



NEW BRITAIN TOWNSHIP

207 Park Avenue • Chalfont, PA 18914 • Telephone: (215) 822-1391

SUBDIVISION & LAND DEVELOPMENT APPLICATION

1. Date of Application: 7/20/2022

2. Date of Plan or Revision: 7/15/2022

3. Application for: Preliminary/Final Plan Review

4. Name of Subdivision or Land Development: Gilmore Subdivision & Land Preservation

5. Location: Keller Rd & King Rd

6. Tax Map Parcel #: 26-004-010 Total Acreage: Gross 38.1 Net 37.3

7. Net Buildable Site Area (from Section 2401): 37.3 acres

8. Zoning Requirements:

Zoning District	<u>WS</u>	Minimum Lot Size	<u>80,000 SF</u>	Maximum Density	<u>20 lots</u>
Front Yard	<u>100'</u>	Side Yard	<u>30'</u>	Rear Yard	<u>60'</u>

9. Number of Lots or Dwelling Units: 2

10. Equitable Owner of Record of Land: Anna & Aubrey Gilmore
Address: 2075 Scheetz Church Rd
Quakertown, PA 18951
Phone: _____ E-mail: atgilmore@verizon.net


11. Applicant: New Britain Township
Address: 207 Park Ave
Chalfont, PA 18914
Phone: 215-822-1391 E-mail: mwest@newbritaintownship.org

12. Registered Engineer or Surveyor: Gilmore & Associates, Inc.
Address: 65 E Butler Ave, Suite 100
New Britain, PA 18901
Phone: 215-345-4330 E-mail: ckennard@gilmore-assoc.com

TOWNSHIP USE ONLY

Date Recieved: _____
Payment: _____
Check #: _____
Receipt #: _____
Escrow Acc. #: _____

This is to certify that I have read Article V of the New Britain Township Subdivision and Land Development Ordinance and that the accompanying plan meets the requirements of that Article to the best of my knowledge.



Signature of Applicant

Signature of Registered Engineer or Surveyor

**SUBDIVISION & LAND DEVELOPMENT
PLAN SUBMISSION CHECKLIST**

Date of Application: 7/19/2022
Subdivision/Land Development Name: Gilmore Subdivision & Land Preservation
Address of Property: Keller Rd & King Rd
Owner(s) Name: Anna & Aubrey Gilmore
Applicant(s) Name: New Britain Township
Tax Map Parcel Number: 26-004-010

Plan Sets for New Britain Township - Folded to 8 1/2 x 11: (18 Total)

- | | |
|---|--|
| <input checked="" type="checkbox"/> NBT Board of Supervisors (11x17) - 5 Copies | <input checked="" type="checkbox"/> NBT Planning Commission (11x17) - 7 Copies |
| <input checked="" type="checkbox"/> Township Engineer (Full Size) - 2 Copies | <input checked="" type="checkbox"/> NBT File (Full Size) - 3 Copies |
| <input checked="" type="checkbox"/> Fire Marshal (Full Size) - 1 Copy | |

Plan Sets for Outside Agencies - Folded to 8 1/2 x 11: The applicant must show proof of submission to the outside agencies listed below (stamped copy or cover letter and copy of application form). The following plan sets are subject to the requirements of the outside agency and must be submitted to the outside agency by the applicant.

- Bucks County Planning Commission - 1 Copy
- Bucks County Conservation District - 1 Copy
- Water Authority (North Penn/North Wales/Aqua) - 1 Copy
- Chalfont New Britain Joint Sewer Authority - 3 Copies

OR

- Bucks County Department of Health - 1 Copy

Application Forms & Fees to be Submitted to the Township: *All applicants include these items or the application will be considered administratively incomplete and returned to the applicant.*

- New Britain Township Subdivision and Land Development Application (1 Signed Original)
- Filing Fee according to the most current Fee Schedule adopted by Resolution
- Escrow Fee according to the most current Fee Schedule adopted by Resolution
- Contract for Professional Services Agreement (3 Signed Originals)
- Application to Bucks County Planning Commission (Provide Proof of Submission)
- Application to Bucks County Conservation District (Provide Proof of Submission)
- Applicant Plan Submission Checklist (Should be completed by the applicant's professional engineer or land surveyor)
- Stormwater Management Report (2 Copies)
- PADEP Sewage Facilities Planning Module Application/Mailer (Original & 2 Copies)
- Traffic Impact Study, if applicable (2 Copies)
- PADOT Highway Occupancy Permit Plan/Application, if applicable (2 Copies)
- Community Impact Assessment Report, if applicable (4 Copies)

Reviewed By: _____
Township Representative

Date: _____

**All fees or contributions in lieu of shall be payable to New Britain Township. All plan sets, applications and forms shall be submitted directly to New Britain Township.*

****The attached checklist is provided for the applicant as a guideline to assist in the submission process. All applicants must include these items or the application will be considered administratively incomplete and returned to the applicant.****



APPLICANT'S CHECKLIST AND SUBMISSION PROCEDURES

IMPORTANT: *It is recommended that this item be completed by the applicant's professional engineer or land surveyor.*

Please use the following checklist as a guideline for application submission. If applicable, the Township and Township Engineer will look for these items in your application. Failure to provide an applicable item may delay acceptance of the application and plan approval. Please be advised that final approval will not be granted by the Township unless final approvals are granted by the appropriate water and sewer authorities.

Note: Maximum Record Plan Sheet Size 24" x 36"

Item	Code*	Applicant Comments
<input checked="" type="checkbox"/> Type of Water Supply <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	_____	_____
<input checked="" type="checkbox"/> Type of Sewage Disposal Facilities <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	_____	_____
<input type="checkbox"/> PADEP Sewage Facilities Planning Module Application/Mailer	_____	_____
<input checked="" type="checkbox"/> List of Waivers/Variations/Special Exceptions on Record Plan	_____	_____
<input checked="" type="checkbox"/> Letter of Requested Waivers with Justification	_____	Letter separate from application
<input checked="" type="checkbox"/> Provide 5 Signature Lines on the Record Plan for the Board of Supervisors	_____	_____
<input checked="" type="checkbox"/> Indicate Zoning Data Chart on Record Plan (required and proposed dimensions)	_____	_____
<input type="checkbox"/> Indicate Parking Requirements on Record Plan (required and proposed spaces)	_____	_____
<input checked="" type="checkbox"/> Indicate proposed Use Designation on Record Plan	_____	_____
<input checked="" type="checkbox"/> Indicate Site Capacity Calculations on Record Plan	_____	_____
<input checked="" type="checkbox"/> Adjoining Property Owner Names and Tax Map Parcel Numbers	_____	_____
<input type="checkbox"/> Soil Erosion and Sediment Control Plan	_____	_____
<input type="checkbox"/> Utility Plan	_____	_____
<input type="checkbox"/> Landscape and Lighting Plan (show street trees, buffer plantings, lighting locations, isolux lines)	_____	_____
<input type="checkbox"/> Stormwater Management Plan	_____	_____
<input type="checkbox"/> Wetlands Certification on Record Plan	_____	_____
<input type="checkbox"/> PADOT Permit Application/Plan	_____	_____
<input checked="" type="checkbox"/> Existing and Proposed Easement, Right-of-Way or Other restrictions on the Property	_____	Conservation easement/land preservation

*A-Noted on Application

P-Noted on Plan Sheet

N/A - Not Applicable

W - Noted on List of Waivers



**NEW BRITAIN TOWNSHIP
90-DAY REVIEW PERIOD WAIVER**

I/We, the applicant, understand that the time necessary for adequate review of this application and plans for compliance with current Zoning and Subdivision & Land Development Ordinances, including reviews of any revised plans, may exceed the 90-day review period stipulated under the Municipalities Planning Code.

In recognition of the above, I/we hereby waive the 90-day review period, with the understanding that I/we may revoke this waiver at any time in the future, upon 30-day written notice to the New Britain Township Zoning Officer.

Name of Subdivision/Land Development: Gilmore Subdivision & Land Preservation

Tax Map Parcel Number(s): 26-004-010

Signature of Applicant:  Date: 7/20/2022

Signature of Applicant: _____ Date: _____





Matt West
Township Manager

TOWNSHIP OF NEW BRITAIN

Bucks County, Pennsylvania
Founded: 1723

BOARD OF SUPERVISORS

Gregory T. Hood, Chair
William B. Jones, III, Vice-Chair
Cynthia M. Jones
MaryBeth McCabe, Esq.
Stephanie Shortall

July 20, 2022

Matt West
207 Park Ave
Chalfont, PA 18914

RE: Waiver Request Letter
Gilmore Subdivision & Land Preservation

Dear Mr. West,

Please find below a list of waivers requested from the New Britain Township Subdivision and Land Development Ordinance for the subdivision and preservation of the Gilmore property.

1. §22-403 & §27-404 "Preliminary Plan Submission and Review Procedure" and "Final Plan Submission and Review" – To allow the application to be processed as a "Waiver of Land Development".
2. §22-700.1 "Part 7 Design Standards and Public Improvements" – From providing strict compliance with the Township's design standards and allow the improvements to be installed in accordance with generally-accepted engineering practices and applicable guidelines.

We feel that these waivers are justified due to the 31 acres of land that are proposed to be permanently preserved by the Township.

Sincerely,

New Britain Township on behalf of Anna & Aubrey Gilmore

ZONING REQUIREMENTS:

THE FOLLOWING REQUIREMENTS ARE TAKEN FROM THE NEW BRITAIN TOWNSHIP ZONING ORDINANCE IN THE WS WATERSHED DISTRICT

EXISTING USES: A1 - GENERAL FARMING.
 PROPOSED USES: LOT 1 B1 SINGLE-FAMILY DETACHED DWELLING
 (2 AC. MAXIMUM ENVELOPE WITHIN CONSERVATION EASEMENT)
 LOT 2 B1 SINGLE-FAMILY DETACHED DWELLING

	PROVIDED / PERMITTED		
	REQUIRED	LOT 1	LOT 2
MINIMUM LOT AREA (SF)	80,000	1,541,274	84,640
(ACRES)	1.84	35.38	1.94
MINIMUM LOT WIDTH (FT)	175	250 (1)	260.18
MINIMUM BUILDING ENVELOPE (FT)	10,000	87,120 (1)	31,315
YARDS - MINIMUM			
FRONT (FT)	100	100	100
SIDE (FT)	30	30	30
REAR (FT)	60	60	60
MAXIMUM BUILDING COVERAGE (%)	8%	N/A	N/A
MAXIMUM BUILDING COVERAGE (SF) (1)	12%	N/A	N/A
MAXIMUM IMPERVIOUS COVERAGE (%)	35	N/A	N/A
MAXIMUM IMPERVIOUS COVERAGE (SF) (1)			
MAXIMUM BUILDING HEIGHT (FT) (4)			

FOOTNOTES:
 (1) ENVELOPE AREA AND LOT WIDTH ON LOT 1 IS BASED ON 2 ACRE MINIMAL PROTECTION AREA.

TO ALL WHOM THESE PRESENTS MAY COME I, WE, ANNA & AUBREY P. GILMORE SEND GREETINGS, KNOW YE THAT I, WE HAVE LAID OUT OR LANDS IN NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA., CERTAIN LOTS ACCORDING TO THIS PLAN, WHICH IS INTENDED TO BE FORTHWITH RECORDED, WITNESS MY, OUR HAND AND SEAL.

COMMONWEALTH OF PENNSYLVANIA:
 COUNTY OF BUCKS:
 ON THE _____ DAY OF _____, 20____ BEFORE ME THE SUBSCRIBER A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED BEFORE ANNA & AUBREY P. GILMORE

WHO ACKNOWLEDGED THIS PLAN TO BE THE OFFICIAL PLAN OF PROPERTY SHOWN HEREON, LOCATED NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA. AND DESIRED THE SAME TO BE RECORDED.

NOTARY PUBLIC _____ MY COMMISSION EXPIRES _____

APPROVED BY THE NEW BRITAIN TOWNSHIP BOARD OF SUPERVISORS
 THIS _____ DAY OF _____, 20____

BOPC NO. _____
 PROCESSED AND REVIEWED, REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE. CERTIFIED THIS DATE _____, 20____

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN, PENNA. IN PLAN BOOK _____ PAGE _____ ON _____, 20____

RECORDER OF DEEDS

APPROVED BY THE NEW BRITAIN TOWNSHIP PLANNING COMMISSION
 THIS _____ DAY OF _____, 20____

CHAIRMAN

REVIEWED BY THE NEW BRITAIN TOWNSHIP ENGINEER
 THIS _____ DAY OF _____, 20____

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Twin Run Road
 West Mifflin, Pennsylvania
 15122 - 1078



BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY
 PA LAW REQUIRES THREE WORKING DAYS
 NOTICE TO UTILITIES BEFORE YOU EXCAVATE,
 DRILL, BLAST OR DEMOLISH

SERIAL NO. #####

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS, INFORMATION IN THE PREPARATION OF THESE DRAWINGS, THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES, INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON APRIL 28, 2018 PENNSYLVANIA ACT 50. GILMORE & ASSOCIATES, INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

GENERAL NOTES:

- THIS PLAN IS BASED ON A FIELD SURVEY PERFORMED BY GILMORE & ASSOCIATES, INC. IN JUNE OF 2022.
- THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. OTHER RIGHTS TO PROPERTY MAY EXIST.
- SUBJECT TO COVENANTS, RESTRICTIONS AND/OR EASEMENTS EITHER WRITTEN OR IMPLIED.
- VERTICAL DATUM IS NAVD88 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET-GPS VIRTUAL REFERENCE STATION SYSTEM. HORIZONTAL DATUM IS BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (NAD83) ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS), WITH OBSERVATIONS REFERENCED TO THE KEYNET-GPS VIRTUAL REFERENCE STATION SYSTEM.
- REFERENCE PLANS
 - TAX MAP FOR THE TOWNSHIP OF NEW BRITAIN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA.
 - PLAN ENTITLED "PROPERTY SURVEYED FOR ELMER S. KELLER, NEW BRITAIN TWP., BUCKS CO., PA", PREPARED BY G. MARVIN HENDRICKS, DATED MARCH 3, 1961.
 - PLAN ENTITLED "FINAL SUBDIVISION PLAN PREPARED FOR FOX POND SITUATED IN NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA" PREPARED BY VAN GLEEF ENGINEERING ASSOCIATES, DATED FEBRUARY 21, 1996 (LAST REVISED APRIL 8, 1997) AND RECORDED ON MAY 6, 1997 IN PLAN BOOK 287, PAGE 34.
 - PLAN ENTITLED "FINAL PLAN, PLAN OF PROPERTY OF JOHN M. & HELEN A. VINCK, NEW BRITAIN TWP., BUCKS CO., PA" PREPARED BY G. MARVIN HENDRICKS, DATED MAY 16, 1986 AND RECORDED ON NOVEMBER 25, 1986 IN PLAN BOOK 236, PAGE 74.
- DENOTES CONCRETE MONUMENT TO BE SET.
- AREA BETWEEN THE TITLE LINE AND THE ULTIMATE RIGHT-OF-WAY OF KING ROAD (T409) AND KELLER ROAD (T358) SHALL BE OFFERED FOR DEDICATION TO NEW BRITAIN TOWNSHIP.
- THIS PLAN HAS BEEN PREPARED ON THE BASIS OF SURVEYS PERFORMED BY GILMORE & ASSOCIATES, INC. ONLY THE VISIBLE LOCATIONS SHOWN SHALL BE CONSIDERED TRUE AND ACCURATE.
- SITE DEVELOPMENT ACTIVITIES ON ALL LOTS SHALL COMPLY WITH THE REQUIREMENTS OF ARTICLE XXIV, NATURAL RESOURCE PROTECTION STANDARDS OF THE ZONING ORDINANCE.
- CONFIGURATION OF THE MINIMAL PROTECTION AREA FOR LOT 1 SHALL BE IN COMPLIANCE WITH EXHIBIT "A" OF THE CONSERVATION EASEMENT AGREEMENT OF SALE EXECUTED WITH NEW BRITAIN TOWNSHIP.
- BUILDING SETBACK LINES AS SHOWN IS BASED ON MINIMUM YARD REQUIREMENTS PER THE WS ZONING DISTRICT. ANY FUTURE DEVELOPMENT OF THIS LOT WILL NECESSITATE A COMPLETE FIELD SURVEY OF THE LOT TO ASCERTAIN ALL NATURAL RESOURCE RESTRICTIONS WHICH MAY AFFECT THE ACTUAL BUILDABLE AREA/BUILDING ENVELOPE.
- LOTS 1 AND 2 ARE PROPOSED TO BE UNIMPROVED AT THIS TIME. NO WATER AND SEWER ARE PROPOSED FOR THESE LOTS AT THIS TIME.
- ANY PROPOSED WELLS ON NEW LOTS SHALL BE SUBJECT TO THE PROVISIONS OF THE TOWNSHIP'S WELL CONSTRUCTION STANDARDS, INCLUDING REQUIREMENTS FOR PERMITTING, WATER QUALITY TESTING AND WELL PRODUCTION CERTIFICATION. THESE REQUIREMENTS SHALL BE FULFILLED.
- NO PORTION OF THIS SUBDIVISION HAS BEEN APPROVED BY THE MUNICIPALITY OR THE APPROVING AGENCY FOR THE INSTALLATION OF SEWAGE DISPOSAL FACILITIES. NO SEWAGE PERMIT WILL BE ISSUED FOR THE INSTALLATION, CONSTRUCTION, CONNECTION TO OR USE OF ANY SEWAGE COLLECTION, CONVEYANCE, TREATMENT OR DISPOSAL SYSTEM UNLESS THE MUNICIPALITY AND APPROVING AGENCY HAVE APPROVED ANY REQUIRED SEWAGE FACILITIES PLANNING FOR THE SUBDIVISION LOTS DESCRIBED HEREIN IN ACCORDANCE WITH THE SEWAGE FACILITIES ACT (35 P.S. SECTIONS 750.1 ET SEQ.) AND REGULATIONS PROMULGATED THEREUNDER. PRIOR TO SIGNING, EXECUTING, IMPLEMENTING OR RECORDING ANY SALES CONTRACT OR SUBDIVISION PLAN, ANY PURCHASER OR SUBDIVIDER OF THE PROPOSED LOTS SHOULD CONTACT THE PADEP WHICH IS CHARGED WITH ADMINISTERING THE SEWAGE FACILITIES ACT TO DETERMINE WHAT TYPE OF SEWAGE FACILITIES PLANNING IS REQUIRED AND THE PROCEDURE AND REQUIREMENTS FOR OBTAINING APPROPRIATE PERMITS OR APPROVALS.
- ALL PUBLIC IMPROVEMENTS ARE REQUESTED TO BE WAIVED.
- ANY DEVELOPER OF LOTS 1 OR 2 SHALL BE REQUIRED TO SUBMIT ZONING PERMIT PLANS DEMONSTRATING COMPLIANCE WITH ALL APPLICABLE TOWNSHIP REGULATIONS, INCLUDING, BUT NOT LIMITED TO STORMWATER MANAGEMENT PRIOR TO TOWNSHIP REVIEW OF BUILDING PERMIT PLANS.

I, TIMOTHY M. WALLACE, PE092271
 (NAME OF PROFESSIONAL ENGINEER) (REGISTRATION NUMBER)

DO HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE INFORMATION CONTAINED IN THE ACCOMPANYING PLANS, SPECIFICATIONS AND REPORTS, HAS BEEN PREPARED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE, IS TRUE AND CORRECT, AND IS IN CONFORMANCE WITH THE ZONING ORDINANCE AND THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE OF NEW BRITAIN TOWNSHIP AS LAST AMENDED.

SIGNATURE

I, DONALD RAPINSKI, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL SURVEYOR, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY OF I.P. 26-4-10 COMPLETED UNDER MY SUPERVISION IN JUNE 2022; THAT ALL THE MARKERS SHOWN HEREON ACTUALLY EXIST; THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN.

SIGNATURE

LOT 2 ACCESS EASEMENT

LABEL	BEARING	DISTANCE
A	N48°52'50"W	161.36'
B	N37°48'00"E	29.93
C	S38°29'50"E	165.81'



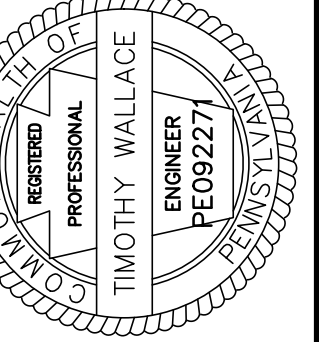
LOT 2 ACCESS EASEMENT DETAIL
 SCALE 1" = 50'



LOCATION MAP

SCALE: 1" = 2000'

GILMORE & ASSOCIATES, INC.
 ENGINEERING & CONSULTING SERVICES
 66 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18903
 (610) 524-5300 www.gilmoreassoc.com



DATE: 7/21/22

REV.	DESCRIPTION	DATE	BY

MINOR SUBDIVISION PLAN
GILMORE MINOR SUBDIVISION
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA
RECORD PLAN

GILMORE & ASSOCIATES, INC.
 ENGINEERING & CONSULTING SERVICES

PROJECT NO.: 16-10028-01

OWNERS INFO:
 ANNA & AUBREY GILMORE
 2075 SCHEITZS CHURCH RD
 QUAKERTOWN, PA 18951
 ###-###-####

MUNICIPAL FILE NO.: 16-10028-01

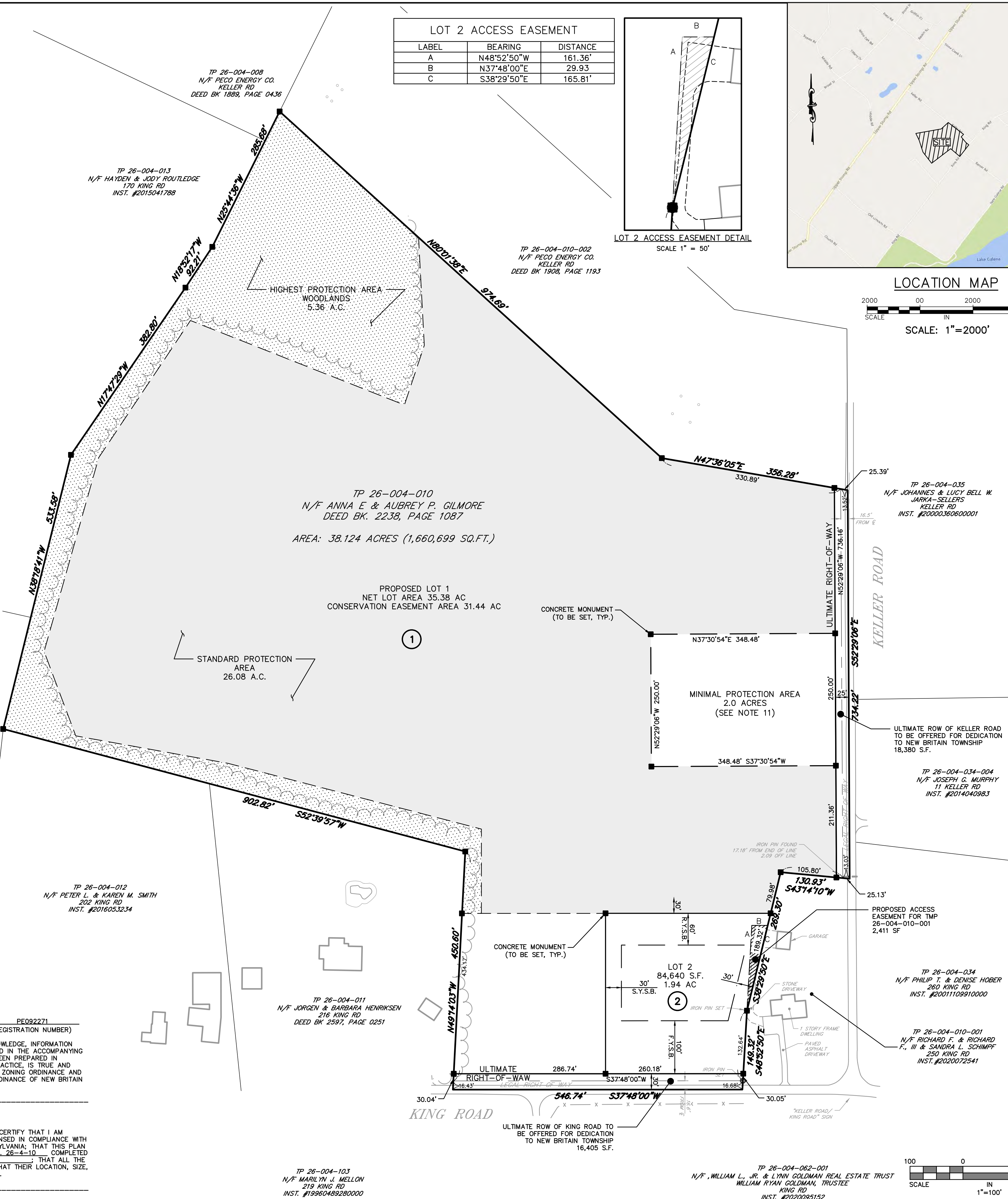
TAX MAP PARCEL NO.: 26-004-010

TOTAL AREA: 38.12 AC TOTAL LOTS: 2

DATE: 07/21/22 SCALE: 1"=100'

DRAWN BY: T.M.W. CHECKED BY: C.K.

SHEET NO.: 1 OF 1



SCALE: 1" = 100'

C:\MUNICIPAL\2016\10028-01-NBT-Gilmore_Conservation_King_Road\CAD\Survey_Drawings\Production_Drawings\1610028-01_REC.dwg Layout: RECORD PLAN Plotted By: twalace, on Thu Jul 21, 2022 at 1:57pm



TOWNSHIP OF NEW BRITAIN

Bucks County, Pennsylvania


Founded: 1723

Eileen M. Bradley
Township Manager

NEW BRITAIN TOWNSHIP SUBDIVISION & LAND DEVELOPMENT APPLICATION

1. Date of Application October 30, 2020 2. Date of Plan or Revision n/a
3. Application for: Fee Paid
 - Subdivision Sketch Plan _____ Lot Line Change _____
 - Formal or Informal (Circle One)
 - Land Development Preliminary Plan _____ Minor Subdivision _____
 - Final Plan _____
4. Name of Subdivision or Land Development D'Alessio Tract (3 Lot Subdivision)
5. Location 315 Old Limekiln Road, Chalfont, PA 18914
6. Tax Parcel No. 26-004-005 Total Acreage Gross 10.67 Net 10.08
7. Net Buildable Site Area (from Section 2401) 2.82 ACRES
8. Zoning Requirements: District WS - WATERSHED Minimum Lot Size 80,000 SF (1.837 AC)
Maximum Density 1/1.837= 0.54 UNITS / AC Yards: Front 100' Side 30' Rear 60'
9. Number of Lots or Dwelling Units Three (3) - One existing dwelling plus two proposed.
10. Equitable Owner of Record of Land VINICIO AND SHARON D'ALESSIO
Address 315 OLD LIMEKILN ROAD, CHALFONT, PA 18914 Phone _____
11. Applicant AUDAX HOMES, LLC C/O JONATHAN THOMAS
Address P.O. BOX 390, DOYLESTOWN, PA 18901 Phone 267-454-6922
12. Registered Engineer or Surveyor VAN CLEEF ENGINEERING ASSOC. C/O LEON D. McGUIRE JR., P.E.
Address 501 NORTH MAIN STREET Phone 215-345-1876

This is to certify that I have read Article V of the New Britain Township Subdivision and Land Development Ordinance and that the accompanying plan meets the requirements of that Article to the best of my knowledge.



Signature of Applicant

Signature of Registered Engineer or Surveyor

NEW BRITAIN TOWNSHIP
SUBDIVISION & LAND DEVELOPMENT
PLAN SUBMISSION CHECKLIST

Date of Application October 30, 2020

Subdivision/Land Development Name D'Alessio Tract (3 Lot Subdivision)

Address of Property 315 Old Limekiln Road, Chalfont, PA 18914

Owner(s) Name Vinicio and Sharon D'Alessio

Applicants Name Audax Homes, LLC C/O Jonathan Thomas

Tax Map Parcel Number 26-004-005

Plan Sets – Folded to 8½ x 11: (18 Total)

_____ NBT Planning Commission – 7 copies

_____ NBT File – 3 copies

_____ NBT Board of Supervisors – 5 copies

_____ Township Engineer – 2 copies

_____ Fire Marshal – 1 copy

Plan Sets for Outside Agencies – Folded to 8½ x 11: The applicant must show proof of submission to the outside agencies listed below (stamped copy or cover letter and copy of application form). The following plan sets are subject to the requirements of the outside agency and ***must be submitted to the outside agency by the applicant.***

_____ Bucks County Planning Commission (1 copy)

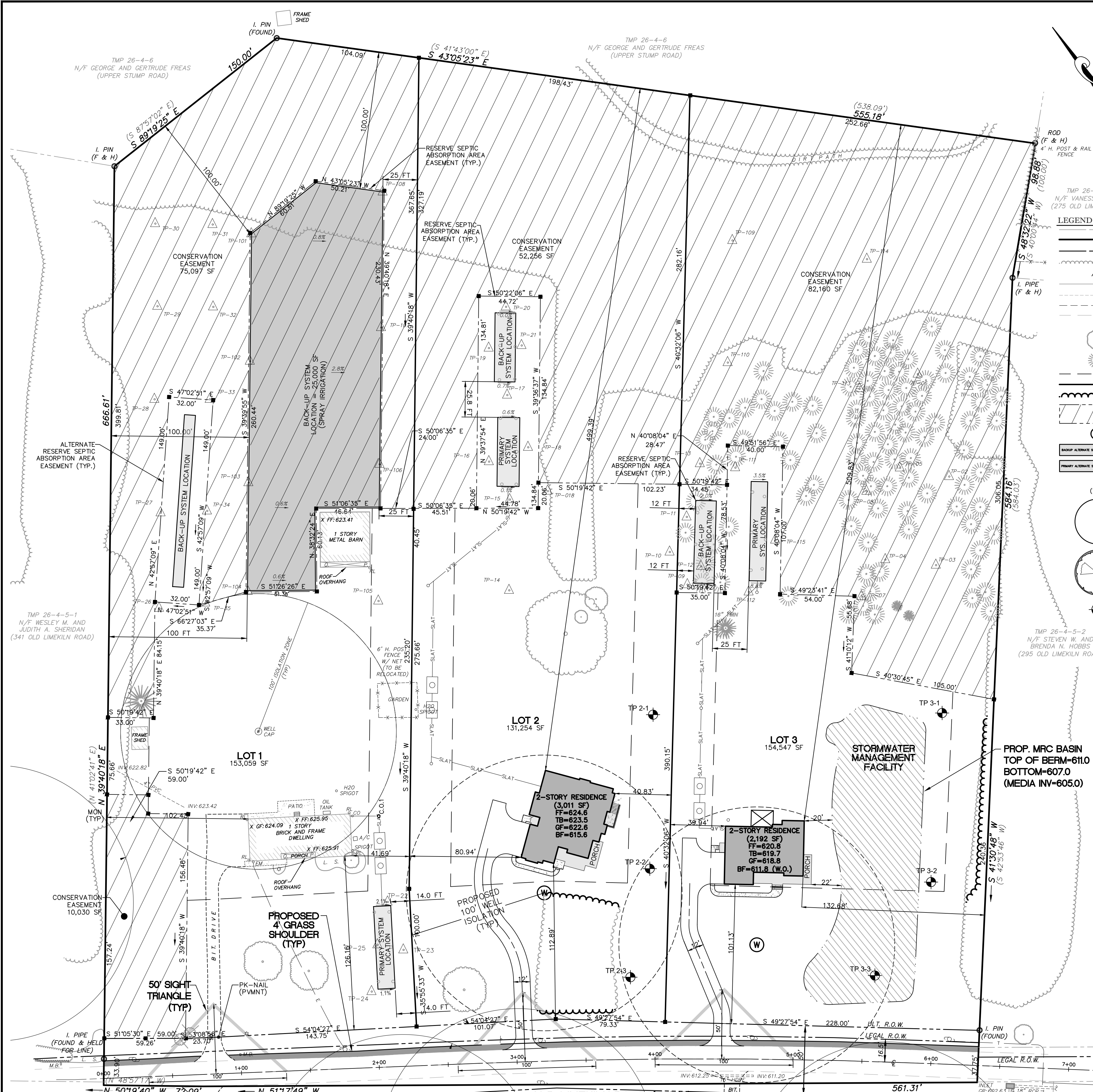
_____ Bucks County Conservation District (1 copy)

_____ Water Authority – North Penn, North Wales, Aqua (1 copy)

_____ Chalfont New Britain Joint Sewer Authority (3 copies)

OR

_____ Bucks County Department of Health (1 copy)



ZONING DATA

ZONED: WS - WATERSHED
PROPOSED USE: B-1 SINGLE FAMILY DETACHED DWELLING

	REQUIRED	LOT 1	LOT 2	LOT 3	SITE TOTAL
MIN. LOT AREA (TO ULT. ROW)	80,000 SF	153,059 SF	131,254 SF	154,547 SF	438,860 SF
-CONSERVATION AREA		85,127 SF	52,256 SF	82,160 SF	219,543 SF
=ADJ. LOT AREA USED FOR IMPERV. CALCS.		67,932 SF	78,998 SF	72,387 SF	219,317 SF
MIN. LOT WIDTH (Ø REQ'D BSBL)	175 FT.	220 FT.	188 FT.	230 FT.	N/A
MIN. YARDS					
FRONT	100 FT.	126.2 FT.	112.9 FT.	101.1 FT.	N/A
SIDE	30 FT.	41.7 FT.	40.8 FT.	39.9 FT.	N/A
REAR	60 FT.	549.9 FT.	499.4 FT.	509.8 FT.	N/A
MAX. HEIGHT	35 FT.	35 FT.	35 FT.	35 FT.	N/A
MAX. BLDG. COVERAGE PER LOT	8%	5.32%(3,648 SF)	3.81%(3,011 SF)	3.20%(2,192 SF)	4.04%(8,851 SF)
MAX. IMPERV. COVERAGE PER LOT	12%	12.0%(9,152 SF)	12.0%(9,480 SF)	12.0%(8,686 SF)	12.0%(26,318 SF)
MAX. IMPERV. COVERAGE PER SITE	12%				
MIN. BLDG. ENVELOPE	10,000 SF	*35,256 SF	*36,896 SF	*31,855 SF	N/A
*DOES NOT INCLUDE RESERVE SEPTIC AREA(S)					



BASE SITE CALCULATIONS

- GROSS SITE AREA AS DETERMINED BY AN ON-SITE BOUNDARY SURVEY: 10.674 AC.
- SUBTRACT LAND WITHIN THE ULTIMATE RIGHT-OF-WAY OF EXISTING ROADS, WITHIN EXISTING UTILITY RIGHTS-OF-WAY OR EASEMENTS; AND/OR WHICH HAS BEEN PRESERVED THROUGH EASEMENT OR OTHER MEANS: -0.599 AC.
- SUBTRACT LAND WHICH IS NOT CONTIGUOUS, I.E.: (a) A SEPARATE PARCEL WHICH DOES NOT ABUT OR ADJOIN, NOR SHARE COMMON BOUNDARIES WITH, THE REST OF THE DEVELOPMENT; AND/OR (b) LAND WHICH IS CUT OFF FROM THE MAIN PARCEL BY A ROAD, RAILROAD, EXISTING LAND USE, AND/OR MAJOR STREAM, SO AS TO SERVE AS A MAJOR BARRIER TO COMMON USE AND/OR SO THAT IT IS ISOLATED AND UNAVAILABLE FOR BUILDING PURPOSES: -0.000 AC.
- SUBTRACT LAND WHICH, IN A PREVIOUSLY APPROVED SUBDIVISION, WAS SET ASIDE, RESERVED, AND/OR RESTRICTED FOR OPEN SPACE, NATURAL RESOURCE PROTECTION, AND/OR RECREATION PURPOSES: -0.000 AC.
- SUBTRACT LAND USED FOR ANOTHER USE (I.E. LAND WHICH IS USED OR TO BE USED, FOR COMMERCIAL OR INDUSTRIAL USES IN A RESIDENTIAL DEVELOPMENT) OR LOCATED IN A DIFFERENT ZONING DISTRICT THAN THE REST OF THE DEVELOPMENT: -0.000 AC.

BASE SITE AREA: 10.075 AC.

NATURAL RESOURCE PROTECTION AREA (AC)

PROTECTED RESOURCE:	PROTECTION RATIO	LOT #1 EXISTING	LOT #2 EXISTING	LOT #3 EXISTING	TOTAL EXISTING	PROT. REQ'D	LOT #1 PROT. REQ'D	LOT #2 PROT. REQ'D	LOT #3 PROT. REQ'D	TOTAL PROT. REQ'D
WATERCOURSES	1.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RIPARIAN BUFFER	1.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FLOODPLAIN	1.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FLOODPLAIN (ALLUVIAL) SOILS	1.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WETLANDS	1.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAKES OR PONDS	1.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WOODLANDS	0.80	0.616	1.228	0.933	2.777	2.544	0.618	0.982	0.944	2.544
STEEP SLOPES (8%+)	0.60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
STEEP SLOPES (15%+)	0.70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
STEEP SLOPES (25%+)	0.85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AGRICULTURAL SOILS	0.50	3.351**	3.013	3.548	9.912**	4.957	1.954**	1.200	1.886	5.040**

GENERAL NOTES

- A BOUNDARY AND TOPOGRAPHIC SURVEY WAS PERFORMED BY VCEA IN MAY AND JUNE 2020. THE VERTICAL DATUM IS NAVD 88 BASED ON RTK GPS OBSERVATIONS DERIVED THROUGH THE KEYNETGPS TRIMBLE VRS NETWORK.
- THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION REGARDING EASEMENTS AND OTHER DOCUMENTS THAT MAY AFFECT THE QUALITY OF TITLE FOR THE SUBJECT PROPERTY WAS OBTAINED FROM A TITLE SEARCH PREPARED BY CHOICE ONE ABSTRACT, INC., AGENT TO COMMONWEALTH LAND TITLE INSURANCE COMPANY, TW FILE# 8535739, FILE# ACCOM315, HAVING A SEARCH DATE ENDING ON MAY 19, 2020.
- NO CERTIFICATION IS MADE BY VAN CLEEF ENGINEERING ASSOCIATES AS TO THE POSITION OF ANY UTILITIES OR TO THE COMPLETENESS OF ANY UTILITIES SHOWN. ALL CONTRACTORS WORKING ON THIS SITE SHALL COMPLY WITH THE REQUIREMENTS OF ACT 287 OF 1974 AS AMENDED BY ACT 50 OF 2017 (UNDERGROUND UTILITY LINE PROTECTION LAW). VCEA HAS REGISTERED THIS SITE WITH THE PA ONE-CALL SYSTEM ON MAY 18, 2020 (SERIAL NO. 20201391701).
- THIS SITE PLAN DOES NOT CERTIFY AS TO THE PRESENCE OR ABSENCE OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS.
- THE ULTIMATE RIGHT OF WAY SHOWN ON THE NORTHEAST SIDE OF OLD LIMEKILN ROAD WAS DERIVED BY PARALLELING THE ULTIMATE R.O.W. PREVIOUSLY DETERMINED ON THE SOUTHWEST SIDE OF OLD LIMEKILN ROAD. (SEE REF. PLAN NO. 5 ON EXISTING FEATURES PLAN).
- THIS SITE PLAN DOES NOT CERTIFY AS TO THE PRESENCE OR ABSENCE OF WETLANDS OR WATERS. THERE ARE NO SHOWN WETLANDS ON THE SUBJECT PROPERTY BASED ON MAPPING FROM THE NATIONAL WETLANDS INVENTORY WEBSITE.
- THE PARCEL SHOWN HEREON IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (SFHA) PER FLOOD INSURANCE RATE MAPS (FIRM) PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BEING PANEL 280 OF 532, MAP NUMBER 420102801, EFFECTIVE DATE MARCH 16, 2015.
- SITE TO BE SERVED BY ON-LOT WATER AND SEWER FACILITIES. WELLS ARE SUBJECT TO THE PROVISIONS OF WELL CONST. STANDARDS, INCLUDING PERMITTING, WATER QUALITY TESTING AND PRODUCTION CERT.
- A FEE IN LIEU OF RECREATION LAND WILL BE OFFERED TO NEW BRITAIN TOWNSHIP. THE REQUIREMENT IS FOR 5,049 SF (2,500 SF PER NEW DWELLING UNIT X 2 PROP. LOTS).
- EX. TREE STAND ADJACENT TO LOT #2 DRIVEWAY TO BE LIMBED TO ENABLE REQ'D SIGHT TRIANGLE.
- ULTIMATE R.O.W. TO BE OFFERED TO NEW BRITAIN TOWNSHIP FOR DEDICATION.
- HOMEOWNERS ARE RESPONSIBLE FOR MAINTAINING A CLEAR SIGHT TRIANGLE AT THEIR DRIVEWAYS: TOWNSHIP HAS RIGHT TO PERFORM REQUIRED MAINTENANCE IF DEEMED CRITICAL TO PUBLIC WELFARE.
- TREES DESIGNATED "TO REMAIN" WHICH ARE DAMAGED OR KILLED DURING CONSTRUCTION PER TWP. ENGR.'S REP. (OR A CERTIFIED ARBORIST), SHALL BE REPLACED ON AN EQUIVALENT CALIPER INCH BASIS.
- LOTS 1-3 ARE RESTRICTED FROM FURTHER SUBDIVISION.
- ROAD IMPROVEMENTS AND STORMWATER FACILITIES SHALL BE INSTALLED BEFORE THE ISSUANCE OF A BUILDING PERMIT, UNLESS OTHERWISE APPROVED BY THE NEW BRITAIN TWP B.O.S. AND THE BCD.
- ROOF DRAINAGE FROM LOT #2 TO BE CONVEYED TO PROPOSED STORM SEWER (INL-1) VIA 8" PVC ROOF DRAIN.

IMPERVIOUS CALCULATIONS

LOT #	BUILDING	DRIVEWAY	DECK/PATO/WALKWAYS	TOTAL	% IMPERV.
LOT 1	2,152 SF (EX)	2,354 SF (EX)	619 SF (EX)	5,125 SF	12%
LOT 2	3,011 SF	2,800 SF	710 SF	6,521 SF	12%
LOT 3	2,192 SF	2,300 SF	849 SF	5,341 SF	12%

TOT. PROP. + FUTURE IMPERV. FOR SITE 26,686 SF (12%)

TRACT AREA SUMMARY

LOT #	NET ACRES	BLDG. ENVELOPE
LOT 1	3.514 ACRES (NET)	0.809 ACRES (BLDG. ENVELOPE)
LOT 2	3.013 ACRES (NET)	0.847 ACRES (BLDG. ENVELOPE)
LOT 3	3.548 ACRES (NET)	0.731 ACRES (BLDG. ENVELOPE)

PERMISSORY / FINAL PLANS

PER REV.	ON-LOT SEPTIC DESIGN (VW)	LDM	1-18-2022	DESIGNED BY:	LSM
PER TWP. REVIEW DATED DEC. 3, 2020		LDM	7-30-2021	CHECKED BY:	RWC/SDC
REVISIONS		AUTH.	DATE	JOB NO.	19-06-NBR

CERTIFICATIONS

COMMONWEALTH OF PENNSYLVANIA:
COUNTY OF BUCKS

OWNERSHIP, ACKNOWLEDGEMENT OF PLAN AND OFFER OF DEDICATION

I, (WE), _____ HAVE LAID OUT UPON MY (OUR) LAND, SITUATED IN THE TOWNSHIP OF NEW BRITAIN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, LOTS AND STREETS ACCORDING TO THIS PLAN WHICH IS INTENDED TO BE RECORDED. WITNESS MY HAND AND SEAL THIS _____ DAY OF _____ 20____.

OWNER SIGNATURE _____ OWNER SIGNATURE _____

OWNER SIGNATURE _____

ON THIS, THE _____ DAY OF _____ 20____, BEFORE ME, A NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA, THE UNDERSIGNED OFFICER/OWNER, PERSONALLY APPEARED _____ WHO ACKNOWLEDGED HIMSELF TO BE THE OWNER OF THE SUBDIVISION, AND, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE OWNER/COMPANY BY HIMSELF, AS (OFFICER)

NOTARY PUBLIC SIGNATURE _____ MY COMMISSION EXPIRES _____

BOARD OF SUPERVISORS

APPROVED BY THE NEW BRITAIN TOWNSHIP BOARD OF SUPERVISORS THIS _____ DAY OF _____ 20____

TOWNSHIP ENGINEER _____

APPROVED BY THE NEW BRITAIN TOWNSHIP ENGINEER THIS _____ DAY OF _____ 20____

TOWNSHIP ENGINEER _____

BUCKS COUNTY PLANNING COMMISSION

BCPC No. 12531 _____

PROCESSED AND REVIEWED, REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

CERTIFIED THIS DATE _____

REPRESENTATIVE, BUCKS COUNTY PLANNING COMMISSION _____

RECORDER OF DEEDS

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC. IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN, PENNSYLVANIA IN PLAN BOOK _____ PAGE _____ ON _____ 20____

RECORDER OF DEEDS _____

ENGINEER'S CERTIFICATION

THIS IS TO CERTIFY THAT I HAVE READ ARTICLE V OF THE NEW BRITAIN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, AND THAT THE ACCOMPANYING PLAN MEETS THE REQUIREMENTS OF THAT ARTICLE TO THE BEST OF MY KNOWLEDGE.

LEON D. MCGUIRE, JR., P.E. (PA PE-52121-E) DATE _____

SURVEYOR'S CERTIFICATION

I, ROBERT W. COOK, P.L.S., CERTIFY THAT THE EXISTING FEATURES, TOPOGRAPHY AND MEETS AND BOUNDS DESCRIPTIONS SHOWN ON THIS PLAN REPRESENT A FIELD SURVEY PERFORMED UNDER MY IMMEDIATE SUPERVISION.

ROBERT W. COOK, P.L.S. (PA SU 075256) DATE _____

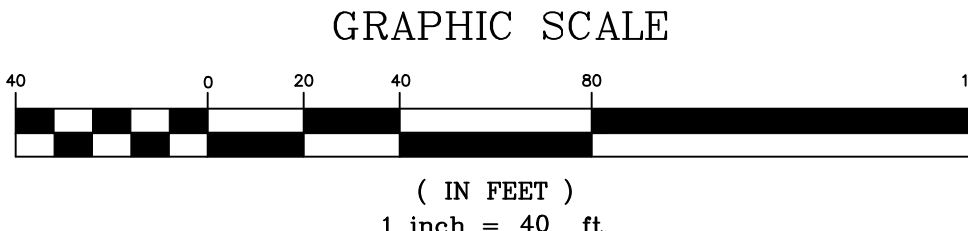
APPLICANT:
AUDAX HOMES, LLC
P.O. BOX 390
DOYLESTOWN, PA 18901

OWNER OF RECORD:
VNICO AND SHARON D'ALESSIO
SITE ADDRESS:
315 OLD LIMEKILN ROAD
CHALFONT, PA 18914

MAPPING ADDRESS:
1162 WEDGE WAY
MAPLE GLEN, PA 19002-1011

TMP 26-004-005
(DEED) INSTRUMENT 201504069

Before You Dig Anywhere
811
Call before you dig.
STOP! CALL 1-800-242-7776
PA Law requires 3 working days notice before you excavate.
PA ONE CALL SYSTEM, INC.



DATE: OCTOBER 30, 2020
SCALE: 1" = 40'
DESIGNED BY: LSM
DRAWN BY: LDM
CHECKED BY: RWC/SDC

BY: _____
LEON D. MCGUIRE, JR., PA PE NO. PE-52121-E

BY: _____
ROBERT W. COOK, PA PLS No. SU075256

Van Cleaf
ENGINEERING ASSOCIATES

Consulting Civil Engineering
Environmental Engineering
Municipal Engineering
Land Surveying
Professional Planning
Landscape Architecture

801 NORTH MAIN STREET, DOYLESTOWN, PA 18901
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (215) 345-1876 FAX (215) 345-1730

OFFICES THROUGHOUT NJ, EASTERN PA AND DE

RECORD PLAN FOR D'ALESSIO TRACT TMP 26-004-005 NEW BRITAIN TOWNSHIP BUCKS COUNTY, PENNSYLVANIA



ZONING DATA

ZONED: WS - WATERSHED
 PROPOSED USE: B-1 SINGLE FAMILY DETACHED DWELLING

	REQUIRED	EXISTING
MIN. LOT AREA	80,000 SF	438,860 SF
MIN. LOT WIDTH (REO'D BSBL)	175 FT.	638 FT.
MIN. YARDS		
FRONT	100 FT.	100 FT.
SIDE	30 FT.	30 FT.
REAR	60 FT.	60 FT.
MAX. HEIGHT	35 FT.	35 FT.
MAX. BLDG. COVERAGE(DEVELOPER)	4%	<4%
MAX. BLDG. COVERAGE(HOMEOWNER)	6%	<6%
MAX. IMPERV. COVERAGE(DEVELOPER)	6%	<6%
MAX. IMPERV. COVERAGE(HOMEOWNER)	8%	<8%
MIN. BLDG. ENVELOPE	10,000 SF	>10,000 SF

SOILS LEGEND

SYMBOL NAME	CAPABILITY CLASS
AbA ABBOTTSTOWN SILT LOAM, 0-3% SLOPES	3 (AG SOIL)
AbB ABBOTTSTOWN SILT LOAM, 3-8% SLOPES	3 (AG SOIL)

NATURAL RESOURCE PROTECTION AREA (AC)

PROTECTED RESOURCE	PROTECTION RATIO	TOTAL EXISTING	REQUIRED PROTECTION
WATERCOURSES	1.00	0.000	0.000
RIPARIAN BUFFER	1.00	0.000	0.000
FLOODPLAIN (ALLUVIAL SOILS)	1.00	0.000	0.000
WETLANDS	1.00	0.000	0.000
LAKES OR PONDS	1.00	0.000	0.000
WOODLANDS	0.80	2.775	2.544***
STEEP SLOPES (8%-15%)	0.60	0.000	0.000
STEEP SLOPES (15%-25%)	0.70	0.000	0.000
STEEP SLOPES (25%+)	0.85	0.000	0.000
AGRICULTURAL SOILS	0.50	9.913**	4.853***

* THE AMOUNT OF LAND IN EACH RESOURCE IS THE TOTAL AMOUNT OF THAT RESOURCE WITHIN THE BASE SITE AREA.
 ** EXCLUDES AREA COVERED BY EXISTING BUILDINGS AND DRIVEWAY.
 *** ALL PROPOSED RESOURCE PROTECTION LAND TO BE CONTAINED WITHIN THE PROPOSED CONSERVATION EASEMENT.

SERIAL NO. 20201391701

811 Before You Dig Anywhere

Know what's below. Call before you dig.

STOP! CALL 1-800-242-1778

PA Law requires 3 working days notice before you excavate.

PA ONE CALL SYSTEM INC.

LEGEND

- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING FENCE
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING LEGAL RIGHT OF WAY
- EXISTING EASEMENT
- EXISTING ROAD CENTERLINE
- EXISTING CURB
- EXISTING EDGE OF DRIVE
- EXISTING SIGN
- EXISTING SOILS LIMIT AND SOILS TYPE
- EXISTING STREAM
- EXISTING TREES
- EXISTING TREES TO BE REMOVED (TBR)
- EXISTING TREE LINE
- EXISTING WOODLANDS
- EXISTING MAILBOX
- EXISTING UTILITY POLES
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE
- EXISTING GAS MAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER VALVE
- EXISTING WELL
- EXISTING FIRE HYDRANT
- EXISTING ITEM TO BE REMOVED
- EXIST. INFILTRATION TEST LOCATION
- EXIST. SEPTIC TEST LOCATION

OWNER OF RECORD:
 VINCIO AND SHARON D'ALESSIO
 315 OLD LIMEKILN ROAD
 CHALFONT, PA 18914

APPLICANT:
 AUDAX HOMES, LLC
 P.O. BOX 390
 DOYLESTOWN, PA 18901

SITE ADDRESS:
 315 OLD LIMEKILN ROAD
 CHALFONT, PA 18914

MAILING ADDRESS:
 1182 WEDGE WAY
 MAPLE GLEN, PA 19002-1011

TMP 26-004-005
 (DEED) INSTRUMENT 2015040969

- REFERENCE PLANS:**
- PLAN ENTITLED "MINOR SUBDIVISION: LANDS OF MR. & MRS. WILLIAM R. HAMILTON COUNTY TAX PARCEL 26-4-5" PREPARED BY THOMAS R. ANTROBUS AND ASSOCIATES CONSULTING ENGINEERS, DATED JUNE 12, 1980, LAST REVISED JULY 21, 1980, AS RECORDED IN PLAN BOOK 200 PAGE 40.
 - PLAN ENTITLED "FINAL PLAN OF LOTS FOR VERNON HORN" PREPARED BY ROBERT D. COOPER, R.S., DATED JULY 1, 1969, AS RECORDED IN PLAN BOOK 68 PAGE 28.
 - PLAN ENTITLED "FINAL PLAN OF LOTS FOR VERNON HORN" PREPARED BY ROBERT D. COOPER, R.S., DATED FEBRUARY 15, 1975, AS RECORDED IN PLAN BOOK 133 PAGE 15.
 - PLAN ENTITLED "MINOR SUBDIVISION PLAN" PREPARED FOR THOMAS WHITEHEAD BY BOUCHER AND JAMES, INC. DATED OCTOBER 8, 1997, LAST REVISED DECEMBER 16, 1997, AS RECORDED IN PLAN BOOK 291 PAGE 51.
 - PLAN ENTITLED "AMENDED RECORD PLAN (SHEET 3 OF 4)", BY BOUCHER AND JAMES, INC. DATED AUGUST 16, 2019, AS RECORDED IN INSTRUMENT 2019064627.

- GENERAL NOTES**
- THIS MAP REPRESENTS A BOUNDARY SURVEY PERFORMED BY VCEA IN MAY AND JUNE 2020. THE COURSES AND DISTANCES SHOWN IN PARENTHESES ARE DERIVED FROM THE DEED OF RECORD.
 - A TOPOGRAPHIC SURVEY WAS PERFORMED BY VCEA IN MAY AND JUNE 2020. THE VERTICAL DATUM IS NAVD 88 BASED ON RTK GPS OBSERVATIONS DERIVED THROUGH THE KEYNETGPS TRIMBLE VRS NETWORK.
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 - THIS SURVEY DOES NOT CERTIFY AS TO THE PRESENCE OR ABSENCE OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS.
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 - EXISTING SOILS TAKEN FROM NRCS WEBSITE.
 - INFILTRATION TESTING WAS PERFORMED AT THE SITE IN MAY AND JUNE OF 2021 BY VW CONSULTANTS, LLC.
 - THE DEED OF THE SUBJECT PROPERTY REFERENCES TWO COMPONENTS, PREMISES 'A' & 'B', WITH A TRACT LINE THAT ORIGINALLY DIVIDED THE TWO PARCELS PRIOR TO THEIR CONSOLIDATION: THIS TRACT LINE WILL CEASE TO EXIST AFTER THE SUBJECT PROPERTY HAS BEEN SUBDIVIDED.
 - EXISTING EVERGREEN TREES DEPICTED ON PLAN WERE TAKEN FROM ORTHOIMAGERY.

PRELIMINARY / FINAL PLANS

PER REV.	ON-LOT SEPTIC DESIGN (VW)	LDM	1-18-2022	DESIGNED BY:	LSM
PER TWP. REVIEW DATED DEC. 3, 2020		LDM	7-30-2021	DRAWN BY:	LDM
REVISIONS		AUTH.	DATE	CHECKED BY:	RWC/SDC
				JOB NO.	19-06-NBR

DATE: OCTOBER 30, 2020
 SCALE: 1" = 40'
 DESIGNED BY: LSM
 DRAWN BY: LDM
 CHECKED BY: RWC/SDC

BY: LEON D. MCGUIRE, JR., PA PE NO. PE-052121-E

BY: ROBERT W. COOK, PA PLS No. SU 075256

Van Cleef ENGINEERING ASSOCIATES

Consulting Civil Engineering
 Environmental Engineering
 Municipal Engineering
 Land Surveying
 Professional Planning
 Landscape Architecture

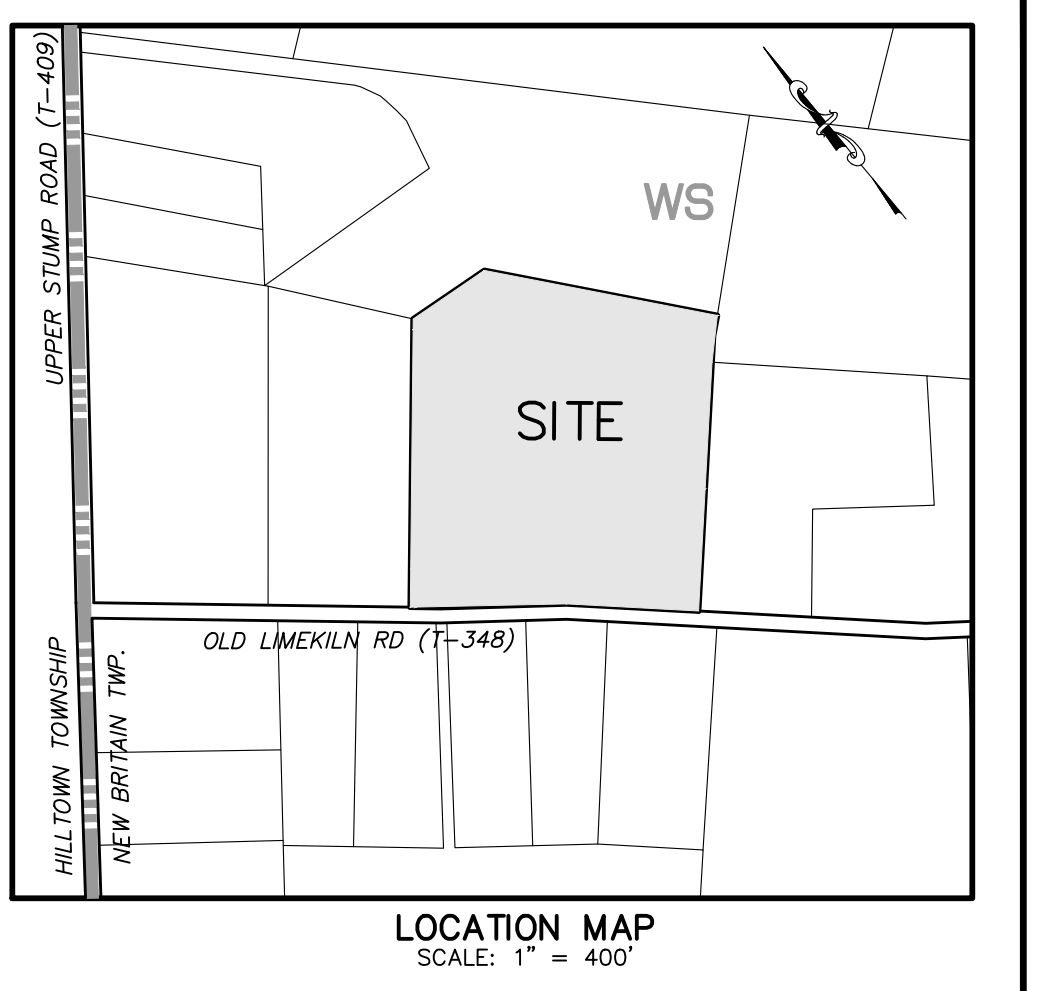
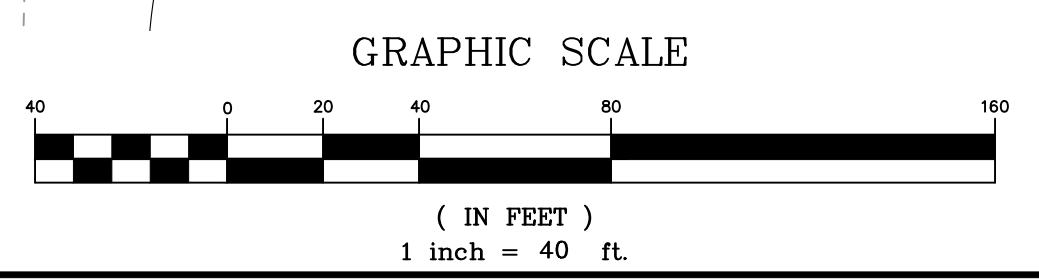
501 NORTH MAIN STREET, DOYLESTOWN, PA 18901
 WEB: WWW.VANCLEEFENGINEERING.COM
 PHONE: (215) 345-1876 FAX: (215) 345-1730

EXISTING FEATURES PLAN FOR D'ALESSIO TRACT TMP 26-004-005 NEW BRITAIN TOWNSHIP BUCKS COUNTY, PENNSYLVANIA

PLAN NOTATION
 ONLY THOSE PLANS WHICH CONTAIN AN IMPRESSED SEAL OR A RED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIALLY PREPARED FOR THE OWNER DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

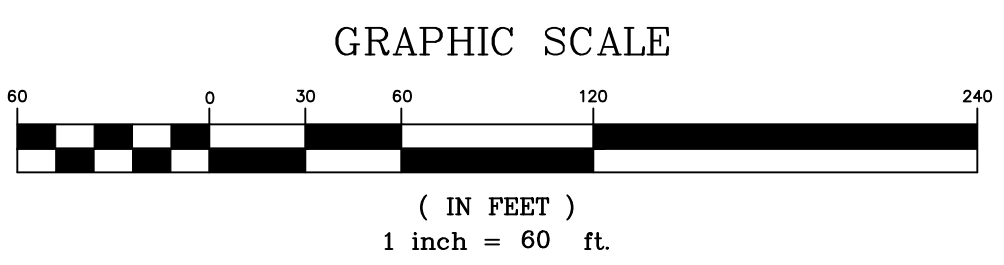
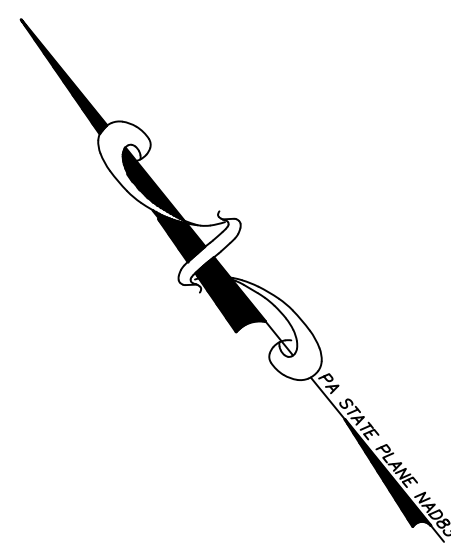
SOILS LEGEND

SYMBOL NAME	CAPABILITY CLASS
AbA ABBOTTSTOWN SILT LOAM, 0-3% SLOPES	3 (AG SOIL)
AbB ABBOTTSTOWN SILT LOAM, 3-8% SLOPES	3 (AG SOIL)






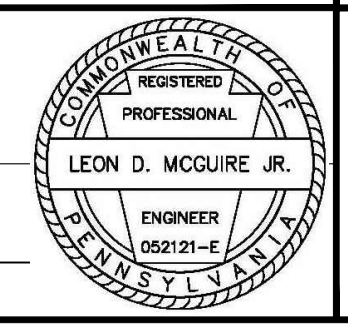
PRELIMINARY / FINAL PLANS



PLAN NOTATION
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		DATE:	OCTOBER 30, 2020
		SCALE:	1" = 60'
		DESIGNED BY:	LSM
PER REV. ON-LOT SEPTIC DESIGN (VW)	LDM	1-18-2022	DRAWN BY: LDM
PER TWP. REVIEW DATED DEC. 3, 2020	LDM	7-30-2021	CHECKED BY: SDC
REVISIONS	AUTH.	DATE	JOB NO. 19-06-NBR

BY: 
 LEON D. MCGUIRE, JR, PA PE No. PE-052121-E




Van Cleef
 ENGINEERING ASSOCIATES

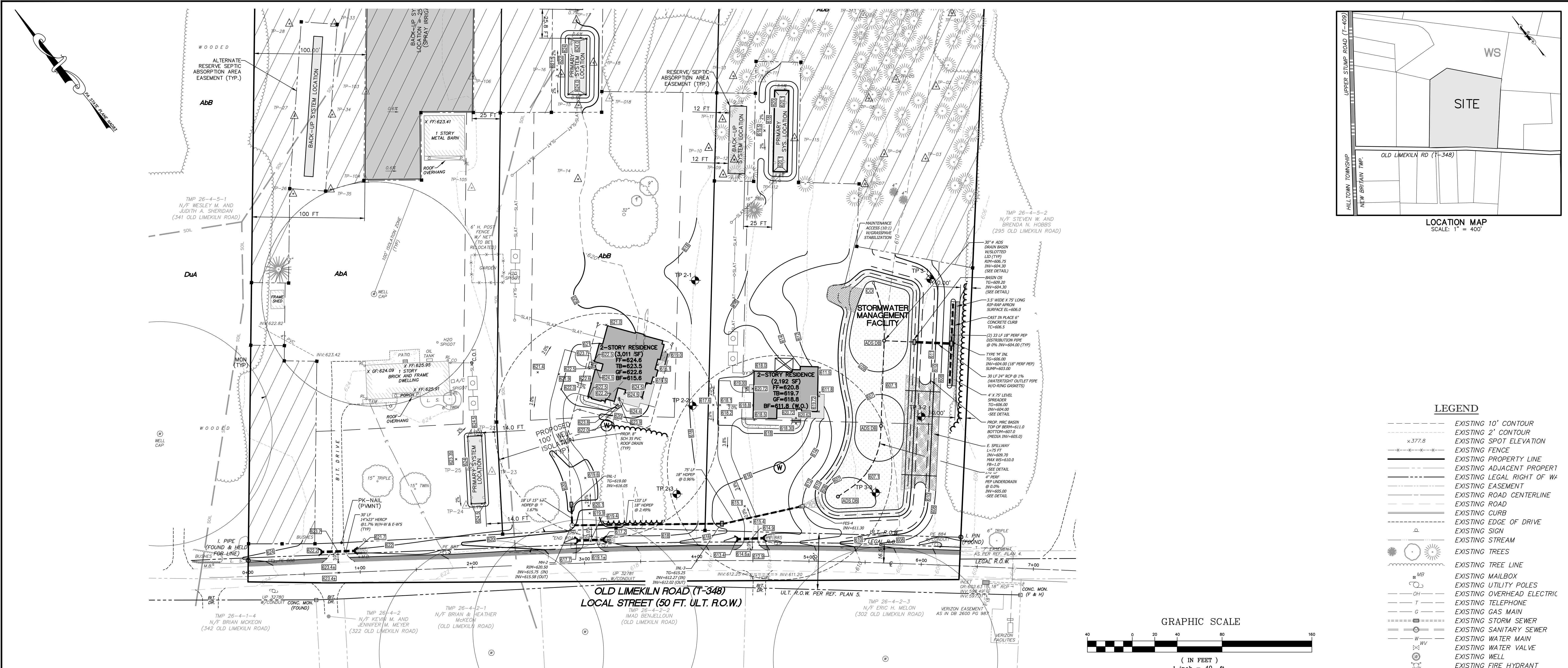
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AERIAL PLAN
 FOR
 D'ALESSIO TRACT
 TMP 26-004-005
 NEW BRITAIN TOWNSHIP
 BUCKS COUNTY, PENNSYLVANIA

