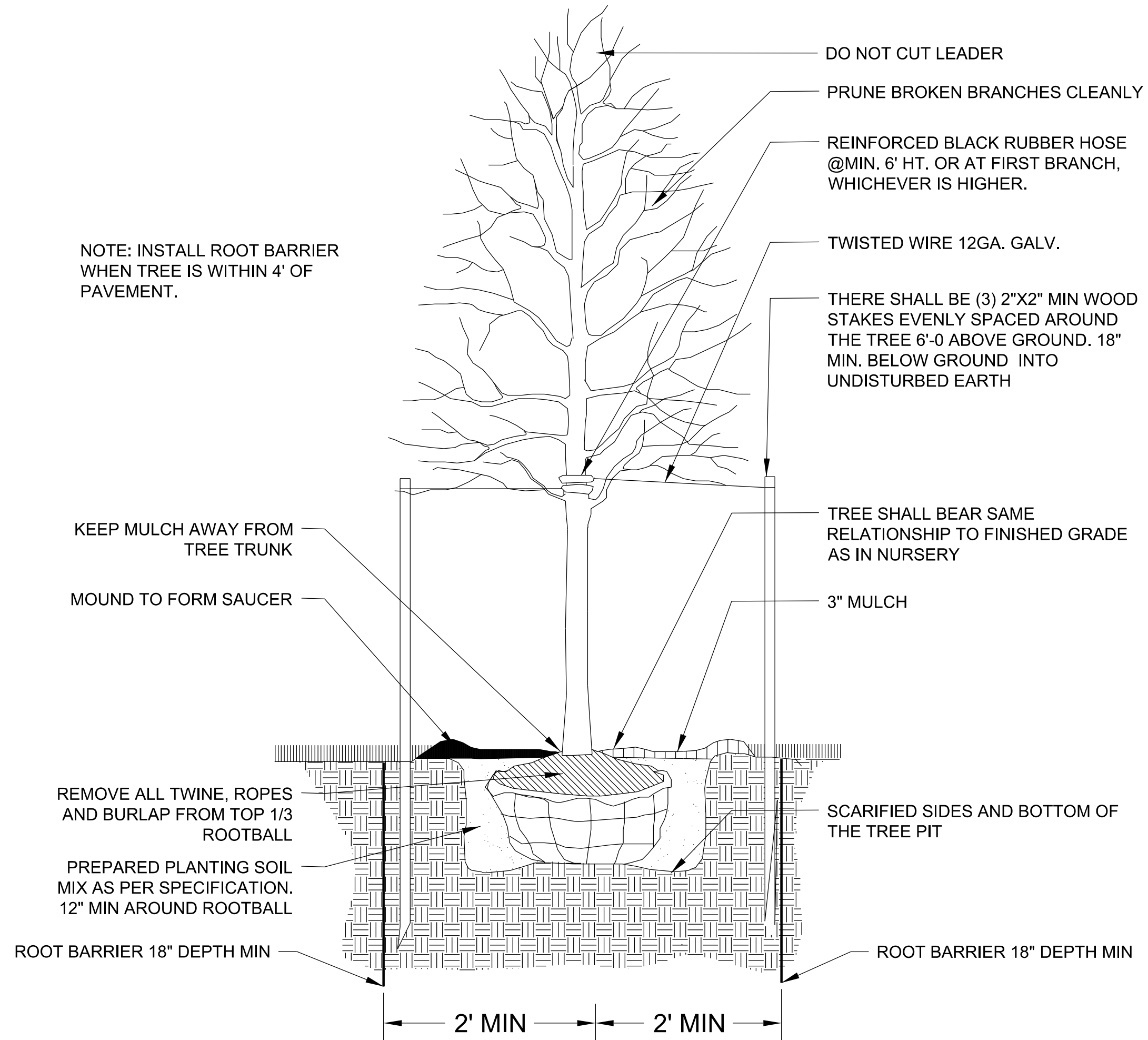


REV	DATE	DESCRIPTION	BY	CHKD	APD

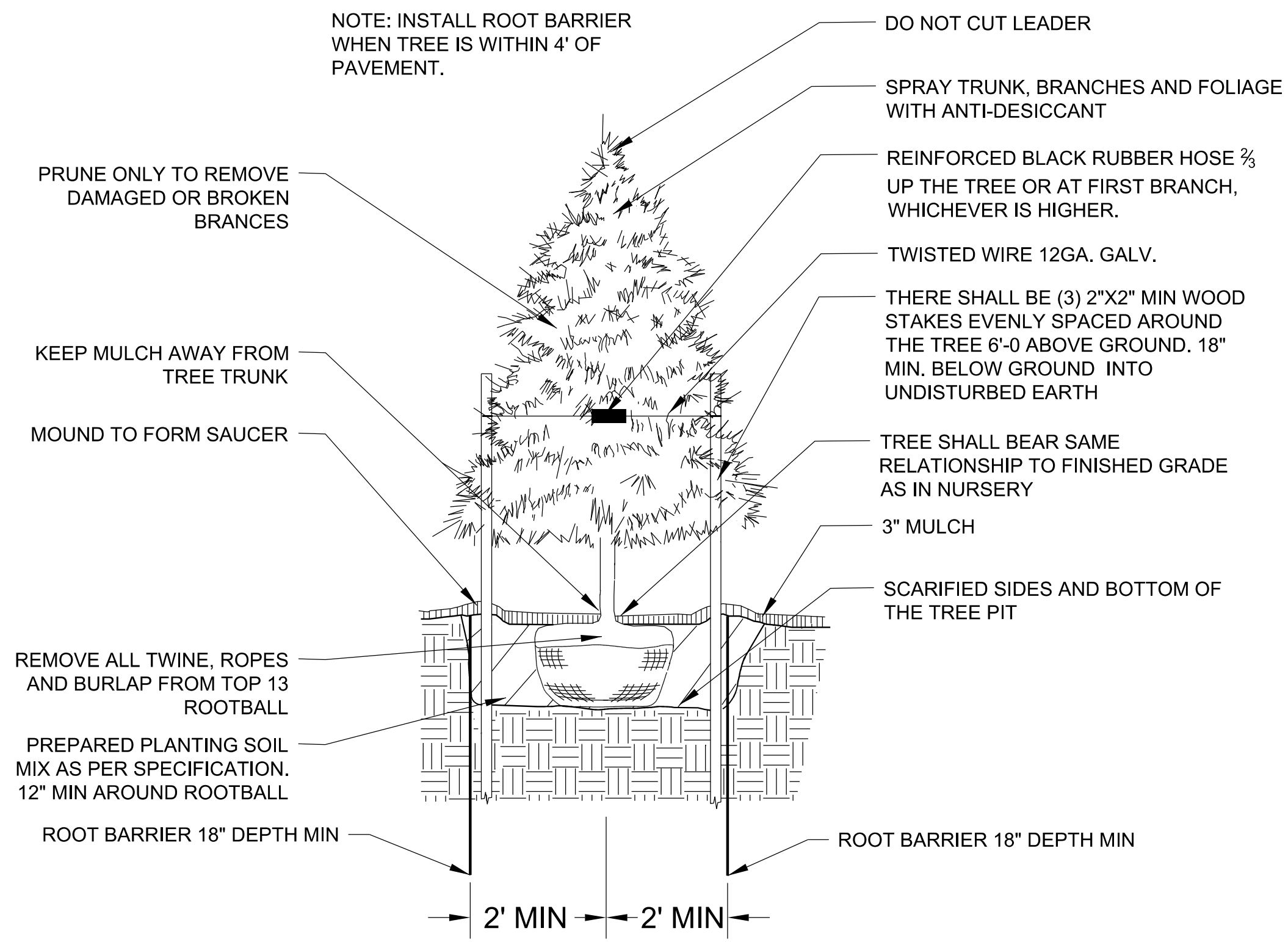
CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
LANDSCAPING DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLB
WORK ORDER NO.:	GEC212D-24	CHECKED BY:	KB
DRAWING NUMBER:	C507		
DWG. NO.:	C034	OF	C070
SHT. NO.:	38	OF	081
COMPUTER FILE NO.:	21D-24-C507	REV. NO.:	0

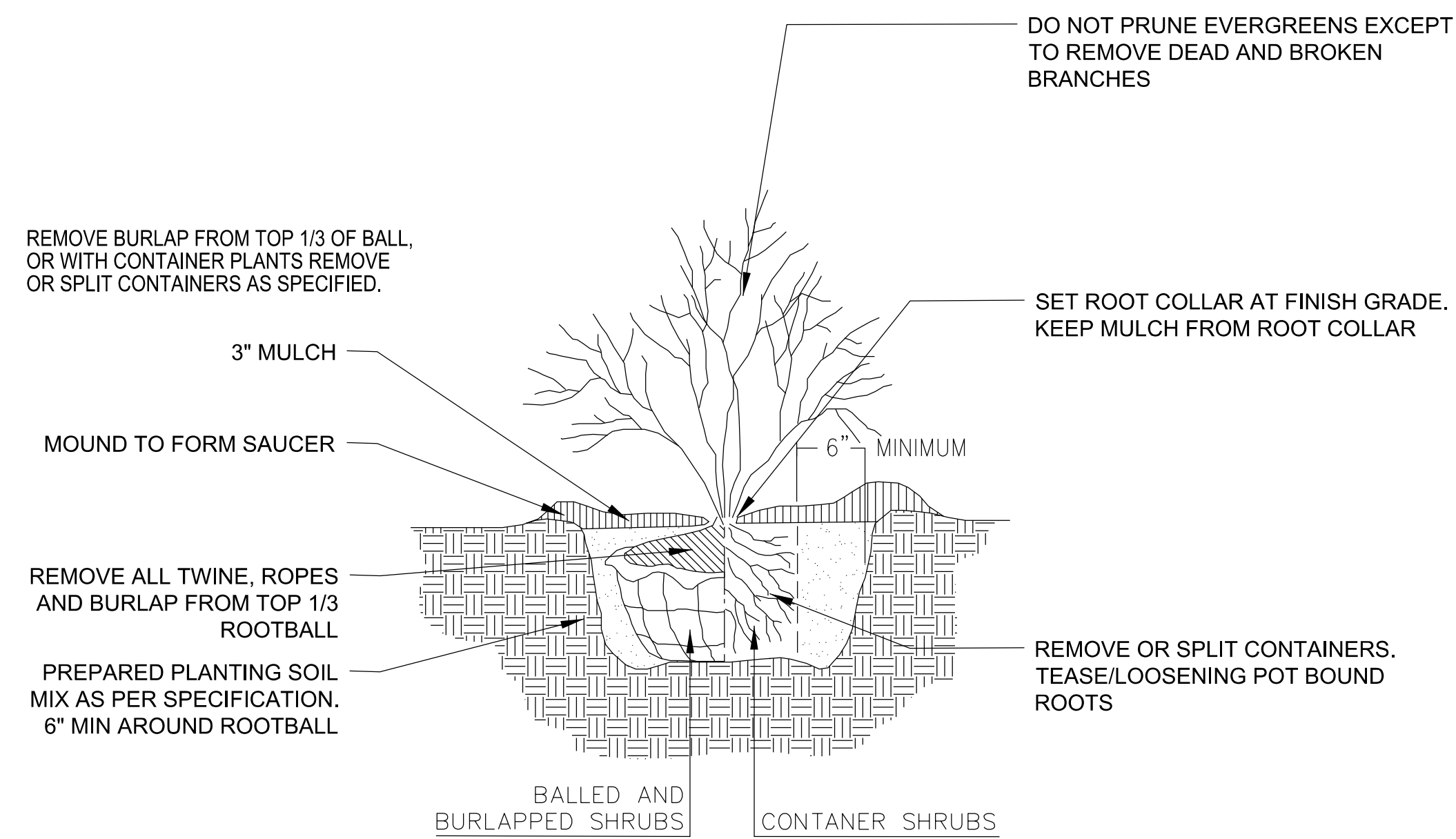
LAND DEVELOPMENT SUBMISSION



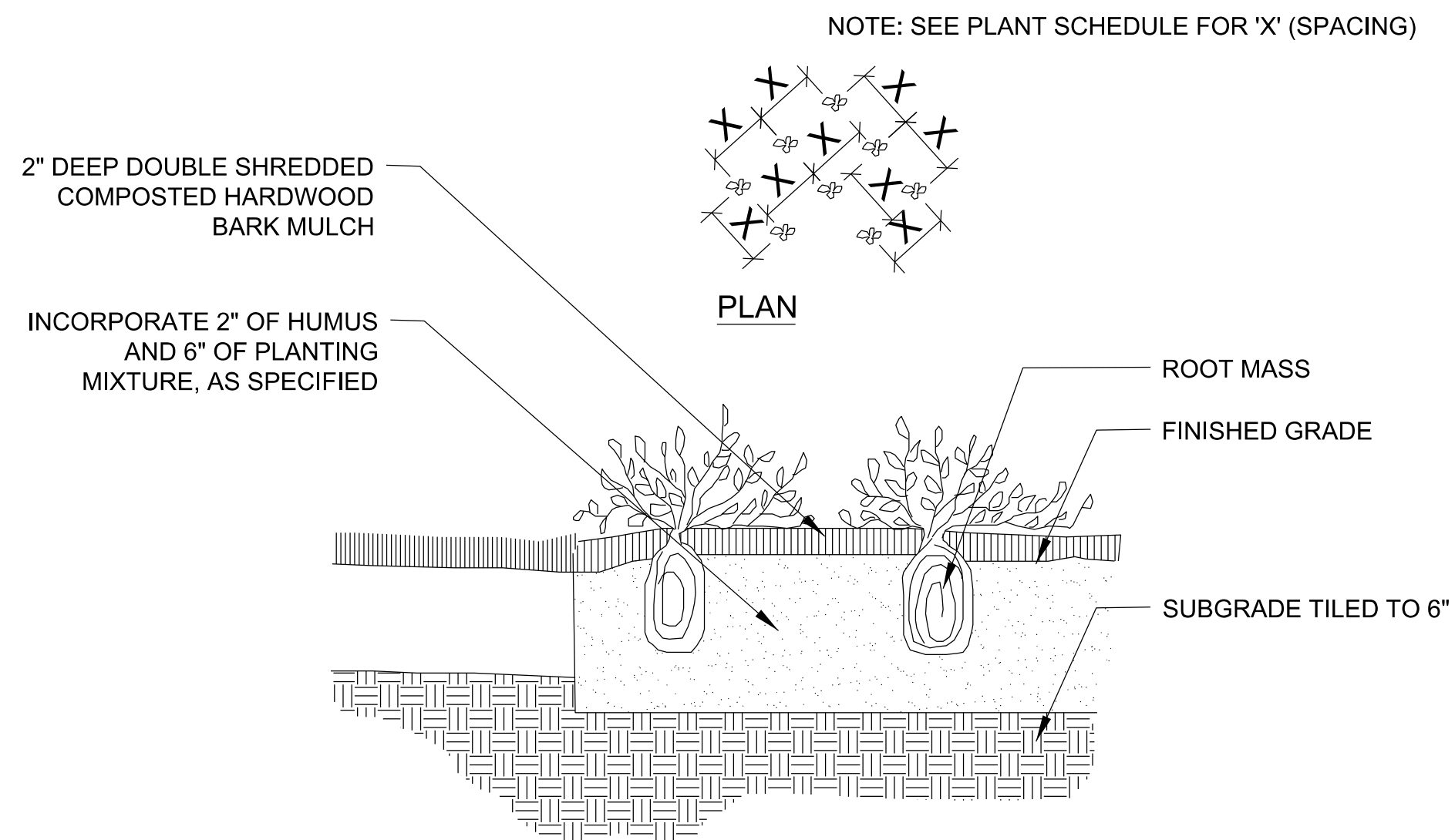
1 DECIDUOUS TREE PLANTING
C507 SCALE: NO SCALE



2 EVERGREEN TREE PLANTING
C507 SCALE: NO SCALE



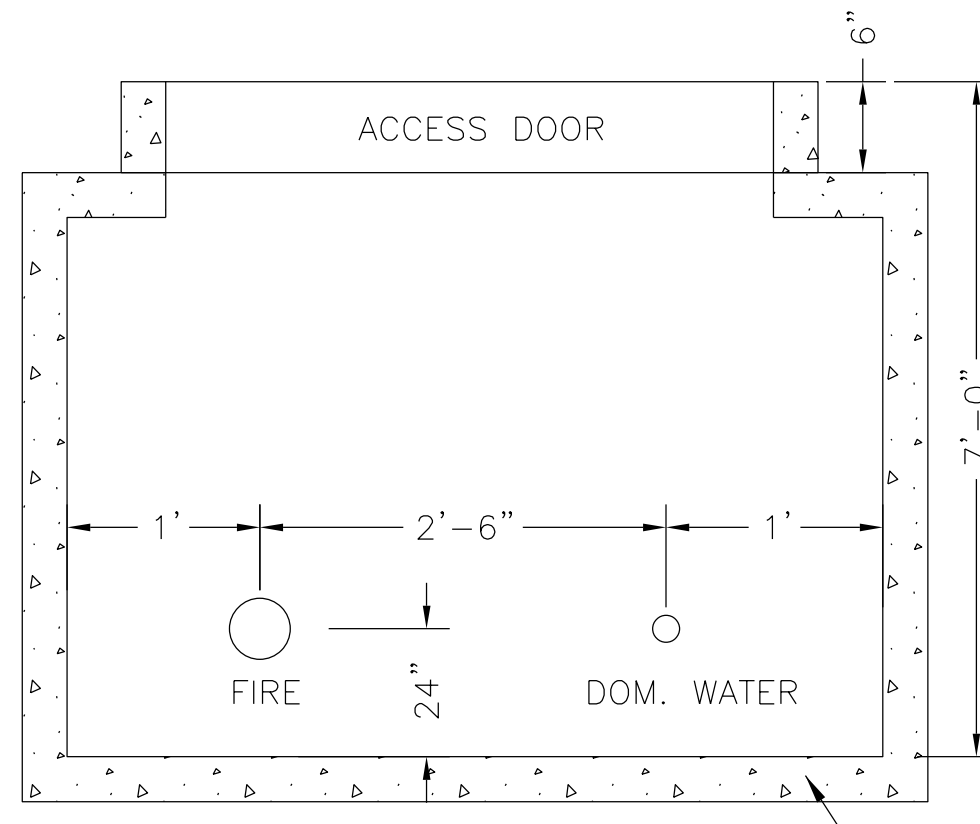
3 SHRUB PLANTING
C507 SCALE: NO SCALE



4 GROUNDCOVER/HERBACIOUS PLANTING
C507 SCALE: NO SCALE

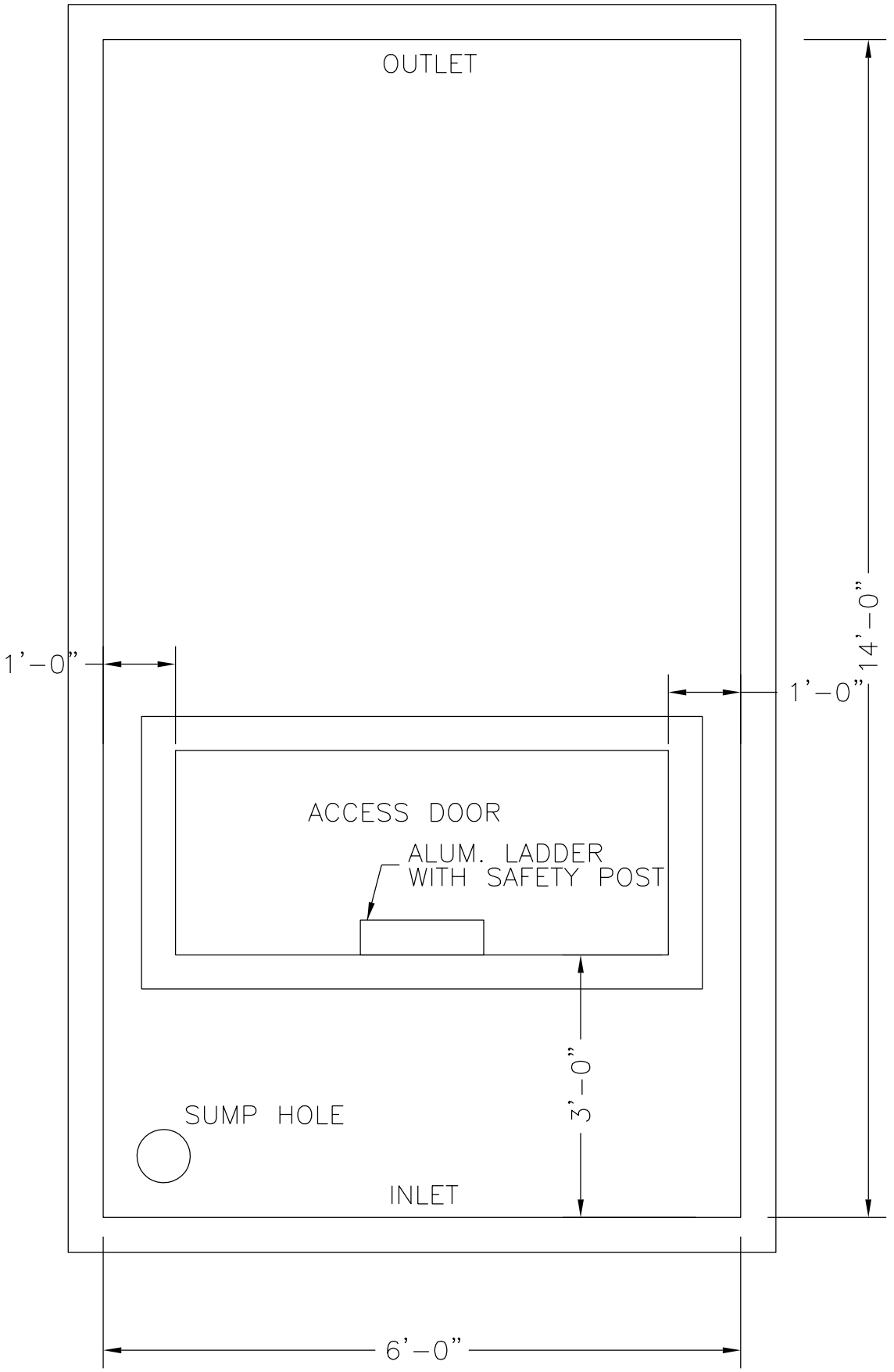
MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



FRONT VIEW

PRECAST 4000 PSI CONCRETE, CONFORMING WITH ASTM C150, AGGREGATE CONFORMING WITH ASTM C33. DESIGNED FOR H-20 LOADING.



TOP VIEW

- NOTES:
- 1) ALUMINUM LADDER WITH SAFETY POST TO BE CENTERED BETWEEN FIRE AND DOMESTIC LINES ON THE INLET SIDE OF THE PIT.
 - 2) DOORS MUST BE CENTERED DIRECTLY OVER THE FIRE METER.
 - 3) DOORS MAY BE RECESSED IN THE TOP OF THE PIT OR MOUNTED ON THE TOP OF THE PIT.
 - 4) GRADE MUST BE SLOPED AWAY FROM PIT IN ALL DIRECTIONS.
 - 5) PIPE RESTRAINED WITH OMNI SLEEVE IN EACH END OF PIT WALL.
 - 6) ALL VALVES INSIDE METER PIT TO BE PROVIDED BY AQUA. CONTRACTOR TO COORDINATE PIT INSTALLATION WITH AQUA.
 - 7) VAULT TO BE SET BETWEEN 1" AND 4" ABOVE FINISHED GRADE IN GRASS AREA AND GRADE TO BE SLOPED AWAY FROM VAULT.
 - 8) ACCESS DOOR TO BE BILCO ALUMINUM, SINGLE OR DOUBLE-LEAF TYPE J-401, CHANNEL FRAME WITH STAINLESS STEEL HARDWARE THROUGHOUT, OR APPROVED EQUAL.

1 AQUA - EXISTING DUAL SERVICE PIT DETAIL
C508 SCALE: NOT TO SCALE

REV	DATE	DESCRIPTION	BY	CHK	APP

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
WATER SERVICE DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	HLS
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	KB
DRAWING NUMBER:	C508		
DWG. NO.:	C035	OF	C070
SHT. NO.:	39	OF	081
COMPUTER FILE NO.:	21D-24-C508	REV. NO.:	0

GENERAL NOTES

- ALL CONSTRUCTION WILL BE IN ACCORDANCE WITH THE FOLLOWING CURRENT STANDARDS, AS APPLICABLE: CONSHOHOCKEN BOROUGH ZONING ORDINANCE, SEPTA STANDARD DETAILS AND SPECIFICATIONS, PENNDOT SPECIFICATIONS (PUB 408), PENNDOT ROADWAY CONSTRUCTION STANDARDS.
- THE PROJECT IS LOCATED WITHIN FEMA DESIGNATED FLOODPLAIN.
- BASED ON REVIEW OF THE EXISTING SITE CONDITIONS, NO PORTION OF THE PROJECT WOULD BE CONSIDERED AS A JURISDICTIONAL WETLAND OR WATERWAY; THEREFORE PERMITS UNDER DEP CHAPTER 105/ USACOE SECTION 404 WILL NOT BE REQUIRED.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN APPROVED FOR THIS PROJECT. A COPY OF THE APPROVED PLAN MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL EROSION CONTROL MEASURES THAT MAY BE REQUIRED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR IS REQUIRED TO CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO IMPLEMENT ANY REVISIONS TO THE APPROVED PLAN.
- NO OBJECTS SHALL BE PLACED, PLANTED, OR SET WITHIN THE AREA OF ANY EASEMENT OR RIGHT-OF-WAY THAT WOULD ADVERSELY IMPACT THE FUNCTION OF THE EASEMENT OR RIGHT-OF-WAY.
- ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE BUILDING. SPOT ELEVATIONS REFERENCE THE BOTTOM OF THE CURB AND FINISHED GROUND SURFACES UNLESS OTHERWISE NOTED.
- CONTRACTOR WILL REMOVE ANY TEMPORARY STORAGE BOXES ON SITE AT THE BEGINNING OF WORK AND RETURN TO SEPTA.
- CONTRACTOR WILL USE EXTREME CARE NOT TO DAMAGE EXISTING RAIL DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR WILL PROTECT NEW RAIL AND EXISTING RAIL WHILE IN USE.
- REMOVE ALL TRASH BINS, CLEAN AND RETURN TO SEPTA FOR REUSE.
- REMOVE ALL BENCHES, ADVERTISEMENT BILLBOARDS, AND WIND SCREENS, CLEAN AND RETURN TO SEPTA FOR REUSE.

SURVEY NOTES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM ELECTRONIC FILES PROVIDED BY THE SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY (SEPTA). SURVEY INFORMATION PROVIDED BY PENNONI ASSOCIATES DATED JAN 20, 2019.
- SUPPLEMENTAL TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY KMA CONSULTING ENGINEERS INC. IN NOVEMBER 2020. TOPOGRAPHICAL PLAN UPDATES WERE MADE ALONG THE RIVER SIDE AREA OF THE SITE AND ALONG THE RAILWAY.
- THIS SURVEY HAS BEEN PREPARED AND COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, EXCEPTIONS OR RESTRICTIONS OF RECORD THAT A TITLE SEARCH MAY DISCLOSE.
- THE HORIZONTAL DATUM FOR THIS PLAN IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83. THE VERTICAL DATUM FOR THIS PLAN IS BASED ON NAVD88.
- A PENNSYLVANIA ONECALL WAS COMPLETED ON JULY 24, 2020 SERIAL NO. 20202062212
- THE PROJECT UNITS ARE IN U.S. SURVEY FEET.
- BENCHMARKS
BM#1 - CONTROL POINT FROM PENNONI ASSOCIATES - ELEV 57.49'
BM#2 - CONTROL POINT FROM PENNONI ASSOCIATES - ELEV 57.89'
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL SURVEY DATA & INFORMATION PROVIDED.

EARTHWORK, EXCAVATION, AND BACKFILLING

- ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWINGS ARE BASED ON LIMITED FIELD INSPECTIONS. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL AND SHALL BE FIELD VERIFIED.
- EXCAVATIONS WHICH UNDERMINE EXISTING STRUCTURES TO REMAIN SHALL BE BRACED BY A SUITABLE EXCAVATION SUPPORT SYSTEM. NOTIFY PROJECT MANAGER WHERE UNCOVERED.
- PRIOR TO CONSTRUCTION, LOCATE ALL UNDERGROUND UTILITIES AND CONTACT THE PENNSYLVANIA ONE-CALL SYSTEM AT (800) 242-1776.
- ALL OVEREXCAVATED AND FILL AREAS UNDER AND ADJACENT TO FOUNDATIONS SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DRY DENSITY PER ASTM D1557 PRIOR TO PLACEMENT OF CONCRETE. REFER TO PROJECT SPECIFICATIONS FOR COMPACTION TESTING REQUIREMENTS.
- REMOVE UNSUITABLE MATERIALS UNDER FOUNDATIONS AND REPLACE WITH PENNDOT 2A COMPACTED FILL OR FLOWABLE FILL. REFER TO NOTE 4.

NOTICE

PURSUANT TO THE REQUIREMENTS OF PA ACT 287 of 1974 (THE UNDERGROUND UTILITY LINE PROTECTION ACT), AS AMENDED BY PA ACT 199 of 2004, THE CONTRACTOR SHALL CONTACT THE PENNSYLVANIA ONE CALL SYSTEM AT 811 OR 1-800-242-1776, 3 TO 10 WORKING DAYS PRIOR TO EXCAVATION.

HIGHWAY DISTRICT NO. 6 WARD NO. N/A
 SURVEY DISTRICT NO. N/A DRAINAGE SHT. NO. N/A
 ONE CALL NO. 20202062212 OUTFALL NO. N/A

OWNERS

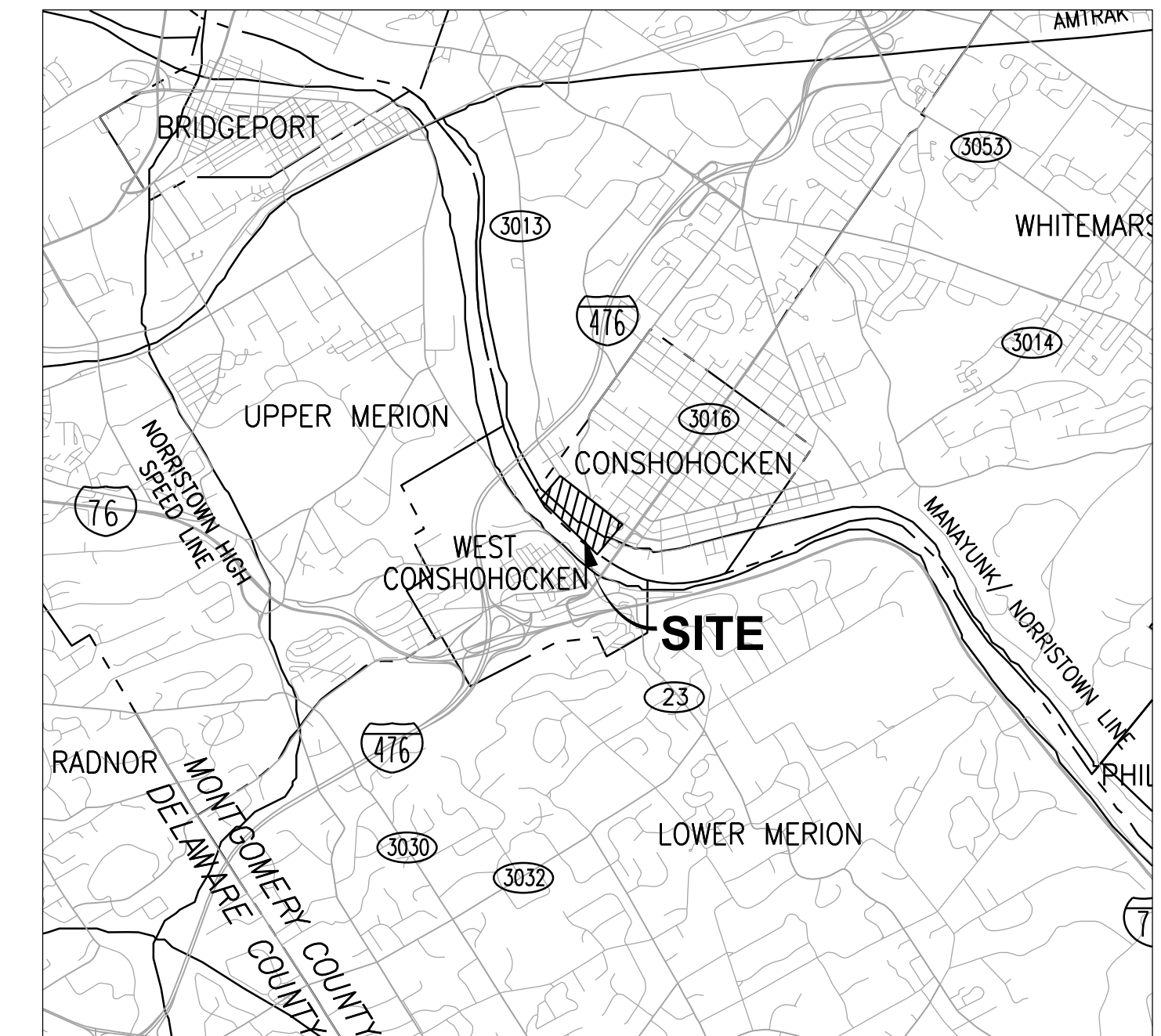
SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
 1234 MARKET STREET, 12TH FLOOR
 PHILADELPHIA, PA 19107
 PHONE: (215) 580-7800

SITE ADDRESS

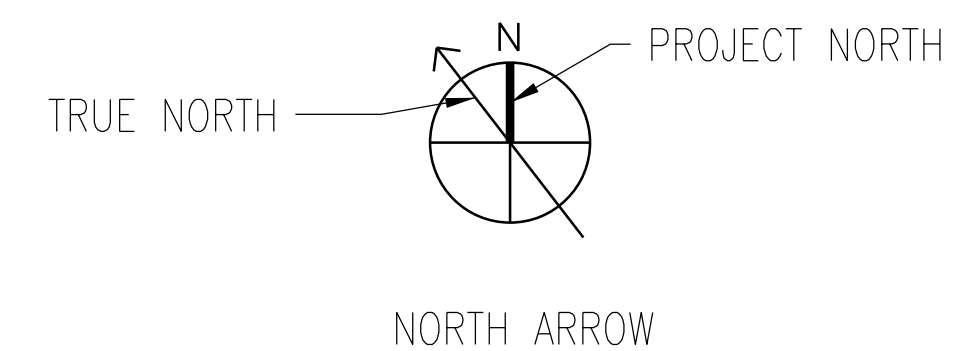
103 WASHINGTON ST
 CONSHOHOCKEN, PA 19428

PLAN LEGEND

- EXISTING UNDERGROUND ELECTRIC SERVICE
- EXISTING SANITARY SEWER
- EXISTING WATER SERVICE
- EXISTING GAS SERVICE
- EXISTING UNDERGROUND TELEPHONE SERVICE
- EXISTING ELECTRIC SERVICE
- EXISTING TELEPHONE SERVICE
- EXISTING CABLE TV SERVICE
- EXISTING WATER SERVICE
- PROPOSED UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT
- PROPOSED WATER SERVICE
- PROPOSED UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT
- EXISTING PROPERTY LINE
- EXISTING PROPERTY Z LINE
- EXISTING CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
- SOIL BOUNDARY
- SOIL BOUNDARY
- PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED STORMWATER PIPE
- 100-YEAR FLOODPLAIN BOUNDARY
- FILL LINE
- CUT LINE
- EXISTING INLET
- EXISTING PIPE
- COMPOST FILTER SOCK
- ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
- INLET FILTER BAG
- PUMPED WATER FILTER BAG WITH CFS RING
- TEMPORARY PROTECTIVE FENCE (ORANGE CONSTRUCTION FENCE)



VICINITY MAP
 SCALE: 1"=4000'

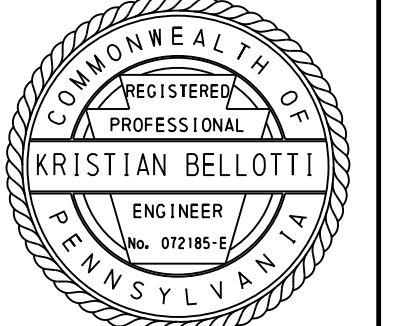


TOTAL PROJECT SITE = 4.37 AC
 TOTAL DISTURBED AREA = 4.37 AC
 TOTAL DISTURBED AREA FOR PCSM CALCULATIONS = 3.22 AC
 EXISTING IMPERVIOUS AREA = 2.79 AC
 PROPOSED IMPERVIOUS AREA = 1.92 AC
 NET CHANGE = -0.87 AC

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
 EM&C DIVISION
 1234 MARKET ST. 13TH FL.
 PHILADELPHIA, PA 19107

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 EROSION AND SEDIMENT CONTROL NOTES

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: OMA
DRAWING NUMBER: C601	REV. NO.: 0
DWG. NO.: C036 OF C070	COMPUTER FILE NO.: 21D-24-C601
SHT. NO.: 40 OF 081	

LAND DEVELOPMENT SUBMISSION

STANDARD EROSION & SEDIMENT CONTROL NOTES

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

STANDARD EROSION & SEDIMENT CONTROL NOTES (CONT'D)

- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
15. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
16. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
17. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES, 6 TO 12 INCHES ON COMPACTED SOILD PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL AHVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
22. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
23. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.

STANDARD EROSION & SEDIMENT CONTROL NOTES (CONT'D)

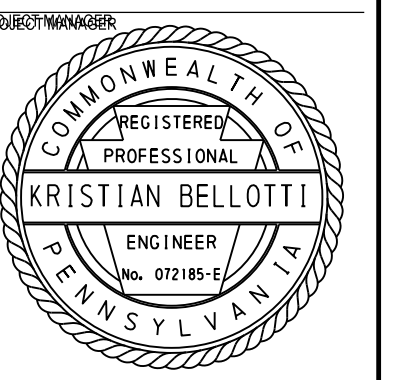
- 26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
27. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
28. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
30. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
31. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
33. IN NO CASE SHALL CONCRETE WASH WATER BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
34. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS. SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
35. THIS PROJECT IS LOCATED WITHIN THE SCHUYLKILL WATERSHED. THE SCHUYLKILL RIVER AND PLYMOUTH CREEK ARE THE RECEIVING WATERCOURSES. THE CHAPTER 93 CLASSIFICATION FOR THE SCHUYLKILL RIVER IS WARM WATER FISHES (WWF) AND MIGRATORY FISHES (MF); PLYMOUTH CREEK IS WWF AND MF.

CONSTRUCTION NOTES

- 1. THE CONTRACTOR WILL CONTACT THE PA ONE CALL SYSTEM (800-242-1776) NO LESS THAN THREE (3) AND NO MORE THAN TEN (10) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. ANY DISCREPANCY FOUND IS TO BE BROUGHT TO THE ATTENTION OF THE SEPTA SITE PROJECT MANAGER PRIOR TO THE START OF WORK.
3. THE CONTRACTOR WILL VERIFY ALL BASELINES AND POINTS OF CONSTRUCTION, THE LOCATION OF ALL NEW CONSTRUCTION, AND VERIFY ALL SETBACKS, OFFSETS, AND CLEARANCES.
4. THE CONTRACTOR WILL MAINTAIN ALL UTILITY SERVICES TO PERMANENT AND TEMPORARY FACILITIES THROUGHOUT CONSTRUCTION. THE CONTRACTOR WILL PROVIDE A WRITTEN CONSTRUCTION SEQUENCE PLAN AND COORDINATE ANY REQUIRED BREAKS IN UTILITY SERVICE WITH SEPTA AND THE APPROPRIATE UTILITY PRIOR TO COMMENCING ANY WORK REQUIRING A BREAK IN UTILITY SERVICE.
5. THE CONTRACTOR MUST PROVIDE AND MAINTAIN SAFE PEDESTRIAN ACCESS FROM ALL OPERATIONAL AREAS TO ACTIVE PLATFORMS AND OPERATIONAL STATION BUILDING AT ALL TIMES DURING CONSTRUCTION. ACCESS MUST BE ADA COMPLIANT.
6. THE CONTRACTOR MUST MAINTAIN MINIMUM 10'-WIDE ENTRANCE AND EXIT LANES TO/FROM THE SITE AT ALL TIMES.
7. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY ON-SITE AND OFF-SITE TEMPORARY TRAFFIC CONTROL AND DIRECTIONAL SIGNAGE AND MARKINGS TO ALLOW SAFE MOVEMENT THROUGH CONSTRUCTION AREAS AND TO AND FROM ALL TEMPORARY AREAS.
8. THE CONTRACTOR WILL ESTABLISH AND MAINTAIN TEMPORARY BENCHMARKS ON-SITE TO PERFORM OPERATIONS DURING CONSTRUCTION.
9. THE CONTRACTOR WILL SAWCUT ALL OPENINGS IN EXISTING PAVEMENT FOR DEMOLITION AND TRENCH OPENINGS WHEN SURROUNDING EXISTING PAVEMENT IS TO REMAIN IN PLACE.
10. THE CONTRACTOR WILL LIMIT THE AMOUNT OF EARTH DISTURBANCE DURING CONSTRUCTION.
11. THE CONTRACTOR WILL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
12. THE CONTRACTOR WILL PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ELEMENTS. ADJUST PROPOSED GRADES AND/ OR SAW CUT EXISTING PAVEMENTS TO PROVIDE A SMOOTH FIT AND CONTINUOUS GRADE.
13. ALL STORM AND UTILITY STRUCTURE TOPS ARE TO BE FLUSH WITH FINISH GRADE. ADJUST TOPS OF EXISTING STRUCTURES TO PROVIDE FLUSH FINISH. ALL RAINWATER IS TO DRAIN TO INLETS WITHOUT ON-SITE PONDING.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION WASTE FROM THE SITE. ANY MATERIAL REMOVED FROM THE SITE IS TO BE LEGALLY DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL PROVIDE EVIDENCE OF LEGAL DISPOSAL.
15. NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERCEDE ANY DISCREPANCY IN THE SCALING OF THE DRAWINGS.
16. UTILITY AND STORM LINES ARE TO BE CLEANED BY THE CONTRACTOR PRIOR TO PLACING THE LINES IN SERVICE. THE CLEANING METHOD IS TO ELIMINATE ANY CONSTRUCTION MATERIAL AND DEBRIS FROM THE SYSTEM. CONTRACTOR TO OBTAIN APPROVAL OF CLEANING METHOD FROM SEPTA PROJECT MANAGER. EXISTING INLETS AND EXISTING STORM DRAIN PIPES NOT SCHEDULED FOR REMOVAL WITHIN THE SITE AREA / LIMIT OF DISTURBANCE DEPICTED ON THIS PLAN WILL BE CLEANED. DEBRIS IN INLETS WILL BE REMOVED TO THE BOTTOM OF THE STRUCTURE.
17. THE CONTRACTOR WILL SUBMIT JOINT LAYOUT PLANS AND A SEQUENCE OF POURS 30 DAYS PRIOR TO PLACING CONCRETE. THE PLAN AND SEQUENCE WILL BE REVIEWED BY THE SEPTA PROJECT MANAGER.
18. NO MATERIALS OR CONSTRUCTION DEBRIS/ TRASH WILL BE STORED OUTSIDE THE LIMIT OF DISTURBANCE.



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Revision table with columns: REV, DATE, DESCRIPTION, BY, CKD, APD. Contains 4 revision entries.

Vertical title block containing project name 'CONSHOCKEN RAILROAD STATION', 'PHASE II PARKING NEW CONSTRUCTION CIVIL', and 'EROSION AND SEDIMENT CONTROL NOTES'.

Technical drawing metadata table including SCALE (AS NOTED), DATE (11/1/2024), DRAWING NUMBER (C602), and DWG. NO. (C037).

LAND DEVELOPMENT SUBMISSION

PREPAREDNESS, PREVENTION, AND CONTINGENCY PLAN GENERAL NOTES

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREPARE A "PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN" FOR THE PROPOSED CONSTRUCTION ACTIVITIES TO CONTROL THE POTENTIAL DISCHARGE OF POLLUTANTS CARRIED IN STORM WATER.

BOTH THE E&S AND THE PPC PLAN ARE TO BE MAINTAINED ONSITE FOR THE DURATION OF THE PERMIT.

THE PPC PLAN IS REQUIRED IF CHEMICALS, SOLVENTS, HAZARDOUS WASTES, OR ANY MATERIAL WITH THE POTENTIAL FOR CAUSING ACCIDENTAL POLLUTION OF THE AIR, LAND, OR WATER, IS STORED OR UTILIZED ON THE SITE.

FOLLOW THIS FORMAT AND INCLUDE THESE ELEMENTS FOR THE PPC PLAN:

- A. GENERAL DESCRIPTION FOR THE CONSTRUCTION ACTIVITY
 - 1. INCLUDE DRAWINGS SHOWING GENERAL LAYOUT OF SITE, PROPERTY BOUNDARIES, MATERIALS STORAGE AREAS, LOADING AND UNLOADING OPERATION SITES, AND TRUCK WASHING AREAS, IN ADDITION TO THE FEATURES OF THE E&S PLANS.
- B. EMERGENCY RESPONSE PROGRAM
 - 1. DESCRIBE THE ORGANIZATION STRUCTURE, CHAIN OF COMMAND, EMERGENCY COORDINATORS AND CONTACTS. INCLUDE DESCRIPTIONS OF EACH INDIVIDUALS DUTIES AND RESPONSIBILITIES WITHIN THE CHAIN OF COMMAND FOR IMPLEMENTATION OF THE PPC PLAN.
 - 2. IDENTIFY ON THE ORGANIZATIONAL CHART A LIST OF EMERGENCY COORDINATORS THAT MUST BE CONTACTED IN THE EVENT OF AN EMERGENCY OR SPILL.
 - 3. DESCRIBE THE DUTIES AND RESPONSIBILITIES OF THE EMERGENCY COORDINATOR SPECIFIC TO THE SITE OR ACTIVITY IN THE EVENT OF AN EMINENT OR ACTUAL EMERGENCY.
 - 4. INCLUDE ON THE ORGANIZATIONAL CHART OR A LIST OF AGENCIES ON AN ATTACHMENT AND PHONE NUMBERS THAT MUST BE CONTACTED IN THE EVENT OF AN EMERGENCY OR SPILL. SUCH A LIST INCLUDES AS APPLICABLE:
 PA DEP
 PA EMERGENCY MANAGEMENT AGENCY
 COUNTY HEALTH DEPARTMENT
 PA FISH & BOAT COMMISSION
 THE NATIONAL RESPONSE CENTER
 (U.S. EPA AND U.S. COAST GUARD)
 LOCAL POLICE AND FIRE DEPARTMENTS
 LOCAL SEWAGE TREATMENT PLANT
 DOWNSTREAM PUBLIC WATER SUPPLIES
 INDUSTRIAL WATER USERS
 RECREATION AREAS
 INTERNAL AND EXTERNAL COMMUNICATIONS AND ALARM SYSTEMS
- C. EMPLOYEE TRAINING PROGRAM
 - 1. LIST OF EMERGENCY EQUIPMENT. INCLUDE THE LOCATION, PHYSICAL DESCRIPTION, INTENDED USE AND CAPABILITIES OF EACH ITEM.
 - 2. MAINTENANCE PROCEDURES AND DECONTAMINATION PROCEDURES OF EMERGENCY EQUIPMENT.
 - 3. EVACUATION PLAN FOR INSTALLATION PERSONNEL. (IF DEEMED NECESSARY)
 - 4. ARRANGEMENTS WITH EMERGENCY RESPONSE CONTRACTORS. PROVIDE LIST WITH PHONE NUMBERS AND THE SERVICES EACH CONTRACTOR WILL PROVIDE.
 - 5. INFORM LOCAL EMERGENCY RESPONSE AGENCIES AND HOSPITALS CONCERNING THE TYPE OF POTENTIAL EMERGENCIES THAT MAY OCCUR AND THE NEED FOR SERVICES.
 - 6. FAMILIARIZE LOCAL POLICE, FIRE DEPARTMENT, EMERGENCY RESPONSE TEAMS AND THE COUNTY EMERGENCY MANAGEMENT COORDINATOR WITH THE LAYOUT OF THE CONSTRUCTION SITE, THE PROPERTIES AND DANGERS ASSOCIATED WITH THE HAZARDOUS MATERIALS (IF ANY) HANDLED, PLACES WHERE PERSONNEL WOULD BE NORMALLY WORKING, ENTRANCES TO ACCESS ROADS INSIDE THE FACILITY, AND ANY POSSIBLE EVACUATION ROUTES.
- D. MATERIALS AND WASTE INVENTORY
 - 1. INFORM LOCAL EMERGENCY RESPONSE AGENCIES AND HOSPITALS CONCERNING THE TYPE OF POTENTIAL EMERGENCIES THAT MAY OCCUR AND THE NEED FOR SERVICES.
 - 2. FOR EACH HAZARDOUS CHEMICAL STORED AT THE CONSTRUCTION SITE, THE LOCATION MATERIAL SAFETY DATA SHEET OR SIMILAR INFORMATION IS TO BE CLEARLY CITED IN THE PPC PLAN.
- E. SPILL AND LEAK PREVENTION RESPONSE
 - 1. DESCRIBE THE SOURCE AND AREAS FOR POTENTIAL LEAKS AND SPILLS, THE PROBABLE DIRECTION OF FLOW OF SPILLED MATERIALS AND THE POLLUTION INCIDENT MEASURE SPECIFIC TO THE SOURCE OR AREA.
 - 2. PROVIDE SEPARATE DRAWINGS OR PLOT PLANS TO SUPPLEMENT THE ABOVE.
- F. INSPECTION PROGRAM
 - 1. DESCRIBE THE INSPECTION PROGRAM AND MONITORING PROCEDURES TO ASSESS THE INTEGRITY OF EQUIPMENT, STORAGE AREAS AND SIMILAR AREAS.
- G. HOUSEKEEPING PROGRAM
 - 1. IDENTIFY THE AREAS AND THE ASSOCIATED TYPE OF HOUSEKEEPING PRACTICES TO MINIMIZE THE POSSIBILITY OF ACCIDENTAL SPILLS AND SAFETY HAZARDS TO PERSONNEL.
- H. SECURITY MEASURES
 - 1. DESCRIBE SECURITY PROCEDURES AND SYSTEMS AT THE SITE TO PREVENT ACCIDENTAL OR INTENTIONAL ENTRY THAT COULD RESULT IN A VIOLATION OF DEPARTMENTAL REGULATIONS, AND/OR INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.
- I. EXTERNAL FACTORS
 - 1. DESCRIBE THE POSSIBLE EFFECTS OF EXTERNAL FACTORS SUCH AS POWER OUTAGES, STRIKES, FLOODS, SNOWSTORMS, ETC. AND ANY ACTION TO BE TAKEN TO ALLEVIATE ANY RESULTING EFFECTS TO PUBLIC HEALTH SAFETY OR THE ENVIRONMENT.
- J. ALL IN STREAM WORK SHALL BE CONDUCTED DURING LOW FLOW CONDITIONS
 - 1. INCLUDE PROVISIONS FOR EVACUATING MATERIALS AND EQUIPMENT FROM FLOODPLAIN WORK AREAS DURING HIGH FLOWS.

MAINTENANCE PROGRAM

ROCK CONSTRUCTION ENTRANCES WITH WASH RACKS: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PUBLIC ROADS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

INLET FILTER BAGS: INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG IS 1/2 FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. ACCUMULATED SEDIMENT SHOULD BE DISPOSED IN AN APPROVED MANNER. DAMAGED FILTER BAGS SHOULD BE REPLACED. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. A SUPPLY SHALL BE MAINTAINED ON THE SITE FOR REPLACEMENT OF BAGS.

PUMPED WATER FILTER BAGS: INSPECT FILTER BAGS DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. REPLACE FILTER BAGS WHEN THEY BECOME 1/2 FULL. KEEP SPARE BAGS AVAILABLE FOR THOSE THAT HAVE FAILED OR ARE FILLED. FILTER BAGS SHALL NOT BE PLACED IN WATERWAYS OF THE U.S. OR COMMONWEALTH.

COMPOST FILTER SOCK: SEDIMENT SHALL BE REMOVED WHERE ACCUMULATIONS REACH HALF THE ABOVEGROUND HEIGHT OF THE FILTER SOCK. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

WASH RACK DIVERSION: SEDIMENT SHALL BE REMOVED WHERE ACCUMULATIONS REACH HALF THE ABOVEGROUND HEIGHT OF THE FILTER SOCK. WASH RACK DIVERSION SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

CONCRETE WASHOUT: ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. ACCUMULATED MATERIALS WHOULD BE REMOVED WHEN THEY REACH THE CLEANOUT LEVEL AS SPECIFIED BY MANUFACTURER.

EROSION CONTROL BLANKET: BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. REMOVE ACCUMULATED SEDIMENT AS NECESSARY. REMOVE AND DISPOSE OF SEDIMENT IN ACCORDANCE WITH PENNDOT PUBLICATION 408.

SILT FENCE: SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED FENCE SHALL BE REPAIRED IMMEDIATELY. REMOVE ACCUMULATED SEDIMENT WHEN ACCUMULATIONS REACH HALF THE ABOVEGROUND HEIGHT OF THE FENCE. ANY SECTION OF SILT FENCE THAT IS UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.

STONE INLET PROTECTION: 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.

NOTES

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY BY THE CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTION OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED REPLACEMENT BMPS OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.

THERMAL IMPACTS CREATED BY IMPERVIOUS SURFACES ARE MITIGATED BY PROVIDING BASINS AND SEDIMENT FOREBAYS AS SHOWN ON THE PLANS. OTHER MEASURES ON THIS PROJECT WHICH PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF INCLUDE ROCK CONSTRUCTION ENTRANCES, INLET FILTER BAGS, RIPRAP APRONS, PUMPED WATER FILTER BAGS, COMPOST FILTER SOCK, AND ROLLED EROSION CONTROL PRODUCT.

MOW VEGETATION WHENEVER NECESSARY TO MAINTAIN A PLEASING APPEARANCE AND TO DISCOURAGE WEED GROWTH.

A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

PROJECT WASTES DURING OPERATION AND MAINTENANCE CONSIST OF VEGETATION, DEBRIS, AND SEDIMENT THAT HAVE ACCUMULATED IN THE E&S BMPS. IF THESE WASTES ARE IDENTIFIED DURING INSPECTION THEY SHOULD BE REMOVED FROM THE PROJECT SITE AND PROPERLY DISPOSED OF OR RECYCLED. CONSTRUCTION WASTES ANTICIPATED FOR THIS PROJECT ARE CONCRETE, STEEL AND PAVEMENT ASSOCIATED WITH THE ROADWAY IMPROVEMENTS. REMOVE ALL BUILDING MATERIALS AND WASTES FROM THE SITE AND RECYCLE OR DISPOSE OF IN ACCORDANCE WITH PA DEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. DO NOT BURN, BURY, DUMP OR DISCHARGE ANY BUILDING MATERIALS, WASTES, OR UNUSED BUILDING MATERIALS AT THE SITE.

PLACE ALL SEEDING AND SOIL SUPPLEMENTS AND MULCHING ITEMS IN ACCORDANCE WITH THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 804 AND 805.

SEED AND MULCH IMMEDIATELY ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED. DURING NON-GERMINATING PERIODS (OCTOBER 15 TO MARCH 15), APPLY MULCH AT THE RECOMMENDED RATES. SEED AND MULCH WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH ALL DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR. SEED AND MULCH WITH A PERMANENT SEED MIXTURE AND MULCH ALL DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR.

REMOVE SILT THAT HAS ACCUMULATED, ALLOW TO DRY, AND THEN USE AS FILL WHEREVER REQUIRED ON THE SITE.

REPEAT THE ABOVE PROCEDURE AFTER EACH STORM UNTIL NO ADDITIONAL SIGNS OF EROSION ARE EVIDENT. AT MONTHLY INTERVALS THEREAFTER, INSPECT AND CLEAN AS NECESSARY.

FILL MEASURES

FOR ANY FILL MATERIAL IMPORTED FROM AN OFF-SITE LOCATION, IT IS THE RESPONSIBILITY OF THE OPERATOR/RESPONSIBLE PERSON (O/RP) ON SITE TO PERFORM ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THE PROJECT QUALIFIES AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.

IF THE CONTRACTOR WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE REGIONAL OFFICE OF THE DEPARTMENT.

CLEAN FILL: CLEAN FILL IS DEFINED AS UNCONTAMINATED SOLUBLE NON-DECOMPOSABLE, INERT SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).

CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1a AND FP-1b FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL."

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL."

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CADE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ONLINE AT WWW.PACODE.COM.

AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.

ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

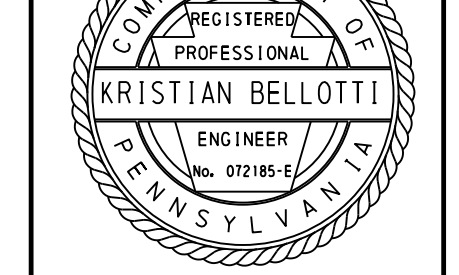
FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.



1234 MARKET ST. 13TH FL. PHILADELPHIA, PA 19107

MANAGER-ARCHENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 EROSION AND SEDIMENT CONTROL BMP MAINTENANCE NOTES

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CAI
		CHECKED BY:	CAI
WORK ORDER NO.:	GEC21D-24		
DRAWING NUMBER:	C603		
DWG. NO.:	C038	OF:	C070
SHT. NO.:	42	OF:	081
COMPUTER FILE NO.:	21D-24-C603	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

CONSTRUCTION SEQUENCE

THE FOLLOWING IS THE SEQUENCE OF EARTH MOVING AND CONSTRUCTION ACTIVITIES FOR THIS PROJECT. ANY REVISIONS TO THE SEQUENCE ARE SUBJECT TO REVIEW BY THE CONSERVATION DISTRICT PRIOR TO IMPLEMENTATION. COMPLETE EACH PHASE BEFORE ANY SUBSEQUENT PHASE IS INITIATED. A DESIGNATED LICENSED PROFESSIONAL IS REQUIRED TO ATTEND THE PRE-CONSTRUCTION MEETING. FOR CRITICAL STAGES OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO NOTIFY THE DESIGNATED LICENSED PROFESSIONAL FOR OBSERVATION OF THAT PHASE. REFER TO THE CONTAMINATED GROUNDWATER MANAGEMENT ON SHEETS C613 TO C615 OF THE E&S PLAN PRIOR TO EXCAVATION ON THE PROJECT SITE. IF GROUNDWATER IS ENCOUNTERED ON THE PROJECT SITE DURING EXCAVATION, REFER TO SHEET C614 FOR THE PROCEDURES OF THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND/OR STORMWATER. ENSURE WORK ADHERES TO THE PADEP E&S MANUAL AND SPECIFICATIONS.