3
10

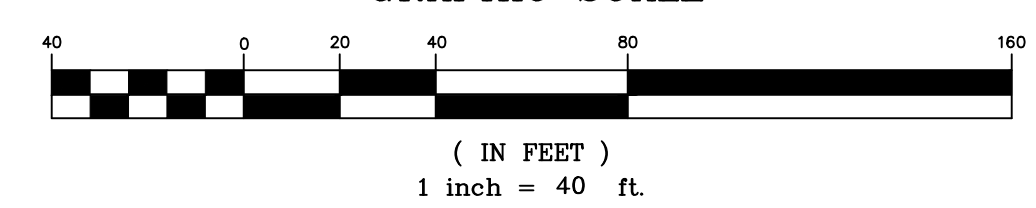


LOCATION MAP
SCALE: 1" = 400'

LEGEND

- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING FENCE
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY
- EXISTING LEGAL RIGHT OF WAY
- EXISTING EASEMENT
- EXISTING ROAD CENTERLINE
- EXISTING ROAD
- EXISTING CURB
- EXISTING EDGE OF DRIVE
- EXISTING SIGN
- EXISTING STREAM
- EXISTING TREES
- EXISTING TREE LINE
- EXISTING MAILBOX
- EXISTING UTILITY POLES
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE
- EXISTING GAS MAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER VALVE
- EXISTING WELL
- EXISTING FIRE HYDRANT
- EX. SEPTIC PERC LOCATION
- EX. INFILTRATION TEST LOC.
- PROPOSED CONTOUR
- PROPOSED CURB
- PROPOSED EASEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED SETBACK LINE
- PROPOSED LIMIT OF TREE CLEAR
- PROPOSED UTILITY POLE
- PROPOSED SIGN
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- FF FINISHED FLOOR ELEVATION
- GF GARAGE FLOOR ELEVATION
- BF BASEMENT FLOOR ELEVATION
- WO PROPOSED WALKOUT BASEMENT
- PROPOSED SPOT ELEVATION
- PROPOSED RIP-RAP APRON

GRAPHIC SCALE



GRADING AND UTILITY NOTES

1. A TOPOGRAPHIC SURVEY WAS PERFORMED BY VCEA IN MAY AND JUNE 2020. THE VERTICAL DATUM IS NAVD 88 BASED ON RTK GPS OBSERVATIONS DERIVED THROUGH THE KEYNETGPS TRIMBLE VRS NETWORK.
2. NO CERTIFICATION IS MADE BY VAN CLEEF ENGINEERING ASSOCIATES AS TO THE POSITION OF ANY UTILITIES OR TO THE COMPLETENESS OF ANY UTILITIES SHOWN. ALL CONTRACTORS WORKING ON THIS SITE SHALL COMPLY WITH THE REQUIREMENTS OF ACT 287 OF 1974 AS AMENDED BY ACT 50 OF 2017 (UNDERGROUND UTILITY LINE PROTECTION LAW). VCEA HAS REGISTERED THIS SITE WITH THE PA ONE-CALL SYSTEM ON MAY 18, 2020 (SERIAL NO. 20201391701).
3. THIS SURVEY DOES NOT CERTIFY AS TO THE PRESENCE OR ABSENCE OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS.
4. THE ULTIMATE RIGHT OF WAY SHOWN ON THE NORTHEAST SIDE OF OLD LIMEKILN ROAD WAS DERIVED BY PARALLELING THE ULTIMATE R.O.W. PREVIOUSLY DETERMINED ON THE SOUTHWEST SIDE OF OLD LIMEKILN ROAD. (SEE REF. PLAN NO. 5 ON EXISTING FEATURES PLAN, SHEET 2 OF 10)
5. THIS SURVEY DOES NOT CERTIFY AS TO THE PRESENCE OR ABSENCE OF WETLANDS OR WATERS. THERE ARE NO SHOWN WETLANDS ON THE SUBJECT PROPERTY BASED ON MAPPING FROM THE NATIONAL WETLANDS INVENTORY WEBSITE.
6. THE PARCEL SHOWN HEREON IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (SFHA) PER FLOOD INSURANCE RATE MAPS (FIRM) PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), BEING PLAN 280 OF 532, MAP NUMBER 42017C0280J, EFFECTIVE DATE MARCH 16, 2015.
7. EXISTING SOILS TAKEN FROM THE NRCS WEBSITE IN OCTOBER OF 2020.
8. CONSERVATION EASEMENT CONFIGURATION SUBJECT TO CHANGE PENDING ON-LOT SEWAGE DISPOSAL EVALUATION. THE MINIMUM CONSERVATION EASEMENT AREA REQUIRED/PROVIDED FOR THE SITE IS 4.957 ACRES IN ORDER TO PRESERVE THE REQUIRED AMOUNT OF AGRICULTURAL SOILS.
9. IT IS ANTICIPATED THAT THIS SITE WILL BE SERVED BY ON-LOT WATER AND SEWER FACILITIES.
10. IT IS ANTICIPATED THAT STORMWATER MANAGEMENT WILL BE ACCOMMODATED VIA ON-LOT FACILITIES.
11. IT IS ANTICIPATED THAT WAIVERS WILL BE REQUIRED RELATED TO: LOT DEPTH:WIDTH RATIO FOR ALL 3 LOTS (3:1 PERMITTED, 3.5:1 PROPOSED); PROVIDING ROADWAY WEDGING, CURB AND SIDEWALK.
12. IT IS ANTICIPATED THAT A FEE IN LIEU OF RECREATION LAND WILL BE OFFERED TO NEW BRITAIN TOWNSHIP. A REQUIREMENT OF 5,000 SF (2,500 SF PER NEW DWELLING UNIT) IS REQUIRED.
13. ALL CONSTRUCTION METHODS AND MATERIALS MUST COMPLY WITH THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PA-DOT) PUBLICATION 408, LATEST REVISION.
14. ALL PROPOSED STRUCTURES AND FACILITIES MUST BE CONSTRUCTED IN ACCORDANCE WITH PA-DOT PUBLICATION 72, "ROAD CONSTRUCTION STANDARDS," LATEST REVISION.
15. ALL PROPOSED STREETS, ACCESS DRIVES, DRIVEWAYS AND UTILITIES SHALL COMPLY WITH PENNSYLVANIA (PA) CODE, TITLE 67, CHAPTER 441, "ACCESS TO AND OCCUPANCY OF HIGHWAYS BY DRIVEWAYS AND LOCAL ROADS, AND CHAPTER 459, OCCUPANCY OF HIGHWAYS BY UTILITIES, LATEST REVISION.
16. ALL PROPOSED STRUCTURES AND FACILITIES MUST COMPLY WITH THE AMERICANS WITH DISABILITIES (ADA) ACT, "ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES," LATEST REVISION.
17. ALL PROPOSED WATER AND SEWER FACILITIES MUST COMPLY WITH THE STANDARDS AND POLICIES OF THE APPLICABLE WATER AUTHORITY, SEWER AUTHORITY, BUCKS COUNTY HEALTH DEPARTMENT (BCHD), PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PA-DEP) AND NEW BRITAIN TOWNSHIP.
18. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ENSURING ALL CONSTRUCTION ACTIVITIES ARE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND POLICIES OF THE BUCKS COUNTY CONSERVATION DISTRICT (BCCD).
19. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ENSURING ALL CONSTRUCTION ACTIVITIES ARE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND POLICIES OF THE OCCUPATIONAL SAFETY AND HEALTH ADMIN (OSHA).
20. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL UTILITIES AND COMPLYING WITH THE PENNSYLVANIA ACT 38 AND ACT 187, AS AMENDED.
21. ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND.
22. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287, 12/10/74, AS AMENDED 12/12/86, P.L. 1574, NO. 172. CONTRACTOR MUST NOTIFY PA-1 CALL SYSTEM, INC. 3 DAYS PRIOR TO CONSTRUCTION. CALL 1-800-242-1776 TO ORDER UTILITY MARK OUTS BY OTHERS.
23. CONTRACTOR SHALL NOT ENCROACH ONTO ADJACENT PROPERTIES UNLESS A TEMPORARY CONSTRUCTION EASEMENT HAS BEEN GRANTED BY ADJOINING PROPERTY OWNER. CONTRACTOR SHALL HAVE PROPERTY LINES CLEARLY MARKED IN AREAS WHERE GRADING WILL ENCROACH WITHIN 5 FEET OF THE PROPERTY LINE AND SHALL CONSTRUCT SUCH BARRIERS WHERE NECESSARY TO PREVENT ENCROACHMENT ONTO ADJACENT PROPERTIES.
24. NO EXCAVATION OR FILL SHALL BE MADE WITH A FACE STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.
25. NATURAL RESOURCE PROTECTION LAND REQUIRED TO BE PROTECTED, AS SHOWN IN WITHIN THE "ENVIRONMENTALLY SENSITIVE LAND STANDARDS FOR WATERSHED DISTRICT" TABLE SHALL NOT BE DISTURBED.
26. SHEETS 1 THROUGH 10 INCLUSIVE, ON RECORD AT NEW BRITAIN TOWNSHIP, SHALL BE CONSIDERED A PART OF THE APPROVED FINAL PLAN AS IF RECORDED WITH SAME.
27. THE STORMWATER MANAGEMENT FACILITIES SHOWN ON THIS PLAN ARE A BASIC AND PERPETUAL PART OF THE STORM DRAINAGE SYSTEM OF THE TOWNSHIP OF NEW BRITAIN, AND AS SUCH, ARE TO BE PROTECTED AND PRESERVED BY THE PROPERTY OWNER. THE TOWNSHIP OF NEW BRITAIN AND/OR ITS AGENTS RESERVES THE RIGHT AND PRIVILEGE TO ENTER UPON THE SITE FROM TIME TO TIME FOR THE PURPOSE OF INSPECTION OF THE FACILITY IN ORDER TO DETERMINE THAT THE STRUCTURAL AND DESIGN INTEGRITY ARE BEING MAINTAINED BY THE OWNER. IN ADDITION, THE PROPERTY OWNER SHALL EXECUTE A COVENANT OR BLANKET EASEMENT OVER THE SITE TO ENSURE THE FUTURE PERFORMANCE AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES.

28. ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN THE DRAWINGS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
29. ALL CONSTRUCTION DEBRIS INCLUDING EXCESS EXCAVATED MATERIAL, SCRAP WOOD, BRICKS, BLOCKS, ETC. SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS.
30. CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND COMPLYING WITH THE PENNSYLVANIA ACT 38 AND ACT 187, AS AMENDED.
31. ALL ELEVATIONS, DIMENSIONS, AND THE LOCATIONS OF LINEAR FEATURES SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
32. THE CONTRACTOR, DURING THE PERFORMANCE OF ALL WORK ASSOCIATED WITH THE CONSTRUCTION OF THE PROJECT, IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS, CODES AND REGULATIONS.
33. ALL SIGHT DISTANCE OBSTRUCTIONS (INCLUDING BUT NOT LIMITED TO EMBANKMENTS AND VEGETATION) SHALL BE REMOVED BY THE PERMITTEE TO PROVIDE THE MINIMUM REQUIRED SIGHT DISTANCE AS INDICATED ON THE OLD LIMEKILN ROAD PLAN & PROFILE SHEET (9 OF 10).
34. THE ULTIMATE ROW DEFINED ON THIS SITE PLAN SHALL BE DEDICATED TO NEW BRITAIN TWP AS A CONDITION OF THIS MAJOR SUBDIVISION APPROVAL.
35. EXISTING VEGETATION TO REMAIN SHALL BE PROTECTED BY TREE PROTECTION FENCE: IN THE OPINION OF THE TOWNSHIP ENGINEER'S REPRESENTATIVE, ANY TREES, SHRUBS, OR GROUND COVER DAMAGED, KILLED, DISTURBED DURING OR AS A RESULT OF CONSTRUCTION SHALL BE REPLACED ON AN EQUIVALENT CALIPER BASIS AND GUARANTEED FOR ONE YEAR.
36. ANY DISTURBANCE REQUIRED BY AN APPROVED STREAM CROSSING SHALL BE OFFSET BY RIPARIAN CORRIDOR IMPROVEMENTS. IF DURING CONSTRUCTION, AREAS WITHIN THE RIPARIAN CORRIDOR ARE DISTURBED BEYOND WHAT IS SHOWN ON THE APPROVED PLAN, THEY SHALL BE OFFSET BY LANDSCAPING IMPROVEMENTS PER §2400.1.4, AS APPROVED BY THE TOWNSHIP.
37. NO FURTHER DISTURBANCE OF REGULATED RESOURCES (STEEP SLOPES, WOODLAND, ETC.) IS PERMITTED ON LOT #1-3 AFTER CERTIFICATE OF OCCUPANCY IS ISSUED UNLESS SPECIFICALLY AUTHORIZED BY THE TOWNSHIP VIA WRITTEN APPROVAL.
38. THE RESERVE SEPTIC ABSORPTION FIELDS, AS DEPICTED ON THIS PLAN WITH THEIR PROP. EASEMENTS AND ASSOC. MONUMENTS, ARE RESERVED STRICTLY FOR USE AS REPLACEMENT SEPTIC ABSORPTION AREAS (IN THE EVENT OF A PRIMARY SYSTEM FAILURE); THESE RESERVE AREAS MUST NEVER BE DISTURBED AS IT IS CRITICAL THAT THE SOILS ARE NEVER COMPACTED, WHICH WOULD ADVERSELY AFFECT THEIR PERMEABILITY AND RENDER THEM UNSUITABLE FOR USE AS ALTERNATE LOCATIONS.
39. THE PROPOSED WELL IS SUBJECT TO THE PROVISIONS OF THE WELL CONSTRUCTION STANDARDS INCLUDING PERMITTING, TESTING AND WELL PRODUCTION CERTIFICATION.
40. ALL DETENTION BASIN EMBANKMENTS SHALL BE PLACED IN LIFTS NOT TO EXCEED ONE FOOT THICKNESS. EACH LIFT SHALL BE COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY AS ESTABLISHED BY A.S.T.M. D-1557.
41. ROOF DRAINAGE FROM LOT #2 TO BE CONVEYED TO PROPOSED STORM SEWER (INL-1) VIA 8" PVC ROOF DRAIN.

PRELIMINARY / FINAL PLANS

DATE:	OCTOBER 30, 2020
SCALE:	1" = 40'
DESIGNED BY:	LSM
DRAWN BY:	LDM
CHECKED BY:	SDC
REVISIONS	AUTH. DATE JOB NO.
	19-06-NBR

APPLICANT:
AUXAX HOMES, LLC
P.O. BOX 390
DOYLESTOWN, PA 18901

OWNER OF RECORD:
VINCIO AND SHARON D'ALESSIO

SITE ADDRESS:
315 OLD LIMEKILN ROAD
CHALFONT, PA 18914

MAILING ADDRESS:
1162 WEDGE WAY
MAPLE GLEN, PA 19002-1011

TMP 26-004-005
(DEED) INSTRUMENT 2015040969

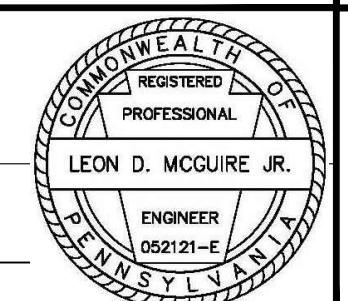
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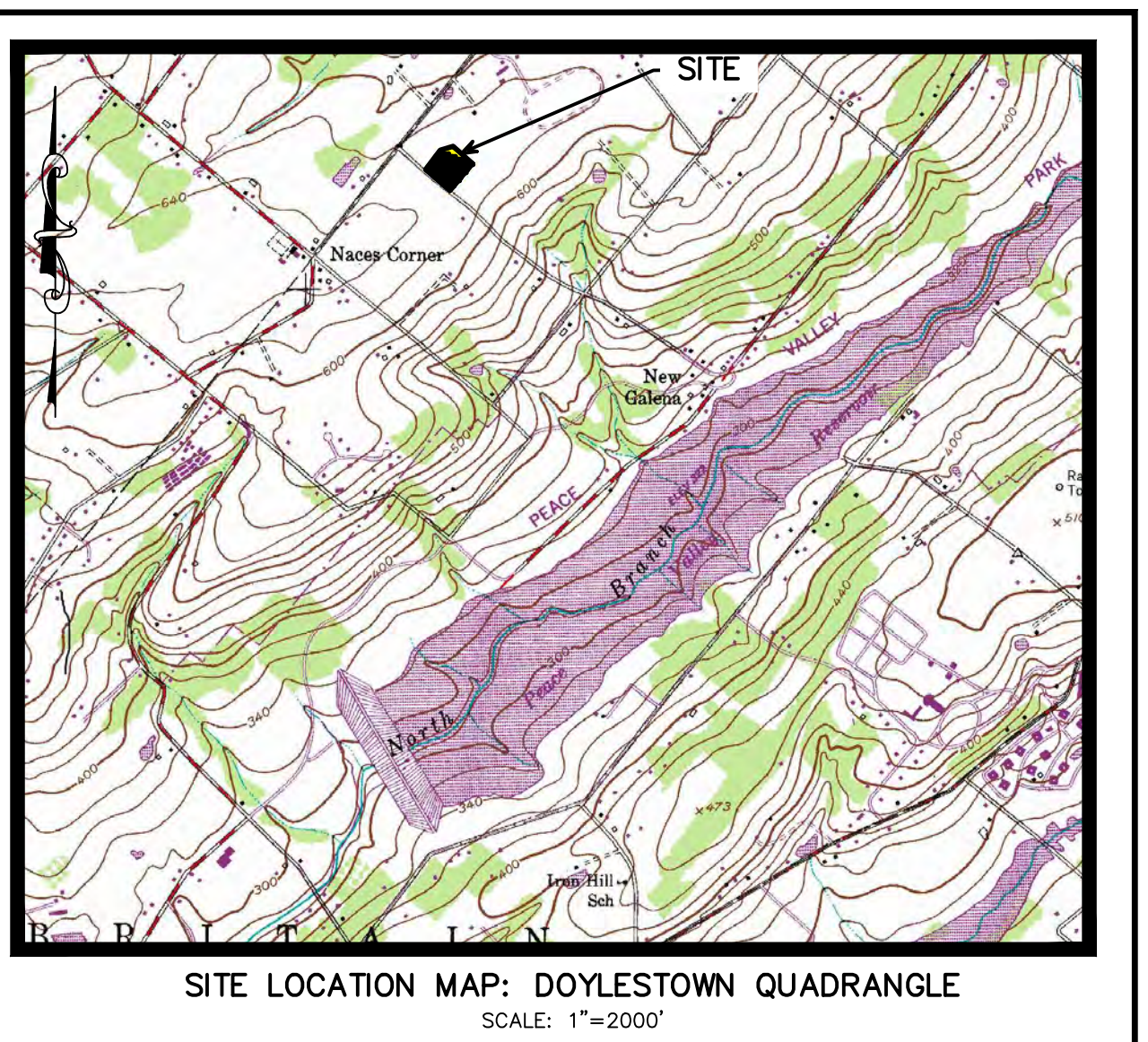
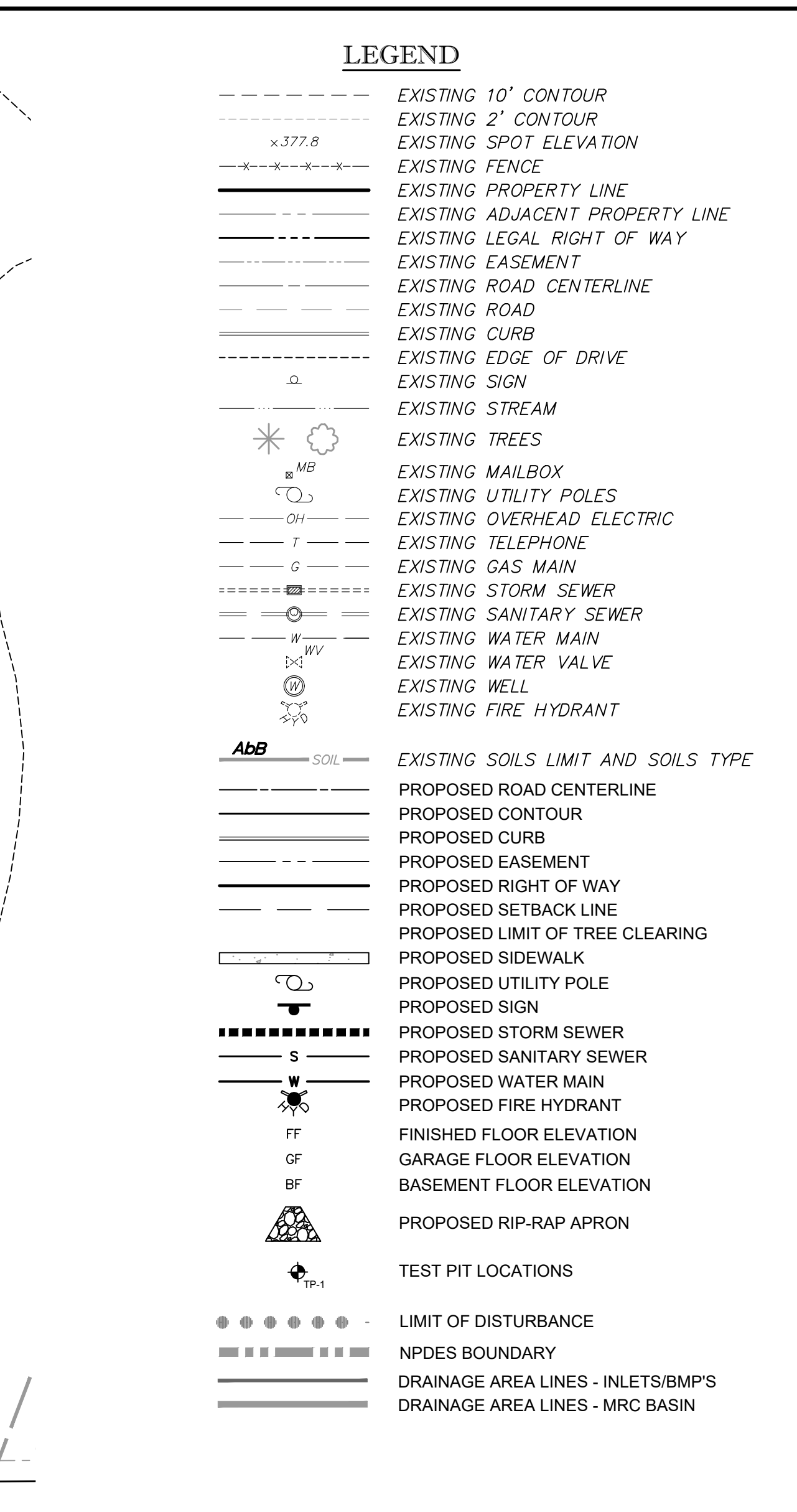
501 NORTH MAIN STREET, DOYLESTOWN, PA 18901
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (215) 345-1876 FAX (215) 345-1730

OFFICES THROUGHOUT NJ, EASTERN PA AND DE

GRADING AND UTILITY PLAN
FOR
D'ALESSIO TRACT
TMP 26-004-005
NEW BRITAIN TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN AN IMPRESSED SEAL OR A RED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN PREPARED FOR THE OWNER DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

BY:
LEON D. MCGUIRE, JR. PA PE No. PE-052121-E



FILL MATERIALS
 IF THE SITE WILL NEED TO HAVE FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE OPERATOR.

PROJECT CONSTRUCTION WASTES

1. TREES - CHIPPED AND REMOVED OFFSITE FOR MULCH.
2. BUILDING MATERIALS - SHALL BE REMOVED AND DISPOSED OF AT PROPER RECYCLING FACILITY AS PER NOTE #10 OF THE GENERAL EROSION & SEDIMENT CONTROL NOTES.
3. ROOF WASTE - ALL ROOFS THAT ARE SUITABLE FOR LANDSCAPING USES SHALL BE USED ON SITE OR AT ANOTHER FACILITY.
4. SOIL WASTE - ALL EXCAVATED SOIL SHALL BE USED ON SITE, AS FILL MATERIAL WHERE POSSIBLE. ANY EXCESS MATERIAL NOT USED ON SITE MAY ONLY BE DISPOSED AT A FACILITY WITH A VALID EARTH DISTURBANCE AND NPDES PERMIT APPROVED AND WHERE ALL BMPs ARE PROPERLY INSTALLED. ALL EXCESS MATERIAL THAT IS REMOVED DURING MAINTENANCE AND CLEANING OF EROSION AND SEDIMENTATION CONTROL DEVICES WILL BE INCORPORATED INTO THE FINE GRADING UPSTREAM FROM A SEDIMENT CONTROL DEVICE. EXCESS MATERIAL THAT IS REMOVED FROM A FACILITY WITH A VALID EARTH DISTURBANCE AND NPDES PERMIT CANNOT BE INCORPORATED INTO THE FINE GRADING STABILIZATION SHALL BE REMOVED FROM THE SITE AND MAY ONLY BE DISPOSED AT A FACILITY WITH A VALID EARTH DISTURBANCE AND NPDES PERMIT APPROVAL AND WHERE ALL BMPs ARE PROPERLY INSTALLED.
5. SEDIMENT REMOVAL FROM ALL SEDIMENT BASINS IS TO BE RETURNED TO SITE UPSTREAM OF ALL PROPOSED BMPs.
6. ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 2601 ET SEQ., 2711 ET SEQ., AND 2811 ET SEQ.) AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

MAINTENANCE RESPONSIBILITY NOTE

- 1.) THE PROPOSED STORM SEWER AND MRC DETENTION BASIN ARE REQUIRED STORMWATER CONTROLS AND CANNOT BE REMOVED BY THE OWNER WITHOUT WRITTEN AUTHORIZATION FROM NEW BRITAIN TOWNSHIP.
- 2.) IT IS THE LANDOWNER'S RESPONSIBILITY TO MAINTAIN THE PROPOSED STORM SEWER AND MRC DETENTION BASIN AND ENSURE THAT THEY ARE FUNCTIONING PROPERLY.
- 3.) NEW BRITAIN TWP. MAINTAINS THE RIGHT TO ENTER THE PROPERTY AND INSPECT THE STORM SEWER AND MRC DETENTION BASIN TO ENSURE THAT THEY ARE BEING MAINTAINED. THE TOWNSHIP ALSO MAINTAINS THE RIGHT TO FIX OR REPAIR THEM AT THE OWNERS EXPENSE IF IT DEEMS IT TO BE NECESSARY.

RESERVE SEPTIC ABSORPTION FIELDS

THE RESERVE SEPTIC ABSORPTION FIELDS, AS DEPICTED ON THIS PLAN WITH THEIR PROP. EASEMENTS AND ASSOC. MONUMENTS, ARE RESERVED STRICTLY FOR USE AS REPLACEMENT SEPTIC ABSORPTION AREAS (IN THE EVENT OF A PRIMARY SYSTEM FAILURE). THESE RESERVE AREAS MUST NEVER BE DISTURBED AS IT IS CRITICAL THAT THE SOILS ARE NEVER COMPACTED, WHICH WOULD ADVERSELY AFFECT THEIR PERMEABILITY AND RENDER THEM UNSUITABLE FOR USE AS ALTERNATE LOCATIONS.

PLANTING SOIL SPECIFICATION

ON SITE TOPSOIL TO BE USED IN RAIN GARDENS SHALL MEET THE FOLLOWING CRITERIA. TOPSOIL SHALL BE TESTED BY A REPUTABLE LABORATORY AND AMENDED, AS REQUIRED. PLANTING SOIL SHALL BE LOAM AMENDED WITH COMPOSTED ORGANIC MATERIAL. ORGANIC AMENDED SOIL SHALL BE 20-30% ORGANIC MATERIAL (COMPOST), AND 70-80% SOIL BASE (PREFERABLY TOPSOIL). SOIL BASE SHALL HAVE A pH BETWEEN 5.5 AND 6.5 AND A CLAY CONTENT LESS THAN 10%.

GENERAL PCSM PLANNING & DESIGN

THIS PROJECT WAS DESIGNED WITH AN EMPHASIS ON PRESERVING THE INTEGRITY OF SURROUNDING STREAM CHANNELS, TO MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL AND CHEMICAL QUALITIES OF RECEIVING STREAMS, PREVENT ANY INCREASE IN THE RATE OF STORM WATER RUNOFF, MINIMIZE ANY INCREASE IN STORM WATER RUNOFF VOLUME, MINIMIZE INCREASE IN IMPERVIOUS AREAS, MAXIMIZE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION, MINIMIZE LAND CLEARING AND GRADING, SOIL COMPACTION UTILIZE OTHER BMPs THAT PREVENT OR MINIMIZE CHANGES IN STORM WATER RUNOFF.

THE DESIGN ACCOMPLISHED THIS DIRECTIVE WITH THE ADDITION OF PROPOSED 'MANAGED RELEASE' BASIN (AKA MRC), WHICH WILL HELP MITIGATE WATER QUALITY, PEAK RATE & VOLUME FOR RUNOFF LEAVING THE SITE. THIS BASIN WILL COLLECT AND TREAT ALL THE PROPOSED SITE RUNOFF AS WELL AS RUNOFF FROM THE EXISTING RESIDENCE (LOT-1) AND ROADWAY DRAINAGE CAPTURED ALONG A PROPOSED ROADSIDE SWALE. A LEVEL SPREADER IS ALSO PROPOSED AT THE MRC BASIN'S OUTLET, WHICH WILL ACT TO DIFFUSE, RUNOFF LEAVING THE SITE TO PREVENT EROSION FROM OCCURRING DOWNSTREAM OF BASIN.

GENERAL NOTES

1. SOIL INFORMATION TAKEN FROM THE SOIL SURVEY OF BUCKS COUNTY DOWNLOADED FROM THE NRCS WEBSITE ON OCTOBER 2020.
2. RUNOFF FROM SITE IS TRIBUTARY TO AN UNNAMED TRIBUTARY OF THE NORTH BRANCH OF THE NESHAMINY CREEK. THE WATERS ARE CLASSIFIED AS WW-MF BY PA CODE CHAPTER 93.

SOILS LEGEND

SYMBOL	NAME	CAPABILITY CLASS
AbA	ABBOTTSTOWN SILT LOAM, 0-3% SLOPES	3 (AG SOIL)
AbB	ABBOTTSTOWN SILT LOAM, 3-8% SLOPES	3 (AG SOIL)

SOILS LIMITATIONS & REGULATIONS

AbA & AbB - POORLY DRAINED SOIL DEPTH TO WATER
 Table 6-18 RESTRICTED WATER GRADING, ELEVATED SEPTIC MOUND

PLAN NOTATION

ONLY THOSE PLANS WHICH CONTAIN AN IMPRESSED SEAL OR A RED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN WAS PREPARED FOR THE OWNER DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

ENGR FILTER MEDIA SPECIFICATIONS

1. TEXTURE OF PLANTING SOIL SHOULD CONFORM TO THE CLASSIFICATION WITHIN THE USDA TRIANGLE FOR SANDY LOAM OR LOAMY SAND. PLANTING SOIL SHOULD BE A MIXTURE OF SAND, SILT, AND CLAY PARTICLES AS REQUIRED TO MEET THE CLASSIFICATION. RANGES OF PARTICLE SIZE DISTRIBUTION, AS DETERMINED BY PIPETTE METHOD IN COMPLIANCE WITH ASTM F-1632.
2. PLANTING SOIL SHOULD BE SCREENED AND FREE OF STONES LARGER THAN A HALF-INCH (1/2", 12.7 mm) IN ANY DIMENSION. NO MORE THAN TEN PERCENT (10%) OF THE SOIL VOLUME SHOULD BE COMPOSED OF SOIL PARTICLES GREATER THAN ONE INCH (1").
3. CLODS, OR NATURAL CLUMPS OF SOILS, GREATER THAN THREE INCHES (3") IN ANY DIMENSION SHOULD BE ABSENT FROM THE PLANTING SOIL. SMALL CLODS RANGING FROM ONE TO THREE INCHES (1"-3") AND PEDS, NATURAL SOIL CLUMPS UNDER ONE INCH (1") IN ANY DIMENSION, MAY BE PRESENT BUT SHOULD NOT MAKE UP MORE THAN TEN PERCENT (10%) OF THE SOIL BY VOLUME.
4. THE pH OF THE PLANTING SOIL SHOULD HAVE A RANGE OF 5.8-7.1.
5. SOLUBLE SALTS SHOULD BE LESS THAN 2.0 mmhos/cm (ds/m), TYPICALLY AS MEASURED BY 1:2 SOIL-WATER RATIO BASIC SOIL SALINITY TESTING. SODIC SOILS (EXCHANGEABLE SODIUM PERCENTAGE (ESP) GREATER THAN 15 AND/OR SODIUM ADSORPTION RATIO (SAR) GREATER THAN 13) SHALL NOT BE ACCEPTABLE FOR USE REGARDLESS OF AMENDMENT.
6. ORGANIC CONTENT OF PLANTING SOIL SHOULD HAVE A RANGE OF THREE TO FIFTEEN PERCENT (3%-15%) BY WEIGHT AS DETERMINED BY LOSS ON IGNITION (ASTM D2974). TO ADJUST ORGANIC CONTENT, PLANTING SOIL MAY BE AMENDED, PRIOR TO PLACING AND FINAL GRADING, WITH THE ADDITION OF ORGANIC COMPOST.
7. ALL AGGREGATE WITHIN THE STONE STORAGE BED SHALL BE CLEAN-WASHED, DEFINED AS HAVING LESS THAN 0.5% WASH LOSS, BY MASS, WHEN TESTED PER THE AASHTO T-11 WASH TEST.
8. THE BASIN EMBANKMENT SHALL BE PLACED IN EIGHT-INCH MINIMUM LIFTS TO A MINIMUM NINETY-FIVE (95) PERCENT DRY DENSITY. PRIOR TO PROCEEDING TO THE NEXT LIFT, COMPACTION SHALL BE CHECKED BY THE TOWNSHIP ENGINEER OR AN APPROVED SOILS ENGINEER WHO SHALL PROVIDE THE TOWNSHIP ENGINEER WITH A WRITTEN REPORT. COMPACTION TESTS SHALL BE PERFORMED USING THE MODIFIED PROCTOR METHOD IN ACCORDANCE WITH ASTM D-1577. COMPACTION TESTS SHALL BE RUN ON THE LEADING AND TRAILING EDGE AS WELL AS THE TOP OF BERM.

OWNER SIGNATURE _____ **OWNER SIGNATURE** _____

ON THIS, THE _____ DAY OF _____, 20____, BEFORE ME, A NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA, THE UNDERSIGNED OFFICER/FORNER, PERSONALLY APPEARED _____ WHO ACKNOWLEDGED HIMSELF TO BE THE OWNER OF THE SUBDIVISION, AND, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE OWNER/COMPANY BY HIMSELF, AS (OFFICER) _____

NOTARY PUBLIC SIGNATURE _____ **MY COMMISSION EXPIRES** _____

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC. IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN, PENNSYLVANIA IN PLAN BOOK _____ PAGE _____ ON _____ 20____

RECORDER OF DEEDS _____

ENGINEER'S CERTIFICATION

THIS IS TO CERTIFY THAT I HAVE READ ARTICLE V OF THE NEW BRITAIN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, AND THAT THE ACCOMPANYING PLAN MEETS THE REQUIREMENTS OF THAT ARTICLE TO THE BEST OF MY KNOWLEDGE.

LEON D. McGUIRE, JR., P.E. (PA 52121-E) DATE _____

PRELIMINARY / FINAL PLANS

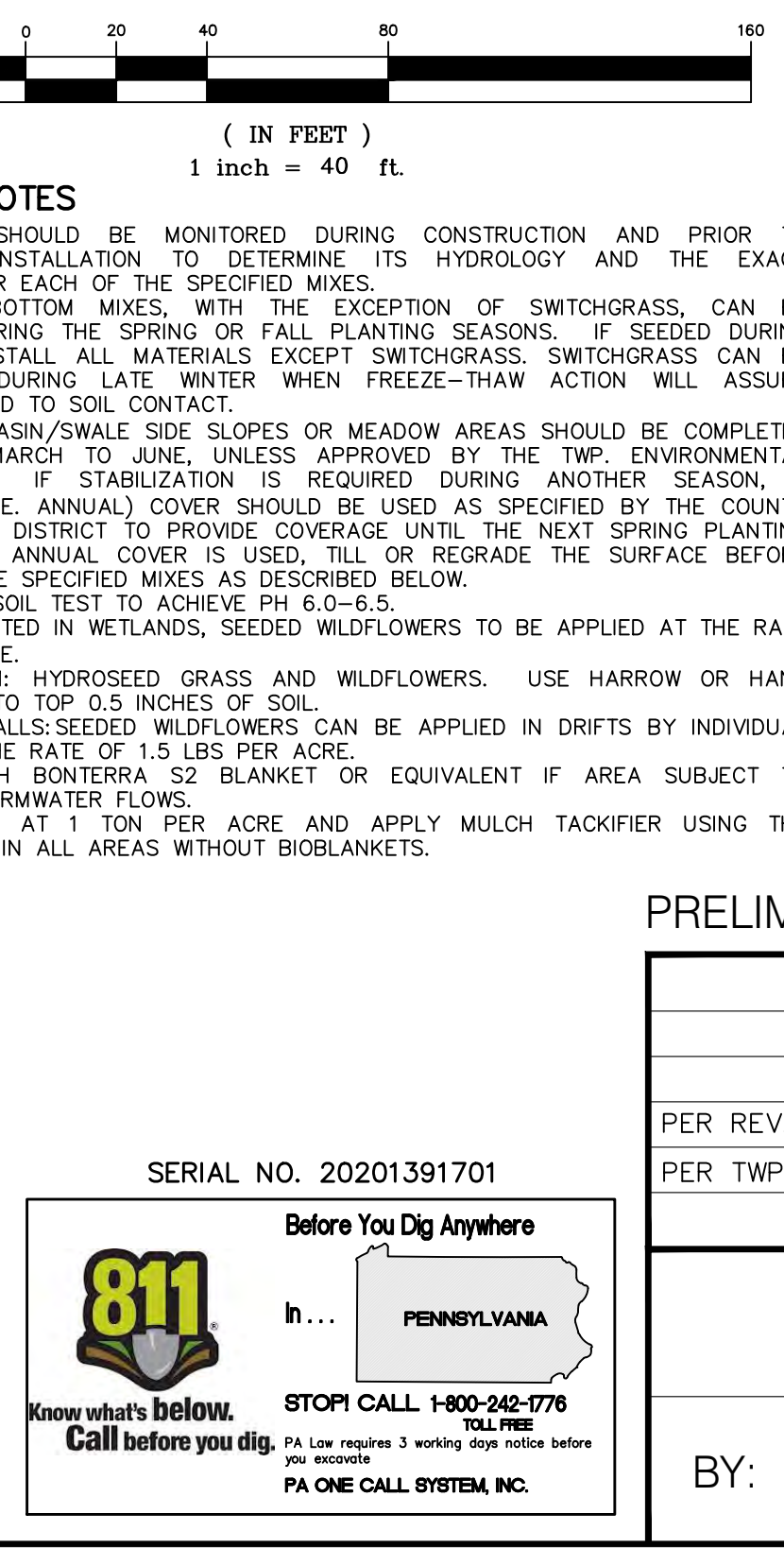
PER REV.	ON-LOT SEPTIC DESIGN (VW)	LDM	1-18-2022	DRAWN BY:	LDM
PER TWP. REVIEW DATED DEC. 3, 2020	LDM	7-30-2021	CHECKED BY:	SDC	
REVISIONS	AUTH.	DATE	JOB NO.	19-06-NBR	

DATE: OCTOBER 30, 2020
 SCALE: 1" = 40'
 DESIGNED BY: LSM
 DRAWN BY: LDM
 CHECKED BY: SDC

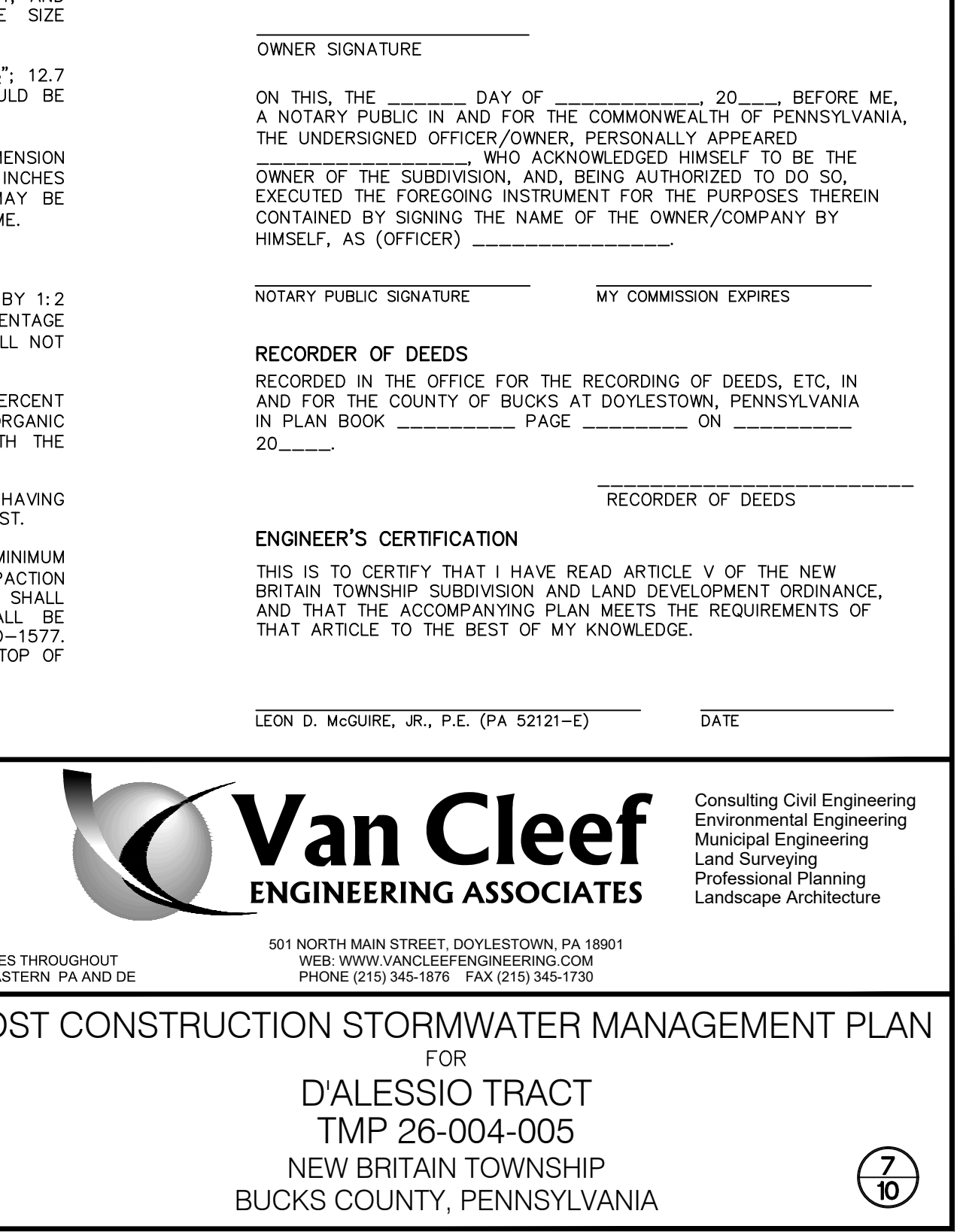
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 PHONE (215) 345-1870 FAX (215) 345-1730

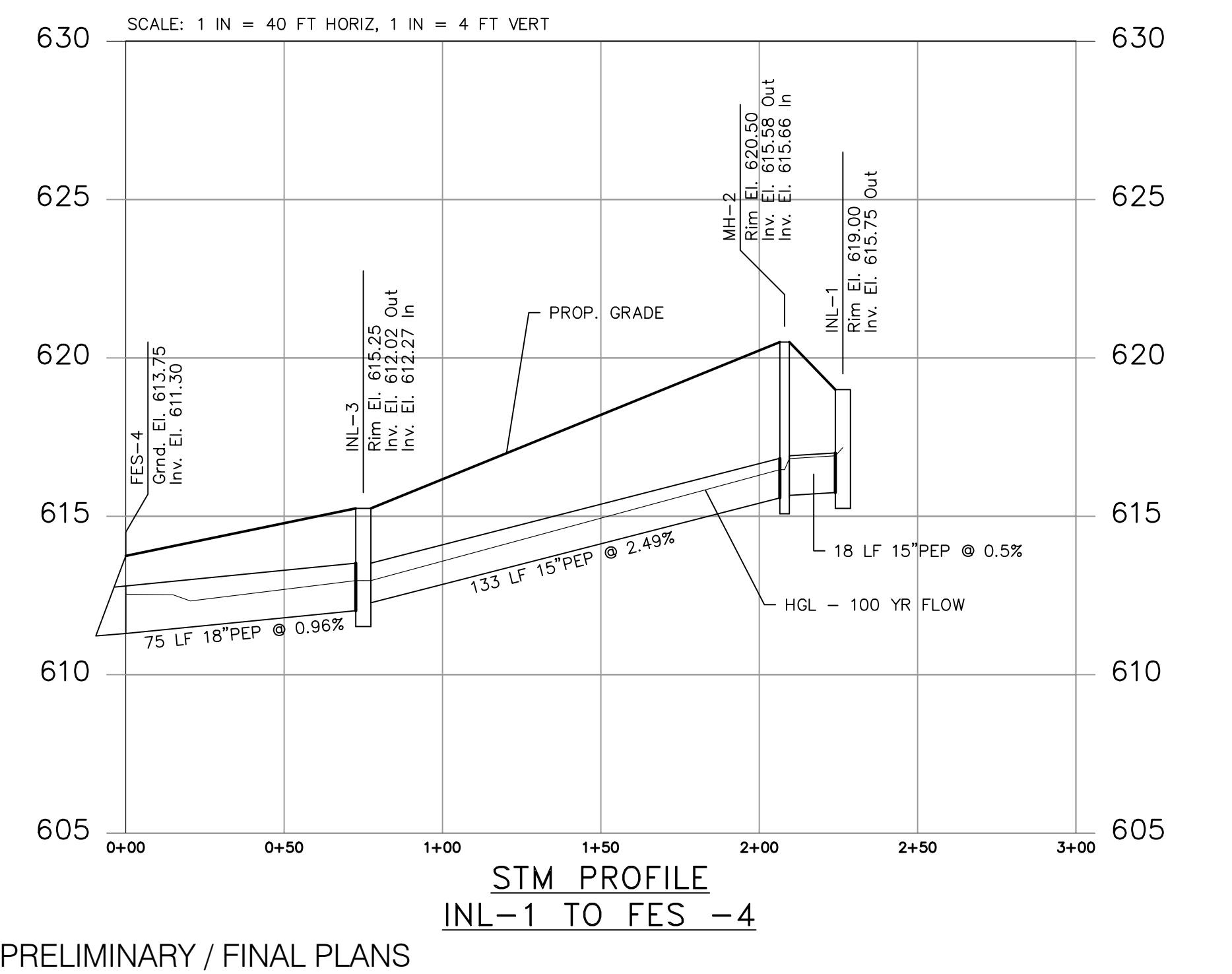
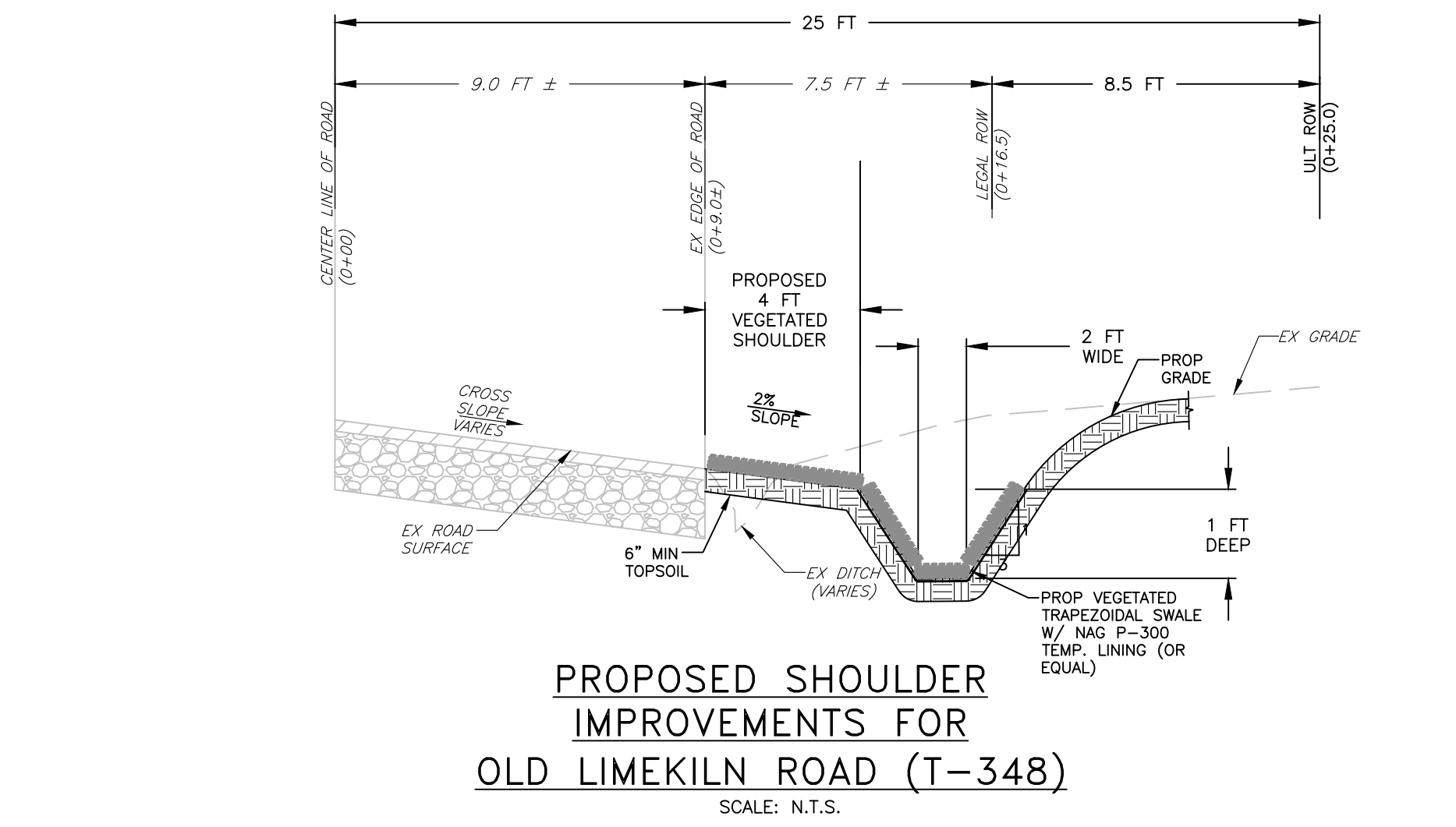
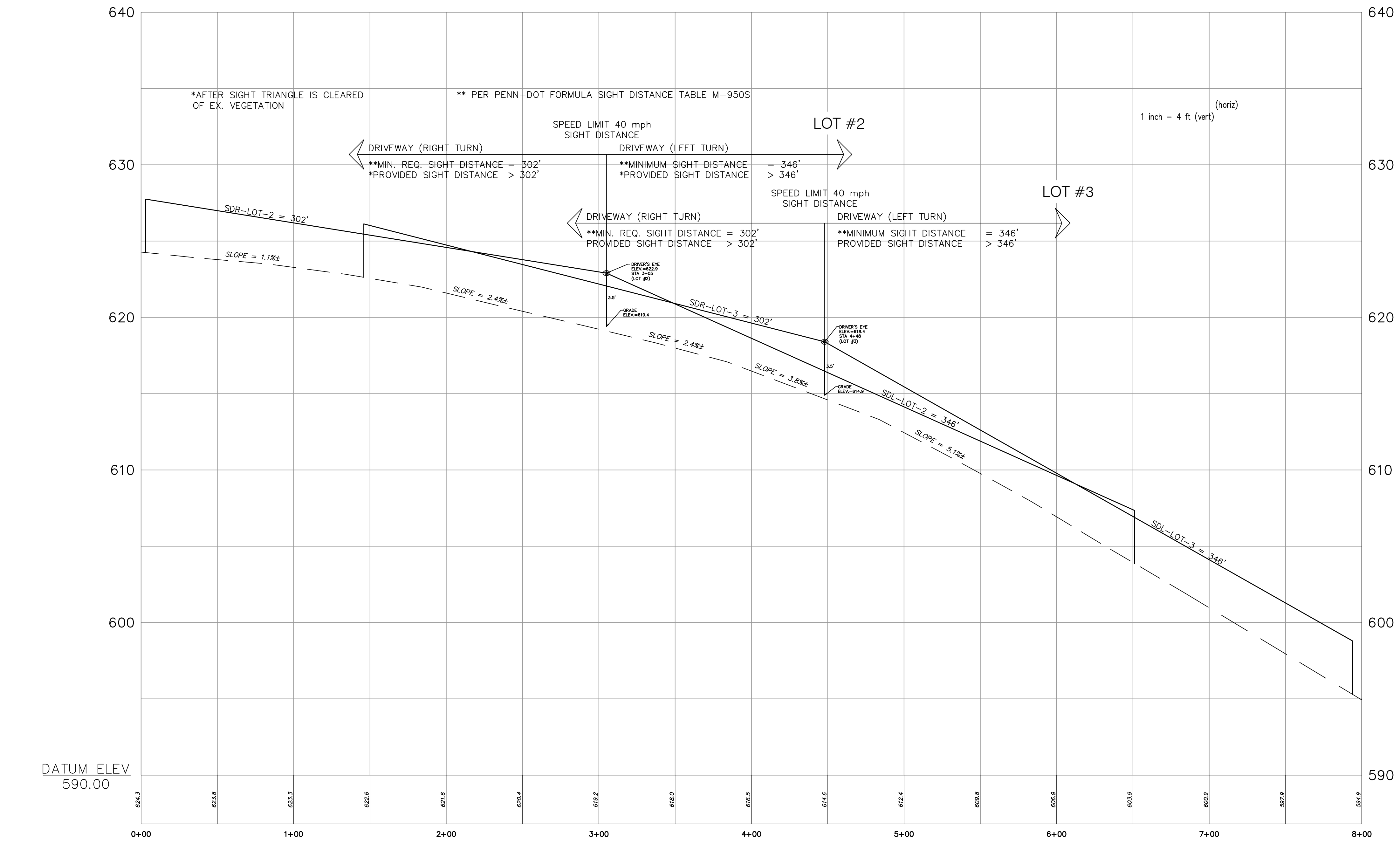
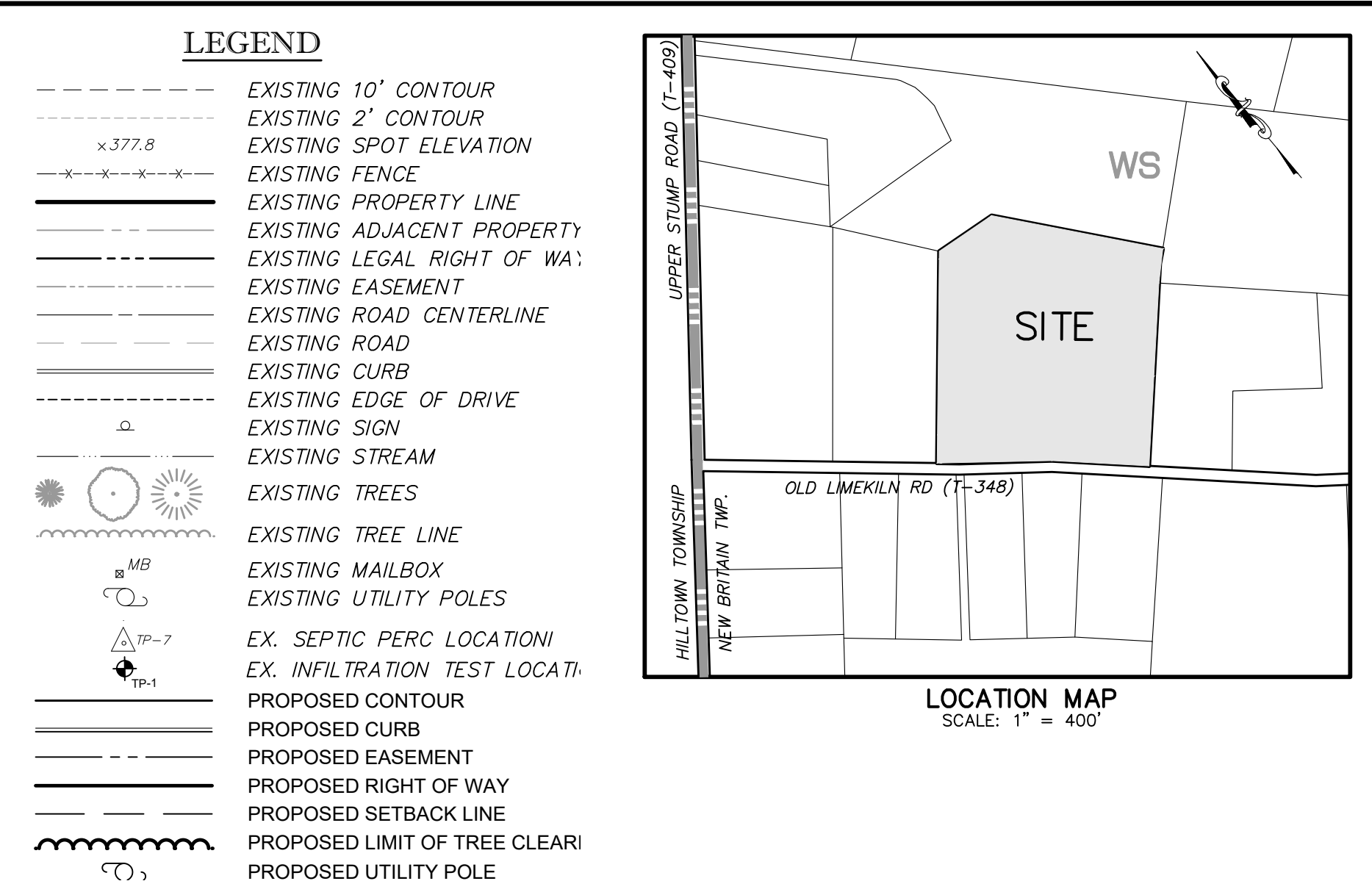
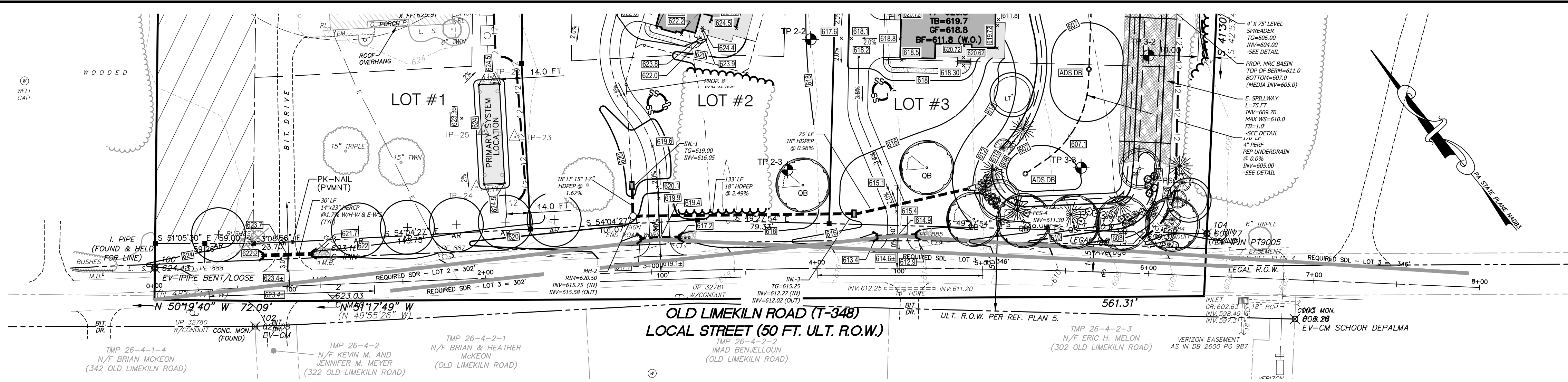
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
 FOR
DALESSIO TRACT
 TMP 26-004-005
 NEW BRITAIN TOWNSHIP
 BUCKS COUNTY, PENNSYLVANIA

BY: _____
 LEON D. McGUIRE, JR. PA PE No. PE-052121-E

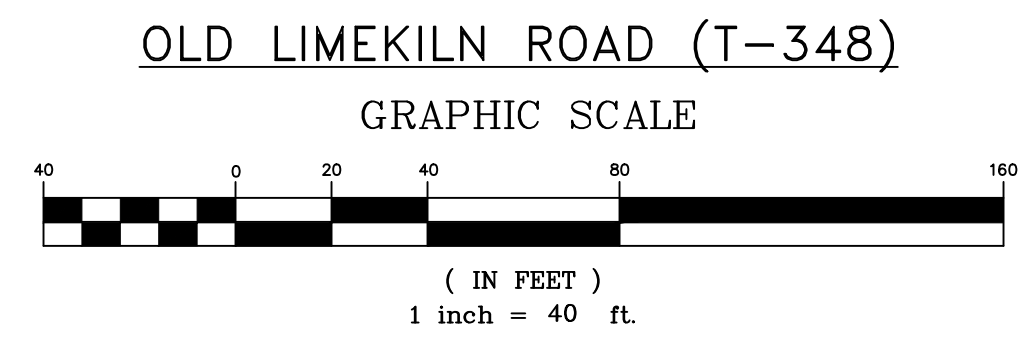
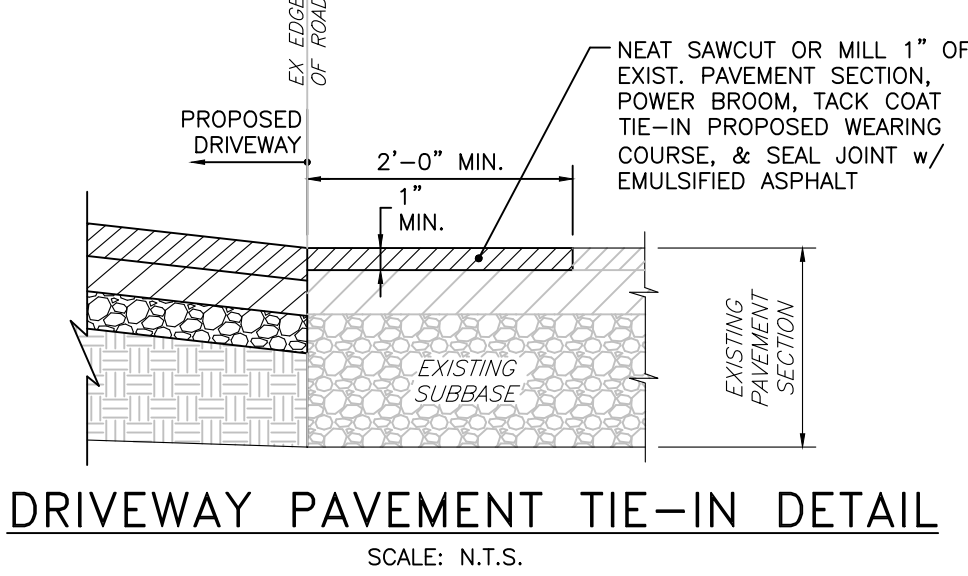


811 Before You Dig
 Know what's below. Call before you dig.
 STOP CALL 1-800-242-0776
 PA ONE CALL SYSTEM INC.





SERIAL NO. 20201391701
811 Before You Dig Anywhere
 In... PENNSYLVANIA
 Know what's below. STOPS CALL 1-800-242-7776
 Call before you dig. PA Law requires 3 working days notice before you excavate.
 PA ONE CALL SYSTEM, INC.



DATE:	OCTOBER 30, 2020
SCALE:	AS NOTED
DESIGNED BY:	LDM
DRAWN BY:	LDM
CHECKED BY:	SDC
REVISIONS	AUTH. DATE JOB NO. 19-06-NBR
BY:	LEON D. MCGUIRE, JR. PA PE No. PE-052124-E

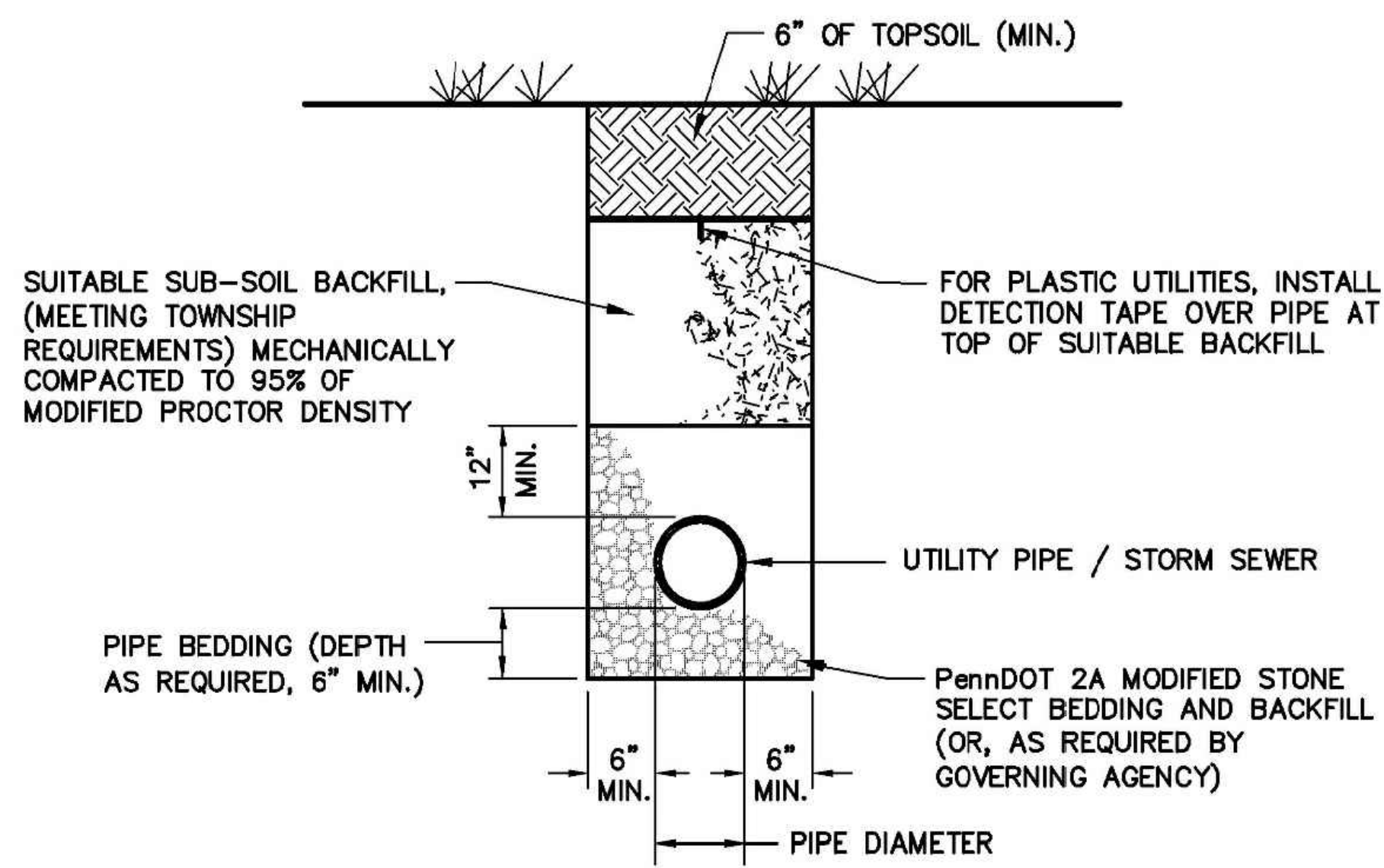
Van Cleaf ENGINEERING ASSOCIATES
 Consulting Civil Engineering
 Environmental Engineering
 Municipal Engineering
 Land Surveying
 Professional Planning
 Landscape Architecture

501 NORTH MAIN STREET, DOYLESTOWN, PA 18001
 WEB: WWW.VANCLEEFENGINEERING.COM
 PHONE: (215) 345-1870 FAX: (215) 345-1730

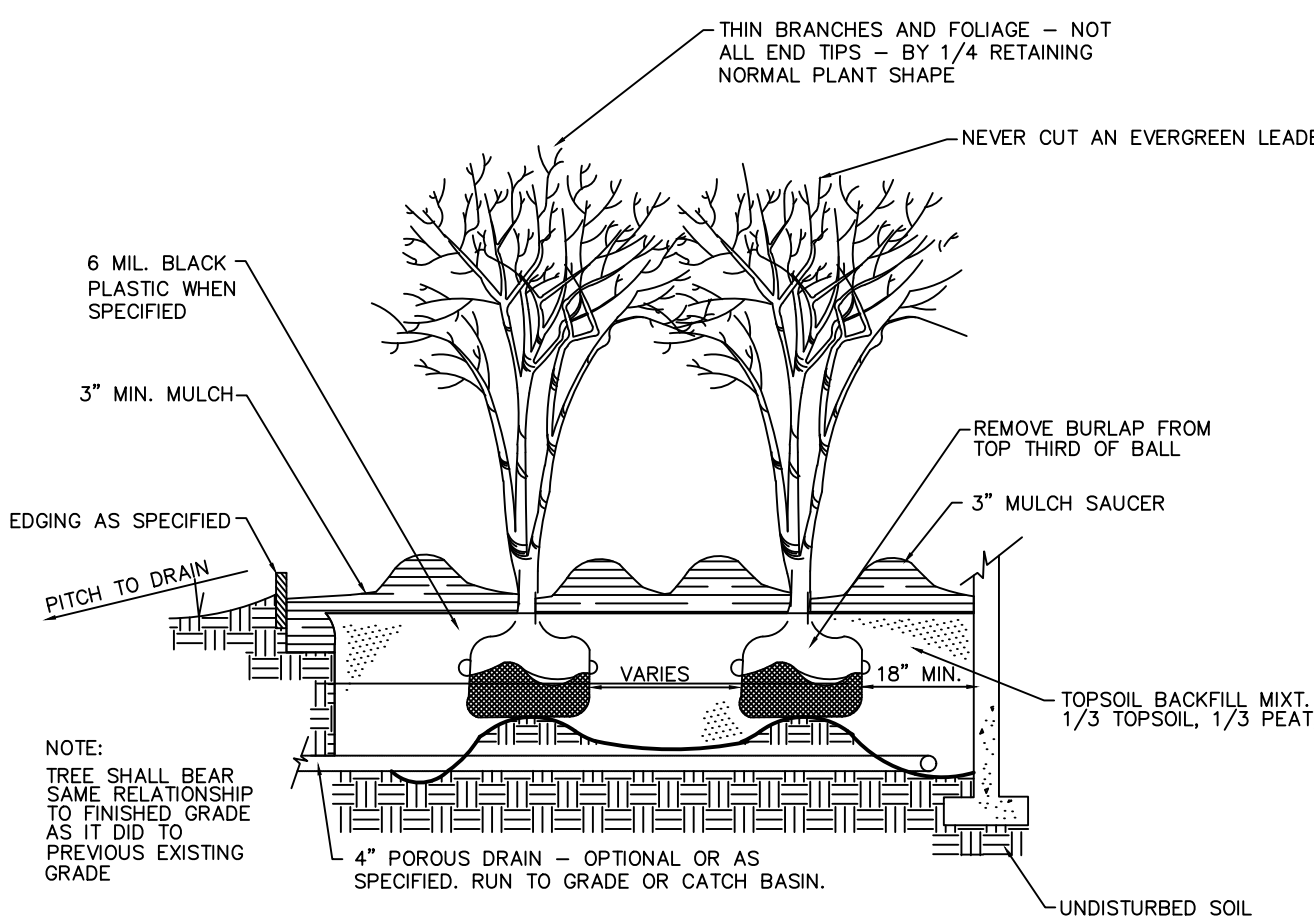
OFFICES THROUGHOUT NJ, EASTERN PA AND DE

OLD LIMEKILN ROAD PLAN AND PROFILE
 FOR
 D'ALESSIO TRACT
 TMP 26-004-005
 NEW BRITAIN TOWNSHIP
 BUCKS COUNTY, PENNSYLVANIA

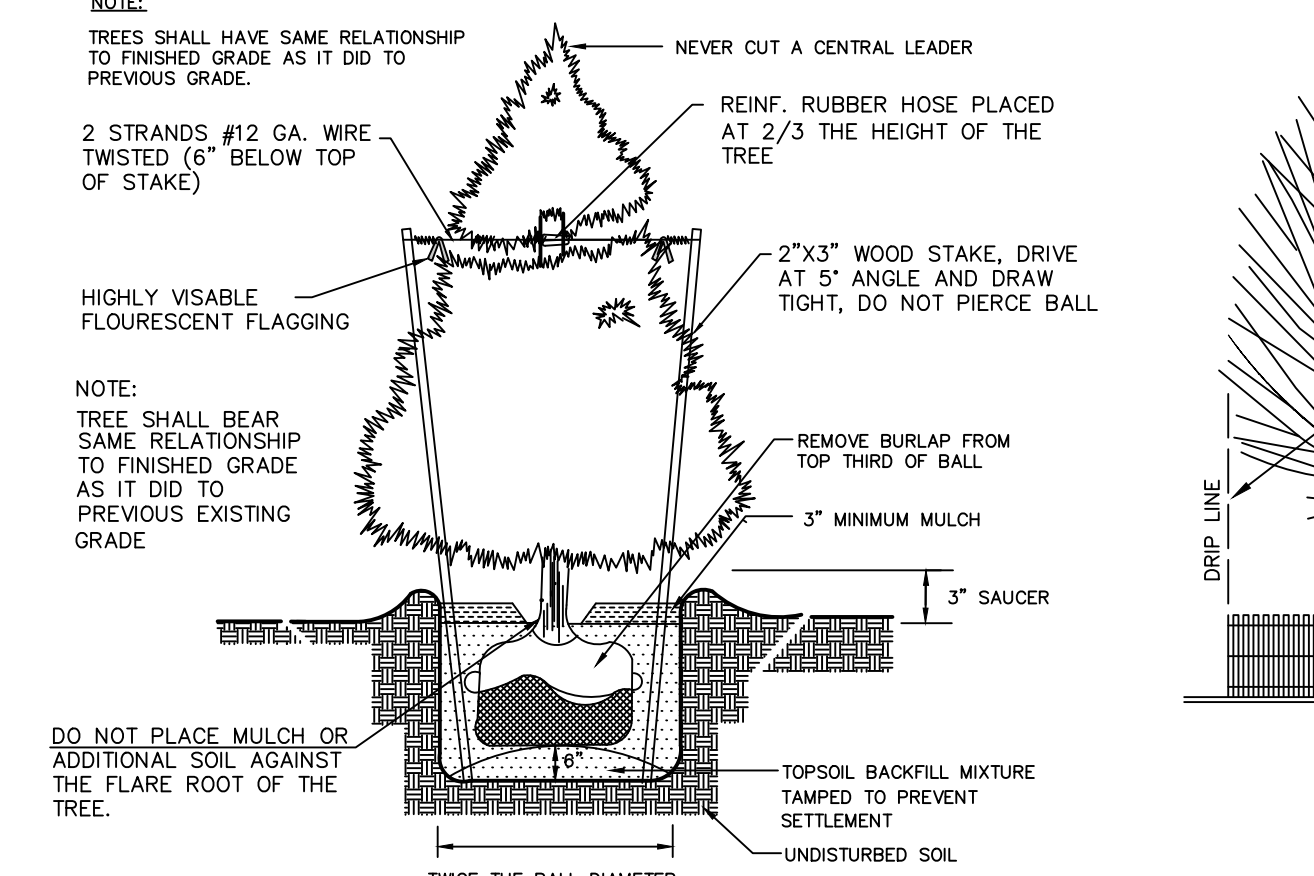
PLAN NOTATION
 ONLY THOSE PLANS WHICH CONTAIN AN IMPRESSED SEAL OR A RED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIFICALLY PREPARED FOR THE OWNER DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.



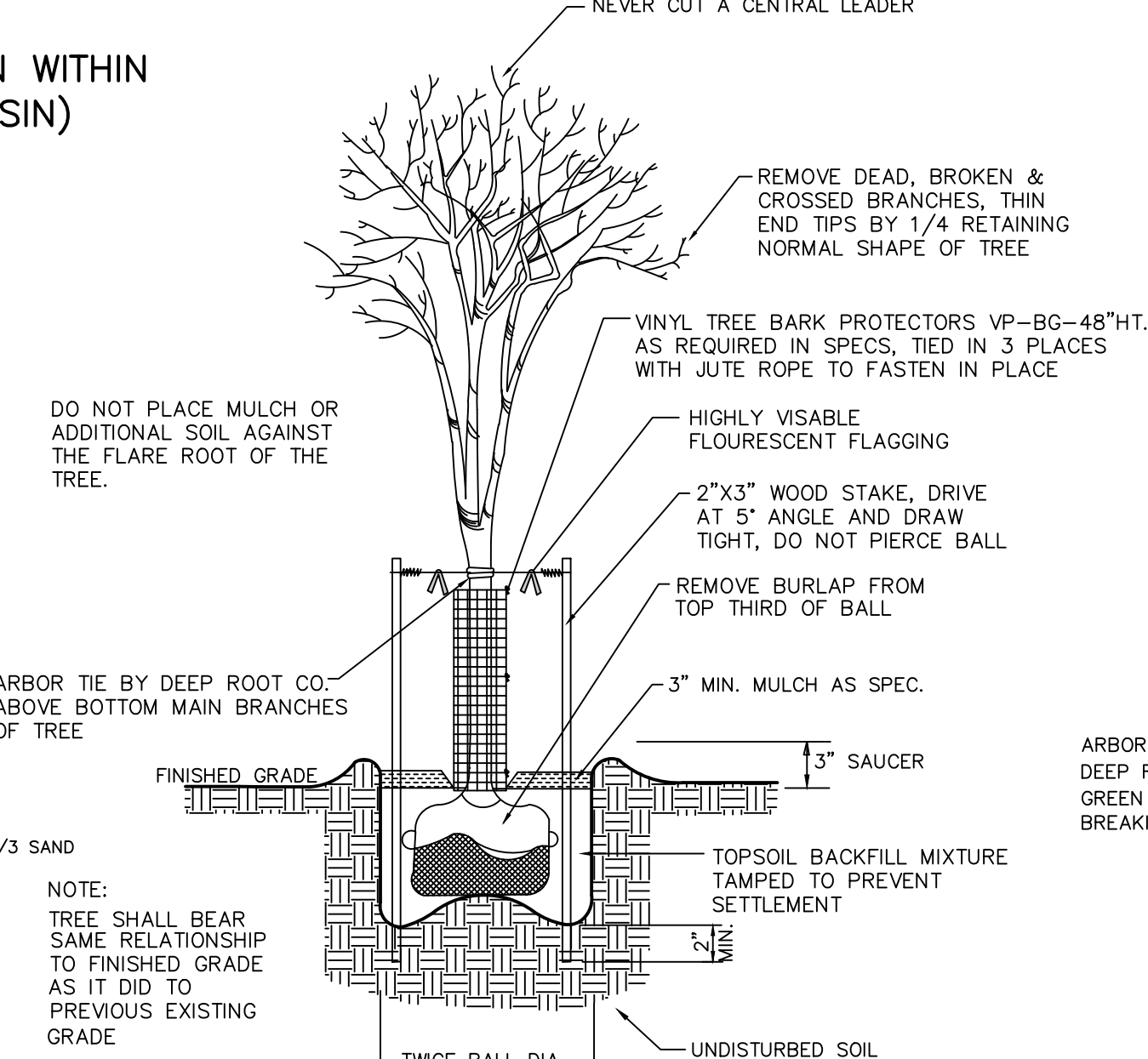
STORM SEWER & UTILITY TRENCH RESTORATION WITHIN PERVIOUS AREAS DETAIL (NOT FOR BASIN)
(NOT TO SCALE)



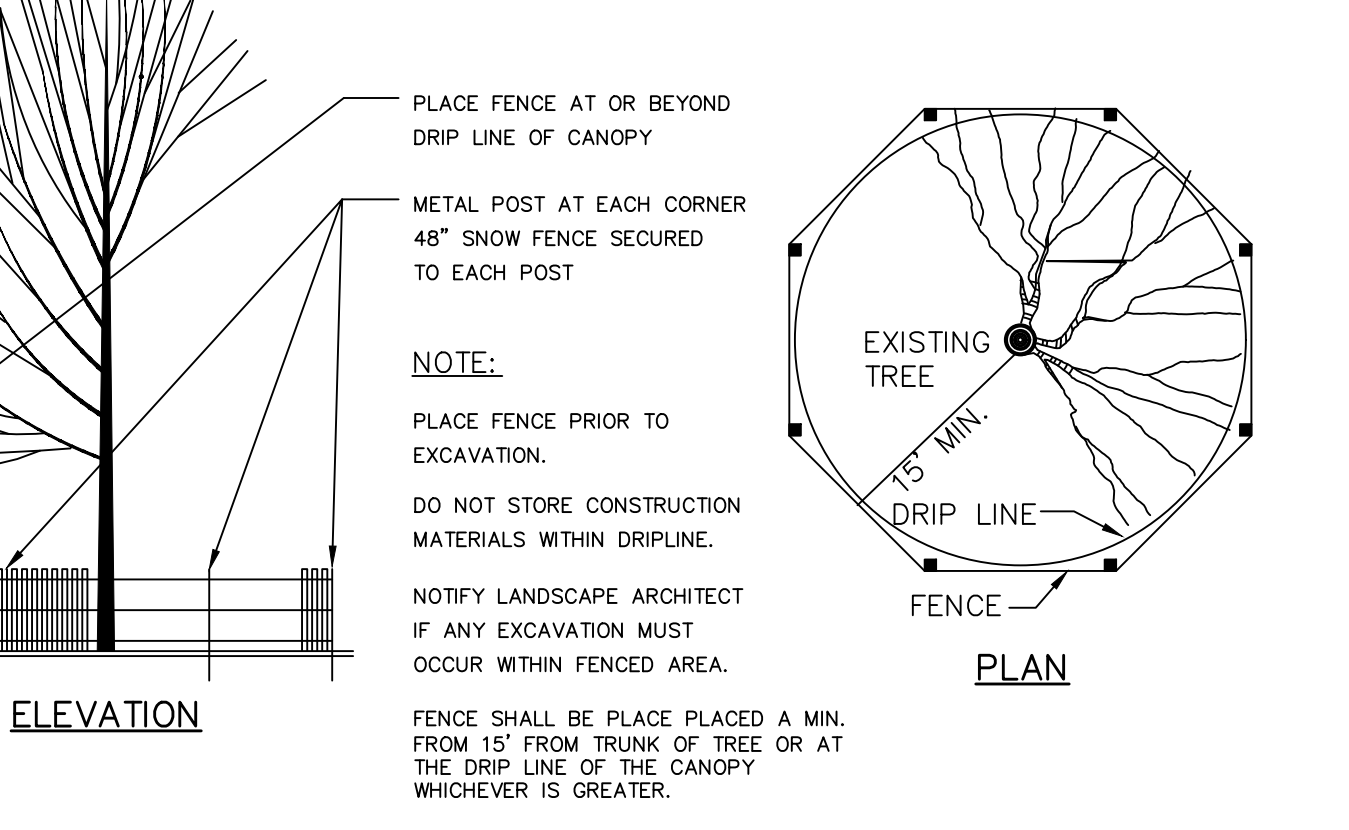
TYPICAL SHRUB BED PLANTING
(NOT TO SCALE)



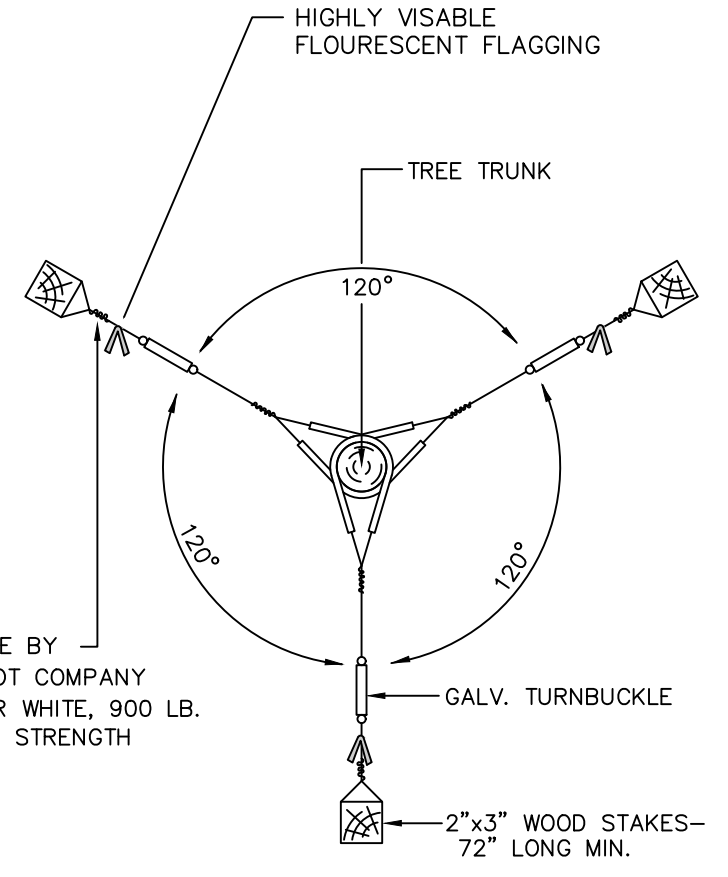
GUYING FOR EVERGREENS
(NOT TO SCALE)



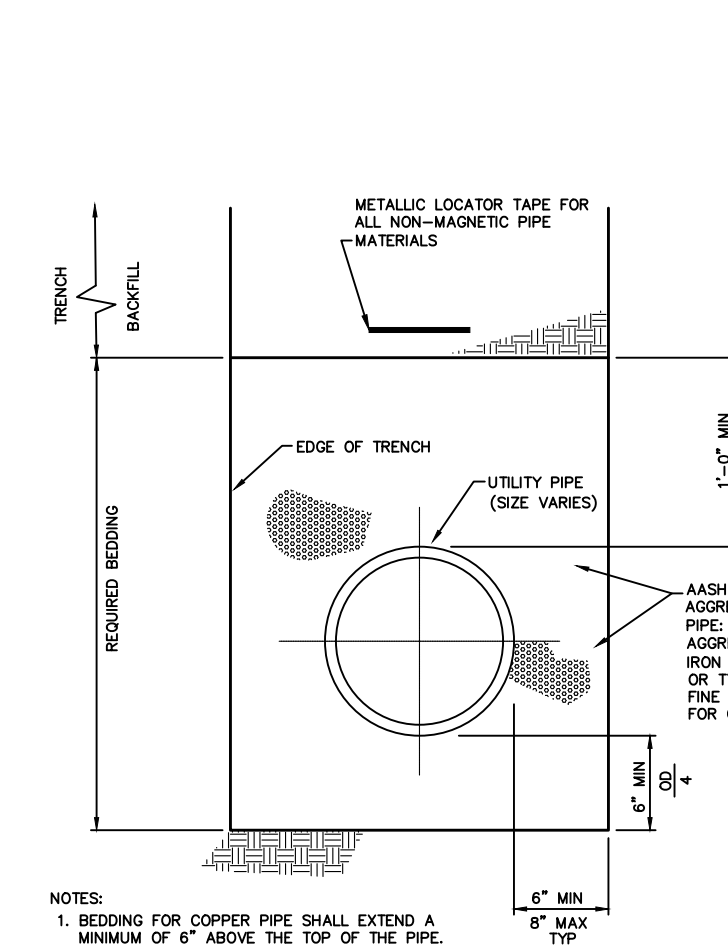
TYPICAL PLANTING FOR TREES TO 3 1/2" CAL.
(NOT TO SCALE)



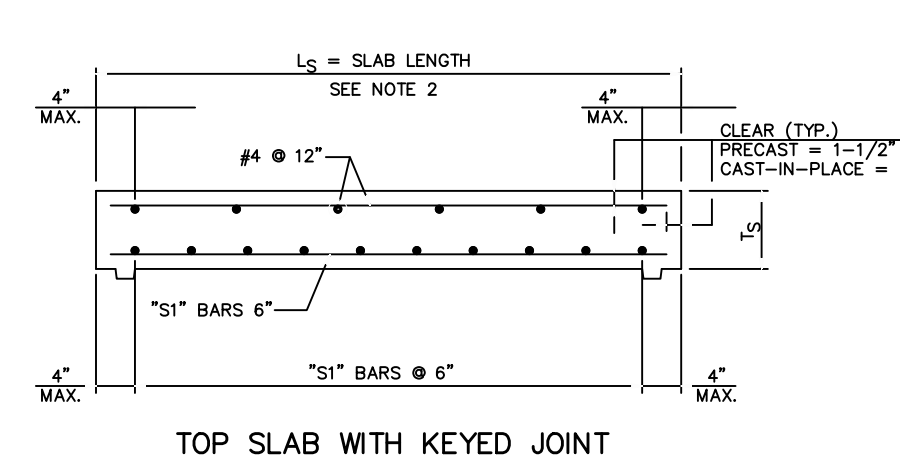
TREE PROTECTION FENCING
(NOT TO SCALE)



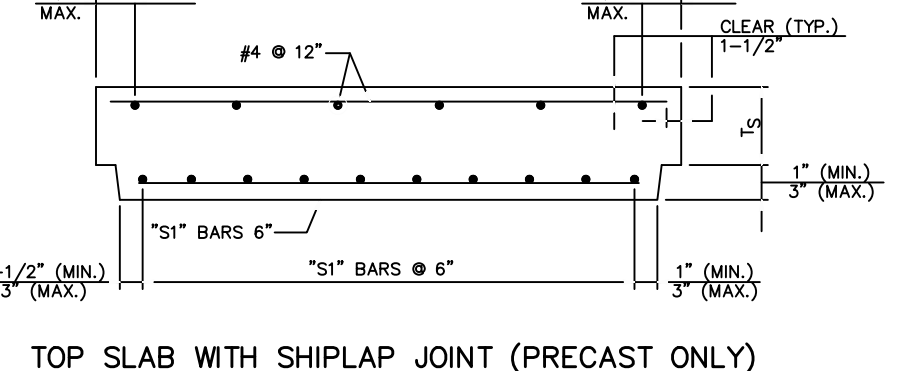
TYPICAL GUYING DETAIL
(NOT TO SCALE)



STANDARD PIPE BEDDING
(NOT TO SCALE)

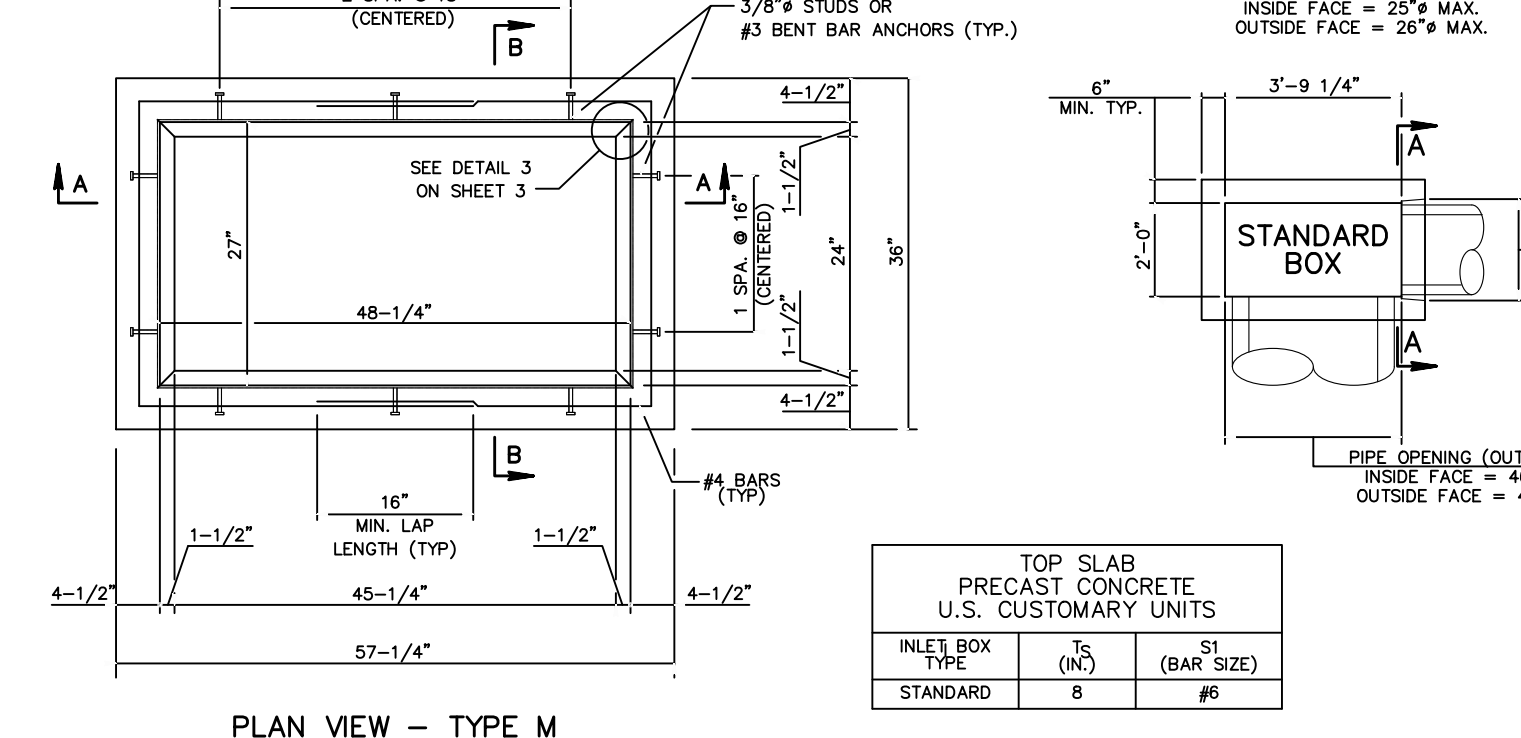


TOP SLAB WITH KEYED JOINT

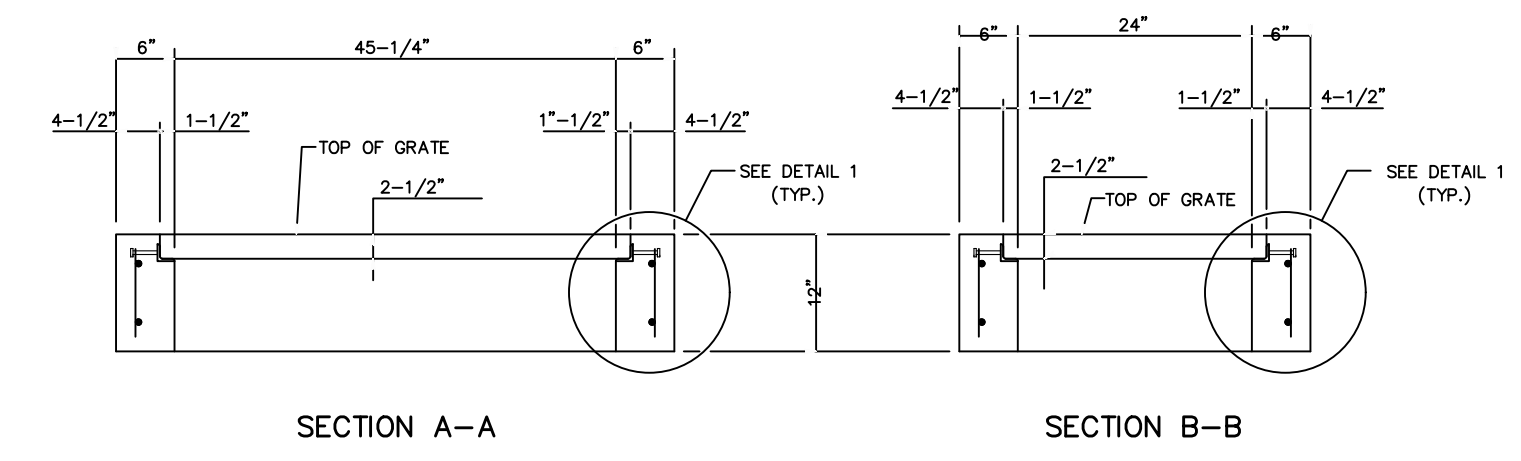


TOP SLAB WITH SHIPLAP JOINT (PRECAST ONLY)

INLET BOX TOP SLAB
(NOT TO SCALE)

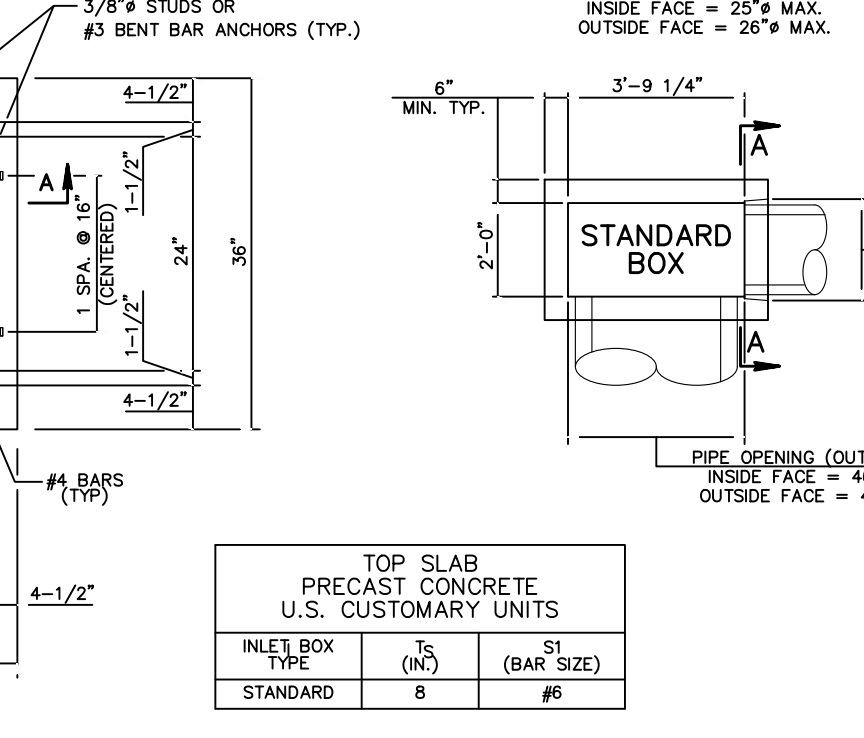


PLAN VIEW - TYPE M

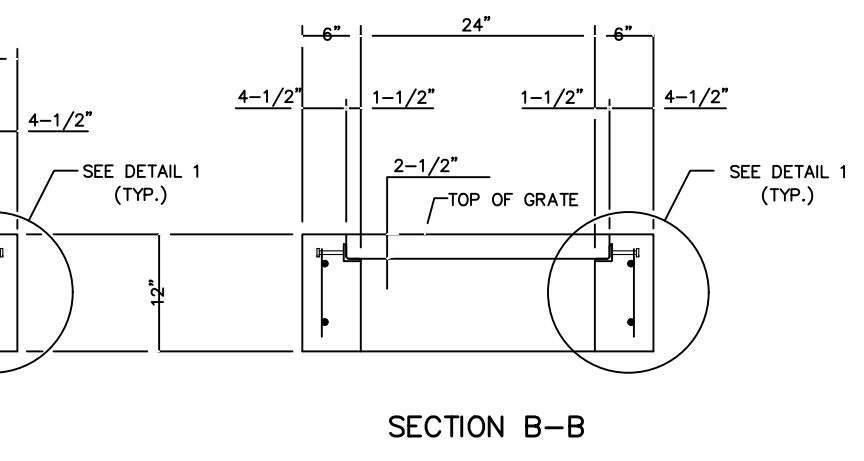


SECTION A-A

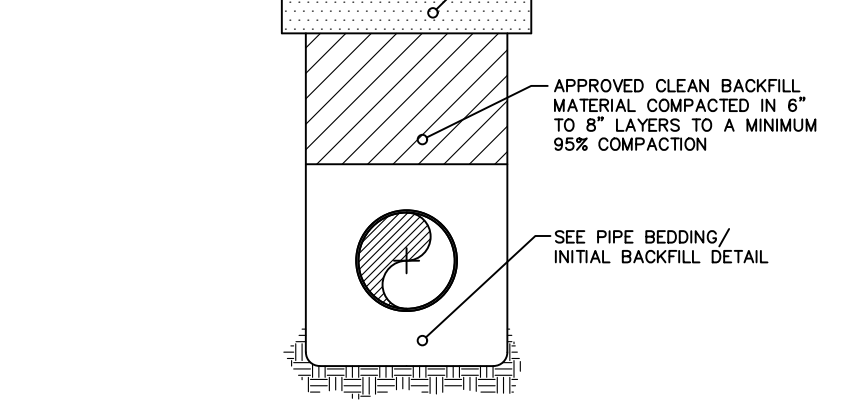
SECTION B-B



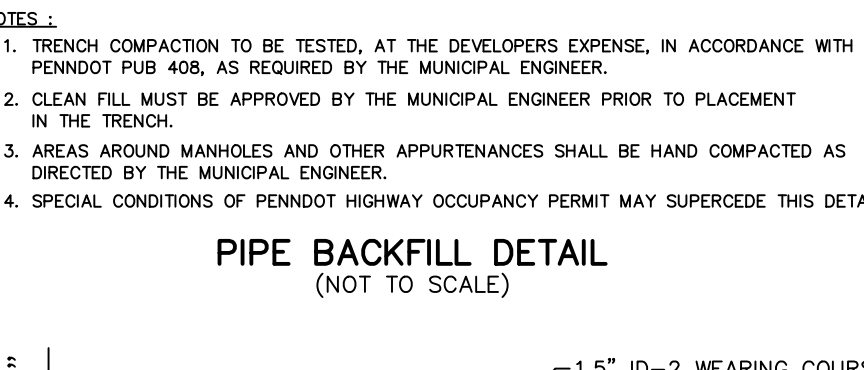
CONCRETE TOP UNIT - TYPE M



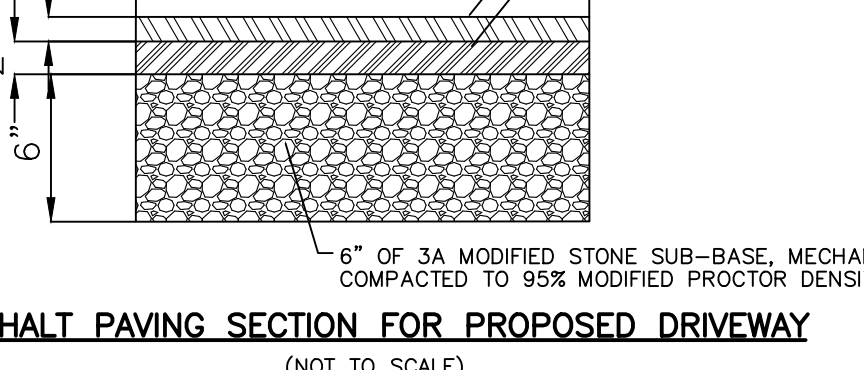
INLET BOX SUBBASE PREPARATION DETAIL
(SEE FIELD CONSTRUCTION NOTES ON SHEET 1)



BAR AND ROD SPACER DETAIL



STRUCTURAL STEEL GRATE BICYCLE SAFE
(NOT TO SCALE)



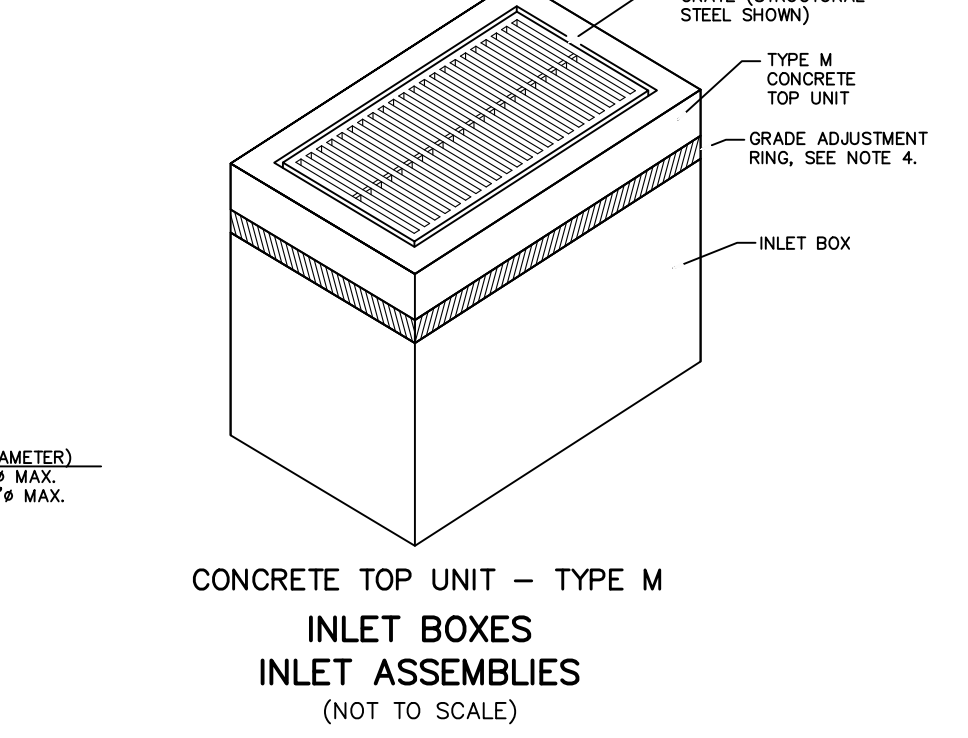
ROOF LEADER AND SPLASH BLOCK DETAIL (LOT #3 ONLY)
(NOT TO SCALE)



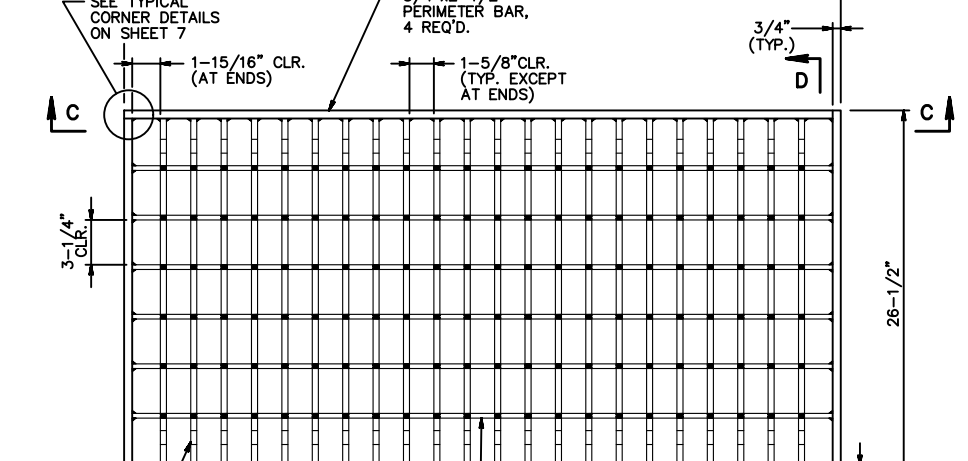
ASPHALT PAVING SECTION FOR PROPOSED DRIVEWAY
(NOT TO SCALE)



GRASSPAVE2 - TYPICAL CROSS SECTION (BASIN MAINTENANCE ACCESS PATH)
(NOT TO SCALE)



ROOF DOWNSPOUT TO STORM SEWER CONNECTION (LOT #2 ONLY)
(NOT TO SCALE)



PRELIMINARY / FINAL PLANS

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	REMARKS
TREES					
AR	6	Acer rubrum	Red Maple (Native)	2" - 2 1/2" CAL.	B&B
QB	7	Quercus bicolor	Swamp White Oak (Native)	2" - 2 1/2" CAL.	B&B

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	REMARKS
TREES					
PS	10	Pinus strobus	Eastern White Pine (Native)	6" HT.	B&B
LT	5	Liriodendron tulipifera	Tulip Poplar (Native)	3" - 3 1/2" CAL.	B&B
QC	5	Quercus coccinea	Scarlet Oak (Native)	3" - 3 1/2" CAL.	B&B
AF	10	Abies concolor	White Fir (Native)	6" HT.	B&B

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	REMARKS
SHRUBS					
CS	10	Cornus sericea	Redosier Dogwood (Native)	42" HT.	#3 CAN
IGC	10	Ilex glabra compacta	Compact Inkberry (Native)	30" HT.	#3 CAN
IV	10	Ilex verticillata	Winterberry (Native)	42" HT.	#3 CAN
LB	10	Lindera benzoin	Spicebush (Native)	42" HT.	#3 CAN
MP	10	Myrica pennsylvanica	Northern Bayberry (Native)	42" HT.	#3 CAN
VD	10	Viburnum dentatum	Arrowwood Viburnum (Native)	42" HT.	#3 CAN

GRASS SEEDING SPECIFICATIONS

TEMPORARY:	PERMANENT:
SPECIES	KENTUCKY BLUEGRASS / SPREADING FESCUE / PERENNIAL RYEGRASS / CHEWING'S RED FESCUE
% PURE LIVE SEED	90%
APPLICATION RATE	41 / 20 / 14 / 20 LB/ACRE
FERTILIZER TYPE	COMMERCIAL 10-20-10
FERTILIZER APPL. RATE	1,100 LB/ACRE
LIMING RATE	2 T/ACRE
MULCH TYPE	HAY OR STRAW
MULCH RATE	3 T/ACRE

Ernst Conservation Seeds
9006 Mercer Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

STREET TREE CALCULATION:

ONE STREET TREE PER 30' REQUIRED:
OLD LIMEKILN RD
635' (GROSS) - CONFLICTS WITH SIGHT TRIANGLES AND EXISTING VEGETATION = 390'
390' / 30' = 13 TREES REQUIRED = NUMBER OF TREES PROPOSED
INFORMAL ARRANGEMENT PROPOSED AS PERMITTED BY ORDINANCE WITH BOARD'S APPROVAL.

MRC BASIN PERIMETER CALCULATION:

1 DECIDUOUS OR EVERGREEN TREE PLANTED EVERY 20 FEET PLUS
1 DECIDUOUS OR EVERGREEN SHRUB EVERY 10 FEET ALONG THE BASIN PERIMETER PLANTED IN AN INFORMAL ARRANGEMENT
MRC BASIN PERIMETER: 595 LF
1 DECIDUOUS OR EVERGREEN TREE PLANTED EVERY 20 FEET
595 LF / 20 LF = 30 TREES REQUIRED/PROVIDED
1 DECIDUOUS OR EVERGREEN SHRUB EVERY 10 FEET ALONG THE BASIN PERIMETER
595 LF / 10 LF = 60 SHRUBS REQUIRED/PROVIDED

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN AN IMPRESSED SEAL OR A RED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIFICALLY PREPARED FOR THE OWNER AND HIS ASSOCIATES. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

NOTES:
1. FOR ADDITIONAL NOTES SEE SHEETS 1 - 3.
2. STANDARD INLET BOXES SHOWN, PROVIDE TOP SLABS FOR OTHER INLET BOX TYPES.
3. SEE RC-45M FOR DETAILS FOR THE CONCRETE TOP UNITS, FRAMES, AND GRATES.
4. PROVIDE GRADE ADJUSTMENT RINGS WHEN REQUIRED. SEE RC-45M FOR DETAILS.

NOTE:
COST OF NO. 2A COARSE AGGREGATE IS INCIDENTAL TO THE INLET BOX.
COMPACTED NO. 2A COARSE AGGREGATE 1'-0" MIN. THICKNESS

NOTE:
TRENCH COMPACTION TO BE TESTED, AT THE DEVELOPER'S EXPENSE, IN ACCORDANCE WITH PENNDOT FUS 408, AS REQUIRED BY THE MUNICIPAL ENGINEER.
CLEAN FILL MUST BE APPROVED BY THE MUNICIPAL ENGINEER PRIOR TO PLACEMENT IN THE TRENCH.
AREAS AROUND MANHOLES AND OTHER APPURTENANCES SHALL BE HAND COMPACTED AS DIRECTED BY THE MUNICIPAL ENGINEER.
SPECIAL CONDITIONS OF PENNDOT HIGHWAY OCCUPANCY PERMIT MAY SUPERCEDE THIS DETAIL.

NOTE:
TREES SHALL HAVE SAME RELATIONSHIP TO FINISHED GRADE AS IT DID TO PREVIOUS GRADE.
2 STRANDS #12 GA. WIRE TWISTED (6" BELOW TOP OF STAKE)
HIGHLY VISIBLE FLOURESCENT FLAGGING
REMOVE BURLAP FROM TOP THIRD OF BALL
3" MINIMUM MULCH
3" SAUCER
TOPSOIL BACKFILL MIXTURE TAMPED TO PREVENT SETTLEMENT
UNDISTURBED SOIL
TWICE THE BALL DIAMETER

NOTE:
TREES SHALL BE PLACED AT OR BEYOND DRIP LINE OF CANOPY
METAL POST AT EACH CORNER 48" SNOW FENCE SECURED TO EACH POST
PLACE FENCE PRIOR TO EXCAVATION.
DO NOT STORE CONSTRUCTION MATERIALS WITHIN DRIPLINE.
NOTIFY LANDSCAPE ARCHITECT IF ANY EXCAVATION MUST OCCUR WITHIN FENCED AREA.
FENCE SHALL BE PLACED AT OR BEYOND DRIP LINE OF CANOPY OR AT THE TRUNK OF TREE OR AT THE DRIP LINE OF THE CANOPY WHICHEVER IS GREATER.

NOTE:
1. BEDDING FOR COPPER PIPE SHALL EXTEND A MINIMUM OF 6" ABOVE THE TOP OF THE PIPE.
6" MIN. 6" MAX. 6" MIN. 6" MAX. 6" MIN. 6" MAX.

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Van Cleef ENGINEERING ASSOCIATES
Consulting Civil Engineering
Environmental Engineering
Municipal Engineering
Land Surveying
Professional Planning
Landscape Architecture

501 NORTH MAIN STREET, DOYLESTOWN, PA 18021
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE: (215) 345-1876 FAX: (215) 345-1730

CONSTRUCTION DETAILS
FOR
D'ALESSIO TRACT
TMP 26-004-005
NEW BRITAIN TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA

DATE: OCTOBER 30, 2020
SCALE: AS NOTED
DESIGNED BY: LSM
DRAWN BY: LDM
PER REV. ON-LOT SEPTIC DESIGN (VW) LDM 1-18-2022
PER TWP. REVIEW DATED DEC. 3, 2020 LDM 7-30-2021
CHECKED BY: SDC
REVISIONS AUTH. DATE JOB NO. 19-06-NBR

SERIAL NO. 20201391701
Before You Dig Anywhere
811
STOP! CALL 1-800-242-7776
PA ONE CALL SYSTEM, INC.

BY: LEON D. MCGUIRE, JR. PA PE No. PE-052121-E



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

February 28, 2022

File No. 20-07074

Matthew West, Township Manager
New Britain Township
207 Park Avenue
Chalfont, PA 18914

Reference: D'Alessio Tract – Preliminary Subdivision and Land Development Plan Review 3
315 Old Limekiln Road, TMP #26-004-005

Dear Matt:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the preliminary plan submission for the above-referenced project. We offer the following comments for consideration by New Britain Township:

I. Submission

- A. Subdivision and Land Development Plans for D'Alessio Tract, prepared by Van Cleef Engineering Associates, dated October 30, 2020, and last revised January 18, 2022, consisting of sheets 1, 4, 5, 7, 8 and 10 of 10.
- B. Engineer's Response Letter for 315 Old Limekiln Road, prepared by Van Cleef Engineering Associates, dated February 15, 2022.

II. General Information

The Applicant, Audax Homes, LLC, and owners of record Vinicio and Sharon D'Alessio propose a 3-lot subdivision for two new Use B-1, Single Family Detached Dwellings, within the WS, Watershed District. Lot 1 is proposed to contain the existing single-family dwelling with two accessory structures on the north side of Old Limekiln Road (Township Road). Lots 2 and 3 are proposed as new dwelling lots with a community stormwater management facility, wells, and primary and backup septic systems. We note that the Zoning Ordinance has been amended per Ordinance No. 2020-11-04 enacted November 16, 2020. However, the amendment is not applicable because the plan application is dated October 30, 2020. Stormwater is designed for maximum amount of impervious surface permitted by zoning for each lot.

III. Review Comments

A. Zoning Ordinance

We offer the following comments with respect to the New Britain Township Zoning Ordinance:

1. §27-502.b – We recommend the Township confirm that the appropriate permits were obtained for the accessory structures on Lot 1 that appear to have been installed prior to 1999 according to aerial images. It appears that the larger structure may be an existing non-conformity with regard to size, which shall be registered with the Township and noted on the plan as such. A Zoning Permit Application shall be obtained for the smaller shed.
2. 27-502.b.3 – A conservation easement is shown over the natural resources to be protected. The Township Solicitor shall draft a Conservation Easement Agreement for execution by the owner(s).

65 East Butler Avenue | Suite 100 | New Britain, PA 18901 | Phone: 215-345-4330 | Fax: 215-345-8606

B. Subdivision and Land Development Ordinance Waivers

The Applicant has requested the following waivers from the Subdivision and Land Development Ordinance:

1. §22-502.D – From the requirement to show existing features within 100 feet of the subdivision. The Applicant has provided an aerial plan; therefore, *we have no objection to this waiver.*
2. §22-703.4.A.(4) – From the requirement that the depth of any proposed lot shall not exceed three times its width. Based on the depth of the existing lot, a waiver is necessary for Lots 1 and 2. *We have no objection to a waiver from this requirement.*
3. §22-705.3, 706.1.B, and 706.2.B – From the requirement to widen Old Limekiln Road 5 feet and install sidewalk and curb along the frontage. *A 4-foot grass shoulder is proposed at a maximum cross-slope of 2%, which we support since the on-lot stormwater facility is designed to over-detain above that required by ordinance (28% reduction (100-to-50-year storm) to 65% (2 to 1-year storm)), the stormwater facility discharge point is shown 10 feet from the property line, and the required driveway culverts are proposed.*
4. §22-713.4.A – To allow 13 proposed street trees to supplement 5 existing street trees for a total of 18 street trees, where 21 total trees are required, due to the required sight triangles at each driveway. *We have no objection to a waiver from this requirement.*
5. An updated waiver request letter shall be submitted prior to attending a public meeting.
6. For any waivers granted from street improvements, the Applicant shall contribute a fee to the Township to cover 50% of the costs of future improvements to bring the Township rights-of-way up to current standards. Resolution 2007-12. The Applicant's engineer shall submit an estimate of the full road improvements to determine the value of the contribution.

C. Subdivision and Land Development Ordinance

We offer the following comments with respect to the current New Britain Township Subdivision and Land Development Ordinance:

1. §22-401.1 – The plans are noted as a preliminary/final submission. The Applicant has indicated a waiver will be requested for the combined submission, *which we support.* This waiver should be included in the updated waiver request letter.
2. §22-406.1.I – Legal descriptions for all proposed lots, conservation easement, backup septic easements, ultimate right-of-way easements, etc., as applicable, shall be submitted to our office for review and approval.
3. §22-715 – The Applicant has indicated they intend to pay a fee-in-lieu of dedication of park and recreation land. We calculate this fee, based on \$2,500.00 per proposed dwelling unit, to be **\$5,000.00.**
4. §22-716 – A written certification letter from a professional land surveyor shall be provided prior to the recording of the plan indicating that the monuments and markers have been installed in accordance with the plan unless included in the financial security.
5. §22-719.7.A – For all residential subdivisions containing three or more lots, including the existing unit, the Applicant shall submit two copies of a Water Resource Impact Study (WRIS) to the Township in accordance with the section §22-719 of the SALDO. We recommend the WRIS be prepared, submitted, and approved prior to the Supervisors considering the plan for Final Approval.

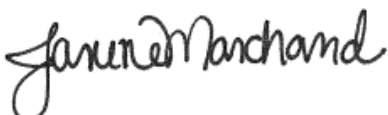
6. §22-721.3 – A PADEP Sewage Facilities Planning Module mailer is required to be submitted with the preliminary plan application. Prior to approval of the Planning Module to the Township, the planning module shall be approved/executed by the applicant, responsible professional soil scientist, Bucks County Department of Health and Bucks County Planning Commission. The septic permit shall be obtained prior to installation of any septic system.
7. The Applicant is responsible for all other required approvals, permits, etc. (i.e. BCPC, BCCD, PADEP, Bucks County Department of Health, Fire Marshal, etc.) Copies of these permits or approvals shall be forwarded to the Township.
8. Upon final plan approval, the developer shall provide a financial security covering the costs of all public improvements. (§22-903.2) A cost estimate of public improvements shall be submitted.

D. Stormwater Comments

1. §22-711 – The Applicant will be required to secure the necessary NPDES Permit from DEP for the proposed earth disturbance.
2. §22-712.13.D – The Applicant shall be required to pay a Storm Sewer Maintenance fee in accordance with the requirements of this section. Based on \$2.50 per lineal foot of existing roadway frontage, we calculate the fee to be **\$1,587.50**.
3. In addition, per Resolution #2020-03, the Applicant shall pay a BMP Maintenance Guarantee equal to 5% of the construction cost of BMPs. An Engineers Opinion of Probable Cost for the proposed stormwater and public improvements shall be submitted to our office for review.
4. §26-164 – The owner shall sign an O&M agreement with the municipality covering all stormwater facilities and BMPs that are to be privately owned including swales, storm sewer, stormwater facilities, amended soils, etc. The O&M agreement shall be transferred with change in ownership and shall be prepared by the Township Solicitor.

If you have any questions regarding the above, please contact this office.

Sincerely,



Janene Marchand, P.E.
Project Engineer
Gilmore & Associates, Inc.

JM/tw

cc: Michael Walsh, Assistant Manager
Ryan Gehman, Assistant Planning and Zoning Officer
Ryan Cressman, Public Works Superintendent
Jeffrey P. Garton, Township Solicitor
Jonathan Thomas, Audax Homes, LLC, Applicant
Samuel Costanza, P.E., Van Cleef Engineering Associates
Vinicio & Sharon D'Alessio, Owner, 315 Old Limekiln Road
Craig D. Kennard, P.E., C.O.O., Gilmore & Associates, Inc.
Timothy Wallace, P.E., Gilmore & Associates, Inc.



MEMORANDUM

Date: July 12, 2022

To: Matthew West, Township Manager

From: Rocco Mercuri, P.G.

cc: Michael Walsh, Assistant Township Manager
Ryan Gehman, Assistant Planning and Zoning Officer
Randy Teschner, Code Enforcement/Fire Marshal
Craig D. Kennard, P.E./Toby Kessler, P.G.

Reference: D'Alessio Tract (G&A File 20-07074)
Water Resources Impact Study Report Review
315 Old Limekiln Road, TMP #26-004-005

As required, Gilmore & Associates, Inc. (G&A) has reviewed on behalf of New Britain Township the "Water Resources Impact Study Report for D'Alessio Subdivision" (Parcel #26-004-005), dated June 21, 2022, submitted by Valley Environmental Services, Inc. (VES). We offer the following general information and comments:

General Information:

The Applicant proposes 2 new single-family dwelling (SFD) lots, while retaining the existing SFD on one lot. The existing lot has an existing well. All three lots have a proposed primary and back-up septic system proposed. VES performed a Water Resources Impact Study including drilling two on-site test wells, identified as the Lot #2 well and the Lot #3 well, and performing a 72-hour aquifer pumping test intending to be representative of the proposed 3-lot subdivision in which each lot will contain a private well and on-lot septic system. The property currently consists of a house, a barn, a shed, trees, and open fields. The following summarizes the testing and information reported:

- Residents within $\frac{1}{4}$ mile of the property were contacted with the intent to monitor private wells during the 72-hour pumping test. 2 private wells, MW-1 (McKeon) and MW-2 (Benjelloun), were monitored during the pumping test. Monitoring began April 26, 2022, prior to the test and continued until May 14, 2022.
- Lot #2 has a total depth of 280 feet below ground surface (bgs), 6 inches in diameter. This well was used for pumping during the 72-hour test. Lot #3 has a total depth of 200 feet below ground surface (bgs), 6 inches in diameter and was used for observation during test. The existing well serving the existing house on the property (Lot #1) was also included in the monitoring well network.
- Both test wells Lot #2 and Lot #3 are drilled into the Brunswick and Lockatong Formations. The study indicates the region contains a semi-confined aquifer system.
- A 72-hour constant-rate, aquifer test of Lot #2 was performed between May 9, 2022 and May 12, 2022. The rate of the aquifer test was 6.35 gallons per minute (gpm).

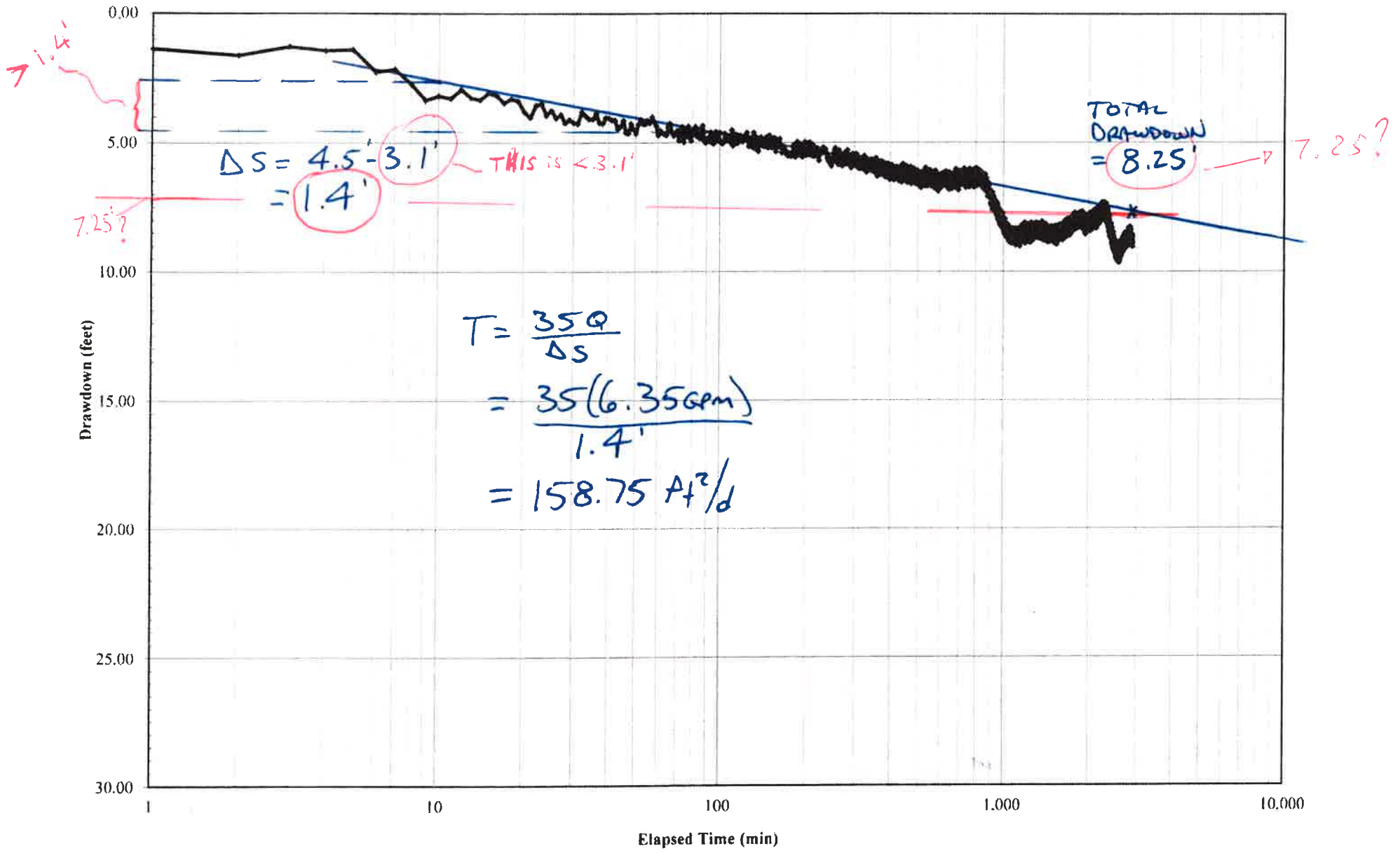
- The long-term drawdown projections consider a pumping rate of approximately 3.8 times the average calculated water use for the proposed subdivision.
- A hydrogeologic budget analysis indicates that the property can provide an average of 5,225 gallons of per day (gpd) groundwater recharge to the aquifer, higher than the calculated groundwater withdrawal in the proposed subdivision of 2,400 gpd. In addition, much of the water pumped from the on-lot domestic water supply wells will be returned to the groundwater system through the proposed on-lot septic systems.
- The change in water level (drawdown) observed in wells Lot #1, Lot #3, MW-1, and MW-2 were 4.5 feet, 4.5 feet, 3.6 feet, and 5.1 feet, respectively. The drawdown observed in the pumping well, Lot #2, was 9.4 feet. VES concluded that drawdown at the observed private wells was negligible considering that the 72-hour aquifer test was conducted at a much higher rate than the anticipated water demand of the subdivision.
- Based on the results of the laboratory analyses, all tested parameters in the Lot #2 well were below U.S. EPA and PADEP safe drinking water standards except for the secondary contaminants manganese (0.056 mg/l, standard 0.05 mg/l) and surfactants (2.36 mg/l, standard 0.5 mg/l). These secondary maximum contaminant levels (SMCLs) are not health-based concerns.
- Based on the Lot #2 well aquifer pumping test, VES concluded that no adverse impacts to the local groundwater system are anticipated as a result of the 2 proposed domestic water supply wells for the subdivision.