- FIELD MARK LIMITS OF DISTURBANCE AND ENVIRONMENTALLY SENSITIVE AREAS INCLUDING FLOODWAYS PRIOR TO DISTURBANCE ACTIVITIES.
- PLACE ORANGE CONSTRUCTION FENCE (OCF), COMPOST FILTER SOCK (CFS) AND SILT FENCE (SF). FOR PLACING THE SILT FENCE, FOLLOW THE SUB-SEQUENCE #1. INSTALL INLET FILTER BAGS IN EXISTING INLETS EX-IN205, EX-IN204 AND EX-IN202. INSTALL THE TEMPORARY ROUNDED ASPHALT BERM ADJACENT TO THE EXISTING INLETS EX-IN204 AND EX-IN205.
- INSTALL THE ROCK CONSTRUCTION ENTRANCE WITH WASH RACK AND WASH RACK DIVERSION AREA.
- CONDUCT CLEARING AND GRUBBING.
- INSTALL THE PROPOSED UTILITIES PER THE UTILITY PLANS IN THE VICINITY OF THE PROPOSED PARKING LOT.
- INSTALL THE PROPOSED INLETS INL-301, INL-302, INL-303, INL-304, PROPOSED MANHOLES MH-301, MH-302, MH-303 AND THE PROPOSED PIPE CONNECTIONS FROM DOWNSTREAM TO UPSTREAM PER PLAN. INSTALL INLET FILTER BAGS IN PROPOSED INLETS INL-301, INL-302, INL-303, AND INL-304.
- REBUILD EXISTING INLET EX-INL202 and GRADE ADJUST EXISTING INLETS EX-INL204 and EX-INL205. RE-INSTALL INLET FILTER BAGS IN EX-INL202, EX-INL204 and EX-INL205
- GRADE THE PROJECT SITE PER THE GRADING PLANS. USE A PUMPED WATER FILTER BAG AS NECESSARY FOR ANY PONDING.
- INSTALL TEMPORARY EARTHEN BERMS OR SANDBAGS AT THE DOWNSTREAM END OF INL-302, INL-303, INL-304 PER PLAN ONCE ADJACENT AREA IS BROUGHT TO GRADE.
- STABILIZE THE PROJECT SITE INCLUDING THE MULTI-USE PATH PER THE PERMANENT STABILIZATION NOTES.
- INSTALL THE CURBS, SUBBASE AND PAVEMENT PER THE CIVIL PLANS.
- INSTALL THE ADA RAMPS, SIDEWALKS AND MULTI-USE PATH PER THE CIVIL PLANS.
- INSTALL STRIPING, SIGNING, FENCING, GATES AND SITE FURNISHINGS PER PLANS.
- INSTALL THE UTILITIES IN THE ACCESS ROAD PER THE UTILITY PLANS AND REFERENCE THE UTILITY WORK ON ACCESS ROAD/OAK STREET NOTES. COORDINATE WITH AQUA FOR CONNECTING THE PROPOSED WATER LINE TO THE EXISTING AQUA WATER METER PIT. MILL AND OVERLAY WASHINGTON AVE AS INDICATED ON THE CIVIL SITE LAYOUT PLANS.
- INSTALL THE SIGNALS AND FIBER OPTICS ON OAK STREET PER THE SIGNAL PLANS AND REFERENCE THE UTILITY WORK ON ACCESS ROAD/OAK STREET NOTES.
- INSTALL SITE LIGHTING PER PLANS.
- INSTALL ALL SEEDING AND LANDSCAPING AS INDICATED ON THE CIVIL LANDSCAPING PLAN.
- REMOVE THE ROCK CONSTRUCTION ENTRANCE WITH WASH RACK, WASH RACK DIVERSION AND IMMEDIATELY STABILIZE AND PAVE THE AREA.
- ACHIEVE PERMANENT STABILIZATION OF ALL DISTURBED AREAS PER THE PERMANENT STABILIZATION NOTES.
- REMOVE E&S BMPS ONCE THE SITE IS STABILIZED. THIS IS A CRITICAL STAGE OF CONSTRUCTION.
- WHEN THE PROJECT IS COMPLETE, SUBMIT THE NOTICE OF TERMINATION.

SUB-SEQUENCE

THE FOLLOWING SUB-SEQUENCES ARE INTENDED TO PROVIDE A DETAILED PROCEDURE FOR AN ASPECT OF CONSTRUCTION THAT IS ENCOUNTERED MULTIPLE TIMES WITHIN THE CONSTRUCTION CONTRACT. THE SUB-SEQUENCE IS REFERENCED BY NUMBER WITHIN THE BODY OF THE MAIN SEQUENCE WHEN APPLICABLE.

SUB-SEQUENCE #1: PENNSYLVANIA FISH & BOAT COMMISSION THREATENED AND ENDANGERED SPECIES PLAN

THE PROJECT SITE CONTAINS ACCESSIBLE NESTING HABITAT FOR THE NORTHERN RED-BELLIED COOTER. THE FOLLOWING MEASURES MUST BE IMPLEMENTED IN ORDER TO AVOID IMPACTS TO THE NORTHERN RED-BELLIED COOTERS DURING THE CONSTRUCTION OF THIS PROJECT:

- INSTALL THE SILT FENCE BARRIER (MINIMUM OF 6 INCHES DEEP) BETWEEN THE SCHUYLKILL RIVER AND THE WORK AREA TO PREVENT THE NORTHERN RED-BELLIED COOTER (PSEUDHEMYS RUBRIVENTRIS, PA THREATENED) FROM ACCESSING THE WORK ZONE. INSTALL THE SILT FENCE DURING THE INACTIVE PERIOD OF THE TURTLE FROM OCTOBER 15 - APRIL 15.
- INSPECT THE SILT FENCE REGULARLY TO ENSURE THERE ARE NO BREACHES IN THE SILT FENCE. PERFORM A SITE PERIMETER INSPECTION IN JUNE TO ENSURE NO TURTLES ARE PRESENT AROUND THE SILT FENCE.
- IF A TURTLE IS FOUND ON SITE, RELOCATE IT TO THE NEAREST AQUATIC HABITAT (SCHUYLKILL RIVER) AND CONTACT THE PENNSYLVANIA FISH AND BOAT COMMISSION IMMEDIATELY.

UTILITY WORK ON ACCESS ROAD/ OAK STREET NOTES

PERFORM UTILITY INSTALLATION IN DRY CONDITIONS. VEHICULAR ACCESS MUST BE MAINTAINED ON THE ACCESS ROAD DURING INSTALLATION. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF UTILITY WORK, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (PUMPED WATER FILTER BAG, SEE DETAIL) BEFORE UTILITY PLACEMENT AND/OR BACKFILLING BEGINS. WORK CREWS AND EQUIPMENT FOR UTILITY CONSTRUCTION AND TRENCHING ON ACCESS ROAD WILL BE SELF-CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING, SITE RESTORATION AND STABILIZATION OPERATIONS. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

PERMANENT STABILIZATION NOTES

IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES, 6 TO 12 INCHES ON COMPACTED SOILS PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES TOPSOIL. TOPSOIL SHALL MEET THE SPECIFICATIONS IN PENNDOT PUBLICATION 408, SECTION 801, 802 AND 803.

CHAPTER 105/106 FLOODPLAIN AND FLOODWAY NOTES

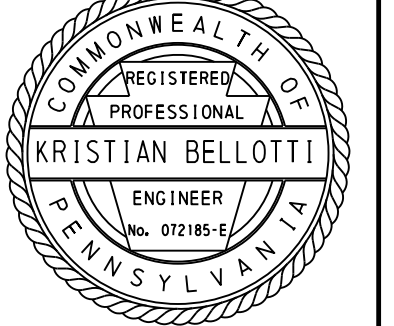
NO WORK CAN BEGIN WITHIN THE FLOODPLAIN UNTIL CHAPTER 105 / 106 AUTHORIZATIONS ARE OBTAINED. FLOODPLAIN AREAS ARE BETWEEN THE FEMA 100-YR FLOODPLAIN AND FEMA 100-YR FLOODWAY DELINEATED ON THE PLANS. WORK TO BE PERFORMED BY AQUA/OTHERS. REFER TO CHAPTER 105/106 JOINT PERMIT (E4601222-016) FOR FLOODPLAIN IMPACTS.



1234 MARKET ST. 13TH FL. PHILADELPHIA, PA 19107

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



NO.	REV	DATE	DESCRIPTION

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 CONSTRUCTION SEQUENCE

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C604		
DWG. NO.:	C039	OF:	C070
SHT. NO.:	43	OF:	081
COMPUTER FILE NO.:	21D-24-C604	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

LEGEND OF SOIL TYPES

SYMBOL	NAME	SLOPES	EROSION	LIMITATION
Gc	GIBRALTAR SILT LOAM	0-2%	MODERATE	CAVING OF CUT BANKS, CORROSIVE TO CONCRETE/STEEL, EASILY ERODIBLE, FLOODING, DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE, HYDRIC/HYDRIC INCLUSIONS, LOW STRENGTH/LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, FROST ACTION
UgB	URBAN LAND	0-8%	NOT RATED	IMPACTED SATURATED SOILS
UugD	URBAN LAND	8-25%	SEVERE	LOW COMPACTION WELL DRAINED

NOTES:

- INSTALL E&S BMPS IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION.
- CONTRACTORS WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS AND RELATED ITEMS INCLUDED WITH THE NPDES PERMIT.
- THE SOIL SURVEY MAPPING WAS OBTAINED FROM THE SOIL SURVEY OF MONTGOMERY COUNTY, PENNSYLVANIA (PUBLISHED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) FOR THE SOIL CONSERVATION SERVICE IN JULY 1967. ADDITIONALLY, THE USDA'S NATURAL RESOURCE CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY WAS USED FOR VERIFICATION.
- THE PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES WAS REFERENCED TO DETERMINE THAT THE PROJECT AREA IS NOT SUSCEPTIBLE TO SINKHOLES OR KARST-RELATED FEATURES AND THERE IS NO ACID-ROCK EXPOSURE POTENTIAL. THEREFORE, THERE IS NO POTENTIAL FOR GEOLOGICAL FORMATIONS OR SOIL CONDITIONS TO CAUSE POLLUTION DURING CONSTRUCTION.

LIMITATIONS:	RESOLUTIONS:
CUTBANKS CAVE	LIMIT GRADING IN THESE AREAS.
CORROSIVE TO CONCRETE & STEEL	AVOID PONDING WITH PROPER GRADING AS SHOWN ON THE PLANS AND MINIMIZE CONTACT WITH CONCRETE AND STEEL.
EASILY ERODIBLE	USE EROSION CONTROL BLANKETING AS NEEDED.
FLOODING	HAVE FILTER BAGS AVAILABLE DURING CONSTRUCTION.
DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HAVE FILTER BAGS AVAILABLE DURING CONSTRUCTION.
HYDRIC/HYDRIC INCLUSIONS	LIMIT EXCAVATION.
LOW STRENGTH/LANDSLIDE PRONE	USE EROSION CONTROL BLANKETING AS NEEDED.
SLOW PERCOLATION	HAVE BYPASS PUMPS AND FILTER BAGS AVAILABLE DURING CONSTRUCTION.
PIPING	AVOID PONDING WITH PROPER GRADING AS SHOWN ON THE PLANS AND HAVE BYPASS PUMPS AND FILTER BAGS AVAILABLE DURING CONSTRUCTION.
FROST ACTION	LIMIT EXCAVATION DURING WINTER MONTHS.
IMPACTED SATURATED SOILS	USE TEMPORARY CONTAINMENT AS SHOWN ON THE DETAILS AND NOTES ON THE PLANS.

SEEDING CHART

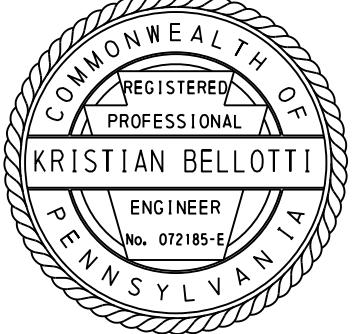
FORMULA AND SPECIES	SEEDING RATE PER 1000 SQ. YD. (LBS.)	SOIL SUPPLEMENTS		MULCHING PER 1000 SQ. YD. (LBS.)	% BY MASS	MINIMUM %		MAXIMUM % WEED SEED
		LIMESTONE	FERTILIZER			PURITY	GERMINATION	
		PER 1000 SQ. YD. (LBS.)	PER 1000 SQ. YD. (LBS.)					
FORMULA B: PERENNIAL RYEGRASS CREEPING RED OR CHEWINGS FESCUE KENTUCKY BLUEGRASS MIX	42.0	800.0	140.0	1200 (HAY) 160 (WOOD FIBER)	20 30 50	97.0 97.0 97.0	90.0 85.0 80.0	0.10 0.10 0.15
	MARCH 15-JUNE 1 AUG 1-OCT 15							
FORMULA L: HARD FESCUE MIXTURE CREEPING RED FESCUE ANNUAL RYEGRASS	48.0	800.0	140.0	1200 (HAY) 160 (WOOD FIBER)	55 35 10	97.0 97.0 95.0	85.0 85.0 90.0	0.10 0.10 0.10
	MARCH 15-JUNE 1 AUG 1-OCT 15							
FORMULA T: OATS (SPRING) CEREAL RYE (FALL)	6.0	800.0	140.0	1200 (HAY) 160 (WOOD FIBER)	100 100	97.0 97.0	85.0 85.0	0.10 0.10
	MARCH 15-JUNE 1 AUG 1-OCT 15							

STABILIZE DISTURBED AREAS IMMEDIATELY WITH SEEDING AND SOIL SUPPLEMENTS AS FOLLOWS:

- USE SEEDING AND SOIL SUPPLEMENTS - FORMULA B, INCLUDING MULCH WITH MULCH CONTROL NETTING FOR SLOPES 3:1 OR FLATTER.
- USE SEEDING AND SOIL SUPPLEMENTS - FORMULA L, INCLUDING MULCH WITH TEMPORARY ROLLED EROSION CONTROL PRODUCT, TYPE 2D FOR SLOPES STEEPER THAN 3:1.
- USE SEEDING - FORMULA T, INCLUDING MULCH WITH MULCH CONTROL NETTING FOR TEMPORARY SEEDING APPLICATIONS.

MANAGER - ARCH/ENGINEERING

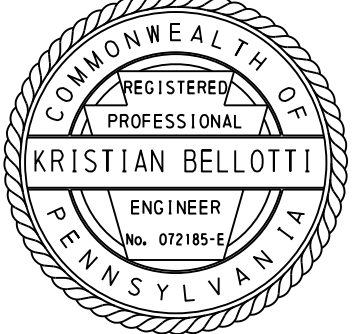
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
SITE SOILS INFORMATION

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C605	
DWG. NO.: C040 OF C070	
SHT. NO.: 44 OF 081	
COMPUTER FILE NO.: 21D-24-C605	REV. NO.: 0

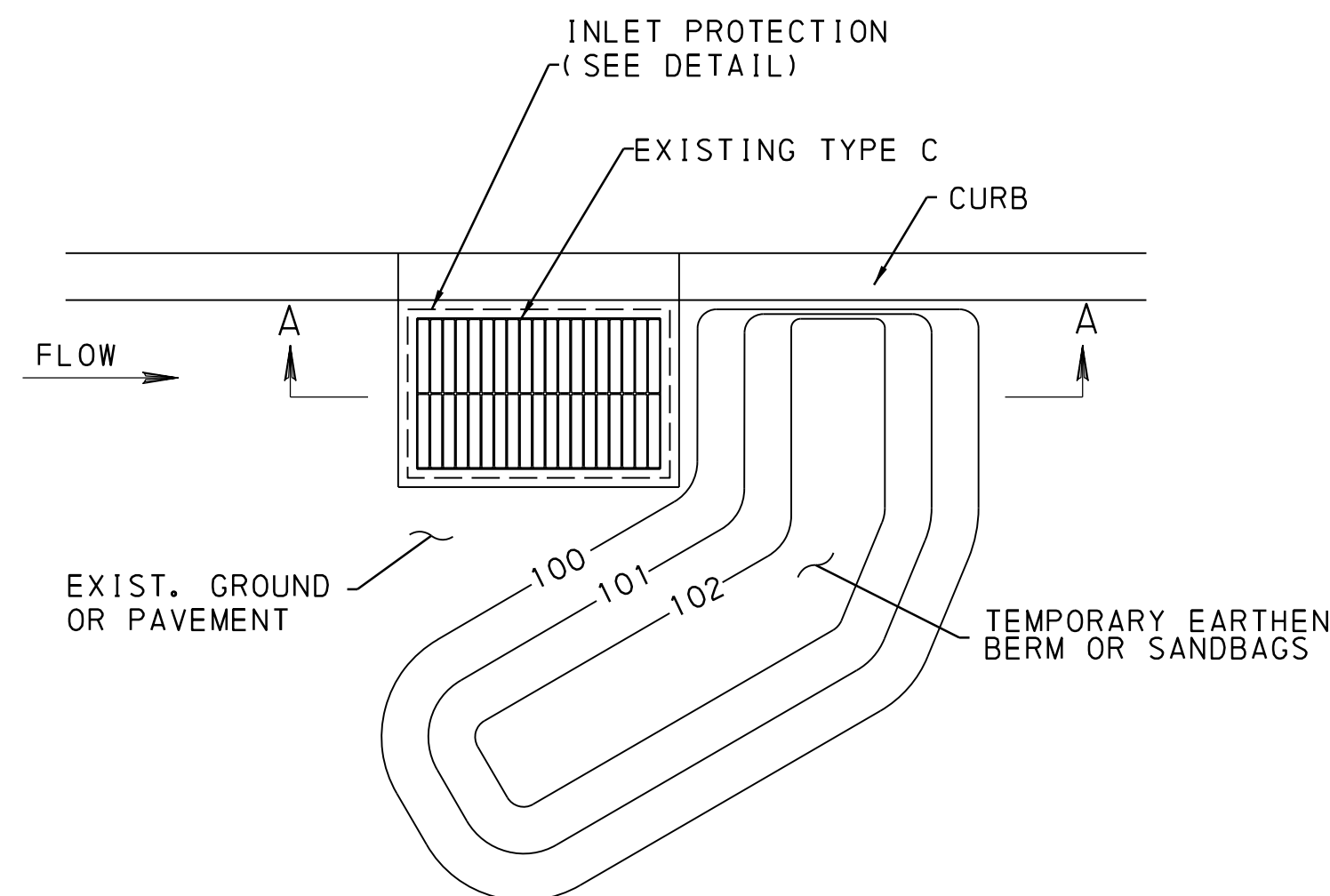


REV	DATE	DESCRIPTION	BY	CHKD	APPD

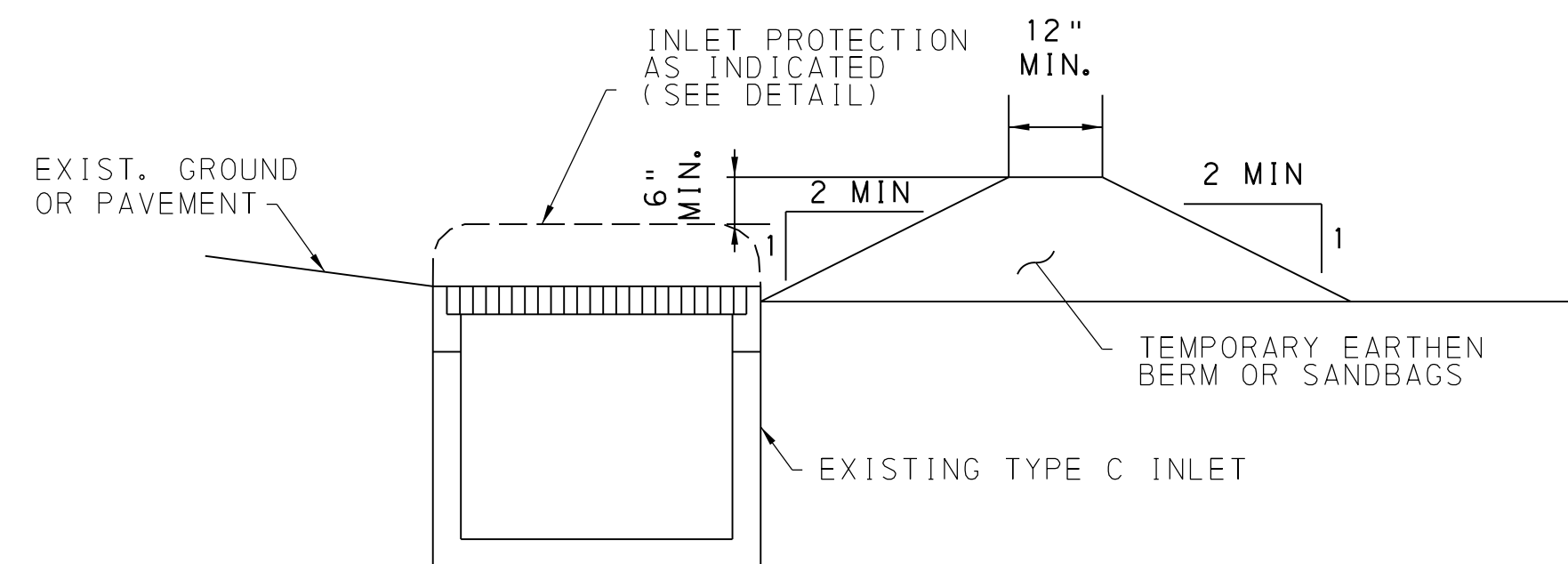
CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EROSION AND SEDIMENT CONTROL DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C606	
DWG. NO.: C041	OF: C070
SHT. NO.: 45	OF: 081
COMPUTER FILE NO.: 21D-24-C606	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION



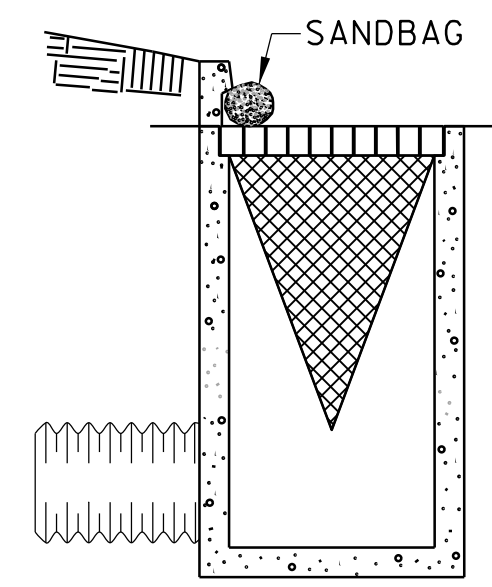
PLAN VIEW



SECTION A-A

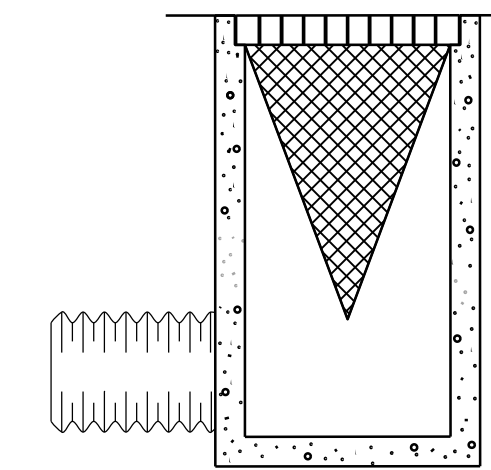
TYPE C INLET PROTECTION SIDE VIEW

INLET NUMBER	INLET TYPE	MAX DRAINAGE AREA DURING CONSTRUCTION (ACRE)
EX-INL202	M	0.04
EX-INL204	C	0.03
EX-INL205	C	0.12
EX-INL101	C	0.03
EX-INL102	C	0.01
EX-INL103	C	0.09
EX-INL104	C	0.06
EX-INL105	C	0.04
EX-INL106	C	0.02
EX-INL105A	C	0.04
EX-INL106A	C	0.02
EX-INL107	C	0.20
EX-INL108	C	0.19
INL-302	C	0.37
INL-303	M	0.09
INL-304	M	0.39



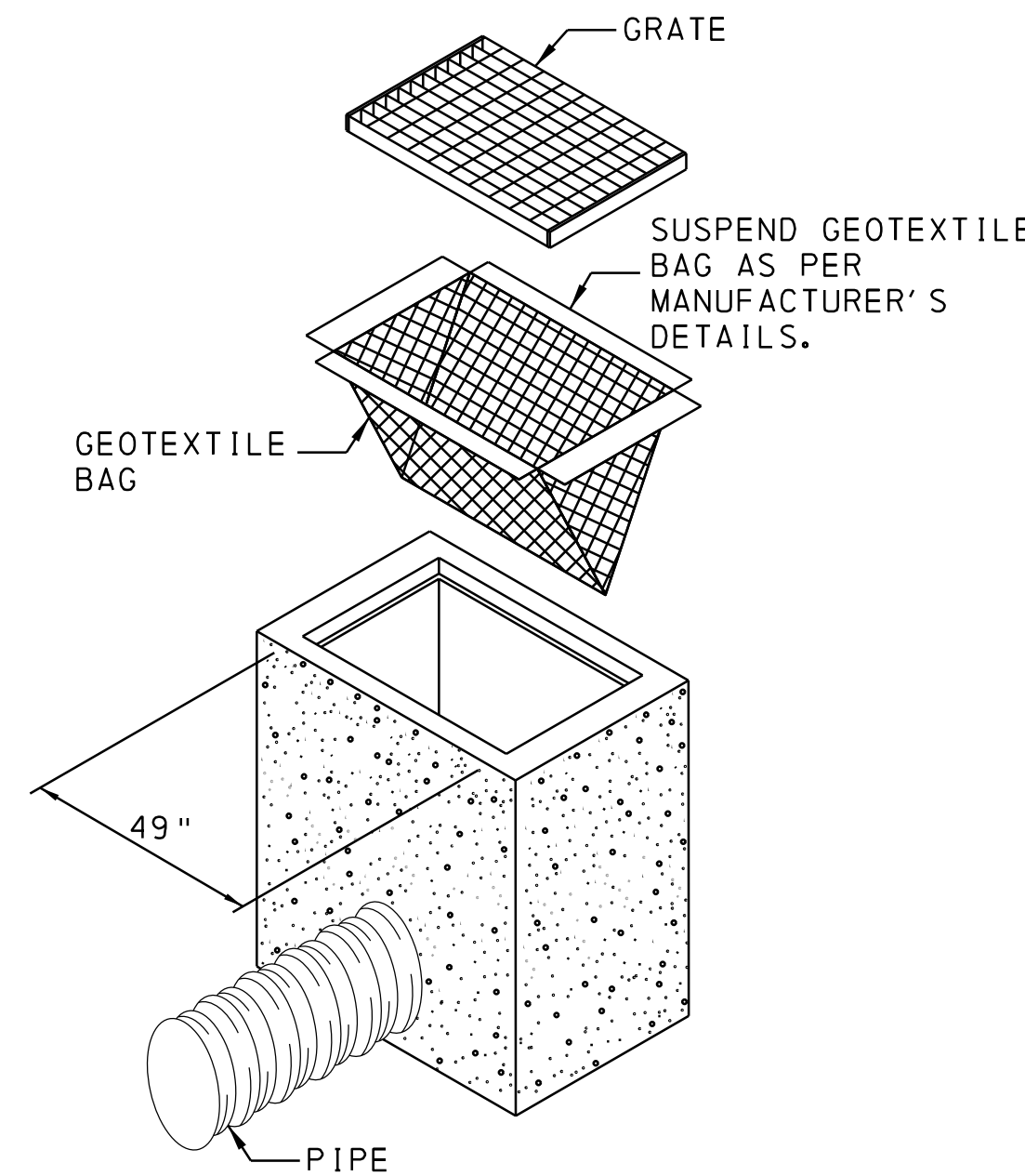
TYPE C INLET INSTALLATION (TYP)

NOT TO SCALE



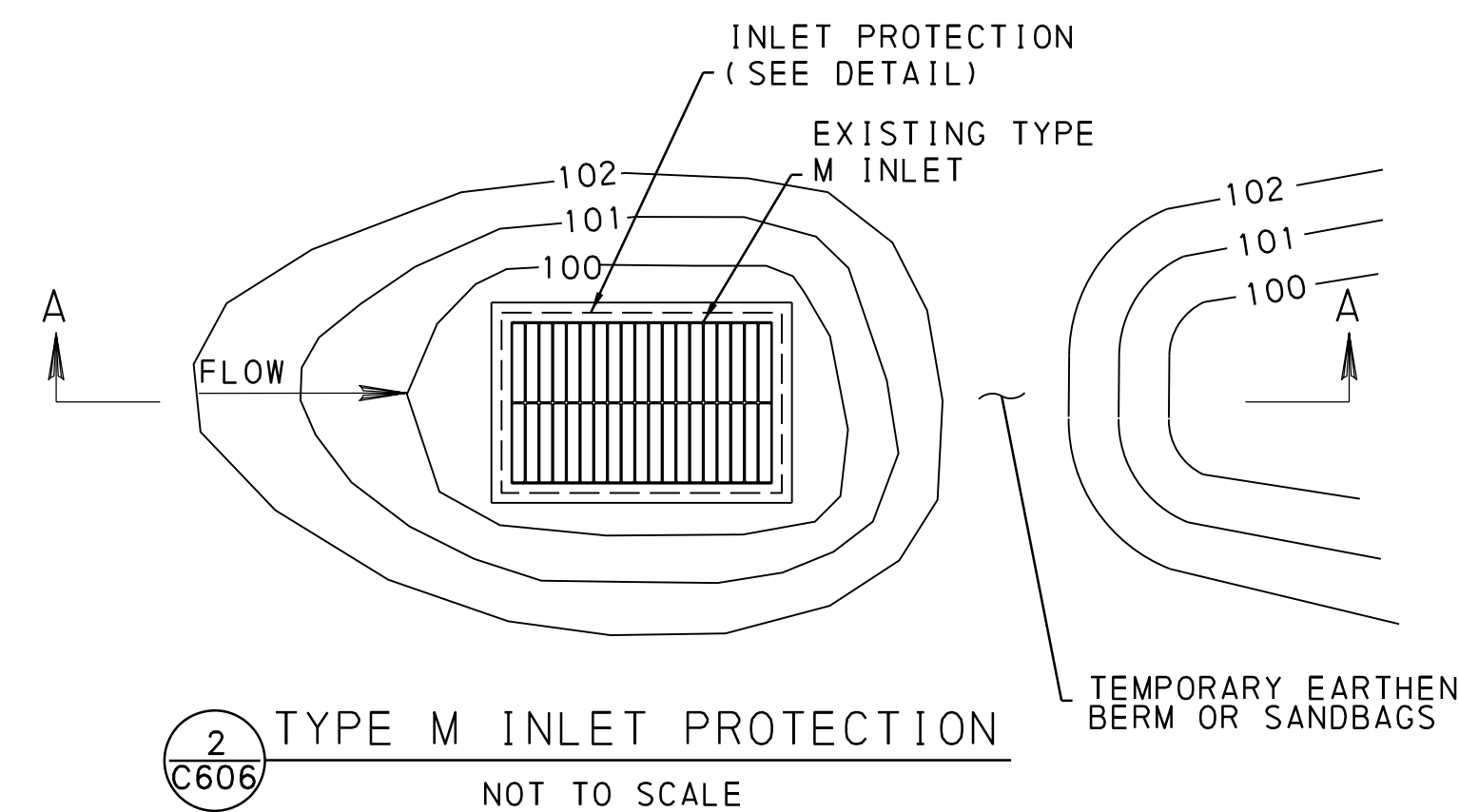
TYPE M INLET INSTALLATION (TYP)

NOT TO SCALE



ISOMETRIC VIEW

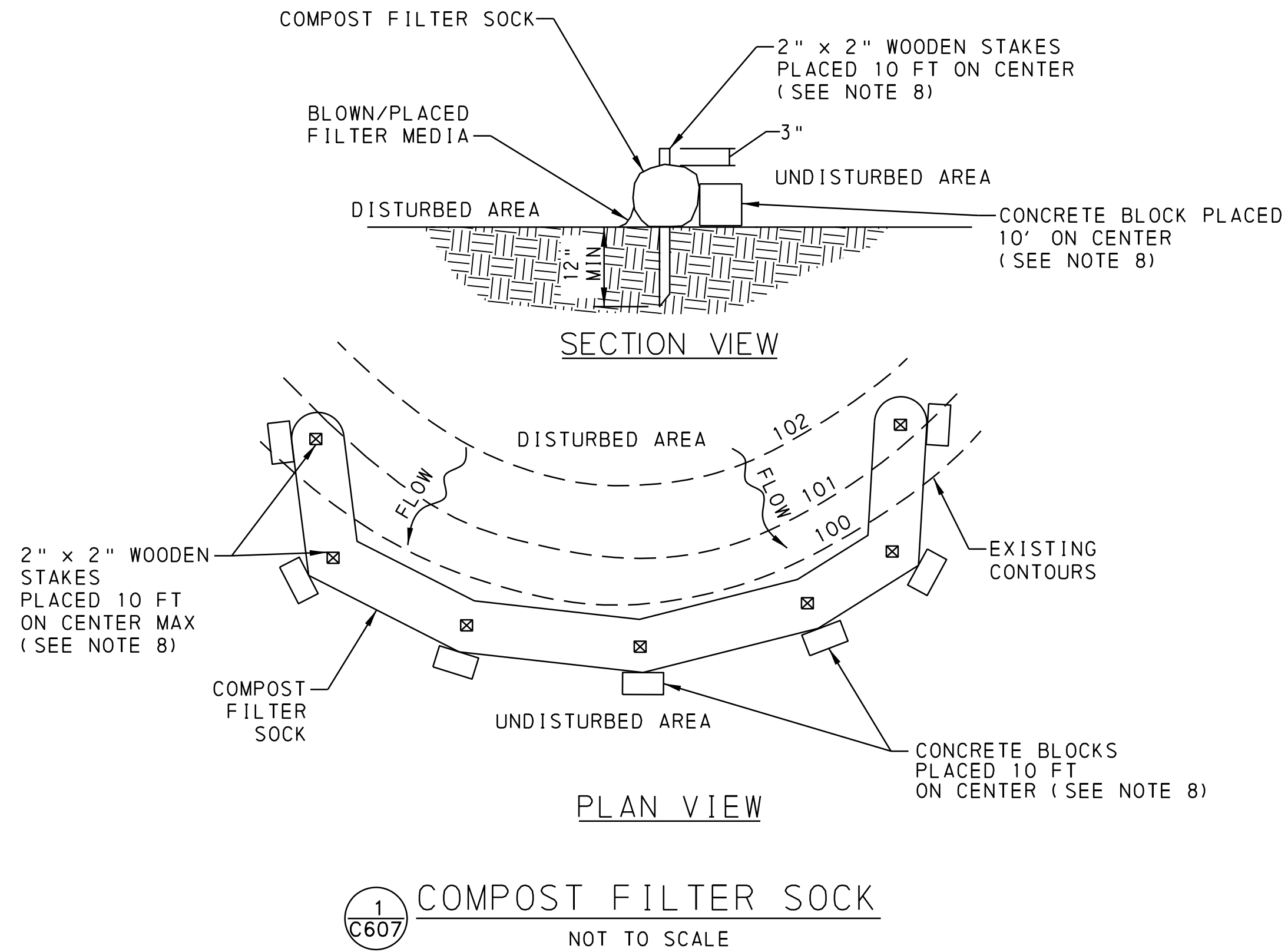
1 TYPE C INLET PROTECTION
C606 NOT TO SCALE



2 TYPE M INLET PROTECTION
C606 NOT TO SCALE

INLET PROTECTION NOTES:

- DO NOT USE INLET PROTECTION ON ROADWAYS WHERE PONDING WATER OR INLET PROTECTION MAY BE HAZARDOUS TO VEHICULAR TRAFFIC.
- INSPECT INLET FILTER BAG AFTER EACH RUNOFF EVENT. MAINTAIN AS REQUIRED TO ENSURE PROPER FUNCTIONING OF THE BAG.
- REMOVE ACCUMULATED SEDIMENT/DEBRIS WHEN THE INLET FILTER REACHES ONE HALF MAXIMUM CAPACITY.
- REPLACE FILTER BAG IF RIPPED OR TORN.
- PROVIDE DOWN GRADIENT BERM AS INDICATED ON THE DETAIL. DO NOT USE SAG/SUMP CONDITIONS.
- USE SANDBAGS AT TYPE C INLET CURB OPENINGS TO PREVENT BYPASS FLOW.
- REMOVE AND PROPERLY DISPOSE OF INLET FILTER BAG WHEN NO LONGER NEEDED.
- TEMPORARY EARTHEN BERMS OR SANDBAGS CAN BE USED FOR ALL INLET PROTECTION.
- USE BERMS AS NEEDED.
- MAXIMUM DRAINAGE AREA = 0.5 ACRE.
- ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. 6 INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
- THE FABRIC SHALL HAVE A MINIMUM GRAB TENSIL 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 OR 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 INSPECTIONS. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.



1
C607
COMPOST FILTER SOCK
NOT TO SCALE

COMPOST STANDARDS TABLE

ORGANIC MATTER CONTENT	25%-100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5-8.5
MOISTURE CONTENT	35%-55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/M (MMHOS/CM) MAXIMUM

COMPOST FILTER SOCK SCHEDULE

CFS NO	SIZE (IN)	LENGTH (FT)	SLOPE (%)	SLOPE LENGTH ABOVE BARRIER (FT)
CFS-1	24	196	4.9	61
CFS-2	18	157	4.6	89
CFS-3	24	488	0.5	121
CFS-4	18	93	3.3	15
CFS-5	18	152	4.2	6
CFS-6	24	174	0.8	281
CFS-7	18	138	0.7	355
CFS-8	18	266	0.6	70

COMPOST FILTER SOCK NOTES:

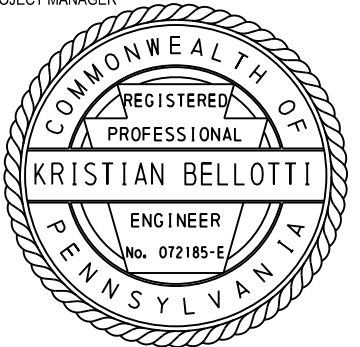
1. SOCK FABRIC SHALL MEET STANDARDS SHOWN IN THE COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS TABLE. COMPOST SHALL MEET THE STANDARDS OF THE COMPOST STANDARDS TABLE.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE COMPOST FILTER SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN COMPOST FILTER SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY COMPOST FILTER SOCK SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
5. COMPOST FILTER 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.
6. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7. 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.
8. USE WOODEN STAKES TO SECURE CFS WHEN PLACED ON GRASS. USE CONCRETE BLOCKS TO SECURE CFS WHEN PLACED ON CONCRETE.
9. FOR PROPOSED GRADING NEAR COMPOST FILTER SOCK, USE EQUIPMENT TO GRADE THE AREA THAT WILL NOT DAMAGE THE SOCK. IF THE SOCK IS DAMAGED, REPLACE IMMEDIATELY.

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

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

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



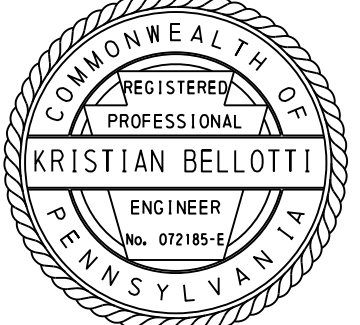
REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
 NEW CONSTRUCTION
 CIVIL
 EROSION AND SEDIMENT CONTROL DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CAJ
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CAJ
DRAWING NUMBER:	C607		
DWG. NO.:	C042	OF:	C070
SHT. NO.:	46	OF:	081
COMPUTER FILE NO.:	21D-24-C607	REV. NO.:	0

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

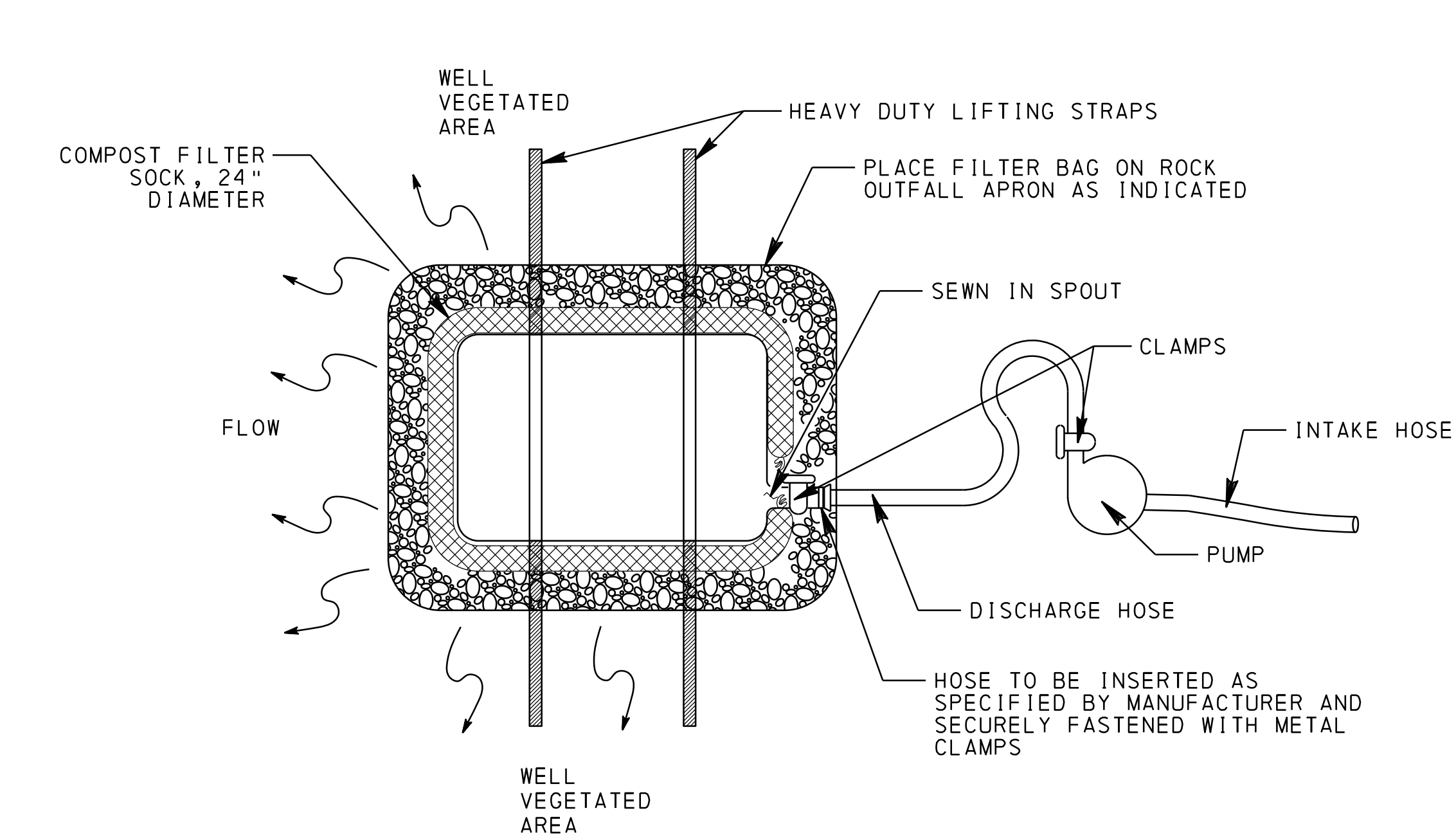


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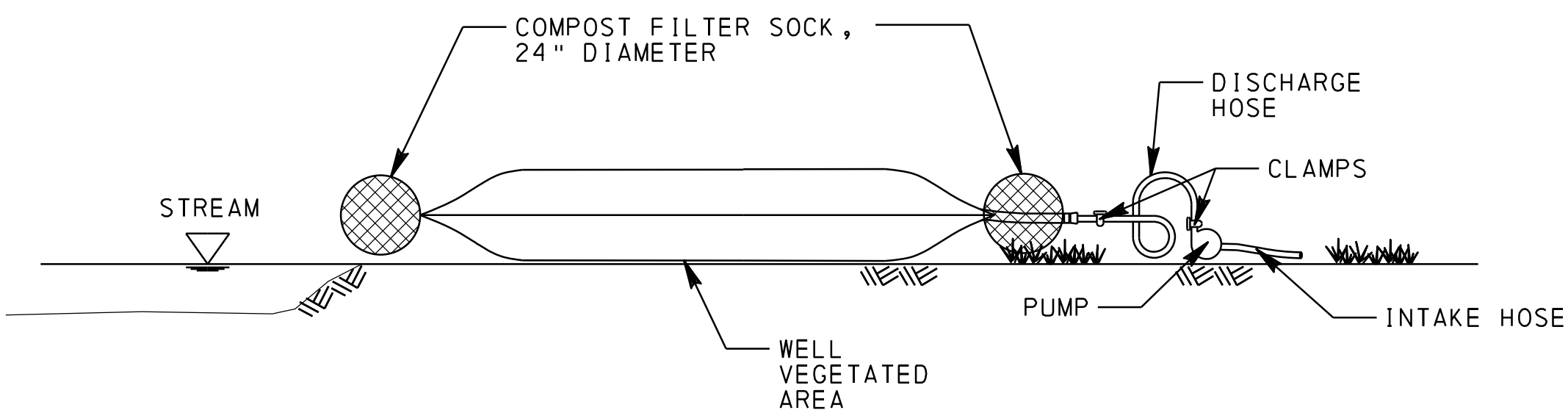
CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 EROSION AND SEDIMENT CONTROL DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C608		
DWG. NO.:	C043	OF:	C070
SHT. NO.:	47	OF:	081
COMPUTER FILE NO.:	21D-24-C608	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION



TOP VIEW



SIDE VIEW

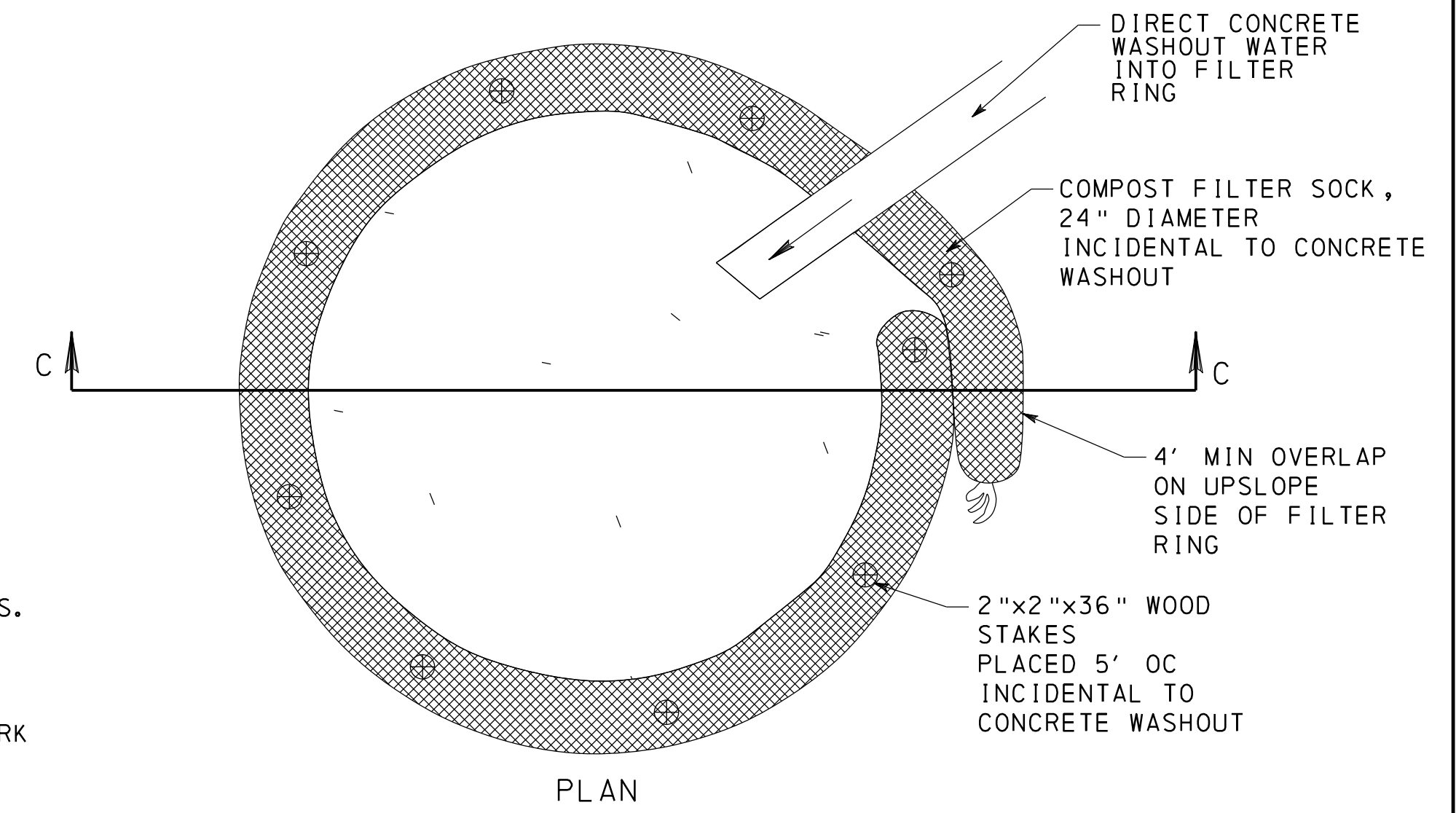
1
C608
PUMPED WATER FILTER BAG
NOT TO SCALE

PUMPED WATER FILTER BAG NOTES:

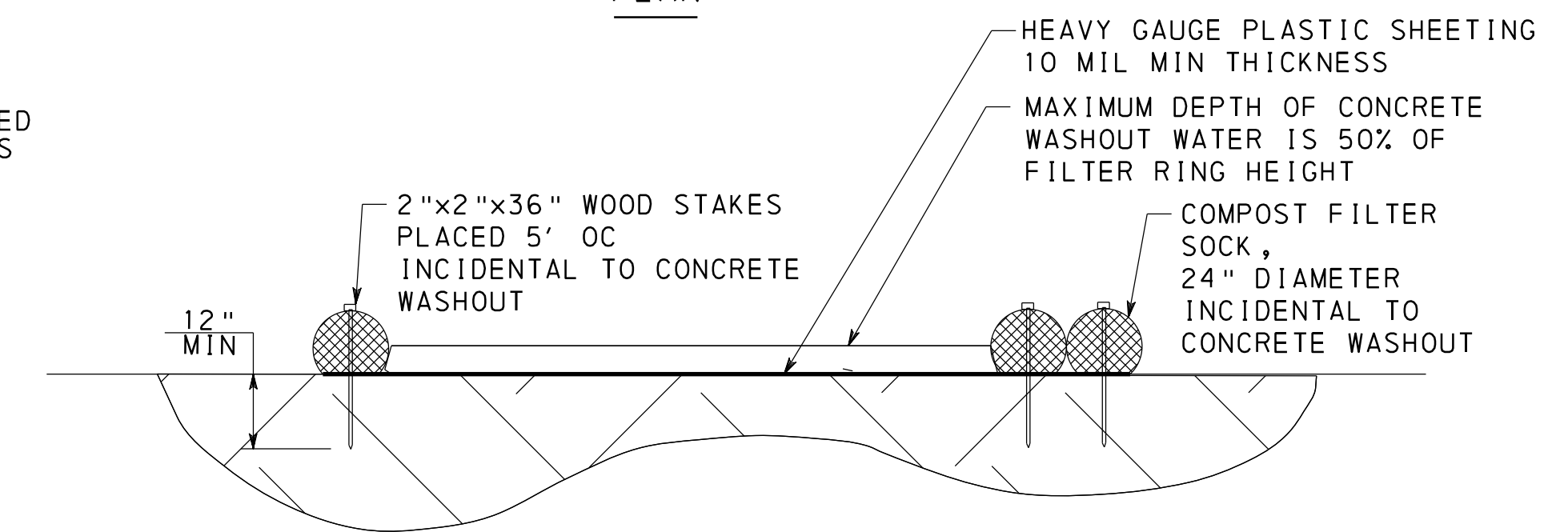
1. LOCATE BAGS IN LEVEL AREAS (LESS THAN 5%) GRADE PLACED ON WELL VEGETATED AREAS AND DISCHARGE ONTO A STABLE, EROSION RESISTANT AREA.
2. LOCATE BAG IN A WELL VEGETATED AREA. DISCHARGE ONTO A STABLE, EROSION RESISTANT AREA. WHEN VEGETATED AREA IS NOT AVAILABLE, PROVIDE A GEOTEXTILE (CLASS 4, TYPE A) LINED FLOW PATH TO A STABLE EROSION RESISTANT RECEIVING WATER COURSE OR A WELL VEGETATED AREA.
3. LOCATE BAGS IN AN AREA ACCESSIBLE BY EQUIPMENT FOR MAINTENANCE AND REMOVAL PURPOSES.
4. DO NOT INSERT MORE THAN ONE HOSE INTO A BAG.
5. REPLACE THE BAG WHEN 50% OF THE SEDIMENT CAPACITY HAS BEEN FILLED AND/OR WHEN THERE IS A FAILURE.
6. REMOVE AND PROPERLY DISPOSE OF THE PUMPED WATER FILTER BAGS. RESTORE THE AREA IN ACCORDANCE WITH THE SPECIFICATIONS IN PUBLICATION 408. DO NOT CUT FILTER BAG OR DISTRIBUTE AND SEED SEDIMENT.
7. DO NOT PERMIT DISCHARGE FROM THE BAG TO DRAIN BACK INTO WORK OR ACCESS AREAS OF THE PROJECT.
8. DO NOT EXCEED A PUMPING RATE OF 750 GAL/MIN OR HALF THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICH EVER IS LESS.
9. LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

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

10. 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.
11. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
12. 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.
13. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1#2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
14. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



PLAN



SECTION C-C

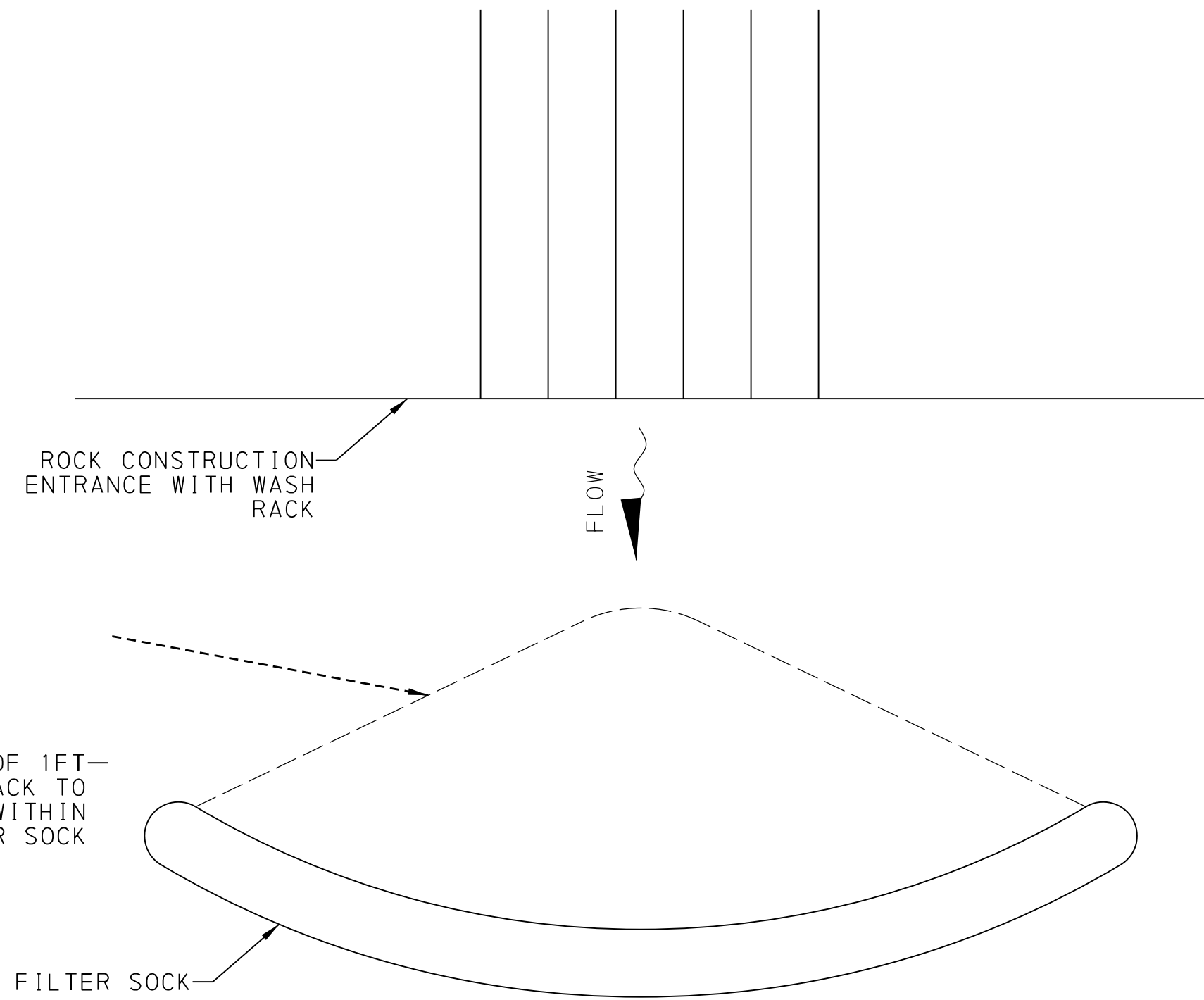
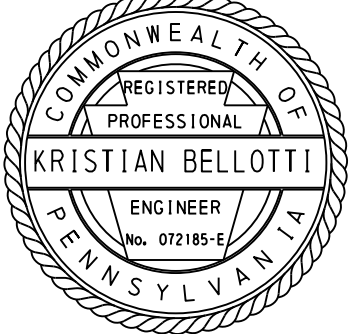
2
C608
CONCRETE WASHOUT DETAIL
NOT TO SCALE

CONCRETE WASHOUT NOTES:

1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. 18" DIAMETER FILTER SOCK MAYBE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
3. PLACE HEAVY GAUGE PLASTIC SHEETING AT LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.
4. IN NO CASE SHALL CONCRETE WASHOUT WATER BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



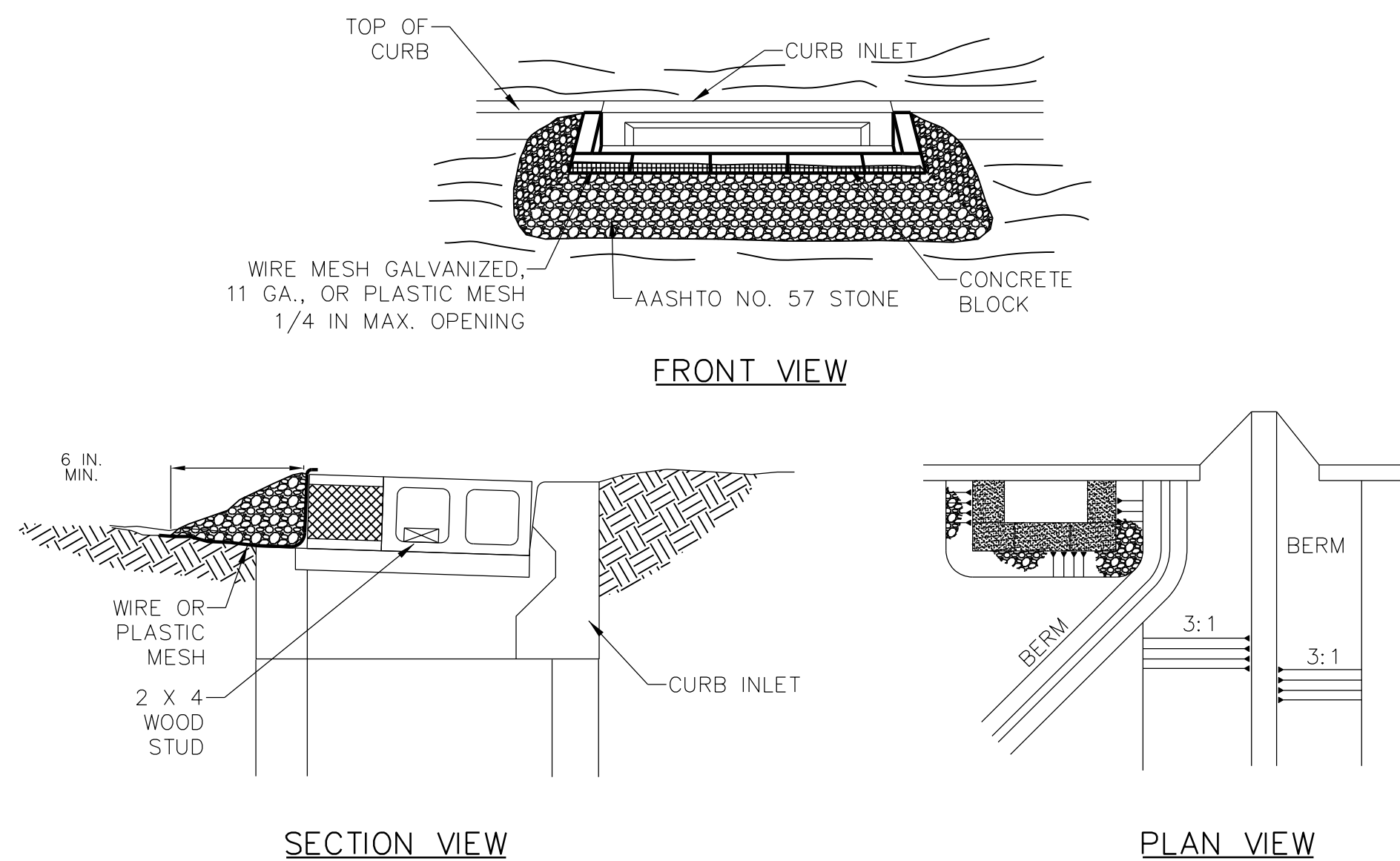
WASH RACK DIVERSION SCHEDULE

DIVERSION NO.	SOCK LENGTH (FT)
WRD-1	25

WASH RACK DIVERSION NOTES:

1. WASH RACK DIVERSION IS INTENDED TO COLLECT AND TREAT RUNOFF FROM THE WASH RACK COMPONENT OF ROCK CONSTRUCTION ENTRANCE.
2. THE WASH RACK DIVERSION SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE SOCK.
3. PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN 1 YEAR.