G&A Comments:

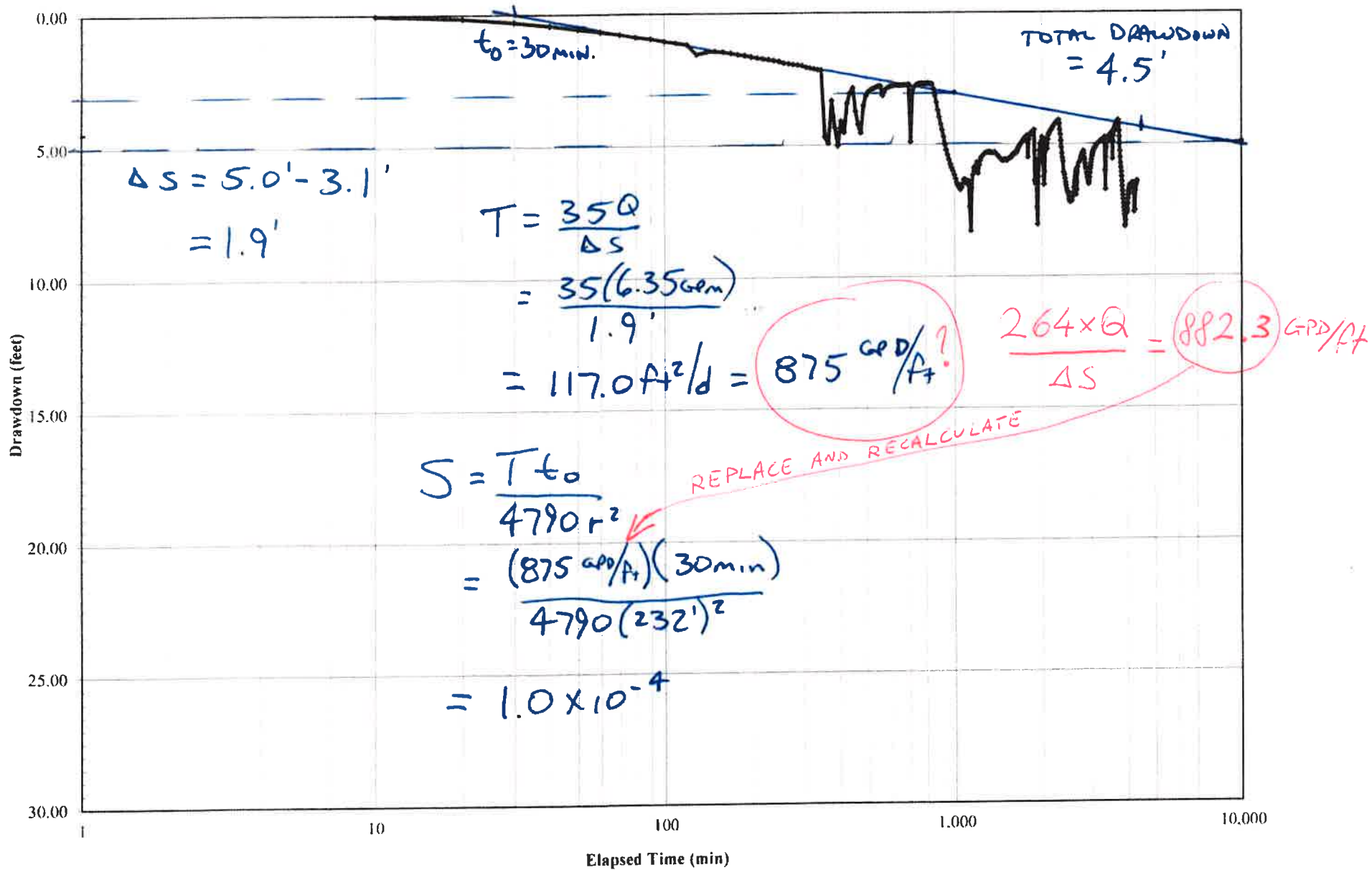
For the Water Resources Impact Study to be in accordance with New Britain Township Wells and Water Supply Ordinance, the Applicant shall address the following comments:

1. A list of formation samples shall be provided based on the drilling of wells Lot #2 and Lot #3. (§ 22-719.8.E.6.c)
2. A contour map of water levels in the test well and monitoring wells after one year of pumping under drought conditions (no recharge) shall be provided. (§ 22-719.8.E(7))
3. All well construction information required by the Well Construction Standards shall be included in the Water Resource Impact Study (§ 22-719.9.E.(8)). The elevation of the ground at the newly constructed wells shall be provided. (§ 22-719.9.C.(2)(h)4)
4. The consultant shall revise the Aquifer Calculation as provided in **Attachment 1** of this review and update the appropriate sections of the narrative in the WRIS report.
5. The Lot #2 well shall be chlorinated and re-tested for potability (bacteria), manganese and surfactants prior to occupancy. If any parameters are above the required U.S. EPA and PADEP Water Quality, the water should be treated prior to use.
6. The Lot #3 well shall be tested for yield and water quality prior to obtaining a building permit for that lot.
7. A narrative describing the design of all on-lot sewage disposal systems and their effect upon groundwater recharge and quality with respect to all proposed and existing water supplies shall be provided. Available existing groundwater quality data shall be obtained from nearby, adjacent supply wells, test wells or springs. (§ 22-719.8.D(6))
8. The Applicant shall enter in a Well Depletion Agreement and provide a monitoring program prior to plan recordation. (§ 22-719.11)

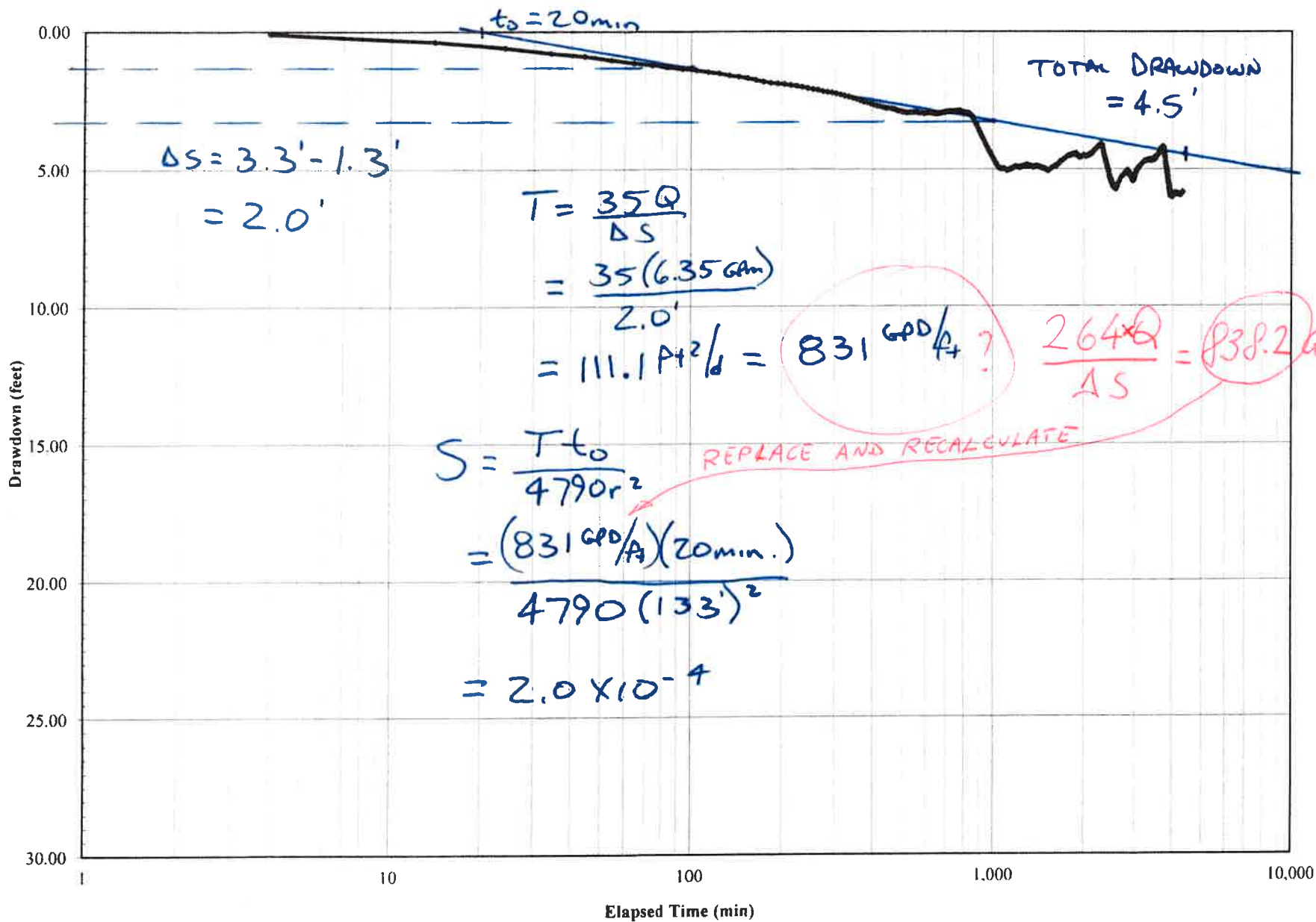
**Drawdown in the Lot #2 Well
D'Alessio Lot #2 72-Hour Pumping Test
New Britain Township, Bucks County, PA**



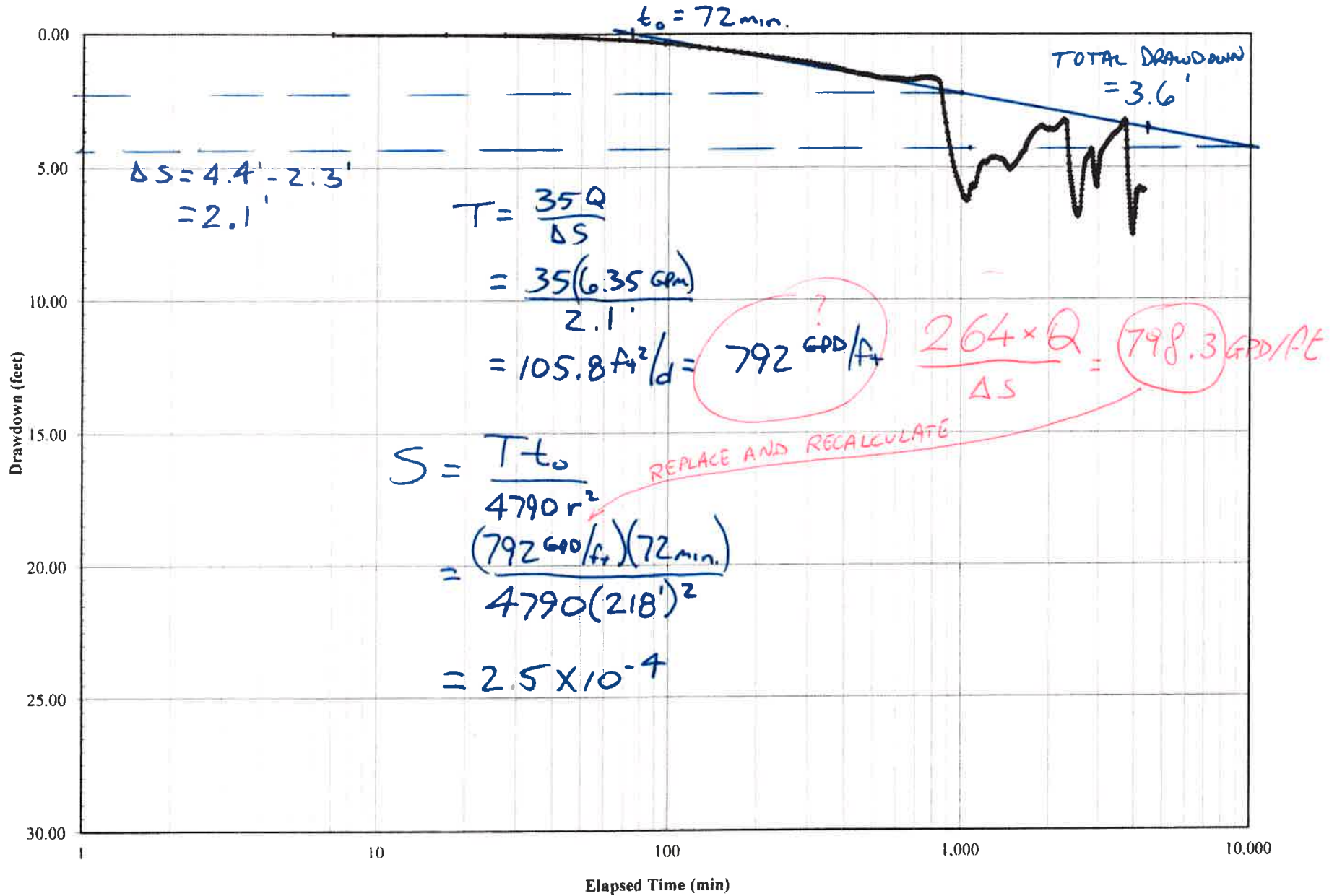
**Drawdown in the Lot #1 Well
D'Alessio Lot #2 72-Hour Pumping Test
New Britain Township, Bucks County, PA**



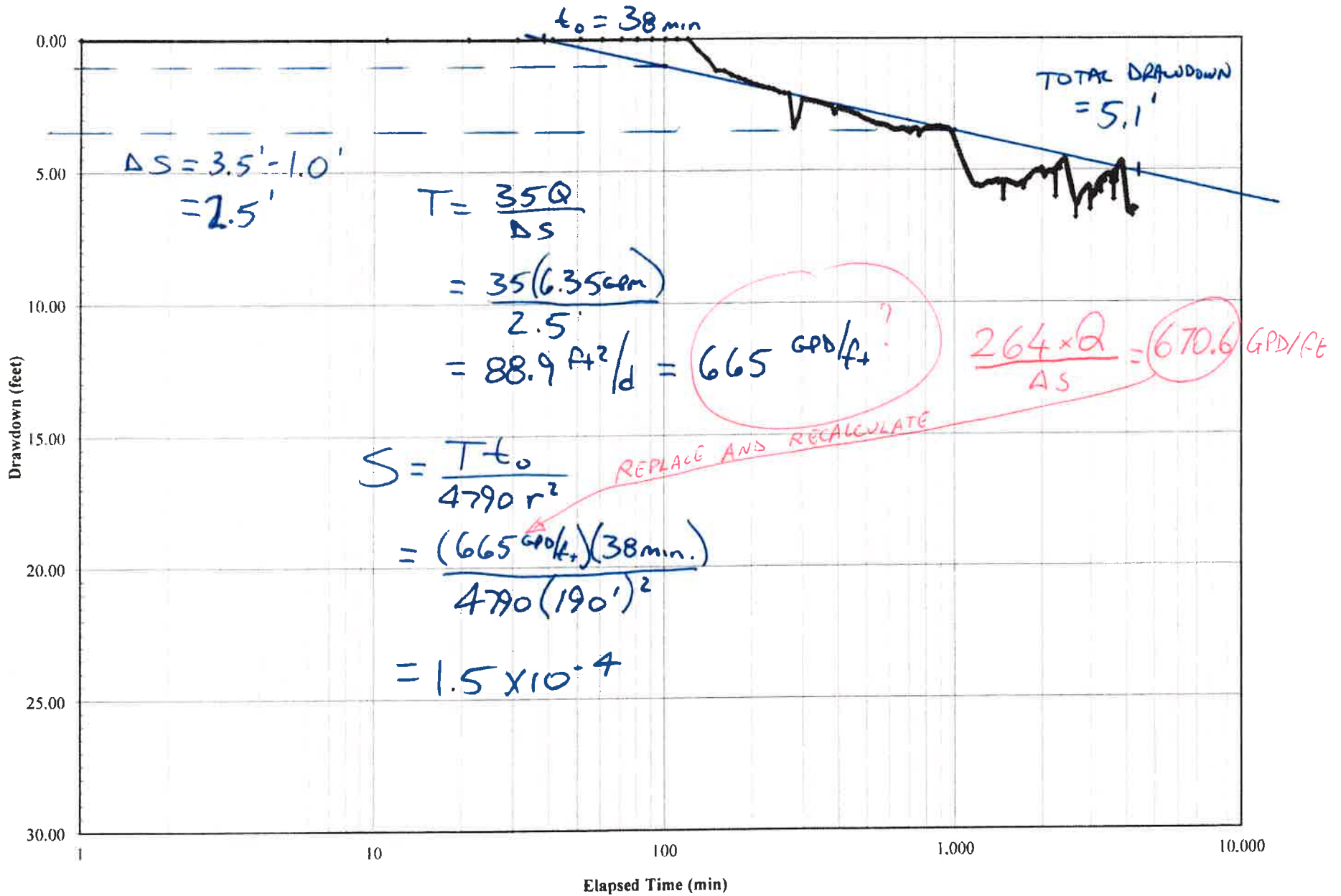
**Drawdown in the Lot #3 Well
D'Alessio Lot #2 72-Hour Pumping Test
New Britain Township, Bucks County, PA**



Drawdown in MW-1
D'Alessio Lot #2 72-Hour Pumping Test
New Britain Township, Bucks County, PA



Drawdown in MW-2
D'Alessio Lot #2 72-Hour Pumping Test
New Britain Township, Bucks County, PA





The Almshouse Neshaminy Manor Center 1260 Almshouse Road
Doylestown, Pennsylvania 18901 215.345.3400 FAX 215.345.3886
E-mail: bcpc@buckscounty.org

PLANNING COMMISSION:

Craig E. Bryson, *Chairman*
R. Tyler Tomlinson, Esq., *Vice Chairman*
Edward Kisselback Jr., *Secretary*

Joan M. Cullen
Richard Donovan
David R. Nyman
Carol A. Pierce
Tom Tosti
Walter S. Wydro

Evan J. Stone
Executive Director

MEMORANDUM

To: New Britain Township Board of Supervisors
New Britain Township Planning Commission

From: Staff of the Bucks County Planning Commission

Date: December 8, 2020

Subject: BCPC #12531
Preliminary Plan of Subdivision for D'Alessio Tract
TMP #26-4-5
Applicant: Jonathan Thomas, Audax Homes, LLC
Owner: Vinicio and Sharon D'Alessio
Plan Dated: October 30, 2020
Date Received: November 9, 2020

This proposal has been reviewed by the Bucks County Planning Commission professional staff, which prepared the following comments in accordance with the Pennsylvania Municipalities Planning Code (Section 502).

GENERAL INFORMATION

Proposal: Subdivide a 10.67-acre property into three single-family detached residential lots. Lot 1 will be 153,059 square feet, Lot 2 will be 131,254 square feet, and Lot 3 will be 154,547 square feet. A conservation easement area totaling a minimum of 5.05 acres in order to preserve the required amount of agricultural soils is shown, spanning across each of the three lots at the northeastern portion of the tract. The precise acreage is subject to change pending on-lot sewage disposal evaluation. All lots will be served by individual on-lot water and sewerage.

Location: On the northeastern side of Old Limekiln Road, approximately 800 feet from its intersection with Upper Stump Road.

Zoning: The WS Watershed District permits Use B1 Single-family detached dwellings, on lots of at least 80,000 square feet (1.84 acres) in size.

Present Use: Residential.

COMMENTS

1. **Requested waivers**—The site plan indicates that the applicant is requesting waivers from the following subdivision and land development ordinance (SALDO) requirements:

Section 502.D. to permit an aerial image in place of noting all existing features within 100 feet of the subdivision



Section 703.4.A.4.	to permit a lot depth in excess of three times its width
Section 703.4.C.	to permit relief from the requirement to draw lot lines parallel or at right angles to the street
Sections 705.3, 706.1.B., & 713.4.A.	to permit relief from the requirement to improve the street to township standards for ultimate right-of-way and cartway widths
Section 712.4.I.	to permit an emergency spillway length in excess of 75 feet
Section 712.4.L.	to permit relief from the requirement that the inlet grate should only be used as an emergency outflow and should be located at or above the 100-year water surface elevation

Section 512.1(b) of the Pennsylvania Municipalities Planning Code requires applicants to state in full the grounds and facts of unreasonableness or hardship on which the request for each waiver is based. The final plan should note all granted waivers.

2. **Conservation easement**—Section 22-704. of the SALDO outlines the applicant’s obligations pertaining to the proposed conservation easement. Subsection 4 of that section of the SALDO states that nothing shall be placed, planted, or set within the area of an easement and the area shall be kept as lawn or in a natural state. A fire pit is shown on Lot 1 within the bounds of the proposed conservation easement. The township should decide whether the presence of a fire pit constitutes a violation of this provision.
3. **Stormwater management maintenance**—The applicant proposes a stormwater facility on Lot 3 that will manage stormwater runoff for the proposed residential lots. We recommend the applicant provide a manual to the township and to the relevant property owners detailing all required maintenance for the stormwater management facilities. This will help to ensure the long-term maintenance and performance of the stormwater facilities and make homeowners aware of their responsibilities for regular maintenance and repair of the facilities.
4. **Sewage facilities**—The applicant must submit a Sewage Facilities Planning Module Application Mailer to the Pennsylvania Department of Environmental Protection (PaDEP) to determine if an Act 537 Planning Module must be submitted for this proposed subdivision.

This review will be included in the Bucks County Planning Commission board materials for the January 6, 2021, meeting. It is not necessary for you to attend this meeting, but you are welcome to do so and to offer comments on the proposal to the BCPC board and staff.

In order that we may be more aware of your concerns, please send us a copy of all municipal decisions sent to this applicant.

JWS:dc/rml

cc: Vinicio & Sharon D’Alessio
Jonathan Thomas, Audax Homes, LLC (via email)
Samuel D. Costanzo, PE, Van Cleef Engineering Associates (via email)
Scott Mill, PE, Van Cleef Engineering Associates (via email)
Janene Marchand, PE, Gilmore & Associates, Township Engineer (via email)
Eileen Bradley, Township Manager (via email)



Township of New Britain

Office of Fire Marshal
Office of Code Enforcement

September 16, 2021

RE: Fire Marshal review and Code Enforcement of D'ALESSIO TRACT

Review By: Randal J. Teschner Fire Marshal, Code Enforcement Officer

The following is a list of items to be addressed:

1. Driveway meet township code and are good for access fire Apparatus
2. Note: All new homes in New Britain twp. Are required to have residential sprinklers.



NEW BRITAIN TOWNSHIP

207 Park Avenue • Chalfont, PA 18914 • Telephone: (215) 822-1391

SUBDIVISION & LAND DEVELOPMENT APPLICATION

1.	Date of Application:	<u>5/24/2022</u>	TOWNSHIP USE ONLY	
2.	Date of Plan or Revision:	<u>5/24/2022</u>	Date Received:	_____
3.	Application for:	<u>Preliminary Land Development Plans</u>	Payment:	_____
4.	Name of Subdivision or Land Development:	<u>84 Schoolhouse Road</u>	Check #:	_____
5.	Location:	<u>84 Schoolhouse Road, Chalfont, 18914</u>	Receipt #:	_____
6.	Tax Map Parcel #: 26- <u>005-003</u>	Total Acreage: Gross <u>9.14</u>	Escrow Acc. #:	_____
7.	Net Buildable Site Area (from Section 2401):	<u>7.10</u>	Base Site Area	<u>8.85</u>
8.	Zoning Requirements:			
	Zoning District	<u>RR</u>	Minimum Lot Size	<u>1 Ac.</u>
	Front Yard	<u>50</u>	Side Yard	<u>25</u>
			Rear Yard	<u>75</u>
9.	Number of Lots or Dwelling Units:	<u>5</u>	Maximum Density	<u>N/A</u>
10.	Equitable Owner of Record of Land:	<u>84 Schoolhouse Road, LP</u>		
	Address:	<u>PO Box 210</u>		
		<u>Spring House, PA 19477</u>		
	Phone: <u>484-388-1802</u>	E-mail: <u>daveb@prdcproperties.com</u>		
11.	Applicant:	<u>Same as Owner</u>		
	Address:	_____		
	Phone: _____	E-mail: _____		
12.	Registered Engineer or Surveyor:	<u>Robert Cunningham, P.E.</u>		
	Address:	<u>409 East Butler Ave, Unit 5</u>		
		<u>Doylestown, PA 18901</u>		
	Phone: <u>215-586-3330</u>	E-mail: <u>rob@hcengineering.net</u>		
13.	Type of Water & Sewer:	<input checked="" type="checkbox"/> Public Water	<input type="checkbox"/> Private Water	
		<input checked="" type="checkbox"/> Public Sewer	<input type="checkbox"/> Private Sewer	
14.	Proposed Use:	<u>B-1 Single-Family Detached Dwelling</u>		

This is to certify that I have read Article V of the New Britain Township Subdivision and Land Development Ordinance and that the accompanying plan meets the requirements of that Article to the best of my knowledge.

Signature of Applicant *Presidents sole GR*

Signature of Registered Engineer or Surveyor _____

SUBDIVISION & LAND DEVELOPMENT PLAN SUBMISSION CHECKLIST

Date of Application: 5/24/2022
Subdivision/Land Development Name: 84 Schoolhouse Road
Address of Property: 84 Schoolhouse Road, Chalfont, PA 18914
Owner(s) Name: 84 Schoolhouse Road, LP
Applicant(s) Name: Tax Map _____
Parcel Number: 26-005-003

Plan Sets for New Britain Township - Folded to 8 1/2 x 11: (9 Full Size, 5 11x17)

- | | |
|---|--|
| <input checked="" type="checkbox"/> NBT Board of Supervisors (Full Size) - 5 Copies | <input checked="" type="checkbox"/> NBT Planning Commission (11x17) - 5 Copies NBT |
| <input checked="" type="checkbox"/> Township Engineer (Full Size) - 1 Copy | <input checked="" type="checkbox"/> File (Full Size) - 2 Copies |
| <input checked="" type="checkbox"/> Fire Marshal (Full Size) - 1 Copy | <input checked="" type="checkbox"/> Digital Submission - Flash Drive |

Plan Sets for Outside Agencies - Folded to 8 1/2 x 11: The applicant must show proof of submission to the outside agencies listed below (stamped copy or cover letter and copy of application form). The following plan sets are subject to the requirements of the outside agency and must be submitted to the outside agency by the applicant.

- Bucks County Planning Commission - 1 Copy
- Bucks County Conservation District - 1 Copy
- Water Authority (North Penn/North Wales/Aqua) - 1 Copy
- Chalfont New Britain Joint Sewer Authority - 3 Copies

OR

- Bucks County Department of Health - 1 Copy

Application Forms & Fees to be Submitted to the Township: *All applicants include these items or the application will be considered administratively incomplete and returned to the applicant.*

- New Britain Township Subdivision and Land Development Application (1 Signed Original)
- Filing Fee according to the most current Fee Schedule adopted by Resolution
- Escrow Fee according to the most current Fee Schedule adopted by Resolution
- Contract for Professional Services Agreement (3 Signed Originals)
- Application to Bucks County Planning Commission (Provide Proof of Submission)
- Application to Bucks County Conservation District (Provide Proof of Submission)
- Applicant Plan Submission Checklist (Should be completed by the applicant's professional engineer or land surveyor)
- Stormwater Management Report (2 Copies) (Digital Acceptable)
- PADEP Sewage Facilities Planning Module Application/Mailer approved by Sewer Authority or SEO (Original & 2 Copies)
- Traffic Impact Study, if applicable (2 Copies)
- PADOT Highway Occupancy Permit Plan/Application, if applicable (2 Copies)
- Community Impact Assessment Report, if applicable (4 Copies)
- Letter of Requested Waivers with Justification
- Affidavit of Mailing Notification, Mailing Content & Post Property of SLD Application (§ 22-401.8 General Procedures)
- Township Road Opening Permit, if applicable
- Water Resource Impact Study, if applicable (2 Copies)
- Waiver Request Letter with Justification

Reviewed By: _____
Township Representative

Date: _____

**All fees or contributions in lieu of shall be payable to New Britain Township. All plan sets, applications and forms shall be submitted directly to New Britain Township.*



****The attached checklist is provided for the applicant as a guideline to assist in the submission process. All applicants must include these items or the application will be considered administratively incomplete and returned to the applicant.****

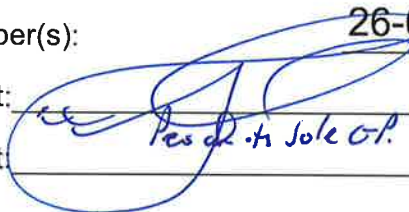
**NEW BRITAIN TOWNSHIP
90-DAY REVIEW PERIOD WAIVER**

I/We, the applicant, understand that the time necessary for adequate review of this application and plans for compliance with current Zoning and Subdivision & Land Development Ordinances, including reviews of any revised plans, may exceed the 90-day review period stipulated under the Municipalities Planning Code.

In recognition of the above, I/we hereby waive the 90-day review period, with the understanding that I/we may revoke this waiver at any time in the future, upon 30-day written notice to the New Britain Township Zoning Officer.

Name of Subdivision/Land Development: 84 Schoolhouse Road

Tax Map Parcel Number(s): 26-005-003

Signature of Applicant:  Date: 5.23.22

Signature of Applicant: *President of Sole O.P.* Date: _____





Kristin Holmes, P.E., LEED AP
Robert Cunningham, P.E., LEED AP

May 24, 2022
Revised July 21, 2022

Via Email

Matthew West, Township Manager
New Britain Township
207 Park Avenue
Chalfont, PA 18914

RE: 84 Schoolhouse Road Waiver Request Letter
TMP#: 26-005-003
New Britain Township, Bucks County, PA
HCE Project No.: 1286

Dear Matt:

In regard to the above referenced land development project, the applicant requests the following waivers from the Subdivision and Land Development Ordinance.

1. SALDO Section 22-403 & 404 – The Applicant is requesting a waiver to allow a combined preliminary and final subdivision and land development submission for this project. All information required for final plans is included on the land development plan set.
2. SALDO Section 22-502.1.H – The Applicant is requesting a waiver from providing a lighting plan, as no new lighting is proposed as part of this project. No pole lighting is proposed for this small-scale residential project with 5 new building lots, only residential scale lighting will be used.
3. SALDO Section 22-705.3.C – The applicant is requesting a waiver from providing cartway widening along Schoolhouse Road. The existing cartway width is adequate for the existing traffic volume and the proposed development doesn't create a significant traffic impact. In addition, widening would disrupt the existing drainage swale along the roadway.
4. SALDO Section 22-705.3.E – The applicant is requesting a waiver from providing a proposed private street that meets design specifications of a local street. The intent of this development is to provide the aesthetic of a rural neighborhood, which only contains 5 new building lots. The proposed road will be private and maintain by the homeowner's association. The proposed cartway width provides adequate access to the homes and for emergency vehicles. The required right-of-way width is proposed for the ability to widen the road in the future.
5. SALDO Section 22-705.3.G – The applicant is requesting a waiver from providing mill and overlay of the entire width of the roadway a depth of 1 ½ inches. There are minimal improvements within the existing cartway, which include water and sewer connections

- on the western side of the Schoolhouse cartway. Additionally, no widening is proposed as part of this project and the existing cartway appears to be in good condition.
6. SALDO Section 22-705.8.C – The applicant is requesting a waiver from providing cul-de-sac streets with a left-side turnaround configuration at the closed end and minimum paving radius of 50 feet. The intent of this development is to provide the aesthetic of a rural neighborhood, which only contains 5 new building lots. A hammerhead turnaround is proposed with the required right-of-way width for the ability to install a cul-de-sac. Additionally, the hammerhead provides adequate turnaround space for emergency vehicles.
 7. *SALDO Section 22-705.8.D – The applicant is requesting a waiver to permit a cul-de-sac street that creates a four-way intersection which is not directly opposite another cul-de-sac street along a local access street. The proposed cul-de-sac street creates a four-way intersection with Boulder Drive, which is not a cul-de-sac. The proposed road was aligned to Boulder Drive during sketch plan review to meet that residential street shall be designed to provide for continuation of existing streets. Additionally, the proposed street must remain a cul-de-sac because the township does not desire a connection to Meadow Road.*
 8. SALDO Section 22-705.8.F – The applicant is requesting a waiver from providing a fifteen-foot by twenty-foot snow storage easement along the right-of-way of the cul-de-sac bulb. The current hammerhead design provides sufficient room for snow storage. Additionally, the roadway will be privately owned and maintained.
 9. SALDO Section 22-706 – The Applicant is requesting a waiver from providing curb and sidewalk along Schoolhouse Road and the proposed private road. Alternatively, the project proposes a 6 ft wide asphalt path to allow pedestrian travel across the frontage. There is curb along the property side of Schoolhouse Road, and it is not practical to provide curb without widening the road.
 10. SALDO Section 22-707.1.B(2) – The applicant is requesting a waiver from providing an eight (8) foot wide path to accommodate bike traffic. The proposed six (6) foot path is consistent with the asphalt path along the Colebrook community. The anticipated bike traffic along the proposed path is similar to the existing path along Colebrook. Therefore, the six (6) foot path width is adequate for anticipated bike traffic on the path.
 11. SALDO Section 22-710.4 – The Applicant is requesting a waiver from providing an emergency access for subdivisions with a single access. The feasibility of providing emergency access in the proposed subdivision is limited because the lot being subdivided is surrounded by an urbanized area. In addition, the emergency access will generate additional impervious areas and woodlands disturbances.
 12. SALDO Section 22-713.4.B – The Applicant is requesting a waiver to allow street trees within the right-of-way. A planted berm is proposed within the right-of-way between the proposed walking trail and the existing roadway. This layout was discussed during Sketch Plan phase of the project and is consistent with the adjacent townhome development on Schoolhouse Road.

13. SALDO Section 22-714.3.A – The Applicant is requesting a waiver from providing streetlights at any location where improvements are shown. The intent of this development is to provide the aesthetic of a rural neighborhood, which only contains 5 new building lots. There are individual residential scale post lights at each home to illuminate the individual driveways. No internal pedestrian walkways are proposed that require illumination.

Very truly yours,
Holmes Cunningham Engineering



Thomas Borghetti, P.E.
Project Engineer

ECC: 84 Schoolhouse Road, LP

O:\1286 - 84 Schoolhouse Road\Outbound\Twp 2022-07-21 Waiver Letter.docx

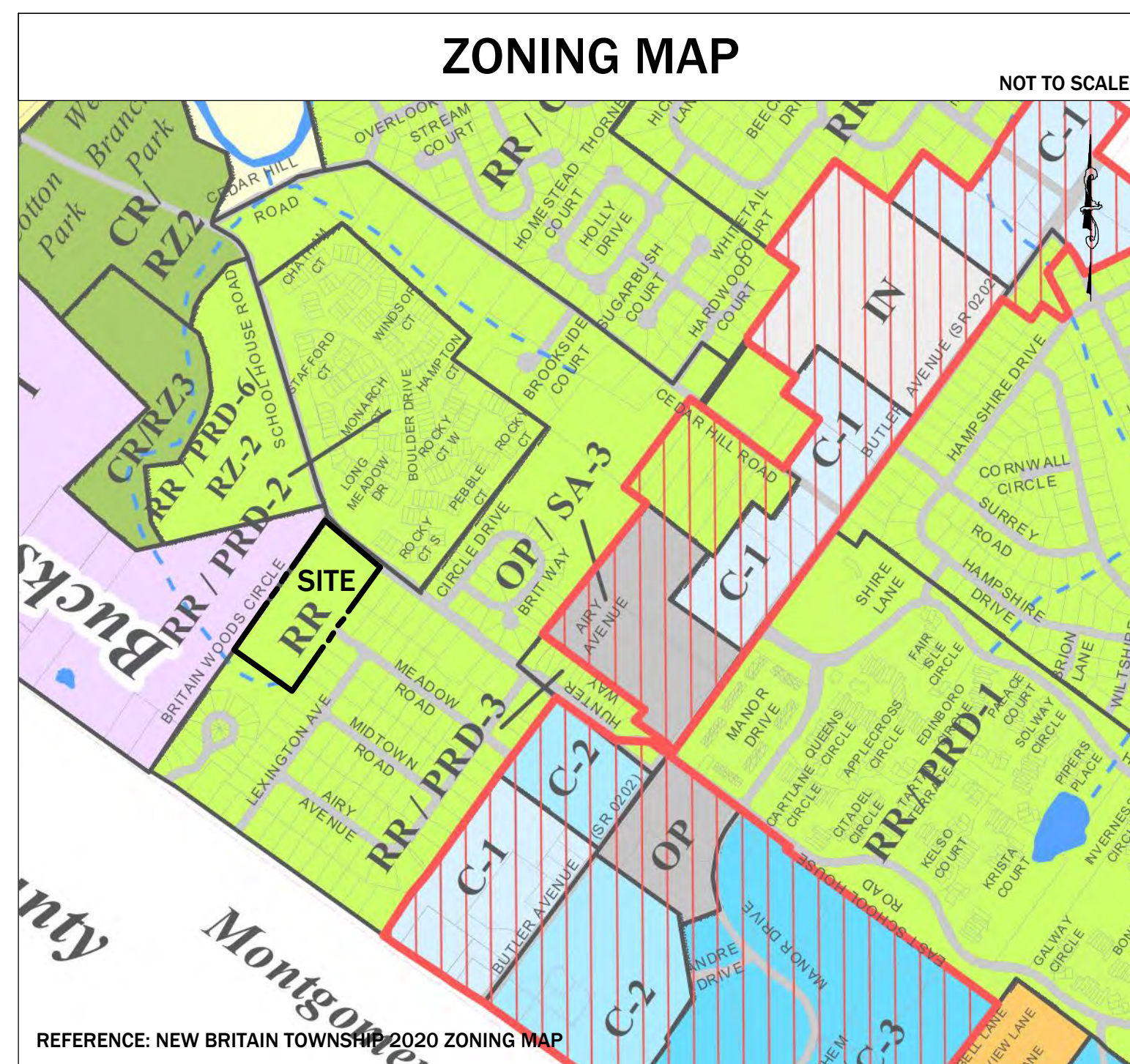
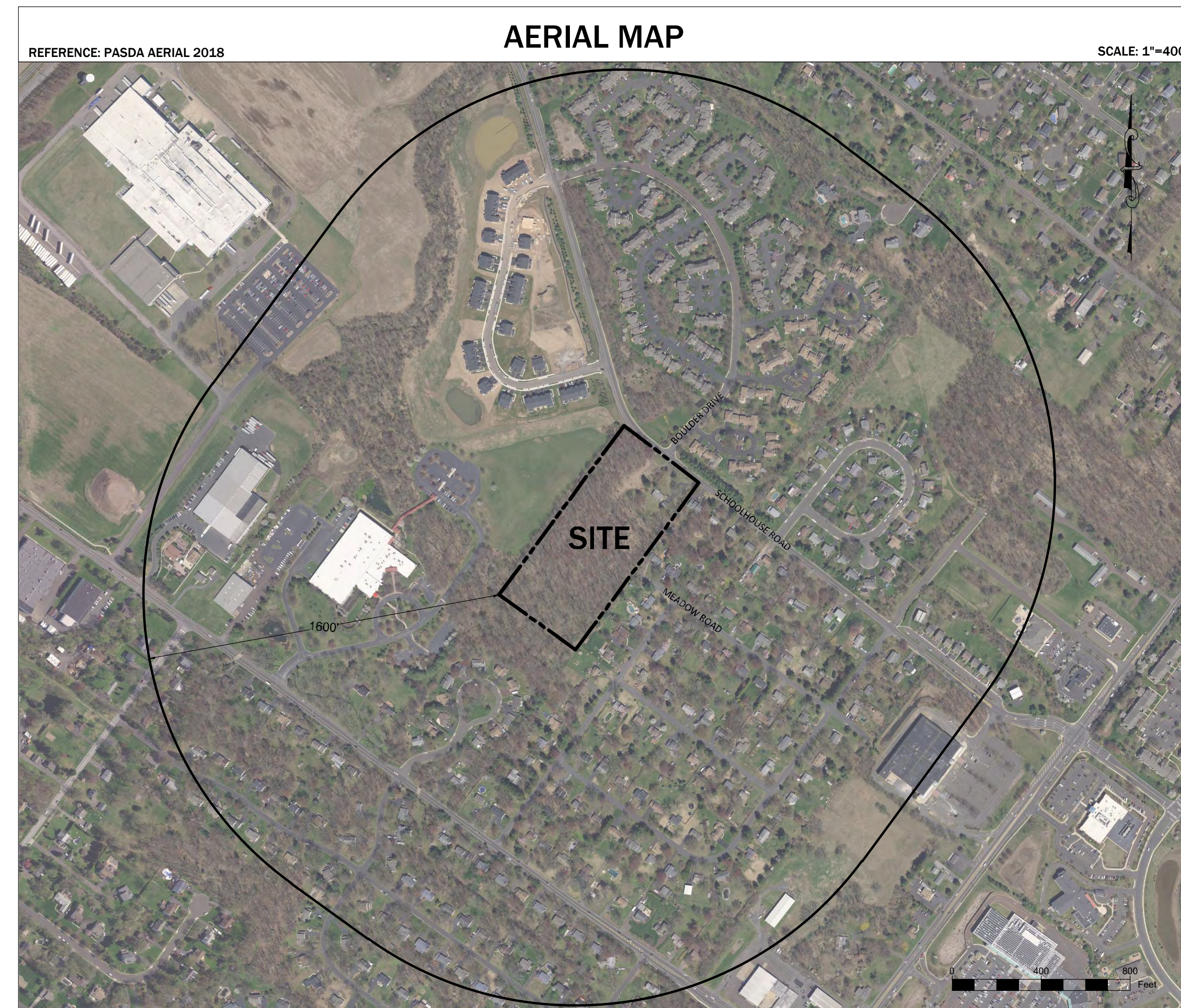
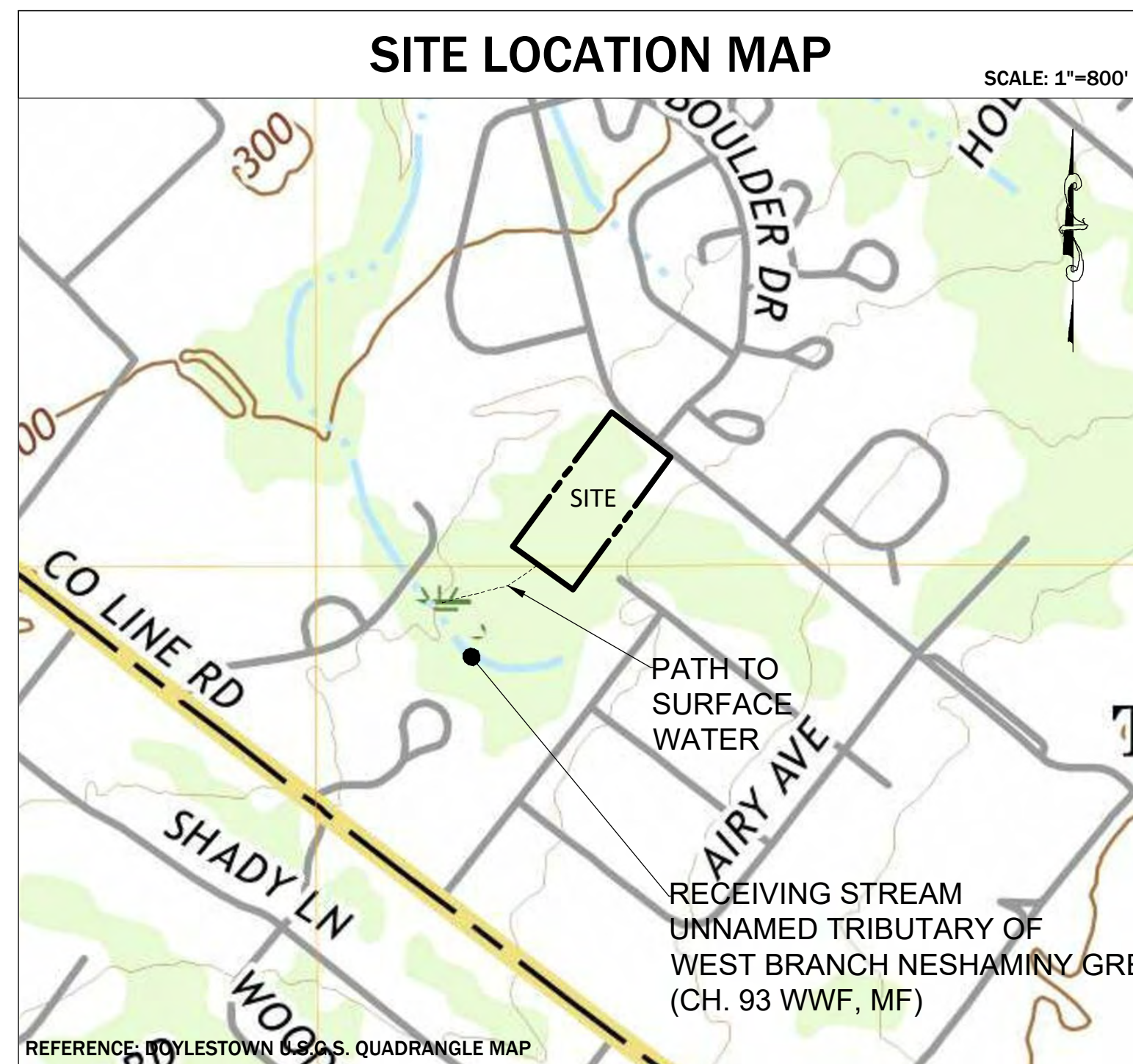
PRELIMINARY AND FINAL LAND DEVELOPMENT AND MAJOR SUBDIVISION PLANS

FOR

84 SCHOOLHOUSE ROAD

TMP # 26-005-003

NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA



CONTACTS

TOWNSHIP
NEW BRITAIN TOWNSHIP
207 PARK AVENUE
CHALFONT, Pa 18914
PHONE: (215)-822-1391

TOWNSHIP ENGINEER
GILMORE & ASSOCIATES, Inc
65 EAST BUTLER AVENUE, SUITE 100
NEW BRITAIN, PA 18901
PHONE: 215 345 4330

TOWNSHIP PUBLIC WORKS DEPARTMENT
207 PARK AVENUE
CHALFONT, PA 18914
PHONE: (215)-822-1391

COUNTY PLANNING COMMISSION
BUCKS COUNTY PLANNING COMMISSION
THE ALMSHOUSE NESHAMINY MANOR CENTER
1260 ALMSHOUSE ROAD
DOYLESTOWN, PA 18901
PHONE: 215-345-3400

COUNTY CONSERVATION DISTRICT
BUCKS COUNTY CONSERVATION DISTRICT
1456 FERRY ROAD, SUITE 704
DOYLESTOWN, PA 18901
PHONE: 215-345-7577

WATER
NORTH WALES WATER AUTHORITY
200 W WALNUT ST.
NORTH WALES, PA 19454
PHONE: (215) 699-4836

ELECTRIC AND GAS
PHILDELPHIA ELECTRIC COMPANY
BUCKS/MONT REGION CONTRACTOR AND BUILDER SERVICES
400 PARK AVENUE
WARMINSTER, PA 18974
PHONE: (215) 956-3270
FAX: (215) 956-3240

SEWER
CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY
1645 UPPER STATE ROAD
DOYLESTOWN, PA 18901
PHONE: (215) 345-1225

PECO
WARMINSTER SERVICE BUILDING
400 PARK AVE.
WARMINSTER, PA 18974
ELECTRIC PHONE: (215) 956-3270
NEW ELECTRIC PHONE: (215) 956-3010
ELECTRIC EMERGENCY: (800) 841-4141
GAS PHONE: (800) 454-4100
NEW GAS PHONE: (800) 454-4100
GAS EMERGENCY: (800) 841-4141
GAS EMERGENCY(ALT): (844) 841-4151

APPLICANT/EQUITABLE OWNER:

84 SCHOOLHOUSE ROAD, LP
PO BOX 210
SPRING HOUSE, PA 19477

PREPARED BY:



HOLMES CUNNINGHAM LLC
409 EAST BUTLER AVENUE
UNIT 5
DOYLESTOWN, PA 18901
(215) 586-3330

DRAWING LIST			
SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE	LAST REVISED DATE
1	C0.0	COVER SHEET	5/24/2022
2	C0.1	EXISTING CONDITIONS PLAN	5/24/2022
3	C0.2	AERIAL MAP	5/24/2022
4	C0.3	EXISTING RESOURCE AND SITE ANALYSIS PLAN	5/24/2022
5	C1.1	RECORD SITE PLAN	5/24/2022
6	C2.0	GRADING, DRAINAGE AND UTILITY PLAN	5/24/2022
7	C2.1	CONSTRUCTION DETAILS	5/24/2022
8	C2.2	CONSTRUCTION DETAILS	5/24/2022
9	C2.3	CONSTRUCTION DETAILS	5/24/2022
10	C3.0	UTILITY PROFILES	5/24/2022
11	C4.0	EROSION AND SEDIMENT CONTROL PLAN	5/24/2022
12	C4.1	EROSION AND SEDIMENT CONTROL DETAILS	5/24/2022
13	C4.2	EROSION AND SEDIMENT CONTROL DETAILS	5/24/2022
14	C5.0	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	5/24/2022
15	C5.1	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS	5/24/2022
16	C6.0	LANDSCAPING PLAN	5/24/2022
17	C6.1	LANDSCAPING DETAILS	5/24/2022

* DENOTES PLAN TO BE RECORDED


DATE:	5/24/2022
PROJECT #	1286
DRAWING #	C0.0
SHEET	1 OF 17




Holmes Cunningham LLC
 409 E. Butler Ave., Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS	Date	Description

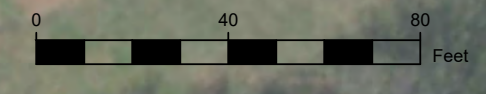
84 SCHOOLHOUSE ROAD
 TMP # 26-005-003
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA
AERIAL MAP


ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No.	1286_C0.2 AERIAL MAP.DWG
HCE Job	1286
Date	5/24/2022
Scale	1"=40'
Designed	RC
Sheet	3 of 17

Drawing No.
C0.2

NOTES:
 1. THE BOUNDARY AND TOPOGRAPHIC INFORMATION IS TAKEN FROM AN EXISTING FEATURES PLAN PREPARED BY CAVANAUGH SURVEYING SERVICES, DATED NOVEMBER 21, 2017.
 2. AERIAL PHOTOGRAPHY TAKEN FROM PASDA AERIAL PHOTOGRAPHS 2018.



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 PENNSYLVANIA ONE
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SITE PHOTOGRAPH FROM SCHOOLHOUSE ROAD

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- WETLANDS
- WETLANDS TRANSITION
- WOODLANDS
- STEEP SLOPES 8%-15%
- STEEP SLOPES 15%-25%
- STEEP SLOPES 25%+
- TrB** SOIL TYPE
- SOIL TYPE BOUNDARY

RESOURCE PROTECTION CALCULATIONS

	Protection Ratio	Acres of Land in Resources	Resource Protection Land	Protected Area
Watercourses	100%	0.05	0.05	0.05
Floodplain (Alluvial) Soils	100%	0.00	0.00	0.00
Wetlands	100%	1.77	1.77	1.77
Lakes and Ponds	100%	0.00	0.00	0.00
Riparian Buffer (75 FT)	100%	0.51	0.51	0.51
Wetlands Margins (25 FT to wetland)	80%	0.00	0.00	0.00
Woodlands (CR.WS.SR-1.SR-2.RR)	80%	5.36	4.29	4.29
Steep Slopes 8-15%	60%	0.03	0.02	0.03
Steep Slopes 15-25%	70%	0.01	0.01	0.01
Steep Slopes 25%+	85%	0.04	0.03	0.04

Soils Table

Symbol	Unit Name	Hydric	Depth to Water	Depth to Bedrock	HSG
AbB	Abbotstown silt loam, 3 to 8 percent slopes	No	6-8 inches	18-60 inches	D
BwB	Buckingham silt loam, 3 to 8 percent slopes	Yes	6-8 inches	20-69 inches	C/D

Limitations and Resolutions: The soils found within the project limits have varying limitations including possible shallow depth to groundwater and possible shallow depth to bedrock. In order to resolve the groundwater limitation, any standing water should be pumped through a sediment filter bag. To resolve the bedrock limitation, the contractor shall determine whether rock is ripplable. If rock is not ripplable, blasting will be required. All blasting shall meet all local, county, state and federal regulations.

- NOTES:
- THE BOUNDARY AND TOPOGRAPHIC INFORMATION IS TAKEN FROM AN EXISTING FEATURES PLAN PREPARED BY CAVANAUGH SURVEYING SERVICES, DATED NOVEMBER 21, 2017.
 - LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM EXISTING RECORDS AND/OR ABOVE GROUND OBSERVATION AT THE SITE. COMPLETENESS OR ACCURACY OF LOCATION CAN NOT BE GUARANTEED.
 - ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCTOBER 9, 2008, PENNSYLVANIA ACT 121. THIS SITE IS CURRENTLY ZONED RR - RESIDENTIAL DISTRICT IN THE TOWNSHIP OF NEW BRITAIN.
 - ELEVATION INFORMATION IS BASED ON THE NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND HORIZONTAL DATUM ID BASED ON 1983 STATE COORDINATE SYSTEM.
 - REFERENCE IS MADE TO PENNSYLVANIA ONE CALL SYSTEM, IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 187 OF 2008. (800-242-1776).
 - FLOOD ZONE INFORMATION: SUBJECT PARCEL AREA IS LOCATED OUTSIDE ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, PANEL NO. 288 OF 532, MAP NO. 42017C0288K WHICH BEARS AN EFFECTIVE DATE OF MARCH 21, 2017.

Site Capacity Calculations

	Area (SF)	Area (AC)
Gross Site Area Determined by Actual On-site Survey	397,947	9.136
Existing Streets Ultimate Rights-of-Way	0	0.000
Existing Utility Rights-of-Way or Easements	12,419	0.285
Existing Preservation Easements	0	0.000
Land Not Contiguous	0	0.000
Land Shown on Previous Subdivision Reserved for Open Space, Protection, etc.	0	0.000
Land in a Different Zoning District from Primary Use	0	0.000
Base Site Area	385,528	8.851

Resource Protection Land

Natural Resource	Protection Ratio	Acres of Land in Resources	Resource Protection Land (AC)	Proposed Resource Protection Land (AC)
Watercourses	1.00	0.05	0.05	0.05
Riparian Buffer	1.00	0.00	0.00	0.00
Floodplain	1.00	0.00	0.00	0.00
Floodplain (Alluvial) Soils	1.00	1.70	1.70	1.70
Wetlands	1.00	0.00	0.00	0.00
Lakes and Ponds	1.00	0.00	0.00	0.00
Steep Slopes 25%+	0.85	0.00	0.00	0.00
Woodlands	0.80	5.36	4.29	4.29
Steep Slopes 15-25%	0.70	0.00	0.00	0.00
Steep Slopes 8-15%	0.60	0.00	0.00	0.00
Total Land with Resource Restrictions				7.11
Total Land with 1.00 Protection Ratio Restrictions				1.75
Total Resource Protection Land Required				6.04
Total Resource Protection Land Provided				6.04
Total Disturbed Resources				1.07

Open Space Calculations

Base Site Area	8.85	Ac.
Multiply by Minimum Open Space Ratio	0.00	Ac.
Standard Minimum Open Space	0.00	Ac.
Required Open Space (Greater of 100% Protection Land or Min Open Space)	1.75	Ac.

Net Buildable Site Area Calculations

Base Site Area	8.85	Ac.
Subtract Required Open Space	1.75	Ac.
Net Buildable Site Area	7.10	Ac.

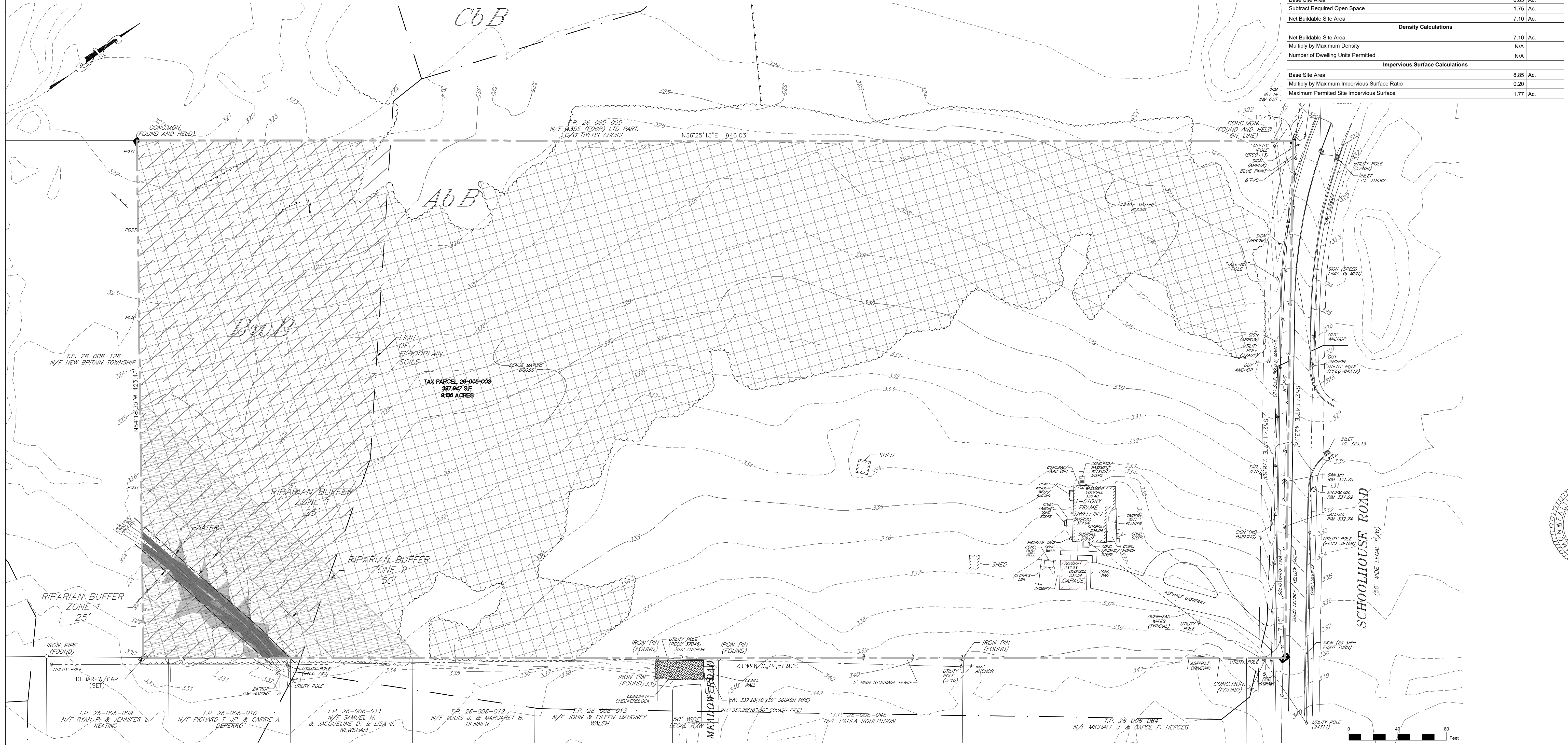
Density Calculations

Net Buildable Site Area	7.10	Ac.
Multiply by Maximum Density	N/A	
Number of Dwelling Units Permitted	N/A	

Impervious Surface Calculations

Base Site Area	8.85	Ac.
Multiply by Maximum Impervious Surface Ratio	0.20	
Maximum Permitted Site Impervious Surface	1.77	Ac.

Holmes Cunningham LLC
 409 E. Butler Ave., Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net



REVISIONS

Date	Description

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 10 WORKING DAYS NOTICE PERIOD - STOP & CALL

Professional Engineer
 Robert T. Cunningham
 License No. PE076424

1286
 5/24/2022
 Scale 1"=40'
 Designed KH
 Sheet 4 of 17

84 SCHOOLHOUSE ROAD
 TWP # 26-005-003
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

EXISTING RESOURCE AND SITE ANALYSIS PLAN

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No. 1263_C0.3 ERSAP.DWG

Drawing No. **C0.3**

OWNER SIGNATURE BLOCK & ACKNOWLEDGEMENT
 TO ALL WHOM THESE PRESENTS MY COME, KNOW YE THAT I, _____, HAS LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF NEW BRITAIN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, CERTAIN LOTS ACCORDING TO THIS PLAN WHICH IS INTENDED TO BE FORTHWITH RECORDED, WITNESS OUR HAND AND SEAL THIS _____ DAY OF _____ 20____.

BY: _____ NAME _____ TITLE _____ CORPORATION _____

OWNER(S): _____

TITLE(S): _____

COMMONWEALTH OF _____ (OR IF NOT PENNSYLVANIA, STATE OF _____)

COUNTY OF _____

ON THIS _____ DAY OF _____ A.D., 20____, BEFORE ME A NOTARY PUBLIC, PERSONALLY APPEARED _____ OF _____ OWNER OF THE SUBJECT PROPERTY, AS SUCH, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT ON HIS BEHALF FOR THE USES AND PURPOSES THEREIN SET FORTH.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

SEAL _____ NOTARY PUBLIC _____ COMMISSION EXPIRATION DATE _____

TOWNSHIP ENGINEER ACKNOWLEDGEMENT
 THIS PLAN HAS BEEN REVIEWED BY THE TOWNSHIP ENGINEER ON THIS _____ DAY OF _____ 20____.

ENGINEER: _____

ENGINEER'S CERTIFICATION
 ROBERT CUNNINGHAM, A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS PLAN IS ACCURATE AND CORRECT AS INDICATED.

ROBERT CUNNINGHAM, P.E.
 PA PE076424

DATE: _____

CERTIFICATION OF ACCURACY
 I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT.

PATRICK CAVANAUGH, PLS
 SURVEYOR

DATE: _____

RECORDER OF DEEDS ACKNOWLEDGEMENT
 RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC. IN AND FOR THE COUNTY OF BUCKS, AT DOYLESTOWN, PENNSYLVANIA IN PLAN BOOK _____ PAGE _____ ON THIS _____ DAY OF _____ 20____.

BUCKS COUNTY RECORDER OF DEEDS _____

BOARD OF SUPERVISORS ACKNOWLEDGEMENT
 THIS PLAN APPROVED BY THE BOARD OF SUPERVISORS OF NEW BRITAIN TOWNSHIP THIS _____ DAY OF _____ 20____.

OWNER CERTIFICATION FOR STORMWATER BMP'S
 THE STORMWATER BMP'S ARE FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY NEW BRITAIN TOWNSHIP.