1
C609 WASH RACK DIVERSION
NOT TO SCALE



STONE AND CONCRETE BLOCK INLET PROTECTION TYPE C NOTES:

1. MAXIMUM DRAINAGE AREA = 1 ACRE.
2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
3. 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.
4. SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.
5. FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6 INCH THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE.
6. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

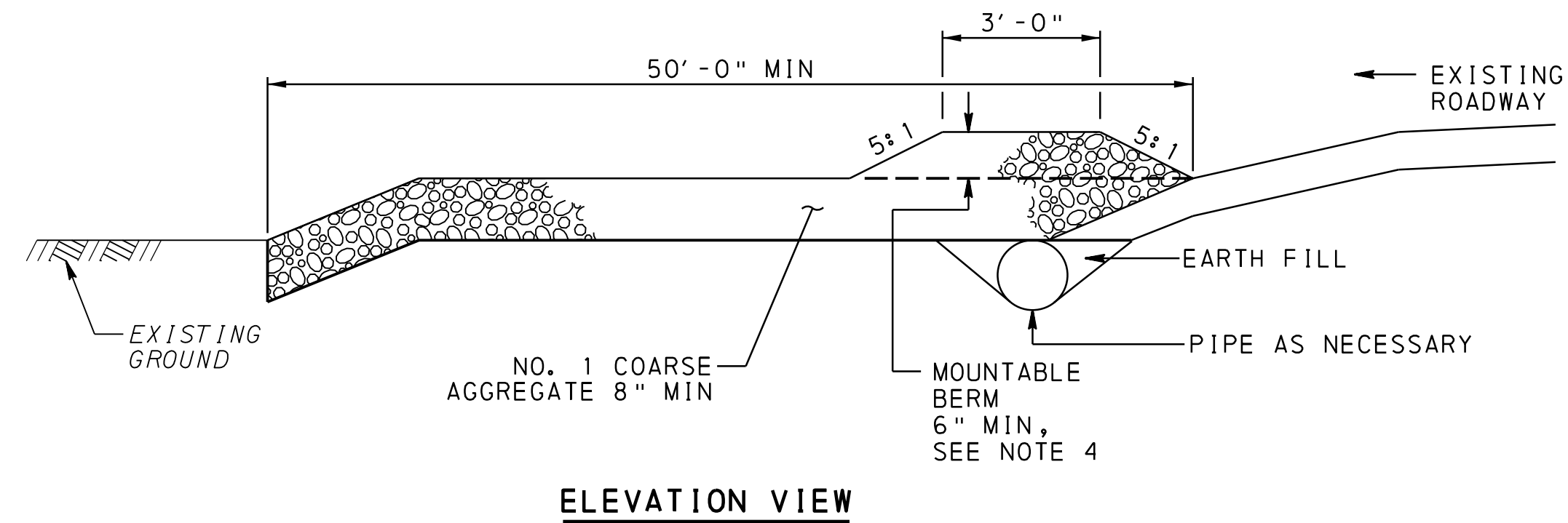
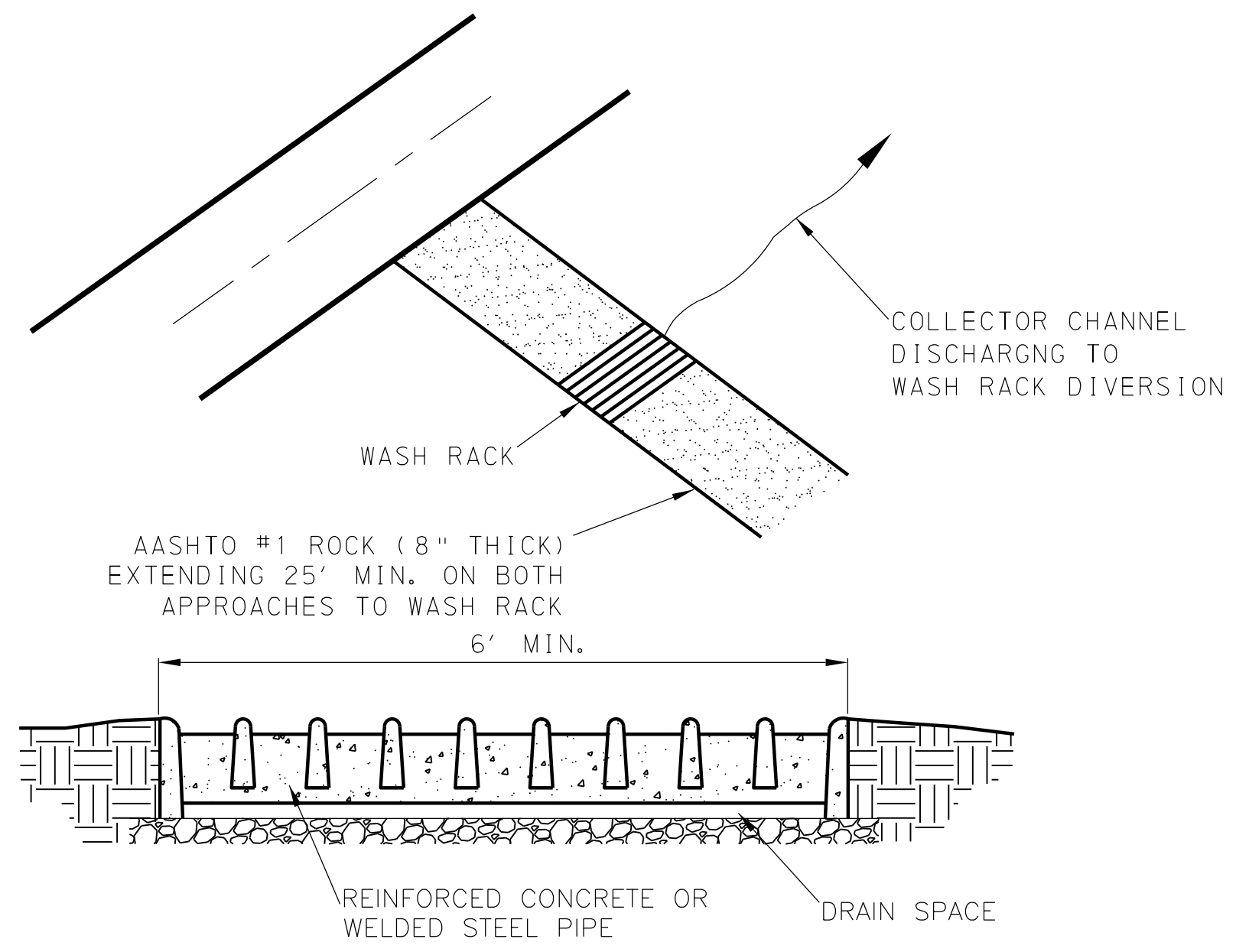
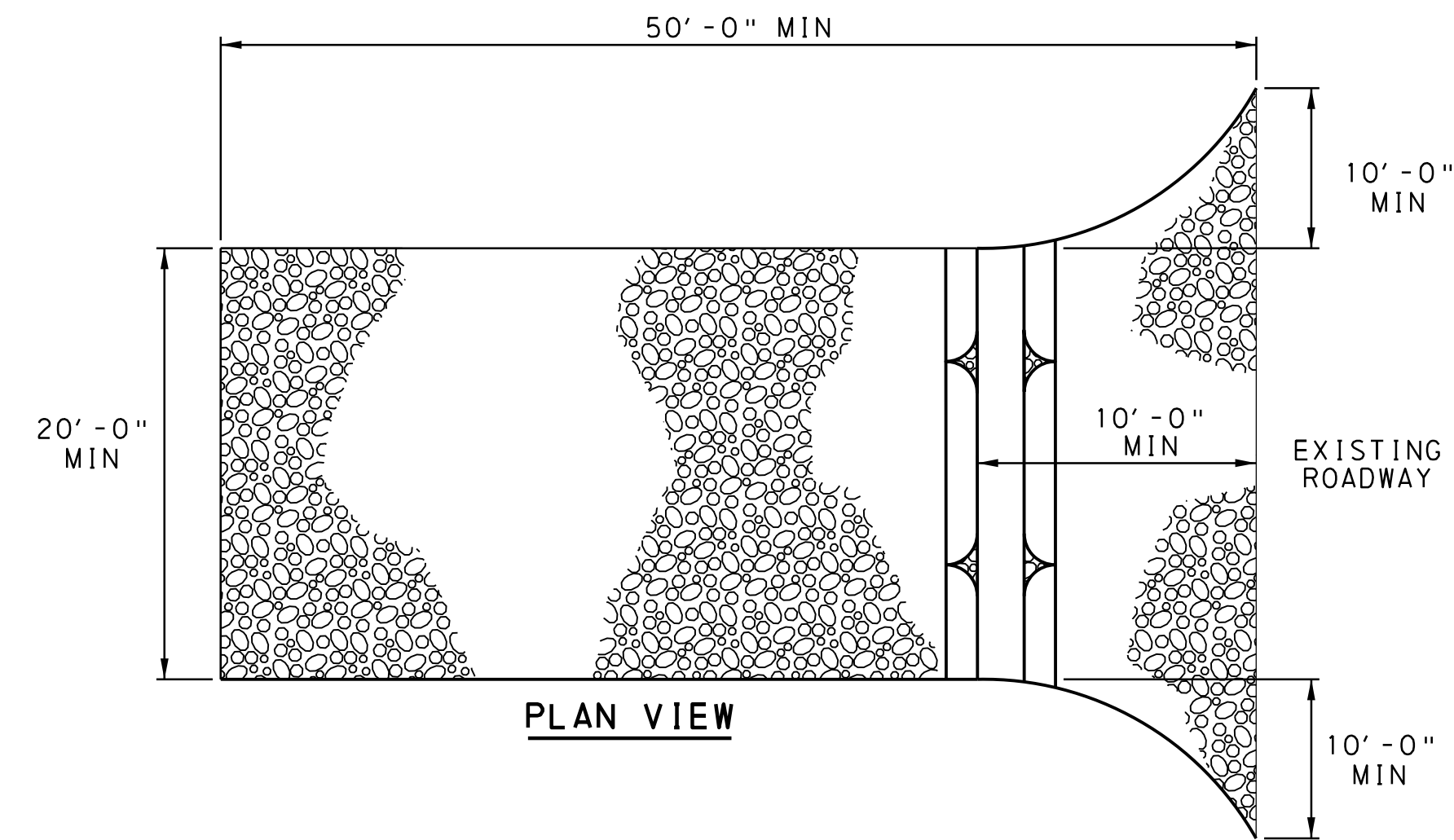
INLET NUMBER	INLET TYPE	MAX DRAINAGE AREA DURING CONSTRUCTION (ACRE)
INL-301	C	0.73

2
C609 STONE AND CONCRETE BLOCK INLET PROTECTION TYPE C
NOT TO SCALE

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EROSION AND SEDIMENT CONTROL DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C609	
DWG. NO.: C044	OF: C070
SHT. NO.: 48	OF: 081
COMPUTER FILE NO.: 21D-24-C609	REV. NO.: 0



ROCK CONSTRUCTION ENTRANCE WITH WASH RACK NOTES:

1. WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
2. WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
3. A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.
4. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE NOTES:

1. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
3. 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.
4. 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.
5. SATISFACTORILY REMOVE MATERIALS AS PER SPECIFICATION IN PUBLICATION 408, SECTION 849 WHEN ROCK CONSTRUCTION ENTRANCE IS NO LONGER NEEDED.
6. PROVIDE GEOTEXTILE MATERIAL MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 735. FURNISH AND INSTALL IN ACCORDANCE WITH SECTION 212. PROVIDE GEOTEXTILE ALONG ALL INTERFACE AREAS WITH GROUND CONTACT.
7. CONSTRUCT ROCK CONSTRUCTION ENTRANCE WITHIN THE RIGHT-OF-WAY OR EASEMENT AREAS. ENTRANCE MAY BE CONSTRUCTED ON A SKEW IF ADEQUATE PULL OUT SIGHT DISTANCE IS AVAILABLE.
8. INSPECT THE ENTRANCE DAILY. REMOVE ALL SEDIMENT DEPOSITED ON THE PUBLIC ROADWAYS AND RETURN TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WILL NOT BE PERMITTED.
9. MAINTAIN A STOCKPILE OF NO. 1 COARSE AGGREGATE.

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

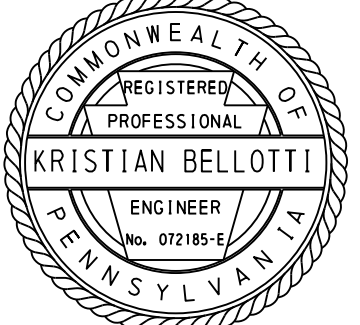


REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOCKEN RAILROAD STATION
MANAYUNK/ROSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EROSION AND SEDIMENT CONTROL DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C610		
DWG. NO.:	C045	OF:	C070
SHT. NO.:	49	OF:	081
COMPUTER FILE NO.:	21D-24-C610	REV. NO.:	0

1
C610 **ROCK CONSTRUCTION ENTRANCE WITH WASH RACK**
NOT TO SCALE

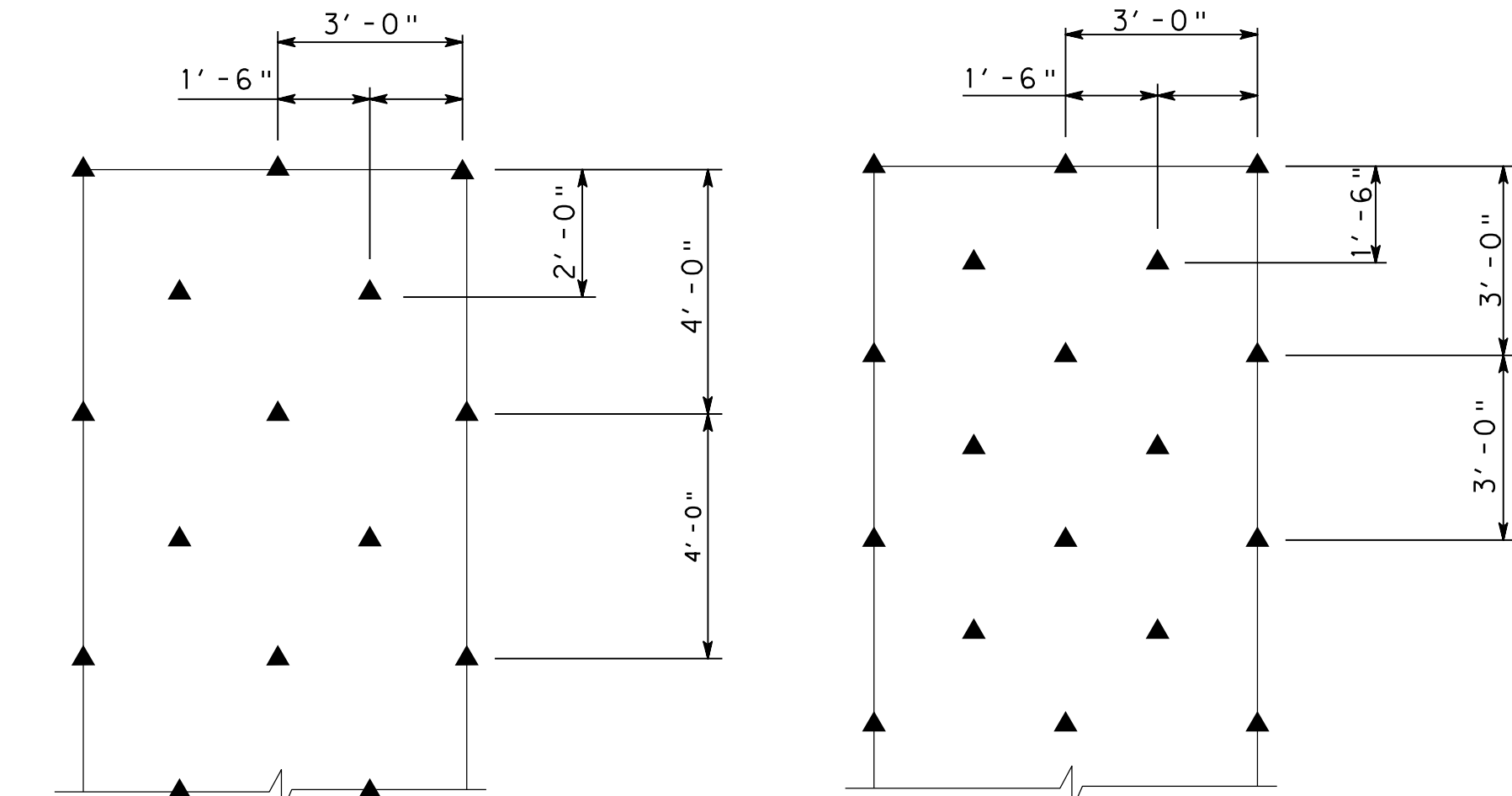


REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/ROSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 EROSION AND SEDIMENT CONTROL DETAILS

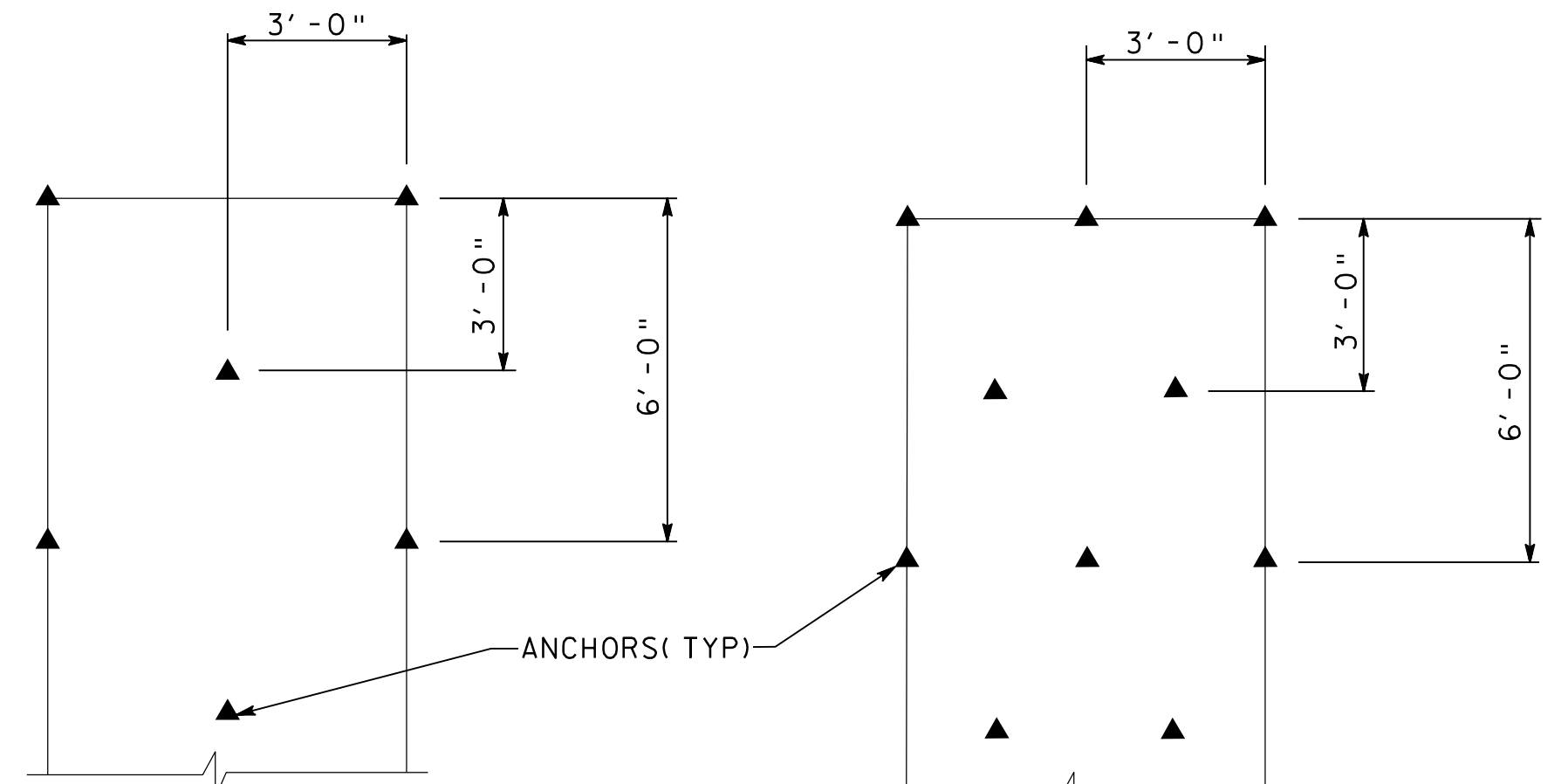
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DWG. NO.:	C046	OF:	C070
SHT. NO.:	50	OF:	081
COMPUTER FILE NO.:	21D-24-C611	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION



ANCHOR PATTERN FOR SLOPES BETWEEN 2:1 AND 1:1 (INCLUDING 2:1)
PLACE 2 ANCHORS/SY

ANCHOR PATTERN FOR 1:1 OR STEEPER
PLACE 2 1/2 ANCHORS/SY



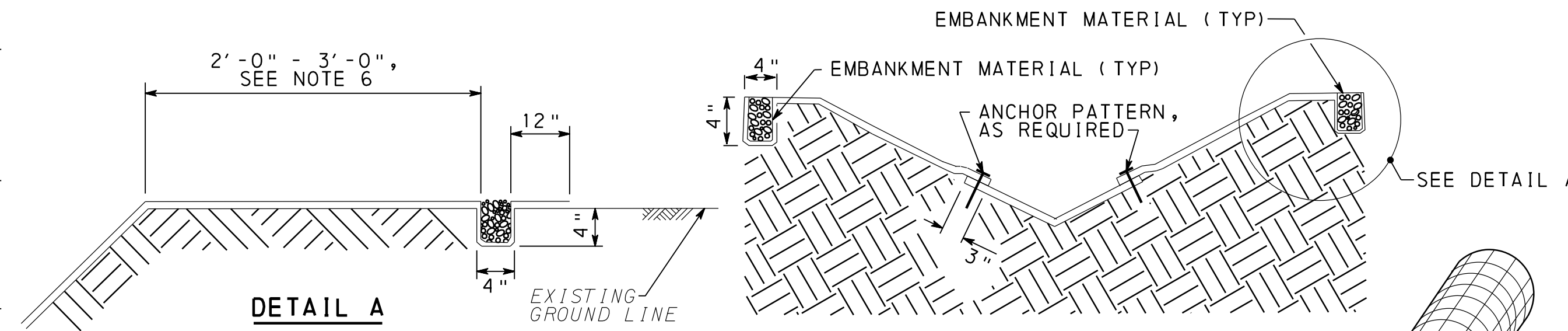
ANCHOR PATTERN FOR SLOPES FLATTER THAN 3:1
PLACE 1 ANCHOR/SY

ANCHOR PATTERN FOR SLOPES BETWEEN 3:1 AND 2:1 (INCLUDING 3:1)
PLACE 1 1/2 ANCHORS/SY

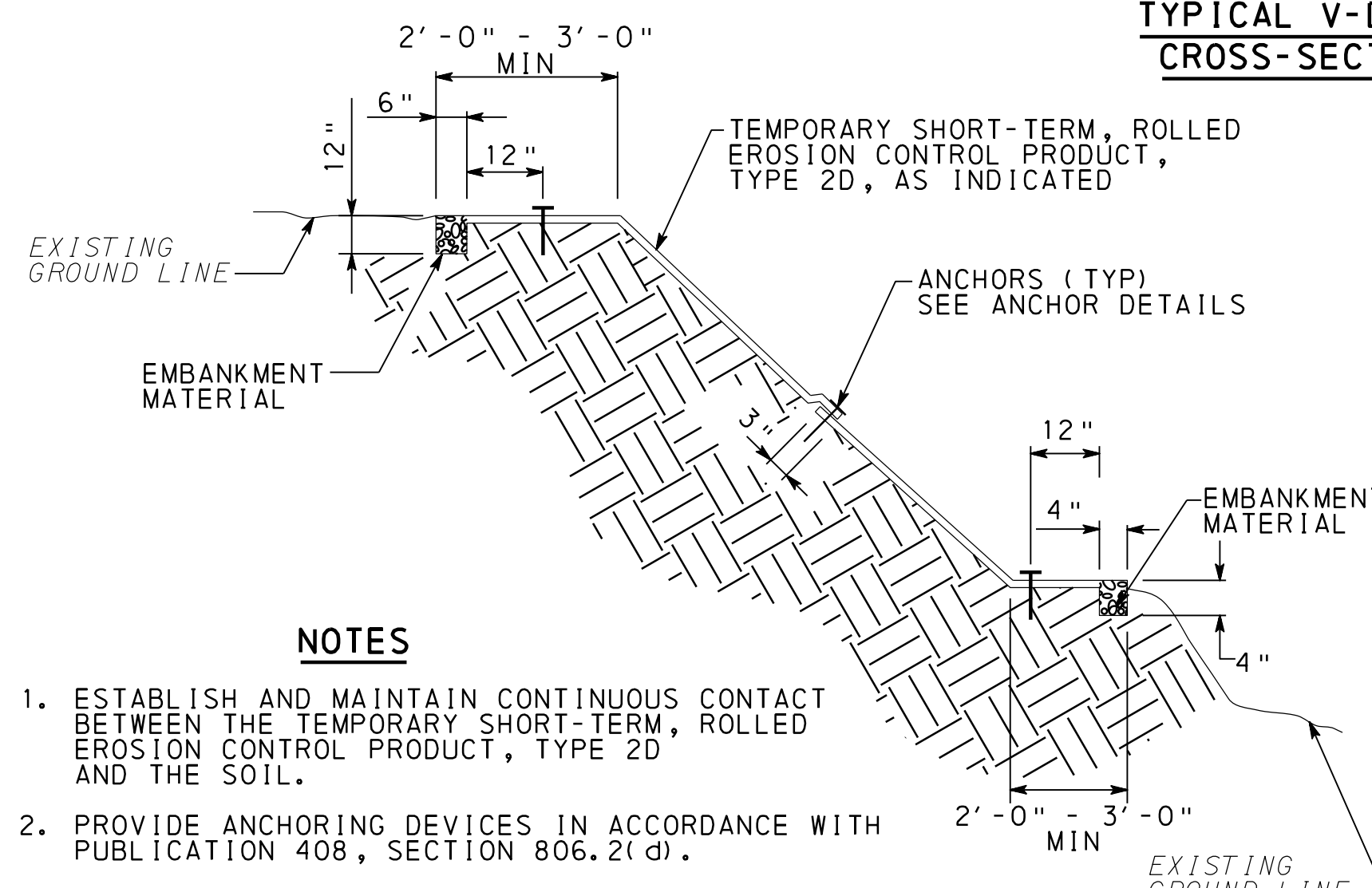
ANCHOR PATTERNS FOR SLOPES

ROLLED EROSION CONTROL PRODUCT NOTES

1. ESTABLISH AND MAINTAIN CONTINUOUS CONTACT BETWEEN THE TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D AND THE SOIL.
2. PROVIDE ANCHORING DEVICES IN ACCORDANCE WITH PUBLICATION 408, SECTION 806.2(d).
3. EXCAVATE INITIAL ANCHOR TRENCH 1'-0" DEEP AND 6" WIDE ACROSS THE WIDTH OF THE CHANNEL TO PREVENT UNDERMINING OF THE TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D.
4. EXCAVATE INTERMITTENT CHECK SLOT 6" DEEP AND 6" WIDE ACROSS THE WIDTH OF THE CHANNEL AT 25'-0" TO 30'-0" ALONG THE LENGTH OF THE TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D TO PREVENT LOOSE SOIL FROM BEING TRANSPORTED DOWNSTREAM BENEATH THE TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D.
5. EXCAVATE TERMINAL ANCHOR TRENCH 1'-0" DEEP AND 6" WIDE ACROSS THE WIDTH OF THE CHANNEL TO ENSURE WATER FLOW TRANSITIONS SMOOTHLY ONTO THE TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D WITHOUT SEPARATION FROM THE SOIL.
6. EXTEND TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D 2'-0" - 3'-0" ABOVE THE CREST OF CHANNEL SIDE WHENEVER POSSIBLE.
7. PLACE 2 1/2 ANCHORS/SY FOR TRENCHES, DITCHES, AND CHANNELS.



TYPICAL V-DITCH CROSS-SECTION



TYPICAL SLOPE CROSS-SECTION

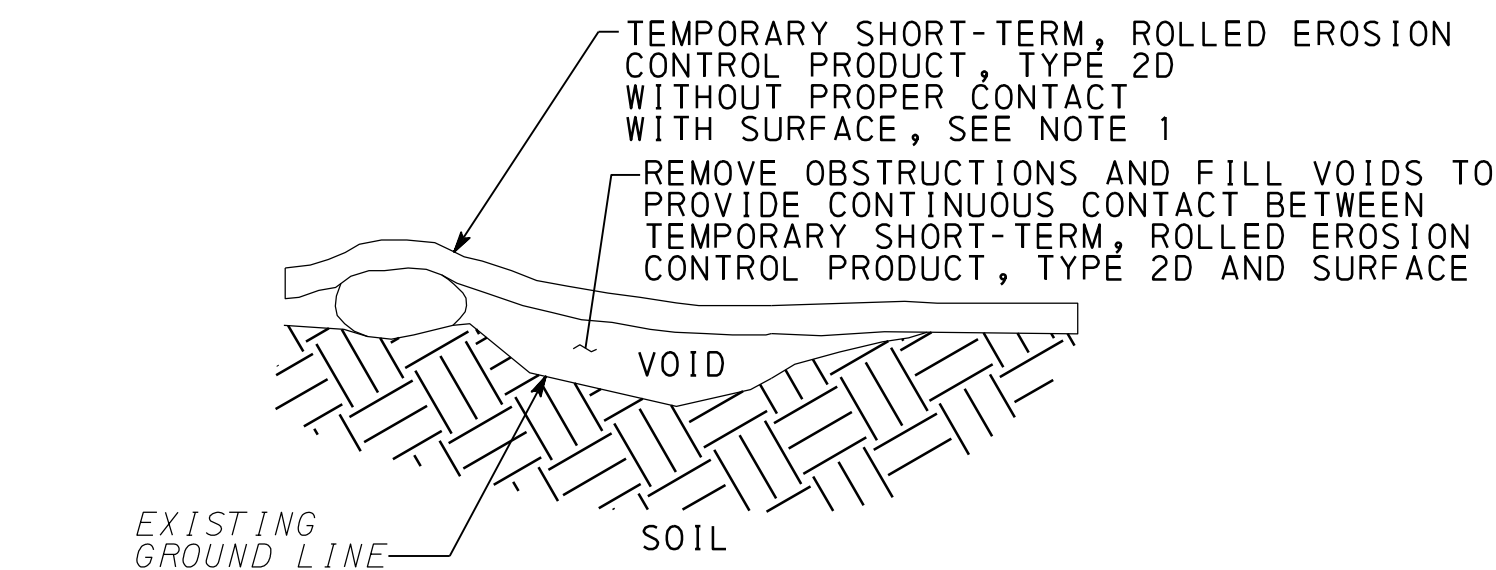


FIGURE 1

LACK OF CONTINUOUS CONTACT

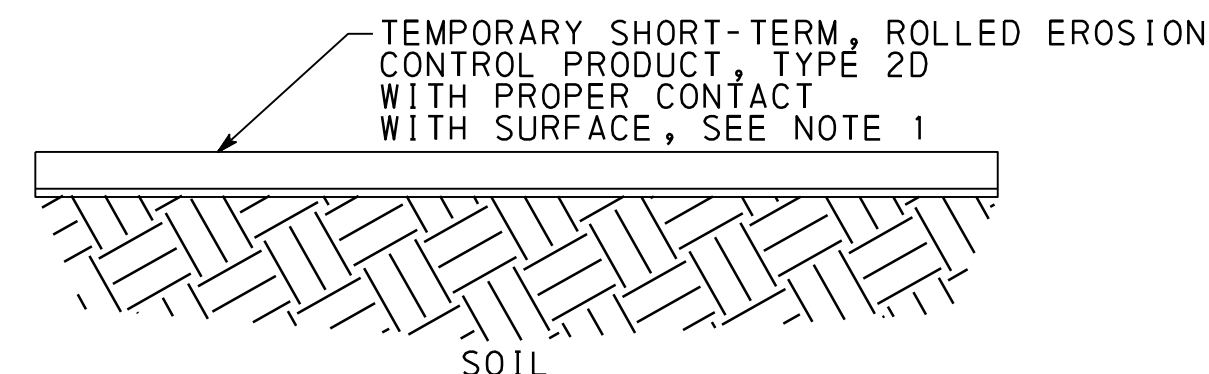
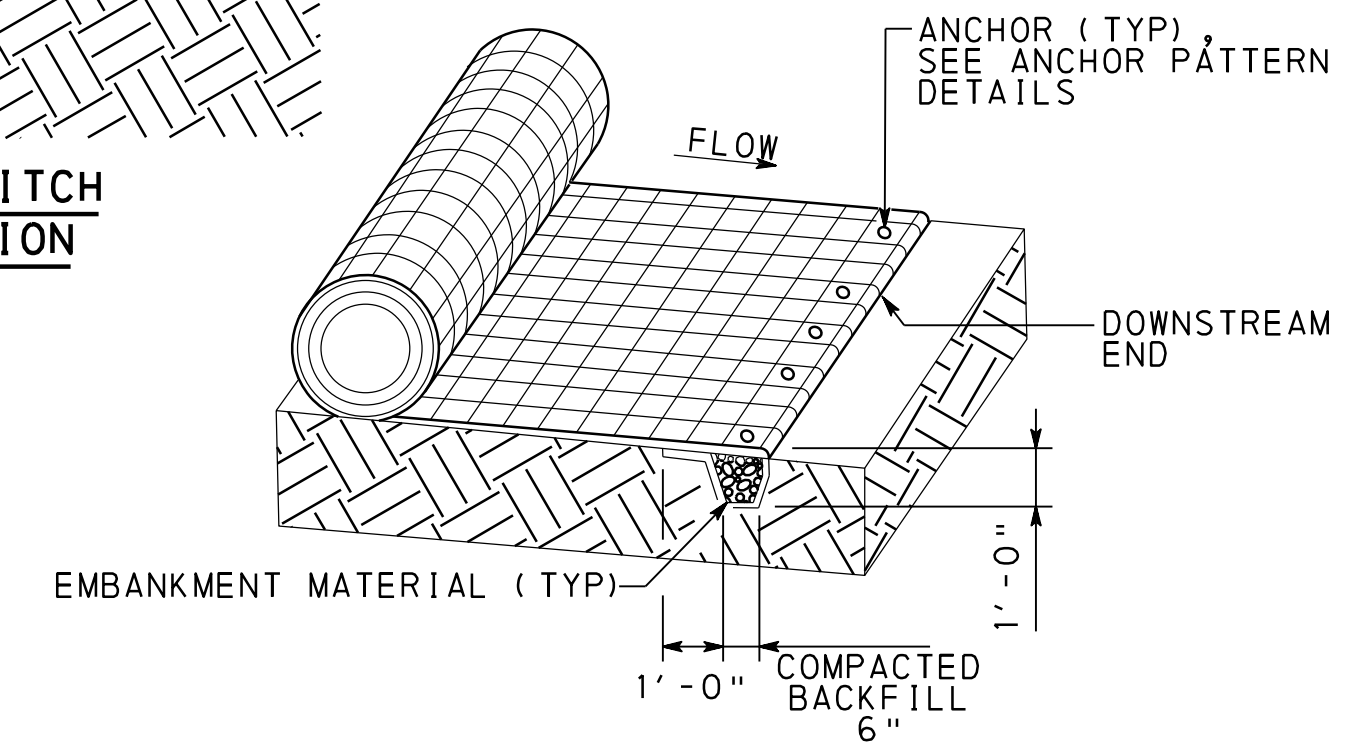


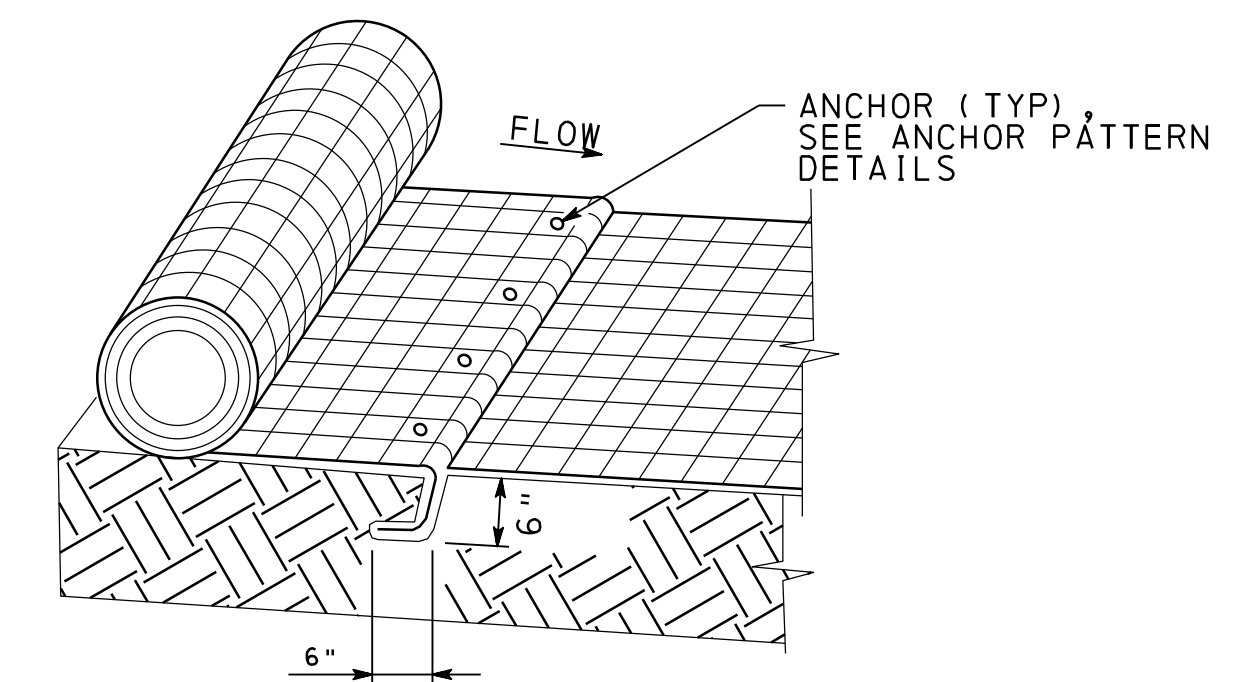
FIGURE 2

CONTINUOUS CONTACT

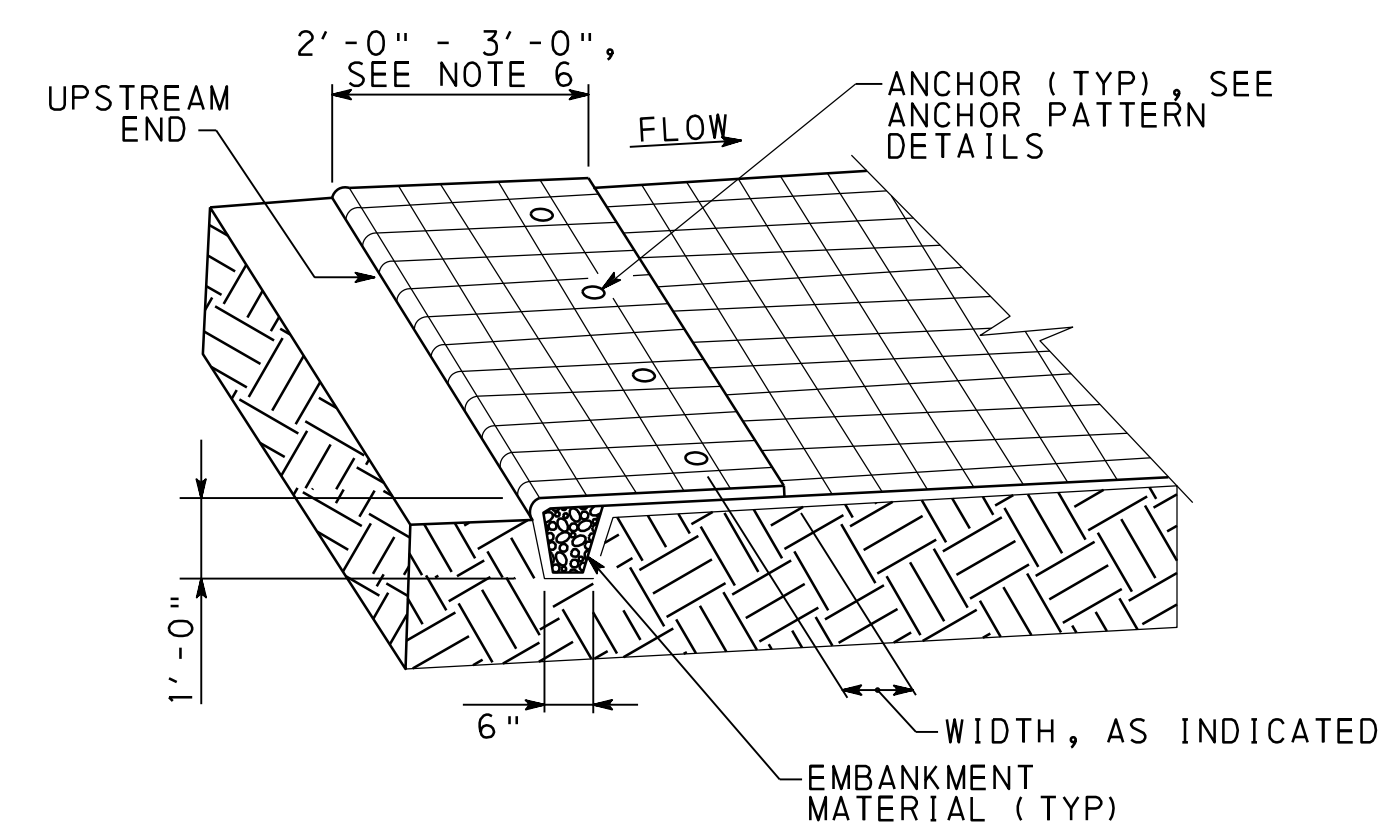
TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D
NOT TO SCALE



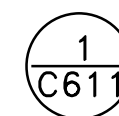
INITIAL ANCHOR TRENCH
SEE NOTE 3

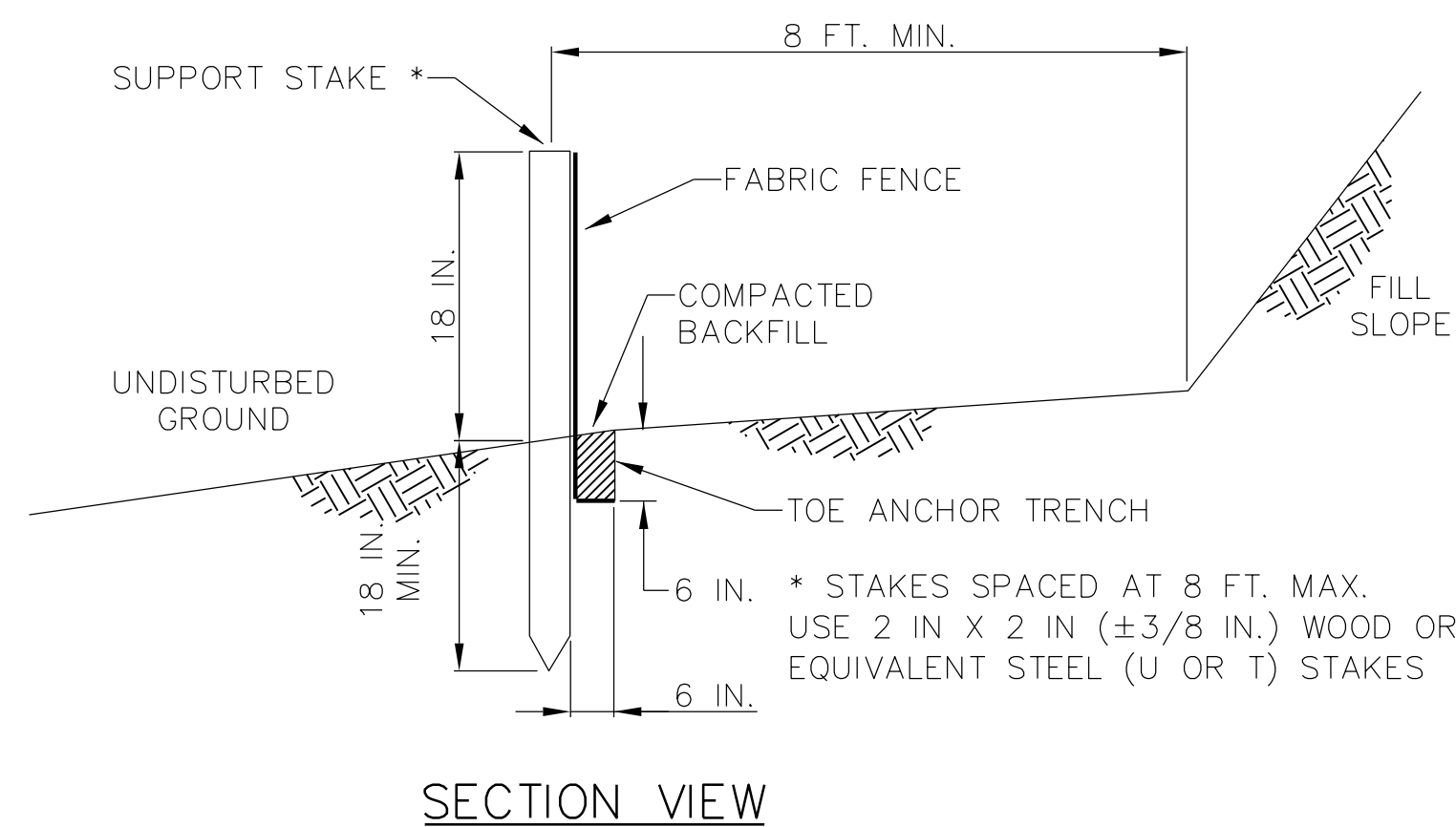
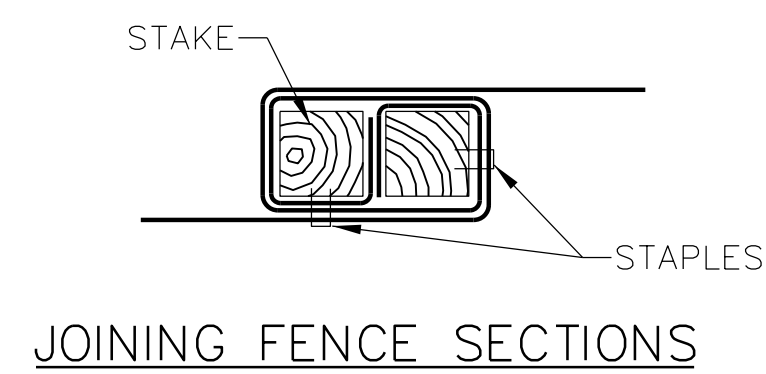


INTERMITTENT CHECK SLOT
SEE NOTE 4



TERMINAL ANCHOR TRENCH
SEE NOTE 5





NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

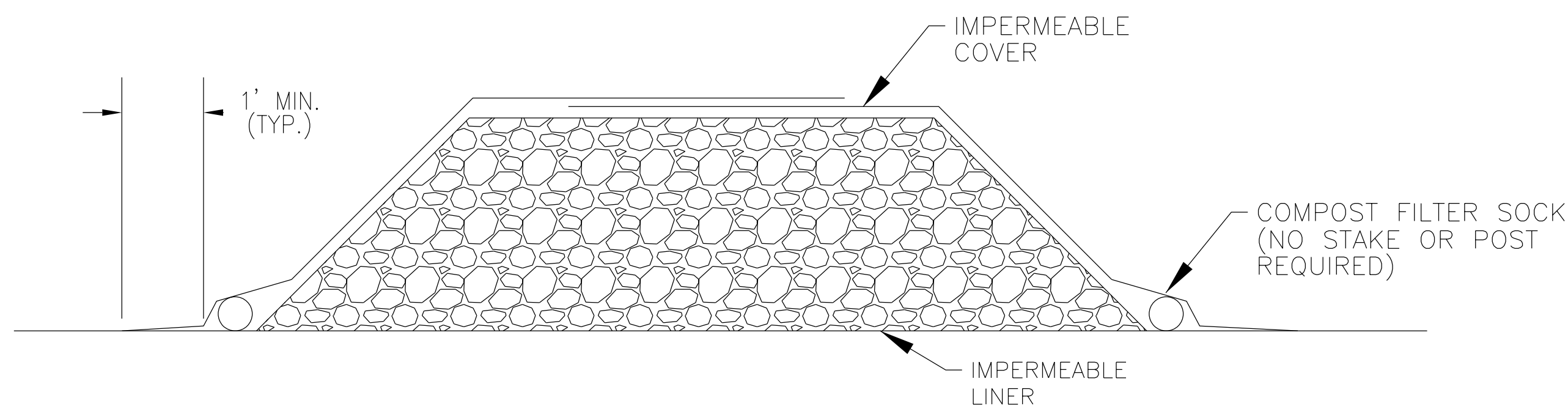
SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

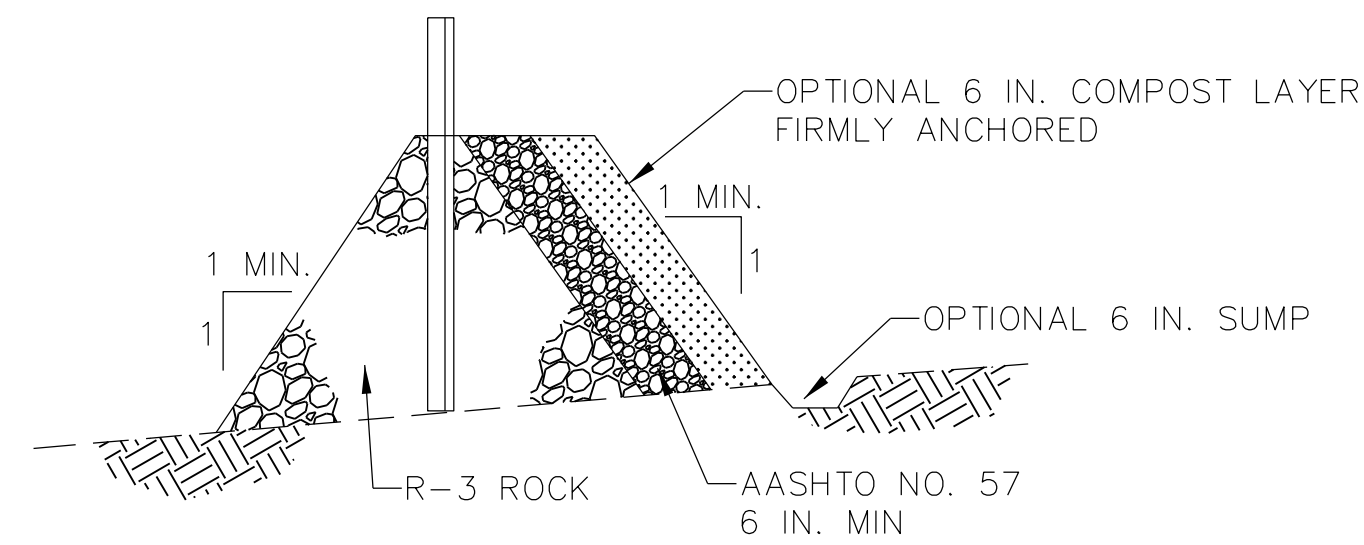
ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

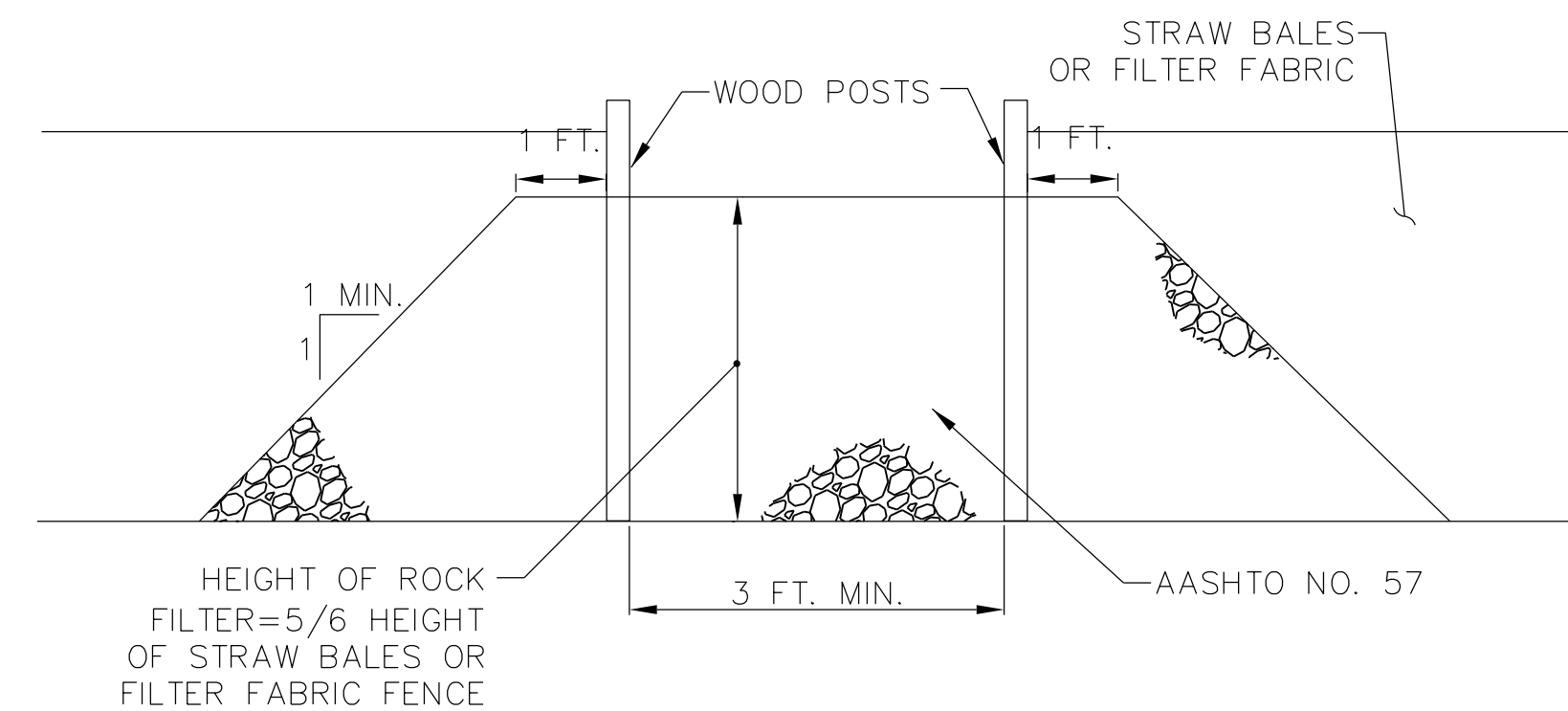
1 STANDARD SILT FENCE (18" HIGH)
NOT TO SCALE



3 STOCKPILE W/ COMPOST FILTER SOCK & IMPERMEABLE LINER
NOT TO SCALE



OUTLET CROSS-SECTION



UP-SLOPE FACE

NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

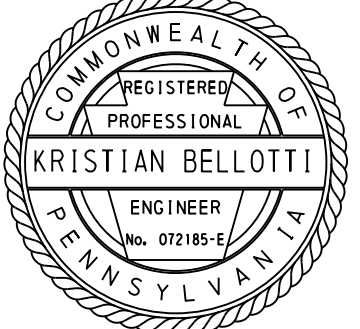
2 ROCK FILTER OUTLET
NOT TO SCALE

STOCKPILE NOTES:

- INSPECTION OF THE COMPOSITE FILTER SOCK SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF 1/2". REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SEDIMENT TRAPPED BY THE FILTER SOCK SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
- AN IMPERMEABLE COVER SHALL ENCLOSE THE ENTIRE STOCKPILE AT ALL TIMES. INSPECTION OF THE COVER SHALL BE DAILY. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- FILTER SOCK AND IMPERMEABLE COVER SHALL STAY IN PLACE UNTIL STOCKPILE HAS BEEN REMOVED AND DISPOSED OF PROPERLY.
- FILTER SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 AND COMPOST SHALL MEET STANDARDS OF TABLE 4.2 IN THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION EROSION AND SEDIMENT POLLUTION CONTROL MANUAL, MARCH 2012, OR CURRENT VERSION.
- FILTER SOCK TO BE FITREXX SEDIMENT CONTROL, 5 MIL HDPE PHOTO-DEGRADABLE COMPOST FILTER SOCK OR APPROVED EQUAL. FILTER SOCK TO BE SIZED PER PADEP EROSION AND SEDIMENT POLLUTION CONTROL MANUAL, MARCH 2012, OR CURRENT VERSION.