LOT WIDTH/DEPTH TABLE

Lot #	Lot Width (Feet)	Lot Depth (Feet)
1	217	204
2	239	180
3	250	180
4	220	190
5	265	203

Curve Table

Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	146.75'	451.20'	018°38'06"	N44°49'42"W	146.10'
C2	54.98'	35.00'	090°00'00"	N07°43'16"W	49.50'
C3	67.60'	475.00'	008°09'13"	N41°21'21"E	67.54'
C4	32.20'	60.00'	030°45'05"	S30°03'24"W	31.82'
C5	128.83'	60.00'	123°01'18"	S46°49'47"E	105.47'
C6	114.19'	60.00'	109°02'46"	N17°08'10"E	97.72'
C7	28.91'	20.00'	082°49'09"	N04°01'22"E	26.46'
C8	74.71'	525.00'	008°09'13"	S41°21'21"W	74.65'
C9	54.98'	35.00'	090°00'00"	S82°16'44"W	49.50'
C10	275.22'	60.00'	262°49'09"	S85°58'38"E	90.00'

Zoning Table
 Zone: RR - Residential District

ITEM	REQUIRED/ PERMITTED	PROPOSED	ORDINANCE SECTION
Permitted Uses	B-1 Single Family Detached Dwelling; B2 Cluster Subdivision	B-1 Single Family Detached Dwelling	27-901.a
B-1 Single Family Detached Dwelling Requirements			
Max. Building Height	35 FT	<35 FT	27-902.a; 2110
Min. Lot Area	1 AC	1.00 AC	27-902.b
Min. Lot Width At Setback	150 FT	217 FT	27-902.b
Min. Lot Depth	180 FT	180 FT	27-902.b
Min. Front Yard Setback	50 FT	>50 FT	27-902.b
Min. Side Yard Setback	25 FT	>25 FT	27-902.b
Min. Rear Yard Setback	75 FT	>75 FT	27-902.b
Max. Building Coverage	15%	6%	27-902.b
Max. Site Impervious Surface Coverage	20%	16%	27-902.b
Max. Lot Impervious Surface Coverage	25%	14%	27-902.b
General Requirements			
Min. Driveway Clear Sight Triangle	50 FT	50 FT	27-2111.b
Min. Off Street Parking	3 Spaces/DU	3/DU	27-2901B
Min. Building Envelope in RR District	5,000 SF (B-1 Use)	>5,000 SF	27-2401.b

LOT AREA AND COVERAGE TABLE

Lot #	Gross Lot Area (square feet)	100% Protected Natural Resources (square feet)	Proposed Easement Areas (square feet)	Ratio Base Site Area (square feet)	Impervious Coverage* (square feet)	Impervious Ratio %	Building Coverage (square feet)	Building Ratio %
1	43,560	0	3,956	39,604	5,922	15%	2,711	7%
2	43,560	0	0	43,560	5,930	14%	2,711	6%
3	45,470	0	0	45,470	5,918	13%	2,711	6%
4	176,424	80,789	41,846	53,789	6,106	11%	2,711	5%
5	43,943	0	0	43,943	6,073	14%	2,711	6%

* Includes 1,500 SF of Future Impervious Coverage

SITE PLAN NOTES:

- THE BOUNDARY AND TOPOGRAPHIC INFORMATION IS TAKEN FROM EXISTING FEATURES PLAN PREPARED BY CAVANAUGH SURVEYING SERVICES DATED NOVEMBER 21, 2017.
- THE PROPOSED DEVELOPMENT IS TO BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
- THE PROPERTY IS WITHIN ZONE X AREAS OUTSIDE THE 100-YEAR FLOODPLAIN AS PER PANEL 288 OF 532 MAP 4201700288K REVISED MARCH 21, 2017.
- AN EASEMENT IS PROPOSED ON LOT 4 FOR INSPECTION AND MAINTENANCE OF THE PROPOSED STORMWATER FACILITIES FOR ACCESS BY THE PROPERTY OWNERS AND NEW BRITAIN TOWNSHIP.
- THE ULTIMATE RIGHT-OF-WAY OF SCHOOLHOUSE ROAD EXTENSION FOR THE SHARED DRIVEWAY WILL BE PRIVATELY OWNED AND MAINTAINED.
- THE STORMWATER MANAGEMENT FACILITIES (AS SHOWN ON THIS PLAN) ARE A BASIC AND PERPETUAL PART OF THE STORMWATER MANAGEMENT SYSTEM OF THE TOWNSHIP OF NEW BRITAIN, AND AS SUCH ARE TO BE PROTECTED AND PRESERVED, IN ACCORDANCE WITH THE APPROVED FINAL PLAN BY THE OWNER OR WHOSE LANDS THE FACILITY IS LOCATED. THE TOWNSHIP OF NEW BRITAIN AND/OR ITS AGENTS RESERVE THE RIGHT AND PRIVILEGE TO ENTER UPON SUCH LANDS FROM TIME TO TIME FOR THE PURPOSE OF INSPECTION OF THE STORMWATER MANAGEMENT FACILITIES IN ORDER TO DETERMINE THAT THE STRUCTURAL AND DESIGN INTEGRITY ARE BEING MAINTAINED BY THE OWNERS.
- TOPSOIL SHALL NOT BE REMOVED FROM THE DEVELOPMENT SITE. TOPSOIL SHALL BE STRIPPED, STOCKPILED, AND REDISTRIBUTED ON THE SITE.
- THE STORMWATER MANAGEMENT FACILITIES AND SHARED DRIVEWAY MAINTENANCE WILL BE PURSUANT TO A SHARED MAINTENANCE AGREEMENT BETWEEN ALL LOT OWNERS.
- AT THE TIME OF INDIVIDUAL ZONING PERMIT APPLICATION FOR EACH LOT, THE NATURAL RESOURCES PROTECTION STANDARDS SHALL BE REVIEWED FOR COMPLIANCE AND SITES LAID OUT TO MINIMIZE NATURAL RESOURCE DISTURBANCE TO THE GREATEST EXTENT PRACTICABLE.
- THE APPLICANT OFFERS THE ULTIMATE RIGHT-OF-WAY OF SCHOOLHOUSE ROAD EXTENSION FOR DEDICATION TO NEW BRITAIN TOWNSHIP.
- THE PROPOSED SHARED DRIVEWAY CONSISTS OF APPROXIMATELY 435 LINEAR FEET.
- IF THE DISTURBANCE ENCLOSES INTO A DESIGNATED TREE PROTECTION ZONE RESULTING IN THE DAMAGE OR DESTRUCTION OF THE EXISTING TREES AND/OR VEGETATION DESIGNATED TO REMAIN, THE APPLICANT SHALL BE RESPONSIBLE FOR REPLACING THE DAMAGED OR DESTROYED VEGETATION ON AN EQUIVALENT CALIBER BASIS.
- WITH THE SITE BEING AT THE MAXIMUM WOODLAND DISTURBANCE PERMITTED BY ZONING, ANY FUTURE WOODLANDS DISTURBANCE WOULD REQUIRE PROPERTY OWNERS APPLY TO THE ZONING HEARING BOARD FOR ANY FUTURE IMPROVEMENTS TO THE PROPERTIES. COMPLIANCE WITH THE RESIDENTIAL DISCLOSURE ORDINANCE SHALL BE MET.
- THE APPLICANT WILL MEET WITH THE TOWNSHIP ENGINEER AFTER THE IMPROVEMENTS ARE CONSTRUCTED AND DETERMINE IF STREET TREES AND BASIN PLANTINGS, OR SUBSTITUTIONS AS APPROVED BY THE TOWNSHIP ENGINEER, CAN BE INSTALLED DEPENDING ON EXISTING VEGETATION, SPACE AND CANOPY CONDITIONS.
- NOTHING SHALL BE PLACED, PLANTED OR SET WITHIN THE AREA OF AN EASEMENT AND THE AREA SHALL BE KEPT AS LAWN OR IN A NATURAL STATE.
- OBSTRUCTIONS TO VISIBILITY SHALL NOT BE PERMITTED WITHIN 2 FEET AND 7 FEET ABOVE THE EDGE OF PAVING. ANY PLANT MATERIALS PLACED WITHIN CLEAR SIGHT TRIANGLES SHALL BE PROPERLY MAINTAINED TO CONTINUALLY COMPLY WITH THE HEIGHT RESTRICTIONS AND THE TOWNSHIP HAS THE RIGHT TO ENTER THE AREA AND PERFORM MAINTENANCE IF DEEMED CRITICAL TO PUBLIC WELFARE PURSUANT TO A DECLARATION OF COVENANTS, RESTRICTIONS AND CONDITIONS APPROVED BY THE BOARD.
- ALL MONUMENTATION SHALL BE SET BY A PROFESSIONAL LAND SURVEYOR AND ARE TO BE SET DURING CONSTRUCTION.

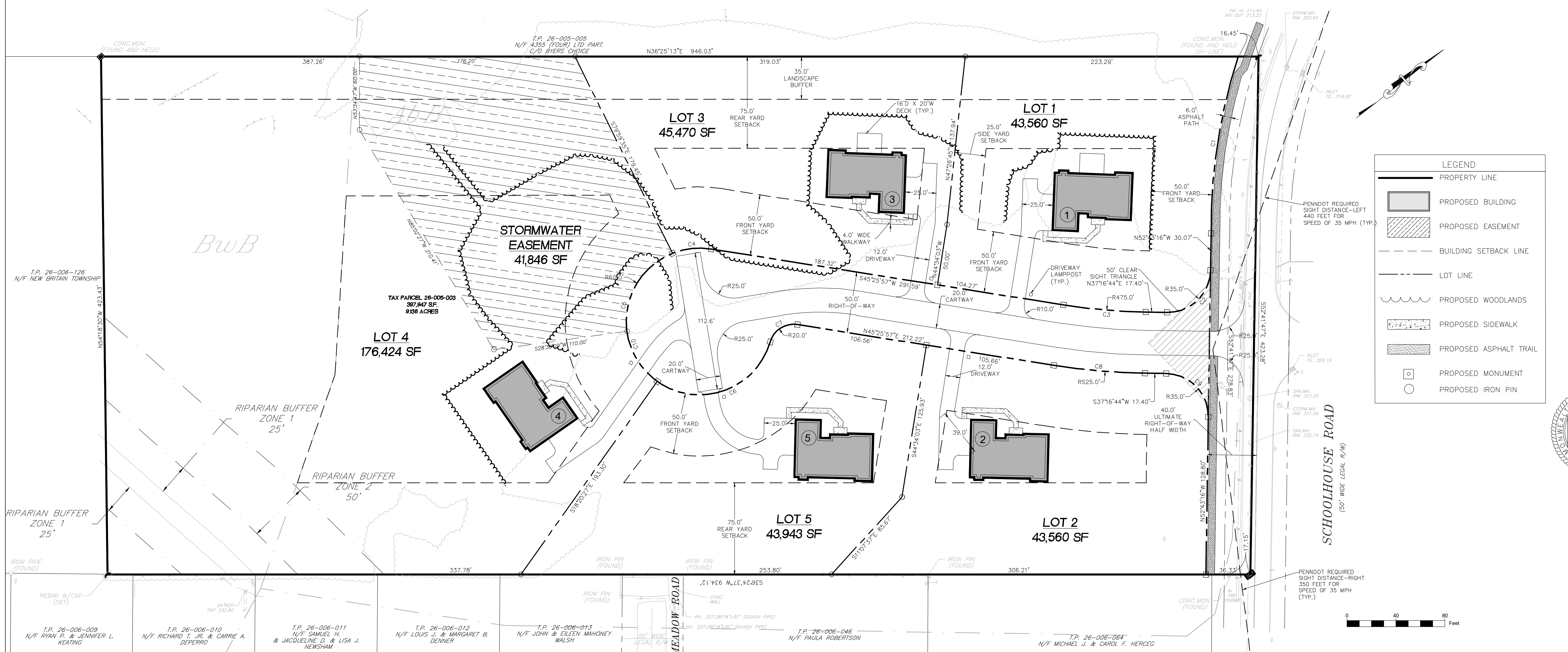
Holmes Cunningham LLC
 409 E. Butler Ave., Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS

Date	Description

PLANNING COMMISSION ACKNOWLEDGEMENT
 BUCKS COUNTY PLANNING COMMISSION NOTATION BCPC NO 12559 PROCESSED AND REVIEWED. REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE. CERTIFIED THIS DATE _____

OWNER CERTIFICATION FOR STORMWATER BMP'S
 THE STORMWATER BMP'S ARE FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY NEW BRITAIN TOWNSHIP.



84 SCHOOLHOUSE ROAD
 TWP # 26-005-003
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

RECORD SITE PLAN

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No.
 1286_C1.0 RECORD.DWG

HCE Job 1286
 Date 5/24/2022
 Scale 1"=40'
 Designed RC
 Sheet 5 of 17

Drawing No.
C1.0

GRADING AND DRAINAGE NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- CONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR INFORMATION TO THE OWNER AND OWNER'S ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM DEPICTED ON THE PLANS, FOR ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPECIFIC SITEWORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND ADDRESSING WRITTEN REQUESTS FOR INFORMATION.
- SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- PVC = POLYVINYLCHLORIDE PIPE, HDPE = HIGH DENSITY POLYETHYLENE PIPE, RCP = REINFORCED CONCRETE PIPE
- STORM DRAINAGE PIPING TO UTILIZE WATER TIGHT JOINTS.
- COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA GIVEN ELSEWHERE:

FILL AREA	PERCENT OF MAXIMUM MODIFIED PROCTOR DRY DENSITY
BUILDING FOOTPRINT	95%
PAVEMENT AND ROADWAYS	95%
SIDEWALKS	95%
LANDSCAPE AREAS	93%
TRENCH BACKFILL	SAME AS SURROUNDING AREA
- PROTECT SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION, INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.
- REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THAN BEST SUBGRADE MATERIAL ON-SITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE AND TRUE TO GRADE AND CROSS SECTION.
- ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE A MINIMUM OF 4,000 PSI.
- NEW BRITAIN TOWNSHIP SHALL HAVE THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT FACILITY.
- ALL STORMWATER MANAGEMENT FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED OR MODIFIED WITHOUT PRIOR APPROVAL FROM NEW BRITAIN TOWNSHIP.

UTILITY NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- ANY EXISTING FEATURES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE OWNER, AT NO COST TO THE TOWNSHIP.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING THE EXISTING UTILITY SERVICE (WATER, SEWER, GAS AND ELECTRIC) TO THE PROPERTY AND ENSURE THAT THEY ARE PROPERLY DISCONNECTED FROM THE EXISTING UTILITIES AND RECONNECTED TO THE NEW SERVICES PROVIDED.
- THE LOCATION OF THE EXISTING GAS MAINS ARE APPROXIMATE. THE CONTRACTOR SHOULD CONSULT LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION.
- THE LOCATION OF EXISTING ELECTRIC LINES ARE APPROXIMATE. THE CONTRACTOR SHOULD CONSULT LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION.
- ALL GAS WORK AND OTHER ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS.
- ALL ELECTRICAL WORK, TRANSFORMER PADS, AND ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS. MIN. DEPTH OF COVER OVER ELECTRIC, GAS, AND CABLE SHALL BE 2 FT.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS, UTILITY LOCATIONS, CATHODIC PROTECTION AND INVERTS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DISRUPTIONS TO EXISTING UTILITIES SERVICES. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE SANITARY SEWER MAINS ARE TO BE DEDICATED TO THE CHALFONT NEW BRITAIN SEWER AUTHORITY.
- THE CONTRACTOR SHALL COORDINATE THE SANITARY SEWER WORK WITH THE CHALFONT NEW BRITAIN SEWER AUTHORITY. THE CHALFONT NEW BRITAIN SEWER AUTHORITY IS TO BE CONTACTED ONE WEEK PRIOR TO SANITARY SEWER CONSTRUCTION, AND 72 HOURS PRIOR TO EXCAVATING NEAR OR CONNECTING INTO ANY EXISTING SEWER FACILITIES.
- ALL SANITARY SEWER FACILITIES SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE CHALFONT NEW BRITAIN SEWER AUTHORITY SPECIFICATIONS.
- EIGHTEEN (18) INCHES VERTICAL CLEARANCE SHOULD BE PROVIDED AT ALL UTILITY CROSSINGS. WHERE THIS CLEARANCE CANNOT BE MAINTAINED, THE WATER MAIN MUST BE ENCASED IN CONCRETE 10 FEET EACH SIDE OF THE CROSSING. IN CASES WHERE THE UTILITY IS SANITARY OR STORM WATER MAIN OR A LATERAL AND THE CLEARANCE CANNOT BE MAINTAINED, THEN THE SEWER AND/OR STORM SHALL ALSO BE ENCASED IN CONCRETE.
- ALL WATER MAINS ARE TO HAVE A MINIMUM COVER OF 4 FEET FROM THE TOP OF THE PIPE TO THE PROPOSED SURFACE ELEVATION.
- PROVIDE A MINIMUM HORIZONTAL CLEARANCE OF 10 FT BETWEEN SANITARY SEWER MAINS AND WATER MAINS. PROVIDE A 5 FT MINIMUM HORIZONTAL CLEARANCE BETWEEN SANITARY SEWER MAINS AND ALL OTHER UTILITIES.

UTILITY LEGEND

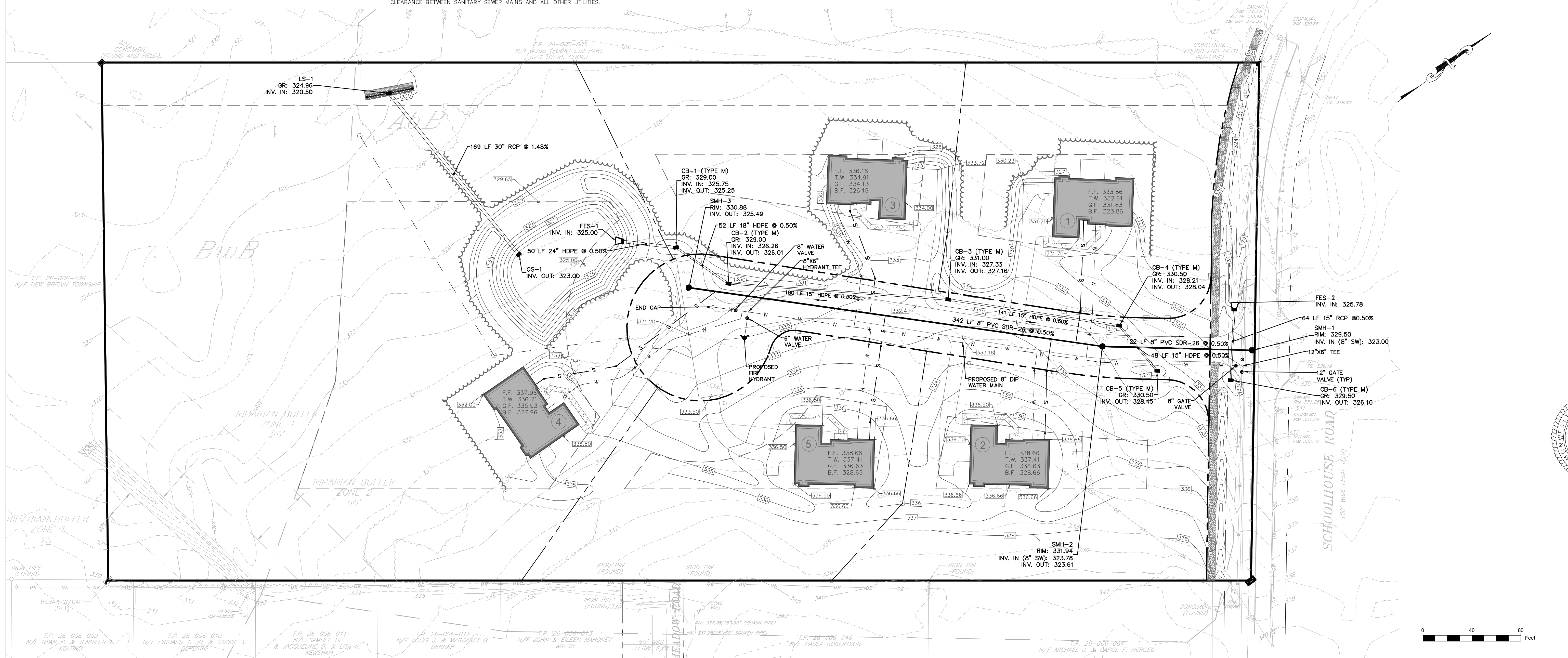
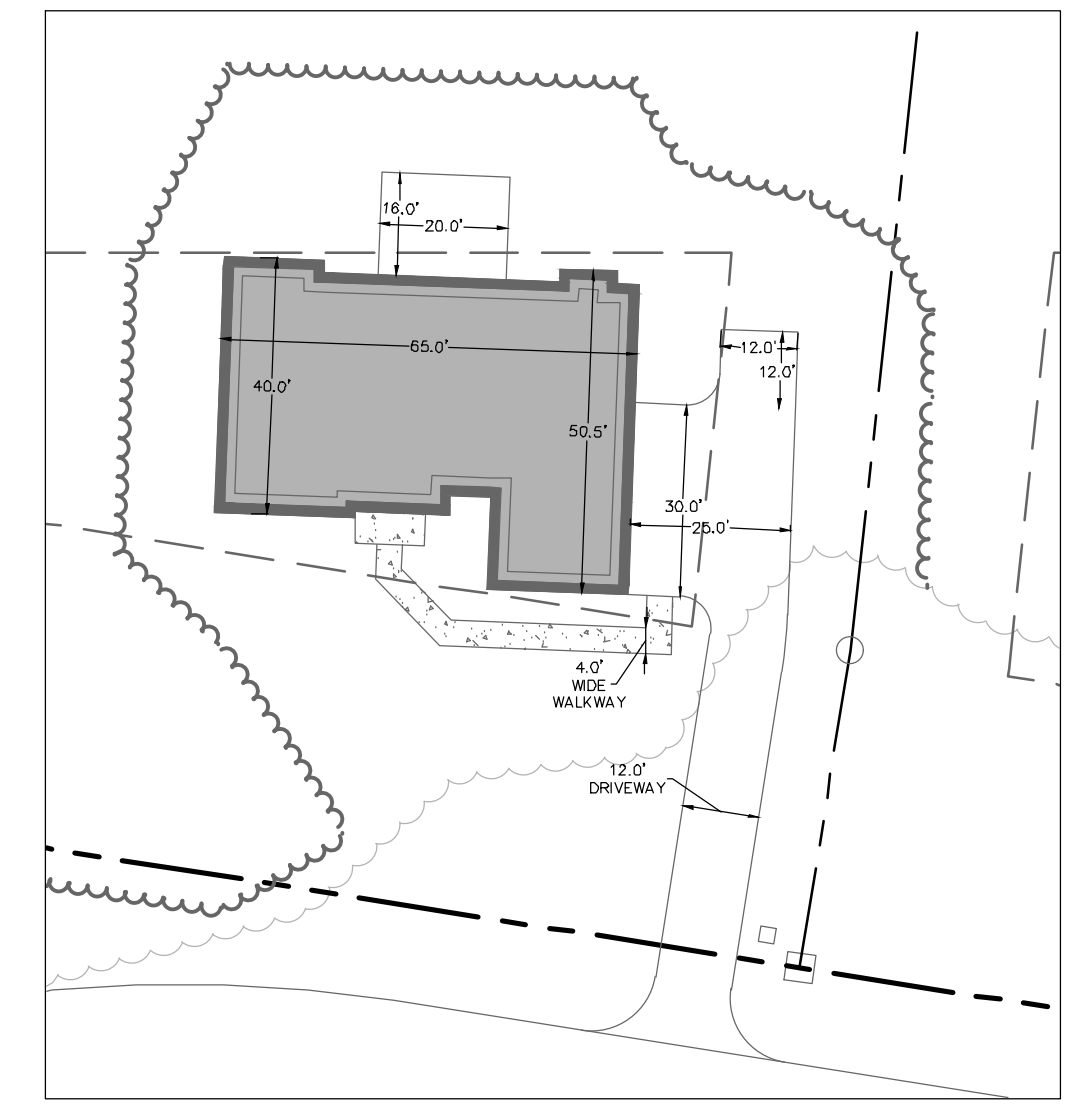
- ALL PROPOSED WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52, BITUMINOUS COATED DOUBLE CEMENT MORTAR LINED.
- ALL WATER FACILITIES WITHIN THIS DEVELOPMENT, INCLUDING THE WATER MAIN AND WATER SERVICE PIPING UP TO AND INCLUDING INDIVIDUAL CURB STOPS, FIRE LINE ISOLATION VALVES AND FIRE HYDRANTS, SHALL BE OFFERED FOR DEDICATION TO THE NORTH WALES WATER AUTHORITY. ALL WATER PIPING AND ASSOCIATED APPURTENANCES DOWNSTREAM OF THESE FACILITIES TO THE INDIVIDUAL BUILDINGS SHALL BE PRIVATELY OWNED.
- ALL WATER MAIN FITTINGS AND VALVES SHALL BE MECHANICAL JOINT (RESTRAINED) AND THE FITTINGS SHALL BE PROVIDED WITH THRUST BLOCKING. REFER TO DRAWING C2.3 FOR THRUST BLOCK DETAILS AND FITTING SCHEDULES.
- PROPOSED 4" WATER MAIN SHALL BE CONNECTED TO EXISTING WATER MAIN IN SCHOOLHOUSE ROAD.
- ALL FIRE HYDRANTS AND VALVES SHALL OPEN RIGHT (CLOCKWISE).
- THE OWNER IS RESPONSIBLE FOR REPLACEMENT OF LANDSCAPING SHOULD DISTURBANCE BE REQUIRED FOR UTILITY REPAIRS.
- THE CONTRACTOR MUST CONTACT NWWA ONE WEEK PRIOR TO WATER MAIN CONSTRUCTION, AND 72 HOURS PRIOR TO EXCAVATION NEAR AND CONNECTION TO EXISTING WATER MAIN.
- ALL WATER FACILITIES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH NORTH WALES WATER AUTHORITY STANDARD SPECIFICATIONS.
- 18 INCHES OF VERTICAL CLEARANCE OR 10 FEET OF HORIZONTAL CLEARANCE SHALL BE PROVIDED BETWEEN THE SANITARY SEWER AND ALL OTHER UTILITIES. OTHERWISE, CONCRETE ENCASEMENT OF THE SANITARY SEWER SHALL BE PROVIDED.
- THERE SHALL NOT BE BUILT, INSTALLED, CONSTRUCTED, PLANTED OR LOCATED ANY TEMPORARY OR PERMANENT BUILDINGS OR STRUCTURES INCLUDING INFILTRATION BASINS, OR ANY TREES, SHRUBS, OR OTHER LANDSCAPING WITHIN 10 FEET OF SANITARY SEWER FACILITIES, EXCEPT TREES, SHRUBS, AND OTHER LANDSCAPING WHICH WILL NOT GROW TO MORE THAN 6 FEET IN HEIGHT.
- SINCE THE PROJECT IS LOCATED IN THE MONTGOMERY HIGH PRESSURE ZONE, A PRESSURE REDUCING VALVE SHALL BE INSTALLED ON EACH WATER SERVICE.
- A MINIMUM OF 5 FEET OF HORIZONTAL CLEARANCE SHALL BE PROVIDED BETWEEN THE WATER MAIN AND ALL PARALLEL UTILITY LINES.
- A MINIMUM CLEARANCE OF 18 INCHES SHALL BE PROVIDED WHERE A WATER MAIN CROSSES ANOTHER UTILITY.
- ALL CURB STOPS WITHIN PAVED AREAS MUST BE PROVIDED WITH A VALVE BOX AND COVER FOR PROTECTION.
- WATER MAINS MUST BE SURVEY STAKED AT FIFTY (50) FOOT INTERVALS ALONG THE MAIN ALIGNMENT FOR STRAIGHT RUNS AND AT TWENTY-FIVE (25) FOOT INTERVALS ALONG CURVES. SURVEY STAKES MUST BE CLEARLY INSCRIBED WITH THE STATION POINTS, TOP OF FINAL GRADE, AND, WHEN APPLICABLE, FACE OF CURB. WHEN PIPELINE LOCATION IS USED FOR PLACEMENT OF SURVEY STAKES, THE STAKES SHALL BE OFFSET A MINIMUM OF TEN (10) FEET AND A MAXIMUM OF TWENTY (20) FEET FROM THE PIPELINE SO AS NOT TO INTERFERE WITH THE INSTALLATION OF THE PIPE.
- ALL WATER SERVICE CONNECTIONS, WATER MAIN CONNECTIONS AND SERVICE DISRUPTIONS REQUIRED FOR CONSTRUCTION OF THE NEW WATER FACILITIES WITHIN THIS DEVELOPMENT MUST BE COORDINATED WITH NORTH WALES WATER AUTHORITY. THE AUTHORITY MAY REQUIRE SOME OR ALL OF THESE CONNECTIONS AND DISRUPTIONS TO OCCUR OUTSIDE OF REGULAR WORKING HOURS. THE SPECIFIC HOURS DURING WHICH THESE CONNECTIONS OR DISRUPTIONS ARE TO BE MADE WILL BE AS DIRECTED BY THE AUTHORITY AND THE WORK SHALL BE COMPLETED AT NO ADDITIONAL COST TO THE AUTHORITY.

GRADING LEGEND

- EXISTING CONTOUR: 185
- EXISTING SPOT ELEVATION: 185.2 x
- PROPOSED CONTOUR: 185
- PROPOSED SPOT ELEVATION: 185.2 x

DRAINAGE LEGEND

- EXISTING SANITARY SEWER MAIN: Ex.San MH
- EXISTING SANITARY SEWER MANHOLE: Ex.MH
- EXISTING WATER MAIN AND VALVE: W
- EXISTING FIRE HYDRANT: Fire Hydrant
- PROPOSED SANITARY SEWER MAIN: SAN MH
- PROPOSED SANITARY SEWER MANHOLE: SAN MH
- PROPOSED WATER MAIN: W
- PROPOSED WATER VALVE: Valve
- PROPOSED FIRE HYDRANT: Fire Hydrant
- PROPOSED SANITARY SERVICE LATERAL: S
- PROPOSED WATER SERVICE LATERAL: W
- PROPOSED TELEPHONE, ELECTRIC, & CABLE: T&E
- EXISTING STORM PIPE: Ex.Storm
- EXISTING INLET: Ex.Inlet
- EXISTING MANHOLE: MH
- PROPOSED STORM PIPE: Storm Pipe
- PROPOSED YARD INLET: Y.I.
- PROPOSED CURB INLET: C.I.
- PROPOSED MANHOLE: MH



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409 E. Butler Ave. Unit 5
Doylesstown, PA 18901
(215) 586-3330
www.hcengineering.net

REVISIONS	Description	Date

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CONSTRUCTION PHASE AND
10 WORKING HOURS PRIOR TO
CONSTRUCTION START
STOP & CALL
Pennsylvania One
Call System, Inc.
1-800-242-1776

UTILITY LOCATIONS AS SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION.

84 SCHOOLHOUSE ROAD
TMP # 26-005-003
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

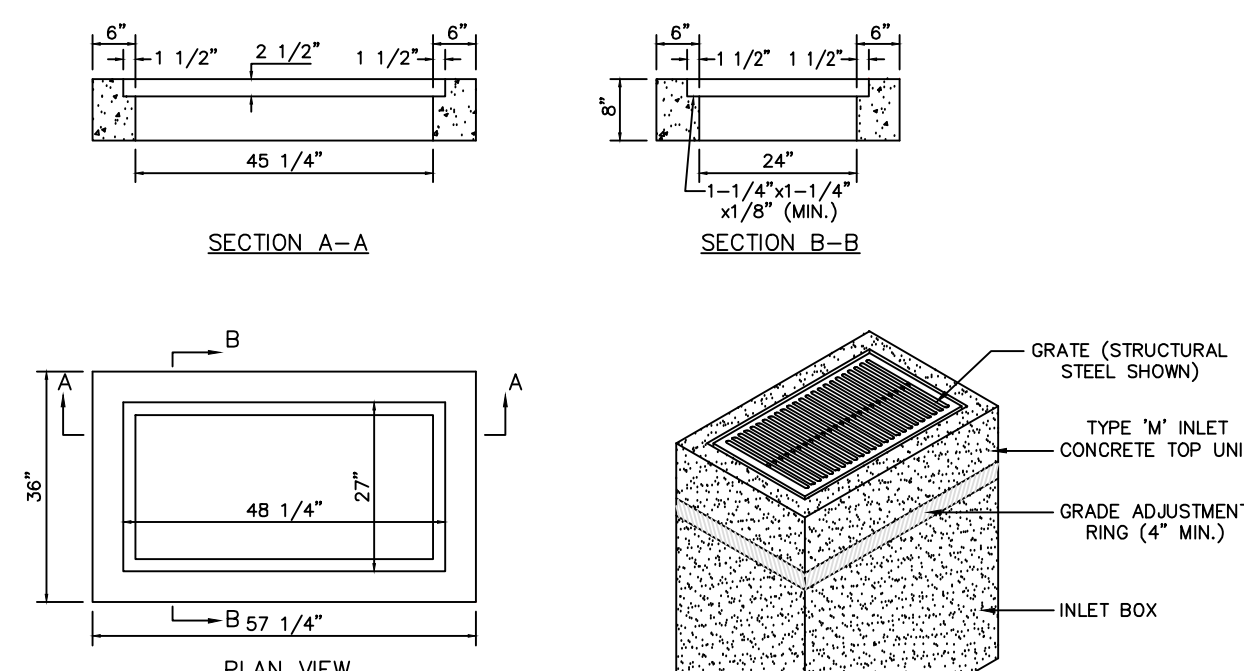
GRADING, DRAINAGE AND UTILITY PLAN

ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.
1286_C2.0 GRADING.DWG

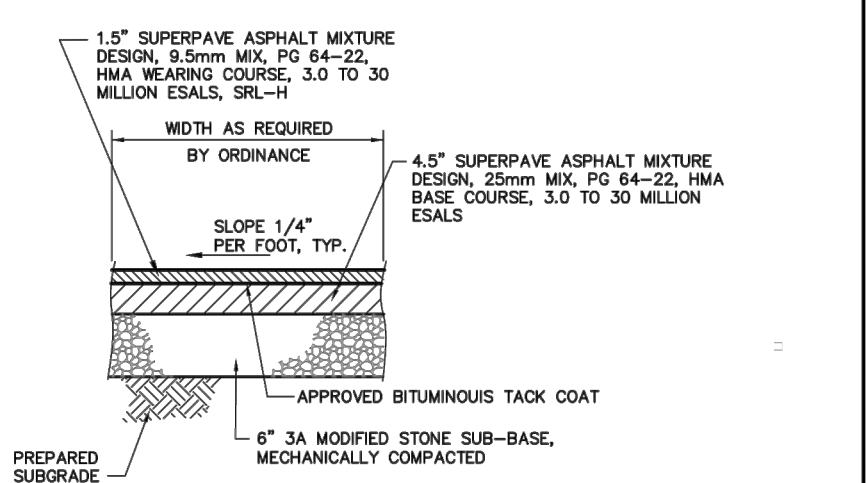
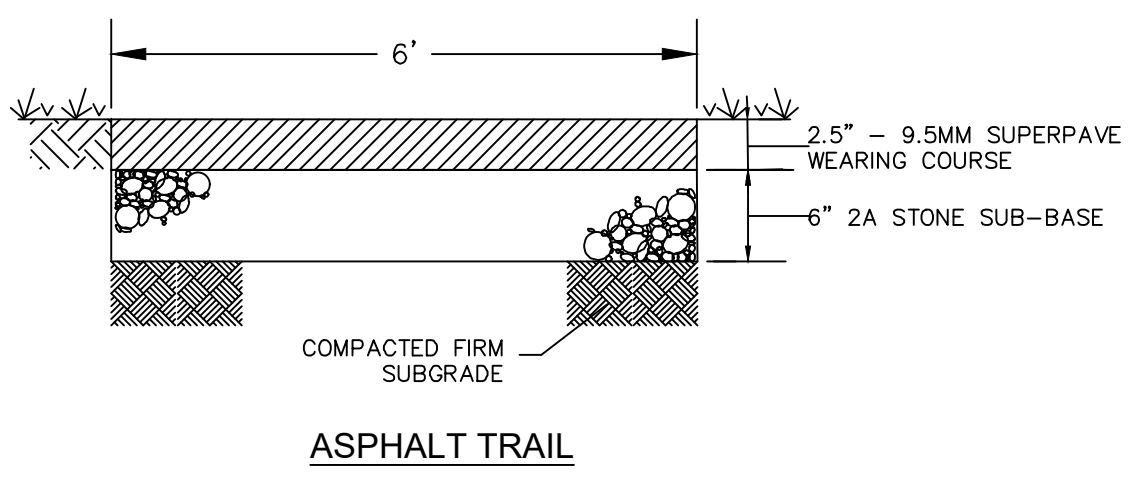
HCE Job	1286	Scale	1"=40'	RC
Date	5/24/2022	Designed	RC	Sheet
			6	of 17

Drawing No.
C2.0

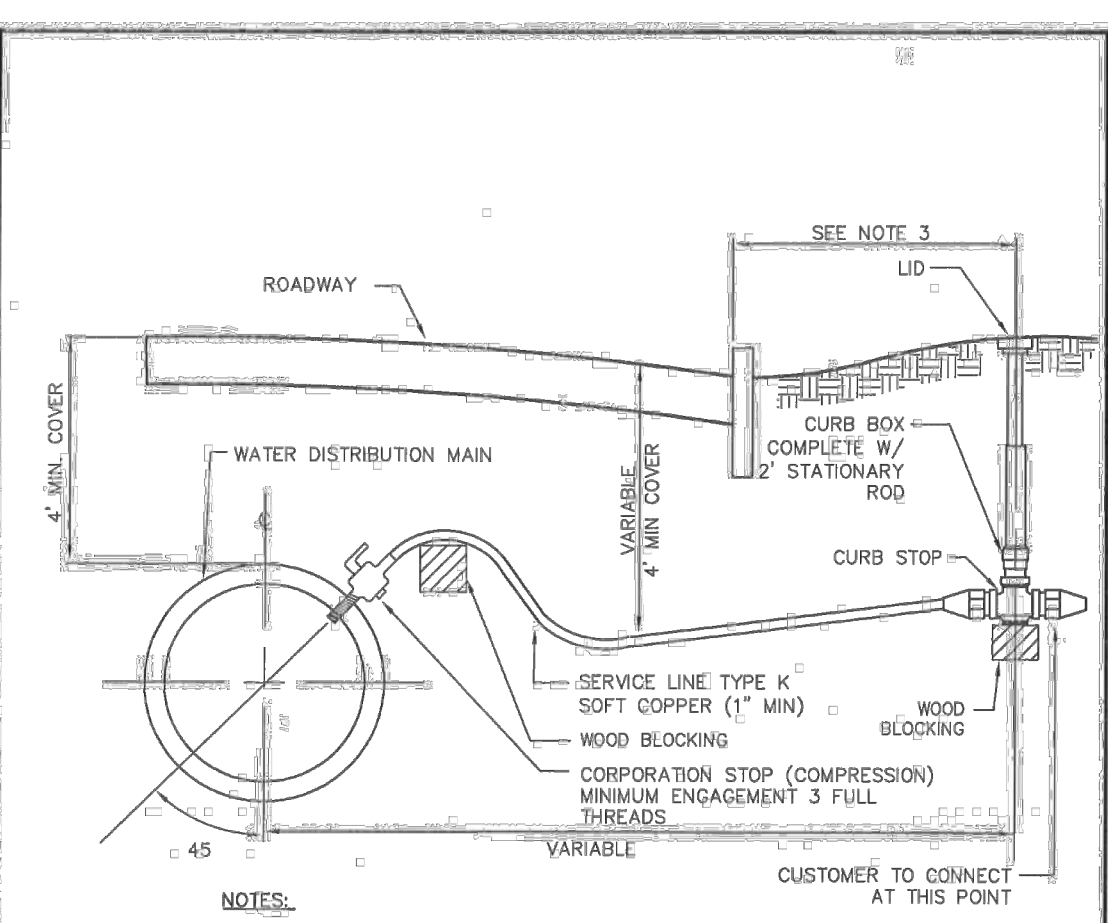


NOTE:
 1. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-24, SHEETS 1 and 2 of 8, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.
 2. ALL INLET TOP SHALL BE THE ENVIRONMENT TYPE.
 3. ALL INLET IN AREAS TO BE PAVED ARE TO BE BACKFILLED WITH 2A MATERIAL.

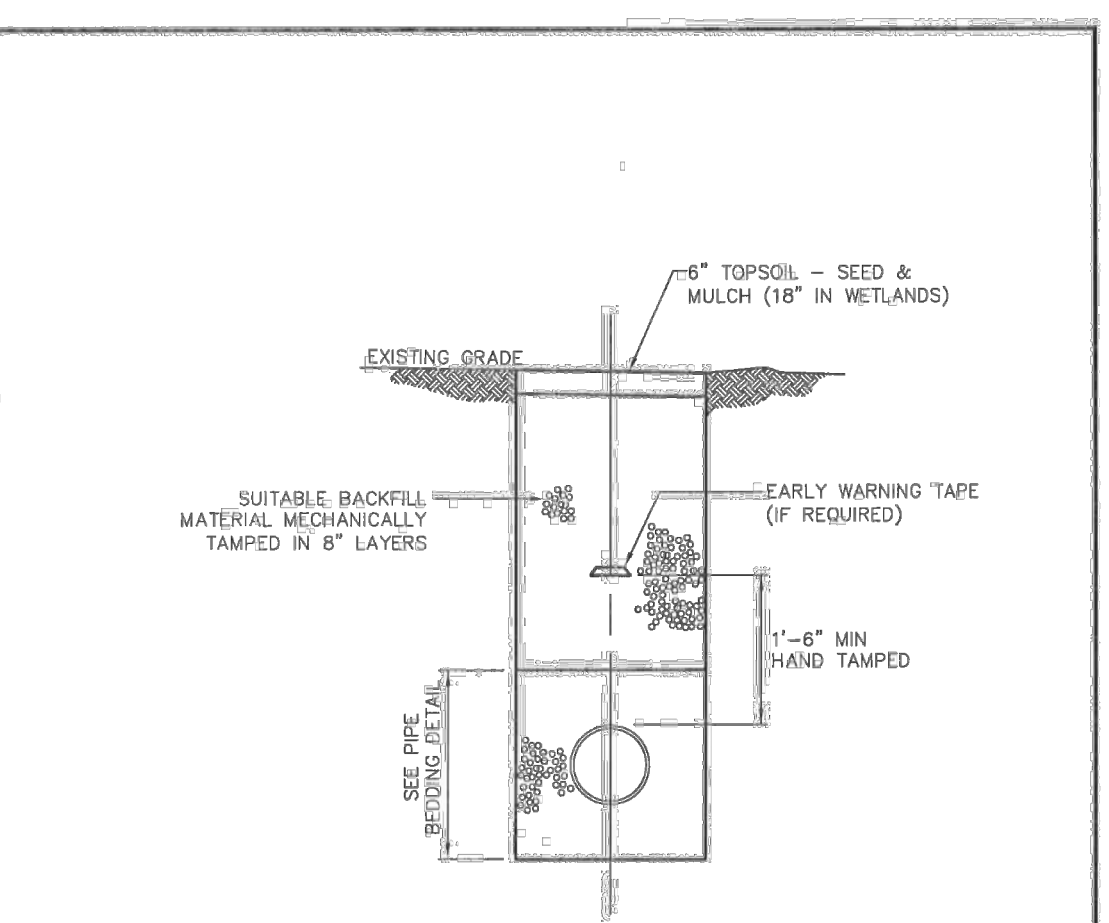
REFER TO DRAWING C5.1 FOR OUTLET STRUCTURE DETAILS AND INFORMATION



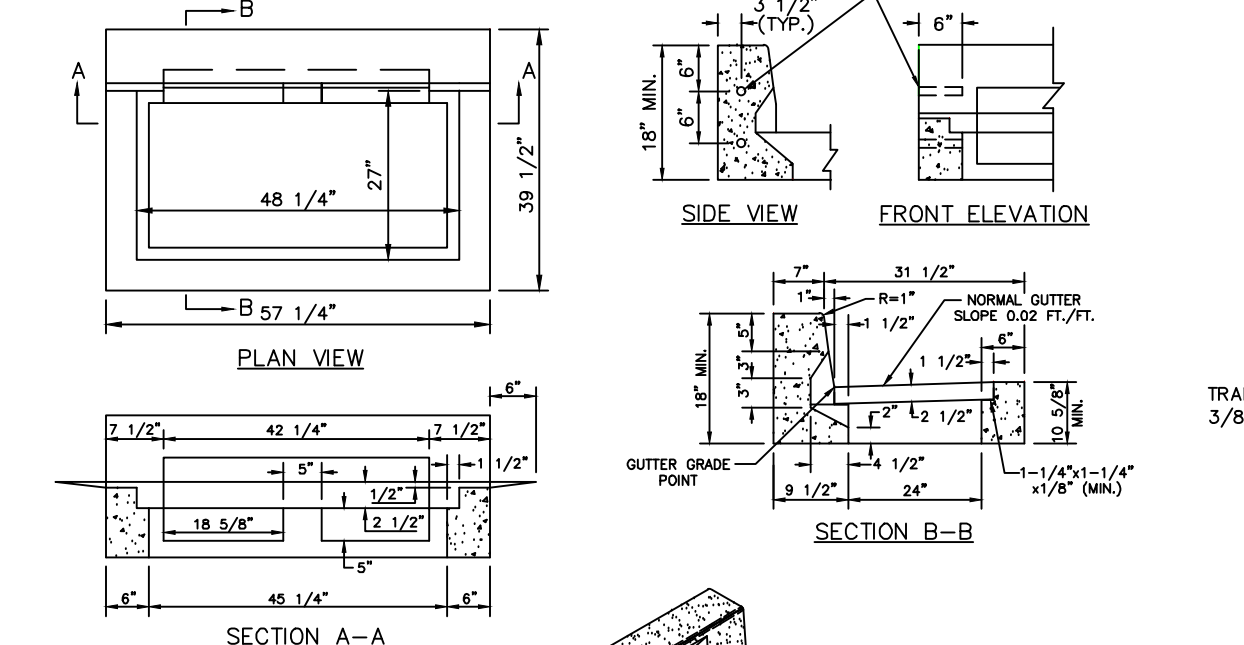
NON-RESIDENTIAL AND MULTI-RESIDENTIAL DRIVEWAYS, PARKING AREAS AND LOADING AREAS PAVING SECTION DETAIL
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA
GILMORE & ASSOCIATES, INC.
 ENGINEERING & CONSULTING SERVICES
 48 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901-0109 • (717) 545-0200
 DATE: 5/22/09 LAST REVISED: SCALE: N.T.S. DRAWING No: 8 of 17



NOTES:
 1. FOR TAPS > 1\"/>

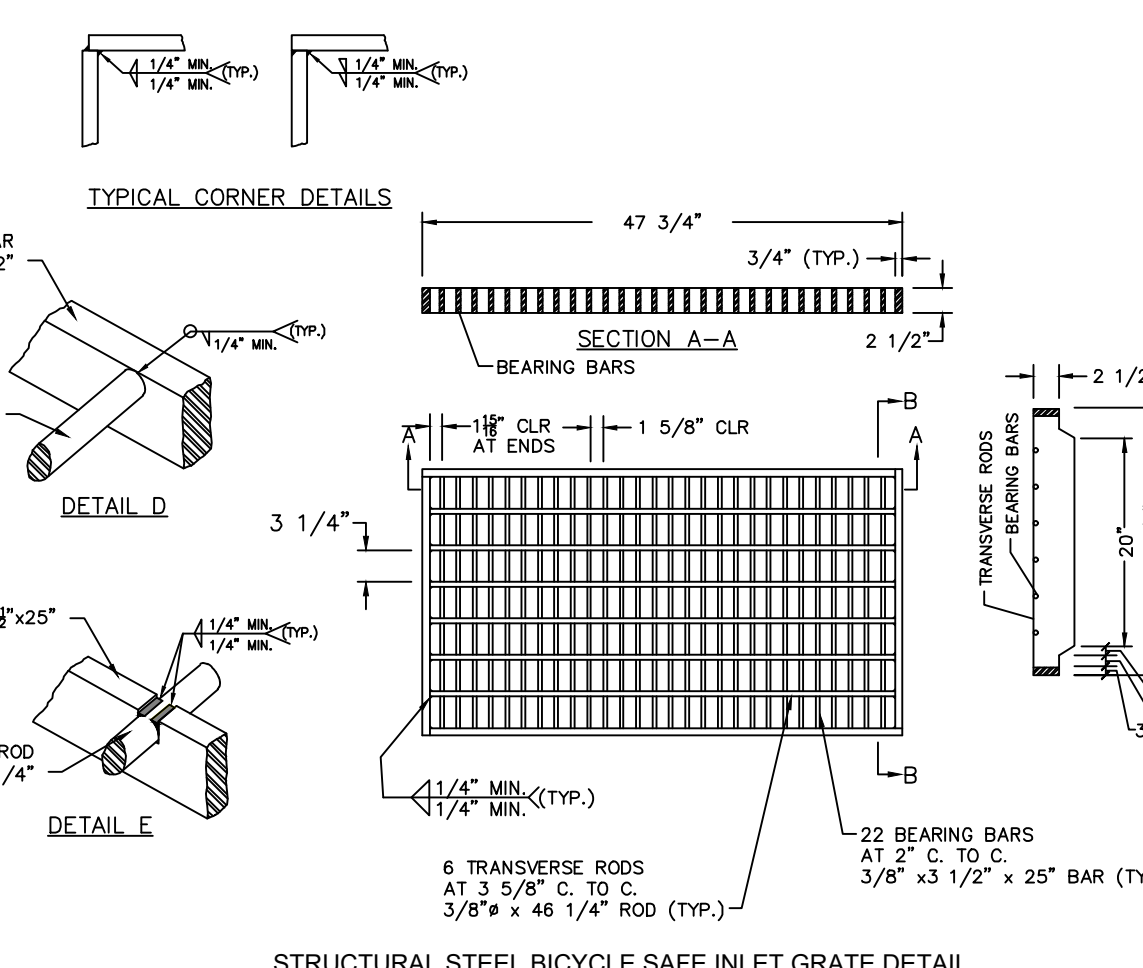


NOTES:
 1. THE TOP 6\"/>

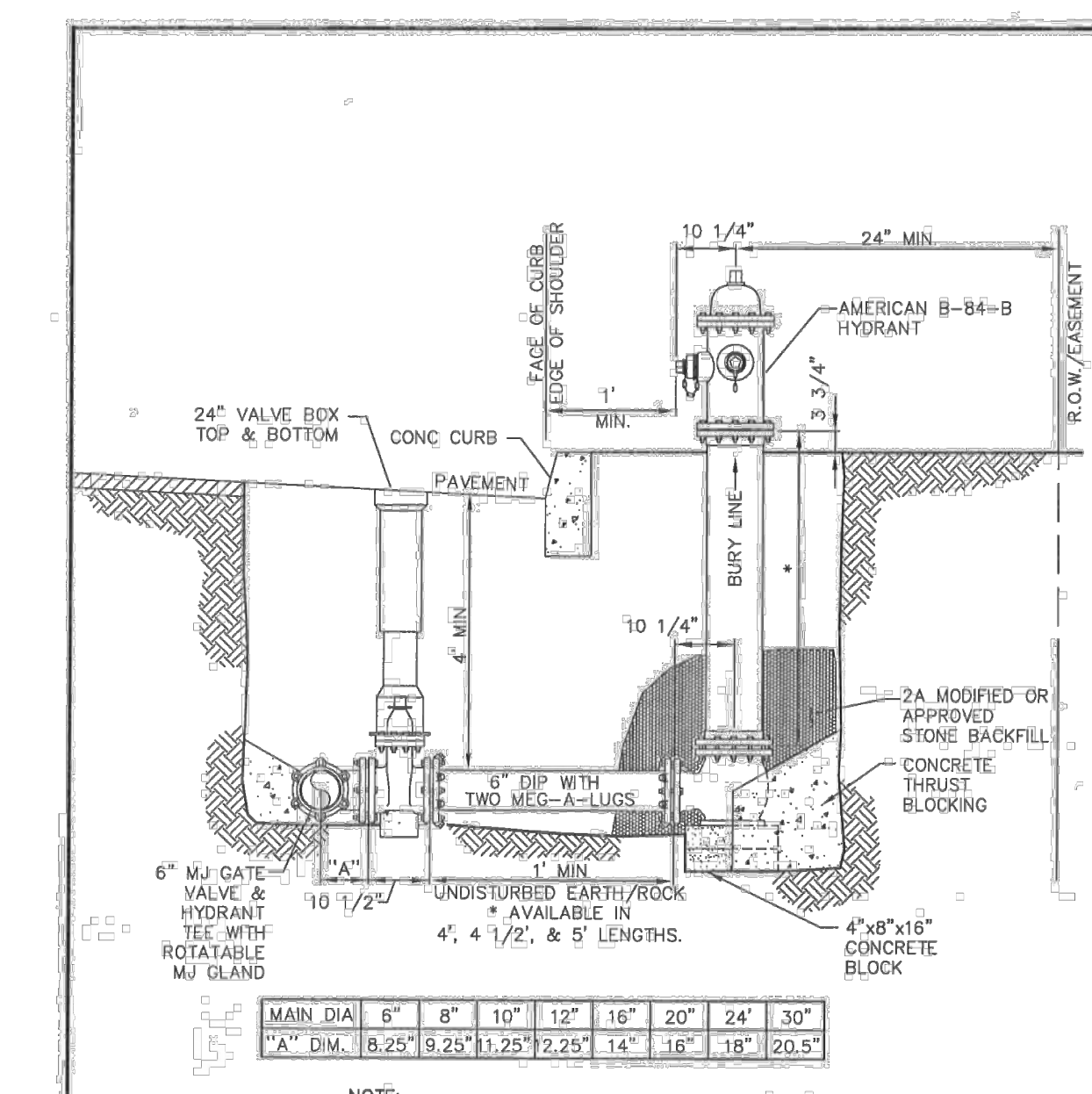


NOTE:
 1. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-24, SHEETS 1 and 2 of 8, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.
 2. ALL INLET TOPS SHALL BE THE ENVIRONMENT TYPE.
 3. ALL INLETS IN AREAS TO BE PAVED ARE TO BE BACKFILLED WITH 2A MATERIAL.

REFER TO DRAWING C5.1 FOR OUTLET STRUCTURE DETAILS AND INFORMATION



STRUCTURAL STEEL BICYCLE SAFE INLET GRATE DETAIL

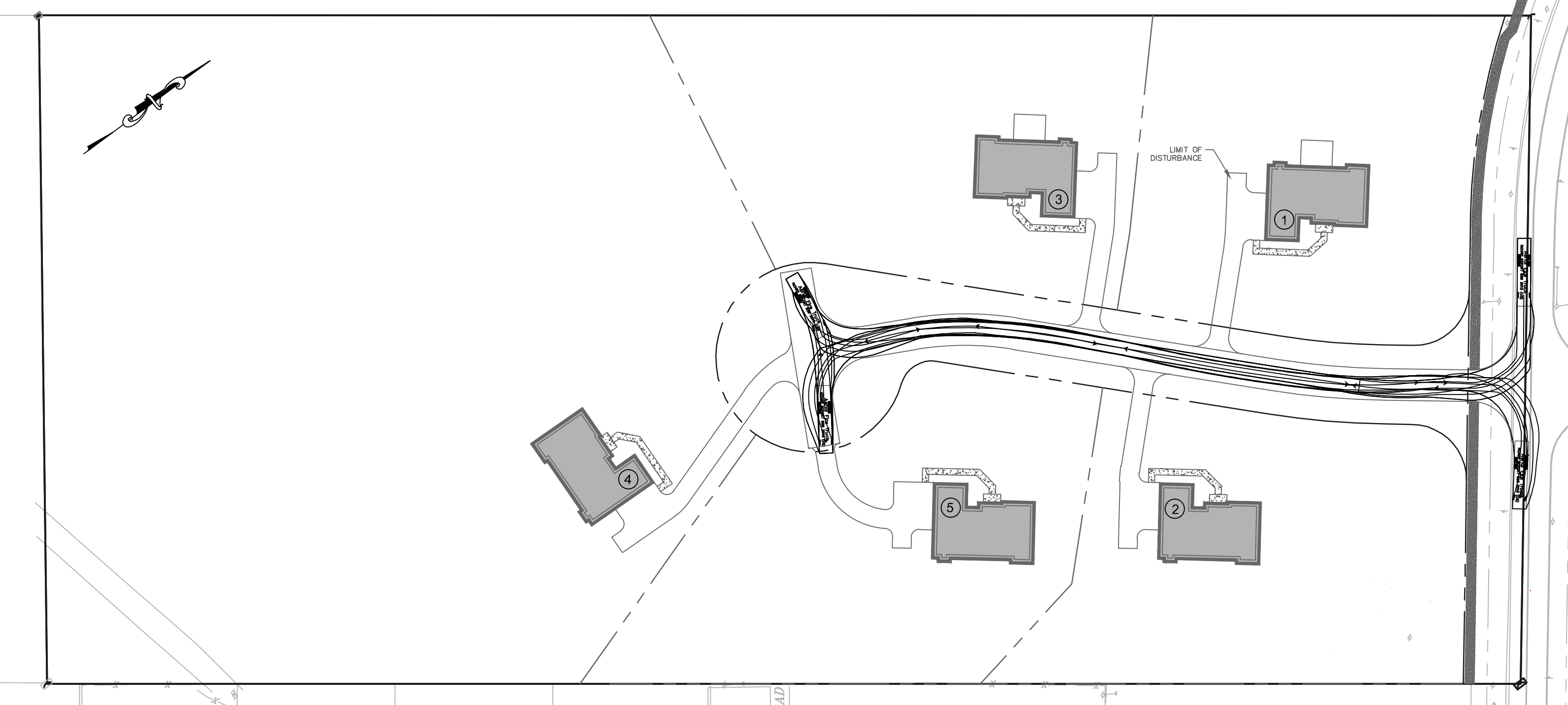


RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIA. MIN.	TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

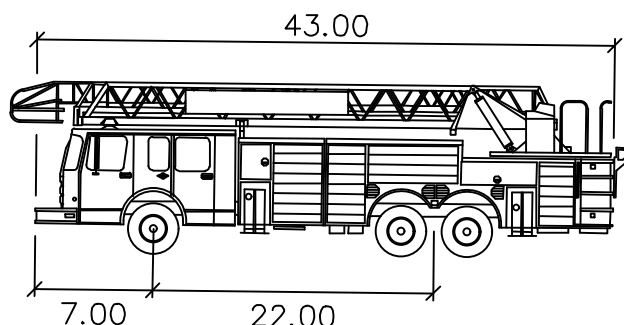
NOTES:
 1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4\"/>

NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 TYPICAL FIRE HYDRANT INSTALLATION
 STANDARD DETAIL W2



TRUCK TURN 1"=60'

NOTES:
 1. THE TRUCK TURNING TEMPLATE WAS GENERATED USING TRANSOFT SOLUTIONS AUTOTURN 11.



Aerial Fire Truck
 Width : 8.50 feet
 Track : 8.50
 Lock to Lock Time : 6.0
 Steering Angle : 33.3

Holmes Cunningham LLC
 409 E. Butler Ave. Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengneering.net

REVISIONS	Description	Date

84 SCHOOLHOUSE ROAD
 TMP # 26-005-003
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

CONSTRUCTION DETAILS

CALL BEFORE YOU DIG 1-800-485-3772
 PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 CONSTRUCTION PHASE AND STAGE
 STOP & CALL
 Pennsylvania One
 Call System, Inc.
 1-800-942-1775