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EROSION AND SEDIMENT CONTROL DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C612		
DWG. NO.:	C047	OF:	C070
SHT. NO.:	51	OF:	081
COMPUTER FILE NO.:	21D-24-C612	REV. NO.:	0

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



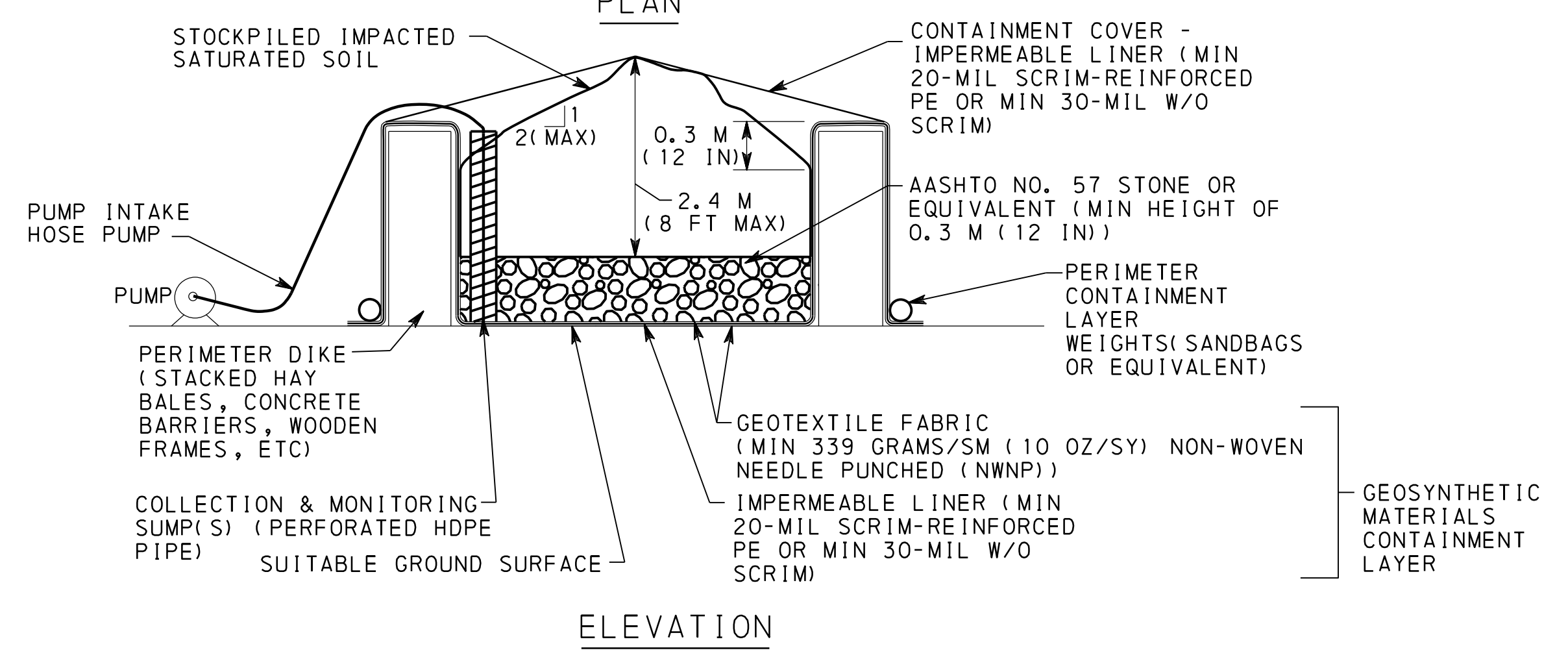
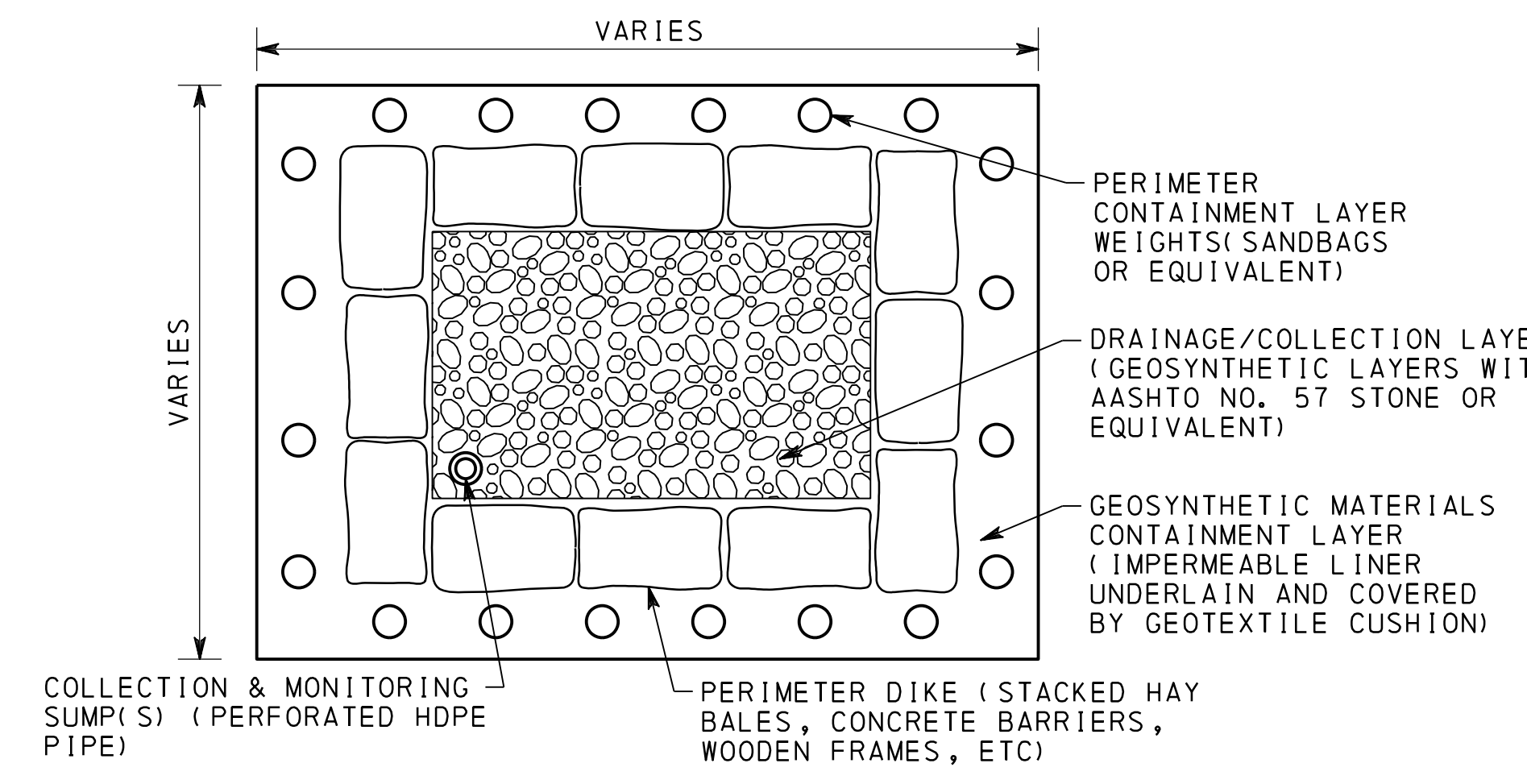
REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NOTTOWNE LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
HAZARDOUS WASTE DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C613	REV. NO.:	0
DWG. NO.:	C048	OF:	C070
SHT. NO.:	52	OF:	081
COMPUTER FILE NO.:	21D-24-C613	REV. NO.:	0

NOTES (CONT'D):

- PLACE THE COLLECTION AND MONITORING SUMP(S) TO BE UTILIZED TO COLLECT THE DRAINED CONTAMINATED GROUNDWATER OR STORMWATER FROM THE DRYING IMPACTED SATURATED SOIL STOCKPILE INSIDE THE TEMPORARY CONTAINMENT AREA.
- DETERMINE THE NUMBER, LOCATION, AND SIZE OF THE DEWATERING SUMP(S) AND SIZE OF THE PUMP AS REQUIRED TO PUMP THE DRAINED CONTAMINATED GROUNDWATER OR STORMWATER FROM THE STANDPIPE INSIDE THE TEMPORARY CONTAINMENT AREA, AND ALSO ANY CONTAMINATED GROUNDWATER OR STORMWATER ABOVE THE AASHTO NO. 57 AGGREGATE, TO THE PORTABLE STORAGE TANKS.
- AVOID COMINGLING OF EXCAVATED UNSATURATED AND IMPACTED SATURATED SOIL. PLACE ONLY THE EXCAVATED IMPACTED SATURATED SOIL FROM THE AQUA WATER LINE WORK INTO THE TEMPORARY CONTAINMENT AREA. PROPERLY MANAGE THE STOCKPILE OF THE IMPACTED SATURATED SOIL WITHIN THE TEMPORARY CONTAINMENT AREA AS THE EXCAVATED IMPACTED SATURATED SOIL FROM THE EXCAVATED TRENCH ACCUMULATES.
- SAMPLE AND TEST THE PUMPED CONTAMINATED GROUNDWATER AND/OR STORMWATER FROM THE TEMPORARY CONTAINMENT AREA TO THE PORTABLE STORAGE TANKS TO DETERMINE THE CLASSIFICATION OF THE CONTAMINANT FOR THE DISPOSAL OF AT AN OFFSITE LICENSED FACILITY.
- SAMPLE AND TEST THE EXCAVATED SOIL STOCKPILE AFTER IT HAS DRAINED AND DRIED ATOP THE AASHTO NO. 57 AGGREGATE WITHIN THE TEMPORARY CONTAINMENT AREA. CHARACTERIZE THE SOIL CONDITION AS EITHER NONHAZARDOUS REGULATED FILL TO BE REUSED ON THE PROJECT SITE OR CLEAN FILL TO BE LOADED FOR OFFSITE DISPOSAL FOR USE ON OTHER TRANSPORTATION PROJECTS.
- COVER THE TEMPORARY CONTAINMENT AREA WITH THE IMPERMEABLE LINER TO PROVIDE A WATERTIGHT BARRIER AS A CONTINUOUS PANEL/ROLL, OR FIELD WELDED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS. COVER THE STOCKPILE WITHIN THE TEMPORARY CONTAINMENT AREA WHEN STOCKPILING ACTIVITIES ARE NOT BEING PERFORMED, AND ALSO OVERNIGHT WHEN NOT IN USE.



1 C613 TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS

NOTES:

NOT TO SCALE

- INSPECT THE GROUND SURFACE WITH THE ENVIRONMENTAL CONSULTANT AND THE REPRESENTATIVE TO OBTAIN APPROVAL PRIOR TO INSTALLING THE TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS. SELECT A GROUND SURFACE THAT IS SMOOTH, FLAT, UNIFORM, COMPACTED AND NON-YIELDING FOR THE INSTALLATION OF THE GEOSYNTHETIC MATERIALS. PRIOR TO PLACEMENT, CERTIFY IN WRITING THAT THE GROUND SURFACE ON WHICH THE GEOSYNTHETIC MATERIALS IS TO BE PLACED IS ACCEPTABLE AND IS GEOTECHNICALLY AND STRUCTURALLY COMPETENT.
- CONSTRUCT THE PERIMETER DIKE. THE SIZE OF THE TEMPORARY CONTAINMENT AREA IS BASED ON THE VOLUME OF EXCAVATED IMPACTED SATURATED SOIL FROM THE AQUA WATER LINE WORK. CONTAMINATED GROUNDWATER WAS FOUND AT APPROXIMATELY 11.5 FEET, 24 FEET AND 17 FEET BELOW EXISTING GROUND SURFACE AT TMW-4, TMW-5 AND TMW-6 RESPECTIVELY. SOILS EXCAVATED FROM BELOW THE GROUNDWATER MUST BE MANAGED AS CONTAMINATED AND KEPT SEPARATE FROM THE EXCAVATED UNSATURATED SOIL. THE STOCKPILE IN THE TEMPORARY CONTAINMENT AREA MUST BE 2:1 OR FLATTER AND THE STOCKPILE HEIGHT ABOVE THE AASHTO NO. 57 AGGREGATE AND MUST NOT EXCEED 8 FEET. A MINIMUM OF 12 INCHES SHOULD BE KEPT FROM THE TOP OF THE PERIMETER DIKE TO THE STOCKPILE ON THE INSIDE OF THE CONTAINMENT AREA TO AVOID OVERTOPPING OF THE STOCKPILED IMPACTED SATURATED SOIL.
- PLACE THE GEOSYNTHETIC MATERIALS. THE IMPERMEABLE LINER AT THE BOTTOM OF THE CONTAINMENT AREA AND WRAPPED AROUND THE PERIMETER DIKE MUST BE SEAMLESS TO PREVENT THE CONTAINMENT AREA FROM LEAKING.
 - THE GEOSYNTHETIC MATERIALS ARE TO BE LAID OUT AND INSTALLED BY TRAINED PERSONNEL.
 - REPAIR OR REPLACE GEOSYNTHETIC MATERIALS THAT ARE DAMAGED OR CONTAIN IMPERFECTIONS.
 - LAY THE GEOSYNTHETIC MATERIALS AS SMOOTH AS POSSIBLE (FREE OF TENSILE STRESSES, FOLDS, AND WRINKLES). CONTINUOUSLY OVERLAP ADJACENT PANELS/ROLLS OF ALL GEOTEXTILE FABRICS A MINIMUM OF 0.3 METERS (12 INCHES) AND MINIMIZE WRINKLES BETWEEN ADJACENT PANELS/ROLLS. FIELD SEWING GEOTEXTILE FABRIC PANELS INSTEAD OF OVERLAPPING IS ALSO PERMITTED. IF SEWN, PROVIDE A FLAT SEAM WITH ONE ROW OF A SINGLE-THREAD CHAIN STITCH UNLESS RECOMMENDED OTHERWISE BY THE MANUFACTURER.
 - DO NOT ALLOW ANY EQUIPMENT TO DAMAGE THE GEOSYNTHETIC MATERIALS BY HANDLING, TRAFFICKING, OR OTHER MEANS. NO VEHICULAR TRAFFIC OF ANY KIND IS ALLOWED DIRECTLY ON THE GEOSYNTHETIC MATERIALS. PROHIBIT ALL PERSONNEL WORKING ON THE GEOSYNTHETIC MATERIALS TO SMOKE, WEAR DAMAGING SHOES, OR ENGAGE IN OTHER ACTIVITIES THAT COULD DAMAGE THE GEOSYNTHETIC MATERIALS.
- CAREFULLY PLACE THE DRAINAGE LAYER CONSISTING OF WASHED AASHTO NO. 57 AGGREGATE ON TOP OF THE GEOSYNTHETIC MATERIALS WITHIN THE TEMPORARY CONTAINMENT AREA.
- PLACE THE SANDBAGS AROUND THE PERIMETER OF THE TEMPORARY CONTAINMENT AREA TO PROVIDE ADEQUATE ANCHORAGE TO PREVENT UPLIFT OF THE GEOSYNTHETIC MATERIALS BY THE WIND.

2 C613 STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER

NOT TO SCALE

NOTES:

- INSPECT THE GROUND SURFACE WITH THE ENVIRONMENTAL CONSULTANT AND THE REPRESENTATIVE TO OBTAIN APPROVAL PRIOR TO INSTALLING THE PORTABLE SPILL CONTAINMENT BARRIER (BERM) AND TRUCK HOLDING THE PORTABLE STORAGE TANKS (FRAC TANKS). SELECT A GROUND SURFACE THAT IS SMOOTH, UNIFORMLY FLAT, COMPACTED, AND NON-YIELDING FOR THE INSTALLATION OF THE PORTABLE SPILL CONTAINMENT BARRIER. PRIOR TO PLACEMENT, OBTAIN WRITTEN CERTIFICATION FROM THE ENVIRONMENTAL CONSULTANT AND REPRESENTATIVE THAT THE GROUND SURFACE ON WHICH THE PORTABLE SPILL CONTAINMENT BERM AND TRUCK HOLDING THE PORTABLE STORAGE TANKS ARE TO BE PLACED IS ACCEPTABLE AND IS GEOTECHNICALLY AND STRUCTURALLY COMPETENT.
- OBTAIN APPROVAL FROM THE REPRESENTATIVE THAT THE STORAGE AND CONTAINMENT TANKS ARE CLEAN (DECONTAMINATED) PRIOR TO TRANSPORTING OF ANY PUMPED GROUNDWATER FROM THE AQUA WATER LINE WORK OR FROM THE TEMPORARY IMPACTED SATURATED SOIL CONTAINMENT AREAS.
- PLACE THE PORTABLE SPILL CONTAINMENT BARRIER (BERM) AND TRUCK HOLDING THE CLEAN PORTABLE STORAGE TANKS.
- PUMP ANY GROUNDWATER AND/OR STORMWATER FROM THE EXCAVATED TRENCH FOR THE RELOCATED AQUA WATER LINE INTO THE PORTABLE STORAGE TANKS. BE RESPONSIBLE FOR ALL PUMPS, PIPING, VALVES, METERS AND APPURTENANCES NECESSARY TO MANAGE THE GROUNDWATER OR STORMWATER ON-SITE TO THE PORTABLE STORAGE TANK.
- PUMP ANY GROUNDWATER AND/OR STORMWATER FROM THE TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS INTO THE PORTABLE STORAGE TANKS. BE RESPONSIBLE FOR ALL PUMPS, PIPING, VALVES, METERS AND APPURTENANCES NECESSARY TO MANAGE THE GROUNDWATER OR STORMWATER ON-SITE FROM THE TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS AREA TO THE PORTABLE STORAGE TANK.

PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER OR STORMWATER

1. THE CONTRACTOR WILL DEVELOP A WASTE MANAGEMENT PLAN (WMP) IN ACCORDANCE WITH CONTRACT WASTE PROVISIONS IDENTIFYING PROCEDURES FOR SCREENING, CHARACTERIZING, HANDLING, AND DISPOSING OF CONTAMINATED GROUNDWATER OR STORMWATER.
2. EXCAVATIONS WILL BE DEWATERED DIRECTLY INTO A STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER TANK. CONTRACTOR WILL USE APPLICABLE METHODS INCLUDING THE DIRECT DEWATERING FROM THE BOTTOM OF THE EXCAVATED TRENCH USING AN ADEQUATELY SIZED PUMP.
3. THE DEWATERED CONTAMINATED GROUNDWATER PUMPED INTO THE STORAGE AND CONTAINMENT TANK IS TO BE SAMPLED AND TESTED TO DETERMINE CLASSIFICATION OF CONTAMINATED GROUNDWATER OR STORMWATER BEFORE TRANSPORTING FOR OFFSITE DISPOSAL AT A LICENSED FACILITY.
4. SAMPLE AND TEST THE GROUNDWATER AND/OR STORMWATER IN THE PORTABLE STORAGE TANKS TO DETERMINE THE CLASSIFICATION OF THE CONTAMINANT PRIOR TO DISPOSAL OF AT AN OFFSITE LICENSED FACILITY.
5. INSPECT THE STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER PORTABLE STORAGE TANKS AND PORTABLE SPILL CONTAINMENT BARRIER (BERM) AND PERFORM MAINTENANCE AS NECESSARY. DOCUMENT INSPECTIONS AND ANY CORRECTIVE ACTIONS/MEASURES PERFORMED.
6. CONTROL VAPORS AND/OR ODORS EMANATING FROM THE STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER AREA IN ACCORDANCE WITH THE WMP. ANY DAMAGE CAUSED BY THE VAPOR OR ODOR NUISANCE IS EXCLUSIVELY THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE.
7. KEEP RECORDS OF DOCUMENTS GENERATED DURING THE COURSE OF WORK ASSOCIATED WITH THIS ITEM. THIS INCLUDES FIELD NOTES, SAMPLING/TESTING LABORATORY REPORTS, AIR MONITORING DATA, CHAIN OF CUSTODY FORMS, DAILY LIQUID VOLUMES AND WEIGHTS, WASTE MANIFEST/BILLS OF LOADING, MAINTENANCE/INSPECTION REPORT, AND REPORTS OF ANY SPILLS OF ACCIDENTS.
8. IF GROUNDWATER IS ENCOUNTERED ELSEWHERE ON THE PROJECT SITE DURING EXCAVATION OR CONSTRUCTION, NOTIFY THE REPRESENTATIVE. THE GROUNDWATER IS TO BE SAMPLED AND TESTED, CLASSIFIED, AND DISPOSED OF AT AN OFFSITE, LICENSED FACILITY IF DEEMED CONTAMINATED.

ENVIRONMENTAL DUE DILIGENCE NOTES:

IMPORTED FILL

1. WITH THE EXCEPTION OF SITES ENROLLED IN DEP'S LAND RECYCLING AND REMEDIATION STANDARDS ACT (ACT 2) PROGRAM AND SITES WITH DEP'S WASTE MANAGEMENT GENERAL PERMIT (WMGR096) APPROVAL TO USE REGULATED FILL, ALL FILL MATERIAL IMPORTED TO THE SITE MUST MEET THE DEFINITION OF CLEAN FILL, AS DEFINED IN DEP'S MANAGEMENT OF FILL POLICY. REGULATED FILL USED ON ACT 2 SITES MUST COMPLY WITH THE STANDARDS ESTABLISHED BY THE ACT 2 PROGRAM. REGULATED FILL USED OUTSIDE OF ACT 2 SITES MUST COMPLY WITH DEP'S WASTE MANAGEMENT GENERAL PERMIT WMGR096.
2. FOR AREAS NOT ENROLLED IN THE ACT 2 PROGRAM, THE PERMITTEE SHALL COMPLY WITH DEP'S MANAGEMENT OF FILL POLICY (DOCUMENT NO. 258-2182-773) IF FILL IS IMPORTED TO THE SITE, AND COMPLY WITH THE FOLLOWING WHEN USING FILL AT THE SITE TO LEVEL AN AREA OR BRING IT TO GRADE.
 - A. THE PERMITTEE SHALL CONDUCT ENVIRONMENTAL DUE DILIGENCE TO DETERMINE WHETHER THE FILL HAS BEEN AFFECTED BY A RELEASE OF A REGULATED SUBSTANCE. IF DUE DILIGENCE WAS CONDUCTED PRIOR TO SUBMITTING THE PERMIT APPLICATION AND CIRCUMSTANCES HAVE NOT CHANGED BETWEEN THE DUE DILIGENCE AND THE USE OF THE FILL, DUE DILIGENCE DOES NOT NEED TO BE REPEATED.
 - B. IF DUE DILIGENCE RESULTS IN EVIDENCE OF A RELEASE, AS DEFINED IN DEP'S MANAGEMENT OF FILL POLICY, THE PERMITTEE SHALL TEST THE MATERIAL TO DETERMINE WHETHER IT QUALIFIES AS CLEAN FILL, AND IF SO, DEP'S ELECTRONIC FORM FP-001 (CERTIFICATION OF CLEAN FILL) MUST BE COMPLETED, RETAINED BY THE PERMITTEE, AND BE MADE AVAILABLE TO DEP/COUNTY CONSERVATION DISTRICT (CCD) UPON REQUEST. IF THE FILL DOES NOT QUALIFY AS CLEAN FILL, BUT MEETS THE REGULATED FILL STANDARDS, IT MAY BE USED IN ACCORDANCE WITH AN APPROVAL FOR COVERAGE UNDER DEP'S WASTE MANAGEMENT GENERAL PERMIT WMGR096.

ON-SITE CONTAMINATION

1. FOR SITES ENROLLED IN THE ACT 2 PROGRAM, IF THE RESULTS OF SOIL SAMPLING IN THE AREA OF EARTH DISTURBANCE ACTIVITIES DEMONSTRATE NEWLY DISCOVERED SOIL CONTAMINATION WITH CONCENTRATIONS OF REGULATED SUBSTANCES EXCEEDING THE RESIDENTIAL OR NON-RESIDENTIAL MEDIUM-SPECIFIC CONCENTRATIONS (MSCS), WHICHEVER IS APPLICABLE, THE PERMITTEE SHALL NOTIFY DEP/CCD BY PHONE WITHIN 24 HOURS OF RECEIVING THE SAMPLING RESULTS. EARTH DISTURBANCE ACTIVITIES IN AREAS OF NEWLY DISCOVERED CONTAMINATION NEED NOT CEASE AFTER NOTIFICATION TO DEP/CCD UNLESS SO DIRECTED BY DEP/CCD.
2. FOR AREAS NOT ENROLLED IN THE ACT 2 PROGRAM, IF THE PERMITTEE OR CO-PERMITTEE DISCOVERS DURING EARTH DISTURBANCE ACTIVITIES WASTES OR OTHER MATERIAL OR SUBSTANCES THAT HAVE OR HAVE LIKELY CAUSED SOIL CONTAMINATION WITH CONCENTRATIONS OF REGULATED SUBSTANCES EXCEEDING THE RESIDENTIAL OR NON-RESIDENTIAL MSCS, WHICHEVER IS APPLICABLE, THE PERMITTEE SHALL NOTIFY DEP/CCD BY PHONE WITHIN 24 HOURS. EARTH DISTURBANCE ACTIVITIES IN AREAS OF NEWLY DISCOVERED CONTAMINATION NEED NOT CEASE AFTER NOTIFICATION TO DEP/CCD UNLESS SO DIRECTED BY DEP/CCD.

ON-SITE GROUNDWATER CONTAMINATION

1. IF THE RESULTS OF SAMPLING PERFORMED ON GROUNDWATER ENCOUNTERED DURING EARTH DISTURBANCE ACTIVITIES DEMONSTRATE THAT THE GROUNDWATER IS CONTAMINATED BY ONE OR MORE POLLUTANTS AT CONCENTRATIONS EXCEEDING WATER QUALITY CRITERIA CONTAINED IN 25 PA. CODE CHAPTER 93, THAT WERE NOT PREVIOUSLY DISCLOSED TO DEP/CCD, THE PERMITTEE SHALL NOTIFY DEP/CCD BY PHONE WITHIN 24 HOURS OF RECEIVING THE SAMPLING RESULT. CONTAMINATED GROUNDWATER MAY NOT BE PUMPED OR OTHERWISE DIVERTED TO SURFACE WATERS UNLESS SPECIFICALLY AUTHORIZED BY THE DEP'S CLEAN WATER PROGRAM.

CONTAMINANTS					
REGULATED SUBSTANCE	PADEP STATEWIDE HEALTH STANDARD	SAMPLE CONCENTRATION	SAMPLING POINT	MEDIUM	DATE OF SAMPLES
	NON-RESIDENTIAL USED AQUIFER < 2500				
IRON	300	940	TMW-4	GROUNDWATER	03/04/2022
MANGANESE	300	760	TMW-5	GROUNDWATER	03/04/2022
		3,300	TMW-6	GROUNDWATER	03/04/2022
BENZO(A) PYRENE	0.20	0.32	TMW-4	GROUNDWATER	03/04/2022

A PHASE II ENVIRONMENTAL SITE ASSESSMENT (ESA) WAS PREPARED FOR SEPTA IN JUNE AND JULY 2019. THIS PHASE II ESA WAS CONDUCTED IN ACCORDANCE WITH AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) E1903-11 STANDARD PRACTICE FOR ENVIRONMENTAL SITE ASSESSMENTS, AND WITH GENERALLY ACCEPTED PROFESSIONAL PRACTICES, PRINCIPLES, AND PROCEDURES EXISTING AT THE TIME OF THE PREPARATION OF THIS REPORT. THIS PHASE II ESA WAS COMPLETED IN ORDER TO FURTHER INVESTIGATE THE RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS) IDENTIFIED DURING THE MARCH 2016 PHASE I ESA.

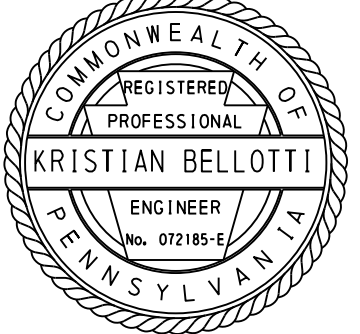
THE EVALUATION OF ANALYTICAL RESULTS FROM THE SOIL SAMPLES INDICATE THAT NO SOIL IMPACTS ARE PRESENT AT THE SITE. THEREFORE, THERE ARE NO ENVIRONMENTAL LIABILITIES ASSOCIATED WITH THE SOILS INVESTIGATED DURING THIS PHASE II ESA.

ON MARCH 4, 2022, DIRECT PUSH DRILLING WAS PERFORMED IN ORDER TO SCREEN SOIL CORES, IDENTIFY PRESENCE OF WATER, AND INSTALL TEMPORARY MONITORING WELLS (TMW-4 THROUGH TMW-6).

THE GROUND WATER ANALYTICAL RESULTS FROM THE GROUNDWATER SAMPLES INDICATE THAT BENZO(A)PYRENE EXCEEDED THE PADEP STATEWIDE HEALTH STANDARD, NON-RESIDENTIAL (NR) USED AQUIFER MEDIUM SPECIFIC CONCENTRATION (MSC) IN TMW-4. IRON IN TMW-4 AND MANGANESE IN TMW-5 AND TMW-6 EXCEEDED THE NR USED MSCs.

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



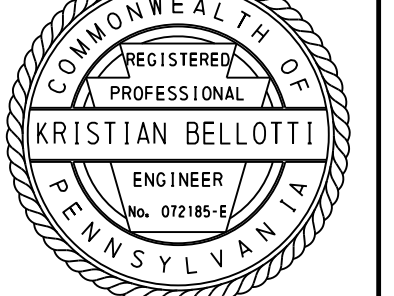
REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
HAZARDOUS WASTE NOTES

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CAJ
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CAJ
DRAWING NUMBER:	C614		
DWG. NO.:	C049	OF	C070
SHT. NO.:	53	OF	081
COMPUTER FILE NO.:	21D-24-C614	REV. NO.:	0

MANAGER - ARCH/ENGINEERING

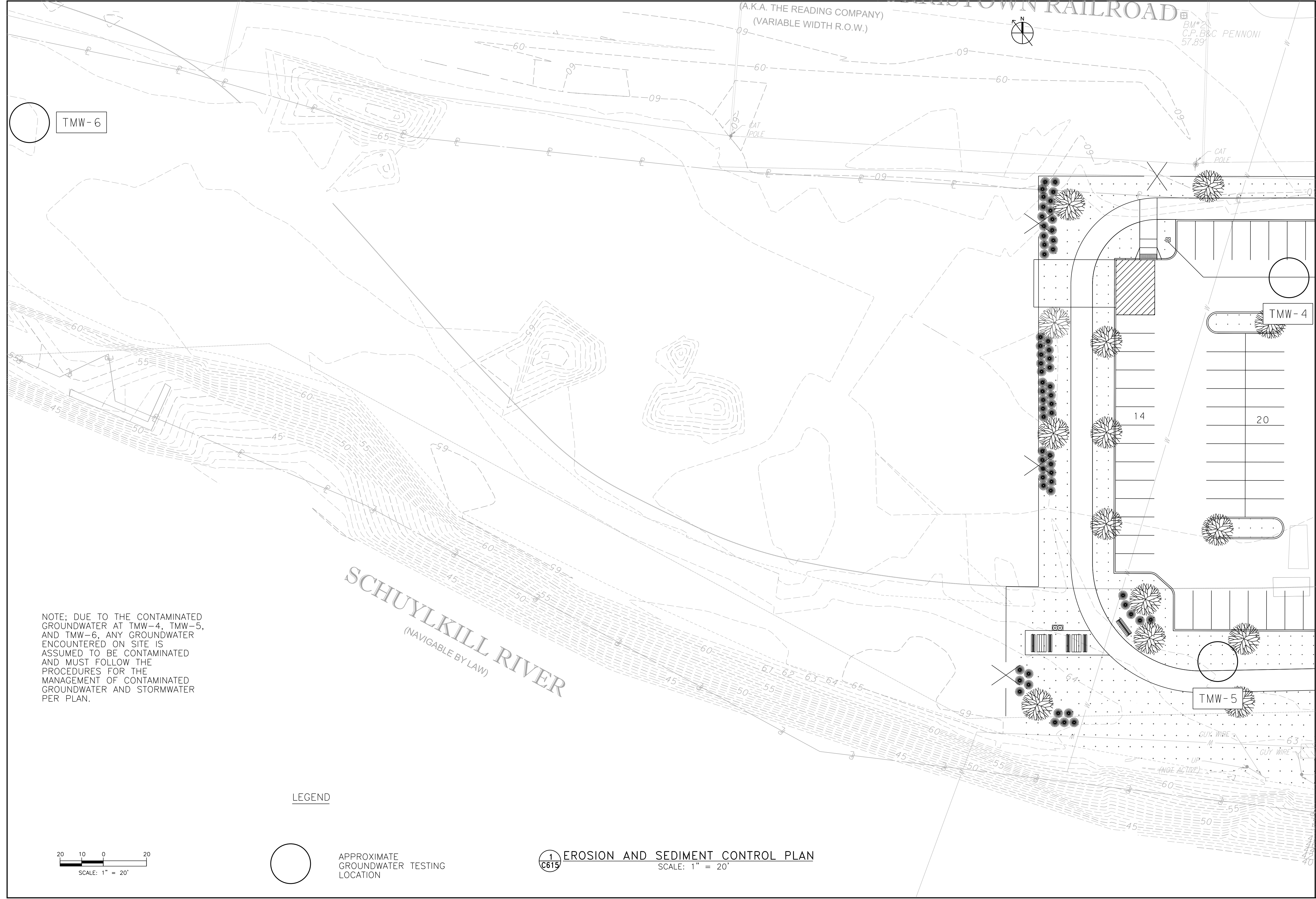
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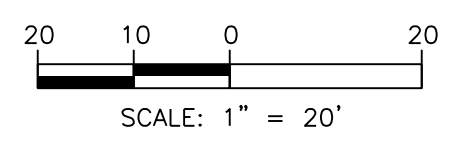
REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
HAZARDOUS WASTE TESTING LOCATIONS

SCALE: 1:20	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C615	
DWG. NO.: C050 OF C070	
SHT. NO.: 54 OF 081	
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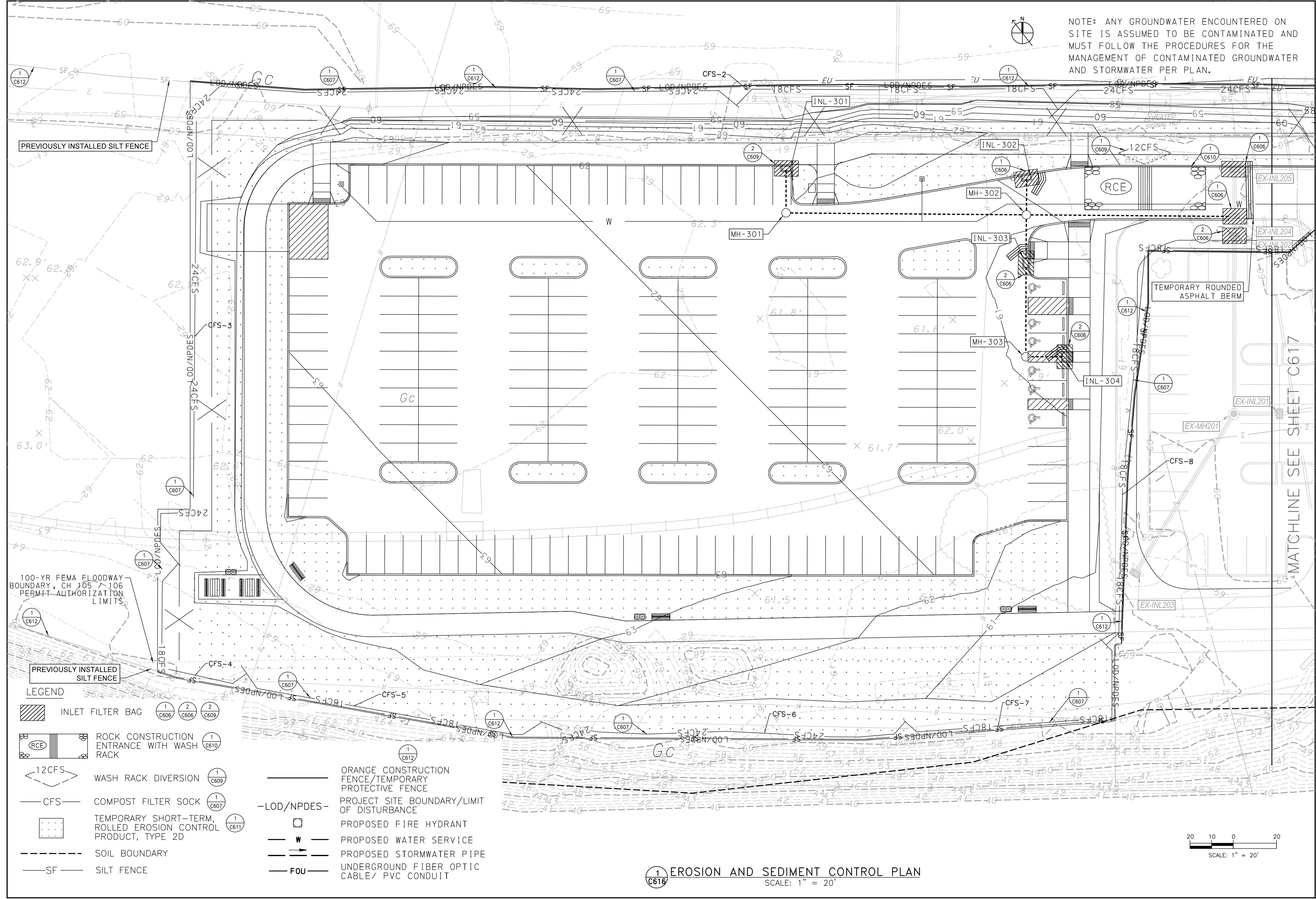


NOTE: DUE TO THE CONTAMINATED GROUNDWATER AT TMW-4, TMW-5, AND TMW-6, ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.



LAND DEVELOPMENT SUBMISSION

NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.



100-YR FEMA FLOODWAY BOUNDARY, CH 105 & 106 PERMIT-AUTHORIZATION LIMITS

- LEGEND**
- INLET FILTER BAG
 - ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
 - WASH RACK DIVERSION
 - COMPOST FILTER SOCK
 - TEMPORARY SHORT-TERM, ROLLED EROSION CONTROL PRODUCT, TYPE 2D
 - SOIL BOUNDARY
 - SILT FENCE
 - ORANGE CONSTRUCTION FENCE/TEMPORARY PROTECTIVE FENCE
 - PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
 - PROPOSED FIRE HYDRANT
 - PROPOSED WATER SERVICE
 - PROPOSED STORMWATER PIPE
 - UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT

MATCHLINE SEE SHEET C617

MANAGER - ARCH / ENGINEERING
PROJECT MANAGER

McCORMICK TAYLOR

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EROSION AND SEDIMENT CONTROL PLAN

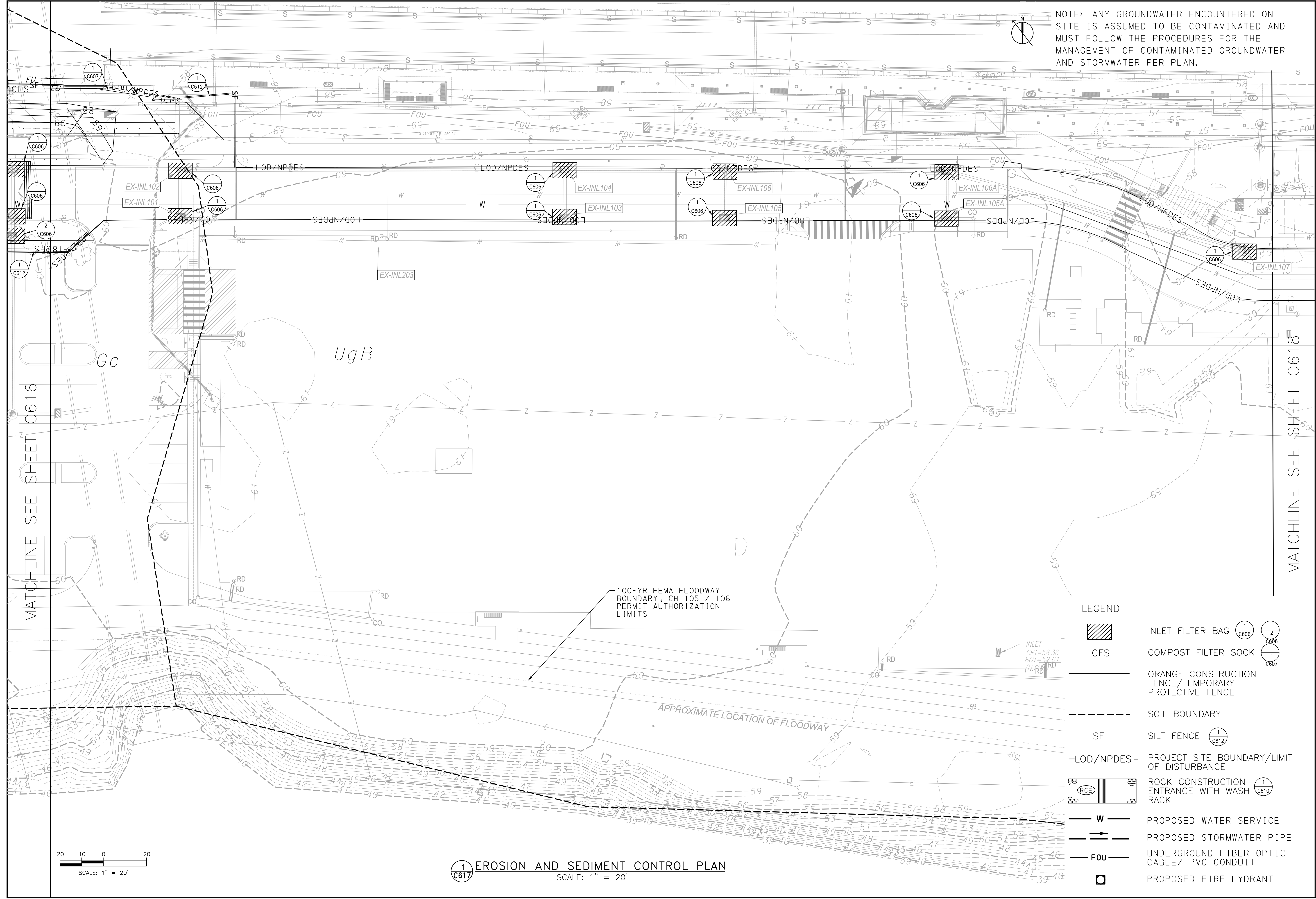
SCALE: 1" = 20'

SCALE:	1:20	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CAI
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CAI
DRAWING NUMBER:	C616		
DWG. NO.:	C051	OF:	C070
SHT. NO.:	55	OF:	081
COMPUTER FILE NO.:	21D-24-C616	REV. NO.:	0

1 EROSION AND SEDIMENT CONTROL PLAN
SCALE: 1" = 20'

LAND DEVELOPMENT SUBMISSION

NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.



MANAGER - ARCH / ENGINEERING

PROJECT MANAGER

McCormick Taylor

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE

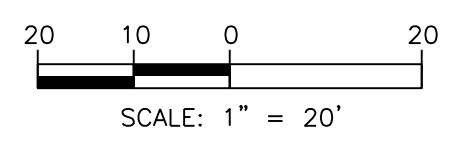
SURFACE PARKING LOT
NEW CONSTRUCTION

CIVIL
EROSION AND SEDIMENT CONTROL PLAN

- LEGEND**
- INLET FILTER BAG (C606)
 - COMPOST FILTER SOCK (C606)
 - (C606)
 - (C606, C607)
 - ORANGE CONSTRUCTION FENCE/TEMPORARY PROTECTIVE FENCE
 - SOIL BOUNDARY
 - SILT FENCE (C612)
 - PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
 - ROCK CONSTRUCTION ENTRANCE WITH WASH RACK (C610)
 - PROPOSED WATER SERVICE
 - PROPOSED STORMWATER PIPE
 - UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
 - PROPOSED FIRE HYDRANT

100-YR FEMA FLOODWAY BOUNDARY, CH 105 / 106 PERMIT AUTHORIZATION LIMITS

APPROXIMATE LOCATION OF FLOODWAY



1 EROSION AND SEDIMENT CONTROL PLAN
SCALE: 1" = 20'

SCALE: 1:20 SCALE FACTOR: 1:1

DATE: 11/1/2024 DRAWN BY: CAL

WORK ORDER NO.: GEC21D-24 CHECKED BY: CMA

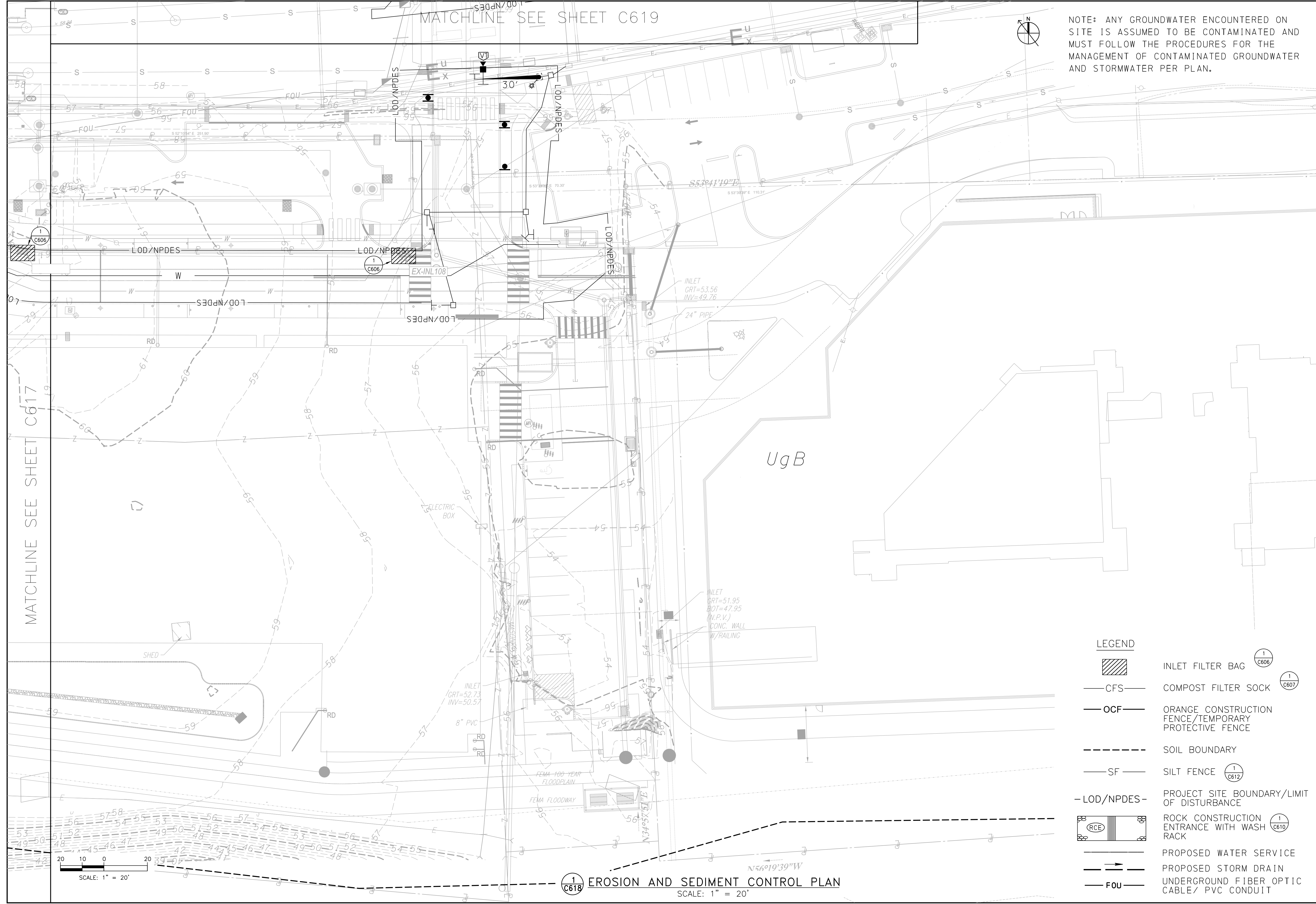
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DWG. NO.: C052 OF C070 REV. NO.: 0

SHT. NO.: 56 OF 081

COMPUTER FILE NO.: 21D-24-C617

LAND DEVELOPMENT SUBMISSION

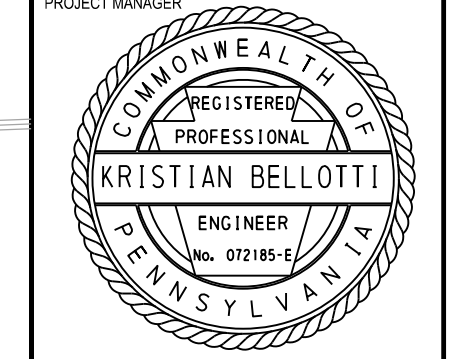


MATCHLINE SEE SHEET C619

NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.



MANAGER - ARCH / ENGINEERING



REV	DATE	DESCRIPTION	BY	CKD	APD

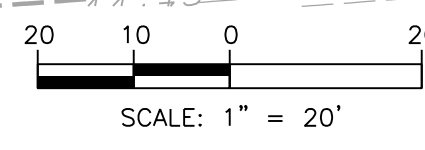
CONSHOHOCKEN RAILROAD STATION
 MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
 EROSION AND SEDIMENT CONTROL PLAN

SCALE:	1:20	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C618	REV. NO.:	0
DWG. NO.:	C053	OF:	C070
DIT. NO.:	057	OF:	081
COMPUTER FILE NO.:	21D-24-C618	REV. NO.:	0

- LEGEND**
- INLET FILTER BAG (1 C606)
 - CFS COMPOST FILTER SOCK (1 C607)
 - OCF ORANGE CONSTRUCTION FENCE/TEMPORARY PROTECTIVE FENCE
 - SOIL BOUNDARY
 - SF SILT FENCE (1 C612)
 - LOD/NPDES - PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
 - ROCK CONSTRUCTION ENTRANCE WITH WASH RACK (1 C610)
 - PROPOSED WATER SERVICE
 - PROPOSED STORM DRAIN
 - FOU UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT

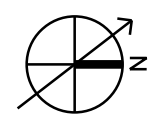
1 C618 EROSION AND SEDIMENT CONTROL PLAN
 SCALE: 1" = 20'

MATCHLINE SEE SHEET C617



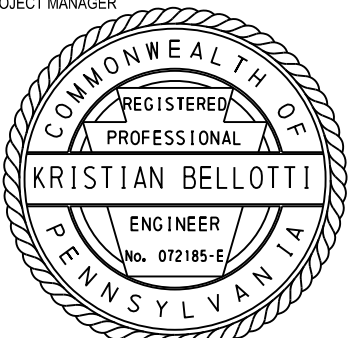
LAND DEVELOPMENT SUBMISSION

NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.

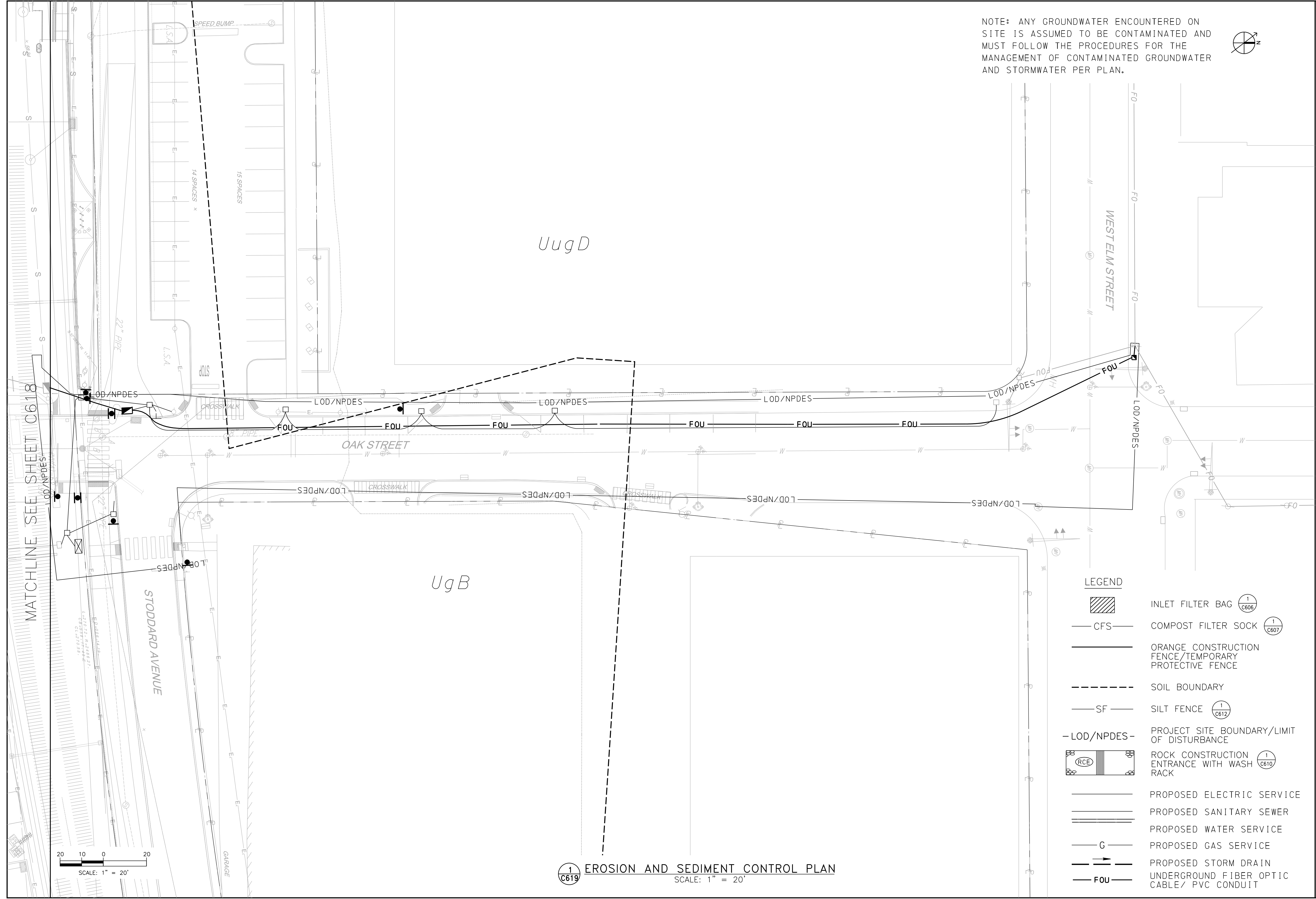


MANAGER - ARCH / ENGINEERING

PROJECT MANAGER



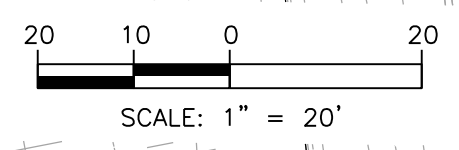
REV	DATE	DESCRIPTION	BY	CKD	APD



LEGEND

- INLET FILTER BAG (1/C606)
- CFS COMPOST FILTER SOCK (1/C607)
- ORANGE CONSTRUCTION FENCE/TEMPORARY PROTECTIVE FENCE
- SOIL BOUNDARY
- SILT FENCE (1/C612)
- PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
- ROCK CONSTRUCTION ENTRANCE WITH WASH RACK (1/C610)
- PROPOSED ELECTRIC SERVICE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED GAS SERVICE
- PROPOSED STORM DRAIN
- UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT

MATCHLINE SEE SHEET C618



1 C619 EROSION AND SEDIMENT CONTROL PLAN
SCALE: 1" = 20'

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1:20	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C619	
DWG. NO.: C054 OF C070	REV. NO.: 0
SHEET NO.: 58 OF 081	
COMPUTER FILE NO.: 21D-24-C619	

LAND DEVELOPMENT SUBMISSION

SURVEY NOTES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM ELECTRONIC FILES PROVIDED BY THE SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY (SEPTA). SURVEY INFORMATION PROVIDED BY PENNONI ASSOCIATES DATED JAN 20, 2019.
- SUPPLEMENTAL TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY KMA CONSULTING ENGINEERS INC. IN NOVEMBER 2020. TOPOGRAPHICAL PLAN UPDATES WERE MADE ALONG THE RIVER SIDE AREA OF THE SITE AND ALONG THE RAILWAY.
- THIS SURVEY HAS BEEN PREPARED AND COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, EXCEPTIONS OR RESTRICTIONS OF RECORD THAT A TITLE SEARCH MAY DISCLOSE.
- THE HORIZONTAL DATUM FOR THIS PLAN IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83. THE VERTICAL DATUM FOR THIS PLAN IS BASED ON NAVD88.
- A PENNSYLVANIA ONECALL WAS COMPLETED ON JULY 24, 2020 SERIAL NO. 20202062212
- THE PROJECT UNITS ARE IN U.S. SURVEY FEET.
- BENCHMARKS
 BM#1 - CONTROL POINT FROM PENNONI ASSOCIATES - ELEV 57.49'
 BM#2 - CONTROL POINT FROM PENNONI ASSOCIATES - ELEV 57.89'
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL SURVEY DATA & INFORMATION PROVIDED.

GENERAL NOTES

- ALL CONSTRUCTION WILL BE IN ACCORDANCE WITH THE FOLLOWING CURRENT STANDARDS, AS APPLICABLE: CONSHOHOCKEN BOROUGH ZONING ORDINANCE, SEPTA STANDARD DETAILS AND SPECIFICATIONS, PENNDOT SPECIFICATIONS (PUB 408), PENNDOT ROADWAY CONSTRUCTION STANDARDS.
- THE PROJECT IS LOCATED WITHIN FEMA DESIGNATED FLOODPLAIN.
- BASED ON REVIEW OF THE EXISTING SITE CONDITIONS, NO PORTION OF THE PROJECT WOULD BE CONSIDERED AS A JURISDICTIONAL WETLAND OR WATERWAY; THEREFORE PERMITS UNDER DEP CHAPTER 105/ USACOE SECTION 404 WILL NOT BE REQUIRED.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN APPROVED FOR THIS PROJECT. A COPY OF THE APPROVED PLAN MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL EROSION CONTROL MEASURES THAT MAY BE REQUIRED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR IS REQUIRED TO CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO IMPLEMENT ANY REVISIONS TO THE APPROVED PLAN.
- NO OBJECTS SHALL BE PLACED, PLANTED, OR SET WITHIN THE AREA OF ANY EASEMENT OR RIGHT-OF-WAY THAT WOULD ADVERSELY IMPACT THE FUNCTION OF THE EASEMENT OR RIGHT-OF-WAY.
- ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE BUILDING. SPOT ELEVATIONS REFERENCE THE BOTTOM OF THE CURB AND FINISHED GROUND SURFACES UNLESS OTHERWISE NOTED.
- CONTRACTOR WILL REMOVE ANY TEMPORARY STORAGE BOXES ON SITE AT THE BEGINNING OF WORK AND RETURN TO SEPTA.
- CONTRACTOR WILL USE EXTREME CARE NOT TO DAMAGE EXISTING RAIL DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR WILL PROTECT NEW RAIL AND EXISTING RAIL WHILE IN USE.
- REMOVE ALL TRASH BINS, CLEAN AND RETURN TO SEPTA FOR REUSE.
- REMOVE ALL BENCHES, ADVERTISEMENT BILLBOARDS, AND WIND SCREENS, CLEAN AND RETURN TO SEPTA FOR REUSE.

EARTHWORK, EXCAVATION, AND BACKFILLING

- ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWINGS ARE BASED ON LIMITED FIELD INSPECTIONS. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL AND SHALL BE FIELD VERIFIED.
- EXCAVATIONS WHICH UNDERMINE EXISTING STRUCTURES TO REMAIN SHALL BE BRACED BY A SUITABLE EXCAVATION SUPPORT SYSTEM. NOTIFY PROJECT MANAGER WHERE UNCOVERED.
- PRIOR TO CONSTRUCTION, LOCATE ALL UNDERGROUND UTILITIES AND CONTACT THE PENNSYLVANIA ONE-CALL SYSTEM AT (800) 242-1776.
- ALL OVEREXCAVATED AND FILL AREAS UNDER AND ADJACENT TO FOUNDATIONS SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DRY DENSITY PER ASTM D1557 PRIOR TO PLACEMENT OF CONCRETE. REFER TO PROJECT SPECIFICATIONS FOR COMPACTION TESTING REQUIREMENTS.
- REMOVE UNSUITABLE MATERIALS UNDER FOUNDATIONS AND REPLACE WITH PENNDOT 2A COMPACTED FILL OR FLOWABLE FILL. REFER TO NOTE 4.

NOTICE

PURSUANT TO THE REQUIREMENTS OF PA ACT 287 of 1974 (THE UNDERGROUND UTILITY LINE PROTECTION ACT), AS AMENDED BY PA ACT 199 of 2004, THE CONTRACTOR SHALL CONTACT THE PENNSYLVANIA ONE CALL SYSTEM AT 811 OR 1-800-242-1776, 3 TO 10 WORKING DAYS PRIOR TO EXCAVATION.