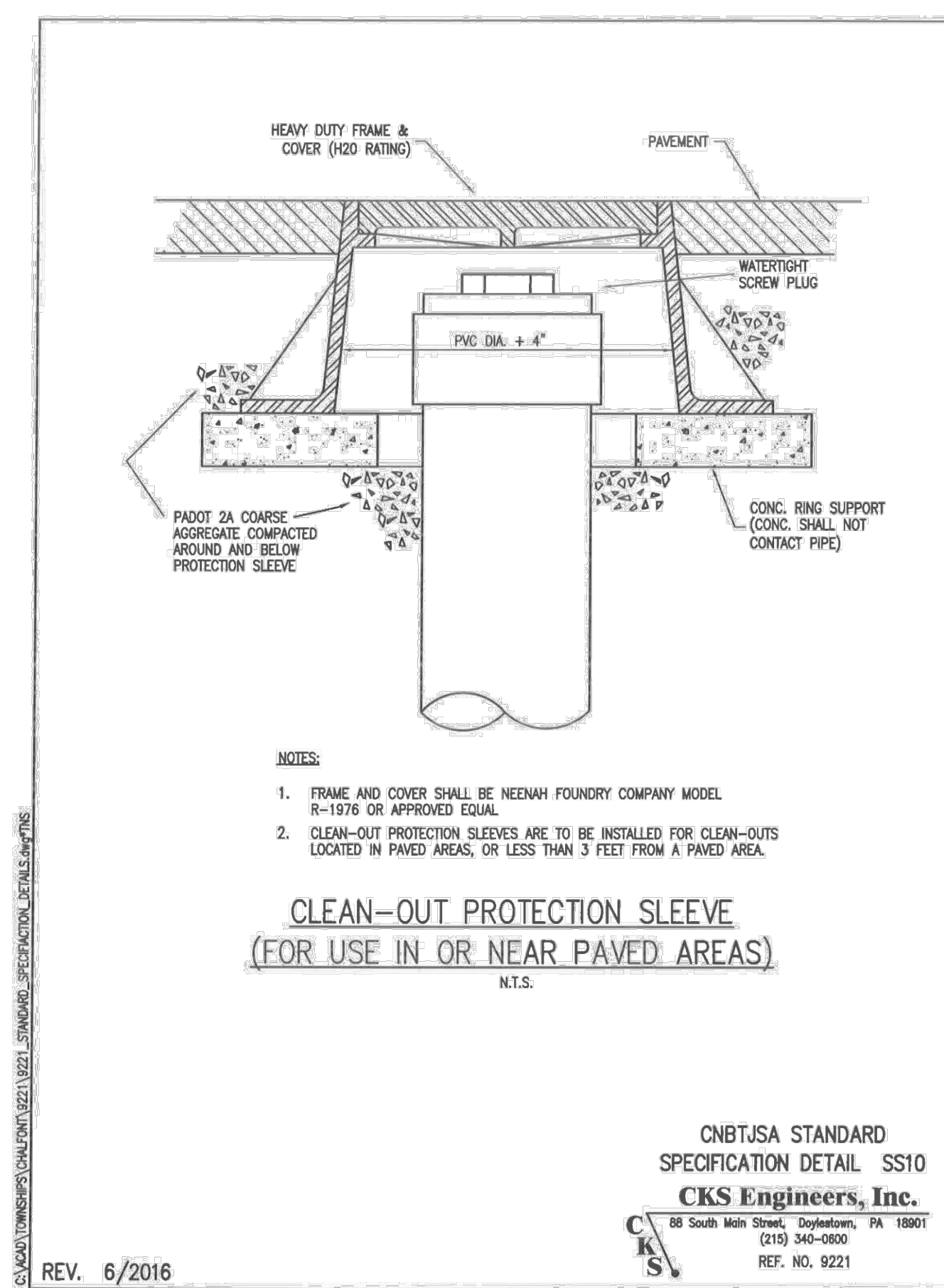
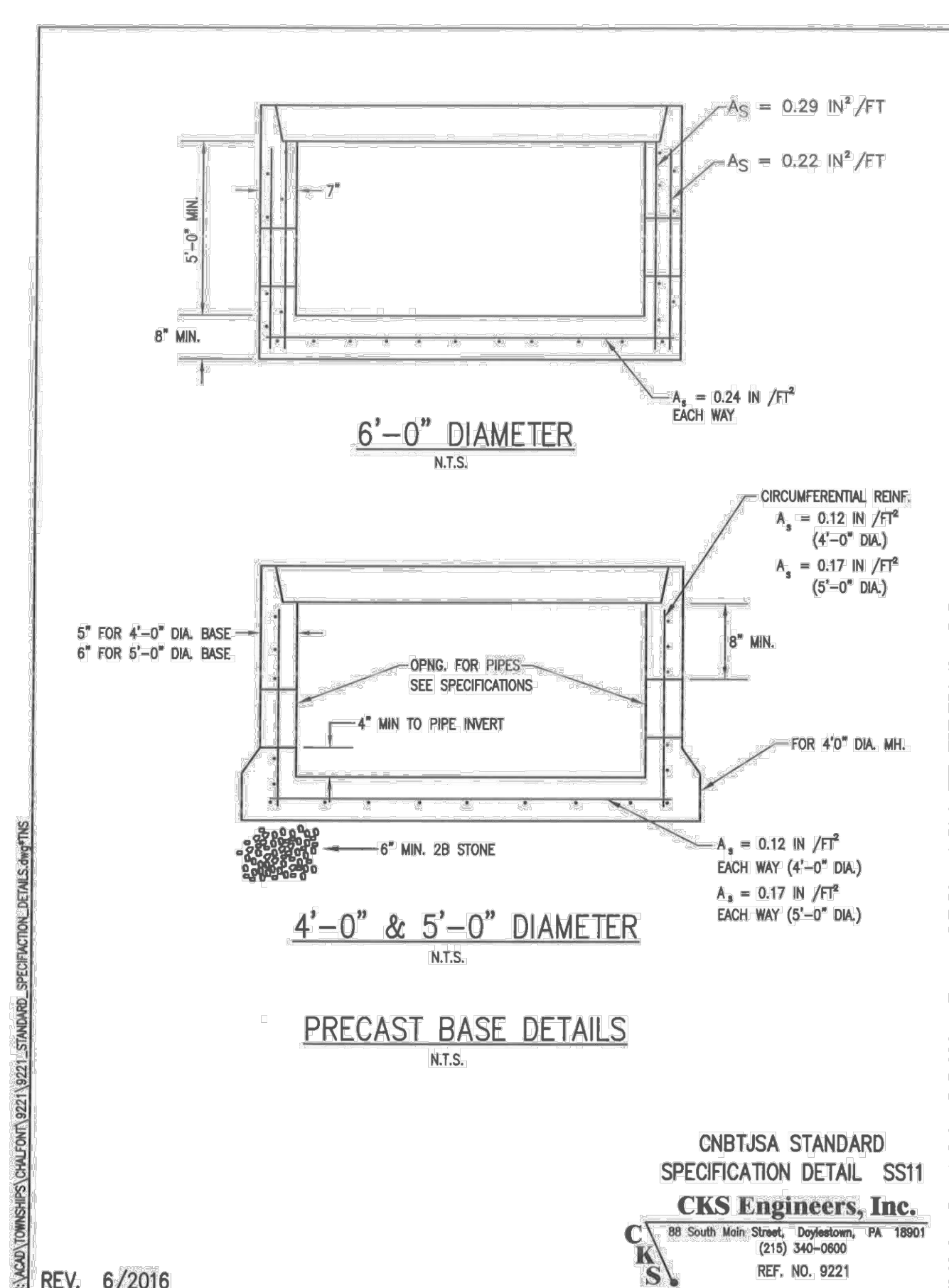
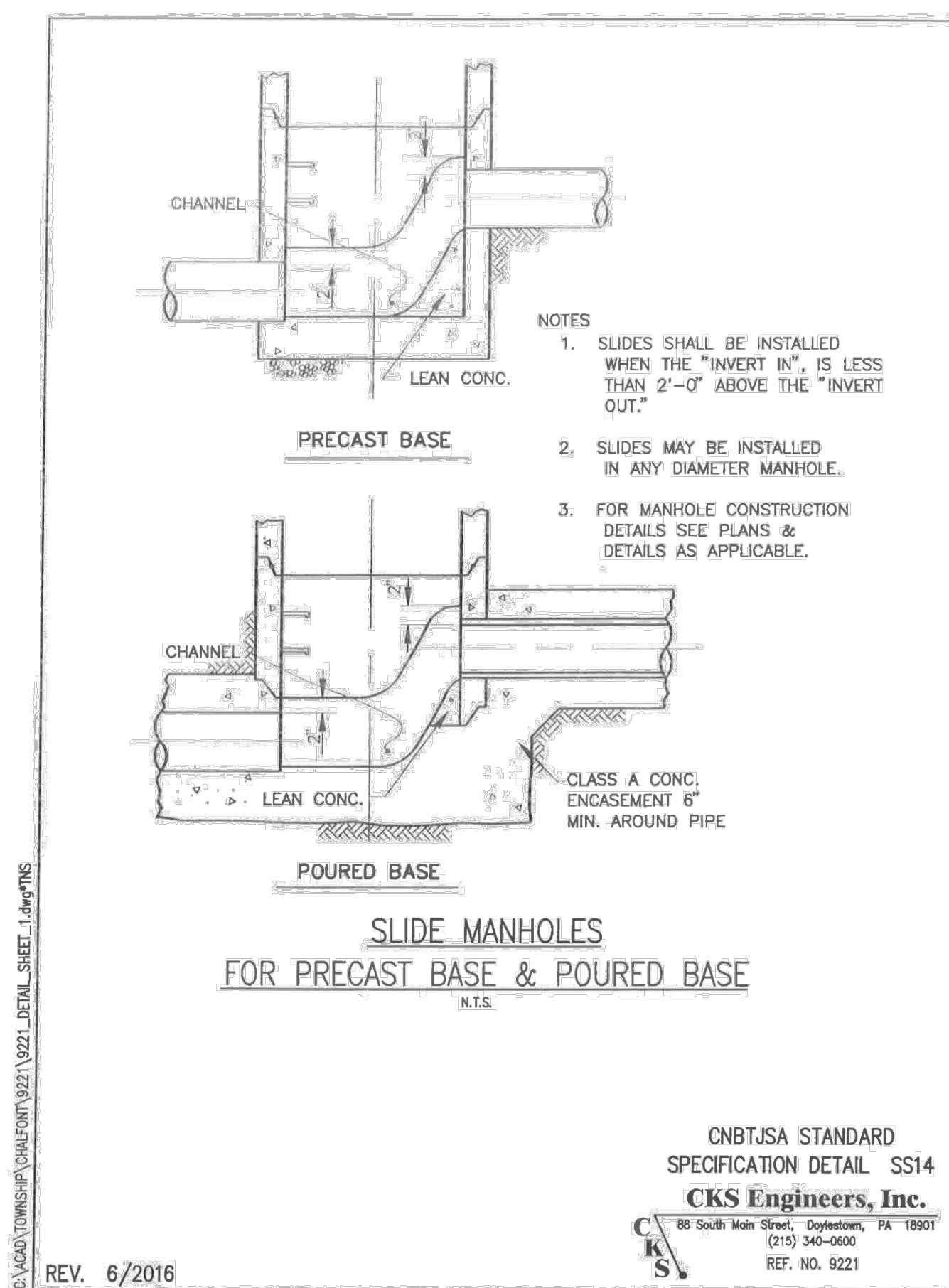
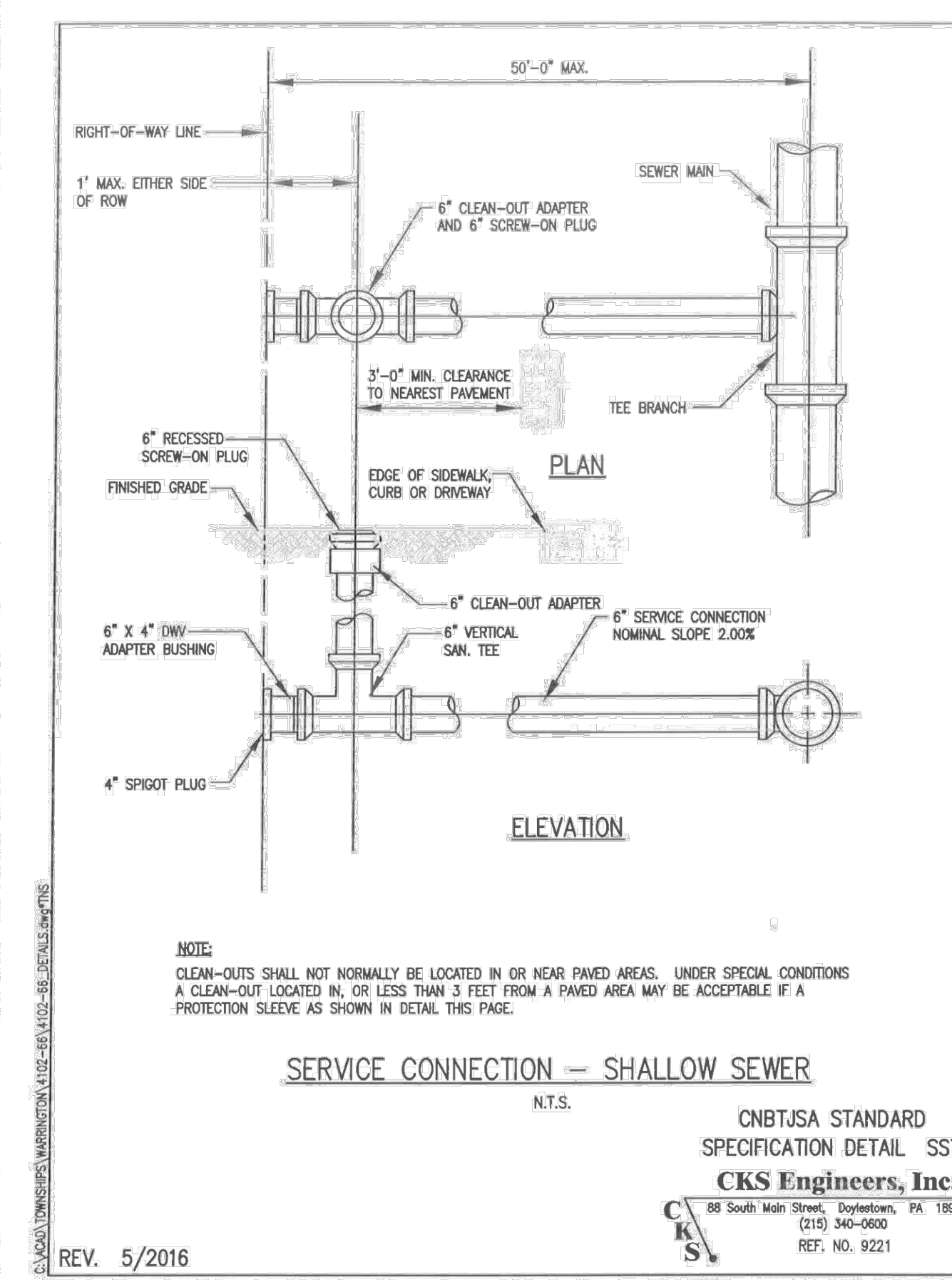
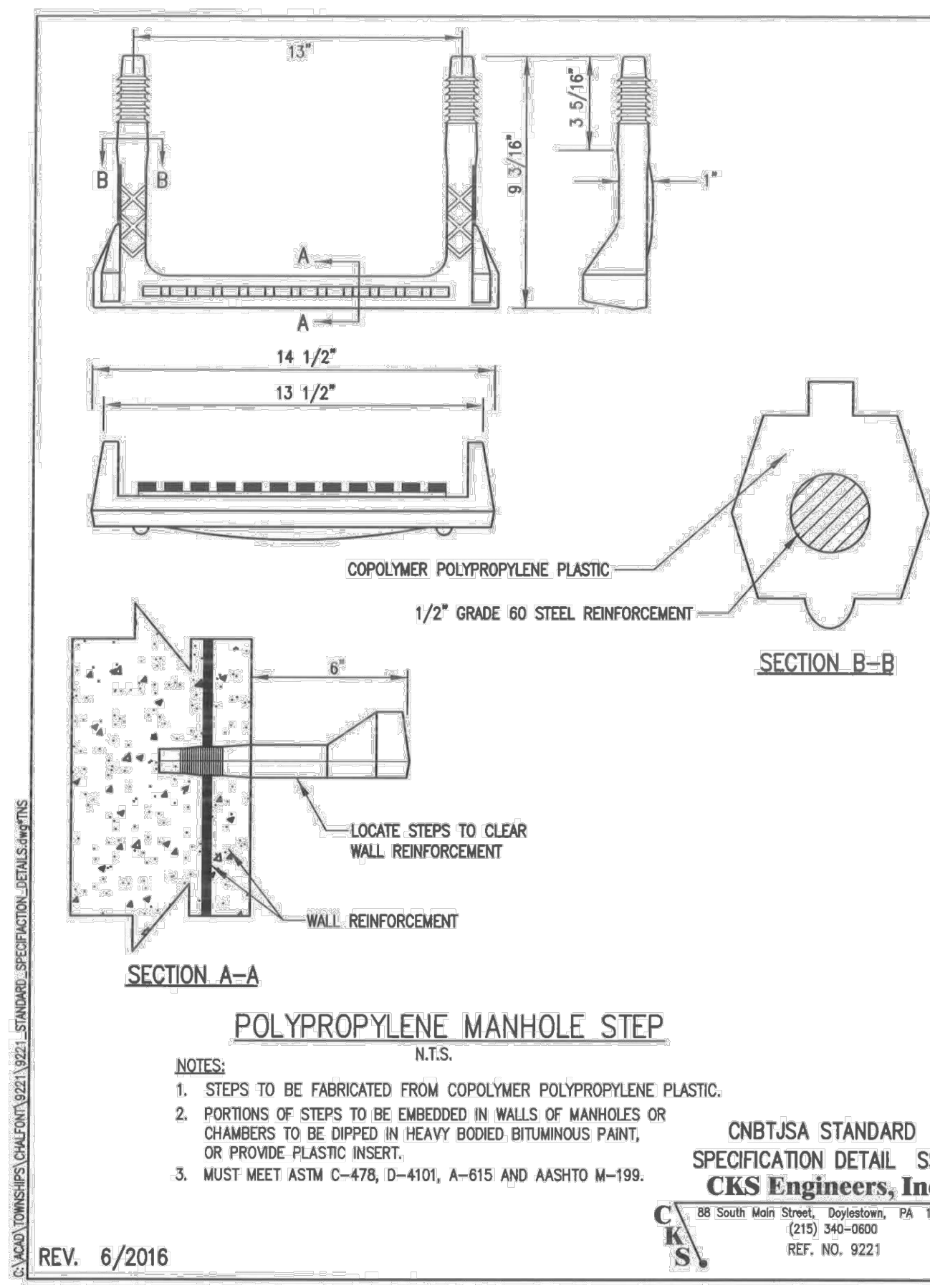
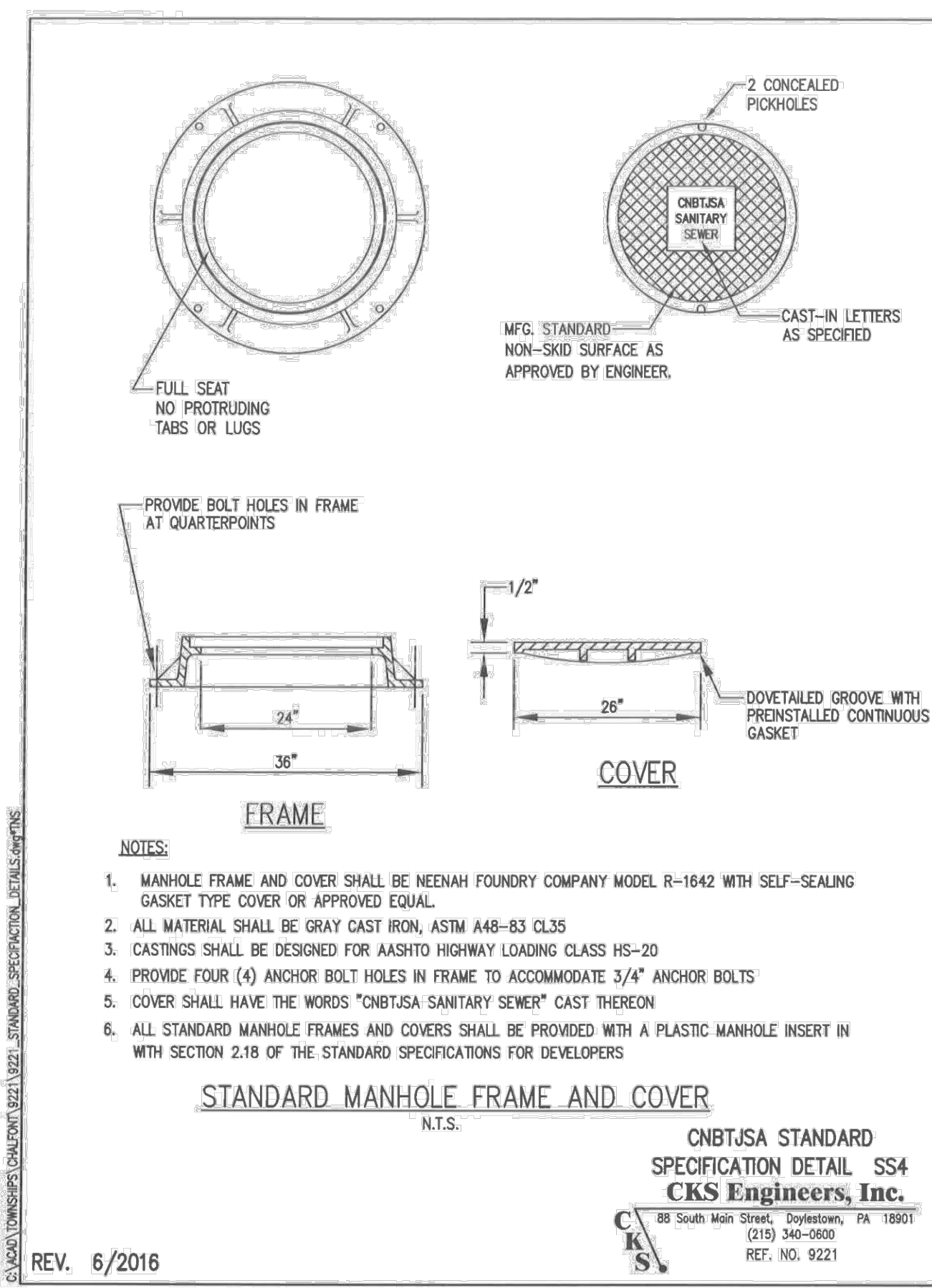
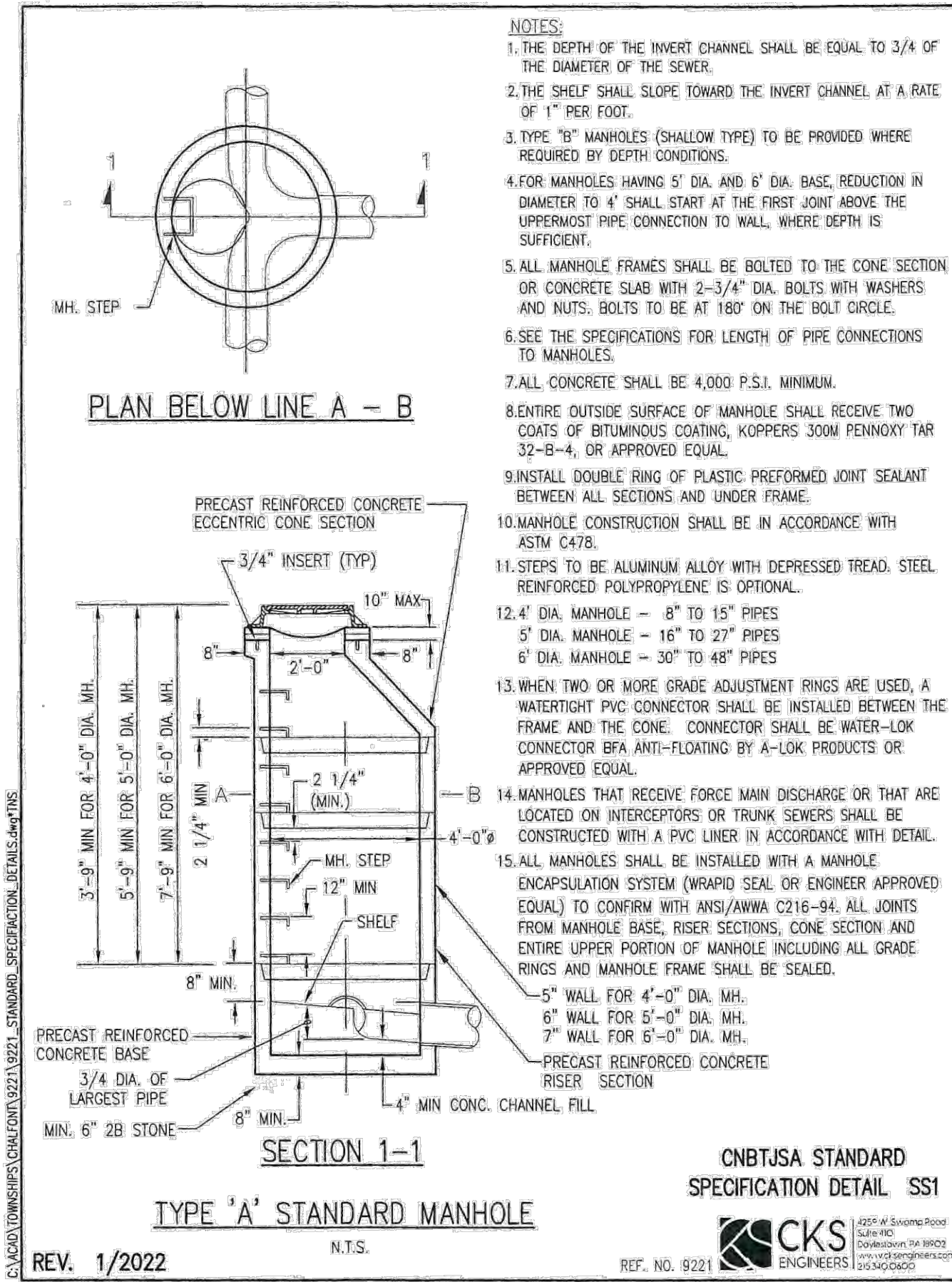
UTILITY LOCATIONS AS SHOWN ON THIS PLAN ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES PRIOR TO ANY EXCAVATION.

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No.
1286_C2.1 DETAILS.DWG

HCE Job	1286	Scale	N.T.S.	RC
Date	5/24/2022	Designed	7	of 17

Drawing No.
C2.1



REVISIONS	Description	Date

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CONSTRUCTION PHASE AND
10 WORKING DAYS BEFORE
STOPS & CALL
Pennsylvania One
1-800-242-1775
UTILITY LOCATIONS AS SHOWN ON
THIS PLAN ARE THE PROPERTY OF THE
UTILITY COMPANIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE UTILITY COMPANIES PRIOR
TO ANY EXCAVATION.

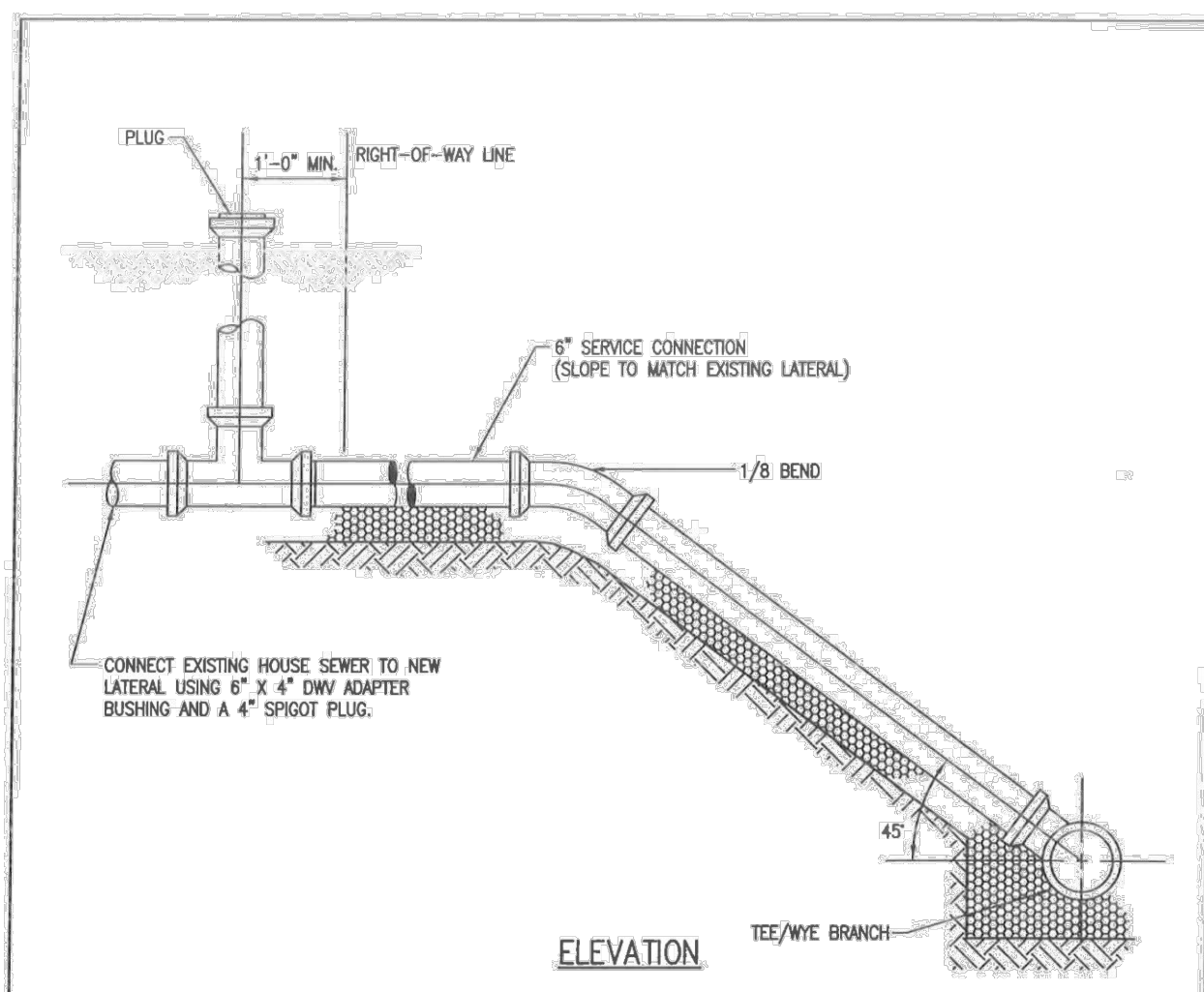
84 SCHOOLHOUSE ROAD
TMP # 26-005-003
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

CONSTRUCTION DETAILS

ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.	1286_C2.1 DETAILS.DWG		
HCE Job	1286	Date	5/24/2022
Scale	N.T.S.	Designed	RC
Sheet	8	of	17

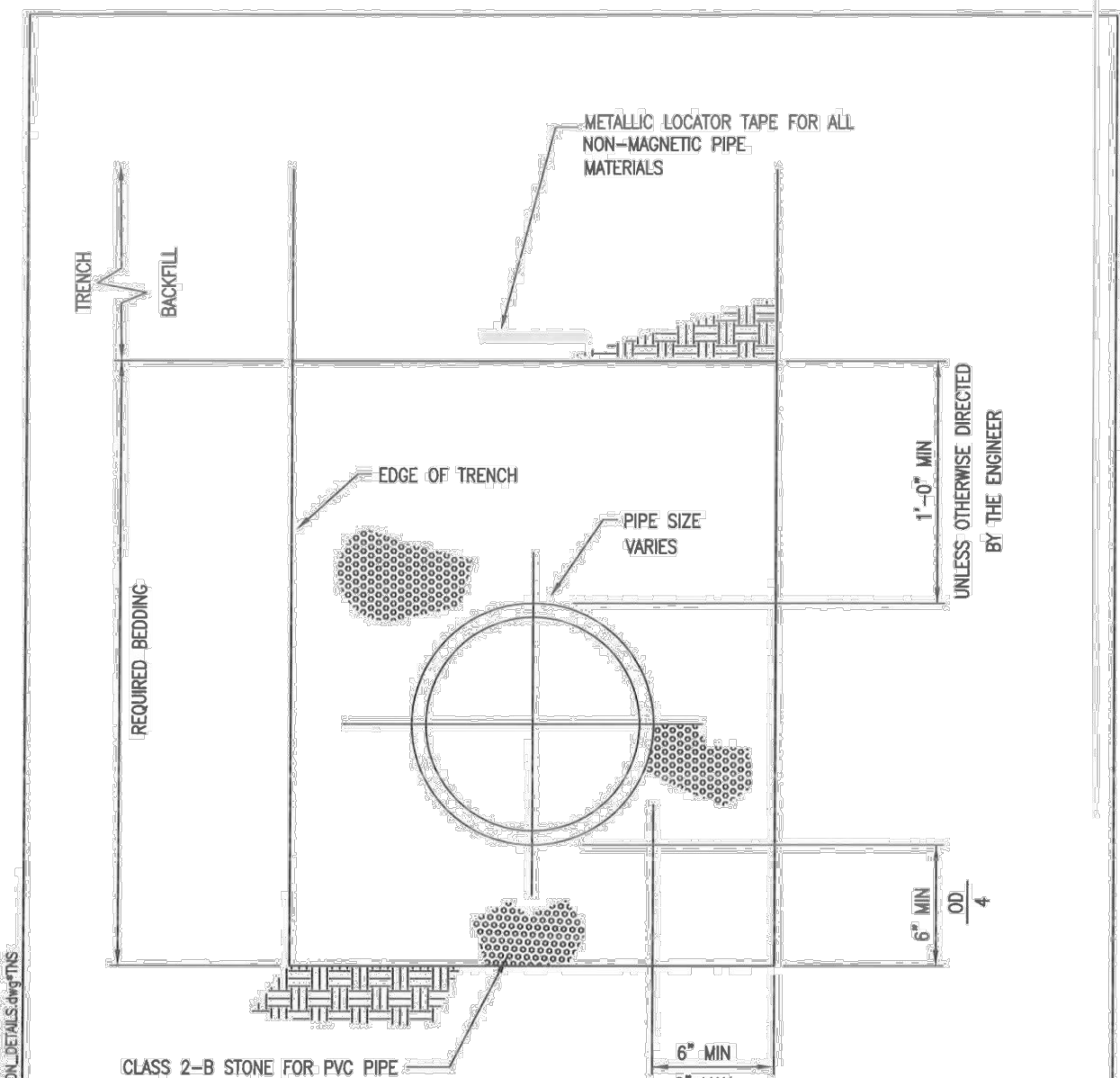
Drawing No.
C2.2



NEW LATERAL INSTALLATION - DEEP SEWER

CNBT/SA STANDARD SPECIFICATION DETAIL SSB
CKS Engineers, Inc.
 68 South Main Street, Doylestown, PA 18041
 (215) 348-9600
 REF. NO. 9221

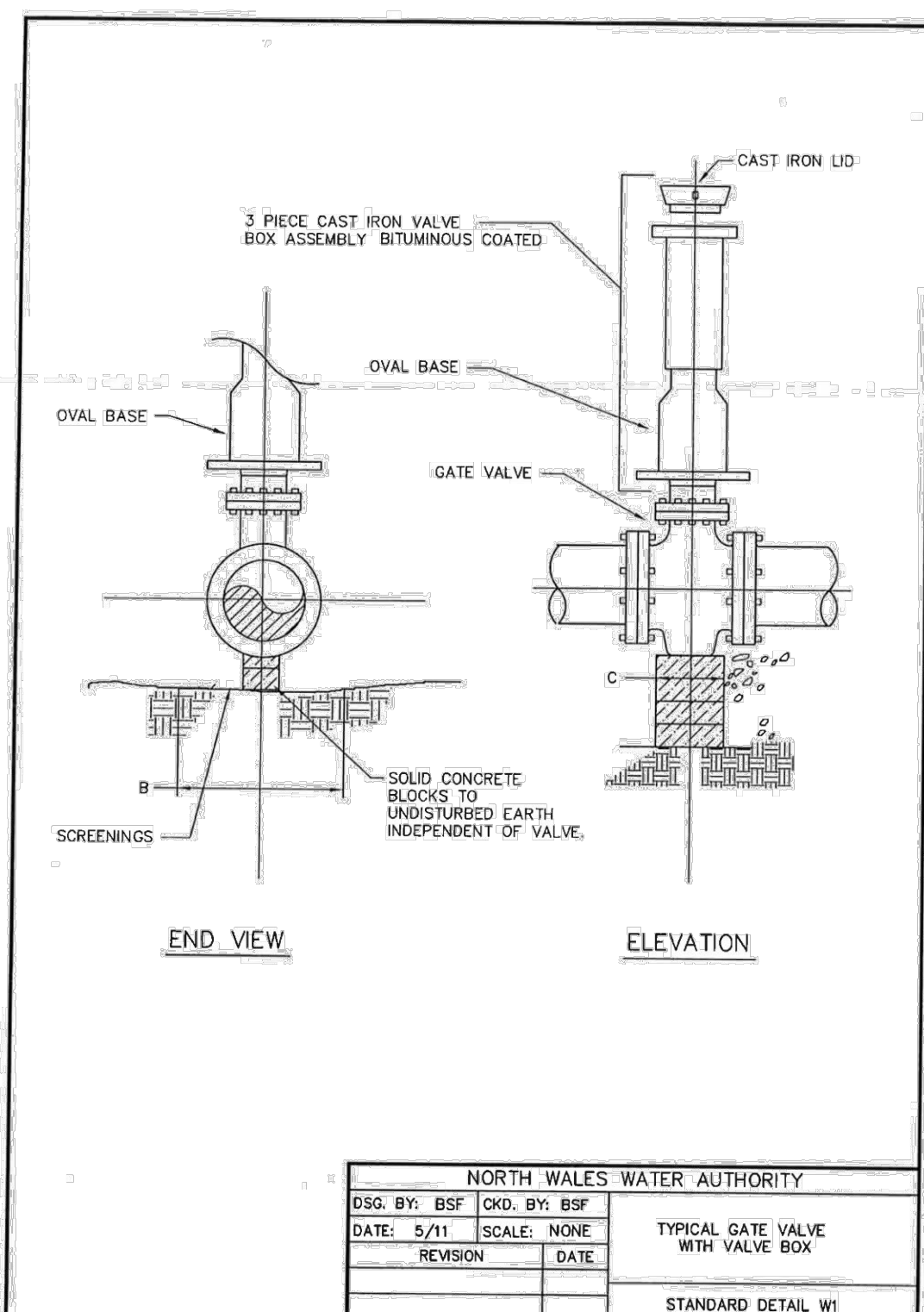
REV. 6/2016



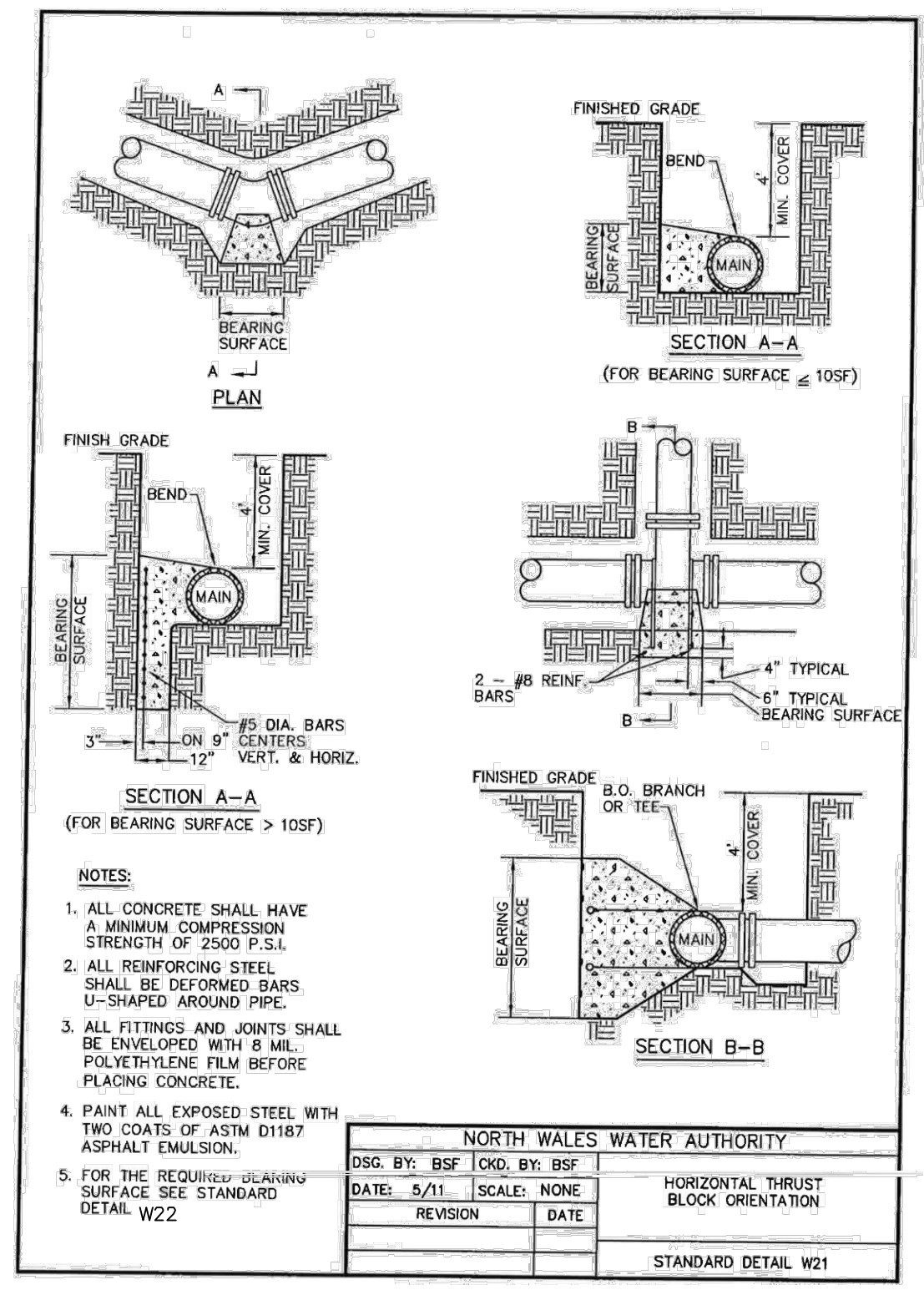
STANDARD PIPE BEDDING

CNBT/SA STANDARD SPECIFICATION DETAIL SS9
 68 South Main Street, Doylestown, PA 18041
 (215) 348-9600
 REF. NO. 9221

REV. 6/2016



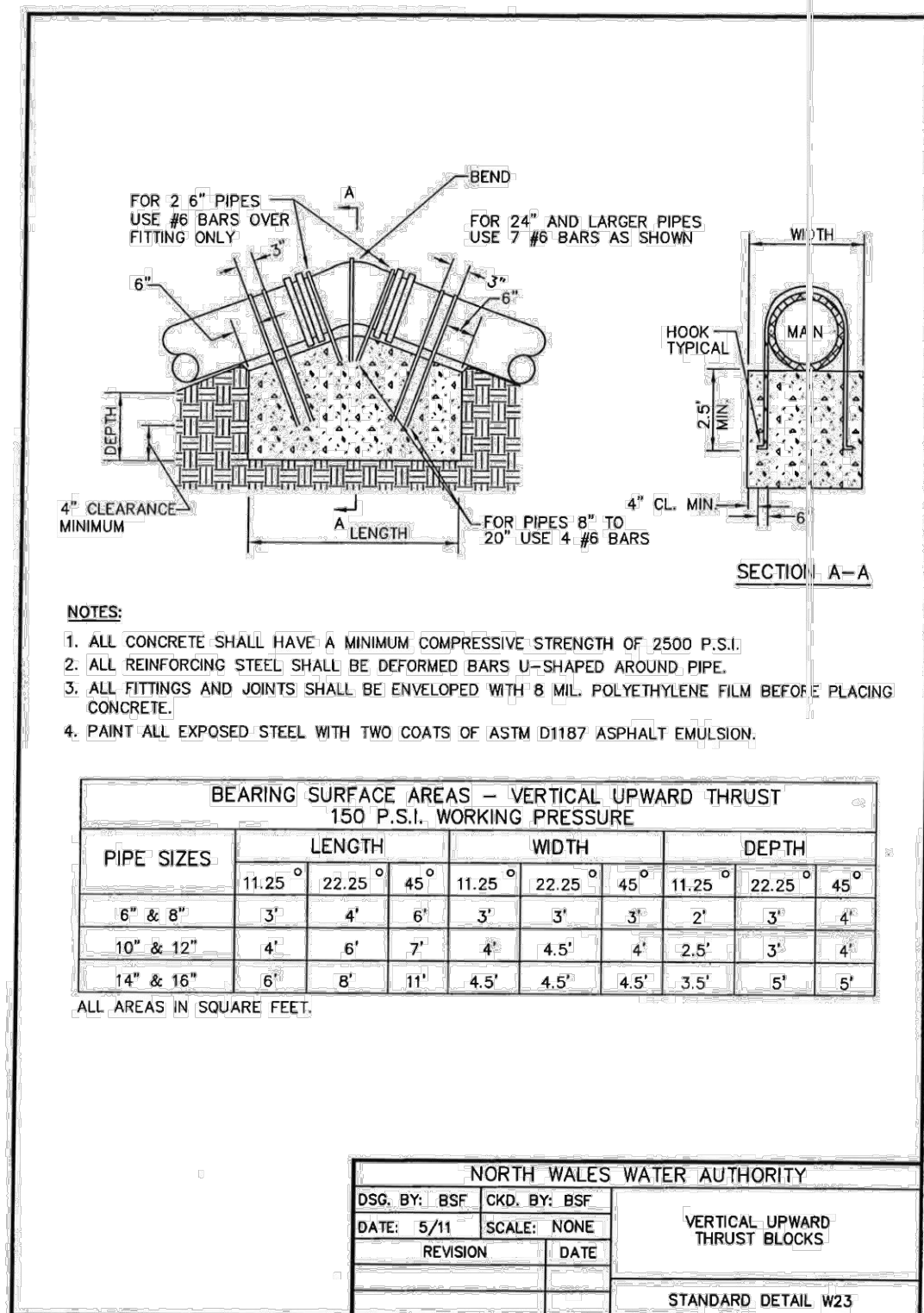
TYPICAL GATE VALVE WITH VALVE BOX
 NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 STANDARD DETAIL W1



HORIZONTAL THRUST BLOCK ORIENTATION
 NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 STANDARD DETAIL W21

BEARING SURFACE AREAS
 HORIZONTAL THRUST & VERTICAL DOWNWARD THRUST
 150 P.S.I. WORKING PRESSURE

PIPE SIZE	3"			4"			6"													
	TYPE OF BEARING MATERIAL AND ALLOWABLE LOAD	DEGREE OF BEND OR DEFLECTION	DEPTH	TYPE OF BEARING MATERIAL AND ALLOWABLE LOAD	DEGREE OF BEND OR DEFLECTION	DEPTH	TYPE OF BEARING MATERIAL AND ALLOWABLE LOAD	DEGREE OF BEND OR DEFLECTION	DEPTH											
SOFT CLAY (1,000#/SF)	2.8	3.5	2.1	1.1	1.0	4.1	5.8	2.1	1.6	1.0	8.4	11.8	6.4	3.3	1.6	14.5	20.5	11.1	5.6	2.8
SILT (1,000#/SF)	1.8	2.4	1.4	1.0	1.0	2.7	3.9	2.1	1.1	1.0	5.6	7.9	4.5	2.2	1.1	9.6	13.6	7.4	3.8	1.9
SANDY SILT (3,000#/SF)	1.0	1.3	1.0	1.0	1.0	1.4	1.9	1.0	1.0	1.0	2.8	4.0	2.1	1.1	1.0	4.8	6.8	3.7	1.8	1.0
SAND (6,000#/SF)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1	3.0	1.8	1.0	1.0	3.8	5.1	2.8	1.4	1.0
SANDY CLAY (6,000#/SF)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.4	2.0	1.1	1.0	1.0	2.4	3.4	1.8	1.0	1.0
HARD CLAY (6,000#/SF)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.6	2.3	1.2	1.0	1.0

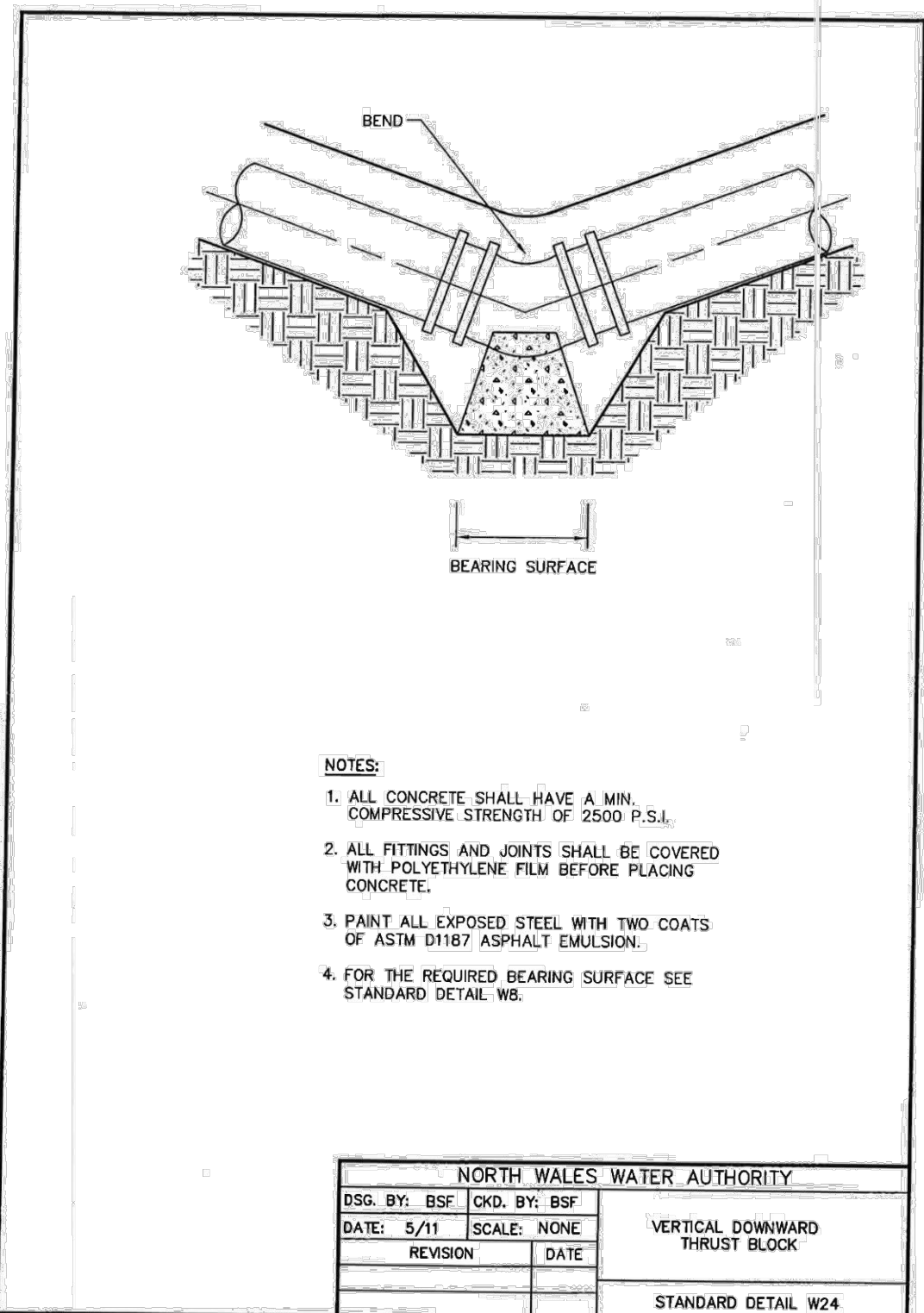


BEARING SURFACE AREAS - VERTICAL UPWARD THRUST
 150 P.S.I. WORKING PRESSURE

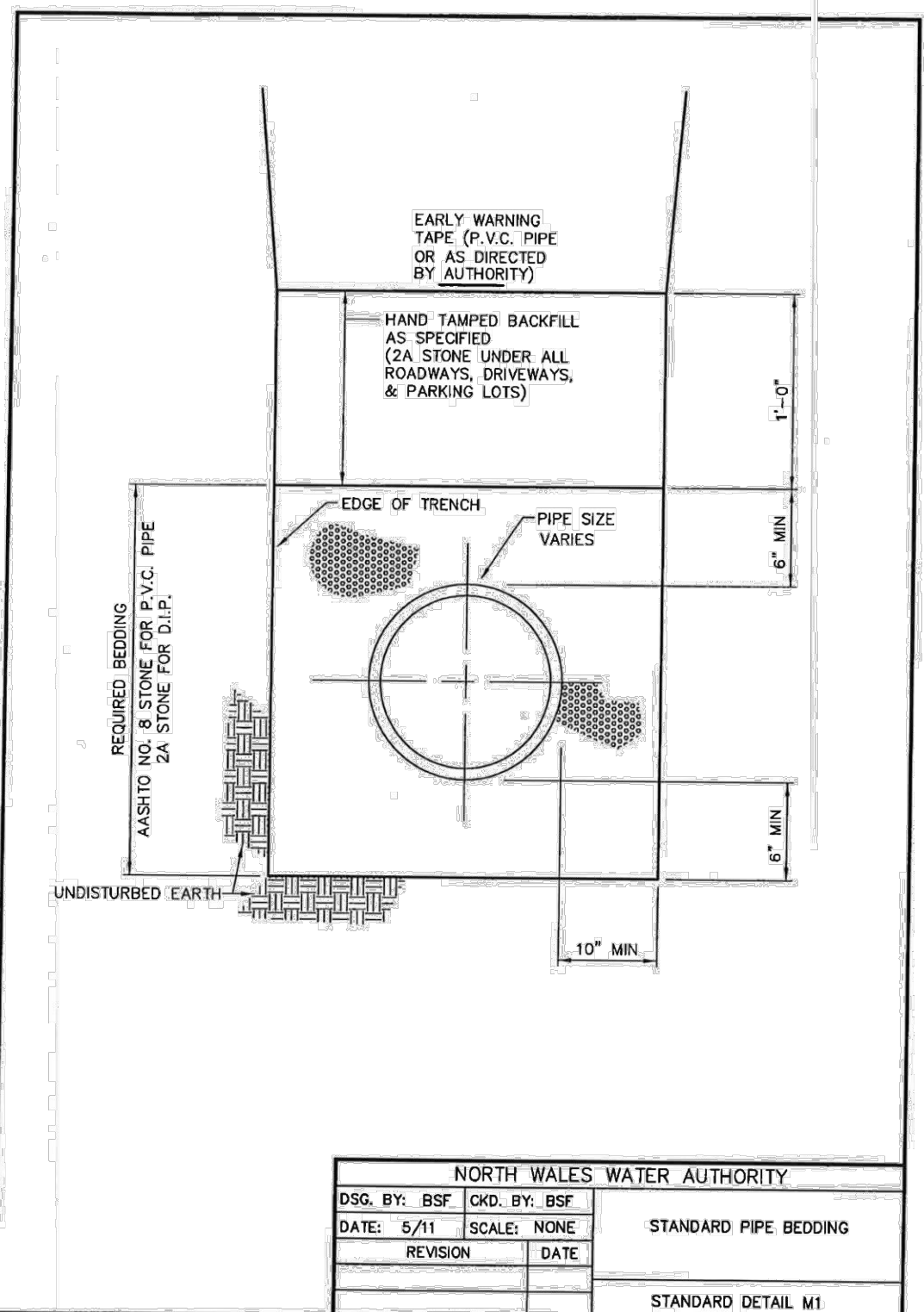
PIPE SIZES	LENGTH		WIDTH		DEPTH	
	11.25'	22.25'	11.25'	22.25'	11.25'	22.25'
6" & 8"	3'	4'	3'	3'	2'	3'
10" & 12"	4'	6'	7'	4'	4.5'	3'
14" & 16"	6'	8'	11'	4.5'	4.5'	5'

ALL AREAS IN SQUARE FEET.

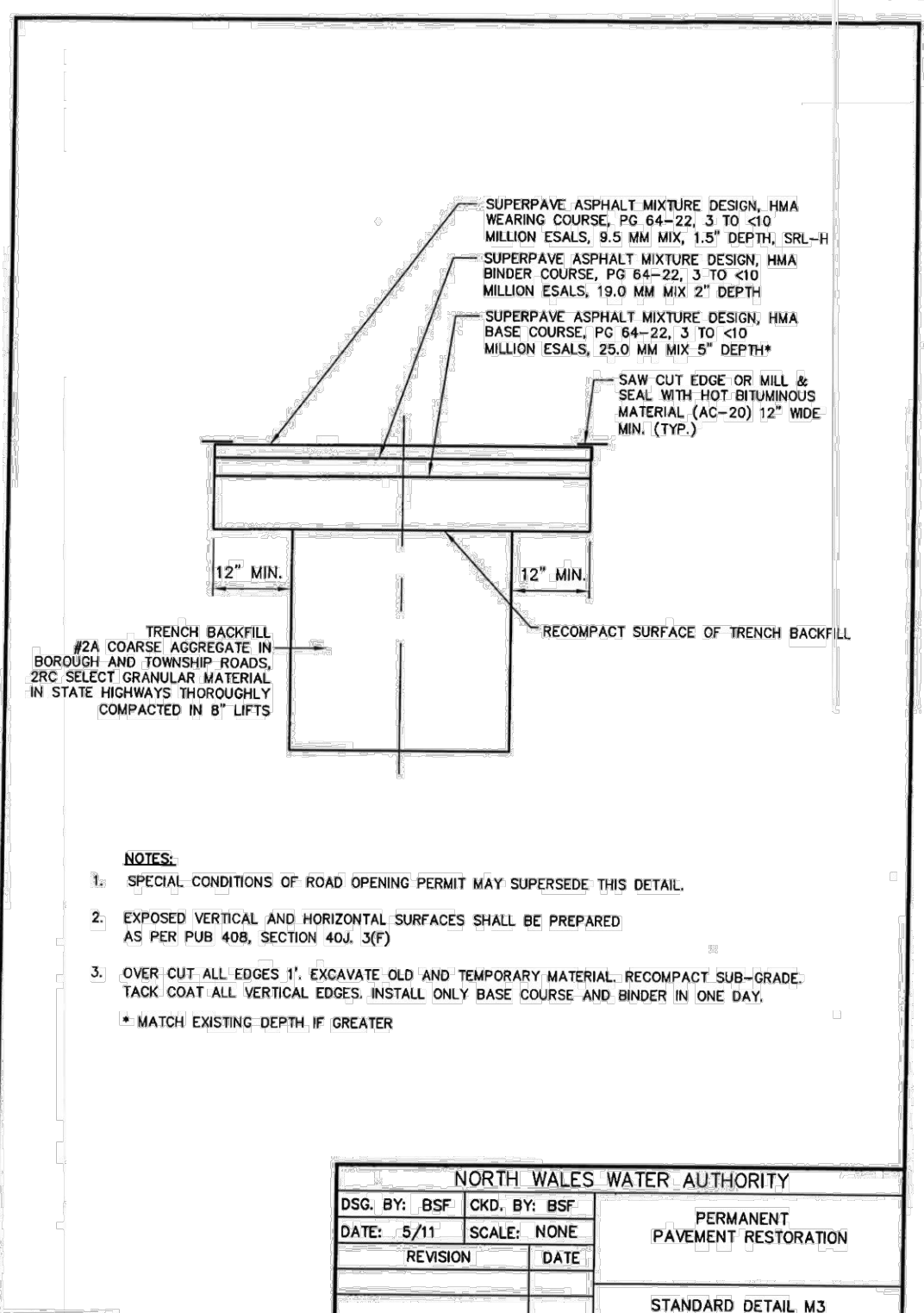
VERTICAL UPWARD THRUST BLOCKS
 NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 STANDARD DETAIL W23



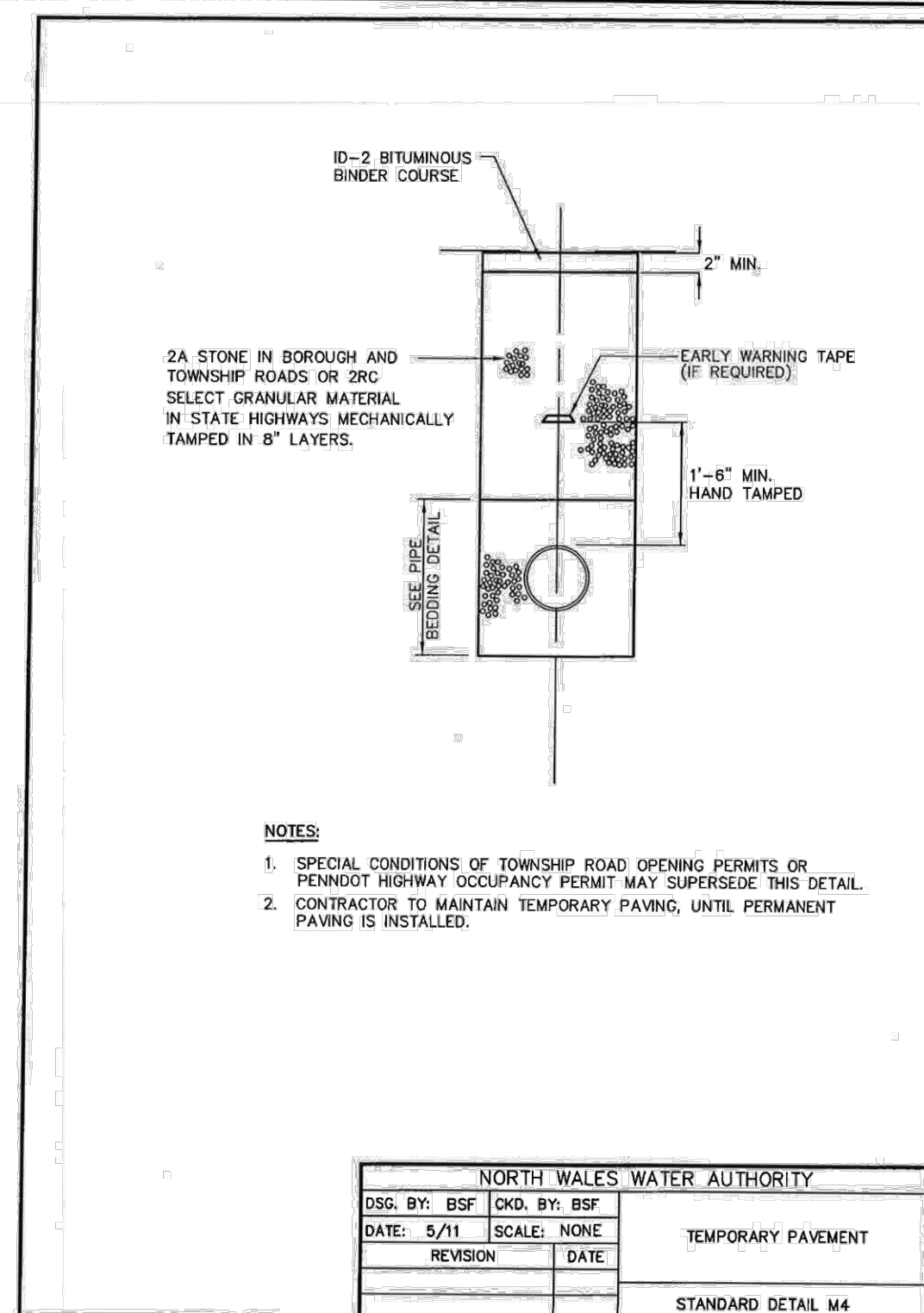
VERTICAL DOWNWARD THRUST BLOCK
 NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 STANDARD DETAIL W24



STANDARD PIPE BEDDING
 NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 STANDARD DETAIL W1



PERMANENT PAVEMENT RESTORATION
 NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 STANDARD DETAIL M3



TEMPORARY PAVEMENT
 NORTH WALES WATER AUTHORITY
 DSG. BY: BSF CKD. BY: BSF
 DATE: 5/11 SCALE: NONE
 REVISION DATE
 STANDARD DETAIL M4

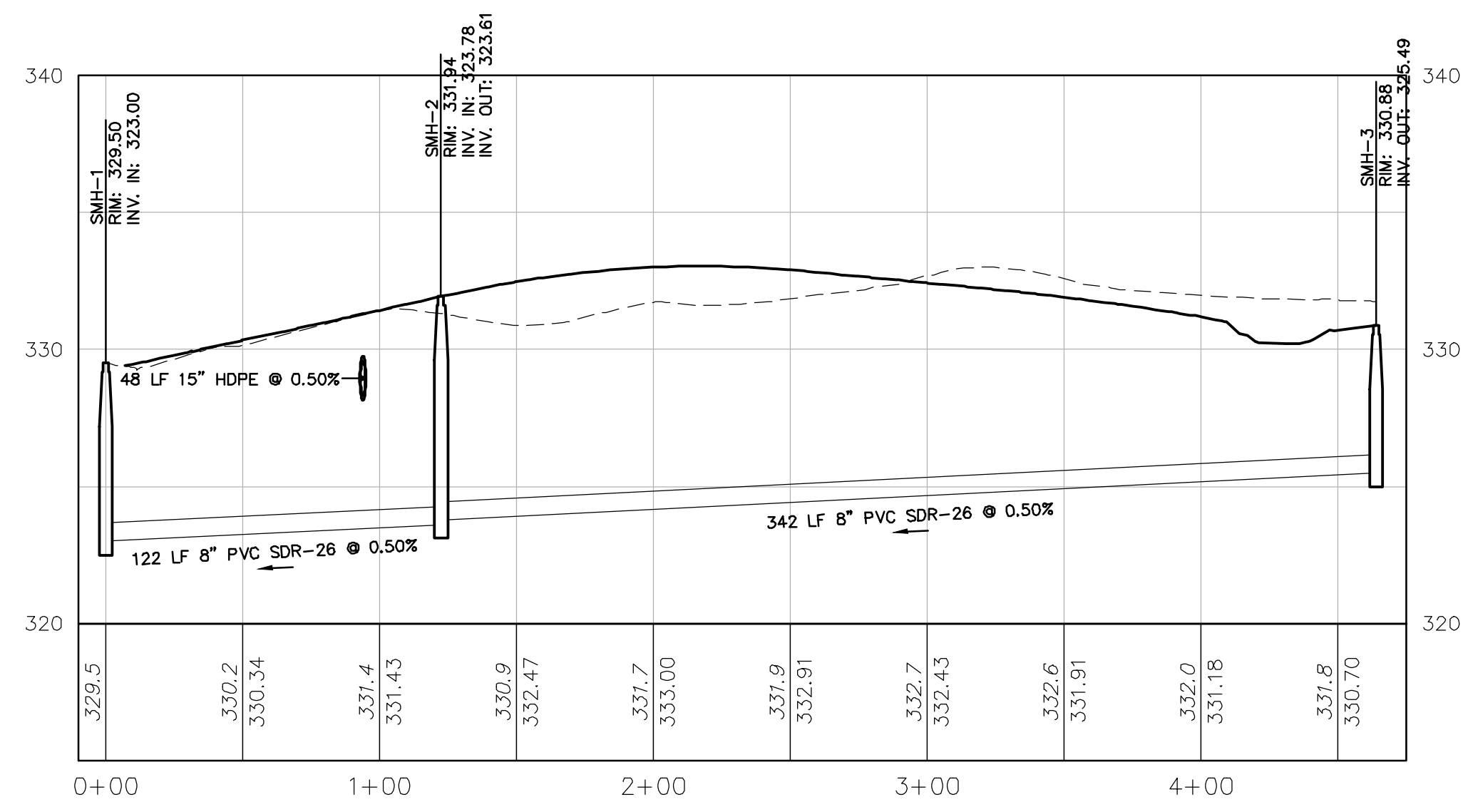
Holmes Cunnigham LLC
 409 E. Butler Ave. Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS Description Date
 10 WORKING SURFACE CONSTRUCTION - BASE AND FINISH
 11 ST09 & CALL
 Pennsylvania One Call System, Inc.
 1-800-942-1776
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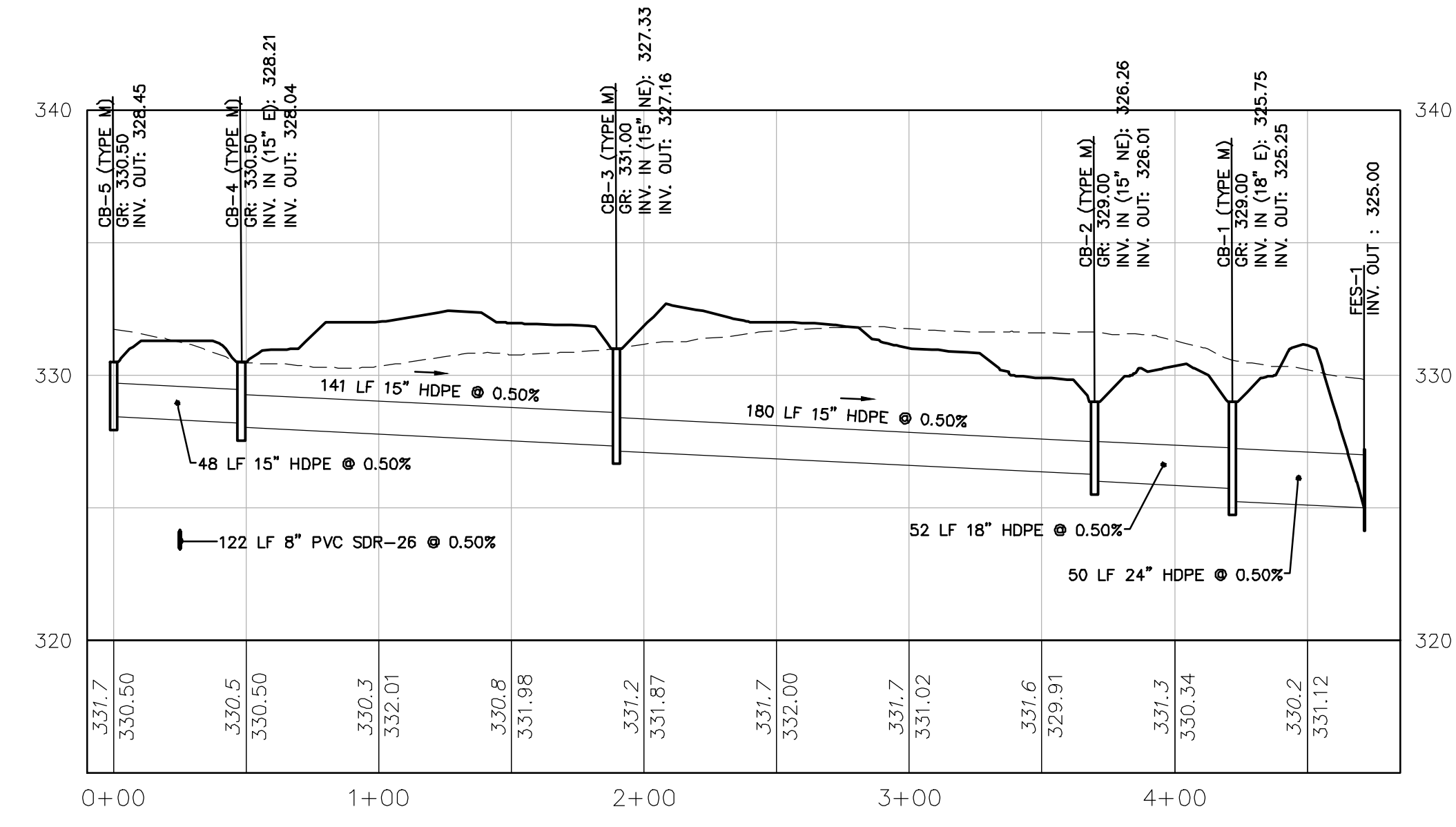
84 SCHOOLHOUSE ROAD
 TMP # 26-005-003
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

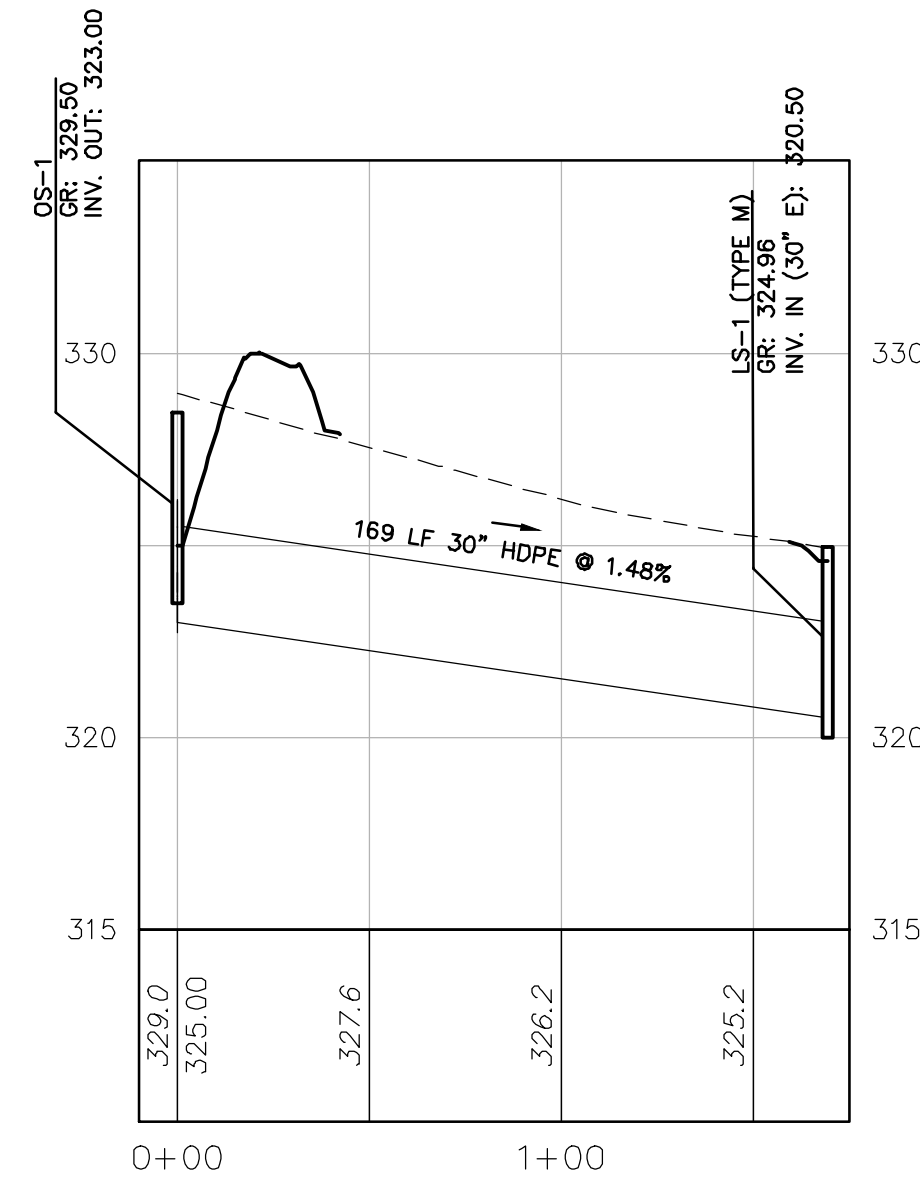
File No. 1286-C2.1 DETAILS.DWG
 HCE Job 1286
 Date 5/24/2022
 Scale N.T.S.
 Designed RC
 Sheet 9 of 17
 Drawing No. C2.3



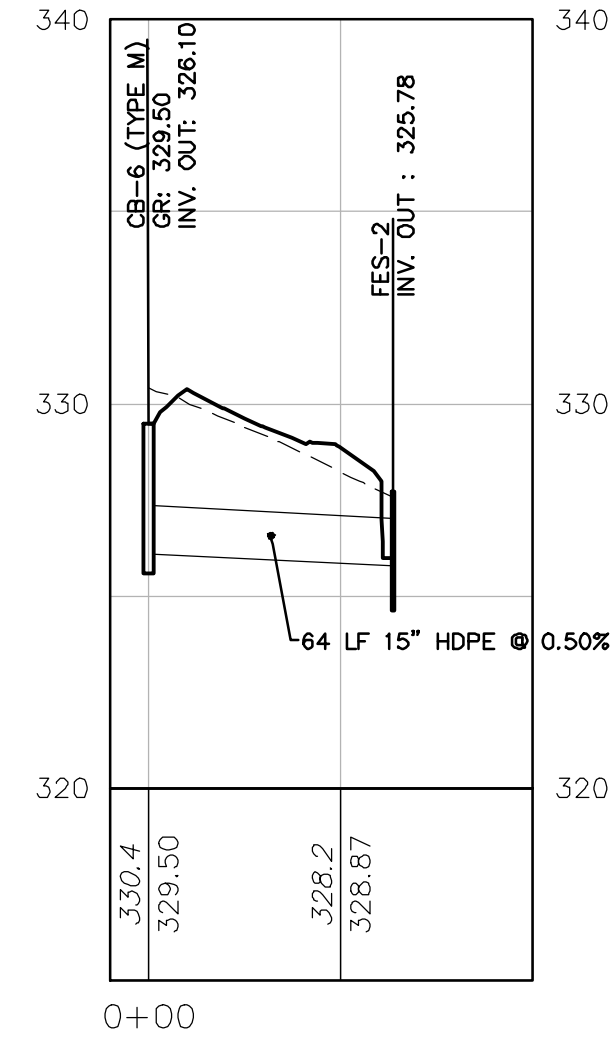
SMH-1 TO SMH-3 PROFILE



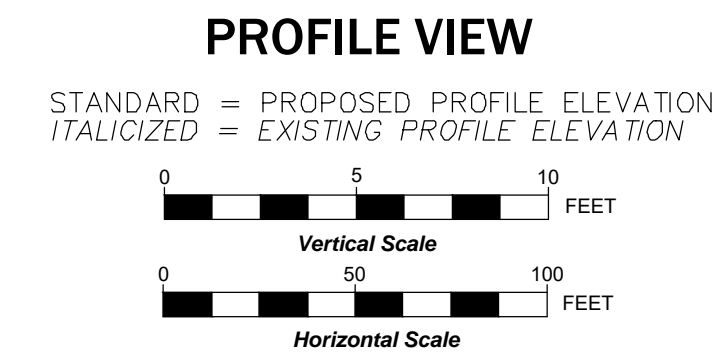
CB-5 TO FES-1 PROFILE



OS-1 TO LS-1 PROFILE



CB-6 TO FES-2 PROFILE



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 ALL EXCAVATIONS TO BE
 CONDUCTED IN ACCORDANCE WITH
 THE PROVISIONS OF THE
 PROTECTIVE SHIELD ACT
 - STOP & CALL -
 Pennsylvania One
 Call System, Inc.
 1-800-242-1176
 UTILITY LOCATIONS AS SHOWN ON
 THIS DRAWING ARE THE RESPONSIBILITY OF THE
 CONTRACTOR. THE CONTRACTOR SHALL
 CONTACT UTILITY COMPANIES PRIOR
 TO ANY EXCAVATION.