HIGHWAY DISTRICT NO. 6 WARD NO. N/A
 SURVEY DISTRICT NO. N/A DRAINAGE SHT. NO. N/A
 ONE CALL NO. 20202062212 OUTFALL NO. N/A

OWNERS

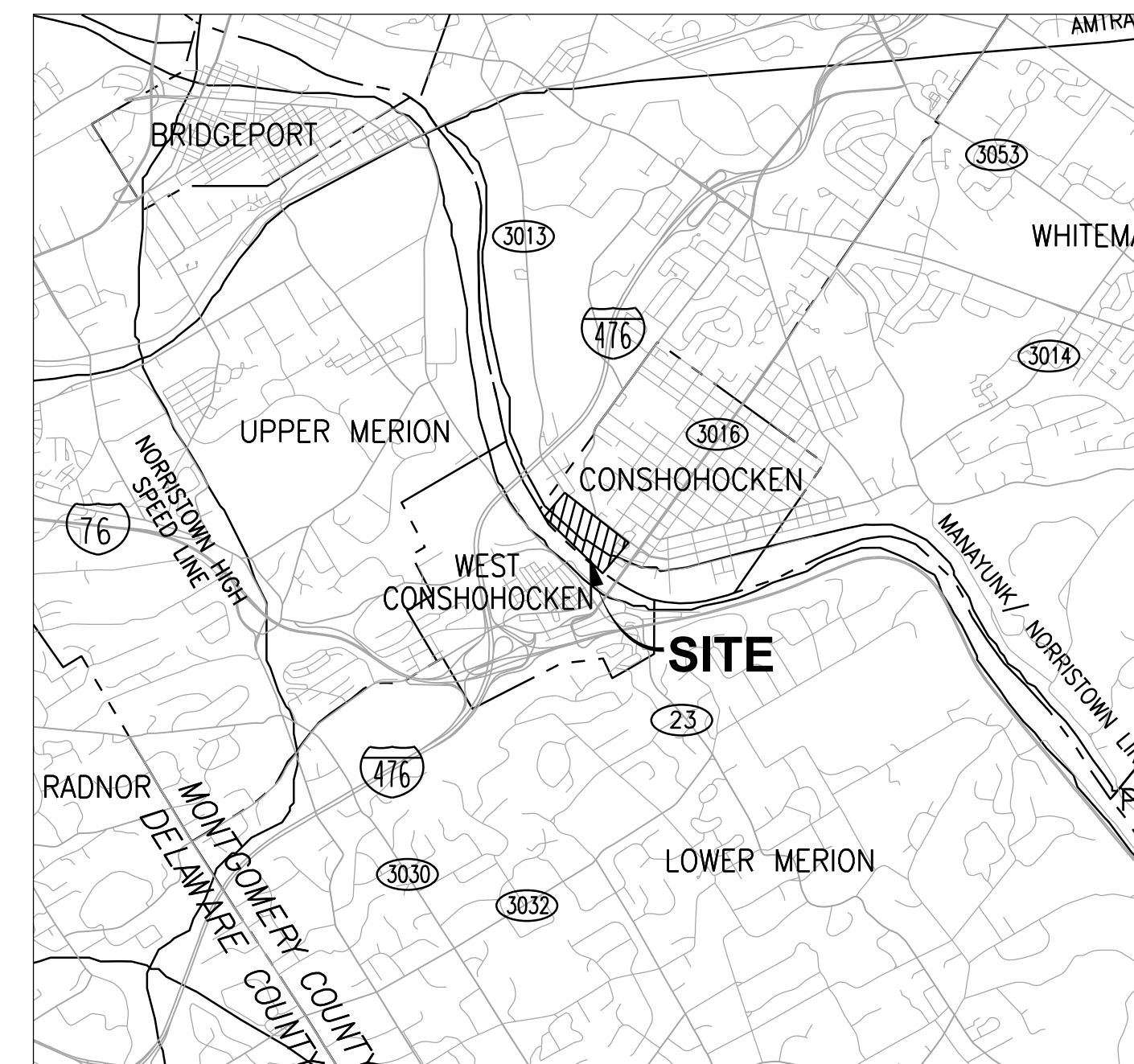
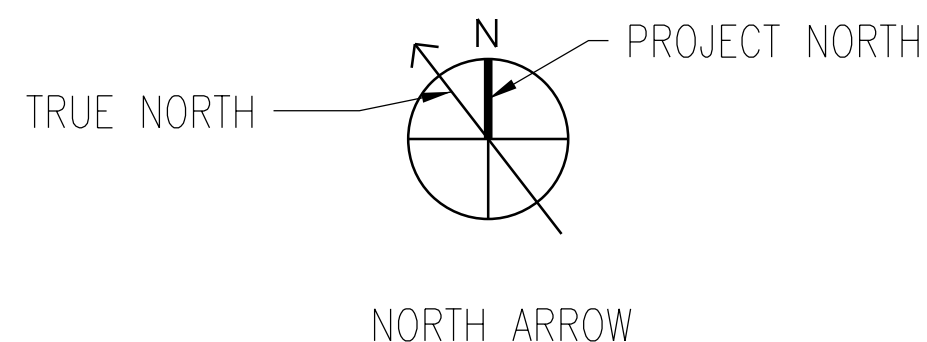
SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
 1234 MARKET STREET, 12TH FLOOR
 PHILADELPHIA, PA 19107
 PHONE: (215) 580-7800

SITE ADDRESS

103 WASHINGTON ST
 CONSHOHOCKEN, PA 19428

PLAN LEGEND

- EXISTING UNDERGROUND ELECTRIC SERVICE
- EXISTING SANITARY SEWER
- EXISTING WATER SERVICE
- EXISTING GAS SERVICE
- EXISTING UNDERGROUND TELEPHONE SERVICE
- EXISTING ELECTRIC SERVICE
- EXISTING TELEPHONE SERVICE
- EXISTING CABLE TV SERVICE
- PROPOSED WATER SERVICE
- UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT
- EXISTING PROPERTY LINE
- EXISTING PROPERTY Z LINE
- EXISTING CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
- SOIL BOUNDARY
- SOIL BOUNDARY
- PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED STORMWATER PIPE
- 100-YEAR FLOODPLAIN BOUNDARY
- FILL LINE
- CUT LINE
- EXISTING INLET
- EXISTING PIPE



VICINITY MAP
 SCALE: 1"=4000'

THIS PROJECT IS LOCATED WITHIN THE SCHUYLKILL RIVER WATERSHED. THE SCHUYLKILL RIVER AND PLYMOUTH CREEK ARE THE RECEIVING WATERCOURSES. THE CHAPTER 93 CLASSIFICATION FOR THE SCHUYLKILL RIVER IS WARM WATER FISHES (WWF) AND MIGRATORY FISHES (MF); PLYMOUTH CREEK IS WWF AND MF.

CONCRETE CURB, SIDEWALK, AND UTILITY NOTES

- ALL REINFORCED AND PLAIN CONCRETE SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH ACI 301 AND 318.
- CAST-IN-PLACE STRUCTURAL CONCRETE REQUIREMENTS:
 A) MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI @ 28 DAYS
 B) MINIMUM AIR CONTENT OF 6±1.5%
 C) COARSE AGGREGATE SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33. THE NOMINAL MAXIMUM COARSE AGGREGATE SIZE IS 1 1/2" FOR GENERAL WORK. THE NOMINAL COARSE AGGREGATE IS 3/4" FOR 8" OR LESS THICKNESS.
- ALL CONCRETE REINFORCEMENT SIZES ARE IN ENGLISH UNITS. ALL REINFORCEMENT BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED, GALVANIZED.
- MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3±1" FOR CONCRETE CAST AND PERMANENTLY EXPOSED TO EARTH AND 2" FOR ALL OTHER LOCATIONS.
- CONCRETE FINISHES: EXPOSED SURFACES ARE TO BE SMOOTH FINISH. ALL EXPOSED CORNERS, EDGES, SHALL BE CHAMFERED 3/4" x 3/4".
- ALL CAST-IN-PLACE CONCRETE SHALL BE WET CURED FOR A MINIMUM OF 7 DAYS OR APPLY A CURING MEMBRANE PER PENNDOT STANDARD SPECIFICATIONS.
- REINFORCEMENT SHALL BE FREE OF MUD, OIL, OR OTHER DEBRIS AT THE TIME OF PLACEMENT.
- REINFORCEMENT SHALL BE PLACED PRIOR TO START OF CONCRETING.
- FORM ALL ABOVE-GRADE CONCRETE. CONTRACTOR TO DESIGN FORMWORK.
- PLACE CONCRETE IN ONE CONTINUOUS OPERATION.
- ALL BAR SPLICES SHALL BE CLASS B PER ACI 318.
- DETAIL, FABRICATE, AND INSTALL REINFORCEMENT BARS PER ACI 315.
- ALL GROUT SHALL BE NON-METALLIC, NON-SHRINKAGE TYPE.
- CEMENT GROUT (AS MENTIONED ABOVE) SHALL BE USED UNDER STATIC LOAD CONDITIONS, COMPLY WITH ASTM C1107, HAVE MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AFTER ONE DAY, AND 6000 PSI AT 28 DAYS. REFER TO PROJECT SPECIFICATIONS FOR TESTING REQUIREMENTS.
- EPOXY GROUT (NON-METALLIC, NON-SHRINKAGE) SHALL BE USED UNDER DYNAMIC LOAD CONDITIONS, COMPLY WITH ASTM C579B, HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7000 PSI AFTER ONE DAY, AND 14000 PSI AT 7 DAYS. REFER TO PROJECT SPECIFICATIONS FOR TESTING REQUIREMENTS.
- WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.

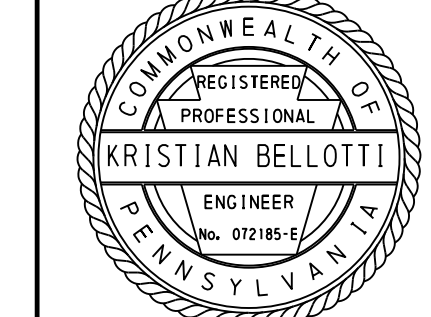
TOTAL PROJECT SITE = 4.37 AC
 TOTAL DISTURBED AREA = 4.37 AC
 TOTAL DISTURBED AREA FOR PCSM CALCULATIONS = 3.22 AC
 EXISTING IMPERVIOUS AREA = 2.79 AC
 PROPOSED IMPERVIOUS AREA = 1.92 AC
 NET CHANGE = -0.87 AC



1234 MARKET ST, 13TH FL.
 PHILADELPHIA, PA 19107

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 POST CONSTRUCTION STORMWATER MANAGEMENT NOTES

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C701	
DWG. NO.: C055 OF C070	
SHT. NO.: 59 OF 081	
COMPUTER FILE NO.: 21D-24-C701	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION

CONSTRUCTION NOTES

1. THE CONTRACTOR WILL CONTACT THE PA ONE CALL SYSTEM (800-242-1776) NO LESS THAN THREE (3) AND NO MORE THAN TEN (10) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. ANY DISCREPANCY FOUND IS TO BE BROUGHT TO THE ATTENTION OF THE SEPTA SITE PROJECT MANAGER PRIOR TO THE START OF WORK.
3. THE CONTRACTOR WILL VERIFY ALL BASELINES AND POINTS OF CONSTRUCTION, THE LOCATION OF ALL NEW CONSTRUCTION, AND VERIFY ALL SETBACKS, OFFSETS, AND CLEARANCES.
4. THE CONTRACTOR WILL MAINTAIN ALL UTILITY SERVICES TO PERMANENT AND TEMPORARY FACILITIES THROUGHOUT CONSTRUCTION. THE CONTRACTOR WILL PROVIDE A WRITTEN CONSTRUCTION SEQUENCE PLAN AND COORDINATE ANY REQUIRED BREAKS IN UTILITY SERVICE WITH SEPTA AND THE APPROPRIATE UTILITY PRIOR TO COMMENCING ANY WORK REQUIRING A BREAK IN UTILITY SERVICE.
5. THE CONTRACTOR MUST PROVIDE AND MAINTAIN SAFE PEDESTRIAN ACCESS FROM ALL OPERATIONAL AREAS TO ACTIVE PLATFORMS AND OPERATIONAL STATION BUILDING AT ALL TIMES DURING CONSTRUCTION. ACCESS MUST BE ADA COMPLIANT.
6. THE CONTRACTOR MUST MAINTAIN MINIMUM 10'-WIDE ENTRANCE AND EXIT LANES TO/FROM THE SITE AT ALL TIMES.
7. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY ON-SITE AND OFF-SITE TEMPORARY TRAFFIC CONTROL AND DIRECTIONAL SIGNAGE AND MARKINGS TO ALLOW SAFE MOVEMENT THROUGH CONSTRUCTION AREAS AND TO AND FROM ALL TEMPORARY AREAS.
8. THE CONTRACTOR WILL ESTABLISH AND MAINTAIN TEMPORARY BENCHMARKS ON-SITE TO PERFORM OPERATIONS DURING CONSTRUCTION.
9. THE CONTRACTOR WILL SAWCUT ALL OPENINGS IN EXISTING PAVEMENT FOR DEMOLITION AND TRENCH OPENINGS WHEN SURROUNDING EXISTING PAVEMENT IS TO REMAIN IN PLACE.
10. THE CONTRACTOR WILL LIMIT THE AMOUNT OF EARTH DISTURBANCE DURING CONSTRUCTION.
11. THE CONTRACTOR WILL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
12. THE CONTRACTOR WILL PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ELEMENTS. ADJUST PROPOSED GRADES AND/ OR SAW CUT EXISTING PAVEMENTS TO PROVIDE A SMOOTH FIT AND CONTINUOUS GRADE.
13. ALL STORM AND UTILITY STRUCTURE TOPS ARE TO BE FLUSH WITH FINISH GRADE. ADJUST TOPS OF EXISTING STRUCTURES TO PROVIDE FLUSH FINISH. ALL RAINWATER IS TO DRAIN TO INLETS WITHOUT ON-SITE PONDING.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION WASTE FROM THE SITE. ANY MATERIAL REMOVED FROM THE SITE IS TO BE LEGALLY DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL PROVIDE EVIDENCE OF LEGAL DISPOSAL.
15. NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERCEDE ANY DISCREPANCY IN THE SCALING OF THE DRAWINGS.
16. UTILITY AND STORM LINES ARE TO BE CLEANED BY THE CONTRACTOR PRIOR TO PLACING THE LINES IN SERVICE. THE CLEANING METHOD IS TO ELIMINATE ANY CONSTRUCTION MATERIAL AND DEBRIS FROM THE SYSTEM. CONTRACTOR TO OBTAIN APPROVAL OF CLEANING METHOD FROM SEPTA PROJECT MANAGER. EXISTING INLETS AND EXISTING STORM DRAIN PIPES NOT SCHEDULED FOR REMOVAL WITHIN THE SITE AREA / LIMIT OF DISTURBANCE DEPICTED ON THIS PLAN WILL BE CLEANED. DEBRIS IN INLETS WILL BE REMOVED TO THE BOTTOM OF THE STRUCTURE.
17. THE CONTRACTOR WILL SUBMIT JOINT LAYOUT PLANS AND A SEQUENCE OF POURS 30 DAYS PRIOR TO PLACING CONCRETE. THE PLAN AND SEQUENCE WILL BE REVIEWED BY THE SEPTA PROJECT MANAGER.
18. NO MATERIALS OR CONSTRUCTION DEBRIS/ TRASH WILL BE STORED OUTSIDE THE LIMIT OF DISTURBANCE.

ACT 287/181
UNDERGROUND UTILITY PROTECTION ACT

SEPTA HEREBY STATES THAT, PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF 1974, AS AMENDED BY ACT 181 OF 2006, OF THE PENNSYLVANIA LEGISLATURE, IT HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS REQUIRING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) OR LAND DEVELOPMENT(S) SHOWN ON THE DRAWINGS:

1. PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, DAWOOD, INC. REQUESTED FROM EACH USER'S OFFICE DESIGNATED ON SUCH LIST PROVIDED BY THE ONE CALL SYSTEM NOTIFICATION, THE INFORMATION PRESCRIBED BY SECTION 2, CLAUSE (4) OF SAID ACT, NOT LESS THAN (10) NOR MORE THAN (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED.
2. PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, DAWOOD, INC. HAS SHOWN UPON THESE DRAWINGS "THE POSITION AND TYPE OF EACH LINE", AS DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY CLAUSE (2), THE SERIAL NUMBER PROVIDED BY THE ONE CALL SYSTEM.
3. PURSUANT TO SECTION 4, CLAUSE (5) OF SAID ACT, DAWOOD, INC. HAS MET THEIR OBLIGATIONS OF CLAUSE (2) BY CALLING THE ONE CALL SYSTEM SERVING THE LOCATION WHERE EXCAVATION IS TO BE PERFORMED.

TOLERANCES:

1. THE LONGITUDINAL SLOPES OF ALL BUILT-UP RAMPS SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN THIRTEEN UNITS HORIZONTAL (7.69% SLOPE). THE FLARES OF ALL BUILT-UP RAMPS SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN TEN UNITS HORIZONTAL (10.00% SLOPE).
2. THE WALKING SURFACE SHALL NOT BE SLOPED STEEPER THAN ONE UNIT VERTICAL IN TWENTY UNITS HORIZONTAL (5% SLOPE) IN DIRECTION OF TRAVEL.
3. LANDINGS SHALL NOT BE SLOPED STEEPER THAN ONE UNIT VERTICAL IN FIFTY UNITS HORIZONTAL (2% SLOPE) IN DIRECTION OF TRAVEL.
4. THE WALKING SURFACE OF WALKS AND LANDINGS SHALL NOT BE CROSS SLOPED STEEPER THAN ONE UNIT VERTICAL IN FIFTY UNITS HORIZONTAL (2% SLOPE) IN DIRECTION PERPENDICULAR TO TRAVEL.

EXISTING CONDITIONS

1. ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWING FOR THE EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS, CERTAIN DESIGN DRAWINGS FOR ORIGINAL CONSTRUCTION AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE, AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.
2. THE EXACT EXTENT OF CONSTRUCTION OR RESTORATION WORK CANNOT BE NECESSARILY OR ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS, MATERIAL QUANTITIES, AND EXTENT OF THE MODIFICATION WORK SHOWN ON DRAWINGS. PERFORM THE WORK TO MEET FIELD CONDITIONS ENCOUNTERED.
3. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE PROJECT MANAGER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE SHOP AND ERECTION PLANS, INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED.

LANDSCAPING

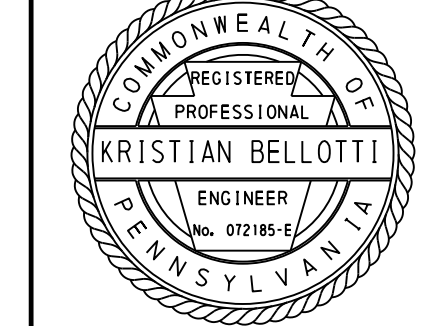
1. WORK CONSISTS OF ALL MATERIAL, LABOR, AND EQUIPMENT TO INSTALL ALL THE LANDSCAPING WORK IN ACCORDANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS AS STATED HEREIN.
2. THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO SEPTA NOT LESS THAN FIFTEEN (15) WORKING DAYS IN ADVANCE OF WHEN THEY WILL WANT TO START INSTALLATION. ALL WORK SHALL BE PERFORMED IN A MANNER SATISFACTORY TO SEPTA'S PROJECT MANAGER.
3. ALL OPERATIONS SHALL BE CONDUCTED SO AS NOT TO INTERFERE WITH, INTERRUPT, OR ENDANGER THE OPERATIONS OF NEITHER TRAINS NOR DAMAGE, DESTROY, OR ENDANGER THE INTEGRITY OF RAILROAD FACILITIES. ALL WORK ON OR NEAR SEPTA PROPERTY SHALL BE CONDUCTED IN ACCORDANCE WITH SEPTA SAFETY RULES AND REGULATIONS. THE CONTRACTOR SHALL SECURE AND COMPLY WITH SEPTA'S SAFETY RULES AND REGULATIONS AND SHALL GIVE WRITTEN ACKNOWLEDGMENT TO SEPTA THAT THEY HAVE BEEN RECEIVED, READ, AND UNDERSTOOD BY THE CONTRACTOR AND ITS EMPLOYEES. OPERATIONS WILL BE SUBJECT TO SEPTA INSPECTIONS AT ANY AND ALL TIMES.
4. MAKE ARRANGEMENTS FOR LEGALLY DISPOSING OF CONTAMINATED EXCAVATED MATERIALS OFF THE WORK SITE AND PAY ALL COSTS THEREOF.
5. NOTIFY THE PROJECT MANAGER AT LEAST (7) DAYS IN ADVANCE OF THE DATE THE ENTIRE WORK WILL BE SUBSTANTIALLY COMPLETE AND READY FOR INSPECTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION ON SITE WITH THE SUBCONTRACTORS.
7. THE WORK SPECIFIED (IN THIS SECTION) CONSISTS OF FURNISHING AND PLACING TOPSOIL TO FINAL GRADE, TREES, SHRUBS, GROUND COVERS, SEEDING AND SOIL SUPPLEMENTS, INOCULATES, MULCHING, WATER COURSE, AND SLOPE EROSION PROTECTION, BED PREPARATION, TREE BACKINGS, AND TREE PROTECTION FOR EXISTING TREES.
8. NURSERY: COMPANY SPECIALIZING IN GROWING AND CULTIVATING THE PLANTS WITH FIVE YEARS' EXPERIENCE.
9. INSTALLER: COMPANY SPECIALIZING IN INSTALLING AND PLANTING THE PLANTS WITH FIVE YEARS' EXPERIENCE. THE LANDSCAPE CONTRACTOR SHALL PROVIDE PROOF TO SEPTA THAT HE/SHE SUCCESSFULLY INSTALLED FIVE DIFFERENT JOBS OF SIMILAR OR LARGER SIZE IN THE PAST.
10. MAINTENANCE SERVICES: PERFORMED BY INSTALLER.
11. MAINTAIN PLANT LIFE IMMEDIATELY AFTER PLACEMENT UNTIL PLANTS ARE WELL ESTABLISHED AND EXHIBIT A VIGOROUS GROWING CONDITION. CONTINUE MAINTENANCE UNTIL TERMINATION OF WARRANTY PERIOD WHICH SHALL BEGIN AFTER ACCEPTANCE OF FINAL WORK.
12. ALL TREES, SHRUBS, AND PLANTINGS SHOWN IN THE CONTRACT DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH PENNDOT STANDARD SPECIFICATIONS, SECTION 808 - PLANTS, PLANTING, & TRANSPLANTING. ALL TREES, SHRUBS, AND PLANTINGS SHALL BE MATURE AND MEET MINIMUM SIZE REQUIREMENTS STATED IN CONTRACT DOCUMENTS.
13. THE LANDSCAPING CONTRACTOR SHALL BE QUALIFIED AND EXPERIENCED FOR LANDSCAPING INSTALLATION IN ACCORDANCE WITH CONTRACT DRAWINGS AND STANDARD SPECIFICATIONS. ALSO REFER TO PENNDOT PUBLICATION 72, STANDARDS FOR ROADWAY CONSTRUCTION PLATE RC-91 FOR COMPLETE DETAILS.
14. FURNISH MAINTENANCE OF SEEDED AREAS IMMEDIATELY AFTER PLACEMENT UNTIL IT IS WELL ESTABLISHED AND EXHIBITS A VIGOROUS GROWING CONDITION FOR FOUR CUTTINGS.
15. LANDSCAPE EDGING SHALL BE PROVIDED BETWEEN PLANTING BEDS OF DIFFERENT GROUND COVERS AND BETWEEN THE PLANTING BEDS AND THE BALLAST.
16. FURNISH AND PLACE TOPSOIL AS REQUIRED AND AS SHOWN ON THE DRAWINGS.
17. IN EXISTING AREAS TO BE PLANTED, LOOSEN EXISTING TOPSOIL TO A DEPTH OF 12 INCHES.
18. DO NOT PLACE TOPSOIL IN A WET OR FROZEN CONDITION.
19. ALL LANDSCAPING AREAS SHALL GET 6" TOPSOIL AND 3" SHREDDED MULCH, UNLESS OTHERWISE NOTED.



1234 MARKET ST., 13TH FL.
PHILADELPHIA, PA 19107

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOCKEN RAILROAD STATION
MANAYUNK/RODRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
POST CONSTRUCTION STORMWATER MANAGEMENT NOTES

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C702		
DWG. NO.:	C056	OF:	C070
SHT. NO.:	60	OF:	081
COMPUTER FILE NO.:	21D-24-C702	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

CONSTRUCTION SEQUENCE

THE FOLLOWING IS THE SEQUENCE OF EARTH MOVING AND CONSTRUCTION ACTIVITIES FOR THIS PROJECT. ANY REVISIONS TO THE SEQUENCE ARE SUBJECT TO REVIEW BY THE CONSERVATION DISTRICT PRIOR TO IMPLEMENTATION. COMPLETE EACH PHASE BEFORE ANY SUBSEQUENT PHASE IS INITIATED. A DESIGNATED LICENSED PROFESSIONAL IS REQUIRED TO ATTEND THE PRE-CONSTRUCTION MEETING. FOR CRITICAL STAGES OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO NOTIFY THE DESIGNATED LICENSED PROFESSIONAL FOR OBSERVATION OF THAT PHASE. REFER TO THE CONTAMINATED GROUNDWATER MANAGEMENT ON SHEETS C613 TO C615 OF THE E&S PLAN PRIOR TO EXCAVATION ON THE PROJECT SITE. IF GROUNDWATER IS ENCOUNTERED ON THE PROJECT SITE DURING EXCAVATION, REFER TO SHEET C614 FOR THE PROCEDURES OF THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND/OR STORMWATER. ENSURE WORK ADHERES TO THE PADEP E&S MANUAL AND SPECIFICATIONS.

1. FIELD MARK LIMITS OF DISTURBANCE AND ENVIRONMENTALLY SENSITIVE AREAS INCLUDING FLOODWAYS PRIOR TO DISTURBANCE ACTIVITIES.
2. PLACE ORANGE CONSTRUCTION FENCE (OCF), COMPOST FILTER SOCK (CFS) AND SILT FENCE (SF). FOR PLACING THE SILT FENCE, FOLLOW THE SUB-SEQUENCE #1. INSTALL INLET FILTER BAGS IN EXISTING INLETS EX-IN205, EX-IN204 AND EX-IN202. INSTALL THE TEMPORARY ROUNDED ASPHALT BERM ADJACENT TO THE EXISTING INLETS EX-IN204 AND EX-IN205.
3. INSTALL THE ROCK CONSTRUCTION ENTRANCE WITH WASH RACK AND WASH RACK DIVERSION AREA.
4. CONDUCT CLEARING AND GRUBBING.
5. INSTALL THE PROPOSED UTILITIES PER THE UTILITY PLANS IN THE VICINITY OF THE PROPOSED PARKING LOT.
6. INSTALL THE PROPOSED INLETS INL-301, INL-302, INL-303, INL-304, PROPOSED MANHOLES MH-301, MH-302, MH-303 AND THE PROPOSED PIPE CONNECTIONS FROM DOWNSTREAM TO UPSTREAM PER PLAN. INSTALL INLET FILTER BAGS IN PROPOSED INLETS INL-301, INL-302, INL-303, AND INL-304.
7. REBUILD EXISTING INLET EX-INL202 and GRADE ADJUST EXISTING INLETS EX-INL204 and EX-INL205. RE-INSTALL INLET FILTER BAGS IN EX-INL202, EX-INL204 and EX-INL205
8. GRADE THE PROJECT SITE PER THE GRADING PLANS. USE A PUMPED WATER FILTER BAG AS NECESSARY FOR ANY PONDING.
9. INSTALL TEMPORARY EARTHEN BERMS OR SANDBAGS AT THE DOWNSTREAM END OF INL-302, INL-303, INL-304 PER PLAN ONCE ADJACENT AREA IS BROUGHT TO GRADE.
10. STABILIZE THE PROJECT SITE INCLUDING THE MULTI-USE PATH PER THE PERMANENT STABILIZATION NOTES.
11. INSTALL THE CURBS, SUBBASE AND PAVEMENT PER THE CIVIL PLANS.
12. INSTALL THE ADA RAMPS, SIDEWALKS AND MULTI-USE PATH PER THE CIVIL PLANS.
13. INSTALL STRIPING, SIGNING, FENCING, GATES AND SITE FURNISHINGS PER PLANS.
14. INSTALL THE UTILITIES IN THE ACCESS ROAD PER THE UTILITY PLANS AND REFERENCE THE UTILITY WORK ON ACCESS ROAD/OAK STREET NOTES. COORDINATE WITH AQUA FOR CONNECTING THE PROPOSED WATER LINE TO THE EXISTING AQUA WATER METER PIT. MILL AND OVERLAY WASHINGTON AVE AS INDICATED ON THE CIVIL SITE LAYOUT PLANS.
15. INSTALL THE SIGNALS AND FIBER OPTICS ON OAK STREET PER THE SIGNAL PLANS AND REFERENCE THE UTILITY WORK ON ACCESS ROAD/OAK STREET NOTES.
16. INSTALL SITE LIGHTING PER PLANS.
17. INSTALL ALL SEEDING AND LANDSCAPING AS INDICATED ON THE CIVIL LANDSCAPING PLAN.
18. REMOVE THE ROCK CONSTRUCTION ENTRANCE WITH WASH RACK, WASH RACK DIVERSION AND IMMEDIATELY STABILIZE AND PAVE THE AREA.
19. ACHIEVE PERMANENT STABILIZATION OF ALL DISTURBED AREAS PER THE PERMANENT STABILIZATION NOTES.
20. REMOVE E&S BMPS ONCE THE SITE IS STABILIZED. THIS IS A CRITICAL STAGE OF CONSTRUCTION.
21. WHEN THE PROJECT IS COMPLETE, SUBMIT THE NOTICE OF TERMINATION.

SUB-SEQUENCE

THE FOLLOWING SUB-SEQUENCES ARE INTENDED TO PROVIDE A DETAILED PROCEDURE FOR AN ASPECT OF CONSTRUCTION THAT IS ENCOUNTERED MULTIPLE TIMES WITHIN THE CONSTRUCTION CONTRACT. THE SUB-SEQUENCE IS REFERENCED BY NUMBER WITHIN THE BODY OF THE MAIN SEQUENCE WHEN APPLICABLE.

SUB-SEQUENCE #1: PENNSYLVANIA FISH & BOAT COMMISSION THREATENED AND ENDANGERED SPECIES PLAN

THE PROJECT SITE CONTAINS ACCESSIBLE NESTING HABITAT FOR THE NORTHERN RED-BELLIED COOTER. THE FOLLOWING MEASURES MUST BE IMPLEMENTED IN ORDER TO AVOID IMPACTS TO THE NORTHERN RED-BELLIED COOTERS DURING THE CONSTRUCTION OF THIS PROJECT:

1. INSTALL THE SILT FENCE BARRIER (MINIMUM OF 6 INCHES DEEP) BETWEEN THE SCHUYLKILL RIVER AND THE WORK AREA TO PREVENT THE NORTHERN RED-BELLIED COOTER (PSEUDEMYD RUBRIVENTRIS, PA THREATENED) FROM ACCESSING THE WORK ZONE. INSTALL THE SILT FENCE DURING THE INACTIVE PERIOD OF THE TURTLE FROM OCTOBER 15 - APRIL 15.
2. INSPECT THE SILT FENCE REGULARLY TO ENSURE THERE ARE NO BREACHES IN THE SILT FENCE. PERFORM A SITE PERIMETER INSPECTION IN JUNE TO ENSURE NO TURTLES ARE PRESENT AROUND THE SILT FENCE.
3. IF A TURTLE IS FOUND ON SITE, RELOCATE IT TO THE NEAREST AQUATIC HABITAT (SCHUYLKILL RIVER) AND CONTACT THE PENNSYLVANIA FISH AND BOAT COMMISSION IMMEDIATELY.

UTILITY WORK ON ACCESS ROAD/ OAK STREET NOTES

PERFORM UTILITY INSTALLATION IN DRY CONDITIONS.

VEHICULAR ACCESS MUST BE MAINTAINED ON THE ACCESS ROAD DURING INSTALLATION.

LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF UTILITY WORK, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.

WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (PUMPED WATER FILTER BAG, SEE DETAIL) BEFORE UTILITY PLACEMENT AND/OR BACKFILLING BEGINS.

WORK CREWS AND EQUIPMENT FOR UTILITY CONSTRUCTION AND TRENCHING ON ACCESS ROAD WILL BE SELF-CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING, SITE RESTORATION AND STABILIZATION OPERATIONS.

ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

PERMANENT STABILIZATION NOTES

IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.

E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES, 6 TO 12 INCHES ON COMPACTED SOILS PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES TOPSOIL. TOPSOIL SHALL MEET THE SPECIFICATIONS IN PENNDOT PUBLICATION 408, SECTION 801, 802 AND 803.

CHAPTER 105/106 FLOODPLAIN AND FLOODWAY NOTES

NO WORK CAN BEGIN WITHIN THE FLOODPLAIN UNTIL CHAPTER 105 / 106 AUTHORIZATIONS ARE OBTAINED.

FLOODPLAIN AREAS ARE BETWEEN THE FEMA 100-YR FLOODPLAIN AND FEMA 100-YR FLOODWAY DELINEATED ON THE PLANS.

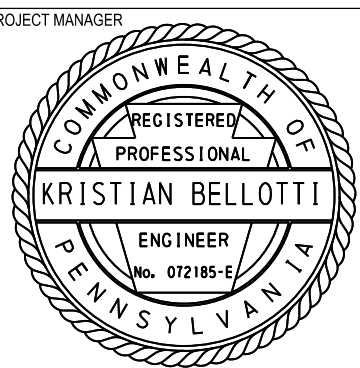
WORK TO BE PERFORMED BY AQUA/OTHERS. REFER TO CHAPTER 105/106 JOINT PERMIT (E4601222-016) FOR FLOODPLAIN IMPACTS.



SOUTHEASTERN
PENNSYLVANIA
TRANSPORTATION
AUTHORITY
EM&C DIVISION
1234 MARKET ST. 13TH FL.
PHILADELPHIA, PA 19107

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/RODRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 CONSTRUCTION SEQUENCE

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24		
DRAWING NUMBER:	C703		
DWG. NO.:	C057	OF:	C070
SHT. NO.:	61	OF:	081
COMPUTER FILE NO.:	21D-24-C703	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

LEGEND OF SOIL TYPES

SYMBOL	NAME	SLOPES	EROSION	LIMITATION
Gc	GIBRALTAR SILT LOAM	0-2%	MODERATE	CAVING OF CUT BANKS, CORROSIVE TO CONCRETE/STEEL, EASILY ERODIBLE, FLOODING, DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE, HYDRIC/HYDRIC INCLUSIONS, LOW STRENGTH/LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, FROST ACTION
UgB	URBAN LAND	0-8%	NOT RATED	IMPACTED SATURATED SOILS
UugD	URBAN LAND	8-25%	SEVERE	LOW COMPACTION WELL DRAINED

NOTES:

- INSTALL E&S BMPS IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION.
- CONTRACTORS WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS AND RELATED ITEMS INCLUDED WITH THE NPDES PERMIT.
- THE SOIL SURVEY MAPPING WAS OBTAINED FROM THE SOIL SURVEY OF MONTGOMERY COUNTY, PENNSYLVANIA (PUBLISHED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) FOR THE SOIL CONSERVATION SERVICE IN JULY 1967. ADDITIONALLY, THE USDA'S NATURAL RESOURCE CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY WAS USED FOR VERIFICATION.
- THE PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES WAS REFERENCED TO DETERMINE THAT THE PROJECT AREA IS NOT SUSCEPTIBLE TO SINKHOLES OR KARST-RELATED FEATURES AND THERE IS NO ACID-ROCK EXPOSURE POTENTIAL. THEREFORE, THERE IS NO POTENTIAL FOR GEOLOGICAL FORMATIONS OR SOIL CONDITIONS TO CAUSE POLLUTION DURING CONSTRUCTION.

LIMITATIONS:	RESOLUTIONS:
CUTBANKS CAVE	LIMIT GRADING IN THESE AREAS.
CORROSIVE TO CONCRETE & STEEL	AVOID PONDING WITH PROPER GRADING AS SHOWN ON THE PLANS AND MINIMIZE CONTACT WITH CONCRETE AND STEEL.
EASILY ERODIBLE	USE EROSION CONTROL BLANKETING AS NEEDED.
FLOODING	HAVE FILTER BAGS AVAILABLE DURING CONSTRUCTION.
DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HAVE FILTER BAGS AVAILABLE DURING CONSTRUCTION.
HYDRIC/HYDRIC INCLUSIONS	LIMIT EXCAVATION.
LOW STRENGTH/LANDSLIDE PRONE	USE EROSION CONTROL BLANKETING AS NEEDED.
SLOW PERCOLATION	HAVE BYPASS PUMPS AND FILTER BAGS AVAILABLE DURING CONSTRUCTION.
PIPING	AVOID PONDING WITH PROPER GRADING AS SHOWN ON THE PLANS AND HAVE BYPASS PUMPS AND FILTER BAGS AVAILABLE DURING CONSTRUCTION.
FROST ACTION	LIMIT EXCAVATION DURING WINTER MONTHS.
IMPACTED SATURATED SOILS	USE TEMPORARY CONTAINMENT AS SHOWN ON THE DETAILS AND NOTES ON THE PLANS.

SEEDING CHART

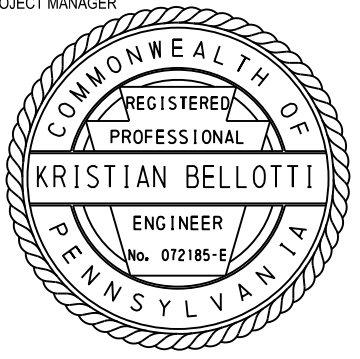
FORMULA AND SPECIES	SEEDING RATE PER 1000 SQ. YD. (LBS.) SEASON	SOIL SUPPLEMENTS		MULCHING PER 1000 SQ. YD. (LBS.)	% BY MASS	MINIMUM %		MAXIMUM % WEED SEED
		LIMESTONE PER 1000 SQ. YD. (LBS.)	FERTILIZER PER 1000 SQ. YD. (LBS.)			PURITY	GERMINATION	
		FORMULA B: PERENNIAL RYEGRASS CREEPING RED OR CHEWINGS FESCUE KENTUCKY BLUEGRASS MIX	42.0 MARCH 15-JUNE 1 AUG 1-OCT 15			800.0	140.0	
FORMULA L: HARD FESCUE MIXTURE CREEPING RED FESCUE ANNUAL RYEGRASS	48.0 MARCH 15-JUNE 1 AUG 1-OCT 15	800.0	140.0	1200 (HAY) 160 (WOOD FIBER)	55 35 10	97.0 97.0 95.0	85.0 85.0 90.0	0.10 0.10 0.10
FORMULA T: OATS (SPRING) CEREAL RYE (FALL)	6.0 MARCH 15-JUNE 1 AUG 1-OCT 15	800.0	140.0	1200 (HAY) 160 (WOOD FIBER)	100 100	97.0 97.0	85.0 85.0	0.10 0.10

STABILIZE DISTURBED AREAS IMMEDIATELY WITH SEEDING AND SOIL SUPPLEMENTS AS FOLLOWS:

- USE SEEDING AND SOIL SUPPLEMENTS - FORMULA B, INCLUDING MULCH WITH MULCH CONTROL NETTING FOR SLOPES 3:1 OR FLATTER.
- USE SEEDING AND SOIL SUPPLEMENTS - FORMULA L, INCLUDING MULCH WITH TEMPORARY ROLLED EROSION CONTROL PRODUCT, TYPE 2D FOR SLOPES STEEPER THAN 3:1.
- USE SEEDING - FORMULA T, INCLUDING MULCH WITH MULCH CONTROL NETTING FOR TEMPORARY SEEDING APPLICATIONS.

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



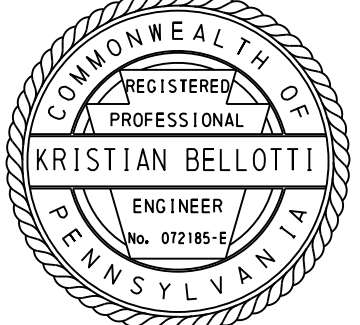
REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/ROBSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 SITE SOIL INFORMATION

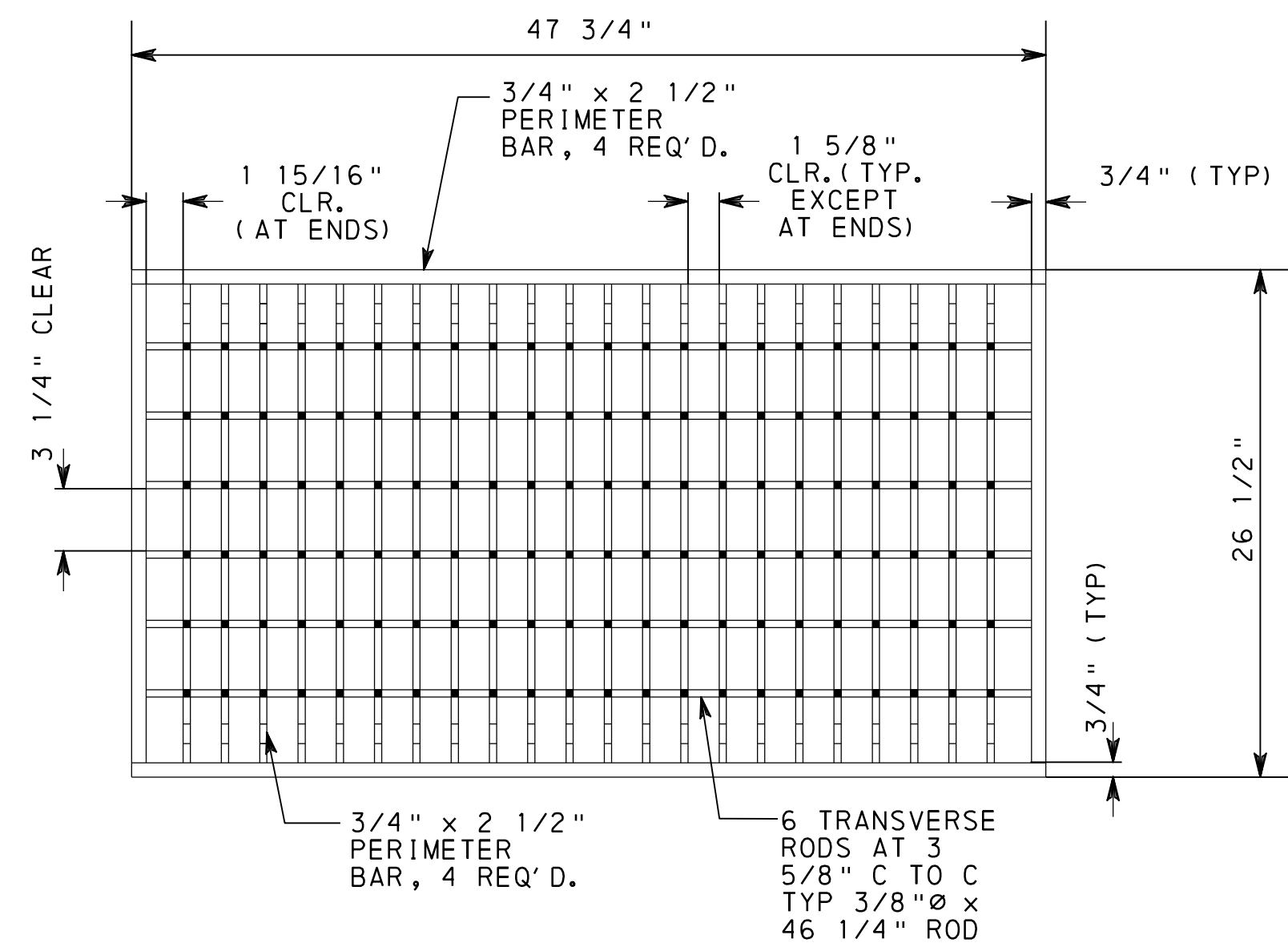
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DRAWING NUMBER: C704	
DWG. NO.: C058 OF C070	
SHT. NO.: 62 OF 081	
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MANAGER - ARCHITECTURE

PROJECT MANAGER



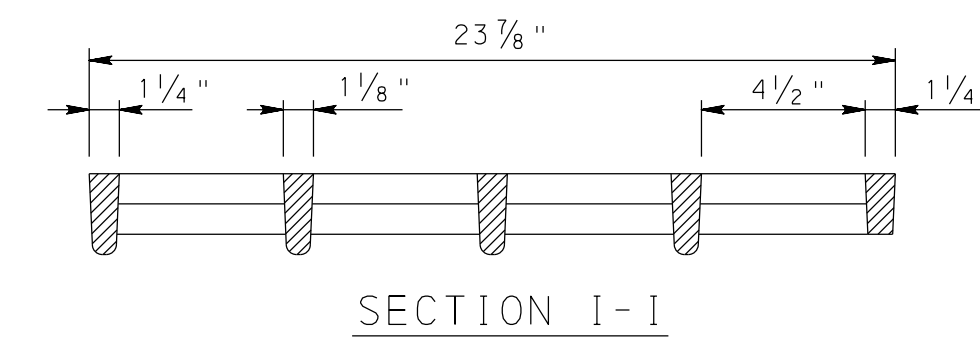
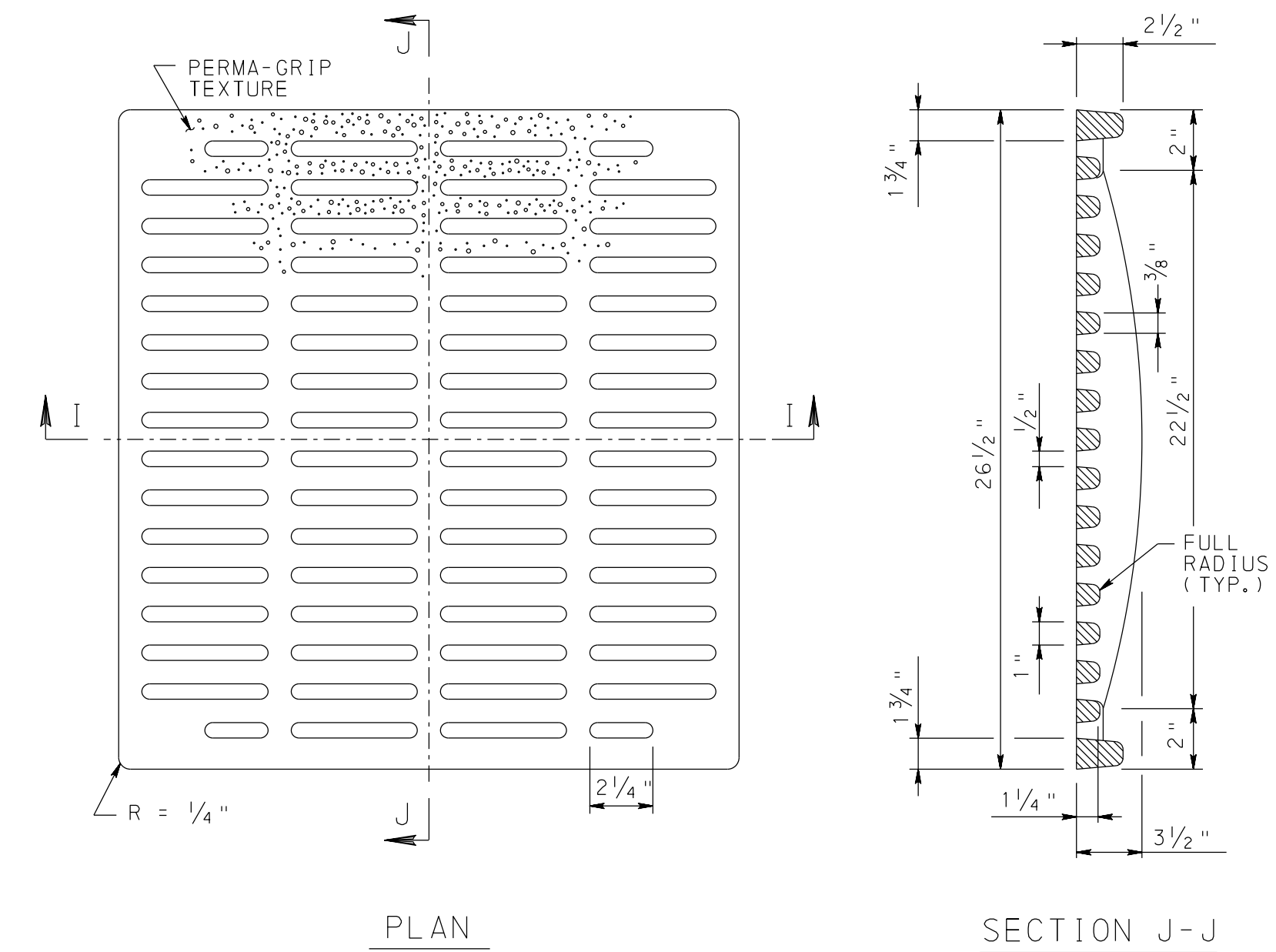
REV	DATE	DESCRIPTION	BY	CHKD	APD



INLET GRATE NOTES:

1. PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE PUBLICATION 408, AASHTO/AWS BRIDGE WELDING CODE AND THE CONTRACT SPECIAL PROVISIONS.
2. PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270 GRADE 50 [ASTM A709, GRADE 50]
3. WELD STRUCTURAL STEEL GRATES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 1105. WELDING SHOPS ARE NOT REQUIRED TO BE AISC CERTIFIED.
4. FABRICATE BEARING BARS FROM 3 1/2" DEEP BARS. FABRICATE BY BURNING, SHEARING, OR PUNCHING. PROVIDE EITHER CHAMFERED OR 1/2" RADIUS CORNERS.
5. LOCATE SPACER BARS FLUSH WITH THE TOP SURFACE OF THE GRATE.
6. FABRICATE SLOTS BY BURNING, DRILLING, SHEARING OR PUNCHING. HAVE THE BOTTOM OF ALL BURNED OR DRILLED SLOTS CONFORM TO THE SHAPE OF THE ROD.
7. COAT GRATES WITH AN APPROVED BITUMINOUS PAINT, IN ACCORDANCE WITH PUBLICATION 408, SECTION 605.2(f). AS AN ALTERNATE TO THE BITUMINOUS PAINT, GALVANIZED GRATES IN ACCORDANCE WITH PUBLICATION 408, SECTION 1105.02 (s).

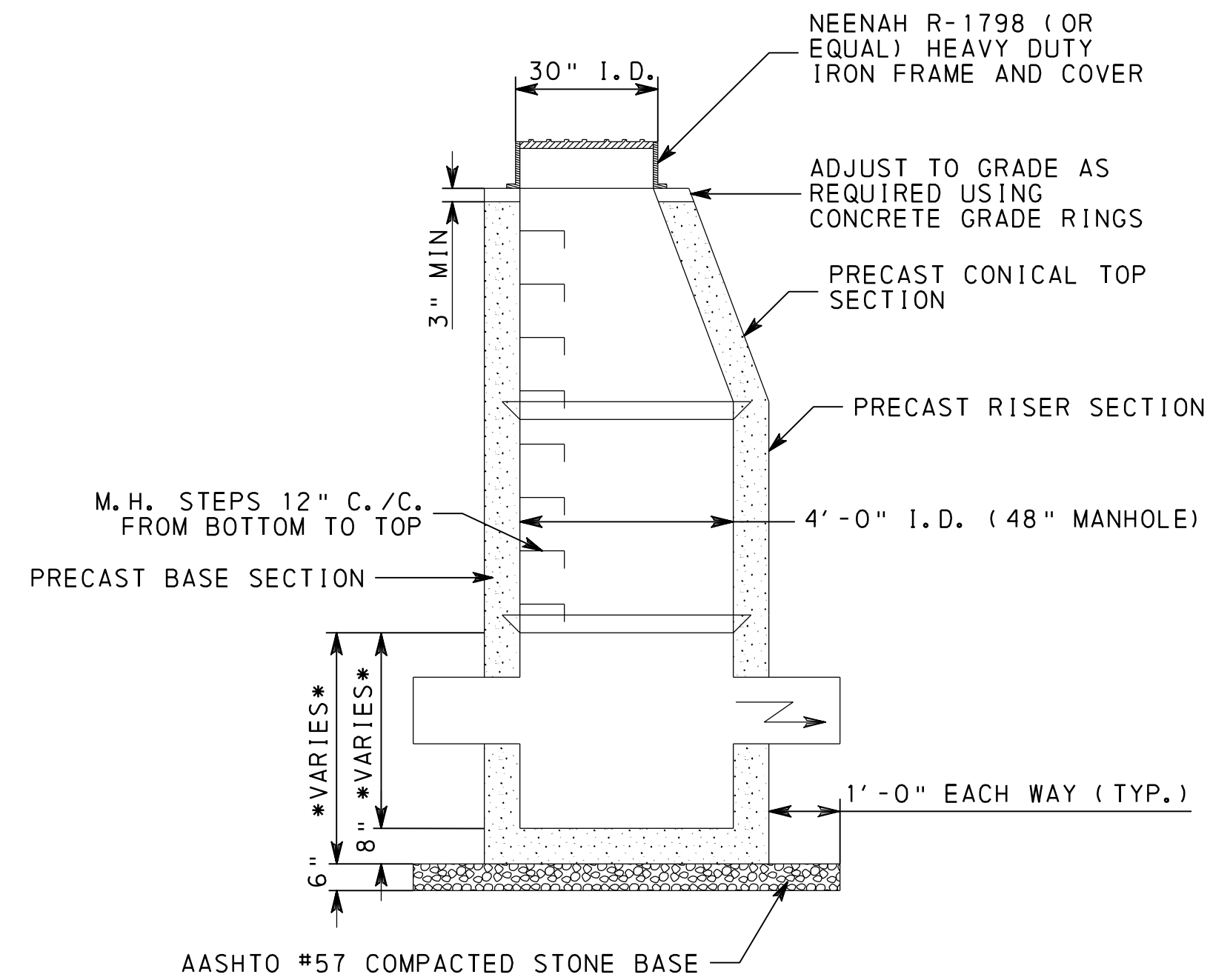
1
C705 **INLET GRATE**
NOT TO SCALE



2
C705 **ADA COMPLIANT GRATE**
NOT TO SCALE

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/ROSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

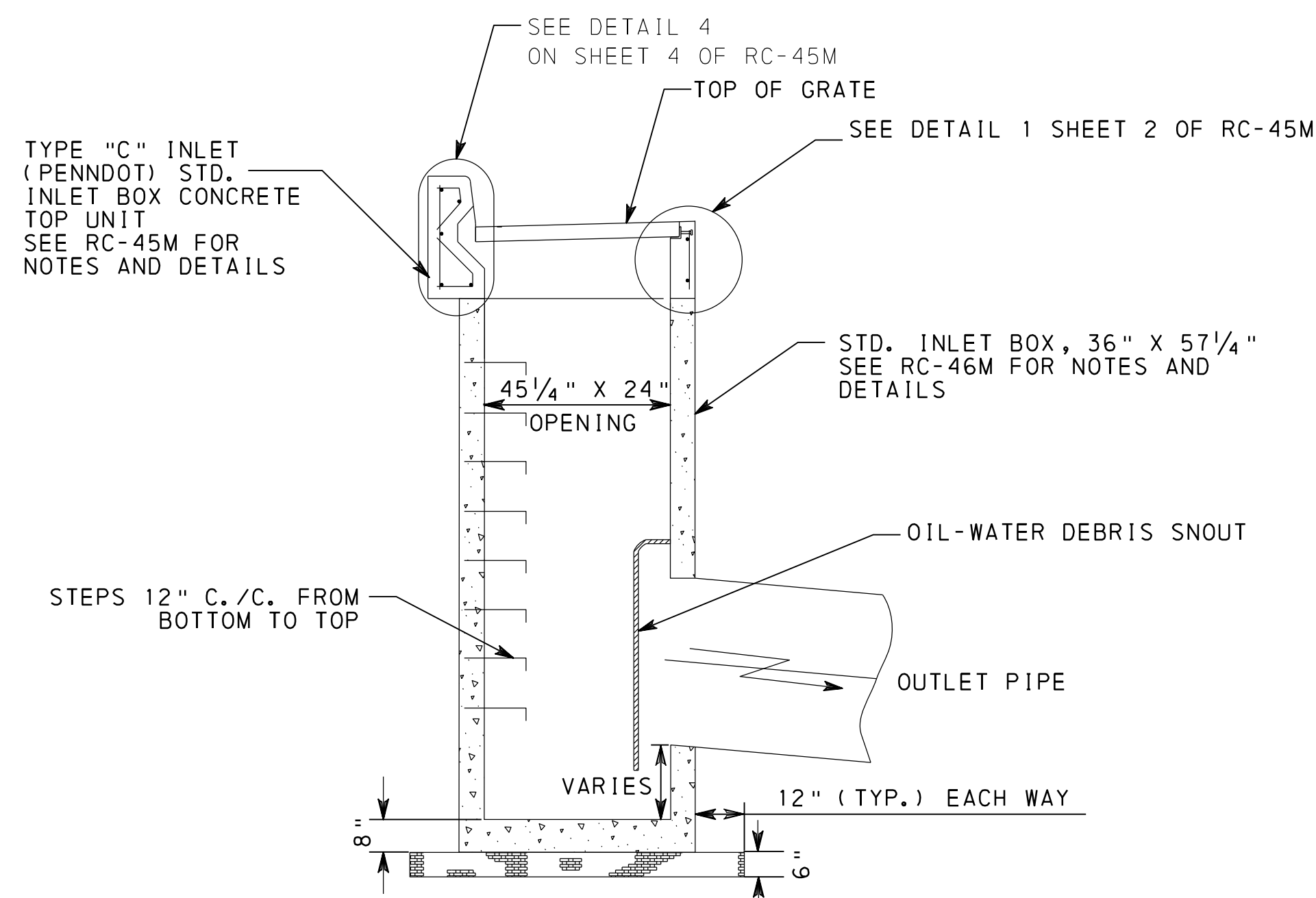
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DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C705		
DWG. NO.:	C059	OF:	C070
SHT. NO.:	63	OF:	081
COMPUTER FILE NO.:	21D-24-C705	REV. NO.:	0



1
C706 TYPICAL STORM MANHOLE DETAIL
NOT TO SCALE

- MANHOLE NOTES:**
1. ALL MATERIAL SHALL CONFORM TO PADOT FORM 408, LATEST EDITION.
 2. PRECAST MANHOLE SHALL MEET THE REQUIREMENTS OF SEC. 714 OF PADOT FORM 408, LATEST EDITION.
 3. MORTAR FOR JOINTS SHALL BE NON SHRINK.
 4. FOR COMPLETE DETAIL REFER TO PADOT STANDARDS FOR ROADWAY CONSTRUCTION PUB. #72 RC-39.
 5. IF CAST IN PLACE M.H. IS USED REFER TO M.H. IN RC-39.
 6. FOR PIPE SIZES AND INVERTS SEE PCSM PLAN.
 7. ALL REINFORCING SHALL BE EPOXY COATED.
 8. MANHOLE AND COVER SHALL BE RATED FOR HIGHWAY LOADINGS.
 9. MANHOLE SHALL HAVE A MINIMUM OF TWO PICK HOLES.
 10. AT MINIMUM, TWO GRADE RINGS SHALL BE INSTALLED WITH EACH MANHOLE.
 11. IDENTIFY ALL MANHOLE COVERS WITH THE WORD "STORM" INSCRIBED ON COVER IN 4 INCH LETTERING, UNLESS OTHERWISE NOTED.
 12. AT MINIMUM, 3 INCHES OF GRADE ADJUSTMENT RINGS SHALL BE USED TO ESTABLISH FINISHED GRADE.

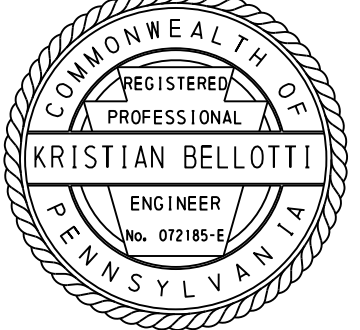
- DRAINAGE INLET NOTES:**
1. ALL MATERIALS, DESIGN AND CONSTRUCTION SHALL MEET THE PENNDOT DESIGN STANDARDS FOR ROADWAY CONSTRUCTION.
 2. SEE POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN FOR INLET TOP OF GRATES AND PIPE SIZES/INVERTS.
 3. PROVIDE INLET BOXES WITH 24" X 45 1/4" STANDARD OPENING TO ACCOMMODATE THE STANDARD TOP COMPONENTS.
 4. PROVIDE STANDARD SIZE HEAVY DUTY FRAME AND COVER.
 5. MORTAR FOR JOINTS SHALL BE NON-SHRINKING TYPE.
 6. ALL CONCRETE COMPRESSIVE STRENGTH 3750 P.S.I. (CLASS "A-A").
 7. CONSTRUCT INLETS WITH STEPS THAT EXCEED FIVE FEET IN HEIGHT SIMILAR TO M.H. SEE RC-39.
 8. PROVIDE 8" THICK BOTTOM SLAB FOR INLETS.
 9. ALL TOLERANCES SHALL BE 1/4" ..
 10. ALL REINFORCING SHALL BE EPOXY COATED AND COMPLY WITH FORM 408 SPECIFICATION, SECTION 709 FOR REINFORCED STEEL. ALL REINFORCING SHALL HAVE A MIN. CONCRETE COVER OF 2".
 11. PROVIDE #4 REINFORCING BAR @12" C/C EACH WAY IN THE WALLS AND THE BASE OF THE INLET BOX WITH A MIN. 2" OF COVER.
 12. PROVIDE TWO #4 REINFORCING BARS AROUND THE OPENINGS.
 13. AT MINIMUM, TWO GRADE ADJUSTMENT RINGS SHALL BE USED TO ESTABLISH FINISHED GRADE.
 14. SIZE OF THE BOX TO BE SUFFICIENT TO ACCEPT ALL OF THE PIPING INDICATED ON THE PLANS AND REMAIN STRUCTURALLY SOUND.
 15. INLET BOX AND GRATING SHALL BE RATED FOR HIGHWAY LOADINGS.



2
C706 TRAPPED TYPE C INLET BOX DETAIL
NOT TO SCALE

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



McCormick Taylor

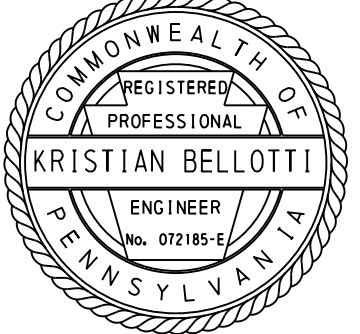
REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/ROSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C706		
DWG. NO.:	C060	OF:	C070
SHT. NO.:	64	OF:	081
COMPUTER FILE NO.:	21D-24-C705	REV. NO.:	0

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER

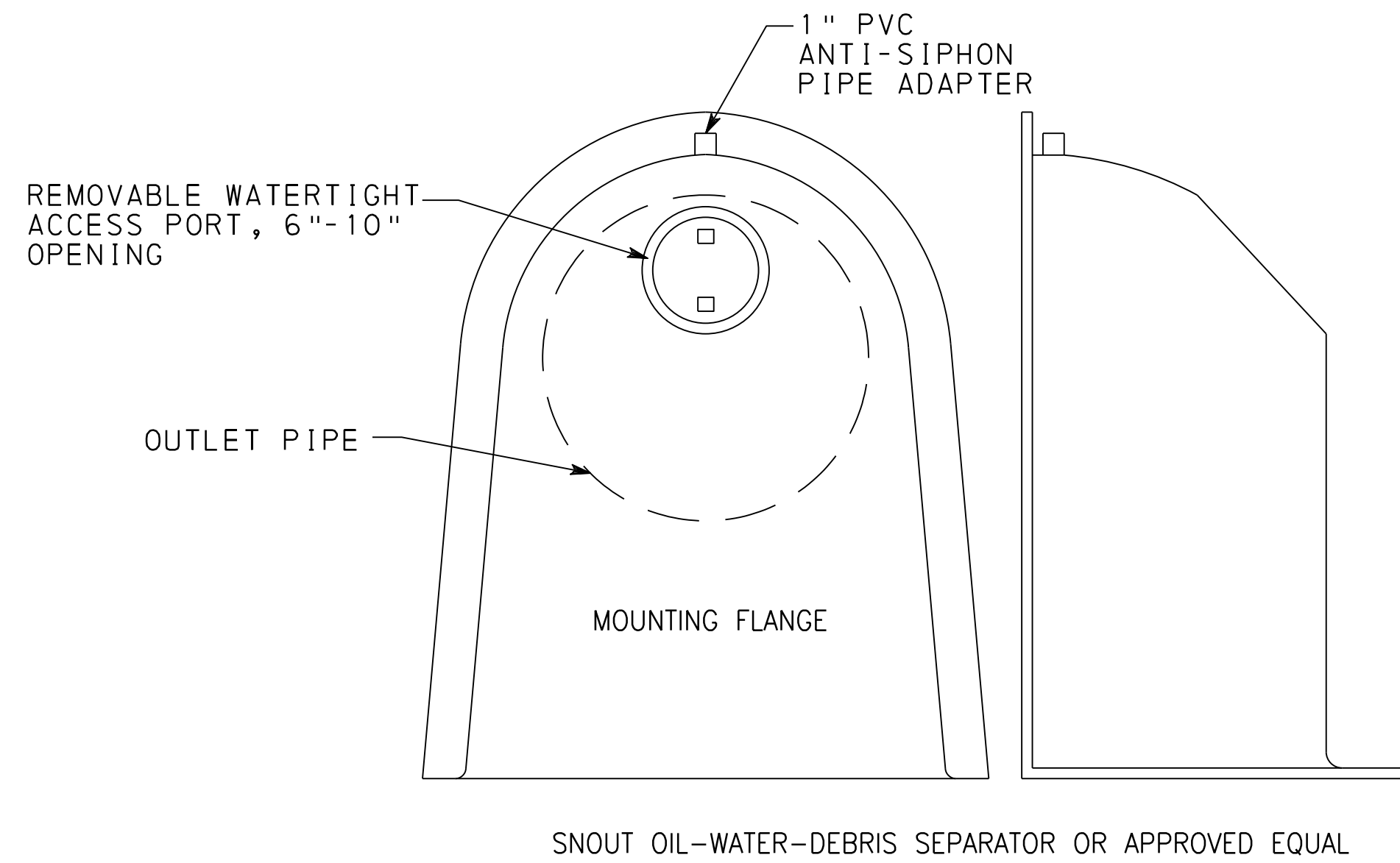


REV	DATE	DESCRIPTION	BY	CHKD	APD

CONSHOCKEN RAILROAD STATION
 MANAYUNK/ROBSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C707		
DWG. NO.:	C061	OF:	C070
SHT. NO.:	65	OF:	081
COMPUTER FILE NO.:	21D-24-C707	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION



SNOUT INSTALLATION SCHEDULE

INLET	MIN BOTTOM ELEV OF INSIDE INLET BOX (FT)
IN301	54.25
IN302	53.55
IN303	53.08
IN304	53.56

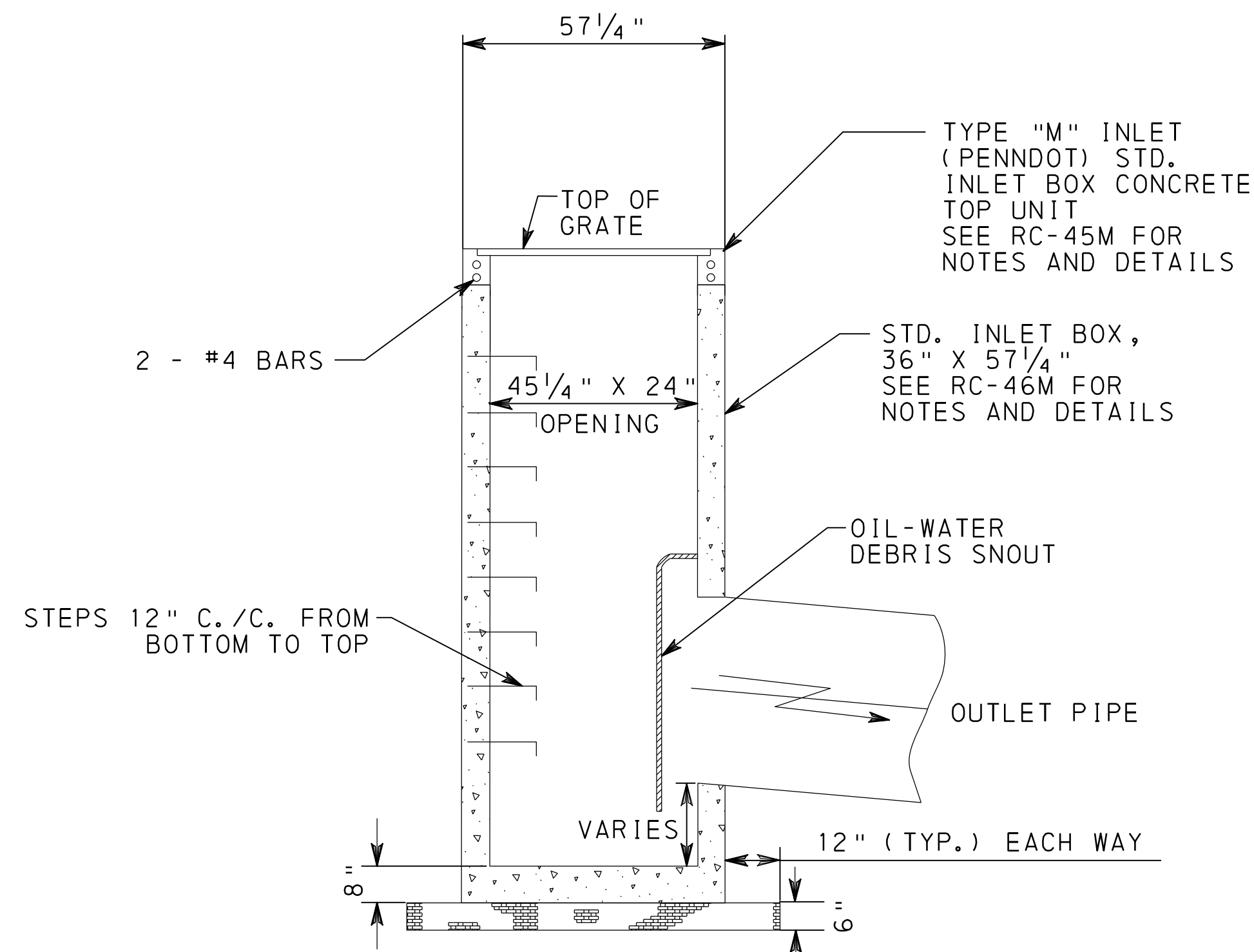
NOTES:

- ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MIN. 0.125" LAMINATE THICKNESS.
- ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT.
- THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURERS RECOMMENDATION.
- THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE OF 6" FROM OUTLET PIPE INVERT.
- SUMP DEPTH OF 2.5 TIMES THE OUTLET PIPE DIAMETER.
- THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MIN. OF 3" AND MAX. OF 24" ACCORDING TO STRUCTURE CONFIGURATION.
- THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIALS.
- THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3#8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER.
- ALL INLET BOXES ARE TO HAVE SNOUTS INSTALLED.

1 OIL-WATER DEBRIS SNOUT DETAIL
NOT TO SCALE

DRAINAGE INLET NOTES:

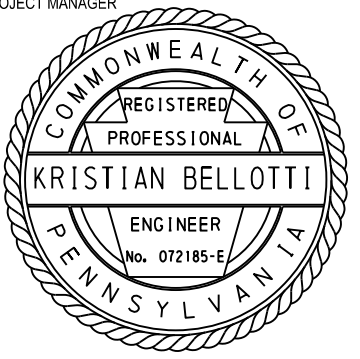
- ALL MATERIALS, DESIGN AND CONSTRUCTION SHALL MEET THE PENNDOT DESIGN STANDARDS FOR ROADWAY CONSTRUCTION.
- SEE POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN FOR INLET TOP OF GRATES AND PIPE SIZES/INVERTS.
- PROVIDE INLET BOXES WITH 24" X 45 1/4" STANDARD OPENING TO ACCOMMODATE THE STANDARD TOP COMPONENTS.
- PROVIDE STANDARD SIZE HEAVY DUTY FRAME AND COVER.
- MORTAR FOR JOINTS SHALL BE NON-SHRINKING TYPE.
- ALL CONCRETE COMPRESSIVE STRENGTH 3750 P.S.I. (CLASS "A-A").
- CONSTRUCT INLETS WITH STEPS THAT EXCEED FIVE FEET IN HEIGHT SIMILAR TO M.H. SEE RC-39.
- PROVIDE 8" THICK BOTTOM SLAB FOR INLETS.
- ALL TOLERANCES SHALL BE 1/4".
- ALL REINFORCING SHALL BE EPOXY COATED AND COMPLY WITH FORM 408 SPECIFICATION, SECTION 709 FOR REINFORCED STEEL. ALL REINFORCING SHALL HAVE A MIN. CONCRETE COVER OF 2".
- PROVIDE #4 REINFORCING BAR @12" C/C EACH WAY IN THE WALLS AND THE BASE OF THE INLET BOX WITH A MIN. 2" OF COVER.
- PROVIDE TWO #4 REINFORCING BARS AROUND THE OPENINGS.
- AT MINIMUM, TWO GRADE ADJUSTMENT RINGS SHALL BE USED TO ESTABLISH FINISHED GRADE.
- SIZE OF THE BOX TO BE SUFFICIENT TO ACCEPT ALL OF THE PIPING INDICATED ON THE PLANS AND REMAIN STRUCTURALLY SOUND.
- INLET BOX AND GRATING SHALL BE RATED FOR HIGHWAY LOADINGS.



2 TRAPPED TYPE M INLET BOX DETAIL
NOT TO SCALE

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



STRUCTURES TABLE

STRUCTURE	STRUCTURE TYPE	NORTHING AND EASTING	RIM/GRATE ELEVATION	INVERT IN	INVERT OUT
INL-301	TRAPPED TYPE C	2650464.78 N 279318.26 E	61.40	-	58.00
INL-302	TRAPPED TYPE C	2650550.21 N 279246.92 E	60.72	-	57.30
INL-303	TRAPPED TYPE M	2650525.85 N 279216.04 E	60.67	56.94	56.83
INL-304	TRAPPED TYPE M WITH ADA COMPLIANT GRATE	2650513.50 N 279170.72 E	60.56	-	57.31
EX-INL202	REBUILT TYPE M	2650610.07 N 279166.92 E	60.69	55.94 (EX-INL204)	55.84
EX-INL204	GRADE ADJUSTMENT	279173.66 N 2650620.17 E	59.98	56.28 (MH-302) 56.12 (EX-INL205)	56.04
EX-INL205	GRADE ADJUSTMENT	2650631.12 N 279187.78 E	59.86	-	56.20
MH-301	STORM MANHOLE	2650452.33 N 279302.13 E	61.51	57.80	57.50
MH-302	STORM MANHOLE	2650539.80 N 279233.43 E	60.84	56.74 (INL-303) 56.90 (MH-301) 57.14 (INL-302)	56.70
MH-303	STORM MANHOLE	2650499.47 N 279181.60 E	60.86	57.24	57.14

NOTE: FIELD VERIFY ALL EXISTING DRAINAGE TIE-IN INVERTS.

PIPE RUN TABLE

PIPE RUN	LENGTH	SLOPE	SIZE	MATERIAL
INL-301 - MH-301	18'	1.1%	18"	REINFORCED CONCRETE, TYPE A
INL-302 - MH-302	15'	1.1%	18"	REINFORCED CONCRETE, TYPE A
MH-301 - MH-302	108'	0.6%	18"	REINFORCED CONCRETE, TYPE A
INL-304 - MH-303	15'	0.5%	18"	REINFORCED CONCRETE, TYPE A
MH-303 - INL-303	40'	0.5%	18"	REINFORCED CONCRETE, TYPE A
INL-303 - MH-302	19'	0.5%	18"	REINFORCED CONCRETE, TYPE A
MH-302 - EX-INL204	93'	0.5%	18"	REINFORCED CONCRETE, TYPE A

NO.	DESCRIPTION	DATE	REV.	BY	CHKD.	APPD.

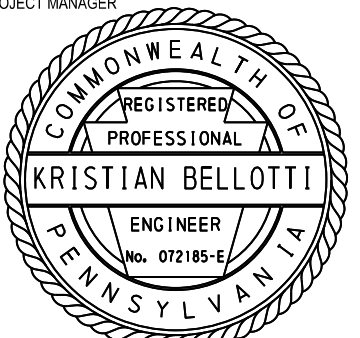
CONSHOHOCKEN RAILROAD STATION
MANAYUNK/ROSTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DRAINAGE STRUCTURE INFORMATION

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C708		
DWG. NO.:	C062	OF	C070
SHT. NO.:	66	OF	081
COMPUTER FILE NO.:	21D-24-C708	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

MANAGER - ARCH/ENGINEERING

PROJECT MANAGER



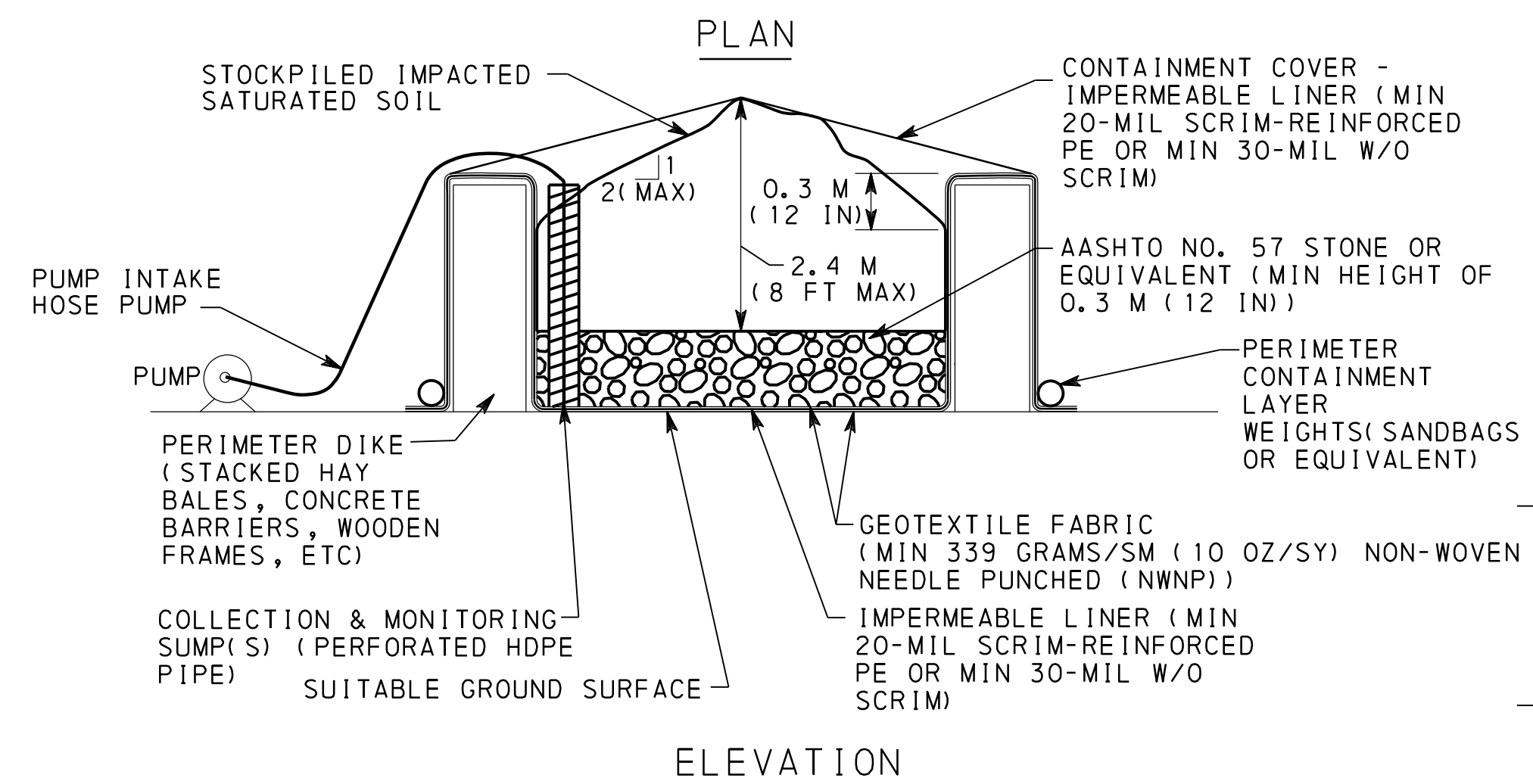
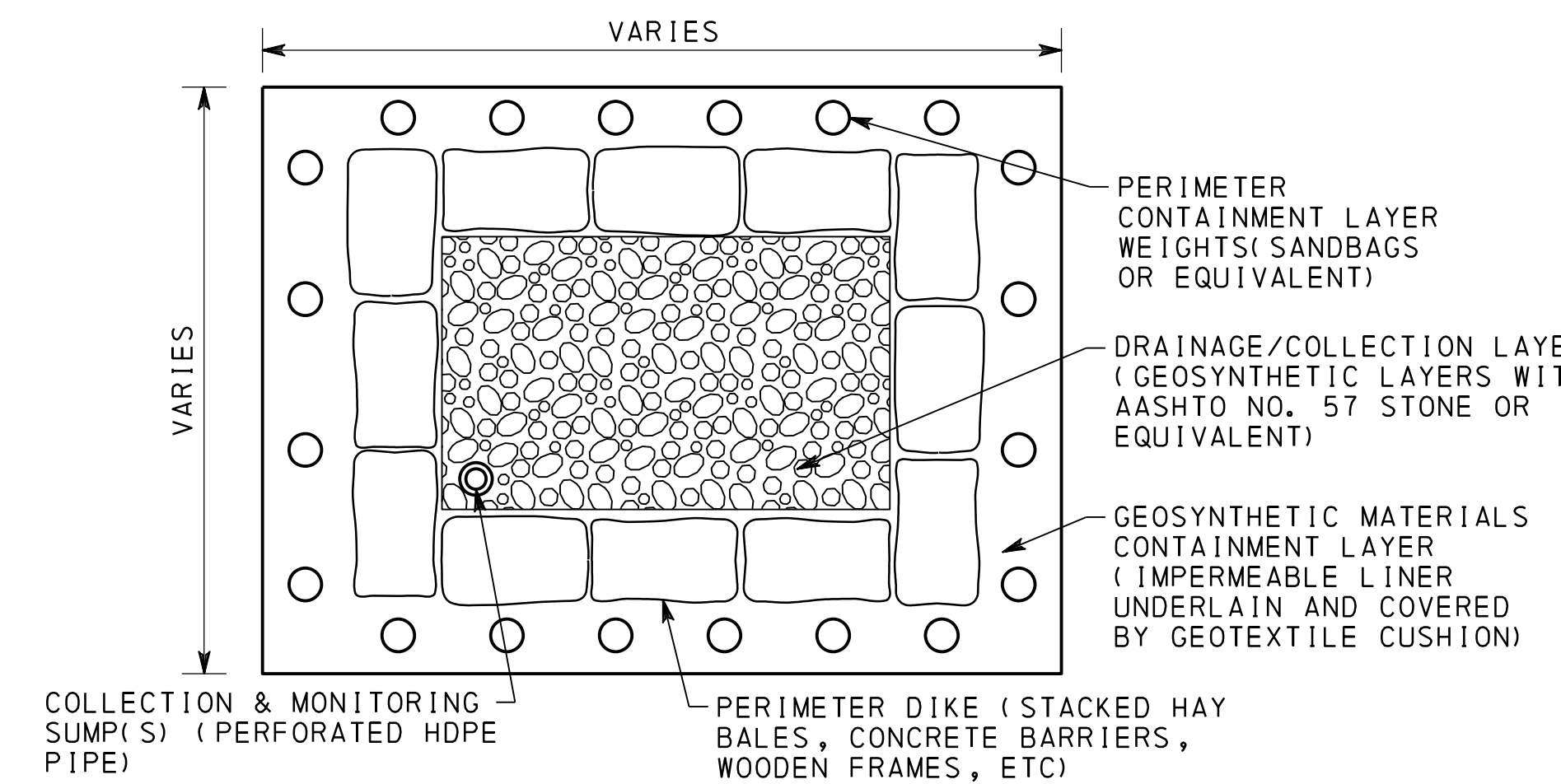
REV	DATE	DESCRIPTION	BY	CHKD	APPD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NOTTOWNE LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
HAZARDOUS WASTE DETAILS

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C709	REV. NO.:	0
DWG. NO.:	C063	OF:	C070
SHT. NO.:	67	OF:	081
COMPUTER FILE NO.:	21D-24-C709	REV. NO.:	0

NOTES (CONT'D):

- PLACE THE COLLECTION AND MONITORING SUMP(S) TO BE UTILIZED TO COLLECT THE DRAINED CONTAMINATED GROUNDWATER OR STORMWATER FROM THE DRYING IMPACTED SATURATED SOIL STOCKPILE INSIDE THE TEMPORARY CONTAINMENT AREA.
- DETERMINE THE NUMBER, LOCATION, AND SIZE OF THE DEWATERING SUMP(S) AND SIZE OF THE PUMP AS REQUIRED TO PUMP THE DRAINED CONTAMINATED GROUNDWATER OR STORMWATER FROM THE STANDPIPE INSIDE THE TEMPORARY CONTAINMENT AREA, AND ALSO ANY CONTAMINATED GROUNDWATER OR STORMWATER ABOVE THE AASHTO NO. 57 AGGREGATE, TO THE PORTABLE STORAGE TANKS.
- AVOID COMINGLING OF EXCAVATED UNSATURATED AND IMPACTED SATURATED SOIL. PLACE ONLY THE EXCAVATED IMPACTED SATURATED SOIL FROM THE AQUA WATER LINE WORK INTO THE TEMPORARY CONTAINMENT AREA. PROPERLY MANAGE THE STOCKPILE OF THE IMPACTED SATURATED SOIL WITHIN THE TEMPORARY CONTAINMENT AREA AS THE EXCAVATED IMPACTED SATURATED SOIL FROM THE EXCAVATED TRENCH ACCUMULATES.
- SAMPLE AND TEST THE PUMPED CONTAMINATED GROUNDWATER AND/OR STORMWATER FROM THE TEMPORARY CONTAINMENT AREA TO THE PORTABLE STORAGE TANKS TO DETERMINE THE CLASSIFICATION OF THE CONTAMINANT FOR THE DISPOSAL OF AT AN OFFSITE LICENSED FACILITY.
- SAMPLE AND TEST THE EXCAVATED SOIL STOCKPILE AFTER IT HAS DRAINED AND DRIED ATOP THE AASHTO NO. 57 AGGREGATE WITHIN THE TEMPORARY CONTAINMENT AREA. CHARACTERIZE THE SOIL CONDITION AS EITHER NONHAZARDOUS REGULATED FILL TO BE REUSED ON THE PROJECT SITE OR CLEAN FILL TO BE LOADED FOR OFFSITE DISPOSAL FOR USE ON OTHER TRANSPORTATION PROJECTS.
- COVER THE TEMPORARY CONTAINMENT AREA WITH THE IMPERMEABLE LINER TO PROVIDE A WATERTIGHT BARRIER AS A CONTINUOUS PANEL/ROLL, OR FIELD WELDED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS. COVER THE STOCKPILE WITHIN THE TEMPORARY CONTAINMENT AREA WHEN STOCKPILING ACTIVITIES ARE NOT BEING PERFORMED, AND ALSO OVERNIGHT WHEN NOT IN USE.



1 C709 TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS

NOTES:

NOT TO SCALE

- INSPECT THE GROUND SURFACE WITH THE ENVIRONMENTAL CONSULTANT AND THE REPRESENTATIVE TO OBTAIN APPROVAL PRIOR TO INSTALLING THE TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS. SELECT A GROUND SURFACE THAT IS SMOOTH, FLAT, UNIFORM, COMPACTED AND NON-YIELDING FOR THE INSTALLATION OF THE GEOSYNTHETIC MATERIALS. PRIOR TO PLACEMENT, CERTIFY IN WRITING THAT THE GROUND SURFACE ON WHICH THE GEOSYNTHETIC MATERIALS IS TO BE PLACED IS ACCEPTABLE AND IS GEOTECHNICALLY AND STRUCTURALLY COMPETENT.
- CONSTRUCT THE PERIMETER DIKE. THE SIZE OF THE TEMPORARY CONTAINMENT AREA IS BASED ON THE VOLUME OF EXCAVATED IMPACTED SATURATED SOIL FROM THE AQUA WATER LINE WORK. CONTAMINATED GROUNDWATER WAS FOUND AT APPROXIMATELY 11.5 FEET, 24 FEET AND 17 FEET BELOW EXISTING GROUND SURFACE AT TMW-4, TMW-5 AND TMW-6 RESPECTIVELY. SOILS EXCAVATED FROM BELOW THE GROUNDWATER MUST BE MANAGED AS CONTAMINATED AND KEPT SEPARATE FROM THE EXCAVATED UNSATURATED SOIL. THE STOCKPILE IN THE TEMPORARY CONTAINMENT AREA MUST BE 2:1 OR FLATTER AND THE STOCKPILE HEIGHT ABOVE THE AASHTO NO. 57 AGGREGATE AND MUST NOT EXCEED 8 FEET. A MINIMUM OF 12 INCHES SHOULD BE KEPT FROM THE TOP OF THE PERIMETER DIKE TO THE STOCKPILE ON THE INSIDE OF THE CONTAINMENT AREA TO AVOID OVERTOPPING OF THE STOCKPILED IMPACTED SATURATED SOIL.
- PLACE THE GEOSYNTHETIC MATERIALS. THE IMPERMEABLE LINER AT THE BOTTOM OF THE CONTAINMENT AREA AND WRAPPED AROUND THE PERIMETER DIKE MUST BE SEAMLESS TO PREVENT THE CONTAINMENT AREA FROM LEAKING.
 - THE GEOSYNTHETIC MATERIALS ARE TO BE LAID OUT AND INSTALLED BY TRAINED PERSONNEL.
 - REPAIR OR REPLACE GEOSYNTHETIC MATERIALS THAT ARE DAMAGED OR CONTAIN IMPERFECTIONS.
 - LAY THE GEOSYNTHETIC MATERIALS AS SMOOTH AS POSSIBLE (FREE OF TENSILE STRESSES, FOLDS, AND WRINKLES). CONTINUOUSLY OVERLAP ADJACENT PANELS/ROLLS OF ALL GEOTEXTILE FABRICS A MINIMUM OF 0.3 METERS (12 INCHES) AND MINIMIZE WRINKLES BETWEEN ADJACENT PANELS/ROLLS. FIELD SEWING GEOTEXTILE FABRIC PANELS INSTEAD OF OVERLAPPING IS ALSO PERMITTED. IF SEWN, PROVIDE A FLAT SEAM WITH ONE ROW OF A SINGLE-THREAD CHAIN STITCH UNLESS RECOMMENDED OTHERWISE BY THE MANUFACTURER.
 - DO NOT ALLOW ANY EQUIPMENT TO DAMAGE THE GEOSYNTHETIC MATERIALS BY HANDLING, TRAFFICKING, OR OTHER MEANS. NO VEHICULAR TRAFFIC OF ANY KIND IS ALLOWED DIRECTLY ON THE GEOSYNTHETIC MATERIALS. PROHIBIT ALL PERSONNEL WORKING ON THE GEOSYNTHETIC MATERIALS TO SMOKE, WEAR DAMAGING SHOES, OR ENGAGE IN OTHER ACTIVITIES THAT COULD DAMAGE THE GEOSYNTHETIC MATERIALS.
- CAREFULLY PLACE THE DRAINAGE LAYER CONSISTING OF WASHED AASHTO NO. 57 AGGREGATE ON TOP OF THE GEOSYNTHETIC MATERIALS WITHIN THE TEMPORARY CONTAINMENT AREA.
- PLACE THE SANDBAGS AROUND THE PERIMETER OF THE TEMPORARY CONTAINMENT AREA TO PROVIDE ADEQUATE ANCHORAGE TO PREVENT UPLIFT OF THE GEOSYNTHETIC MATERIALS BY THE WIND.

2 C709 STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER

NOT TO SCALE

NOTES:

- INSPECT THE GROUND SURFACE WITH THE ENVIRONMENTAL CONSULTANT AND THE REPRESENTATIVE TO OBTAIN APPROVAL PRIOR TO INSTALLING THE PORTABLE SPILL CONTAINMENT BARRIER (BERM) AND TRUCK HOLDING THE PORTABLE STORAGE TANKS (FRAC TANKS). SELECT A GROUND SURFACE THAT IS SMOOTH, UNIFORMLY FLAT, COMPACTED, AND NON-YIELDING FOR THE INSTALLATION OF THE PORTABLE SPILL CONTAINMENT BARRIER. PRIOR TO PLACEMENT, OBTAIN WRITTEN CERTIFICATION FROM THE ENVIRONMENTAL CONSULTANT AND REPRESENTATIVE THAT THE GROUND SURFACE ON WHICH THE PORTABLE SPILL CONTAINMENT BERM AND TRUCK HOLDING THE PORTABLE STORAGE TANKS ARE TO BE PLACED IS ACCEPTABLE AND IS GEOTECHNICALLY AND STRUCTURALLY COMPETENT.
- OBTAIN APPROVAL FROM THE REPRESENTATIVE THAT THE STORAGE AND CONTAINMENT TANKS ARE CLEAN (DECONTAMINATED) PRIOR TO TRANSPORTING OF ANY PUMPED GROUNDWATER FROM THE AQUA WATER LINE WORK OR FROM THE TEMPORARY IMPACTED SATURATED SOIL CONTAINMENT AREAS.
- PLACE THE PORTABLE SPILL CONTAINMENT BARRIER (BERM) AND TRUCK HOLDING THE CLEAN PORTABLE STORAGE TANKS.
- PUMP ANY GROUNDWATER AND/OR STORMWATER FROM THE EXCAVATED TRENCH FOR THE RELOCATED AQUA WATER LINE INTO THE PORTABLE STORAGE TANKS. BE RESPONSIBLE FOR ALL PUMPS, PIPING, VALVES, METERS AND APPURTENANCES NECESSARY TO MANAGE THE GROUNDWATER OR STORMWATER ON-SITE TO THE PORTABLE STORAGE TANK.
- PUMP ANY GROUNDWATER AND/OR STORMWATER FROM THE TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS INTO THE PORTABLE STORAGE TANKS. BE RESPONSIBLE FOR ALL PUMPS, PIPING, VALVES, METERS AND APPURTENANCES NECESSARY TO MANAGE THE GROUNDWATER OR STORMWATER ON-SITE FROM THE TEMPORARY CONTAINMENT FOR IMPACTED SATURATED SOILS AREA TO THE PORTABLE STORAGE TANK.

PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER OR STORMWATER

1. THE CONTRACTOR WILL DEVELOP A WASTE MANAGEMENT PLAN (WMP) IN ACCORDANCE WITH CONTRACT WASTE PROVISIONS IDENTIFYING PROCEDURES FOR SCREENING, CHARACTERIZING, HANDLING, AND DISPOSING OF CONTAMINATED GROUNDWATER OR STORMWATER.
2. EXCAVATIONS WILL BE DEWATERED DIRECTLY INTO A STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER TANK. CONTRACTOR WILL USE APPLICABLE METHODS INCLUDING THE DIRECT DEWATERING FROM THE BOTTOM OF THE EXCAVATED TRENCH USING AN ADEQUATELY SIZED PUMP.
3. THE DEWATERED CONTAMINATED GROUNDWATER PUMPED INTO THE STORAGE AND CONTAINMENT TANK IS TO BE SAMPLED AND TESTED TO DETERMINE CLASSIFICATION OF CONTAMINATED GROUNDWATER OR STORMWATER BEFORE TRANSPORTING FOR OFFSITE DISPOSAL AT A LICENSED FACILITY.
4. SAMPLE AND TEST THE GROUNDWATER AND/OR STORMWATER IN THE PORTABLE STORAGE TANKS TO DETERMINE THE CLASSIFICATION OF THE CONTAMINANT PRIOR TO DISPOSAL OF AT AN OFFSITE LICENSED FACILITY.
5. INSPECT THE STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER PORTABLE STORAGE TANKS AND PORTABLE SPILL CONTAINMENT BARRIER (BERM) AND PERFORM MAINTENANCE AS NECESSARY. DOCUMENT INSPECTIONS AND ANY CORRECTIVE ACTIONS/MEASURES PERFORMED.
6. CONTROL VAPORS AND/OR ODORS EMANATING FROM THE STORAGE AND CONTAINMENT FOR CONTAMINATED GROUNDWATER OR STORMWATER AREA IN ACCORDANCE WITH THE WMP. ANY DAMAGE CAUSED BY THE VAPOR OR ODOR NUISANCE IS EXCLUSIVELY THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE.
7. KEEP RECORDS OF DOCUMENTS GENERATED DURING THE COURSE OF WORK ASSOCIATED WITH THIS ITEM. THIS INCLUDES FIELD NOTES, SAMPLING/TESTING LABORATORY REPORTS, AIR MONITORING DATA, CHAIN OF CUSTODY FORMS, DAILY LIQUID VOLUMES AND WEIGHTS, WASTE MANIFEST/BILLS OF LOADING, MAINTENANCE/INSPECTION REPORT, AND REPORTS OF ANY SPILLS OF ACCIDENTS.
8. IF GROUNDWATER IS ENCOUNTERED ELSEWHERE ON THE PROJECT SITE DURING EXCAVATION OR CONSTRUCTION, NOTIFY THE REPRESENTATIVE. THE GROUNDWATER IS TO BE SAMPLED AND TESTED, CLASSIFIED, AND DISPOSED OF AT AN OFFSITE, LICENSED FACILITY IF DEEMED CONTAMINATED.

ENVIRONMENTAL DUE DILIGENCE NOTES:

IMPORTED FILL

1. WITH THE EXCEPTION OF SITES ENROLLED IN DEP'S LAND RECYCLING AND REMEDIATION STANDARDS ACT (ACT 2) PROGRAM AND SITES WITH DEP'S WASTE MANAGEMENT GENERAL PERMIT (WMGR096) APPROVAL TO USE REGULATED FILL, ALL FILL MATERIAL IMPORTED TO THE SITE MUST MEET THE DEFINITION OF CLEAN FILL, AS DEFINED IN DEP'S MANAGEMENT OF FILL POLICY. REGULATED FILL USED ON ACT 2 SITES MUST COMPLY WITH THE STANDARDS ESTABLISHED BY THE ACT 2 PROGRAM. REGULATED FILL USED OUTSIDE OF ACT 2 SITES MUST COMPLY WITH DEP'S WASTE MANAGEMENT GENERAL PERMIT WMGR096.
2. FOR AREAS NOT ENROLLED IN THE ACT 2 PROGRAM, THE PERMITEE SHALL COMPLY WITH DEP'S MANAGEMENT OF FILL POLICY (DOCUMENT NO. 258-2182-773) IF FILL IS IMPORTED TO THE SITE, AND COMPLY WITH THE FOLLOWING WHEN USING FILL AT THE SITE TO LEVEL AN AREA OR BRING IT TO GRADE.
 - A. THE PERMITEE SHALL CONDUCT ENVIRONMENTAL DUE DILIGENCE TO DETERMINE WHETHER THE FILL HAS BEEN AFFECTED BY A RELEASE OF A REGULATED SUBSTANCE. IF DUE DILIGENCE WAS CONDUCTED PRIOR TO SUBMITTING THE PERMIT APPLICATION AND CIRCUMSTANCES HAVE NOT CHANGED BETWEEN THE DUE DILIGENCE AND THE USE OF THE FILL, DUE DILIGENCE DOES NOT NEED TO BE REPEATED.
 - B. IF DUE DILIGENCE RESULTS IN EVIDENCE OF A RELEASE, AS DEFINED IN DEP'S MANAGEMENT OF FILL POLICY, THE PERMITEE SHALL TEST THE MATERIAL TO DETERMINE WHETHER IT QUALIFIES AS CLEAN FILL, AND IF SO, DEP'S ELECTRONIC FORM FP-001 (CERTIFICATION OF CLEAN FILL) MUST BE COMPLETED, RETAINED BY THE PERMITEE, AND BE MADE AVAILABLE TO DEP/COUNTY CONSERVATION DISTRICT (CCD) UPON REQUEST. IF THE FILL DOES NOT QUALIFY AS CLEAN FILL, BUT MEETS THE REGULATED FILL STANDARDS, IT MAY BE USED IN ACCORDANCE WITH AN APPROVAL FOR COVERAGE UNDER DEP'S WASTE MANAGEMENT GENERAL PERMIT WMGR096.

ON-SITE CONTAMINATION

1. FOR SITES ENROLLED IN THE ACT 2 PROGRAM, IF THE RESULTS OF SOIL SAMPLING IN THE AREA OF EARTH DISTURBANCE ACTIVITIES DEMONSTRATE NEWLY DISCOVERED SOIL CONTAMINATION WITH CONCENTRATIONS OF REGULATED SUBSTANCES EXCEEDING THE RESIDENTIAL OR NON-RESIDENTIAL MEDIUM-SPECIFIC CONCENTRATIONS (MSCS), WHICHEVER IS APPLICABLE, THE PERMITEE SHALL NOTIFY DEP/CCD BY PHONE WITHIN 24 HOURS OF RECEIVING THE SAMPLING RESULTS. EARTH DISTURBANCE ACTIVITIES IN AREAS OF NEWLY DISCOVERED CONTAMINATION NEED NOT CEASE AFTER NOTIFICATION TO DEP/CCD UNLESS SO DIRECTED BY DEP/CCD.
2. FOR AREAS NOT ENROLLED IN THE ACT 2 PROGRAM, IF THE PERMITEE OR CO-PERMITEE DISCOVERS DURING EARTH DISTURBANCE ACTIVITIES WASTES OR OTHER MATERIAL OR SUBSTANCES THAT HAVE OR HAVE LIKELY CAUSED SOIL CONTAMINATION WITH CONCENTRATIONS OF REGULATED SUBSTANCES EXCEEDING THE RESIDENTIAL OR NON-RESIDENTIAL MSCS, WHICHEVER IS APPLICABLE, THE PERMITEE SHALL NOTIFY DEP/CCD BY PHONE WITHIN 24 HOURS. EARTH DISTURBANCE ACTIVITIES IN AREAS OF NEWLY DISCOVERED CONTAMINATION NEED NOT CEASE AFTER NOTIFICATION TO DEP/CCD UNLESS SO DIRECTED BY DEP/CCD.

ON-SITE GROUNDWATER CONTAMINATION

1. IF THE RESULTS OF SAMPLING PERFORMED ON GROUNDWATER ENCOUNTERED DURING EARTH DISTURBANCE ACTIVITIES DEMONSTRATE THAT THE GROUNDWATER IS CONTAMINATED BY ONE OR MORE POLLUTANTS AT CONCENTRATIONS EXCEEDING WATER QUALITY CRITERIA CONTAINED IN 25 PA. CODE CHAPTER 93, THAT WERE NOT PREVIOUSLY DISCLOSED TO DEP/CCD, THE PERMITEE SHALL NOTIFY DEP/CCD BY PHONE WITHIN 24 HOURS OF RECEIVING THE SAMPLING RESULT. CONTAMINATED GROUNDWATER MAY NOT BE PUMPED OR OTHERWISE DIVERTED TO SURFACE WATERS UNLESS SPECIFICALLY AUTHORIZED BY THE DEP'S CLEAN WATER PROGRAM.

CONTAMINANTS					
REGULATED SUBSTANCE	PADEP STATEWIDE HEALTH STANDARD	SAMPLE CONCENTRATION	SAMPLING POINT	MEDIUM	DATE OF SAMPLES
	NON-RESIDENTIAL USED AQUIFER < 2500				
IRON	300	940	TMW-4	GROUNDWATER	03/04/2022
MANGANESE	300	760	TMW-5	GROUNDWATER	03/04/2022
		3,300	TMW-6	GROUNDWATER	03/04/2022
BENZO(A) PYRENE	0.20	0.32	TMW-4	GROUNDWATER	03/04/2022

A PHASE II ENVIRONMENTAL SITE ASSESSMENT (ESA) WAS PREPARED FOR SEPTA IN JUNE AND JULY 2019. THIS PHASE II ESA WAS CONDUCTED IN ACCORDANCE WITH AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) E1903-11 STANDARD PRACTICE FOR ENVIRONMENTAL SITE ASSESSMENTS, AND WITH GENERALLY ACCEPTED PROFESSIONAL PRACTICES, PRINCIPLES, AND PROCEDURES EXISTING AT THE TIME OF THE PREPARATION OF THIS REPORT. THIS PHASE II ESA WAS COMPLETED IN ORDER TO FURTHER INVESTIGATE THE RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS) IDENTIFIED DURING THE MARCH 2016 PHASE I ESA.

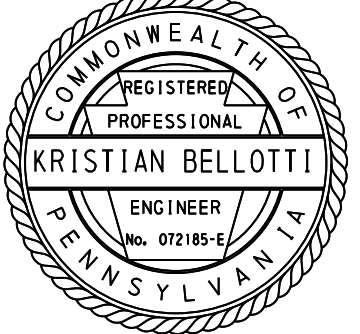
THE EVALUATION OF ANALYTICAL RESULTS FROM THE SOIL SAMPLES INDICATE THAT NO SOIL IMPACTS ARE PRESENT AT THE SITE. THEREFORE, THERE ARE NO ENVIRONMENTAL LIABILITIES ASSOCIATED WITH THE SOILS INVESTIGATED DURING THIS PHASE II ESA.

ON MARCH 4, 2022, DIRECT PUSH DRILLING WAS PERFORMED IN ORDER TO SCREEN SOIL CORES, IDENTIFY PRESENCE OF WATER, AND INSTALL TEMPORARY MONITORING WELLS (TMW-4 THROUGH TMW-6).

THE GROUND WATER ANALYTICAL RESULTS FROM THE GROUNDWATER SAMPLES INDICATE THAT BENZO(A)PYRENE EXCEEDED THE PADEP STATEWIDE HEALTH STANDARD, NON-RESIDENTIAL (NR) USED AQUIFER MEDIUM SPECIFIC CONCENTRATION (MSC) IN TMW-4. IRON IN TMW-4 AND MANGANESE IN TMW-5 AND TMW-6 EXCEEDED THE NR USED MSCs.

MANAGER - ARCH/ENGINEERING

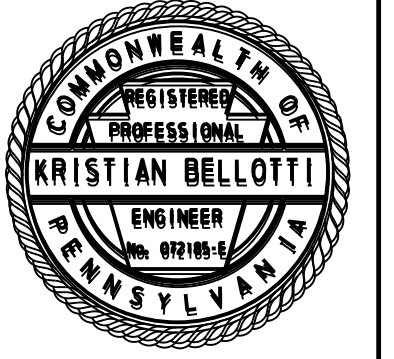
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 HAZARDOUS WASTE NOTES

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C710	
DWG. NO.: C064	OF: C070
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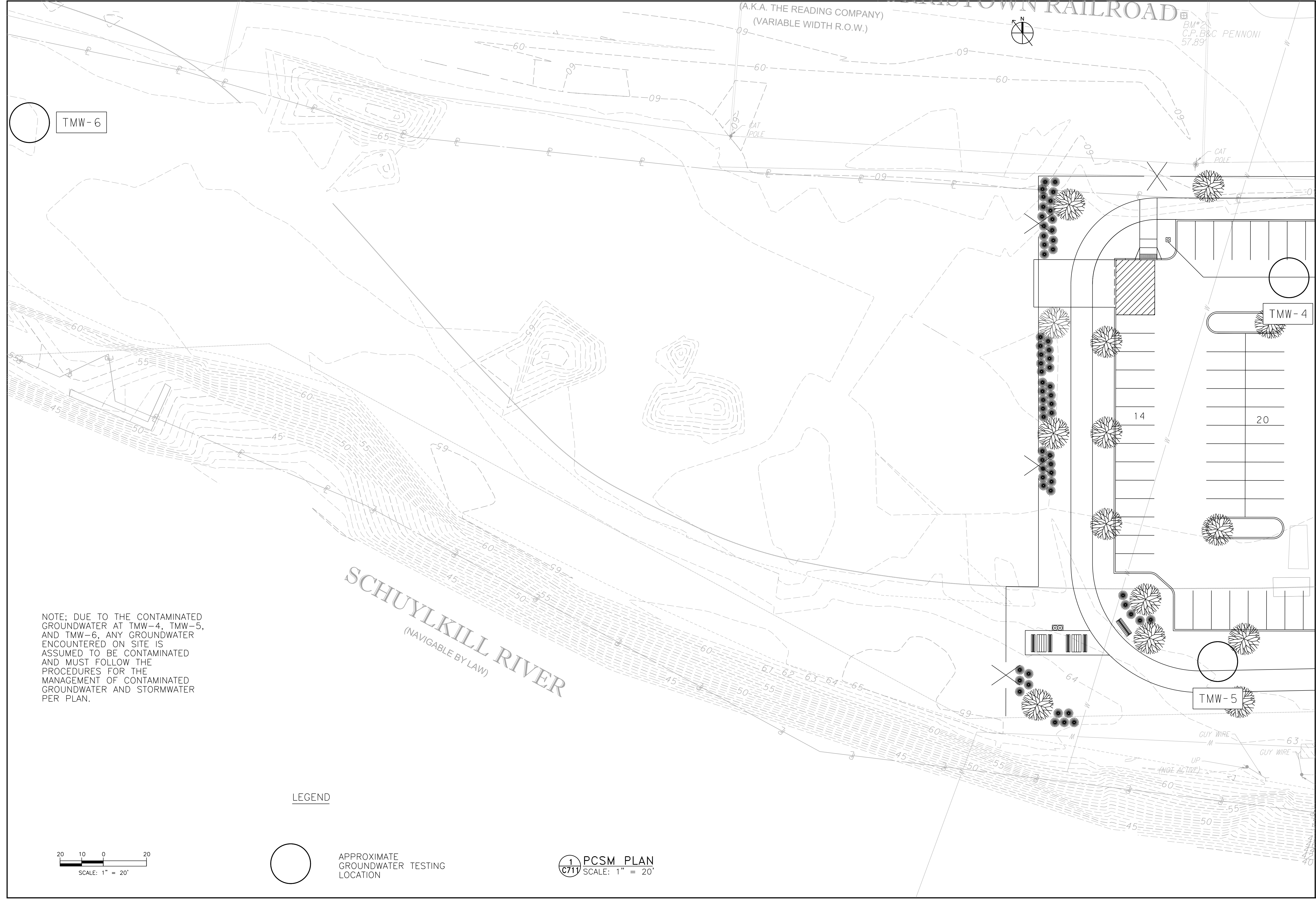


McCORMICK TAYLOR

REV	DATE	DESCRIPTION	BY	CKD	APD

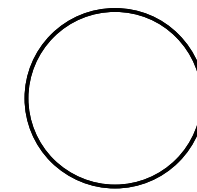
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
HAZARDOUS WASTE TESTING LOCATIONS

SCALE:	1:20	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CL
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	OMA
DRAWING NUMBER:	C711		
DWG. NO.:	C065	OF	C070
SHT. NO.:	69	OF	081
COMPUTER FILE NO.:	21D-24-C711	REV. NO.:	0



NOTE: DUE TO THE CONTAMINATED GROUNDWATER AT TMW-4, TMW-5, AND TMW-6, ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.

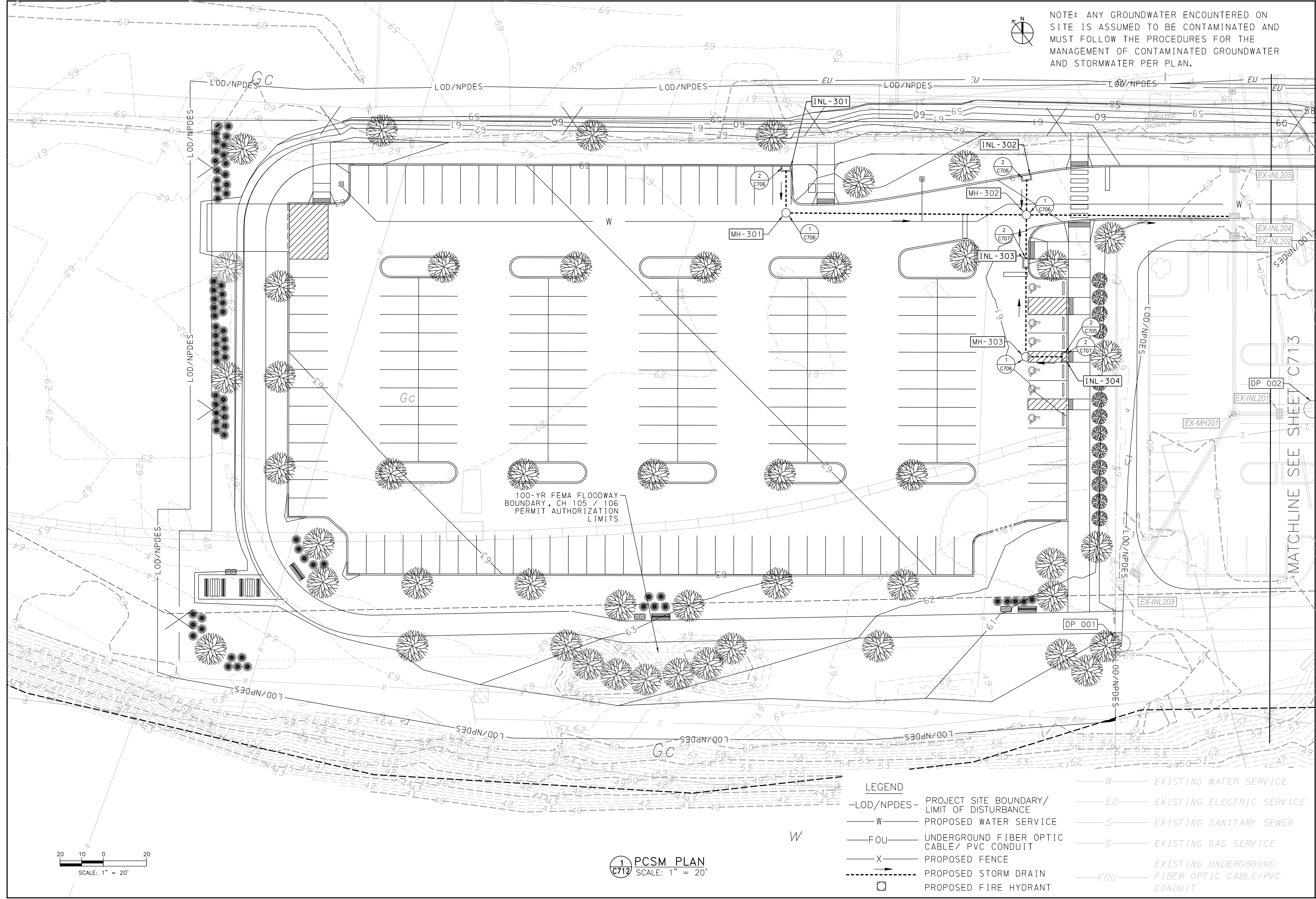
LEGEND



APPROXIMATE GROUNDWATER TESTING LOCATION

1 PCSM PLAN
C711 SCALE: 1" = 20'

NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.



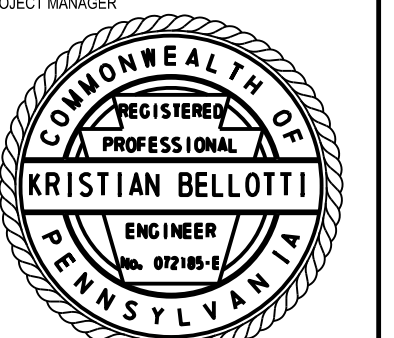
100-YR FEMA FLOODWAY BOUNDARY, CH 105 / 106 PERMIT AUTHORIZATION LIMITS

SCALE: 1" = 20'

1 PCSM PLAN
C712 SCALE: 1" = 20'

- LEGEND**
- LOD/NPDES- PROJECT SITE BOUNDARY/ LIMIT OF DISTURBANCE
 - W — PROPOSED WATER SERVICE
 - FOU — UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
 - X — PROPOSED FENCE
 - - - - - PROPOSED STORM DRAIN
 - PROPOSED FIRE HYDRANT
 - W — EXISTING WATER SERVICE
 - EU — EXISTING ELECTRIC SERVICE
 - S — EXISTING SANITARY SEWER
 - G — EXISTING GAS SERVICE
 - FOU — EXISTING UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT

MANAGER - ARCH / ENGINEERING



MCCORMICK TAYLOR

REV	DATE	DESCRIPTION	BY	CKD	APPD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

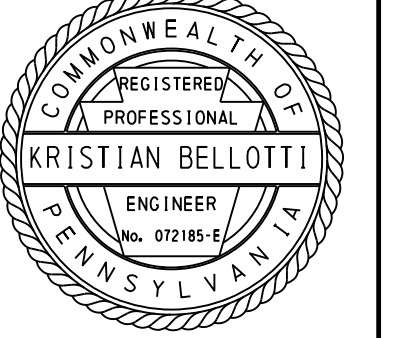
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DRAWING NUMBER: C712	
DWG. NO.: C066 OF C070	
SHT. NO.: 70 OF 081	
COMPUTER FILE NO.: 21D-24-C712	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION

NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.