Date	REVISIONS Description

84 SCHOOLHOUSE ROAD
 TMP # 26-005-003
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

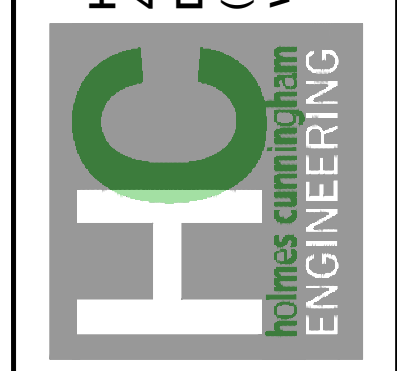
UTILITY PROFILES

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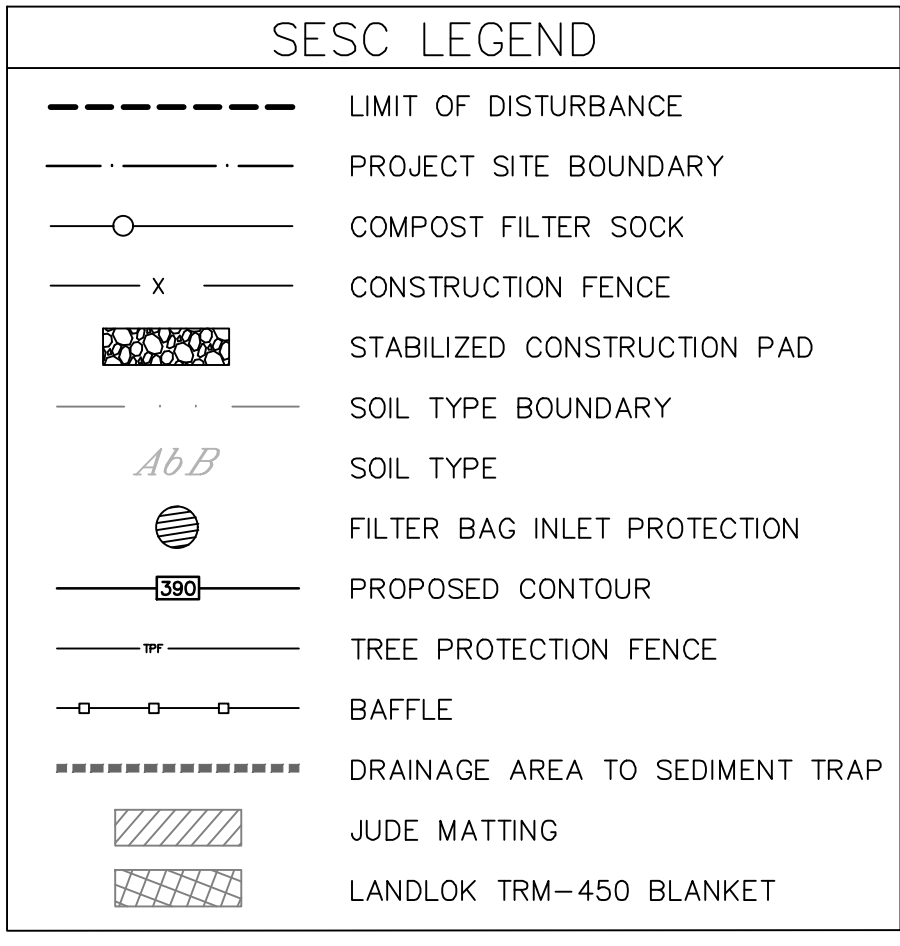
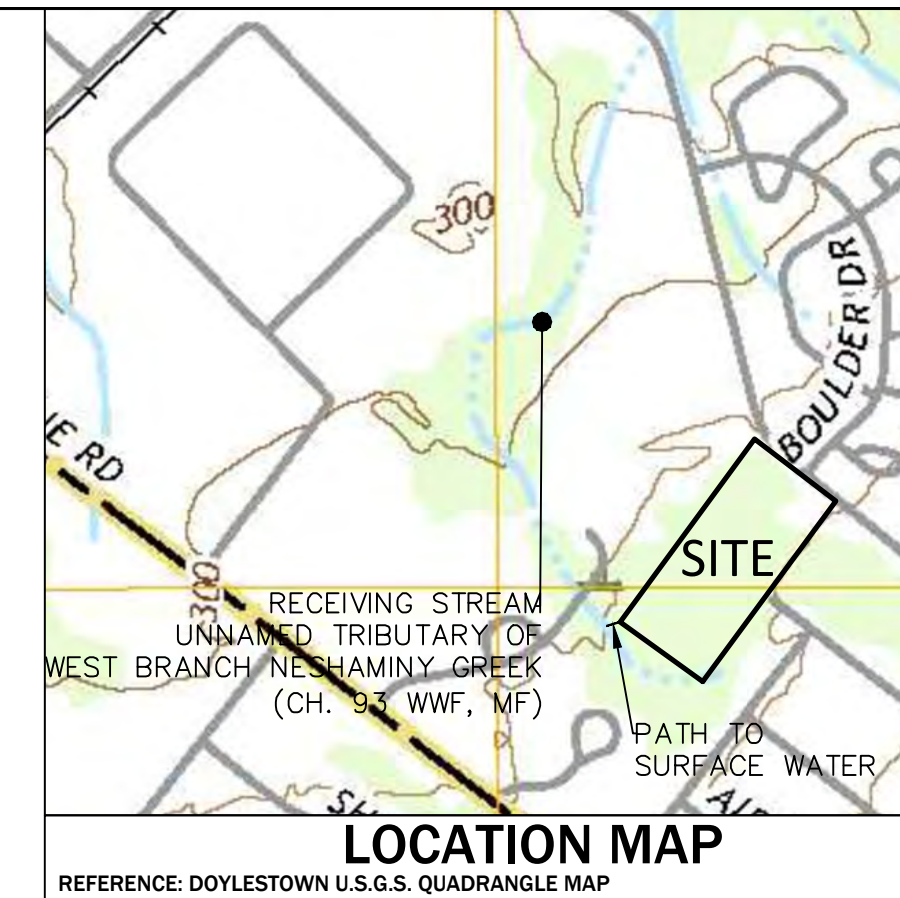
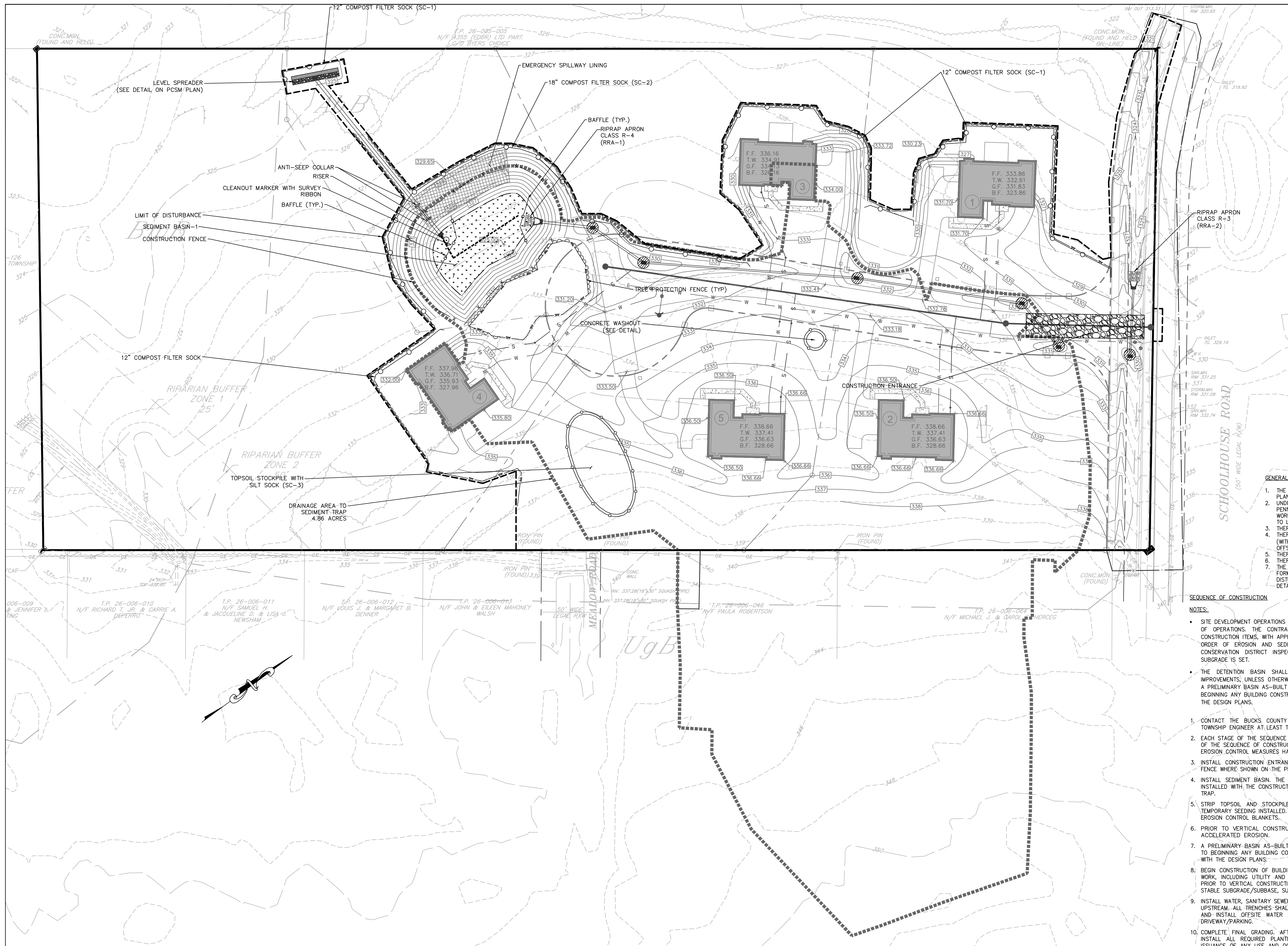
HCE Job	1286
Date	5/24/2022
Scale	AS SHOWN
Designed	RC
Sheet	10 of 17

Drawing No.
C3.0

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424



Holmes Cunnigham LLC
 409 E. Butler Ave., Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net



- GENERAL NOTES**
1. THE BOUNDARY AND TOPOGRAPHIC INFORMATION IS TAKEN FROM AN EXISTING FEATURES PLAN PREPARED BY CAVANAUGH SURVEYING SERVICES, DATED NOVEMBER 21, 2017.
 2. UNDER PENNSYLVANIA LAW THE CONTRACTOR IS REQUIRED TO NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM AT 1-800-242-1776 PRIOR TO THE START OF HIS WORK, SO THAT ALL THE VARIOUS UNDERGROUND UTILITY OPERATORS WILL BE ABLE TO LOCATE THEIR OWN UTILITIES.
 3. THERE ARE NO HO OR CV WATERSHEDS LOCATED WITHIN THE PROJECT AREA.
 4. THERE ARE NO RIPARIAN BUFFERS EXISTING OR PROPOSED AS PART OF THIS PROJECT (WITHIN OR OUTSIDE THE LIMIT OF DISTURBANCE). ADDITIONALLY, RIPARIAN BUFFER OFFSETS ARE NOT NECESSARY.
 5. THERE ARE NO WETLANDS WITHIN THE PROJECT AREA.
 6. THERE ARE NO INFILTRATION BMPs LOCATED OUTSIDE PROPOSED GRADING AREAS.
 7. THE EXISTING SITE IS NOT UNDERLAIN BY ANY NATURALLY OCCURRING GEOLOGIC FORMATIONS OR SOIL CONDITIONS WHICH COULD CAUSE POLLUTION DURING EARTH DISTURBANCE. THEREFORE, NO LOCATIONS ARE IDENTIFIED ON THIS PLAN AND NO DETAILS ARE PROVIDED FOR DISPOSAL OF SUCH MATERIAL.

- SEQUENCE OF CONSTRUCTION NOTES:**
- SITE DEVELOPMENT OPERATIONS SHOULD BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING GENERAL SEQUENCE OF OPERATIONS. THE CONTRACTOR MAY DEViate FROM THE STAGING OF PERMANENT SITE IMPROVEMENT CONSTRUCTION ITEMS, WITH APPROVAL OF THE CONSERVATION DISTRICT INSPECTOR. DEVIATION FROM THE RELATIVE ORDER OF EROSION AND SEDIMENT CONTROL MEASURES SHOULD NOT OCCUR WITHOUT APPROVAL OF THE CONSERVATION DISTRICT INSPECTOR AND SITE ENGINEER. NO VERTICAL CONSTRUCTION MAY OCCUR UNTIL SUBGRADE IS SET.
 - THE DETENTION BASIN SHALL BE INSTALLED BEFORE THE CONSTRUCTION OF ANY BUILDINGS OR SITE IMPROVEMENTS, UNLESS OTHERWISE APPROVED BY THE BOARD AND THE BUCKS COUNTY CONSERVATION DISTRICT. A PRELIMINARY BASIN AS-BUILT PLAN MUST BE SUBMITTED AND APPROVED BY THE TOWNSHIP ENGINEER PRIOR TO BEGINNING ANY BUILDING CONSTRUCTION TO CONFIRM THAT THE CONSTRUCTED VOLUMES ARE IN ACCORDANCE WITH THE DESIGN PLANS.

1. CONTACT THE BUCKS COUNTY CONSERVATION DISTRICT (215-345-7577), NEW BRITAIN TOWNSHIP, AND THE TOWNSHIP ENGINEER AT LEAST THREE (3) WORKING DAYS PRIOR TO SITE DISTURBANCE.
2. EACH STAGE OF THE SEQUENCE OF CONSTRUCTION MUST BE COMPLETED PRIOR TO INITIATION OF THE NEXT STAGE OF THE SEQUENCE OF CONSTRUCTION. CONSTRUCTION MAY OVERLAP INTO A SUBSEQUENT PHASE AS LONG AS ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED IN THE PREVIOUS PHASE.
3. INSTALL CONSTRUCTION ENTRANCE AT SITE ACCESS, STOCKPILE, COMPOST FILTER SOCK AND TREE PROTECTION FENCE WHERE SHOWN ON THE PLAN. INSTALL PROTECTION FENCE AROUND FUTURE BMPs.
4. INSTALL SEDIMENT BASIN. THE PERMANENT OUTFALL FROM SEDIMENT BASIN AND TEMPORARY RISER SHALL BE INSTALLED WITH THE CONSTRUCTION OF THE SEDIMENT BMP. INSTALL CONSTRUCTION FENCE AROUND THE SEDIMENT TRAP.
5. STRIP TOPSOIL AND STOCKPILE WHERE SHOWN ON PLAN. ALL STRIPPED TOPSOIL STOCKPILES SHALL HAVE TEMPORARY SEEDING INSTALLED, ROUGH GRADE SITE, DRIVEWAY/PARKING AND BUILDING PADS. INSTALL TEMPORARY EROSION CONTROL BLANKETS.
6. PRIOR TO VERTICAL CONSTRUCTION A STABLE BASE WILL BE ESTABLISHED AND MAINTAINED, TO AVOID ACCELERATED EROSION.
7. A PRELIMINARY BASIN AS-BUILT PLAN MUST BE SUBMITTED AND APPROVED BY THE TOWNSHIP ENGINEER PRIOR TO BEGINNING ANY BUILDING CONSTRUCTION TO CONFIRM THAT THE CONSTRUCTED VOLUMES ARE IN ACCORDANCE WITH THE DESIGN PLANS.
8. BEGIN CONSTRUCTION OF BUILDING FOUNDATIONS. BUILDING CONSTRUCTION MAY COINCIDE WITH ADDITIONAL SITE WORK, INCLUDING UTILITY AND STREET CONSTRUCTION, THAT IS LISTED IN THIS SEQUENCE OF CONSTRUCTION PRIOR TO VERTICAL CONSTRUCTION. SUBGRADE IS TO BE SET, INCLUDING BUT NOT LIMITED TO FOUNDATION WORK, STABLE SUBGRADE/SUBBASE, SUBSURFACE UTILITY WORK, AND DRIVEWAY/PARKING SUBGRADE.
9. INSTALL WATER, SANITARY SEWER, AND STORM SEWER SYSTEM STARTING AT THE DOWNSTREAM ENDS AND WORKING UPSTREAM. ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH DAY. MAKE OFFSITE UTILITY CONNECTIONS AND INSTALL OFFSITE WATER AND SANITARY SEWER, INSTALL CURB, SUBBASE AND BASE COURSE FOR THE DRIVEWAY/PARKING.
10. COMPLETE FINAL GRADING. AFTER FINAL GRADING IS COMPLETED, APPLY PERMANENT SEEDING MIXTURE AND INSTALL ALL REQUIRED PLANTINGS, FENCING, AND LIGHTING. LIGHTING SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF ANY USE AND OCCUPANCY PERMITS. ONCE ALL BUILDINGS ARE COMPLETED, FLUSH ALL AFFECTED STORM DRAINAGE PIPES OF ACCUMULATED SILT.
11. CONVERT STORMWATER FACILITY UPON COMPLETING AND STABILIZING EACH TRIBUTARY AREA. INSTALLATION SHALL BE IN ACCORDANCE WITH THE PCSM PLANS, NOTES, AND DETAILS. INSTALLATION OF STORMWATER FACILITY IS A CRITICAL STAGE OF THE CONSTRUCTION SEQUENCE.
12. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH STORM EVENT OR ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, REGRADEING, RESEEDING, REMULCHING AND RETENING, MUST BE PERFORMED IMMEDIATELY.
13. UPON COMPLETE STABILIZATION OF SITE, REMOVE EROSION CONTROL DEVICES, REMOVE TEMPORARY ORIFICE PLATES AND CONVERT SEDIMENT TRAP TO PERMANENT STORMWATER BASIN BMPs PER THE CONSTRUCTION SEQUENCES AND DETAILS FOUND ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN. THE SITE SHALL BE CONSIDERED STABILIZED WHEN THE PERMANENT VEGETATION HAS PROVIDED A 70% GROUNDCOVER.
14. AFTER CONSTRUCTION IS COMPLETED, INSTALL WEARING COURSE FOR THE DRIVEWAY/PARKING. REPAIR ANY DAMAGED CURBING, STORM SEWER STRUCTURES, SANITARY SEWER STRUCTURES, LANDSCAPING, LIGHTING, SIDEWALK, DRIVEWAYS, AND/OR ANY OTHER AMENITIES FROM INSTALLATION OF WEARING COURSE.

Soils Table					
Symbol	Unit Name	Hydric	Depth to Water	Depth to Bedrock	HSG
AbB	Abbotstown silt loam, 3 to 8 percent slopes	No	6-8 inches	18-60 inches	D
BwB	Buckingham silt loam, 3 to 8 percent slopes	Yes	6-8 inches	20-99 inches	C/D

Limitations and Resolutions: Outbanks cave - provide shoring during excavation; Corrosive to steel/concrete - provide cathodic protection for concrete and steel as necessary; Easily erodible - provide an erosion control blanket on steep slopes and maintain existing vegetative cover in non-disturbed areas; Depth to saturated zone/seasonal high water table; provide pumped water filter bags where a saturated zone or shw is encountered; Hydric/Hydric inclusions - strip existing topsoil to indicating depth, import suitable fill for construction, and provide adequate site grading; low strength/landslide prone; Import suitable fill for topsoil stockpile and provide shoring during excavation; Slow percolation - replace soil with suitable fill for better percolation results; Piping; Provide cathodic protection for pipes; poor source of topsoil; Import suitable fill for topsoil; Frost action - provide capillary flow path breaks in soils; Wetness - minimize soil compaction for increased infiltration of water into the soil and provide adequate site grading.

LIMIT OF DISTURBANCE = 4.66 ACRES

PROJECT SITE BOUNDARY = 9.41 ACRES

CRITICAL STAGES OF PCSM PLAN IMPLEMENTATION
 THE INSTALLATION AND/OR CONVERSION OF EROSION CONTROL FACILITIES TO STORMWATER FACILITIES, INCLUDING THE INFILTRATION BASIN WITH MRC, SHALL BE OVERSEEN BY A LICENSED PROFESSIONAL ENGINEER OR THEIR DESIGNEE.

RECYCLING/ DISPOSAL OF MATERIALS
 THE CONSTRUCTION WASTES ANTICIPATED INCLUDE DEMOLITION MATERIALS FROM THE BUILDING AND SITE DEMOLITION AND EXCESS BUILDING MATERIAL SUCH AS CONCRETE, WOOD, ETC.
 ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

Holmes Cunningham LLC
 409 E. Butler Ave. Unit 5
 Doylestown, PA 18901
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REVISIONS	Description	Date

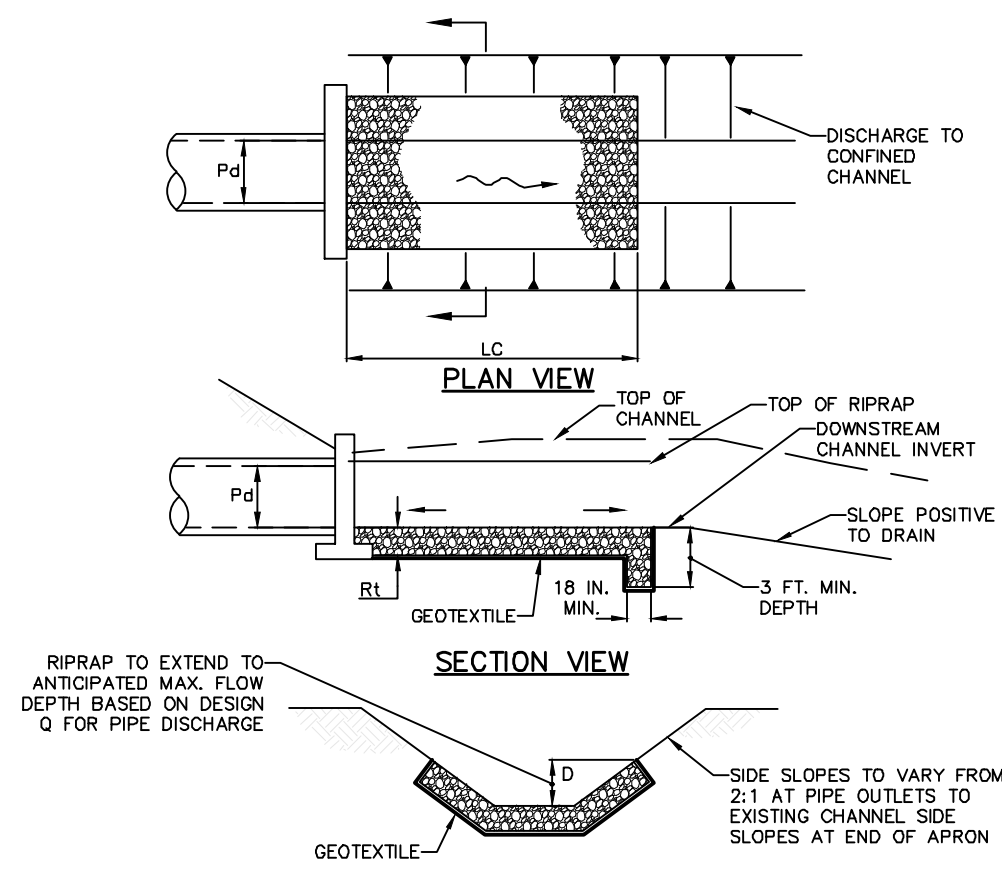
84 SCHOOLHOUSE ROAD
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 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

ROBERT T. CUNNINGHAM, P.E.
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File No.
1286_C4.0 E&S.DWG

HCE Job 1286
 Date 5/24/2022
 Scale 1"=40'
 Designed RC
 Sheet 11 of 17

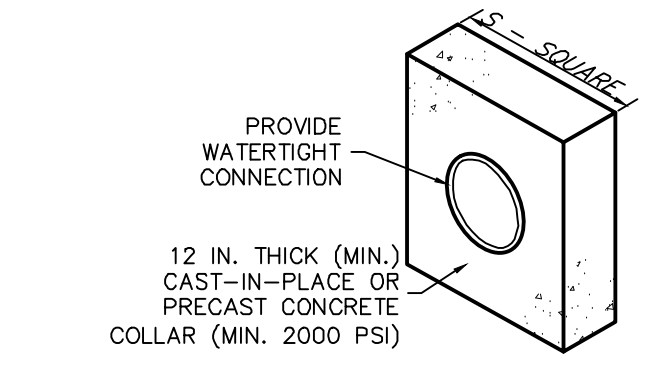
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OUTLET NO.	PIPE DIA. EQUIV. Pd (IN)	RIPRAP SIZE R- (IN)	THICK. Rt (IN)	LENGTH Lc (FT)	INITIAL BOTTOM BOTH (AT ENDWALL) (FT)	END TOP WIDTH (AT ENDWALL) (FT)	END TOP WIDTH (FT)	SIDE SLOPES H:V
RRA-2	15	3	9	8	3.25	5	7.25	9:3

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

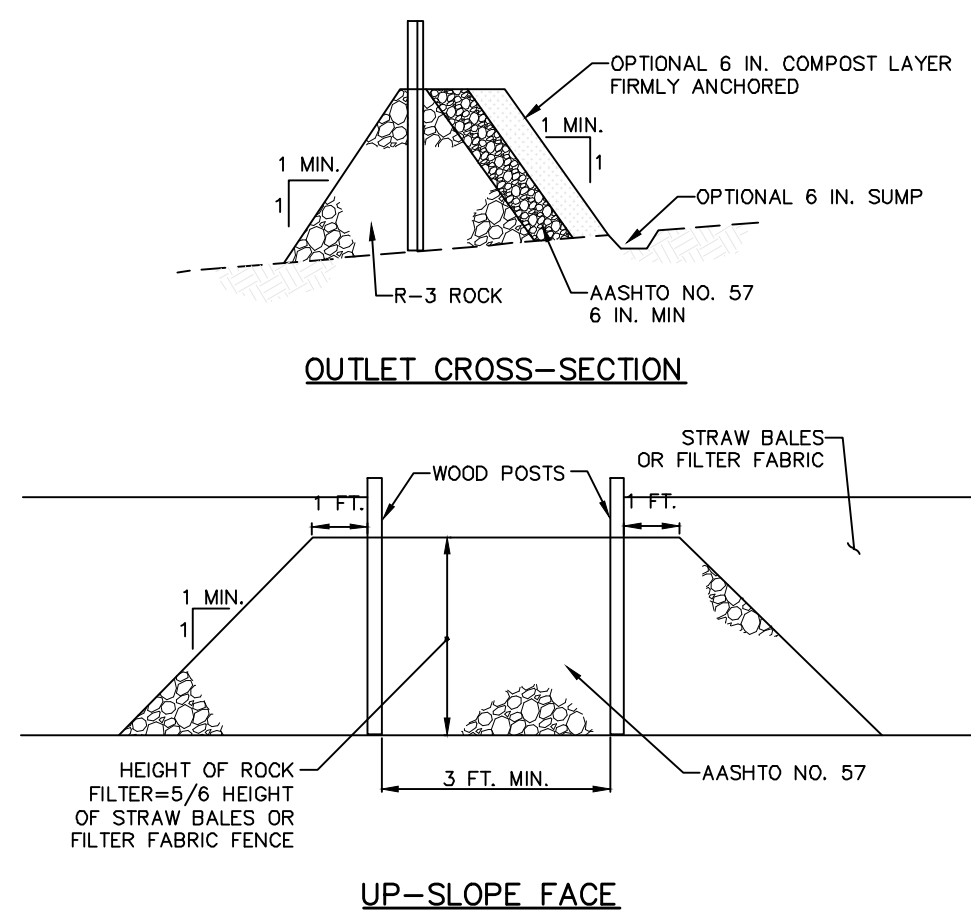
**STANDARD CONSTRUCTION DETAIL #9-3
 RIPRAP APRON AT PIPE OUTLET TO AN EXISTING CHANNEL**



BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
1	30	76	2	14.86	14.86

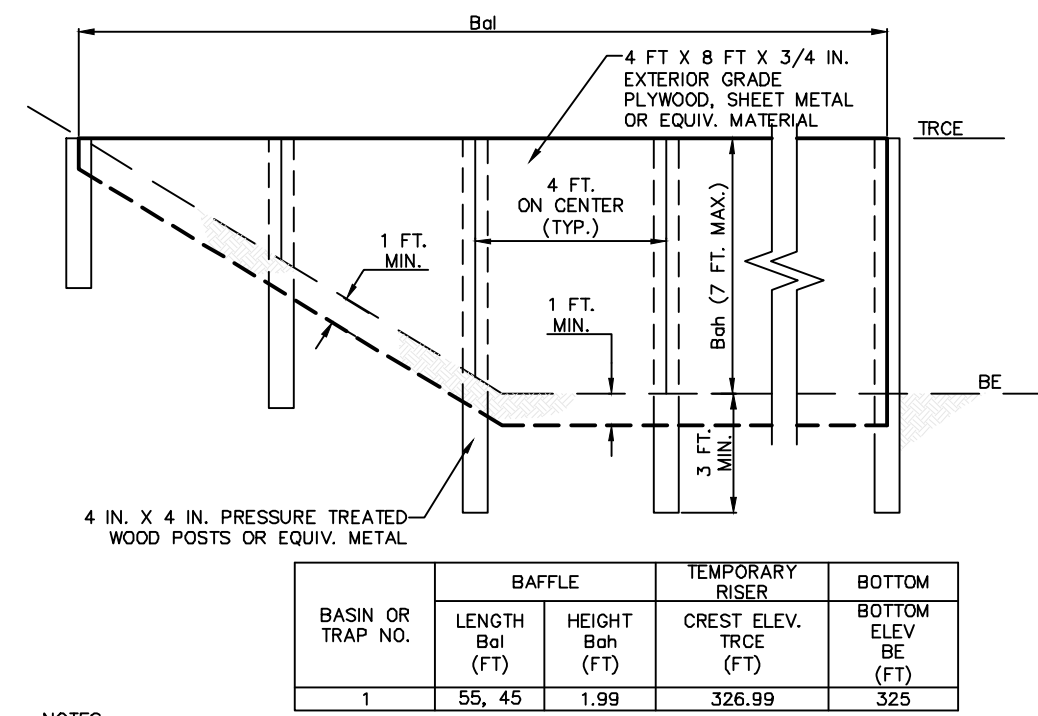
NOTES:
 1. ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
 2. COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

**STANDARD CONSTRUCTION DETAIL #7-14
 CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS**



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.

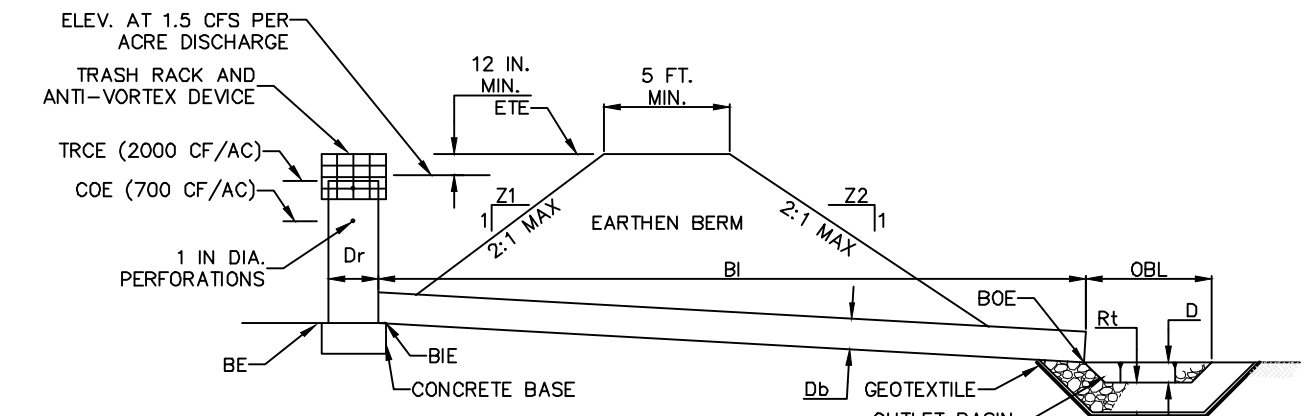
**STANDARD CONSTRUCTION DETAIL #4-6
 ROCK FILTER OUTLET**



BASIN OR TRAP NO.	BAFFLE LENGTH Bbl (FT)	BAFFLE HEIGHT Bbh (FT)	TEMPORARY RISER CREST ELEV. TRCE (FT)	BOTTOM ELEV. BE (FT)
1	55.45	1.99	326.99	325

NOTES:
 SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.
 AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION IN POOLS WITH DEPTHS EXCEEDING 7'. THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST. SUPER SILT FENCE BAFFLES NEED NOT EXTEND TO TRCE ELEVATION.
 BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.
 SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.
 DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.
 BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

**STANDARD CONSTRUCTION DETAIL #7-14
 BAFFLE**

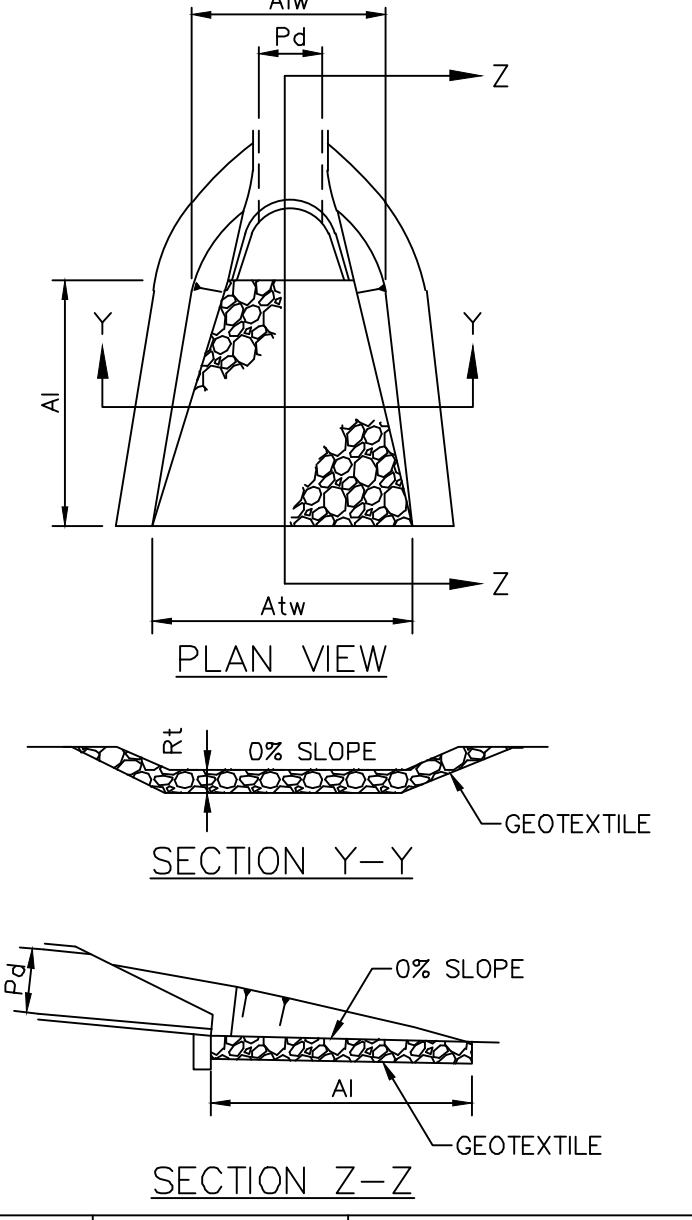


TRAP NO.	Z1 (FT)	Z2 (FT)	RISER MAT'L	DIA. Dr (IN)	CREST ELEV. ROE (FT)	BOT. PERF. ELEV. (FT)	BARREL MAT'L	DIA. Bd (IN)	INLET ELEV. BIE (FT)	ROCK THICK. R1 (IN)	DEPTH D (IN)	WIDTH CBW (FT)	LENGTH OBL (FT)	TOP ELEV. ETE (FT)	TOP WIDTH Etw (FT)	CLEAN OUT ELEV. COE (FT)	BOTTOM ELEV. BE (FT)
1	3	3	CMP	18	326.99	326.99	RCP	15	323	169	320.5	331	10	326	325		

TRAP NO.	CONCRETE BASE LENGTH CBl (IN)	CONCRETE BASE WIDTH Cbw (IN)	CONCRETE BASE THICK. CBT (IN)	RIPRAP SIZE (R-)	RIPRAP THICK. R1 (IN)	ROCK THICK. R2 (IN)	DEPTH D (IN)	WIDTH CBW (FT)	LENGTH OBL (FT)
1	36	36	12	---	---	---	---	---	---
2	36	36	12	---	---	---	---	---	---

NOTES:
 SEE DETAIL #8-3 TEMPORARY RISER FOR DETAILS OF THE TEMPORARY RISER CONSTRUCTION.
 FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS.
 UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS.
 ALL SEDIMENT TRAPS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.
 ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES SHALL BE PROVIDED.
 A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH TRAP. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE TRAP IN THE MANNER DESCRIBED IN THE E&S PLAN.
 CHECK EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. CLOGGED OR DAMAGED SPILLWAYS AND/OR EMBANKMENTS SHALL BE IMMEDIATELY RESTORED TO THE DESIGN SPECIFICATIONS. DISPLACED RIPRAP WITHIN THE OUTLET PROTECTION SHALL BE REPLACED IMMEDIATELY.
 ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS INSIDE THE TRAP SHALL BE STABILIZED BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. TO ASSIST IN REMOVING SEDIMENT, WHICH MAY BE SATURATED, A DEVICE SUCH AS IS SHOWN IN STANDARD CONSTRUCTION DETAIL #7-18 MAY BE USED TO DEWATER THE SEDIMENT PRIOR TO ITS REMOVAL.

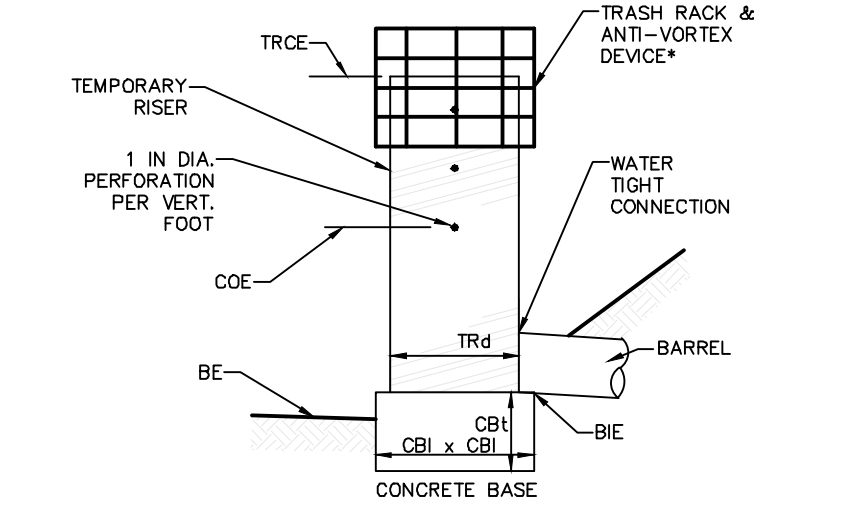
**STANDARD CONSTRUCTION DETAIL #8-2
 BARREL/RISER SEDIMENT TRAP**



OUTLET NO.	PIPE DIA. Pd (IN)	RIPRAP SIZE R- (IN)	THICK. Rt (IN)	LENGTH Lc (FT)	APRON INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
RRA-1	24	4	18	12	6	18

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

**STANDARD CONSTRUCTION DETAIL #9-1
 RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL**



* SEE STANDARD CONSTRUCTION DETAIL #7-5, TRASH RACK AND ANTI-VORTEX DEVICE
 ** LOWEST HOLE AT SEDIMENT CLEAN-OUT ELEVATION

TRAP NO.	TEMPORARY RISER DIA. Trd (IN)	TEMPORARY RISER CREST ELEV. TRCE (FT)	TEMPORARY RISER MAT'L	CLEAN OUT ELEV. COE (FT)	CONCRETE BASE LENGTH CBl (IN)	CONCRETE BASE WIDTH Cbw (IN)	CONCRETE BASE THICK. CBT (IN)	BARREL INLET ELEV. BIE (FT)
1	18	326.99	CMP	326	36	36	12	323

NOTES:
 A MINIMUM OF 2-#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.
 CONCRETE BASE SHALL BE POURED IN SUCH A MANNER SO AS TO INSURE THAT CONCRETE FILLS BOTTOM OF RISER TO INVERT OF THE OUTLET PIPE TO PREVENT RISER FROM BREAKING AWAY FROM THE BASE. MINIMUM BASE WIDTH EQUALS 2 TIMES RISER DIAMETER.
 EMBEDDED SECTION OF ALUMINUM OR ALUMINIZED PIPE SHALL BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT.
 CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

**STANDARD CONSTRUCTION DETAIL #8-3
 SEDIMENT TRAP TEMPORARY RISER**

Holmes Cunningham LLC
 409 E. Butler Ave. Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS

Date	Description

CALL BEFORE YOU DIG!!
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84 SCHOOLHOUSE ROAD
 TWP # 26-005-003
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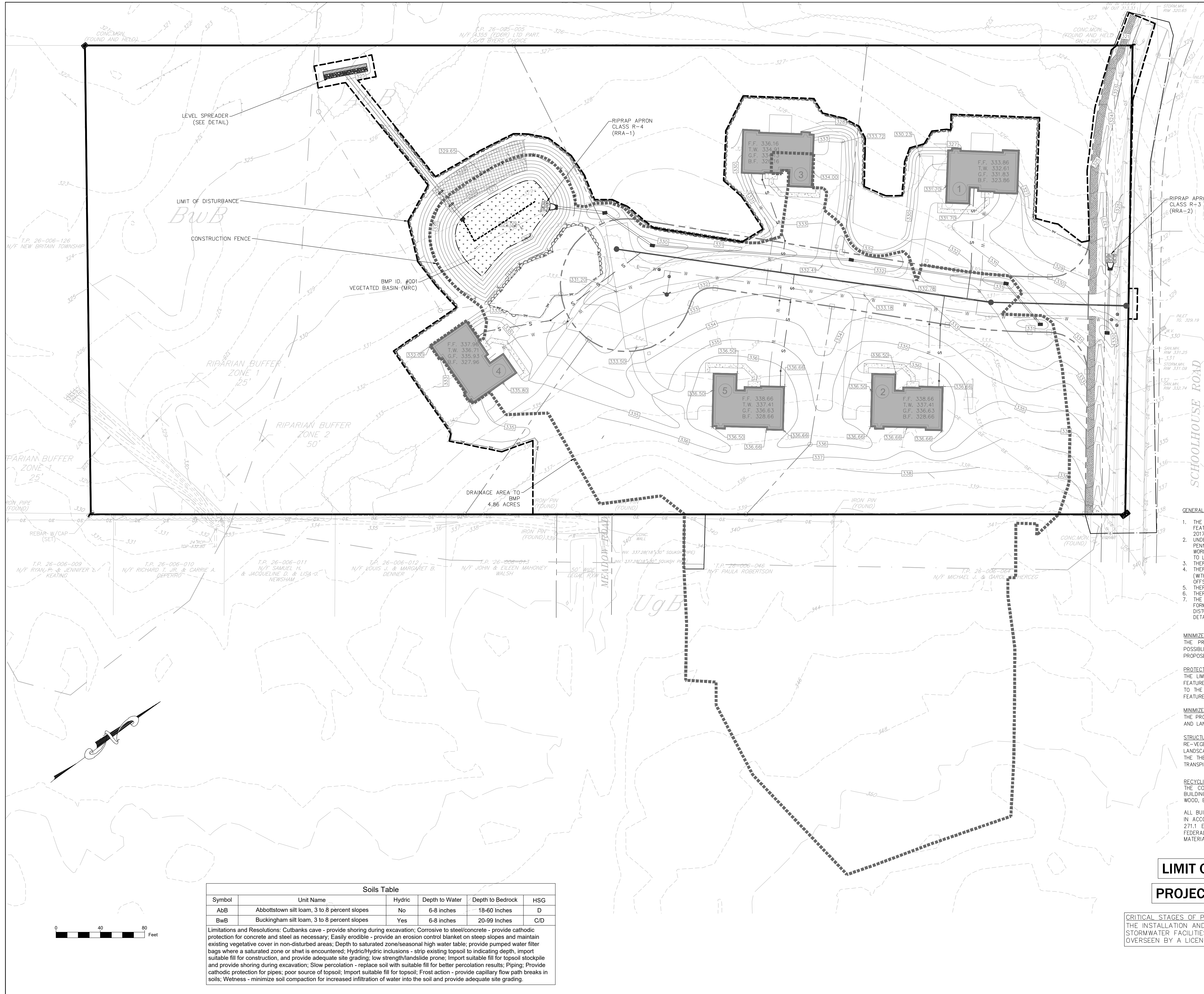
EROSION AND SEDIMENT CONTROL DETAILS

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No.
1286_C4.0 E&S.DWG

HCE Job 1286
 Date 5/24/2022
 Scale N.T.S.
 Designed RC
 Sheet 13 of 17

Drawing No.
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PCSM LEGEND

- LIMIT OF DISTURBANCE
- PROJECT SITE BOUNDARY
- SOIL TYPE BOUNDARY
- AbB SOIL TYPE
- PROPOSED CONTOUR
- DRAINAGE AREA TO SEDIMENT TRAP
- LANDLOK TRM-450 BLANKET
- BMP SOIL MIX / ERNMX-180 RAIN GARDEN SEED MIX
- SOIL/INFILTRATION TEST LOCATION

APPLICANT'S ACKNOWLEDGEMENT
 I, _____, acknowledge that stormwater facilities and BMPs are fixtures that can only be altered and removed after approval by the municipality and submission of a revised E&S plan to the conservation district.

GENERAL NOTES

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- THERE ARE NO WETLANDS WITHIN THE PROJECT AREA.
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MINIMIZE IMPERVIOUS AREAS
 THE PROJECT HAS LIMITED IMPERVIOUS AREAS PROPOSED TO THE MAXIMUM EXTENT POSSIBLE. THE SITE PLAN HAS CLUSTERED THE DEVELOPMENT TO REDUCE THE EXTENT OF PROPOSED ROADWAYS AND THE DRIVEWAYS ARE THE MINIMUM ACCEPTABLE LENGTH.

PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION
 THE LIMIT OF DISTURBANCE IS MINIMIZED TO REDUCE THE DISTURBANCE TO THE EXISTING FEATURES. THE EXISTING VEGETATION AROUND THE PERIMETER OF THE SITE IS TO REMAIN TO THE MAXIMUM EXTENT POSSIBLE. THERE IS NO PROPOSED DISTURBANCE TO DRAINAGE FEATURES.

MINIMIZE LAND CLEARING
 THE PROJECT HAS LIMITED THE SOIL DISTURBANCE AREA TO THE MAXIMUM EXTENT POSSIBLE AND LAND CLEARING IS LIMITED TO THE AREAS SHOWN ON THE PLAN.

STRUCTURAL AND NON-STRUCTURAL BMPs TO DECREASE STORMWATER RUNOFF
 RE-VEGETATE DISTURBED AREAS: ALL DISTURBED AREAS WILL BE PERMANENTLY SEED OR LANDSCAPED. ADDITIONALLY, NEW TREES WILL BE PLANTED THROUGHOUT THE SITE TO REDUCE THE THERMAL IMPACT OF IMPERVIOUS SURFACES AND REDUCE RUNOFF VOLUME THROUGH TRANSPARATION.

RECYCLING/ DISPOSAL OF MATERIALS
 THE CONSTRUCTION WASTES ANTICIPATED INCLUDE DEMOLITION MATERIALS FROM BUILDING AND SITE DEMOLITION AND EXCESS BUILDING MATERIAL SUCH AS CONCRETE, WOOD, ETC.

ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ. 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

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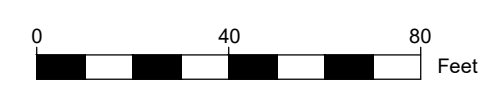
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Soils Table

Symbol	Unit Name	Hydric	Depth to Water	Depth to Bedrock	HSG
AbB	Abbottstown silt loam, 3 to 8 percent slopes	No	6-8 inches	18-60 Inches	D
BwB	Buckingham silt loam, 3 to 8 percent slopes	Yes	6-8 inches	20-99 Inches	C/D

Limitations and Resolutions: Cutbanks cave - provide shoring during excavation; Corrosive to steel/concrete - provide cathodic protection for concrete and steel as necessary; Easily erodible - provide an erosion control blanket on steep slopes and maintain existing vegetative cover in non-disturbed areas; Depth to saturated zone/seasonal high water table; provide pumped water filter bags where a saturated zone or shwt is encountered; Hydric/Hydric inclusions - strip existing topsoil to indicating depth, import suitable fill for construction, and provide adequate site grading; low strength/landslide prone; Import suitable fill for topsoil stockpile and provide shoring during excavation; Slow percolation - replace soil with suitable fill for better percolation results; Piping; Provide cathodic protection for pipes; poor source of topsoil; Import suitable fill for topsoil; Frost action - provide capillary flow path breaks in soils; Wetness - minimize soil compaction for increased infiltration of water into the soil and provide adequate site grading.



Holmes Cunningham LLC
 409 E. Butler Ave., Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS

Date	Description

84 SCHOOLHOUSE ROAD
 TMP # 26-005-003
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No.
 1286_C5.0 PCSM.DWG

HCE Job	1286	Date	5/24/2022	Scale	1"=40'	Designed	RC	Sheet	14 of 17
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Drawing No.
C5.0

LANDSCAPE LEGEND

-  Street tree
-  Detention Basin Planting
-  Buffer Landscape
-  Basin Floor Seeding
-  Basin Slope Seeding

PLANT SCHEDULE							
Plan Symbol	Quantity	Botanical Name	Common Name	Min. Planting Caliber	Min. Planting Spread	Min. Planting Height	Remarks
Shade Trees							
AR	6	<i>Acer rubrum</i> 'October Glory'	'October Glory' Red Maple	3" cal.	-	14-16'	B&B Full, straight leader
CO	4	<i>Carya ovata</i>	Shagbark Hickory	3" cal.	-	14-16'	B&B Full, straight leader
LT	3	<i>Liriodendron tulipifera</i>	Tulip Tree	3" cal.	-	14-16'	B&B Full, straight leader
OB	2	<i>Quercus bicolor</i>	Swamp White Oak	3" cal.	-	14-16'	B&B Full, straight leader
OP	7	<i>Quercus phellos</i>	Willow Oak	3" cal.	-	14-16'	B&B Full, straight leader
OR	2	<i>Quercus rubra</i>	Red Oak	3" cal.	-	14-16'	B&B Full, straight leader
TC	14	<i>Tilia cordata</i>	Littleleaf Linden	3" cal.	-	14-16'	B&B Full, straight leader
TD	4	<i>Taxodium distichum</i>	Bald Cypress	3" cal.	-	14-16'	B&B Full, straight leader
ZS	7	<i>Zelkova serrata</i>	Japanese Zelkova	3" cal.	-	14-16'	B&B Full, straight leader
Evergreen Trees							
PA	14	<i>Picea abies</i>	Norway Spruce	-	-	6'	B&B Symmetrical, branched to ground
PO	12	<i>Picea omorika</i>	Serbian Spruce	-	-	6'	B&B Symmetrical, branched to ground
Ornamental Trees							
AC	4	<i>Amelanchier canadensis</i>	Serviceberry	-	-	8-10'	B&B Multi-stem, min. 5 stems
CC	4	<i>Cercis canadensis</i> 'Forest Pansy'	Forest Pansy Redbud	1.5" cal.	-	8-10'	B&B Full, straight leader
MV	4	<i>Magnolia virginiana</i>	Sweetbay Magnolia	-	-	8-10'	B&B Multi-stem, min. 3 stems
Shrubs**							
AA	11	<i>Aronia arbutifolia</i>	Red Chokeberry	-	-	30"	CONT Heavy, full specimen
CS	14	<i>Cornus sericea</i>	Red Twig Dogwood	-	-	30"	CONT Heavy, full specimen
IG	12	<i>Ilex glabra</i>	Boxwood	-	-	30"	CONT Heavy, full specimen
IV	9	<i>Ilex verticillata</i> 'Red Sprite'	'Red Sprite' Winterberry	-	-	30"	CONT Heavy, full specimen

** Plant in continuous mulch bed (2-3" depth) until fully established.

LANDSCAPE REQUIREMENTS CHART - NEW BRITAIN TOWNSHIP

Subdivision Ordinance Item	Requirement	Plan Proposed
Z.O. 27-2400 Natural Resources	No more than 20% woodland disturbance is permitted in the RR district. 20% of woodland disturbance is proposed. No replacement trees are required.	N/A
Z.O. 27-2800 Buffer Yards	Buffer yards shall be required where a nonresidential zoning district adjoins a residential zoning district. Buffer yards shall include a planting strip which creates a dense screen of closely planted trees or shrubs. 946' along I Industrial District (Northwestern property line)	existing vegetation 7 Shade trees 26 Evergreen trees 8 Ornamental trees
S.O. 22-713.4 Street Trees	Street trees shall be planted every 30' along all proposed streets and existing streets when they abut or lie within the proposed subdivision and/or land development. Trees shall be planted 3-5' outside the ultimate right-of-way. Schoolhouse Rd.: 423' - 50'(driveway) = 373' 373/30 = 13 trees Internal Rd.: 945' along ROW - 60' (driveway openings) = 885' 885/30 = 30 trees	13 Shade trees 23 Shade trees (+ existing vegetation)
S.O. 22-713.5.B.(3) Landscape Buffers & Screens - Detention/Retention Basins	One deciduous or evergreen tree planted every 20 feet, plus one deciduous or evergreen shrub every 10 feet along the basin perimeter, planted in an informal arrangement. Detention Basin: 460' 460/20 = 23 Deciduous or Evergreen trees 460/10 = 46 Deciduous or Evergreen shrubs	6 Shade trees (13 existing trees around perimeter) 4 Ornamental trees 46 Shrubs
Total Landscape Proposed		49 Shade Trees 26 Evergreen Trees 12 Ornamental Trees 46 Shrubs



Holmes Cunnigham LLC
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REVISIONS	Description	Date

84 SCHOOLHOUSE ROAD
TMP # 26-005-003
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

LANDSCAPING PLAN


ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.
1286_C6.0 LANDSCAPE.DWG

HCE Job 1286
Date 5/24/2022
Scale 1"=40'
Designed RC
Sheet 16 of 17

Drawing No.
C6.0

CALL BEFORE YOU DIG!!
PENNSYLVANIA LAW REQUIRES
PROFESSIONAL ENGINEERS
CONSTRUCTION PHASE AND
10 WORKING HOURS BEFORE
STOP & CALL
PennyWise One
Call System, Inc.
1-800-245-1776



UTILITY LOCATIONS AS SHOWN ON
THIS PLAN ARE THE RESPONSIBILITY OF THE
CONTRACTOR. THE CONTRACTOR SHALL
CONTACT UTILITY COMPANIES PRIOR
TO ANY EXCAVATION.





GILMORE & ASSOCIATES, INC.

ENGINEERING & CONSULTING SERVICES

July 19, 2022

File No. 17-08039

Matt West, Township Manager
New Britain Township
207 Park Avenue
Chalfont, PA 18914

Reference: 84 Schoolhouse Road, Preliminary Land Development Plan Review 1
TMP# 26-005-003

Dear Matt:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the Lane Development Plan for the above-referenced project. Upon review by our office, we offer the following comments for consideration:

I. Submission

- A. Preliminary and Final Land Development and Major Subdivision Plans for 84 Schoolhouse Road, prepared by Holmes Cunningham, LLC, dated May 24, 2022, consisting of seventeen (17) sheets.
- B. Post Construction Stormwater Management Plan Narrative for 84 Schoolhouse Road, prepared by Holmes Cunningham, LLC, dated May 24, 2022.
- C. Waiver Request letter for 84 Schoolhouse Road, prepared by Holmes Cunningham, LLC, dated May 24, 2022.
- D. Wetland Delineation letter for 84 Schoolhouse Road, prepared by VW Consultants, LLC, dated May 26, 2019.

II. General Information

The subject property is a 9.14-acre parcel along Schoolhouse Road (T-332) within the Township's RR Residential Zoning District. The property currently contains a one-story single-family dwelling, woodlands, floodplain soils and a stream. The Applicant intends to subdivide the property into five lots for 5 new B1 - Single-Family Detached Dwelling uses, which are permitted by right. A private street is proposed and ends in a hammerhead turnaround configuration. Schoolhouse Road is proposed to be improved with a landscaped berm and 6-foot asphalt path. Stormwater will be managed through a detention basin near the western corner of the site. The property is within the Township's public water and sewer services areas.

III. Review Comments

A. Zoning Ordinance

We have identified the following issues regarding the requirements and provisions of the current New Britain Township Zoning Ordinance:

1. §27-902.b – The following comments related to the dimensional requirements in the RR district shall be addressed:
 - a. The Ratio Base Site Area for Lot 1 subtracts 3,956 sf for a proposed easement, however, it's unclear where the easement is located. The easement area shall be clarified, or the table revised as necessary.

BUILDING ON A FOUNDATION OF EXCELLENCE

- b. The Lot Area and Coverage Table shall include a row to document the impervious areas proposed within the right-of-way to verify the proposed site impervious surface coverage.
 - c. Based on the Lot Area and Coverage Table, the proposed Building Coverage in the Zoning table shall be revised to 7%.
 2. §27-2108.f.3 – All new residential construction on lots of one acre or less shall comply with the increased restrictions as noted in the table. Lots 1 and 2 are each 1 acre and shall be revised to show and meet the 85-foot rear yard setback required for the Developer. In addition, the Zoning requirements for these lots shall list the requirements for both the Developer and the purchaser of these lots. Alternatively, the area for these lots could be increased to more than one acre.
 3. §27-2400.i.4 – In cases where a major subdivision or land development is proposed, replanting of the riparian corridor shall be required where there is little or no existing streamside vegetation. The Applicant should provide photographic and written documentation that the existing vegetation along the riparian corridor is sufficient or landscaping along the corridor shall be provided.
 4. §27-2401.c – Restrictions are required to be placed in the deed to provide for the continuance of the natural resource areas. We offer the following comments relative to the natural resources:
 - a. The required resource protection area shall be designated on the plans and conservation easement(s) provided in accordance with §22-704.1.
 - b. We note that the stormwater easement may be included in the conservation easement area.
 - c. Per the eMap PA application, the area labeled “Waters of the US” appears to be a tributary (ID: 25479034) to the West Branch Neshaminy Creek and shall be labeled as such.
 5. §27-2402.b – The Site Capacity Calculations on the Existing Resources and Site Analysis Plan shall be revised to subtract the ultimate right-of-way of Schoolhouse Road for the Base Site Area. In addition, the location of the 12,419-sf area of existing utility right-of-way or easements shall be clarified or noted on the plan.
 6. §27-2402.c – The riparian buffer area at the southern corner of the site should be noted in the Resource Protection Land table and the area included in the Open Space, Buildable Site Area and Density Calculations. We note that a portion of the riparian buffer overlaps the floodplain soils. This overlap of areas should be noted in the table to document the resource area is not counted twice.
 7. §27-2400.f.1, §22-502.1.D.(7), & §22-713.2.B(3) – No more than 20% of woodlands located upon a lot or site shall be altered, regraded, cleared, or built upon in the RR District. The plans indicate that 20% of woodlands are being disturbed. To confirm, the following information shall be added to the plans:
 - a. The ERSAP and Landscape Plan shall be revised to identify the individual living trees to be removed designated by an “X” marked on the tree. The limits of clearing and location of tree protection fence should be shown on the Landscape Plan.
 - b. A note shall be added to the Construction Sequence specifying that individual trees along the limits of tree removal be marked in the field to ensure the woodlands disturbance does not exceed the maximum permitted.
- B. Subdivision and Land Development Ordinance Waivers

The following waivers have been requested by the Applicant from the Subdivision and Land Development Ordinance in a letter dated May 24, 2022:

1. §22-403 & 404 – From the requirement to provide separate preliminary and final plan submissions. Based on the number of comments, we do not support a waiver at this time. We recommend the plans be revised to address the comments herein.
2. §22-502.1.H – From the requirement to provide a lighting plan, which we support.
3. §22-705.3.C, -706.1.B, 2.B & -713.4.B – From the requirement to provide cartway widening, curb and sidewalk along Schoolhouse Road and curb and sidewalk along the proposed private street. Schoolhouse Road is required to be widened approximately 12 feet and improved to include five (5) foot sidewalks, curbing, and a 3 to 6-foot grass strip. We offer the following comments regarding the street improvements:
 - a. §22-707.1.A –The plans show a 6-foot asphalt path along Schoolhouse Road. The maintenance responsibilities shall be noted on the plans. We recommend this walkway be extended to W. Boulder Drive to provide a walkway connection to the Colebrook development.
 - b. §22-707.1.B(2) – The Bucks County Planning Commission review recommended widening the path to eight (8) feet to accommodate bike traffic. The asphalt path installed at Colebrook is 6 feet.
 - c. §22-713.4.B – Street trees shall be planted between three and five feet outside the ultimate right-of-way line, and as an alternative, the same quantity of trees may be planted in an informal arrangement along the perimeter of the street, when approved by the Board. As discussed during the Sketch Plan phase, the plans propose a berm planted with trees between the path and Schoolhouse Road all within the proposed ultimate right-of-way. A waiver from §22-713.4.B shall be requested to allow the street trees within the right-of-way, which we support. However, we recommend the proposed frontage improvements be discussed. Our office recommends a variety of species of varying heights be provided along the berm. The type of species shall consider potential impacts of branches and roots on the cartway and asphalt path.
 - d. If the requested waiver is granted, the Applicant will be required to pay a fee-in-lieu of the improvements in accordance with Township Resolution No. 2007-12 with credit for any on and offsite improvements.
4. §22-705.3.E – From the requirement that private streets be designed to the specifications of a local street. The Applicant is proposing a 20-foot wide cartway ending in a hammerhead turnaround configuration within a 50-foot-wide right-of-way and a 60-foot right-of-way bulb. We support this waiver conditioned on “No Parking” signs being provided along the street and hammerhead turnaround to ensure adequate clear space for emergency vehicles.
5. §22-705.3.G – From the requirement to mill and overlay the entire width of the existing roadway abutting a subdivision a depth of 1 1/2 inches. The proposed improvements require minimal utility connections within the roadway and the Public Works Superintendent has indicated that the road surface is in good condition. We recommend as a condition of the waiver, that the street conditions be documented prior to construction and any damage done as result of construction restored to the Township’s satisfaction.
6. §22-705.8.C – From the requirement that cul-de-sac streets be provided with a left side turnaround configuration at the closed end with a minimum paving radius of 50 feet. The Applicant is proposing a hammerhead turnaround area subject to the Fire Marshall’s approval.
7. §22-710.4 – From the requirement to provide at least one emergency access for subdivisions with a proposed single access loop street or cul-de-sac street.
8. §22-714.3.A – From the requirement to provide streetlights in residential subdivisions. No new street lighting is proposed at the intersection or at the turnaround, but driveway lampposts are proposed for each lot as was discussed with the Board of Supervisors. However, we recommend that a streetlight be provided at the intersection of Schoolhouse Road for pedestrian and vehicular safety, similar to the Colebrook development.