MANAGER - ARCH / ENGINEERING

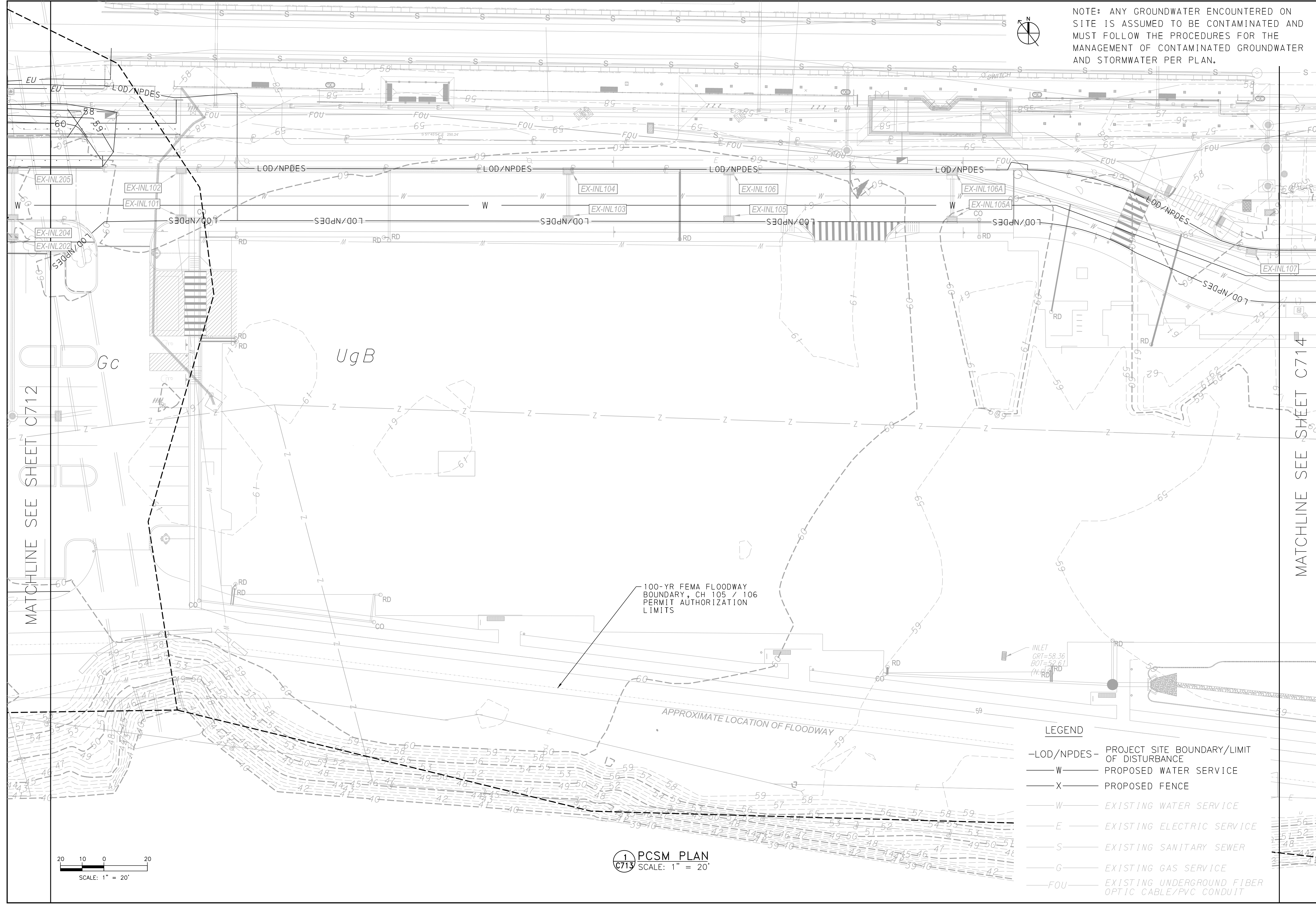
PROJECT MANAGER



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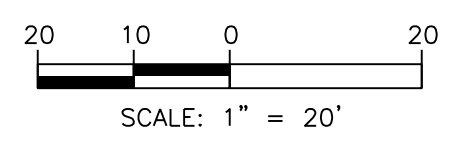
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

SCALE:	1:20	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C713	DWG. NO.:	C067 OF C070
		SHT. NO.:	71 OF 081
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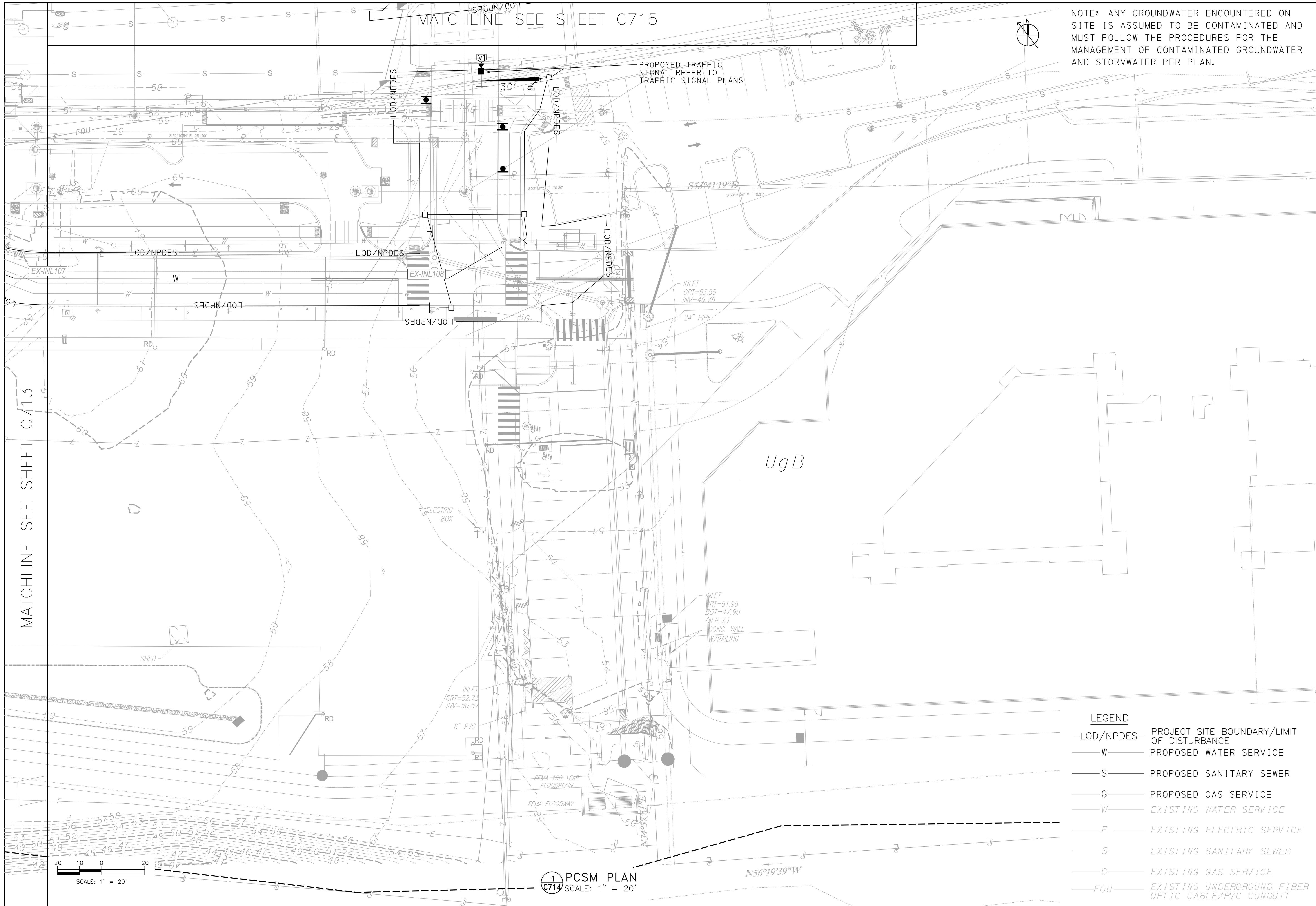
- LEGEND**
- LOD/NPDES- PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
 - W PROPOSED WATER SERVICE
 - X PROPOSED FENCE
 - W EXISTING WATER SERVICE
 - E EXISTING ELECTRIC SERVICE
 - S EXISTING SANITARY SEWER
 - G EXISTING GAS SERVICE
 - FOU EXISTING UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT

1 PCSM PLAN
C713 SCALE: 1" = 20'

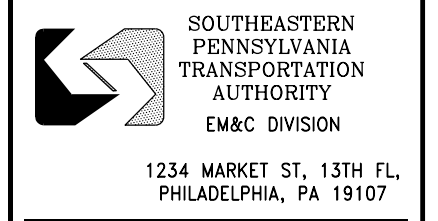


MATCHLINE SEE SHEET C712

MATCHLINE SEE SHEET C714

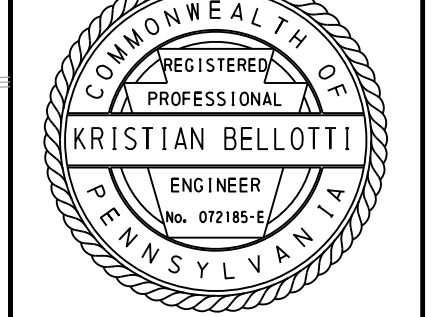


NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.



MANAGER - ARCH / ENGINEERING

PROJECT MANAGER



MATCHLINE SEE SHEET C713

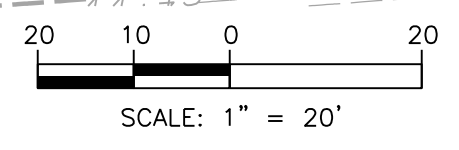
MATCHLINE SEE SHEET C715

PROPOSED TRAFFIC SIGNAL REFER TO TRAFFIC SIGNAL PLANS

UgB

LEGEND

-LOD/NPDES-	PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
— W —	PROPOSED WATER SERVICE
— S —	PROPOSED SANITARY SEWER
— G —	PROPOSED GAS SERVICE
— W —	EXISTING WATER SERVICE
— E —	EXISTING ELECTRIC SERVICE
— S —	EXISTING SANITARY SEWER
— G —	EXISTING GAS SERVICE
— FOU —	EXISTING UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT



1 PCSM PLAN
C714 SCALE: 1" = 20'

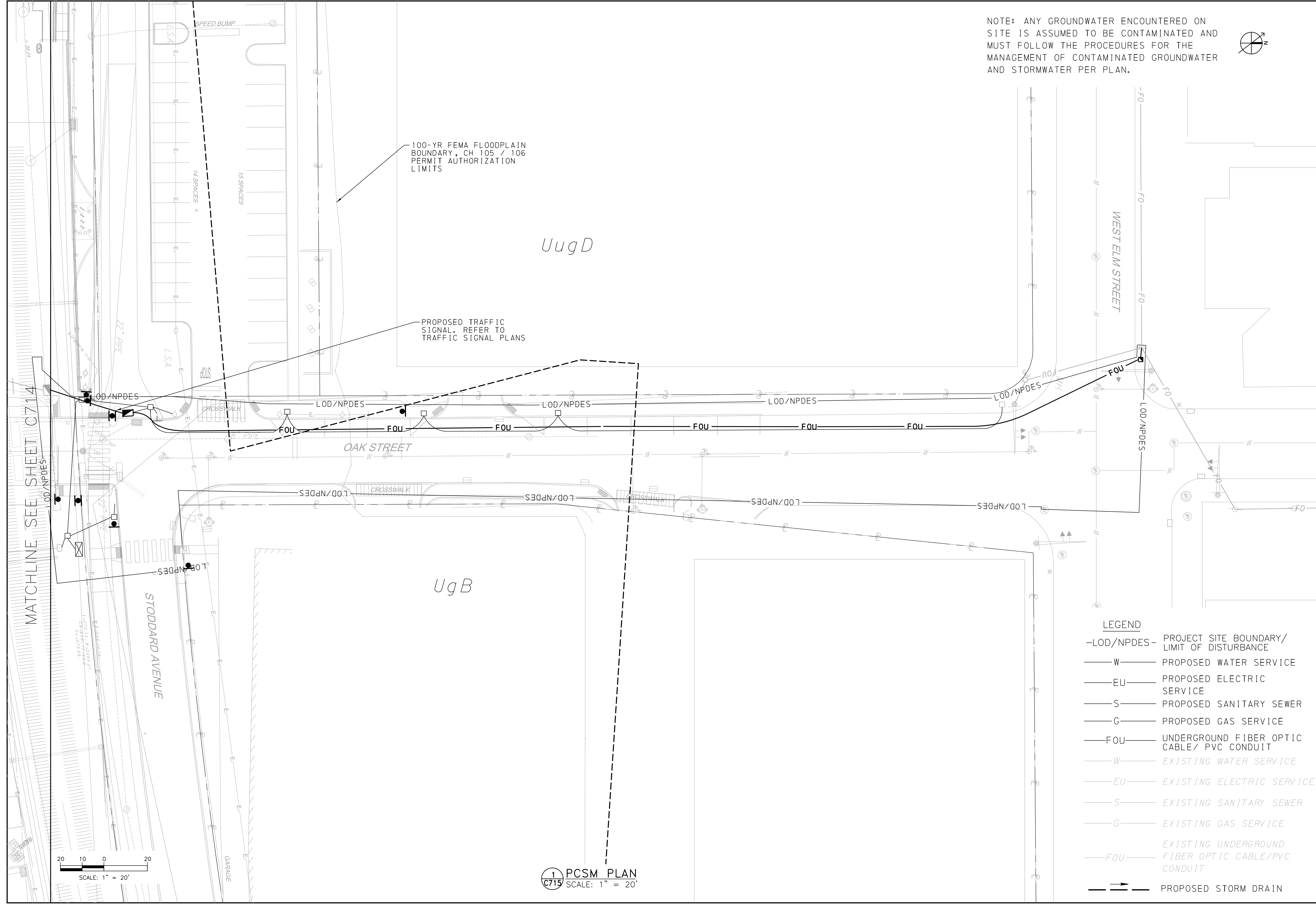
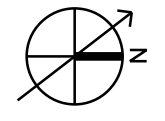
REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
 MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
 CIVIL
 POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

SCALE:	1:20	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CAI
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CMA
DRAWING NUMBER:	C714		
DWG. NO.:	C068	OF:	C070
DIT. NO.:	072	OF:	081
COMPUTER FILE NO.:	21D-24-C714	REV. NO.:	0

LAND DEVELOPMENT SUBMISSION

NOTE: ANY GROUNDWATER ENCOUNTERED ON SITE IS ASSUMED TO BE CONTAMINATED AND MUST FOLLOW THE PROCEDURES FOR THE MANAGEMENT OF CONTAMINATED GROUNDWATER AND STORMWATER PER PLAN.



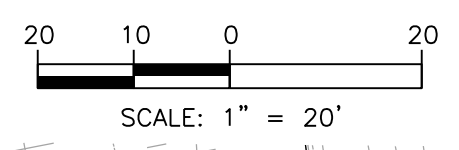
100-YR FEMA FLOODPLAIN BOUNDARY, CH 105 / 106 PERMIT AUTHORIZATION LIMITS

PROPOSED TRAFFIC SIGNAL. REFER TO TRAFFIC SIGNAL PLANS

UugD

UgB

MATCHLINE SEE SHEET C714

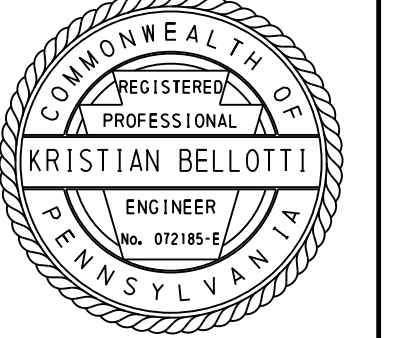


1 PCSM PLAN
C715 SCALE: 1" = 20'

- LEGEND**
- LOD/NPDES- PROJECT SITE BOUNDARY/LIMIT OF DISTURBANCE
 - W — PROPOSED WATER SERVICE
 - EU — PROPOSED ELECTRIC SERVICE
 - S — PROPOSED SANITARY SEWER
 - G — PROPOSED GAS SERVICE
 - FOU — UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
 - W — EXISTING WATER SERVICE
 - EU — EXISTING ELECTRIC SERVICE
 - S — EXISTING SANITARY SEWER
 - G — EXISTING GAS SERVICE
 - FOU — EXISTING UNDERGROUND FIBER OPTIC CABLE/PVC CONDUIT
 - — PROPOSED STORM DRAIN

MANAGER - ARCH / ENGINEERING

PROJECT MANAGER

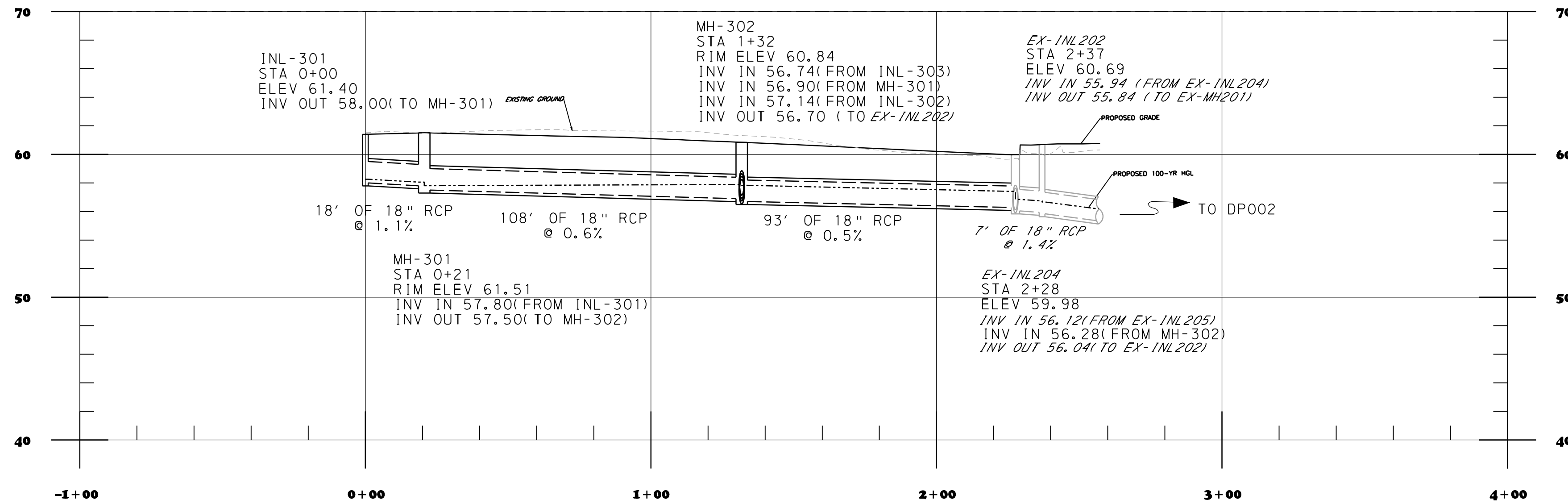


REV	DATE	DESCRIPTION	BY	CKD	APD

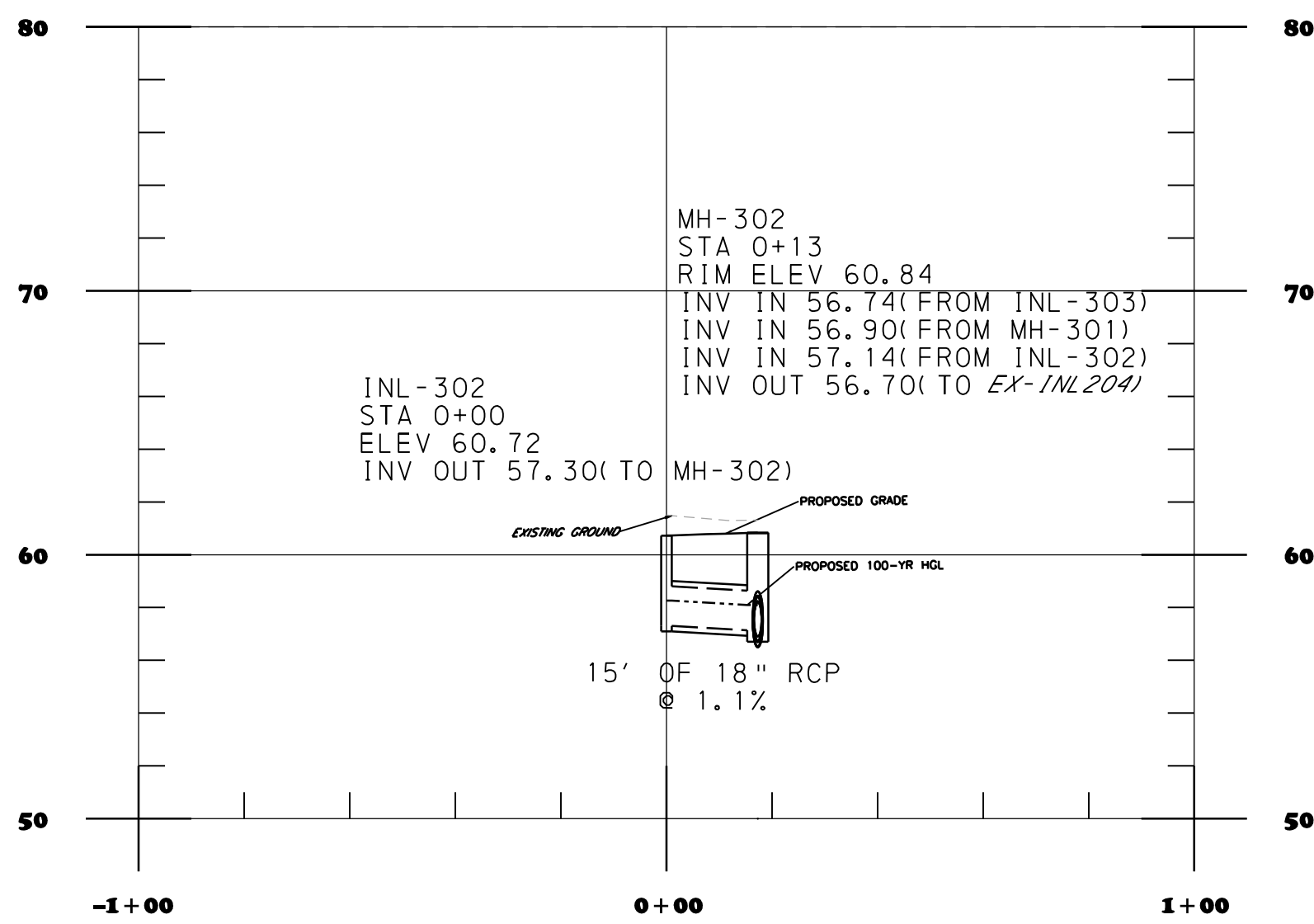
CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

SCALE:	1:20	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	CA
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	CA
DRAWING NUMBER:	C715		
DWG. NO.:	C069	OF:	C070
DIT. NO.:	73	OF:	081
COMPUTER FILE NO.:	21D-24-C715	REV. NO.:	0

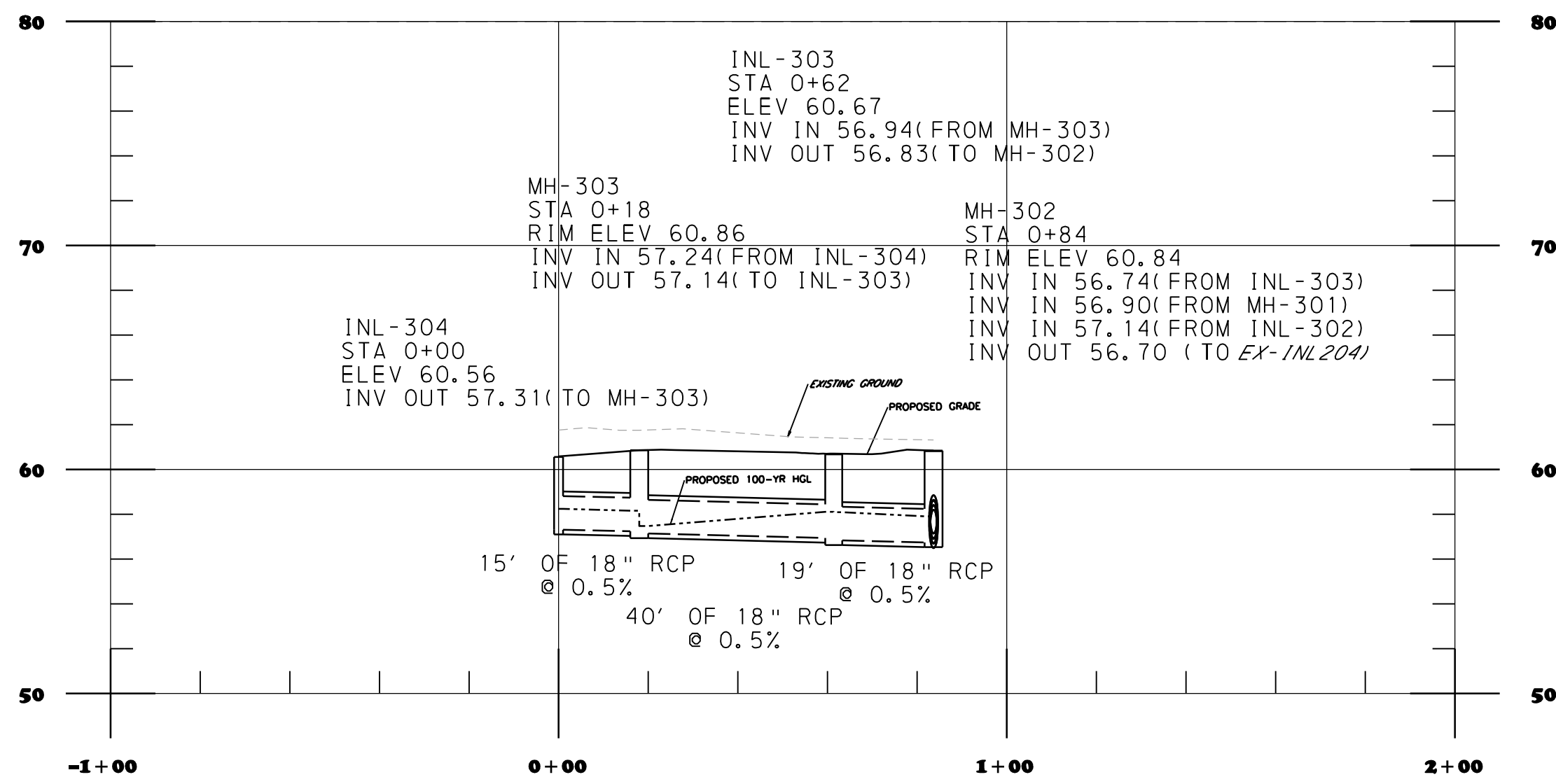
LAND DEVELOPMENT SUBMISSION



1 PIPE PROFILE: INL-301 TO EX-INL202
SCALE: 1" = 1' HORIZONTAL
1" = 5' VERTICAL



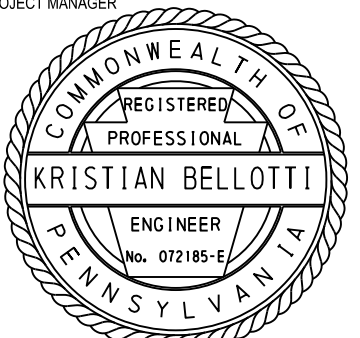
2 PIPE PROFILE: INL-302 TO MH-301
SCALE: 1" = 1' HORIZONTAL
1" = 5' VERTICAL



3 PIPE PROFILE: INL-304 TO MH-301
SCALE: 1" = 1' HORIZONTAL
1" = 5' VERTICAL

MANAGER - ARCHITECTURE

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CHKD	APD

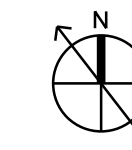
CONSHOHOCKEN RAILROAD STATION
MANAYUNK/RORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
CIVIL
DRAINAGE PROFILES

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 4/21/2024	DRAWN BY: CAL
WORK ORDER NO.: GEC21D-24	CHECKED BY: CMA
DRAWING NUMBER: C716	
DWG. NO.: C070 OF C070	
SHT. NO.: 74 OF 081	
COMPUTER FILE NO.: 21D-24-C716	REV. NO.: 0

LAND DEVELOPMENT SUBMISSION

STATISTICS (LIGHTING CALCULATIONS)

DESCRIPTION	TARGET AVG.	AVG	MAX	MIN	AVG/MIN	TARGET MAX/MIN	MAX/MIN
SELF PARKING LOT	2 FC	4.05 FC	8.4 FC	2.2 FC	1.84:1	4.00:1	3.82:1
PEDESTRIAN WALKWAYS	3 FC	4.89 FC	9.4 FC	2.4 FC	2.04:1	4.00:1	3.92:1



1 SITE LIGHTING ISOFOOTCANDLE PLAN
SCALE: 1" = 20'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EM&C DIVISION
1234 MARKET ST., 13TH FL.
PHILADELPHIA, PA 19107

CHIEF ENGINEER - EM&C

CHIEF ENGINEERING OFFICER - B&B

CHIEF RAIL TRANSIT OFFICER

SYSTEM SAFETY

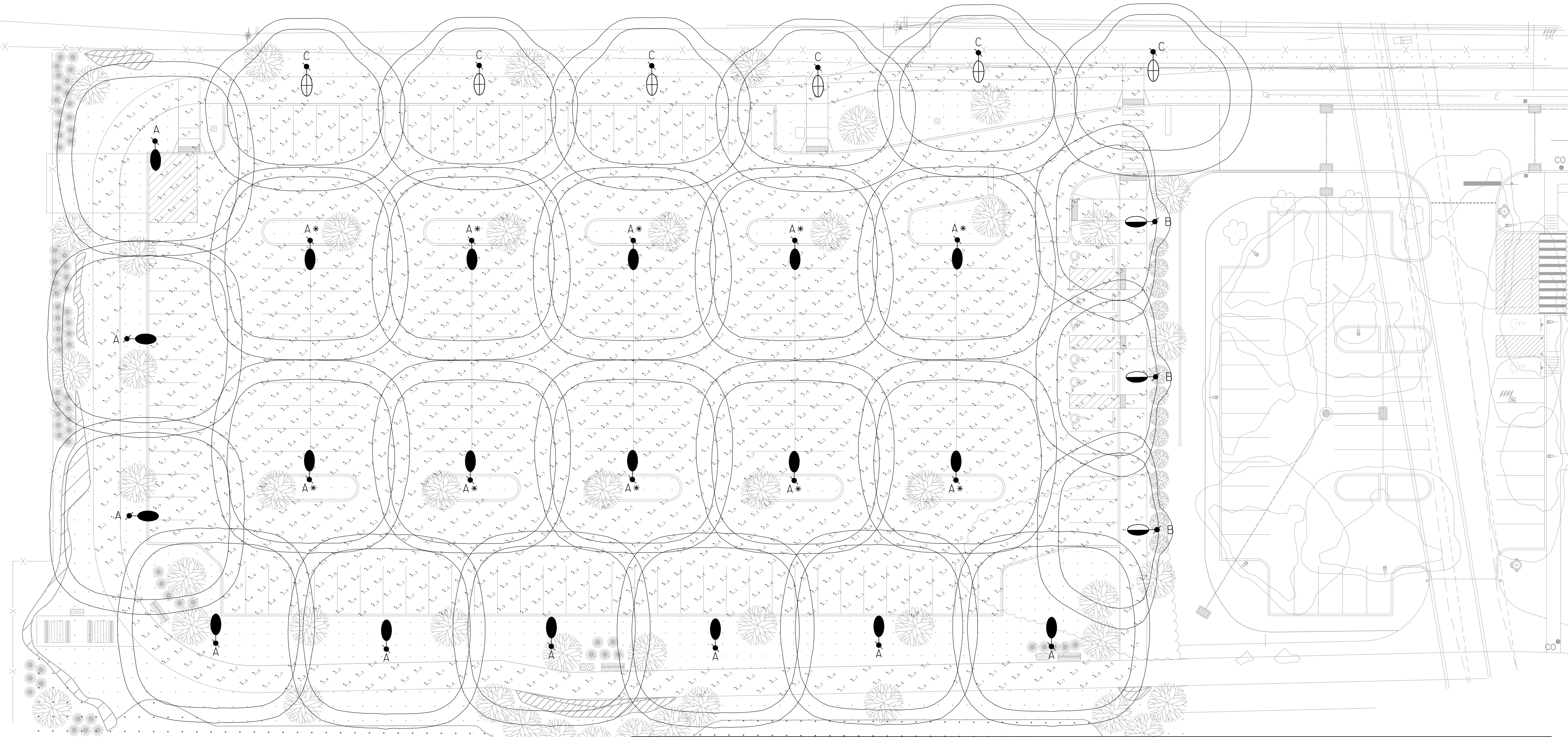
DIRECTOR OF ENGINEERING - B&B

MANAGER - ARCH / ENGINEERING

PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CKD	APD

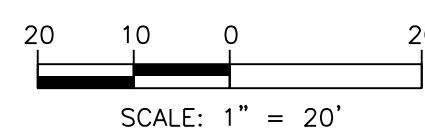


LEGEND

- SITE LIGHTING LUMINAIRE "A" ON PROPOSED 25' WOOD POLE (SEE LUMINAIRE SCHEDULE)
- SITE LIGHTING LUMINAIRE "B" ON PROPOSED 25' WOOD POLE (SEE LUMINAIRE SCHEDULE)
- SITE LIGHTING LUMINAIRE "C" ON PROPOSED 25' WOOD POLE (SEE LUMINAIRE SCHEDULE)
- EXISTING ELECTRIC/UTILITY WOOD POLE
- EXISTING OVERHEAD ELECTRIC LINE

LUMINAIRE SCHEDULE

SYMBOL	LABEL	MH	QTY	MANUFACTURER	DESCRIPTION	LAMP	NO. LAMPS	FILE NAME	LLF	WATTAGE
	A	15'	19	HOLOPHANE	MONGOOSE MEDIUM, P1 PERFORMANCE PACKAGE, 4000K, MEDIUM ROADWAY REFRACTOR, 7-PIN NLIGHT AIR NODE	LED	1	MGLEDM_P1_40K_XXXX_AR.IES	0.97	105
	B	15'	3	HOLOPHANE	MONGOOSE MEDIUM, P1 PERFORMANCE PACKAGE, 4000K, MEDIUM ROADWAY REFRACTOR, 7-PIN NLIGHT AIR NODE, HOUSESIDE SHIELDS	LED	1	MGLEDM_P1_40K_XXXX_FT_HSS.IES	0.97	105
	C	15'	6	HOLOPHANE	MONGOOSE MEDIUM, P1 PERFORMANCE PACKAGE, 4000K, MEDIUM ROADWAY REFRACTOR, 7-PIN NLIGHT AIR NODE	LED	1	MGLEDM_P1_40K_XXXX_FT.IES	0.97	105



CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
ELECTRICAL
SITE LIGHTING PLAN

SCALE: AS NOTED SCALE FACTOR: 1:1
DATE: 3/11/2024 DRAWN BY: DMH
WORK ORDER NO.: GEC21D-24 CHECKED BY: CJB
DRAWING NUMBER: **SL101**
DWG. NO.: SL01 OF SL02
SHT. NO.: 75 OF 081
COMPUTER FILE NO.: 21D-24-SL101 REV. NO.: 0

LAND DEVELOPMENT SUBMISSION

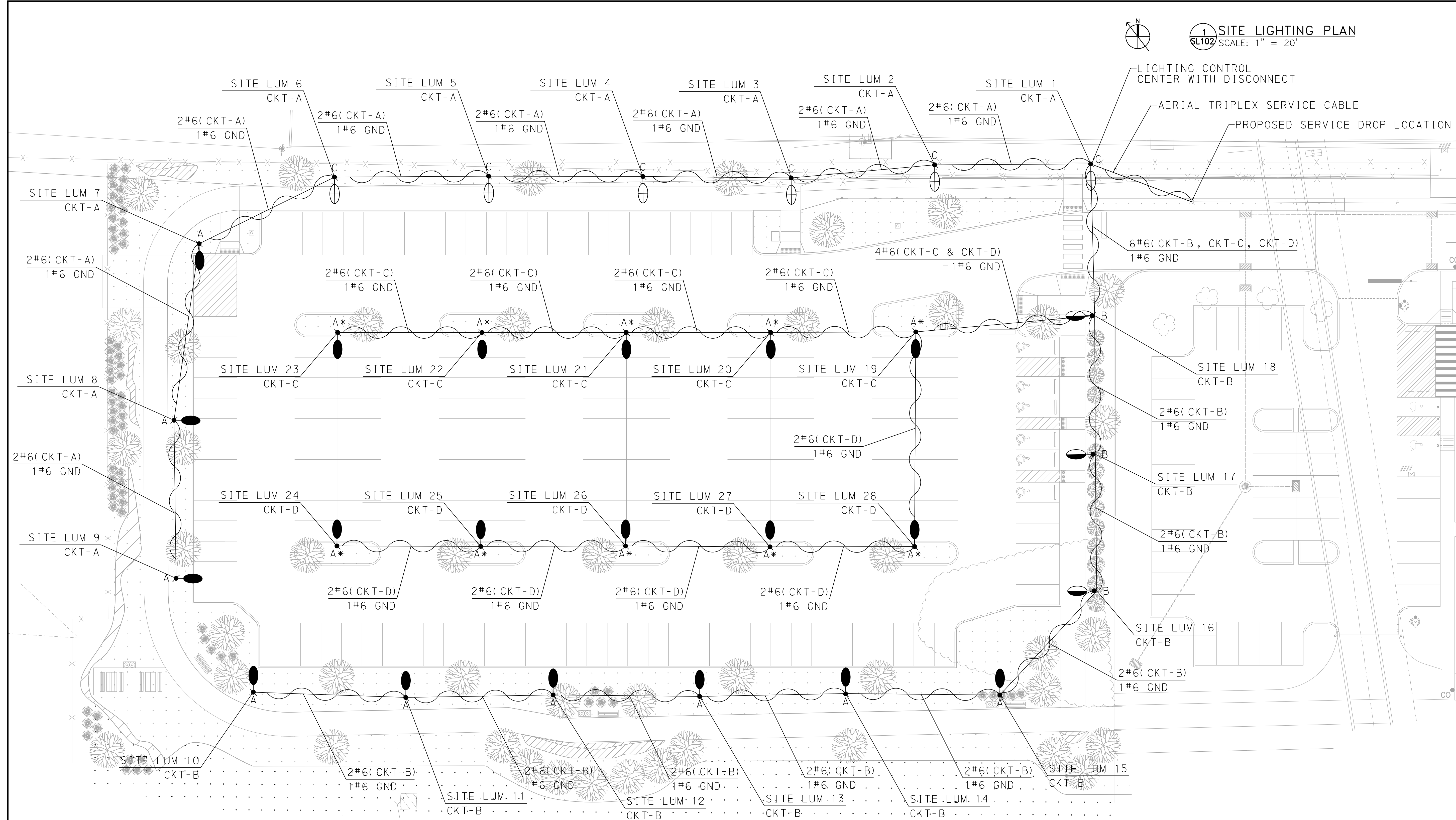
CHIEF ENGINEER - EM&C
CHIEF ENGINEERING OFFICER - BAB
CHIEF RAIL TRANSIT OFFICER
SYSTEM SAFETY
DIRECTOR OF ENGINEERING - BAB
MANAGER - ARCH / ENGINEERING
PROJECT MANAGER



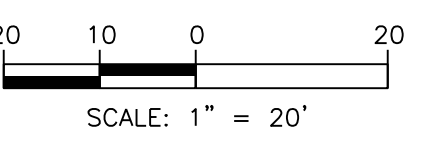
REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
ELECTRICAL
SITE LIGHTING PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 3/11/2024	DRAWN BY: DMH
WORK ORDER NO.: GEC21D-24	CHECKED BY: CJB
DRAWING NUMBER: SL102	
DWG. NO.: SL02 OF SL02	
SHT. NO.: 76 OF 081	
COMPUTER FILE NO.: 21D-24-SL102	REV. NO.: 0



NOTES
1. INSTALL AERIAL WIRE OVER TRAVELWAY AND PARKING LOT WITH A MINIMUM CLEARANCE OF 18' FROM FINAL GRADE



- LEGEND**
- SITE LIGHTING LUMINAIRE "A" ON PROPOSED 25' WOOD POLE (SEE LUMINAIRE SCHEDULE)
 - SITE LIGHTING LUMINAIRE "B" ON PROPOSED 25' WOOD POLE (SEE LUMINAIRE SCHEDULE)
 - SITE LIGHTING LUMINAIRE "C" ON PROPOSED 25' WOOD POLE (SEE LUMINAIRE SCHEDULE)
 - EXISTING ELECTRIC/UTILITY WOOD POLE
 - EXISTING OVERHEAD ELECTRIC LINE
 - AERIAL TRIPLEX SERVICE CABLE (LIGHTING)

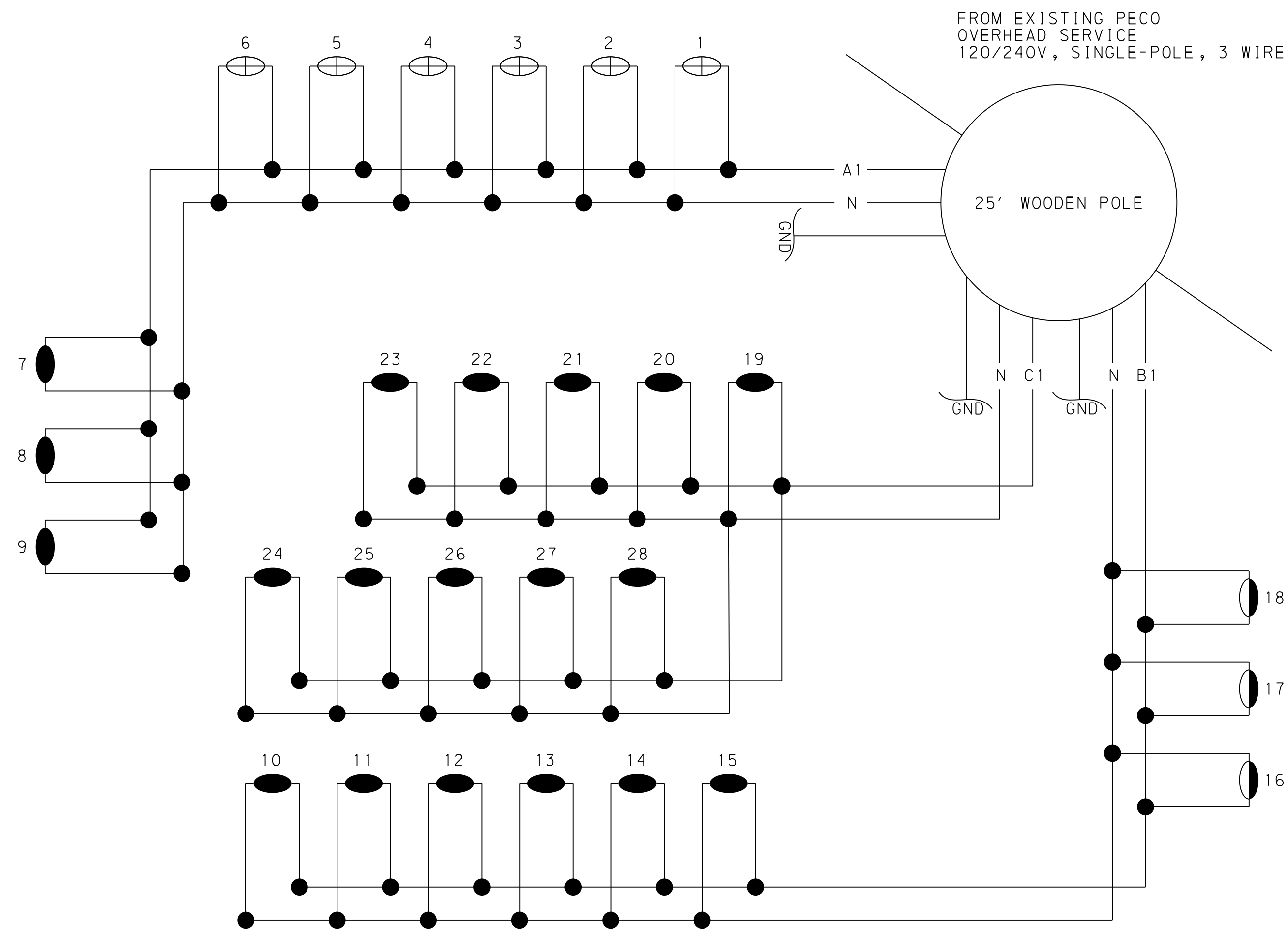
* - INSTALL LUMINAIRES WITH 3 DEGREE TILT

LAND DEVELOPMENT SUBMISSION

CHIEF ENGINEER - EM&C
CHIEF ENGINEERING OFFICER - B&B
CHIEF RAIL TRANSIT OFFICER
SYSTEM SAFETY
DIRECTOR OF ENGINEERING - B&B
MANAGER - ARCH / ENGINEERING
PROJECT MANAGER



REV	DATE	DESCRIPTION	BY	CKD	APD



ELECTRICAL SERVICE NOTES.
1. COORDINATE AERIAL ELECTRICAL SERVICE DROP WITH PECO ENERGY AND CONNECTION TO SERVICE HEAD.
2. PROVIDE METER ENCLOSURE PER PECO ENERGY SPECIFICATIONS AND A NEMA 3R LOCKABLE LOAD CENTER ON WOODEN POLE WITH MINIMUM 60 AMP MAIN CIRCUIT BREAKER.
3. USE RIGID METALLIC CONDUIT FOR SERVICE DROP AND ANY BRANCH CIRCUIT RISERS.
4. PROVIDE MINIMUM OF (8) 20 AMP SINGLE-POLE CIRCUIT BREAKERS IN LOAD CENTER.
5. PROVIDE A LOCKABLE 20 AMP GFCI DUPLEX RECEPTACLE BELOW LOAD CENTER.
6. PLACE EQUIPMENT ON POLE SO IT WILL BE EASILY ACCESSIBLE TO SERVICE PERSONNEL AND AWAY FROM ROADWAY.

NOTES

- GROUNDING CONDUCTOR NOT SHOWN BUT TO BE INCLUDED WITH ALL CIRCUITS.

1 SITE LIGHTING SCHEMATIC
SL103 NOT TO SCALE

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION
ELECTRICAL
SITE LIGHTING PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 01/11/2024	DRAWN BY: DMH CHECKED BY: CJB
WORK ORDER NO.:	
DRAWING NUMBER: SL103	
DWG. NO.:	OF
SHT. NO.: 77	OF 081
COMPUTER FILE NO.:	REV. NO.:

REV	DATE	DESCRIPTION	BY	CKD	APD

CONSHOHOCKEN RAILROAD STATION
MANAYUNK NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTION AND SIGNALS
COMMUNICATIONS LAYOUT PLAN

SCALE:	AS NOTED	SCALE FACTOR:	1:1
DATE:	11/1/2024	DRAWN BY:	DH
WORK ORDER NO.:	GEC21D-24	CHECKED BY:	JH
DRAWING NUMBER:	CS101		
DWG. NO.:	CS01	OF:	CS02
SHT. NO.:	78	OF:	081
COMPUTER FILE NO.:	21D-24-CS101	REV. NO.:	0

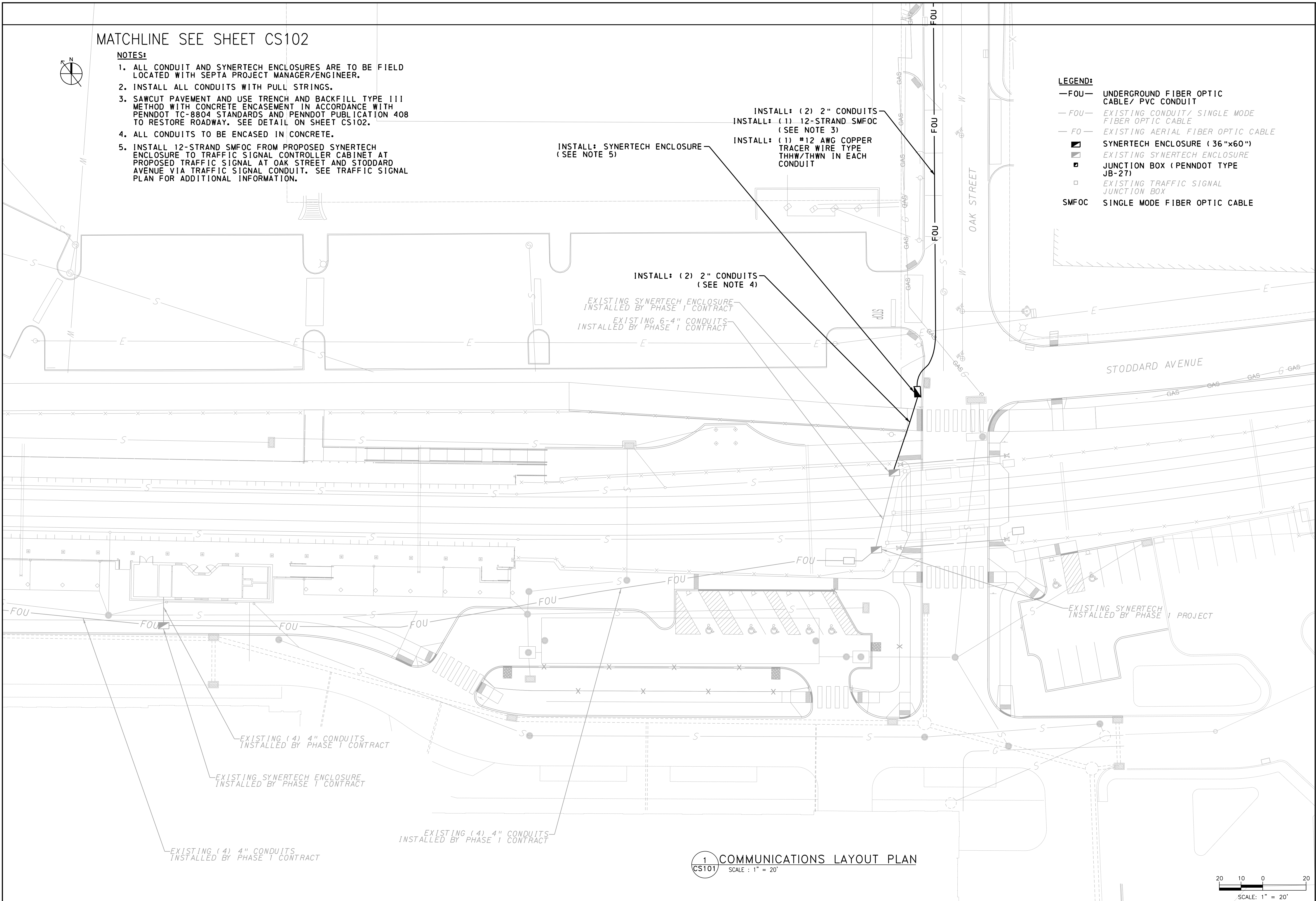
MATCHLINE SEE SHEET CS102

NOTES:

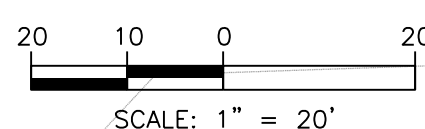
1. ALL CONDUIT AND SYNERTECH ENCLOSURES ARE TO BE FIELD LOCATED WITH SEPTA PROJECT MANAGER/ENGINEER.
2. INSTALL ALL CONDUITS WITH PULL STRINGS.
3. SAWCUT PAVEMENT AND USE TRENCH AND BACKFILL TYPE III METHOD WITH CONCRETE ENCASEMENT IN ACCORDANCE WITH PENNDOT TC-8804 STANDARDS AND PENNDOT PUBLICATION 408 TO RESTORE ROADWAY. SEE DETAIL ON SHEET CS102.
4. ALL CONDUITS TO BE ENCASED IN CONCRETE.
5. INSTALL 12-STRAND SMFOC FROM PROPOSED SYNERTECH ENCLOSURE TO TRAFFIC SIGNAL CONTROLLER CABINET AT PROPOSED TRAFFIC SIGNAL AT OAK STREET AND STODDARD AVENUE VIA TRAFFIC SIGNAL CONDUIT. SEE TRAFFIC SIGNAL PLAN FOR ADDITIONAL INFORMATION.

LEGEND:

- FOU— UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
- FOU— EXISTING CONDUIT/ SINGLE MODE FIBER OPTIC CABLE
- FO— EXISTING AERIAL FIBER OPTIC CABLE
- SYNERTECH ENCLOSURE (36"x60")
- ▣ EXISTING SYNERTECH ENCLOSURE
- JUNCTION BOX (PENNDOT TYPE JB-27)
- EXISTING TRAFFIC SIGNAL JUNCTION BOX
- SMFOC SINGLE MODE FIBER OPTIC CABLE



1 COMMUNICATIONS LAYOUT PLAN
SCALE: 1" = 20'

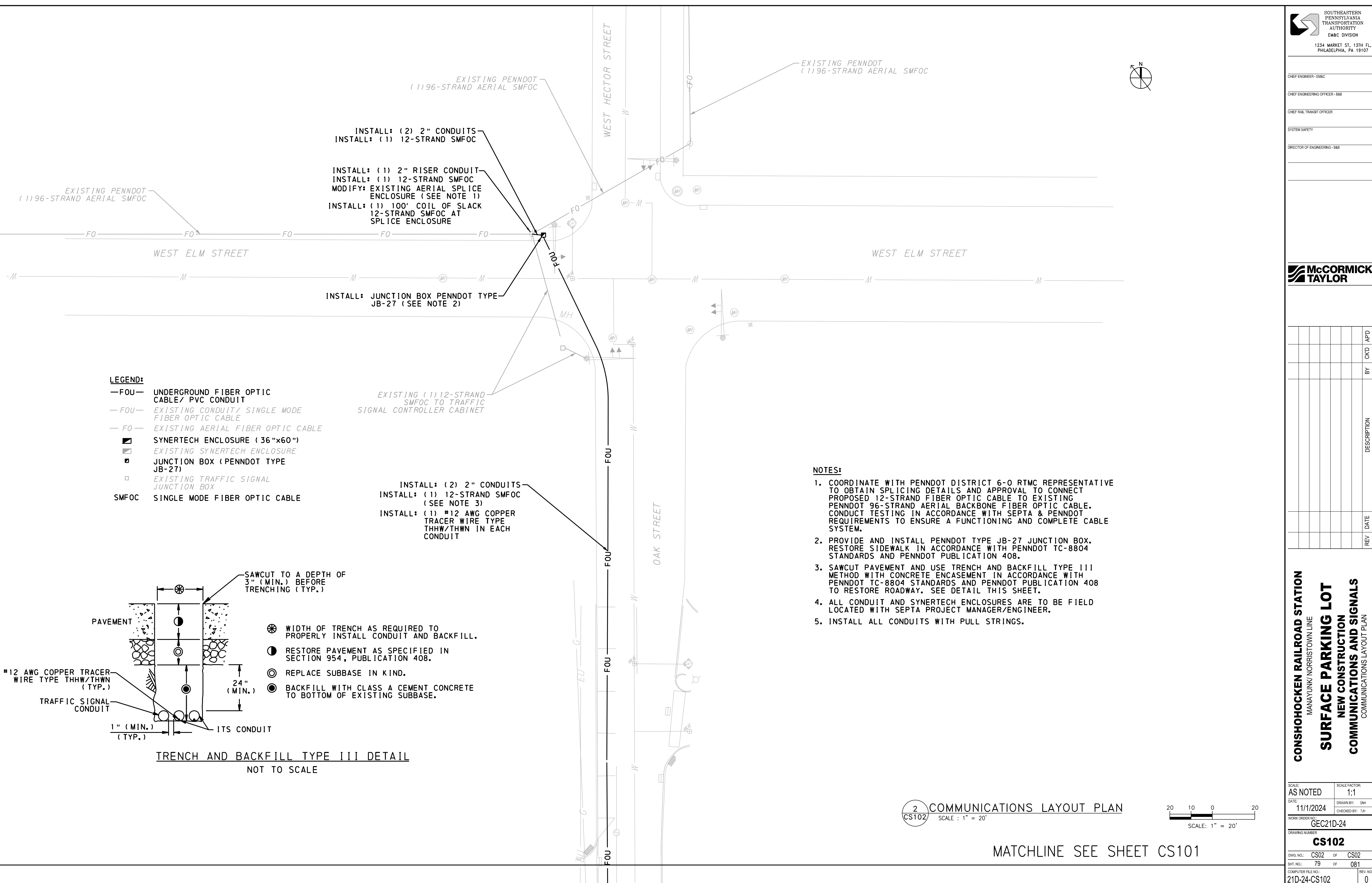
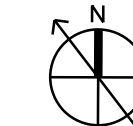


LAND DEVELOPMENT SUBMISSION

REV	DATE	DESCRIPTION	BY	CKD	APD

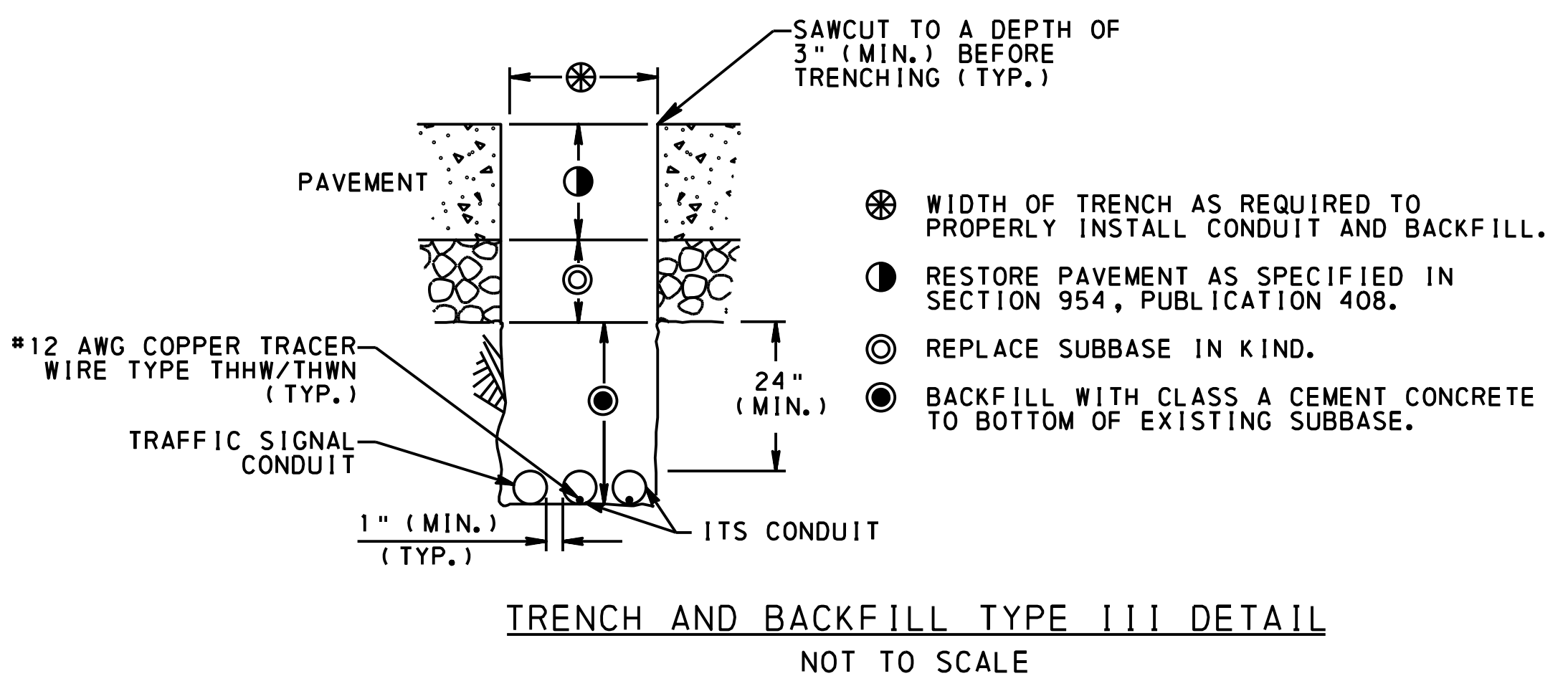
CONSHOHOCKEN RAILROAD STATION
MANAYUNK/NORRISTOWN LINE
SURFACE PARKING LOT
NEW CONSTRUCTIONS AND SIGNALS
COMMUNICATIONS LAYOUT PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: 11/1/2024	DRAWN BY: DMH
WORK ORDER NO.: GEC21D-24	CHECKED BY: TAJ
DRAWING NUMBER: CS102	
DWG. NO.: CS02 OF CS02	
SHT. NO.: 79 OF 081	
COMPUTER FILE NO.: 21D-24-CS102	REV. NO.: 0

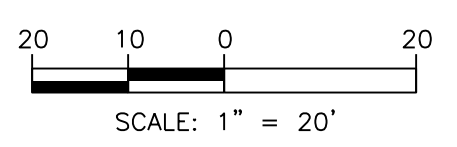


- LEGEND:**
- FOU— UNDERGROUND FIBER OPTIC CABLE/ PVC CONDUIT
 - FOU— EXISTING CONDUIT/ SINGLE MODE FIBER OPTIC CABLE
 - FO— EXISTING AERIAL FIBER OPTIC CABLE
 - ▣ SYNERTECH ENCLOSURE (36"x60")
 - ▣ EXISTING SYNERTECH ENCLOSURE
 - ▣ JUNCTION BOX (PENNDOT TYPE JB-27)
 - ▣ EXISTING TRAFFIC SIGNAL JUNCTION BOX
 - SMFOC SINGLE MODE FIBER OPTIC CABLE

- NOTES:**
- COORDINATE WITH PENNDOT DISTRICT 6-0 RTMC REPRESENTATIVE TO OBTAIN SPLICING DETAILS AND APPROVAL TO CONNECT PROPOSED 12-STRAND FIBER OPTIC CABLE TO EXISTING PENNDOT 96-STRAND AERIAL BACKBONE FIBER OPTIC CABLE. CONDUCT TESTING IN ACCORDANCE WITH SEPTA & PENNDOT REQUIREMENTS TO ENSURE A FUNCTIONING AND COMPLETE CABLE SYSTEM.
 - PROVIDE AND INSTALL PENNDOT TYPE JB-27 JUNCTION BOX. RESTORE SIDEWALK IN ACCORDANCE WITH PENNDOT TC-8804 STANDARDS AND PENNDOT PUBLICATION 408.
 - SAWCUT PAVEMENT AND USE TRENCH AND BACKFILL TYPE III METHOD WITH CONCRETE ENCASEMENT IN ACCORDANCE WITH PENNDOT TC-8804 STANDARDS AND PENNDOT PUBLICATION 408 TO RESTORE ROADWAY. SEE DETAIL THIS SHEET.
 - ALL CONDUIT AND SYNERTECH ENCLOSURES ARE TO BE FIELD LOCATED WITH SEPTA PROJECT MANAGER/ENGINEER.
 - INSTALL ALL CONDUITS WITH PULL STRINGS.



2 COMMUNICATIONS LAYOUT PLAN
CS102 SCALE: 1" = 20'



MATCHLINE SEE SHEET CS101

LAND DEVELOPMENT SUBMISSION

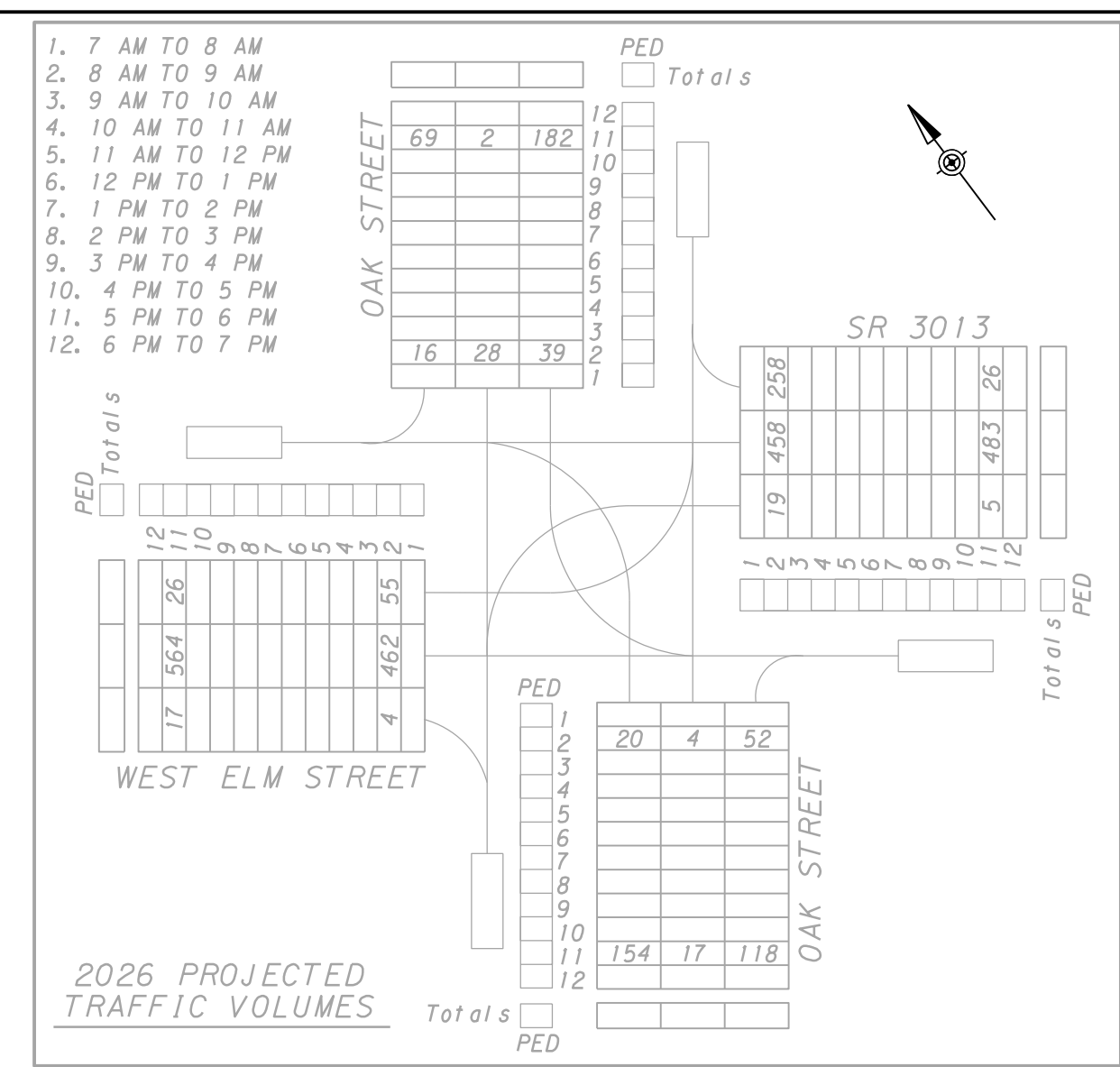
MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	2+5				2+6				4+8				QUEUE CLEARANCE			FLASH
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
SIGNALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	Y
2	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	Y
3,4	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	Y
5,6	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	Y
7	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	Y
8	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	Y
9	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	OFF
10,11	M	FH	H	H	M	FH	H	H	H	H	H	H	H	H	H	OFF
12,13	H	H	H	H	M	FH	H	H	H	H	H	H	H	H	H	OFF
14,15	H	H	H	H	H	H	H	H	M	FH	H	H	H	H	H	OFF
16,17	H	H	H	H	H	H	H	H	M	FH	H	H	H	H	H	OFF
FIXED			3	3			3	3			4	3	**	4	3	
MINIMUM			3				15				3					
PASSAGE			≠				≠				≠					
MAXIMUM 1			7				25				20					
PEDESTRIAN*	③				7	15			7	18						
MEMORY	NL				SVR				NL							

- SIGNAL SHALL BE EQUIPPED WITH ACCESSIBLE PEDESTRIAN SIGNALS (APS) WITH THE FOLLOWING FEATURES:
 - ADA COMPLIANT PUSHBUTTON WITH LATCHING LED INDICATOR AND TONE.
 - A TACTILE DIRECTIONAL ARROW ALIGNED PARALLEL TO THE CROSSING AND WHICH VIBRATES DURING THE WALK INDICATION.
 - A PUSHBUTTON LOCATOR TONE. THE LOCATOR TONE SHALL HAVE A DURATION OF 0.15 SECONDS AND REPEAT AT 1 SECOND INTERVALS, SHALL BE INTENSITY RESPONSIVE TO AMBIENT SOUND, AND AUDIBLE FROM 6 TO 12 FEET FROM THE PUSHBUTTON.
 - ACTUATION OF THE PEDESTRIAN PUSHBUTTON SHALL BE ACCOMPANIED BY THE SPEECH MESSAGE "WAIT" WHEN THE WALK INTERVAL IS NOT TIMING.
 - THE WALK INDICATION SHALL BE THE SPEECH MESSAGE: "(STREET NAME). WALK SIGN IS ON TO CROSS (STREET NAME)."

CONTRACTOR NOTES

- CONTROLLER AND PHASING TO BE MODIFIED TO ACCEPT QUEUE PRE-EMPT A CALLS FROM THE QUEUE CUTTER SIGNAL AT THE OAK STREET CROSSING.
- A 7C/14 CABLE TO BE RUN FROM THE QUEUE CUTTER SIGNAL AT OAK ST AND STODDARD AVE TO THE CONTROLLER CABINET.
- REPLACE EXISTING SIGNAL 7 WITH A 5-SECTION SIGNAL AS SHOWN, PROVIDE 7C/14 WIRING BACK TO THE CONTROLLER AS NEEDED USING EXISTING CONDUIT.



REFER TO SYSTEM PERMIT # 1-0085 FOR ADAPTIVE OPERATION.

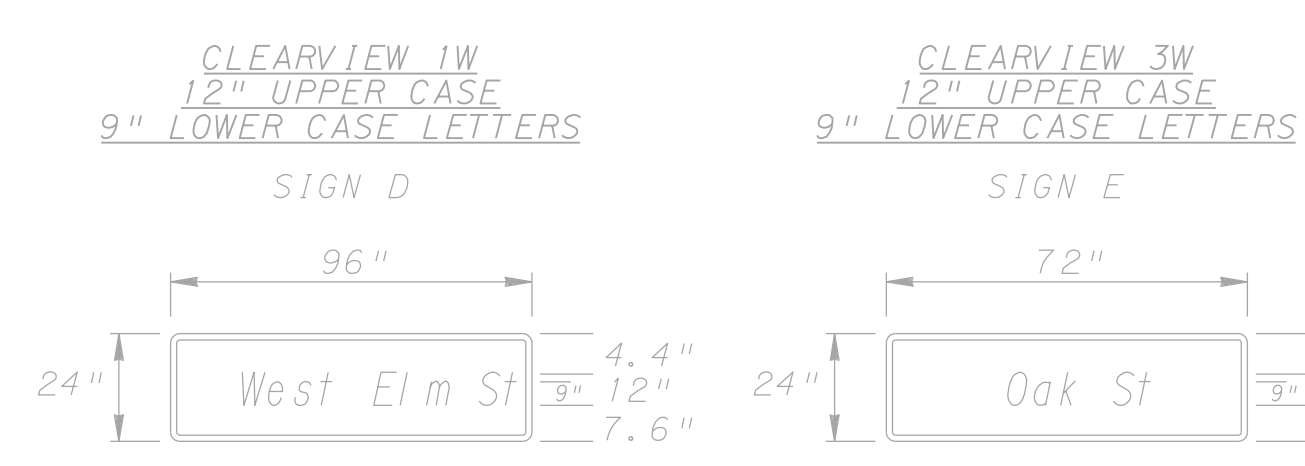
- * UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND SYMBOL AT ALL TIMES.
- ** SHALL REMAIN IN EFFECT UNTIL THE CALL IS LOST OR A MAXIMUM PREEMPTION TIMER IS REACHED.
- PEDESTRIAN COUNTDOWN TIMER TO COUNT DOWN DURING FLASHING HAND INTERVAL.

OPERATION NOTES

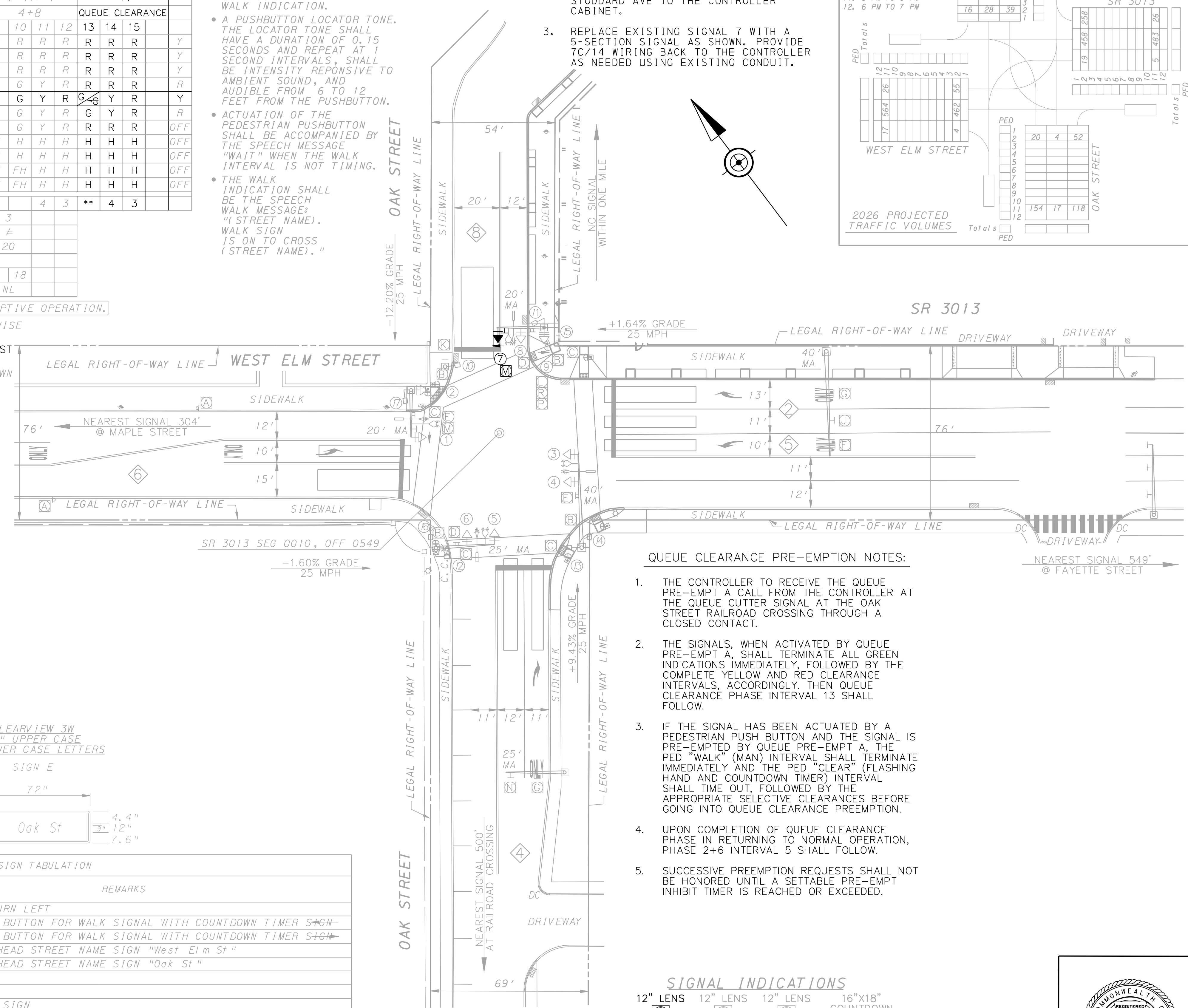
- IF FOLLOWED BY PHASE 2+6.
- IF FOLLOWED BY PHASE 2+6.
- TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6

≠ PHASE PASSAGE CALCULATED BY TRAFFIC ADAPTIVE PROCESSOR

- PHASE SEQUENCE SELECTED BY TRAFFIC ADAPTIVE PROCESSOR
- TRAFFIC ADAPTIVE SHALL NOT ALLOW YELLOW TRAP: -PHASE 2+5 SHALL NOT FOLLOW 2+6
- TRAFFIC ADAPTIVE SYSTEM TO OPERATE WITH PEDESTRIAN MODULE



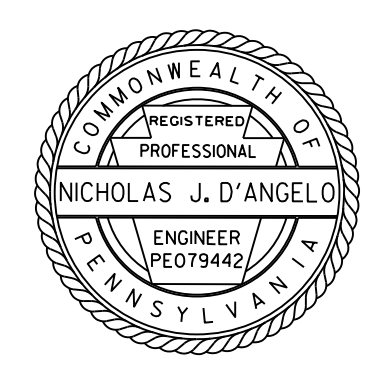
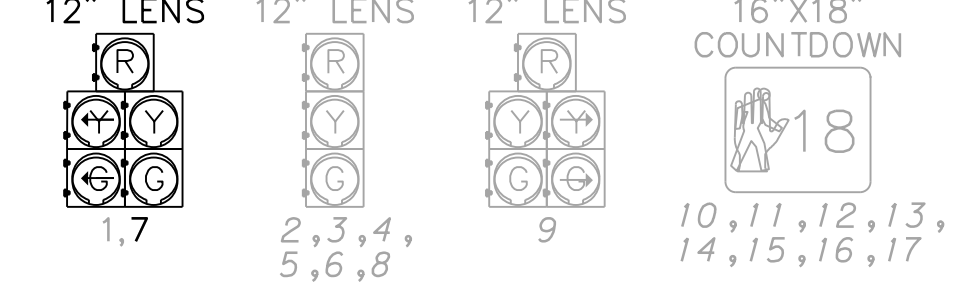
PLAN SYMBOL	SERIES NUMBER	SIZE	REMARKS
(A)	R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
(B)	R10-3E(L)	9"x15"	EDUCATIONAL PUSH BUTTON FOR WALK SIGNAL WITH COUNTDOWN TIMER SIGN
(C)	R10-3E(R)	9"x15"	EDUCATIONAL PUSH BUTTON FOR WALK SIGNAL WITH COUNTDOWN TIMER SIGN
(D)	D3-4	96"x24"	SINGLE-LINE OVERHEAD STREET NAME SIGN "West Elm St"
(E)	D3-4	72"x24"	SINGLE-LINE OVERHEAD STREET NAME SIGN "Oak St"
(F)	R3-5L	30"x36"	LEFT TURN SIGNAL
(G)	R3-5R	30"x36"	RIGHT TURN SIGNAL
(H)	R3-5A	30"x36"	STRAIGHT THROUGH SIGN
(I)	R10-11	24"x30"	NO TURN ON RED
(J)	R10-11	30"x36"	NO TURN ON RED
(K)	R10-12	30"x36"	LEFT TURN YIELD ON GREEN
(L)	R3-6LS	30"x36"	OPTIONAL LEFT TURN SIGNAL
(M)	R5-2	24"x24"	NO TRUCK SIGN
(N)	R10-10R	24"x30"	RIGHT TURN SIGNAL



QUEUE CLEARANCE PRE-EMPTION NOTES:

- THE CONTROLLER TO RECEIVE THE QUEUE PRE-EMPT A CALL FROM THE CONTROLLER AT THE QUEUE CUTTER SIGNAL AT THE OAK STREET RAILROAD CROSSING THROUGH A CLOSED CONTACT.
- THE SIGNALS, WHEN ACTIVATED BY QUEUE PRE-EMPT A, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS, ACCORDINGLY, THEN QUEUE CLEARANCE PHASE INTERVAL 13 SHALL FOLLOW.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON AND THE SIGNAL IS PRE-EMPTED BY QUEUE PRE-EMPT A, THE PED "WALK" (MAN) INTERVAL SHALL TERMINATE IMMEDIATELY AND THE PED "CLEAR" (FLASHING HAND AND COUNTDOWN TIMER) INTERVAL SHALL TIME OUT, FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES BEFORE GOING INTO QUEUE CLEARANCE PREEMPTION.
- UPON COMPLETION OF QUEUE CLEARANCE PHASE IN RETURNING TO NORMAL OPERATION, PHASE 2+6 INTERVAL 5 SHALL FOLLOW.
- SUCCESSIVE PREEMPTION REQUESTS SHALL NOT BE HONORED UNTIL A SETTABLE PRE-EMPT INHIBIT TIMER IS REACHED OR EXCEEDED.

SIGNAL INDICATIONS



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	3013		TS01

BOROUGH OF CONSHOHOCKEN				
REVISION NUMBER	REVISIONS	DATE	BY	

TRAFFIC SIGNAL NOTES

DO NOT MODIFY INSTALLATION WITHOUT PRIOR WRITTEN APPROVAL.

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH PUBLICATION 212.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND FACE OF CURB OR EDGE OF SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FEET ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FEET ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH FLOURESCENT YELLOW RETROREFLECTIVE BACKPLATES.

DETERMINE, PRIOR TO INSTALLATION, THE EXACT LOCATION OF DETECTORS WITH A REPRESENTATIVE OF PENNDOT.

ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING PENNDOT PUBLICATIONS:

- PUB 408 / 2020, SPECIFICATIONS
- PUB 148, TRAFFIC STANDARDS-SIGNALS, TC-8800 SERIES
- PUB 149, TRAFFIC SIGNAL DESIGN HANDBOOK
- PUB 236, HANDBOOK OF APPROVED SIGNS

THE TRAFFIC SIGNAL SUPPORTS SHALL BE LOCATED IN THE FIELD BY A PENNDOT RESIDENT ENGINEER.

THE CONTRACTOR SHALL COMPLETE THE NECESSARY APPLICATION(S) IN ORDER TO OBTAIN ELECTRICAL SERVICE FROM THE LOCAL POWER COMPANY.

THE CONTRACTOR SHALL INSTALL ALL NEW TRAFFIC SIGNAL EQUIPMENT AND RELATED MATERIALS.

ALL EXISTING TRAFFIC SIGNAL EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF BOROUGH OF CONSHOHOCKEN, UNLESS OTHERWISE DIRECTED BY THE TOWNSHIP ENGINEER.

PAVEMENT MARKINGS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, REFER TO PAVEMENT MARKING PLAN FOR INSTALLATION DETAILS.

REFER TO THE ROADWAY CONSTRUCTION PLANS FOR THE LOCATION OF UTILITIES AND PROPERTY OWNER INFORMATION.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST AMENDMENT TO ACT 287, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES, DATED DECEMBER 20, 1974.

LEGEND

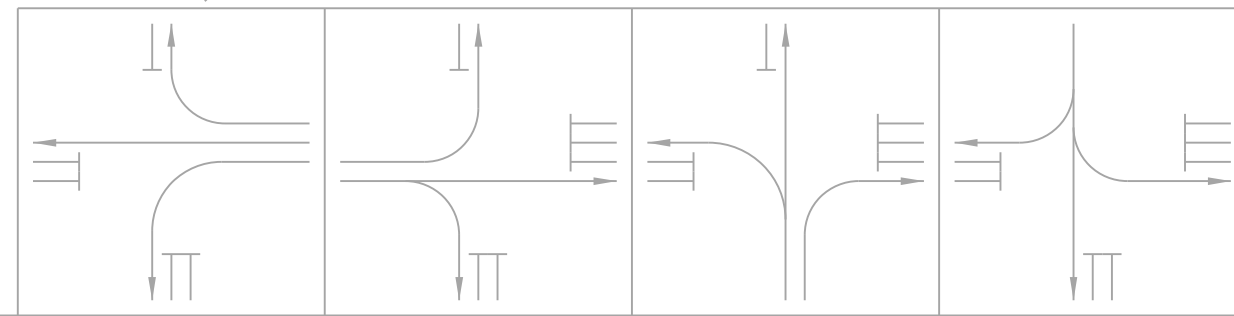
25' MA	MAST ARM/IDENTIFYING LENGTH
⊠	PEDESTAL POLE
⊞	PUSHBUTTON POLE
⊞	VEHICULAR SIGNAL HEAD/BACKPLATE/TUNNEL VISOR/DIRECTIONAL ARROW/IDENTIFYING NUMBER
⊞	PEDESTRIAN SIGNAL HEAD/IDENTIFYING NUMBER
⊞	PEDESTRIAN PUSHBUTTON AND SIGN/IDENTIFYING LETTER
⊞	SIGN/IDENTIFYING LETTER
⊞	THERMAL DETECTOR
⊞	ZONE OF DETECTION (VARIABLE SIZE)
⊞	DETECTABLE WARNING SURFACE
⊞	EMERGENCY PRE-EMPTION DETECTOR
⊞	EMERGENCY PRE-EMPTION FLASHING BEACON
C.C. ⊞	CONTROLLER CABINET
DC	DEPRESSED CURB
15' LA	LUMINAIRE/IDENTIFYING LENGTH
—	FENCE
—	GUIDE RAIL
⊞	UTILITY POLE
⊞	PHASE NUMBER

COUNTY:	MONTGOMERY
MUNICIPALITY:	BOROUGH OF CONSHOHOCKEN
INTERSECTION:	OAK STREET AND STODDARD AVENUE

REVIEWED:	DATE
MUNICIPAL OFFICIAL	DATE
RECOMMENDED:	DATE
DISTRICT TRAFFIC ENGINEER	DATE
FILE # 64-3014	SYSTEM FILE # 3014

\\highdell\Projects\9591_PA_Sep16_GEC\29_Conshohocken_Parking_Design\300_CADD\Plan_Set\Civil\Files\#2014_Rev_5 - Construction Plan.dgn
 \$DATE\$ \$TIME\$ \$USER\$ Traffic Planning and Design, Inc.

EMERGENCY PRE-EMPTION PHASING
 MOVEMENT, SEQUENCE AND TIMING DIAGRAM



PHASE	2			6			4			8		
SIGNALS	16	17	18	19	20	21	22	23	24	25	26	27
1	G	Y [Ⓞ]	R [Ⓞ]	R	R	R	R	R	R	R	R	R
2	G	Y [Ⓞ]	R [Ⓞ]	R	R	R	R	R	R	R	R	R
3,4	R	R	R	G	Y [Ⓞ]	R [Ⓞ]	R	R	R	R	R	R
5,6	R	R	R	R	R	R	R	R	R	G	Y	R
7	R	R	R	R	R	R	G	Y	R	R	R	R
8	R	R	R	R	R	R	R	R	R	R	R	R
9	R	R	R	R	R	R	R	R	R	R	R	R
10,11	H	H	H	H	H	H	H	H	H	H	H	H
12,13	H	H	H	H	H	H	H	H	H	H	H	H
14,15	H	H	H	H	H	H	H	H	H	H	H	H
16,17	H	H	H	H	H	H	H	H	H	H	H	H
FIXED TIME	*	3	3	*	3	3	*	4	3	*	4	3

* FOR DURATION OF PRE-EMPTION

NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

Ⓞ SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.

Ⓟ SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.

EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE NORTHBOUND AND SOUTHBOUND APPROACHES OF OAK STREET AND THE EASTBOUND AND WESTBOUND APPROACHES OF WEST ELM STREET (SR 3013) WITH A FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- PRE-EMPTION PHASE 2 TO ALSO BE CALLED UPON ACTIVATION OF PRE-EMPTION DETECTOR 8B AT THE INTERSECTION OF FAYETTE STREET AND ELM STREET USING PEER TO PEER CONTROLLER COMMUNICATION VIA FIBER OPTIC CABLE CONNECTION BETWEEN INTERSECTIONS. THE USE OF EXTENSIONS AND DELAYS TO BE FIELD ADJUSTED TO ACHIEVE OPTIMAL OPERATION.
- THE SIGNALS, WHEN ACTIVATED BY EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS, ACCORDINGLY. THEN THE GREEN INTERVAL FOR THE PRE-EMPTION PHASE SHALL FOLLOW. ONLY THOSE PHASES NOT POSING A YELLOW TRAP CONDITION MAY REMAIN GREEN (2+5) WHEN GOVERNED BY APPROACHING EMERGENCY VEHICLE.
- THE SIGNALS, WHEN ACTIVATED BY EMERGENCY VEHICLE SHALL TIME OUT ALL YELLOW AND RED INDICATIONS, FOLLOWED BY THE GREEN INTERVAL OF THE PRE-EMPTION PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON AND THE SIGNAL IS PRE-EMPTED, THE PED "WALK" (MAN) INTERVAL SHALL TERMINATE IMMEDIATELY AND THE PED "CLEAR" (FLASHING HAND AND COUNTDOWN TIMER) INTERVAL SHALL TIME OUT, FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES BEFORE GOING INTO EMERGENCY PREEMPTION.
- IF THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, ARE FLASHING ALL SIGNALS SHALL REMAIN FLASHING.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- UPON COMPLETION OF PRE-EMPTION PHASE 2,4,6 OR 8 IN RETURNING TO NORMAL OPERATION, PHASE 2+6 INTERVAL 5 SHALL FOLLOW.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVE" OPERATION.
- LOCATION OF EMERGENCY VEHICLE DETECTORS ARE TO BE FIELD ADJUSTED TO ACHIEVE MAXIMUM OPERATION.

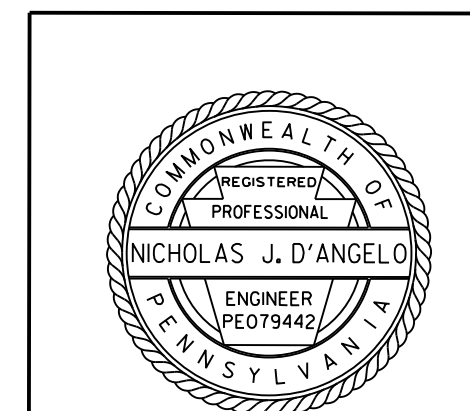
MATERIALS LIST

DESCRIPTION
SIGNAL CABLE, 14 AWG, 7 CONDUCTOR
VEHICULAR SIGNAL HEAD, FIVE 12" SECTIONS
CONTROLLER MODIFICATION, RETIMING

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	3013		TS02
BOROUGH OF CONSHOHOCKEN				
REVISION NUMBER	REVISIONS			DATE BY

TRAFFIC SIGNAL NOTES

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COUNTY: MONTGOMERY

MUNICIPALITY: BOROUGH OF CONSHOHOCKEN

INTERSECTION: OAK STREET AND STODDARD AVENUE

REVIEWED: _____

MUNICIPAL OFFICIAL _____ DATE _____

RECOMMENDED: _____

DISTRICT TRAFFIC ENGINEER _____ DATE _____

FILE # 64-3014 SYSTEM FILE # 3014

LAND DEVELOPMENT SUBMISSION



BOROUGH OF CONSHOHOCKEN

Fire Marshal

MAYOR

Yaniv Aronson

BOROUGH COUNCIL

Tina Sokolowski, President
Kathleen Kingsley, Vice-President
Anita Barton, Senior Member
Alan Chmielewski, Member
Stacy Ellam, Member
Ralph Frey, Member
Adrian Serna, Member

Stephanie Cecco
Borough Manager

Date: November 5, 2024

To: Stephanie Cecco, Borough Manager

From: Timothy Gunning, Fire Marshal
Matthew Traynor, Commercial Building Inspector

Re: Fire Marshal Review
LD-2024-06 - SEPTA Surface Parking Lot
Waiver of Land Development Application

As requested, the following materials submitted for the above referenced waiver of land development application were reviewed:

- "Conshohocken Railroad Station Manayunk/Norristown Line Station Construction, Surface Parking Lot" (81 sheets) prepared by Southeastern Pennsylvania Transportation Authority (SEPTA), dated November 1, 2024.

We have no comments based on the information provided.

**MONTGOMERY COUNTY
BOARD OF COMMISSIONERS**

JAMILA H. WINDER, CHAIR
NEIL K. MAKHIJA, VICE CHAIR
THOMAS DIBELLO, COMMISSIONER

WWW.MONTGOMERYCOUNTYPA.GOV



**MONTGOMERY COUNTY
PLANNING COMMISSION**

MONTGOMERY COUNTY • PO Box 311
NORRISTOWN, PA 19404-0311

610-278-3722
PLANNING@MONTGOMERYCOUNTYPA.GOV

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

December 5, 2024

Ms. Stephanie Cecco, Borough Manager
Borough of Conshohocken
400 Fayette Street, Suite 200
Conshohocken, Pennsylvania 19428

Re: MCPC #19-0175-003
Plan Name: SEPTA Surface Parking Lot- Conshohocken Railroad Station
1 lot/183 parking spaces/+/- 1.88 acres-*disturbance* – 6.32 acre lot
Washington Street/west of the Conshohocken Regional Rail Station
Borough of Conshohocken

Dear Ms. Cecco:

We have reviewed the above-referenced land development plan in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on November 1, 2024. We forward this letter as a report of our review.

BACKGROUND

The applicant, the Southeastern Pennsylvania Transportation Authority (SEPTA), has submitted a land development plan seeking preliminary plan approval for the construction of the following:

- A temporary surface parking lot with 183 parking spaces, located west of the new SEPTA Conshohocken Regional Rail Station
- ADA-Accessibility improvements including, ADA parking spaces, sidewalk ramps
- Stormwater management facilities
- A multi-use trail along the southern edge of the site's development

The proposed surface parking lot within the FEMA 100-year floodplain is Tax Parcel #65-00-05581-01-5, a 6.32 acre parcel located in the borough's HVY-Heavy Industrial District, the RDD-Riverfront Development Overlay District (RDD-3 Subdistrict) and in the Floodplain Conservation District. The applicant's submitted documentation states that they have received the required



variances necessary to construct a parking lot in the AE Area of the Floodplain Conservation District. The applicant is requesting three substantive waivers from the borough's SALDO requirements:

- A waiver of Section 22-404.3.F.(6)- To permit the parking stall size of parking lot to be 8.5' X 18' rather than the required 9.0' X 18' parking stall.
- A waiver of Section 22-405(1).(c).- The requirement for 15' wide sidewalk width in this district.
- A waiver of Section 22-804- To permit the temporary parking lot to be constructed without any dedication of land for park and recreational use or payment of fee-in-lieu.

The applicant's tract was the subject of a multi-phased improvements plan for the Conshohocken Regional Rail Station. This development plan proposed the construction of a 191 space surface parking lot, a 3-level parking garage with 343 spaces, and other site improvements. This plan was reviewed by the planning commission in a review letter dated July 27, 2022 to the borough. According to the applicant's documentation, the proposed SEPTA parking garage was removed from the project scope in late 2023.

RECOMMENDATION & COMMENT

The Montgomery County Planning Commission has reviewed the proposed temporary surface parking lot and we have not identified any significant land use, transportation, design, or other issues that should be addressed in the consideration of this proposal. Therefore, we have no substantive comments. Nevertheless, the municipal staff should ensure that the proposal meets all appropriate municipal land use regulations and other codes prior to granting approval.

CONCLUSION

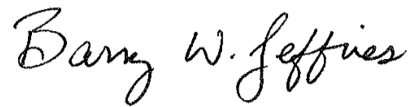
Please note that any review comment, recommendation, or the lack thereof contained in this report are advisory to the borough and final disposition for the approval of any proposal will be made by the municipality.

Please be aware that the MCPC #19-0175-003 has been set aside for the applicant's plan. If any subsequent plans are submitted for final recording, this MCPC number should appear on the applicant's sheets within the plans, in the box reserved for the seal of this agency.

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.

A paper copy bearing the municipal seal and signatures of approval must be supplied for our files.

Sincerely,

A handwritten signature in black ink that reads "Barry W. Jeffries". The signature is written in a cursive, flowing style.

Barry W. Jeffries, ASLA, Senior Design Planner

Barry.Jeffries@montgomerycountypa.gov , 610.278.3444

c:

Robert Tangi, Applicant's representative

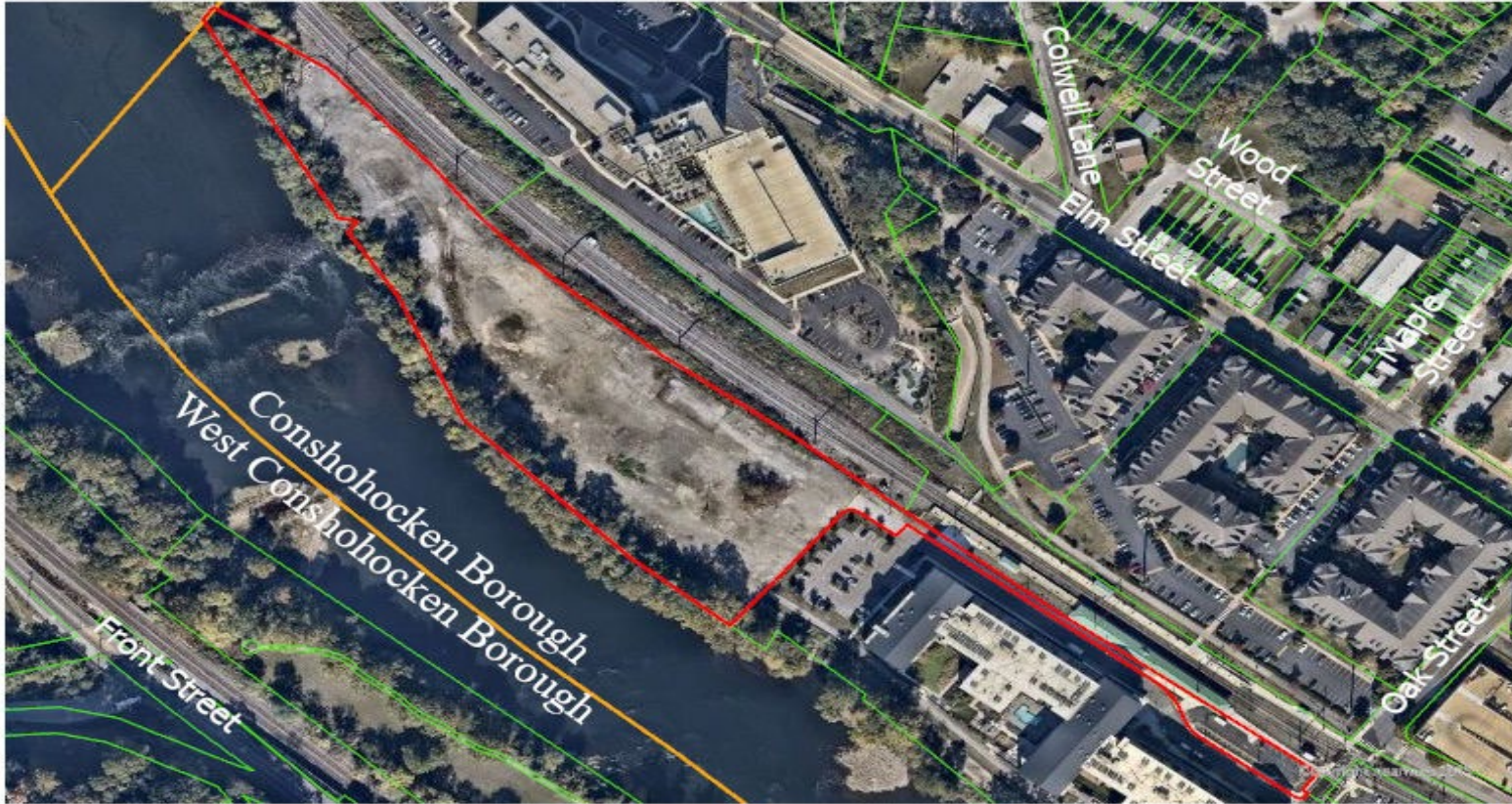
Michael Peters, Esq., Borough Solicitor

Karen MacNair, Borough Engineer

Chair, Borough Planning Commission

Attachments: 1) Aerial Photo; 2) Site Plan

ATTACHMENTS

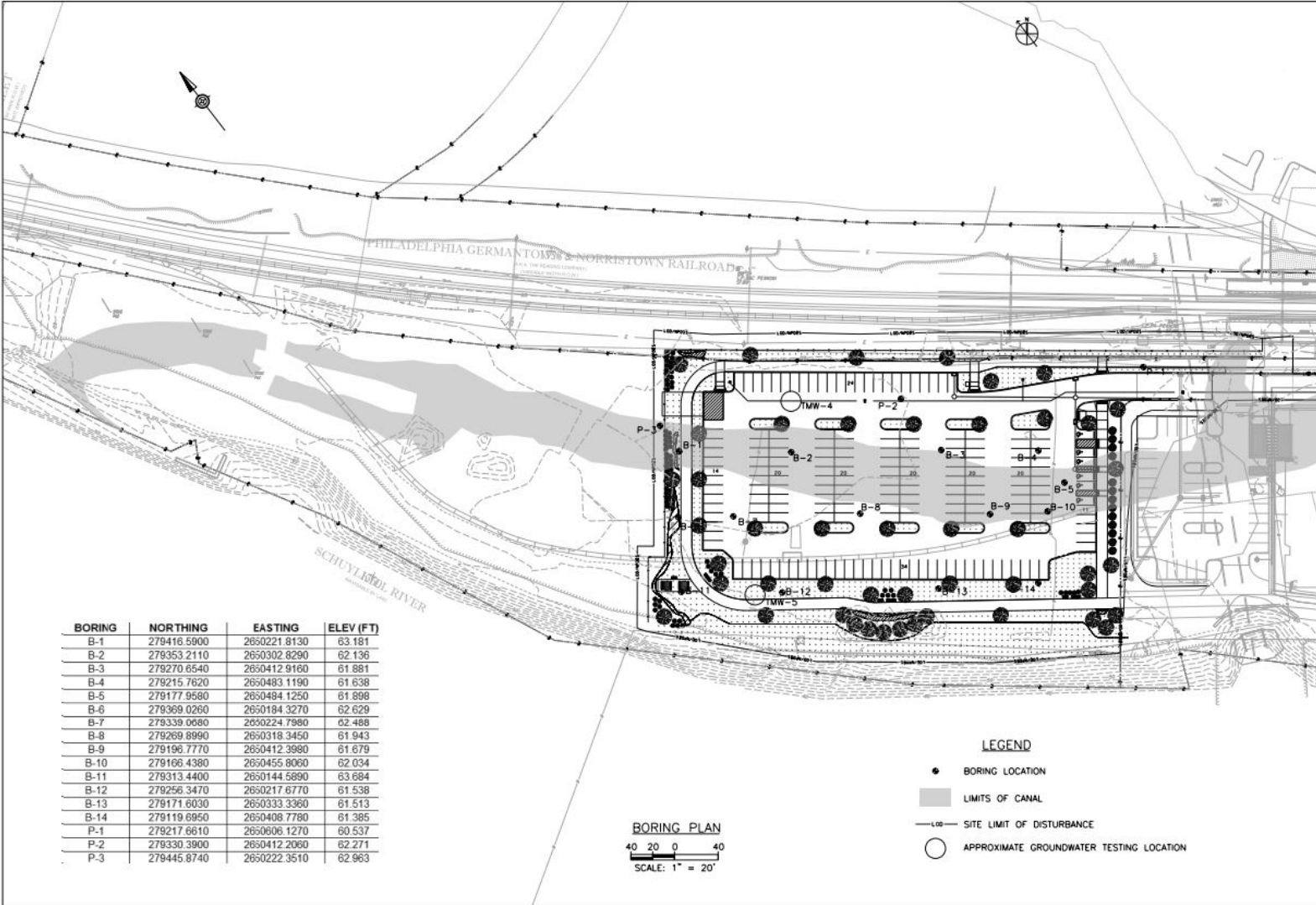


SEPTA Surface Parking Lot
MCPC#190175003

Montgomery
County
Planning
Commission
Montgomery County Courthouse - Planning Commission
PO Box 311, Norristown, PA 19384-0311
(p) 610 278-3722 (f) 610 278-3941
www.montcopa.org/placomm
Aerial photography provided by Neemap

0 100 200 400 Feet

N



BORING	NORTHING	EASTING	ELEV (FT)
B-1	279416.5900	2650221.8130	63.181
B-2	279353.2110	2650302.8290	62.136
B-3	279270.8540	2650412.9160	61.881
B-4	279215.7620	2650483.1190	61.638
B-5	279177.9580	2650484.1250	61.898
B-6	279369.0260	2650184.3270	62.629
B-7	279339.0680	2650224.7980	62.488
B-8	279269.8990	2650318.3450	61.943
B-9	279196.7770	2650412.3980	61.679
B-10	279166.4380	2650455.8060	62.034
B-11	279313.4400	2650144.5890	63.684
B-12	279256.3470	2650217.6770	61.538
B-13	279171.6030	2650333.3360	61.513
B-14	279119.6950	2650408.7780	61.385
P-1	279217.6610	2650606.1270	60.537
P-2	279330.3900	2650412.2060	62.271
P-3	279445.8740	2650222.3510	62.963

BORING PLAN
 SCALE: 1" = 20'

- LEGEND**
- BORING LOCATION
 - ▭ LIMITS OF CANAL
 - SITE LIMIT OF DISTURBANCE
 - APPROXIMATE GROUNDWATER TESTING LOCATION

McCORMICK TAYLOR

NO.	DATE	DESCRIPTION	BY	CHKD	APP'D

CONSHOHOCKEN RAILROAD STATION SURFACE PARKING LOT NEW CONSTRUCTION GENERAL BORING LOCATION PLAN

AS NOTED	1"		
DATE	11/12/2024		
PROJECT	DEC21D-24		
G004			
NO.	DATE	BY	CHKD
002	001		
21D-24-G004			

DATE OF SUBMITTAL: 11/12/2024

November 20, 2024

Ms. Stephanie Cecco
Borough Manager
Borough of Conshohocken
400 Fayette Street, Suite 200
Conshohocken, PA 19428

**RE: Preliminary Major Land Development – Initial Review
SEPTA Surface Parking Lot
101 Washington Street
TMP #05-00-00040-00-9
Conshohocken File #LD-2024-06
RVE File #PMCOP222**

Dear Ms. Cecco:

Remington & Vernick Engineers (RVE), on behalf of the Borough of Conshohocken (Borough), has reviewed the following submission materials in connection with the application referenced above:

- Borough of Conshohocken Application for Subdivision / Land Development dated October 30, 2024, as prepared by Hamburg, Rubin, Mullin, Maxwell & Lupin, PC, Philadelphia, PA.
- Request for a Waiver of Subdivision and Land Development Letter dated October 30, 2024, as prepared by SEPTA, Philadelphia, PA.
- Montgomery County Planning Commission Applicant Request for County Review dated November 1, 2024.
- Notice Letter dated October 23, 2024, for the Borough of Conshohocken Zoning Hearing Board granting of Application Z-2024-22 for SEPTA to construct a surface parking lot, as prepared by Rudolph Clarke, LLC, Trevese, PA.
- Site photographs, undated, no known author.
- Certified copy of the project site property deed dated November 16, 2022.
- Oak Street Queue Signal Analysis dated January 2, 2024, as prepared by McCormick Taylor, Inc., Philadelphia, PA.
- SEPTA Conshohocken Railroad Station Surface Parking Lot Stormwater Management Calculations dated November 2024, as prepared by McCormick Taylor, Inc., Philadelphia, PA.
- Conshohocken Railroad Station Surface Parking Lot Land Development Plan (4 sheets) dated June 7, 2024, as prepared by McCormick Taylor, Inc., Philadelphia, PA.
- Conshohocken Railroad Station Surface Parking Lot (81 Sheets) dated November 1, 2024, as prepared by McCormick Taylor, Inc., Philadelphia, PA.

I. GENERAL INFORMATION

- Applicant & Owner: Southeastern Pennsylvania Transportation Authority
1234 Market Street, 5th Floor
Philadelphia, PA 19103
215-580-7853
Contact: Robert Tangi
rtangi@septa.org
- Engineer: McCormick Taylor Inc.
1818 Market Street, 16th Floor
Philadelphia, PA 19103
215-600-3940
Contact: Kristian Bellotti
kbellotti@mccormicktaylor.com
- Landscape Architect: McCormick Taylor Inc.
1501 S. Clinton Street, Suite 1150
Baltimore, MD 21224
410-662-7400
Contact: Sheryl Bernardo, PLA
SHBernardo@mccormicktaylor.com
- Attorney: Hamburg, Rubin, Mullin, Maxwell & Lupin, PC
123 S. Broad Street, Suite 2102
Philadelphia, PA 19109
215-616-1567
Fax: 215-661-0315
Contact: Carl N. Weiner, Esq.
cweiner@hrmml.com
- Municipality: Borough of Conshohocken
400 Fayette Street, Suite 200
Conshohocken, PA 19428
Contact: Ms. Stephanie Cecco, Borough Manager
c/o Brittany Rogers
- Proposal: The construction of a temporary surface parking lot, in support of the new Regional Rail Station, is to be constructed west of the new station. The proposed work also includes a multi-use trail, sidewalks, picnic areas, fire hydrants, and stormwater inlets and piping. The proposed construction falls within the Federal Emergency Management Agency's (FEMA) 100-year floodplain (Zone AE) but outside of the Schuylkill River Floodway. Zoning District SP-3.

II. COMMENTS

Upon review of this submission, RVE has the following comments. Any underlined comments must be addressed by the applicant prior to approval.

1. Stormwater Management Calculations – Cover Sheet – the report should be signed and sealed.
2. Stormwater Management Calculations – Peak Rate Schuylkill River Watershed summary chart - provide the one (1) year and five (5) year pre- and post- cfs runoffs (§19-304.1).
3. Obtain a Joint Application for a Pennsylvania Chapter 105 Water Obstruction and Encroachment Permit and US Army Corps of Engineers Section 404 Permit for construction in a floodplain.
4. Provide a PADEP NPDES Permit for earth disturbance greater than 1 acre.
5. On Plan Sheet 5 (General Notes) – Survey Notes – the two (2) listed benchmarks could not be located on the plan sheets.
6. On Plan Sheet 6 (General Notes) – Landscaping - add a Landscaping Note that all plant material shall be guaranteed by the developer for a minimum of two (2) growing seasons (§22-421.3)
7. On Plan Sheet 8 (Existing Conditions Plan) – place permanent reference monuments at all corners and angle points of the boundary of the tract (§22-419.1).
8. On Plan Sheet 13 (Site Layout Plan) – provide wheel stops along the north and east edges of the parking lot (adjacent to sidewalk) to prevent vehicle overhang (§22-404.3.D) (§27-2007.D).
9. On Plan Sheet 13 (Site Layout Plan) – one-half of the riverfront seating areas shall be shaded by trees – only the center seating area (1 of 3) is shaded from the western afternoon sun (§27-1610.1.E).
10. On Plan Sheet 13 (Site Layout Plan) – in the Northwest corner of the lot, remove the duplicate 5' radius call outs near the proposed ADA Access Ramp.
11. On Plan Sheet 13 (Site Layout Plan) – freeze or remove slope arrows throughout the parking lot area on this sheet (Northeast corner of the lot).
12. On Plan Sheet 17 (Drainage and Grading Plan) – relocate Inlet 304 out of the accessible striped aisle.
13. On Plan Sheet 23 (Landscaping Plan) – Plant Schedule – shade trees are to be a minimum 3.5 inch caliper (§22-404.3.F(5)).
14. On Plan Sheet 23 (Landscaping Plan) – label and add to the Plant Schedule the three (3) trees along the north and west parking lot edges.

15. On Plan Sheet 23 (Landscaping Plan) – label the tree north of the handicap parking stall (text overlap). There is one AR from the Plant Schedule (9) missing from the plan view (8).
16. On Plan Sheet 24 (Pavement Marking Plan) – change the handicap parking sign, for the space south of the eight (8) foot access aisle, from R7.07 to C01A. This space qualifies as a Van Accessible Space and provides two while only one is required for the 183 parking spaces.
17. Provide a Pavement Marking Plan for the Mill and Overlay section of the access road out to the grade crossing at Oak Street.
18. On Plan Sheet 35 (Site Details) – per the Borough’s Standard Construction Details, pipe trench backfill must include No. 57 stone bedding up to the spring line of the pipe, full No. 2A stone backfill in paved areas, and 1’ paving cutbacks beyond the limits of excavation. Trenches outside of paved areas can be backfilled with excavated material. Please provide a revised Standard Pipe Trench Detail for paved areas and a Standard Pipe Trench Detail for unpaved areas.
19. On Plan Sheet 35 (Traffic Signal Plan) – one 4” white parking stall line on the West side of Oak Street is not shown as proposed. Show this parking line as a proposed line to avoid confusion during construction. Also, note that the 24” white crosswalk lines at the entrance to the parking lot on the West side of Oak Street must be re-installed after the pavement overlay.
20. On Plan Sheet 39 (Water Service Details) – provide a water main concrete encasement detail for water main utility crossings with less than 18” of separation. On the Plan Sheets 19 – 21, add a note stating that the water main concrete encasement detail must be utilized for any utility crossings with less than 18” of separation.
21. On Plan Sheet 55 (Erosion and Sediment Control Plan) – show the location for the concrete washout.
22. On Plan Sheet 74 (Drainage Profiles) – show the proposed water main utility crossings on the profile and dimension the separation between the storm and water utilities.
23. On Plan Sheet 75 (Site Lighting Plan) – in non-residential land developments, pedestrian lighting shall be provided along all internal pedestrian circulation routes with a mounting height not to exceed twelve (12) feet (§22-421.6.C).
24. On Plan Sheet 75 (Site Lighting Plan) – pedestrian oriented lighting shall have a mounting height not exceeding fifteen (15) feet and no light levels shall be in excess of 0.25 footcandles at a lot line abutting a residential property (§27-821.E).
25. On Plan Sheet 75 (Site Lighting Plan) – coordinate the LEGEND and LUMINAIRE SCHEDULE – mounting heights show 15’ and 25’.

III. GRANTED VARIANCES

The Applicant was granted the following variances by the Borough of Conshohocken Zoning Hearing Board on October 21, 2024:

1. Section §27-1714.1.A – to permit new construction of a 183 parking space surface parking lot in the Floodplain Conservation District.

IV. REQUESTED WAIVERS

The Applicant has requested the following waivers:

1. Section §22-404.3.F(6) – to permit parking stalls measuring 8.5' X 18' rather than the required 9' X 18'.
2. Section §22-405.1.C – to not provide a fifteen (15) foot wide sidewalk in this area.
3. Section §22-804 – to not provide land for park or recreational facilities or a fee in-lieu-of.

RVE's recommendation for approval is contingent upon the applicant satisfactorily addressing each underlined comment and submitting revised plans and other materials. In conjunction with any resubmission, the applicant must provide a response letter using the same numbering system and explaining how each underlined comment has been satisfactorily addressed.

Should you have any questions, please feel free to contact our office at (610) 940-1050.

Sincerely,
REMINGTON & VERNICK ENGINEERS

By



Christopher J. Fazio, P.E., C.M.E.
Executive Vice President

CJF/jrw

cc: Southeastern Pennsylvania Transportation Authority, Applicant (via email)
McCormick Taylor Inc., Engineer (via email)
Hamburg, Rubin, Mullin, Maxwell & Lupin, PC, Attorney (via email)
Raymond Sokolowski, Borough of Conshohocken, Executive Director of Operations (via email)
Michael E. Peters, Esq., Eastburn and Gray, PC, Borough Solicitor (via email)
Tyler Williams, P.E.
James R. Watson, P.E., P.L.S.



December 4, 2024

BCONS 18005

Stephanie Cecco
Borough Manager
Conshohocken Borough
400 Fayette Street, Suite 200
Conshohocken, PA 19428

**RE: 101 Washington Street (SEPTA)
LD-2024-06 - Preliminary Land Development
Traffic Engineering Review (1st Submission)**

Dear Ms. Cecco:

As requested, we have reviewed the following materials submitted for the referenced project:

- *"Conshohocken Railroad Station Manayunk/Norristown Line Station Construction, Surface Parking Lot"* (81 sheets) prepared by Southeastern Pennsylvania Transportation Authority (SEPTA), dated November 1, 2024.
- *'Queue-Cutter Signal Analysis' memorandum regarding installation of signal at Oak Street railroad crossing, prepared by McCormick Taylor, dated January 2, 2024.*

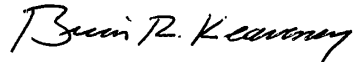
The previous plan, which proposed a parking garage and surface lot that would provide 607 parking spaces, has been amended to remove the parking garage and construct a temporary surface parking lot providing 183 parking spaces.

1. **§27-824** – As noted in the 'Queue-Cutter Signal Analysis' memo, the applicant is recommending installation of the previously designed traffic signal for the Oak Street railroad crossing as part of the proposed temporary parking lot project. We recommend that the applicant coordinate with PennDOT and the Borough regarding the planned schedule for implementation of the signal, and any necessary adjustments to the traffic signal at the intersection of West Elm Street and Oak Street, which is currently being modernized by the Borough.
2. **§22-404** – Alleys, Driveways, and Parking Areas
 - a. SEPTA has previously confirmed that they agree to own, maintain, and adhere to PA One-Call responsibilities for the underground conduit within the right-of-way along Oak Street, and that an easement will be coordinated between the Borough and SEPTA.
 - b. Consideration should be given to providing additional 'Stop' signs (SP.01) at the ends of the internal parking aisles.

If you have any questions or require additional information, please do not hesitate to contact me.

Very truly yours,

PENNONI ASSOCIATES INC.



Brian R. Keaveney, PE, PTOE
Transportation Division

cc: Ray Sokolowski, Executive Director of Operations
Brittany Rogers, Executive Assistant to the Borough Manager
Karen MacNair, PE, Borough Engineer
Michael E. Peters, Esq., Borough Solicitor
Allison A. Lee, PE, Zoning Officer



December 4, 2024

BCONS 24030

Stephanie Cecco, Borough Manager
Conshohocken Borough
400 Fayette Street, Suite 200
Conshohocken, PA 19428

**RE: 101 Washington Street (SEPTA)
LD-2024-06 - Preliminary Land Development
Zoning Review (1st Submission)**

Dear Ms. Cecco:

As requested, we reviewed the following in connection with the referenced project:

- *"Conshohocken Railroad Station Manayunk/Norristown Line Station Construction, Surface Parking Lot"* (81 sheets) prepared by Southeastern Pennsylvania Transportation Authority (SEPTA), dated November 1, 2024.

The Applicant, SEPTA, has amended the site layout previously proposed under a prior land development application in year 2022 to exclude the parking garage on the property. Under the current plans submission, SEPTA is proposing to redevelop the current industrial property located at 101 Washington Street, with a new surface parking lot, riverfront trail and pedestrian accommodations, stormwater management, landscaping, and related site improvements.

The site is located within the SP-3 - Specially Planned District 3 and subject to the FP – Floodplain Conservation overlay district regulations. The site is bounded by the SEPTA's regional rail line from the City of Philadelphia through Conshohocken Borough to Norristown to the north; the Schuylkill River to the South; the Matson Mill residential condominium development to the east; and additional vacant land to the west.

In accordance with the FEMA Flood Insurance Rate Map (FIRM) panel No. 42091C0358G, effective 3/2/2016, and LOMR No. 16-03-0726P effective 1/30/2017, the southern portion of the parcel along the top of banks and south towards the Schuylkill River is located within the Schuylkill River regulated floodway Zone AE; and the remainder of the site is located within the 100-year floodplain (1% annual chance flood) Zone AE, which are special flood hazard areas with base flood elevations defined; therefore, the entire site is subject to the FP – Floodplain Conservation Overlay District regulations. New development and construction is generally prohibited in the Floodplain Conservation District because of the risk of inundation of flood waters.

The Applicant is seeking a land development waiver from the Subdivision and Land Development application process.

Variances Granted

The Applicant went before the Conshohocken Borough Zoning Hearing Board at the regularly scheduled hearing held on October 21, 2024, and was granted the following variances from the Conshohocken Borough Zoning Ordinance of 2001:

1. **Sections §27-1714.1.A, B, D, H, & K** – A Variance to permit new construction, filling, permanent structures, clearing, driveway, parking lots, and stormwater facilities within the FP-Floodplain conservation overlay district, whereas, such activities, facilities, and permanent structures are specifically prohibited within the floodplain conservation overlay district;

We offer the following zoning comments:

1. **Per §27-1605.1** – In the SP-3, Specialty Planned District 3, the minimum front yard shall be 25 feet from the ultimate right-of-way, the minimum side yards shall be 25 feet, and the minimum rear yard shall be 25 feet.

The required yard setback lines shall be provided on the plans since no yard setback lines are shown on the plans provided.

2. **Per §27-1609.1.B** – The outer perimeter of all surface lots shall be buffered with a landscape area at least 10 feet in width. This area shall contain at least three (3) three-and-one-half-inch caliper trees per 100 linear feet, and at least 30 ornamental and flowering shrub plantings per 100 linear feet.

The Applicant is providing a 10-foot wide landscaped area for the outer perimeter of the proposed surface parking lot; however, the quantity and size of the proposed landscaping plantings shall be revised to provide a minimum of three (3) 3.5-inch caliper trees and thirty (30) ornamental and flowering shrubs per 100 linear feet of outer perimeter. The smaller plantings along the property line adjacent the Matson Mills property is not labeled and shall be labeled accordingly. In addition, a landscape planting calculation shall be provided on the Landscape Plans (Sheet 23) to ensure compliance with the above code section.

3. **Per §27-1609.1.C** – All parking lots shall be intensively landscaped. There shall be a minimum of one three-and-one-half-inch caliper shade tree for every 10 parking spaces. Shade trees shall be planted in islands containing a minimum of 36 square feet of planting area. Planting islands shall also contain ornamental and flowering shrubs.

Based on our calculations, the parking lot is proposing 183 parking spaces; therefore, a minimum of 19 3.5-inch caliper shade trees shall be provided within the planting islands. There are currently only 10 trees proposed within the planting islands on site. An additional nine (9) 3.5-inch caliper trees shall be provided. In addition, the planting islands shall also contain ornamental and flowering shrubs.

If you have any questions or concerns, please feel free to contact the undersigned.

Sincerely,



Allison A. Lee, PE
Zoning Officer
PENNONI ASSOCIATES INC.

AAL/