C. Subdivision and Land Development Ordinance

1. §22-406.1 – The Applicant is responsible for any other required outside agency approvals, permits, etc. (i.e., BCPC, BCCD, PADEP, Municipal Sewer Authority, Fire Marshal, North Wales Water Authority, Township Road Opening Permit, etc.) as applicable.
2. §22-406.1.I – Legal descriptions for all proposed easements, rights-of-way, deed restricted areas, etc., shall be submitted to the Township Engineer for review. Upon the Township Engineer's approval, the Township Solicitor shall prepare the required documents including grants of easement, deeds of dedication, stormwater maintenance agreement, operation and maintenance agreement, etc. It shall be discussed whether the proposed private street and Schoolhouse Road right-of-way will be accepted as an easement or right-of-way.
3. §22-502.1 – The following comments related to plan presentation and notes shall be addressed:
 - a. Asterisks shall be added to the Drawing List for the plans to be recorded.
 - b. A certification shall be provided on the Record Site Plan from the wetlands/soil's scientist stating that no wetlands are present on the site.
 - c. The zoning classification of the abutting parcels shall be noted on the record plan.
 - d. Site Plan Notes 5 and 10 both note that the ultimate right-of-way of Schoolhouse Road Extension is offered for dedication. The duplicate note should be removed as well as the word 'extension'.
 - e. The existing water and sewer connections to the existing dwelling shall be shown on the Existing Features Plan and notes added related to their removal/abandonment in accordance with applicable regulations.
4. §22-502.1.B – A copy of the deed for the subject tract, the Existing Features Plan noted in Site Plan Note #1, and any other reference documents used to create the plans shall be submitted.
5. 22-502.1.J – The following comments related to construction details shall be addressed:
 - a. The HDPE Pipe Detail shall be replaced with the Township Pipe Bedding Detail.
 - b. The Township Storm Sewer & Utility Trench Restoration within Paved Areas Detail shall be added to the plans for the restoration of Schoolhouse Road.
 - c. The Township Residential Driveway Paving Section Detail shall be added to the plan for the individual driveways.
 - d. Details for concrete and HDPE flared end sections shall be added to the plans.
 - e. Details shall be provided for the level spreader cleanouts.
 - f. Clarify the private street specification. See attached local street specification.
6. §22-705.7.B – A profile of the proposed private street shall be provided to demonstrate compliance with the vertical street alignment requirements.
7. §22-705.8.D – Cul-de-sac streets shall be permitted only as side streets extending from a through street. Such streets may not create a four-way intersection unless two permanent cul-de-sac streets intersect directly opposite one another along a local access street. The proposed private street creates a four-way intersection with Boulder Drive, which is not a cul-de-sac. We would support a waiver from this requirement.
8. §22-705.8.F – A fifteen-foot by twenty-foot snow storage easement is required along the right-of-way of the cul-de-sac bulb at a location approved by the Board. We note that the current hammerhead design provides sufficient room for snow storage, and therefore would support a waiver from this section.
9. §22-705.12.B – The proposed street name shall be discussed and approved by the Board of Supervisors and Fire Marshall.

10. §22-705.12.C & §22-705.17 – The location of all signs shall be provided on the Record Site Plan. A stop sign shall be provided at the intersection of the private street with Schoolhouse.
11. §22-705.13.C – All access drives and driveways shall be provided with a stopping area of 20 feet, at a maximum grade of 3%, measured from the edge of cartway. It appears the driveways for lots 3, 4 and 5 exceed a 3% slope within 20 feet of the driveway. Additional spot elevations shall be provided as necessary to confirm the driveway slope.
12. §22-705.15.A & 707.1.B.(8) – Crosswalks shall be required at intersections and at other locations where necessary to facilitate pedestrian circulation and to provide access to community facilities. Curb ramps and a crosswalk shall be provided at the intersection of the asphalt path with the private access street. Crosswalks shall consist of brick red thermoplastic street imprint with herringbone pattern and six-inch white stripes.
13. §22-711 – The Applicant will be required to secure the necessary NPDES and Erosion and Sediment (E&S) Control permits.
14. §22-711.2 – The following issues related to E&S control should be addressed:
 - a. Compost silt sock should be provided at the treeline along the southern side of the Lot 3 dwelling.
 - b. Compost silt sock should be provided along the northern end of the asphalt path and berm grading at Schoolhouse Road.
 - c. Erosion control matting should be provided for all slopes of 3:1 or greater. The location of erosion control matting should be shown on the plan.
 - d. The sediment basin and storm sewer system are proposed as part of the erosion controls. The installation of the storm sewer should precede the building construction.
15. §22-711.3 – The following comments related to site grading shall be addressed:
 - a. Spot elevations shall be provided between the proposed 331 and 332 contours around Inlets CB-3, CB-4, and CB-5 to clarify the high points.
 - b. Spot elevations shall be provided between the swales behind Lots 2 and 5 to demonstrate runoff is directed away from the rear of the dwelling and towards the swales with a minimum slope of 2%.
 - c. The grading for the berm along the southeastern portion of the asphalt path will direct runoff onto the private drive at the intersection with Schoolhouse Road. We recommend the cross slope of the path and berm grading be revised as necessary to allow this runoff to be directed to Inlet CB-6.
 - d. Spot elevations shall be provided at the corners of the hammerhead turnaround area to clarify the grading.
 - e. The contours in the southeast corner of the basin shall be rounded to obtain a more accurate basin volume and avoid the basin being undersized while being constructed.
16. §22-715.2.C.(2) – Park and recreation land is required at a ratio of 2,500 square feet per new dwelling unit or 12,500 square feet. The land shall be dedicated to the Township or other entity as may be approved by the Board. A fee-in-lieu of park and recreation at a rate of \$2,500 per dwelling unit or **\$12,500.00** for 5 new dwellings may be provided at the Board's discretion.
17. §22-716 – Monuments shall be provided at the following locations:
 - a. At all proposed lot corners, including changes in direction of boundary for Lot 4 which exceeds 2 acres.
 - b. At the beginning and end of all easements, including changes in direction of easements.
18. §22-718 – We defer to the North Penn Water Authority (NPWA) for review of the plans regarding the water connection from the existing main on Schoolhouse Road.

19. §22-720 – A Sewage Facilities Planning Module shall be approved by the Township, Authority, and PADEP prior to final plan approval by the Township. The Sewage Planning Module Application Mailer shall be submitted to the Township and a copy of the approved sewer agreement, shall be provided to the Township and our office prior to plan recording.
20. §22-720 – We defer to the Chalfont-New Britain Township Joint Sewer Authority (CNBJSA) for review of the plans with respect to the connection to the sewer system in Schoolhouse Road.

D. Stormwater Management Comments

1. §22-712.4.G. – All basin outlet pipes shall be watertight reinforced concrete having "O-Ring" joints. The 30" RCP outlet pipe from the basin shall be revised to specify "O-Ring" joints.
2. §22-712.4.L. – The outlet control structure shall be a Type "M" inlet grate and box. The inlet grate shall be at least six inches below the emergency spillway elevation. The Plan notes an emergency spillway elevation of 329.65 and an outlet structure grate elevation of 329.50.
3. §22-712.5.H. – A minimum of 1 foot of freeboard shall be provided between the 100-year water surface elevation and the top of inlet grate. The stormwater report notes a 100-year water surface elevation of 329.00 which is the same as the grate elevations of Inlets CB-1 and CB-2. This may result in ponding at these locations. The grading and inlet structures shall be revised to direct stormwater to these inlets.
4. §26-123 – The proposed design utilizes the Managed Release Concept (MRC) developed by PADEP to meet the volume control requirement which is permitted for situations where infiltration is infeasible. We note that the proposed managed release concept is subject to PADEP approval. However, the following issues related to the design of the MRC basins should be addressed:
 - a. The PADEP guidance for MRC basins states that a composite Curve Number is not adequate for the modeling of the 1.2 inch/2-hour storm due to the large error associated with averaging of initial abstractions for storms less than or equal to the 2-year/24-hour storm event. Curve numbers must be separate for this analysis. The stormwater report uses a weighted curve number for the flows to the MRC Basin. Separate hydrographs for the pervious and impervious flows to the basin should be provided to verify they meet the release rate requirement.
 - b. The proposed bottom of the MRC basin is approximately 6 feet below existing grade. The Soils Table indicates the soils in the basin provide 6-8 inches from the high-water table and 60 inches to bedrock, indicating that both will be encountered when installing the basin. The guidance for the MRC specifies an additional 1-foot minimum soil media below the underdrain where the in-situ soils are unsuitable due to the water table and/or bedrock.
5. §26-123.2.C.(5)(b) – The stormwater report shall be revised to include infiltration testing results. The use of the MRC is only permitted when infiltration rates do not meet the ¼ inch per hour minimum.
6. §26-124.C – Onsite drainage facilities shall be designed to safely convey offsite flows through the development site. Based on the existing contours shown on the Post Construction Stormwater Management Plan, it appears the offsite drainage area to the basin may extend further than the boundary shown on the plan. The boundary shall be verified and revised accordingly.
7. §26-125.9 – The following comments related to the modeling of the design in the stormwater management report shall be addressed:
 - a. Watershed PR-1 includes 0.1 acres of future impervious, indicating that the future impervious from three lots will be directed towards the basin. It appears that only future impervious for Lots 2 and 5 would be conveyed to the basin. The runoff coefficient calculations shall be revised to include the future impervious for Lots 2 and 5 in Watershed PR-1 and the future impervious for the remaining lots in Watershed PR-2.

- b. Watershed PR-1 includes the entire Lot 4 dwelling. It appears the rear of this dwelling will drain to the swale that bypasses the basin. The locations of the roof drains shall be clearly shown, and the drainage area revised as necessary.
- c. Time of concentration calculations shall be provided to verify the times used in the report.
8. §26-132 – The following discrepancies with the stormwater management design and plans shall be addressed:
 - a. The Sediment Trap Temporary Riser detail and the Basin #1 Outlet Structure Detail shall be coordinated and revised as necessary to clarify how the temporary riser will be connected to the outlet structure or outlet pipe.
 - b. Inlet CB-1 has a 24" HDPE connection at the narrow side of the box. The design shall be revised to accommodate the pipe within the structure.
 - c. A cleanout shall be provided at the end and 90-degree bend of the MRC underdrain.
 - d. The Basin Berm Construction Notes shall include a note specifying that the basin outlet pipe be backfilled with the same clay soils used to construct the berm.
 - e. The MRC Stormwater Facility Section states that the Planting Soil Mix shall be 60% topsoil and 40% compost while the Underdrain Detail specifies 70% topsoil and 30% compost. The composition of the soil mix shall be clarified.
9. §26-164.1 – The Applicant shall sign an Operation and Maintenance (O&M) and Easement agreement with the municipality covering all stormwater, storm sewer facilities and BMPs that are to be privately owned. The O&M agreement shall be transferred with transfer of ownership and shall be prepared by the Township Solicitor.
10. §22-712.13.D – The Township shall require payment of a fee in order to maintain the stormwater management facilities. The fee shall apply to all storm sewers located in public rights-of-way or any easement owned by the Township. The fee is based on \$2.50 per linear footage of storm sewer within the right of way or easement.
11. Township Resolution #2022-03 – The Applicant will be required to pay a fee for the proposed onsite BMP to provide a financial guarantee for the timely installation, proper construction, and continued maintenance by the owner of the subject property. The fee shall be 5% of the total construction cost of the proposed BMP. The Applicant's professional shall submit a cost estimate once the design is finalized.

E. Landscape Comments

1. §22-713.6.A – The location, dimensions and spacing of required plantings should be adequate for their proper growth and maintenance. We note that Note 14 of Sheet 5 indicates the Applicant will meet with the Township Engineer after the improvements are constructed to determine the final locations of the required landscaping depending on existing vegetation, space, and canopy conditions. We offer the following comments relative to the locations of the proposed plantings:
 - a. It appears that existing overhead utilities run along a portion of Schoolhouse Road and the southeastern property line where shade trees and evergreens are proposed. Smaller tree species shall be utilized in these locations or planting locations adjusted adequate distances from the overhead lines to prevent conflicts. Acceptable substitutions from the Township's Required Plant Material List for shade trees is 2:1 for evergreens (6-ft min. height), 2:1 for flowering/ornamental trees (8-ft min. height and 1-1/2-inch min. caliper), and 5:1 for shrubs (30-nch min. height).
 - b. Ten feet separation shall be provided between the proposed shade tree (*Quercus bicolor* – Swamp White Oak) and the basin underdrain and the underdrain shown on sheet 16.

Considering the extent of the required plan revisions identified in this letter, we may have additional comments relating to compliance with the Township Ordinances upon resubmission by the Applicant and upon review of the final plan requirements. To help expedite the review process of the resubmission of the plan, the Applicant shall submit a response letter which addresses each of the above comments. Changes that have been made to the application that are unrelated to the review comments shall also be identified in the response letter.

If you have any questions regarding the above, please contact this office.

Sincerely,



Janene Marchand, P.E.
Gilmore & Associates, Inc.
Township Engineers

JM/tw

Attachments

cc: Michael Walsh, Assistant Manager
Ryan Gehman, Assistant Planning and Zoning Officer
Randy Teschner, Code Enforcement/Fire Marshal
Ryan Cressman, Public Works Superintendent
Jeffrey P. Garton, Township Solicitor
David Brandschain, 84 Schoolhouse Road, LP
Robert Cunningham, Holmes Cunningham, LLC.
Craig D. Kennard, P.E., E.V.P., Gilmore & Associates, Inc.



The Almshouse Neshaminy Manor Center 1260 Almshouse Road
Doylestown, Pennsylvania 18901 215.345.3400 FAX 215.345.3886
E-mail: planningcommission@buckscounty.org

PLANNING COMMISSION:
Tom Tosti, *Chairman*
Richard Donovan, *Vice Chairman*
Thomas J. Jennings, Esq., *Secretary*

James J. Keenan
James E. Miller, Jr.
David R. Nyman
Judith J. Reiss
Edward J. Tokmajian
Walter S. Wydro

Evan J. Stone
Executive Director

MEMORANDUM

To: New Britain Township Board of Supervisors
New Britain Township Planning Commission

From: Staff of the Bucks County Planning Commission

Date: June 23, 2022

Subject: BCPC #12755
Preliminary Plan of Subdivision and Land Development for 84 Schoolhouse Road
TMP #26-5-3
Applicant: 84 Schoolhouse Road, LP
Owner: Same
Plan Dated: May 24, 2022
Date Received: May 27, 2022

This proposal has been reviewed by the Bucks County Planning Commission professional staff, which prepared the following comments in accordance with the Pennsylvania Municipalities Planning Code (Section 502).

GENERAL INFORMATION

Proposal: Subdivide a 9.14-acre parcel into five single-family detached residential lots ranging from 43,560 square feet to 176,424 square feet. A 41,846-square-foot stormwater easement is shown on Lot 4. All five lots will be served by public water and sewerage.

Location: Along the southwest side of Schoolhouse Road, opposite its intersection with Boulder Drive.

Zoning: The RR Rural Residential District permits Use B1 Single-family detached dwellings, on lots of at least 43,560 square feet (1 acre) in size with minimum lot widths of 150 feet. Minimum front, side, and rear yard requirements are 50, 25, and 75 feet, respectively.

Present Use: Residential

COMMENTS

1. **Requested waivers**—The waiver memo attached to this submission indicates that the applicant is requesting waivers from the following subdivision and land development ordinance (SALDO) requirements:



Sections 22-403 & 404

to allow a combined preliminary and final subdivision and land development submission for this proposal; the applicant indicates that all information required for final plans is included on the plan submission

Section 22-502.1.H.

from providing a lighting plan; the applicant indicates that no pole lighting is proposed for this small-scale residential project with five new building lots

Section 22-705.3.C.

from providing cartway widening along Schoolhouse Road; the applicant indicates the existing cartway width is adequate for existing traffic volume, the proposed development won't create a significant amount of traffic, and widening would disrupt the existing drainage swale along the roadway

Section 22-705.3.E.

from providing a proposed private street that meets design specifications of a local street; the applicant indicates the proposed development is intended to provide the aesthetic of a rural neighborhood with only five new lots, the proposed road will be private and maintained by the homeowner's association, and the proposed cartway width provides adequate access to the homes and for emergency vehicles

Section 22-705-3.G.

from providing mill and overlay of the entire width of the roadway at a depth of 1½ inches; the applicant indicates there are minimal improvements within the existing cartway, no widening is proposed as part of this project, and the existing cartway appears to be in good condition

Section 22-705.8.C.

from providing cul-de-sac streets with a left-side turnaround configuration at the closed end and minimum paving radius of 50 feet; the applicant indicates a hammerhead turnaround is proposed with the required right-of-way width for the ability to install a cul-de-sac and the proposed turnaround provides adequate space for emergency vehicles

Section 22-706

from providing curbs and sidewalks along Schoolhouse Road and the proposed private road; the applicant indicates a 6-foot-wide asphalt pedestrian path is proposed across the site frontage and curbing exists along the property side of Schoolhouse Road

Section 22-710.4.

from providing an emergency access for subdivisions with a single access; the applicant indicates the feasibility of providing an emergency access is limited because the lot being subdivided is surrounded by an urbanized area, and an emergency access will generate additional impervious areas and woodlands disturbances

Section 22-714.3.A.

from providing streetlights at any location where improvements are shown; the applicant indicates the proposed development is intended to provide the aesthetic of a rural neighborhood with only five new lots, no internal pedestrian walkways are proposed that require illumination, and individual residential scale post lights will illuminate individual driveways

The final plan should note all granted waivers.

2. **Conservation easement**—Section 27-502.b.3. of the zoning ordinance requires that all unimpacted natural resource protection lands be protected by a conservation easement. The plan does not indicate the required conservation easement for the unimpacted woodlands on the site.
3. **Meadow Road connectivity**—Section 22-705.8.A. of the SALDO states that cul-de-sac streets within the township are to be discouraged and connectivity with existing public streets is required where determined feasible by the township. Further, Sections 22-705.B. and C. of the SALDO state, in relevant part, that streets should be designed to provide for continuation of existing streets and for proper access to adjoining undeveloped tracts. Per the above SALDO provisions, the applicant should be encouraged to pursue connectivity options to a neighboring street, rather than pursuing a cul-de-sac street layout. A connection to Meadow Road, which abuts the site to the southeast, may be a preferred option.
4. **Asphalt trail width**—Section 22-707-1.B.(2) of the SALDO specifies that the minimum width of a pedestrian walkway shall be six feet, while the minimum width of a recreational trail that is anticipated to have bicycle traffic shall be eight feet. The site's proximity to commercial locations along West Butler Avenue to the southeast leaves open the possibility that bicycle traffic may exist in this area. We recommend the applicant widen the proposed asphalt trail to at least eight feet in width.
5. **Park and recreation land**—Section 22-715.2.C.(1) of the SALDO requires that 2,500 square feet of land per new dwelling unit be dedicated to the township for park and recreation uses in all subdivisions. The plan does not indicate whether this provision has been satisfied either through direct dedication or fee-in-lieu.
6. **Landscaping**
 - a. **Registered landscape architect**—We recommend that the landscape plan be prepared, signed, and sealed by a registered landscape architect licensed in the state of Pennsylvania.
 - b. **Oak trees**—The landscape plan (Sheet 16) proposes swamp white, willow, and red oak trees at various locations on the site. Oak trees, specifically red oak, while typically a good native tree for plantings, are subject to bacterial leaf scorch which is an infectious chronic disease that is affecting several species of oaks in southeastern Pennsylvania.¹ Of the types of oak trees affected by leaf scorch, willow and white oaks are somewhat less susceptible to the disease. Municipal officials should monitor planting plans to ensure that oaks are not overplanted, to avoid the risk of infection and eventual loss of these trees.
7. **Stormwater management maintenance**—The applicant proposes a stormwater conveyance system, a vegetated stormwater basin (managed release concept), and tree plantings as a part of its stormwater BMPs on the site. We recommend the applicant provide a manual to the township and to the HOA detailing all required maintenance for the stormwater management facilities. This will help to ensure the long-term maintenance and performance of the stormwater facilities and make the HOA aware of its responsibilities for regular maintenance and repair of the facilities.
8. **Sewage facilities**—The applicant must submit a Sewage Facilities Planning Module Application Mailer to the Pennsylvania Department of Environmental Protection (PaDEP) to determine if an Act 537 Planning Module must be submitted for this proposed land development.

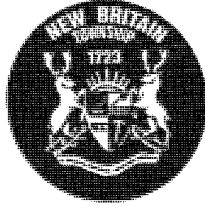
¹ <https://extension.psu.edu/bacterial-leaf-scorch>

This review will be included in the Bucks County Planning Commission board materials for the July 6, 2022, meeting. It is not necessary for you to attend this meeting, but you are welcome to do so and to offer comments on the proposal to the BCPC board and staff.

In order that we may be more aware of your concerns, please send us a copy of all municipal decisions sent to this applicant.

JWS:emh

cc: David Perlman, 84 Schoolhouse Road, LP (via email)
Thomas Borghetti, PE, Holmes Cunningham LLC (via email)
Janene Marchand, PE, Gilmore & Associates, Township Engineer (via email)
Matt West, Township Manager (via email)



Township of New Britain

Office of Fire Marshal

June 10, 2022

RE: Fire Marshal review of 84 Schoolhouse Road Preliminary/final subdivision
Review By: Randal J. Teschner Fire Marshal

The following is a list of items to be addressed:

1. Move hydrant from cul-de-sac to between lots one and three



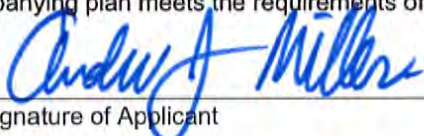
NEW BRITAIN TOWNSHIP

207 Park Avenue • Chalfont, PA 18914 • Telephone: (215) 822-1391

SUBDIVISION & LAND DEVELOPMENT APPLICATION

1.	Date of Application:	<u>06/10/2022</u>	TOWNSHIP USE ONLY	
2.	Date of Plan or Revision:	<u>06/10/2022</u>	Date Received:	_____
3.	Application for:	<u>Prelim/Final LD</u>	Payment:	_____
4.	Name of Subdivision or Land Development:	<u>101 Independence Lane</u>	Check #:	_____
5.	Location:	<u>141 Independence Lane</u>	Receipt #:	_____
6.	Tax Map Parcel #: 26- <u>001-100-011</u>	Total Acreage: Gross <u>7.071</u>	Escrow Acc. #:	_____
7.	Net Buildable Site Area (from Section 2401): <u>5.72</u>	Base Site Area <u>5.76</u>		
8.	Zoning Requirements:			
	Zoning District <u>IO</u>	Minimum Lot Size <u>3 Ac</u>	Maximum Density	<u>N/A</u>
	Front Yard <u>50 ft</u>	Side Yard <u>25 ft</u>	Rear Yard	<u>50 ft</u>
9.	Number of Lots or Dwelling Units:	<u>1</u>		
10.	Equitable Owner of Record of Land:	<u>101 Independence Lane Associates, LLC</u>		
	Address:	<u>One Tower Bridge, 100 Front Street, Suite 560</u>		
		<u>West Conshohocken, PA 19428</u>		
	Phone: <u>717-435-0911</u>	E-mail: <u>amiller@catacomm.com</u>		
11.	Applicant:	<u>101 Independence Lane Associates, LLC</u>		
	Address:	<u>One Tower Bridge, 100 Front Street, Suite 560</u>		
		<u>West Conshohocken, PA 19428</u>		
	Phone: <u>717-435-0911</u>	E-mail: <u>amiller@catacomm.com</u>		
12.	Registered Engineer or Surveyor:	<u>RETTEW Associates</u>		
	Address:	<u>3020 Columbia Avenue</u>		
		<u>Lancaster PA 17603</u>		
	Phone: <u>484-798-9782</u>	E-mail: <u>kim.fasnacht@rettew.com</u>		
13.	Type of Water & Sewer:	<input checked="" type="checkbox"/> Public Water <input type="checkbox"/> Private Water		
		<input checked="" type="checkbox"/> Public Sewer <input type="checkbox"/> Private Sewer		
14.	Proposed Use:	<u>Warehouse</u>		

This is to certify that I have read Article V of the New Britain Township Subdivision and Land Development Ordinance and that the accompanying plan meets the requirements of that Article to the best of my knowledge.


Signature of Applicant


Signature of Registered Engineer or Surveyor

June 9, 2022

Mr. Matthew West, Township Manager
New Britain Township
207 Park Avenue
Chalfont PA 18914

Engineers

Environmental
Consultants

Surveyors

Landscape
Architects

Safety
Consultants

RE: 141 Independence Lane
Preliminary/Final Land Development Plan
Waivers/Modifications/Deferrals
New Britain Township, Bucks County, PA
RETTEW Project No. 111902019

Dear Mr. West:

Please find herein a listing of waivers and deferrals which are requested from the New Britain Township Subdivision and Land Development Ordinance:

1. Section 22-502.1.D.10.a – Contour lines measured at vertical intervals of two feet, as determined by an on-site field survey, not interpretation of United States Geologic Service (USGS) Maps. The plans shall indicate the benchmark elevation and the location and shall be based on the Chalfont-New Britain Township Joint Sewage Authority vertical datum.
 - a. Relief requested: Waiver from the requirement to use the Chalfont-New Britain Township Joint Sewage Authority Vertical datum.
 - b. Justification: The benchmark elevation is based on NAVD88, which is industry standard.
2. Section 22-705.3.G – Where a land development abuts or contains an existing street, the applicant shall be required to mill and overlay the entire width of the roadway a depth of 1 ½ inches.
 - a. Relief requested: Waiver from the requirement to mill and overlay the entire width of the roadway to a depth of 1 ½ inches.
 - b. Justification: The abutting streets appear to be in good condition and do not warrant mill and overlay.
3. Section 22-706.1.B. & 2.B - Where a proposed subdivision or land development fronts on a Township Street, the applicant shall install curbing, sidewalk, and pavement widening along the entire length of the proposed subdivision or land development.
 - a. Relief requested: Waiver from the requirement to install sidewalk along the public right-of-way.
 - b. Justification: The adjoining properties along Independence Lane are not developed with sidewalk that would create a contiguous pathway at this time.
4. Section 22-505. Community Impact Assessment Report.
 - a. Relief requested: Waiver from providing a Community Impact Assessment Report
 - b. Justification: The proposed development is located in the only remaining developable lot within an existing Industrial Park. As this parcel was already planned to be Industrial and



went through the subdivision process when the Industrial Park was initially developed, we are requesting a waiver from providing the Community Impact Assessment Report.

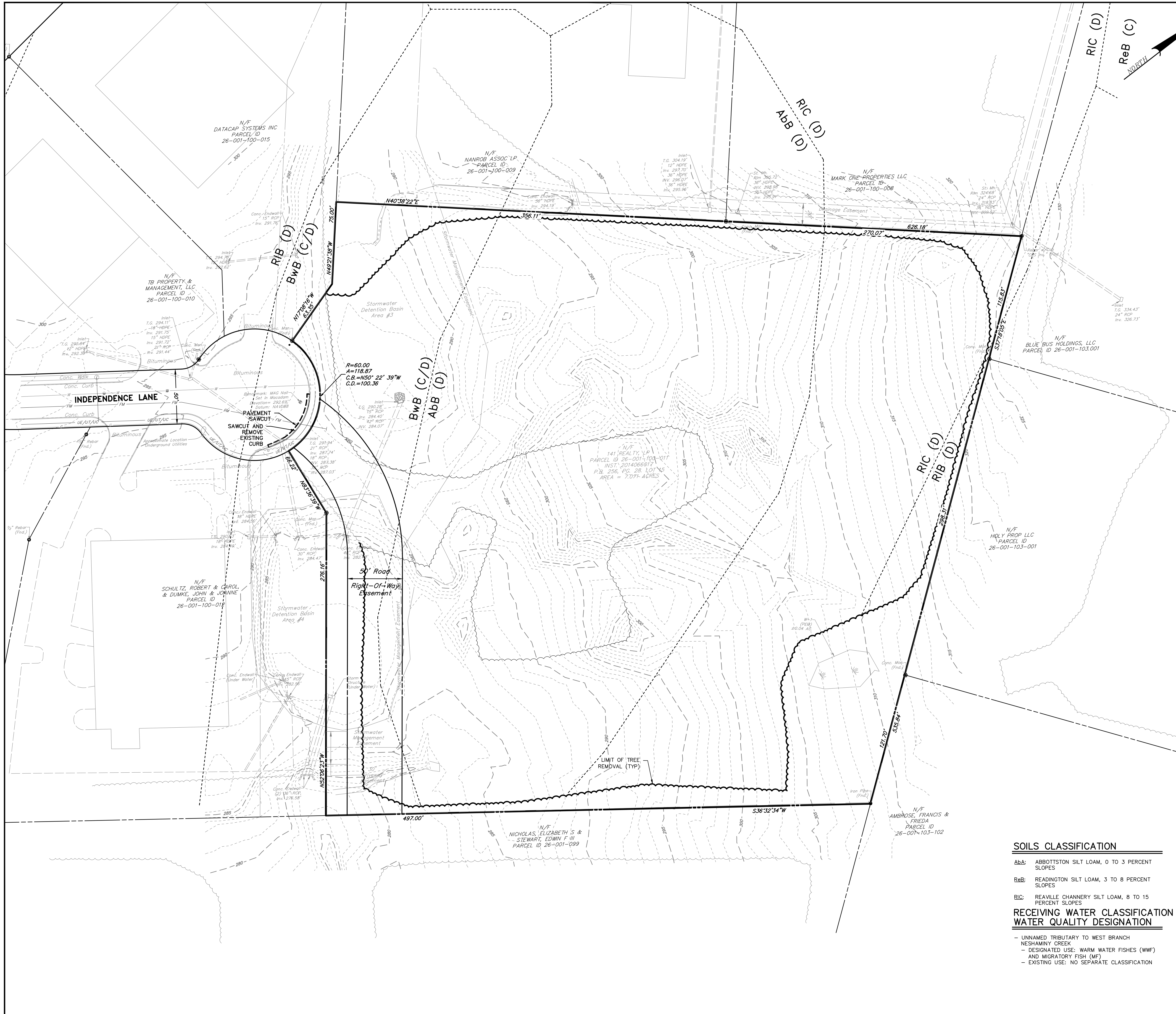
Should you have any questions or need any additional information, please do not hesitate to contact me at kim.fasnacht@rettew.com or on my cell phone at (484)798-9782

Sincerely,

A handwritten signature in black ink that reads "Kimberly M Fasnacht". The signature is written in a cursive style with a small star above the letter 'i' in "Kimberly".

Kim Fasnacht, PMP, LEED AP
Project Manager

\\EgnyteDrive\rettew\Shared\Projects\11190\111902019\LD\Submittals\2022-06-10 Initial LD\LTR-New Britain Twp Waiver.docx



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	BENCHMARK
	CONCRETE MONUMENT
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	MINOR CONTOUR (1')
	GAS CONTOUR (2')
	EASEMENT LINE
	RAILROAD TRACKS
	SOIL TYPE BOUNDARY LINE
	SOIL TYPE DESIGNATION

PA ONE CALL UNDERGROUND UTILITY PROTECTION ACT

PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF 1974, AS AMENDED BY ACT 187 OF 1996, ACT 181 OF 2006, ACT 160 OF 2016 AND ACT 50 OF 2018 OF THE PENNSYLVANIA STATE LEGISLATURE, RETIEW ASSOCIATES, INC. HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS REQUIRING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) SHOWN ON THE DRAWINGS:

- PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, RETIEW ASSOCIATES, INC. REQUESTED FROM EACH FACILITY OWNER 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 TEN (10) NOR MORE THAN NINETY (90) BUSINESS DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED.
- PURSUANT TO SECTION 4, CLAUSE (5) OF SAID ACT, RETIEW ASSOCIATES, INC. HAS MET THEIR OBLIGATIONS OF CLAUSE (2) BY CALLING THE PENNSYLVANIA ONE CALL SYSTEM SERVING THE LOCATION WHERE THE WORK IS TO BE PERFORMED, AND SHOWING THE ASSOCIATED SERIAL NUMBER(S) ON THIS/THESE DRAWING(S).
- PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, RETIEW ASSOCIATES, INC. HAS SHOWN UPON THIS/THESE DRAWING(S) THE POSITION AND TYPE OF EACH FACILITY, AS DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY CLAUSE (2).
- PURSUANT TO SECTION 4, CLAUSE (5) OF SAID ACT, RETIEW ASSOCIATES, INC. HAS SHOWN UPON THIS/THESE DRAWING(S) THE TOLL-FREE NUMBER FOR THE ONE CALL SYSTEM AND THE SERIAL NUMBER(S) FOR THE ASSOCIATED ONE CALL SYSTEM NOTIFICATION(S).

ADDITIONALLY, RETIEW ASSOCIATES, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO SAID REQUEST, AND AS REFLECTED ON THIS/THESE DRAWING(S), IS CORRECT OR ACCURATE. INFORMATION REFLECTED ON THIS/THESE DRAWING(S) IS SHOWN AS REQUIRED BY SAID ACT NO. 160 OF 2016, AND AS PROVIDED BY THE FACILITY OWNER PURSUANT TO SECTION 2, CLAUSE (4) OF SAID ACT.

DATE: 12/13/2021

ONE CALL SYSTEM SERIAL NUMBER: 20213472396

PA1 SYSTEM, INC.

CALL BEFORE YOU DIG!

1-800-242-1776

LIST OF UTILITIES

WINDSTREAM 1450 CENTER POINT ROAD HAWATHA, IA 52233 CONTACT: LOCATE DESK PERSONNEL EMAIL: locate.desk@windstream.com	NEW BRITAIN TOWNSHIP 207 PARK AVENUE CHALFONT, PA 18914 CONTACT: RYAN CRESSMAN EMAIL: RCRESSMAN@NEWBRITAIN.TOWNSHIP.PA.GOV
CHALFONT NEW BRITAIN TWP JT SEWAGE AUTH 1645 UPPER STATE ROAD DOYLESTOWN, PA 18901 CONTACT: JOHN SCHMIDT EMAIL: jschmidt@cnbsa.org	COMCAST 55 INDUSTRIAL DRIVE MYRTLE, PA 18937 CONTACT: KATHIE BROWN EMAIL: kbrown@comcast.net
PECO ENERGY C/O/ USIC 450 S HENDERSON ROAD SUITE B KING OF PRUSSIA, PA 19406 CONTACT: NIKKIA SIMPKINS EMAIL: NIKKIASIMPKINS@USICLLC.COM	TEXAS EASTERN/SPECTRA SUITE 400 2601 MARKET PLACE HARRISBURG, PA 17110 CONTACT: RYAN LUMBATIS EMAIL: Ryan.Lumbatis@entbridge.com
NORTH PENN WATER AUTHORITY 300 FORTY FOOT ROAD LANSDALE, PA 19446 CONTACT: STEVE FRETZ EMAIL: sfretz@npsa.org	VERIZON PENNSYLVANIA LLC 1050 VIRGINIA DR FORT WASHINGTON, PA 19034 CONTACT: DARLENE LEPPARD JOHNSON

SOILS CLASSIFICATION

AbA: ABBOTTSTON SILT LOAM, 0 TO 3 PERCENT SLOPES

ReB: READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES

RIC: REAVILLE CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES

RECEIVING WATER CLASSIFICATION WATER QUALITY DESIGNATION

- UNNAMED TRIBUTARY TO WEST BRANCH NESHAMINY CREEK
- DESIGNATED USE: WARM WATER FISHES (WFF) AND MIGRATORY FISH (MF)
- EXISTING USE: NO SEPARATE CLASSIFICATION

FOR RETIEW ASSOCIATES BY:		NO.		DATE	
MANAGER: KIM M. FASNAUGHT		CHKD BY: KMF		MUB	
DESIGN BY: KMF		SURV. CHIEF: JAM		CHKD BY: JAM	
CLIENT: 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428		DRAWING REFERENCE:		SCALE: 1"=40'	
PROJECT: 11802019-SV-BASE		DRAWN BY: JMS		DATE: 6/9/2022	
PROJECT: 11802019-SV-1000		DATE: 6/9/2022		SHEET NO. 2 OF 20	
PROJECT: 11802019-SV-1001		DATE: 6/9/2022		DWG. NO. 111902019	
PROJECT: 11802019-SV-1002		DATE: 6/9/2022		NOT FOR CONSTRUCTION/NOT FOR BIDDING	
PROJECT: 11802019-SV-1003		DATE: 6/9/2022		BUCKS COUNTY, PA	
PROJECT: 11802019-SV-1004		DATE: 6/9/2022		NEW BRITAIN TOWNSHIP	
PROJECT: 11802019-SV-1005		DATE: 6/9/2022		EXISTING CONDITIONS/DEMOLITION PLAN	
PROJECT: 11802019-SV-1006		DATE: 6/9/2022		PRELIMINARY/FINAL LAND DEVELOPMENT PLAN	
PROJECT: 11802019-SV-1007		DATE: 6/9/2022		101 INDEPENDENCE LANE	
PROJECT: 11802019-SV-1008		DATE: 6/9/2022		REVIEW ASSOCIATES, INC. Lancaster, PA 17603	
PROJECT: 11802019-SV-1009		DATE: 6/9/2022		Phone: (610) 738-8995	
PROJECT: 11802019-SV-1010		DATE: 6/9/2022		Email: www.retiew.com	
PROJECT: 11802019-SV-1011		DATE: 6/9/2022		Engineers • Planners • Surveyors • Landscape Architects	
PROJECT: 11802019-SV-1012		DATE: 6/9/2022		Landscape Architects	



LEGEND

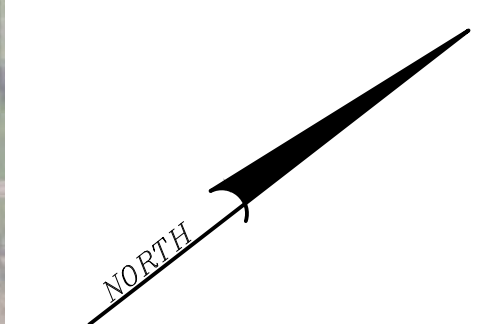
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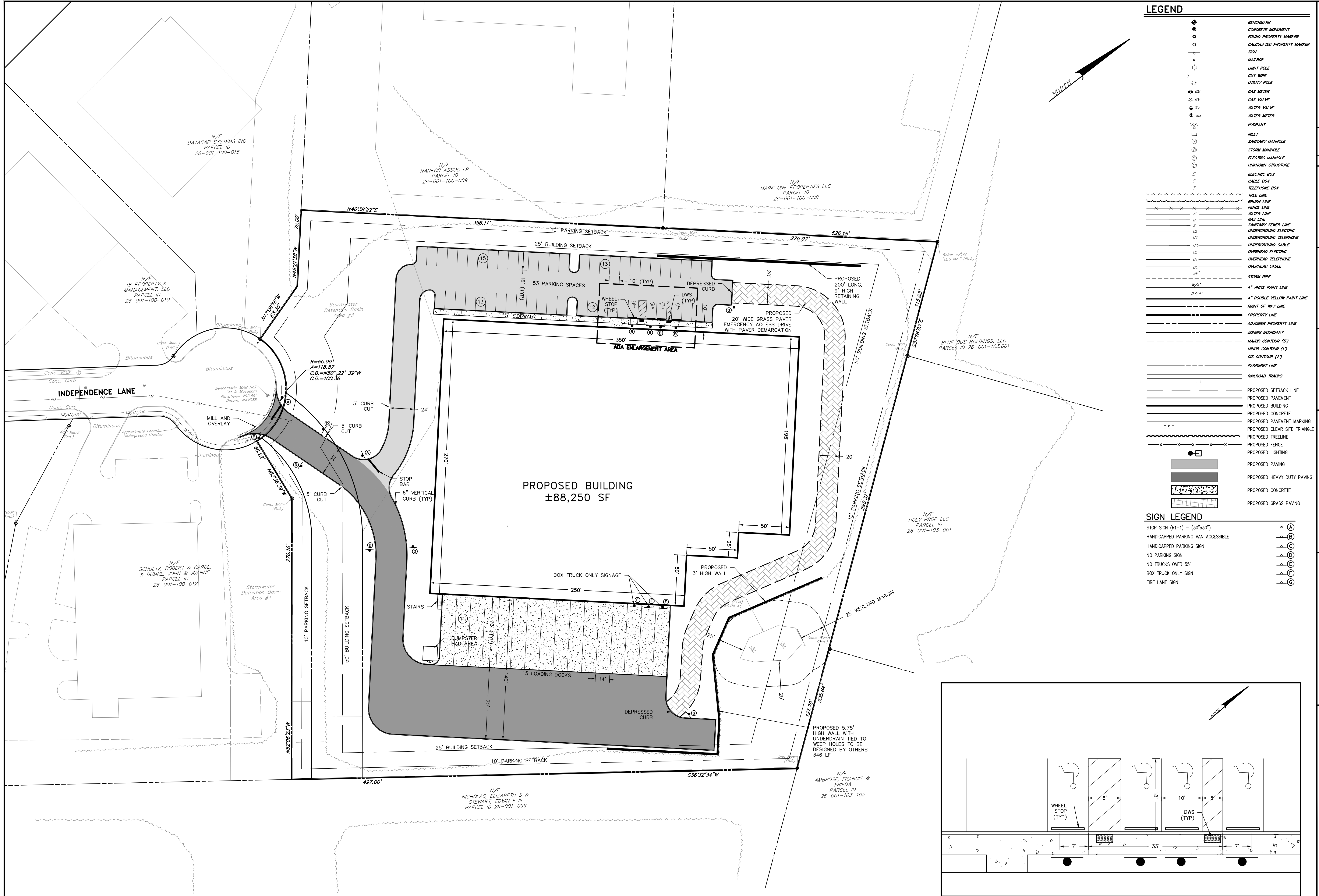
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 - EXISTING USE: NO SEPARATE CLASSIFICATION



FOR RETTEW ASSOCIATES BY:		NO.		DATE		REVISION	
MANAGER: KIM M. FASNACHT		CHKD BY: KMF		NO.		DATE	
DESIGN BY: MJB		SURV. CHIEF: FREDRICK NO. DATA COLLECTOR: JAM		NO.		DATE	
DRAWN BY: JMS		DRAUGHTING REFERENCE: C:\CAD\System\Software\Autodesk\Temp\AutoCAD\Temp\AutoCAD\19136\111902019-Plan.dwg		NO.		DATE	
CLIENT: 101 INDEPENDENCE LANE ASSOCIATES, LLC		SCALE: 1"=200'		NO.		DATE	
ONE TOWER BRIDGE		SCALE: 1"=200'		NO.		DATE	
100 FRONT STREET, SUITE 560		SCALE: 1"=200'		NO.		DATE	
WEST CONSHOHOCKEN, PA 19428		SCALE: 1"=200'		NO.		DATE	
		SCALE: 1"=200'		NO.		DATE	
RETTEW Associates, Inc. Lancaster, PA 17603 Phone: (610) 738-8995 Email: rettew@rettew.com Website: www.rettew.com		SCALE: 1"=200'		NO.		DATE	
Engineers • Planners • Surveyors • Landscape Architects Environmental Scientists		SCALE: 1"=200'		NO.		DATE	
AERIAL MAP PRELIMINARY/FINAL LAND DEVELOPMENT PLAN 101 INDEPENDENCE LANE NEW BRITAIN TOWNSHIP BUCKS COUNTY, PA		SCALE: 1"=200'		NO.		DATE	
DATE: 6/9/2022		SCALE: 1"=200'		NO.		DATE	
SHEET NO. 3 OF 20		SCALE: 1"=200'		NO.		DATE	
DWG. NO. 111902019		SCALE: 1"=200'		NO.		DATE	

NOT FOR CONSTRUCTION/NOT FOR BIDDING

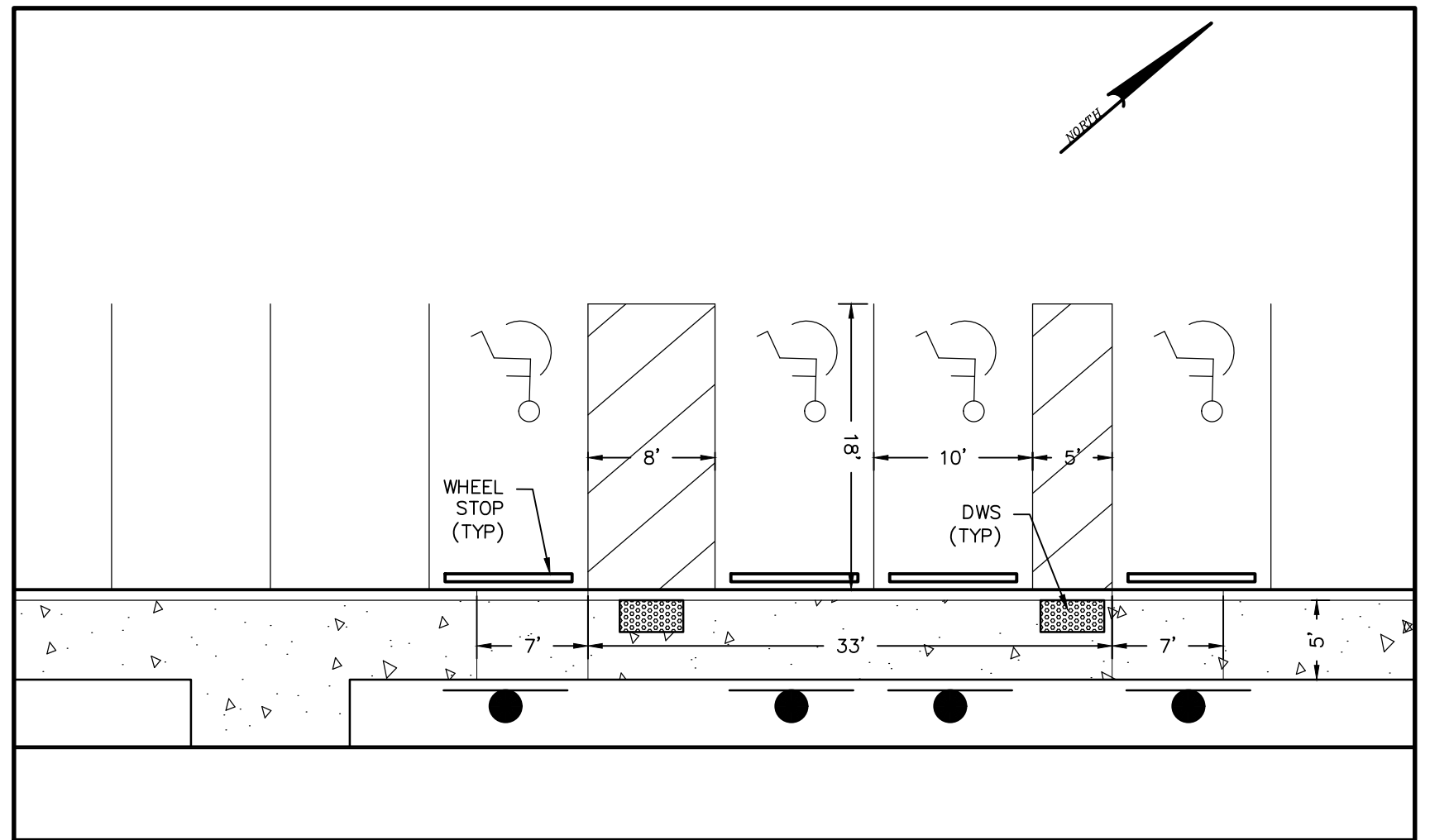


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- BENCHMARK
- CONCRETE MONUMENT
- FOUND PROPERTY MARKER
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- SM
- MAILBOX
- LIGHT POLE
- GUY WIRE
- UTILITY POLE
- GAS METER
- GAS VALVE
- WATER VALVE
- WATER METER
- HYDRANT
- INLET
- SANITARY MANHOLE
- STORM MANHOLE
- ELECTRIC MANHOLE
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- TELEPHONE BOX
- TREE LINE
- BRUSH LINE
- FENCE LINE
- WATER LINE
- GAS LINE
- SANITARY SEWER LINE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- UNDERGROUND CABLE
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- RAILROAD TRACKS
- PROPOSED SETBACK LINE
- PROPOSED PAVEMENT
- PROPOSED BUILDING
- PROPOSED CONCRETE
- PROPOSED PAVEMENT MARKING
- PROPOSED CLEAR SITE TRIANGLE
- PROPOSED TREELINE
- PROPOSED FENCE
- PROPOSED LIGHTING
- PROPOSED PAVING
- PROPOSED HEAVY DUTY PAVING
- PROPOSED CONCRETE
- PROPOSED GRASS PAVING

SIGN LEGEND

- STOP SIGN (R1-1) - (30"x30")
- HANDICAPPED PARKING SIGN ACCESSIBLE
- HANDICAPPED PARKING SIGN
- NO PARKING SIGN
- NO TRUCKS OVER 55'
- BOX TRUCK ONLY SIGN
- FIRE LANE SIGN



HC INSET
SCALE 1"=10'

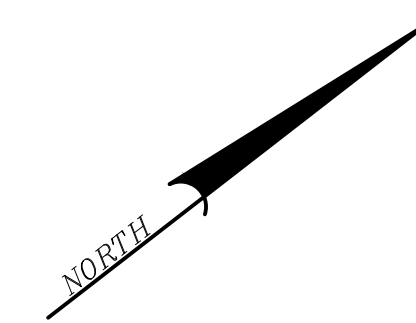
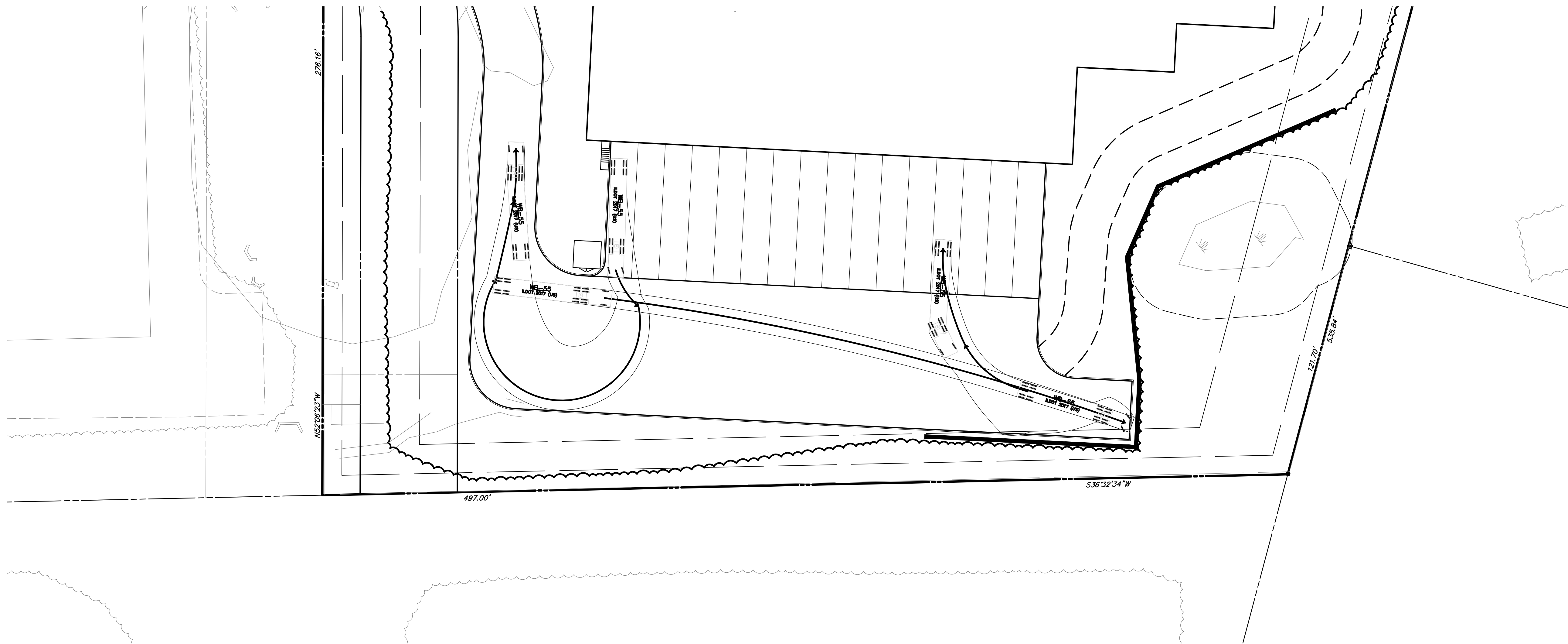
FOR REVIEW ASSOCIATES BY:				NO.	DATE
REVISED:					
MANAGER:					
DESIGN BY:					
SURV. CHIEF:					
DRAWN BY:					
DRAWING REFERENCE:					
CLIENT:					
SCALE:					
DATE:					
SHEET NO.:					
DWG. NO.:					

101 INDEPENDENCE LANE
 ASSOCIATES, LLC
 ONE TOWER BRIDGE
 100 FRONT STREET, SUITE 560
 WEST CONSHOHOCKEN, PA 19428
 TEL: 610-666-8955
 FAX: 610-666-8956
 WWW.RETTEW.COM

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN
101 INDEPENDENCE LANE
 NEW BRITAIN TOWNSHIP
 BUCKS COUNTY, PA

WB-50 TRUCK TURNING MOVEMENTS

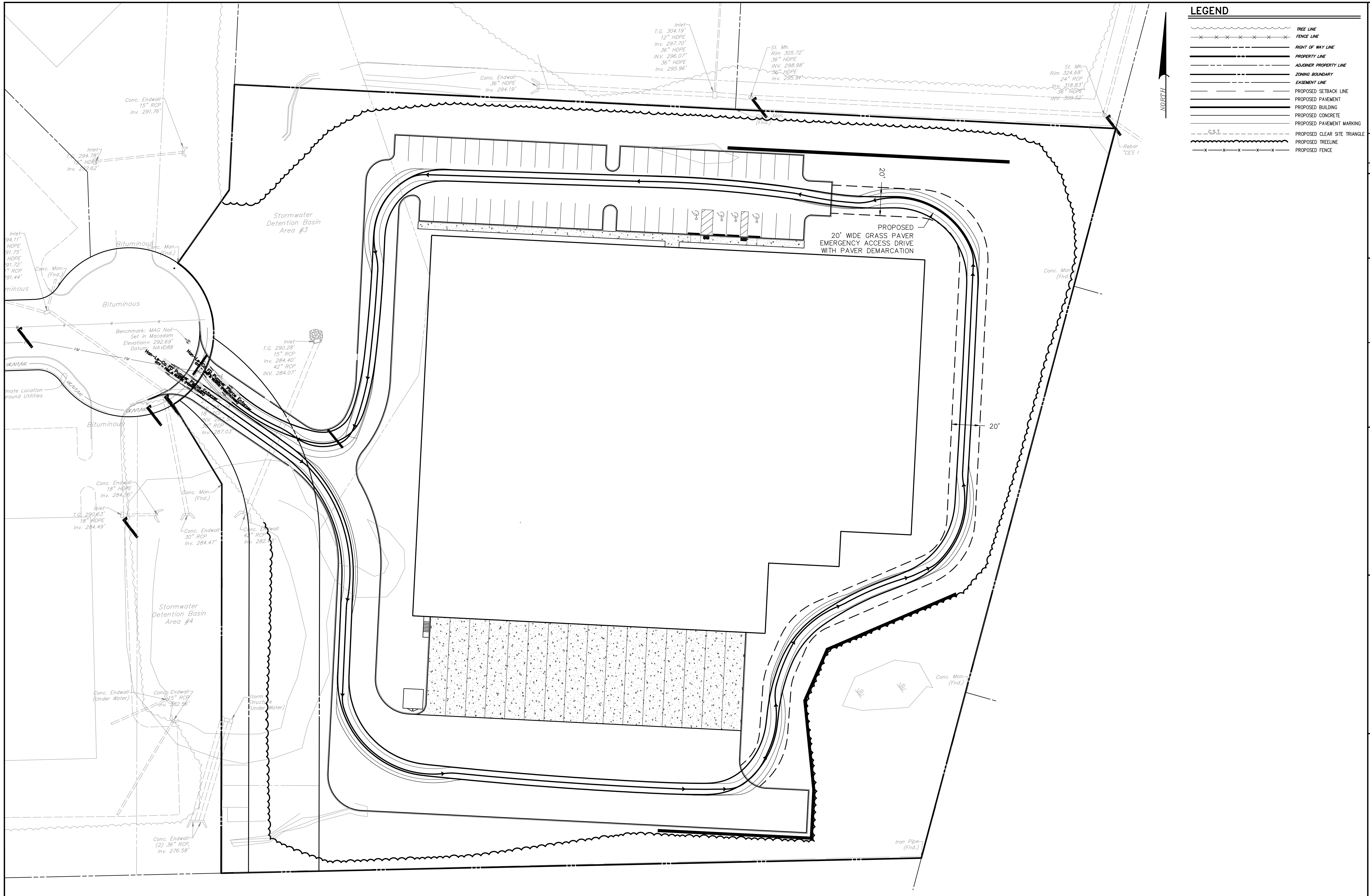
SCALE - 1"=30'



LEGEND

	TREE LINE
	FENCE LINE
	RIGHT OF WAY LINE
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	ZONING BOUNDARY
	EASEMENT LINE
	PROPOSED SETBACK LINE
	PROPOSED PAVEMENT
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED PAVEMENT MARKING
	PROPOSED CLEAR SITE TRIANGLE
	PROPOSED TREELINE
	PROPOSED FENCE

<p>DATE: 6/9/2022</p> <p>SHEET NO. 5 OF 20</p> <p>DWG. NO. 111902019</p>	<p>TRUCK TURNING MOVEMENTS PRELIMINARY/FINAL LAND DEVELOPMENT PLAN</p> <p>101 INDEPENDENCE LANE</p> <p>NEW BRITAIN TOWNSHIP BUCKS COUNTY, PA</p>	<p>RETTEW Engineers • Planners • Surveyors • Landscape Architects Landscape Architects</p> <p>RETTEW Associates, Inc. • Lancaster, PA 17603 Phone: (610) 738-8395 Email: rettew@rettew.com Website: www.rettetw.com</p>	<p>CLIENT</p> <p>101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428</p> <p>SCALE 0 15' 30' 60' 90'</p>	<p>MANAGER: KIM M. FASNACHT</p> <p>DESIGN BY: KMF</p> <p>SURV. CHIEF: RELBROOK NO. DATA COLLECTOR</p> <p>DRAWN BY: JMS</p> <p>DRAWING REFERENCE: C:\ADD\System\Software\Autodesk\Temp\Temp\Autodesk\19136\111902019-Prelim_Final_LD_Plan.dwg</p>	<p>FOR RETTEW ASSOCIATES BY:</p> <p>NO. DATE</p>
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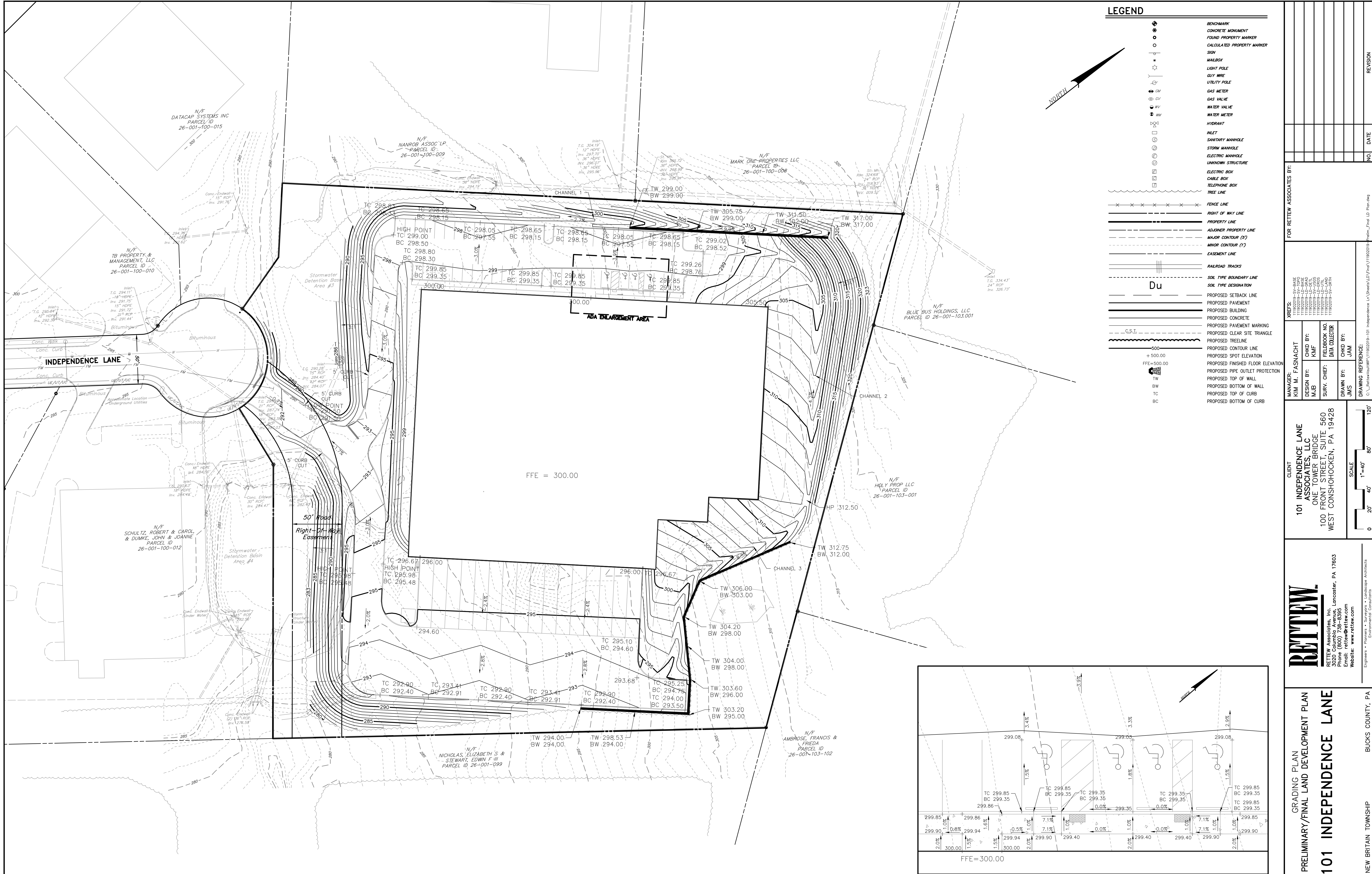


LEGEND

	TREE LINE
	FENCE LINE
	RIGHT OF WAY LINE
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	ZONING BOUNDARY
	EASEMENT LINE
	PROPOSED SETBACK LINE
	PROPOSED PAVEMENT
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED PAVEMENT MARKING
	PROPOSED CLEAR SITE TRIANGLE
	PROPOSED TREELINE
	PROPOSED FENCE

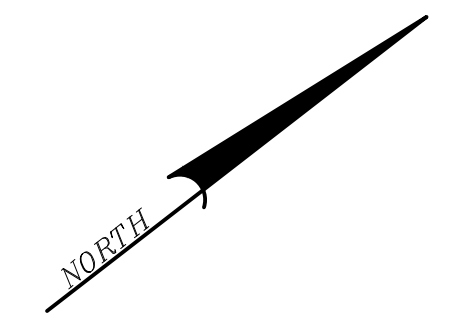
FIRE TRUCK TURNING MOVEMENTS
SCALE - 1"=30'

<p>CLIENT</p> <p>101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428</p>	<p>MANAGER: KIM M. FASNACHT</p> <p>DESIGN BY: KMF</p> <p>SURV. CHIEF: JMS</p> <p>DRAWN BY: JMS</p>	<p>CHKD BY: KMF</p> <p>FIELDBOOK NO. DATA COLLECTOR: JAM</p> <p>CHKD BY: JAM</p>	<p>FOR RETTEW ASSOCIATES BY:</p>	<p>NO.</p> <p>DATE</p>	<p>REVISION</p>
<p>101 INDEPENDENCE LANE</p> <p>ASSOCIATES, LLC</p> <p>100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428</p>					
<p>RETTEW</p> <p>RETTEW Associates, Inc. Lancaster, PA 17603 Phone: (610) 738-8995 Email: rettew@rettew.com Website: www.rettew.com</p> <p>Engineers • Planners • Surveyors • Landscape Architects Environmental Scientists</p>					
<p>FIRE TRUCK TURNING MOVEMENTS</p> <p>PRELIMINARY/FINAL LAND DEVELOPMENT PLAN</p> <p>101 INDEPENDENCE LANE</p> <p>NEW BRITAIN TOWNSHIP BUCKS COUNTY, PA</p>					
<p>DATE: 6/9/2022</p> <p>SHEET NO. 8 OF 20</p> <p>DWG. NO. 111902019</p>					

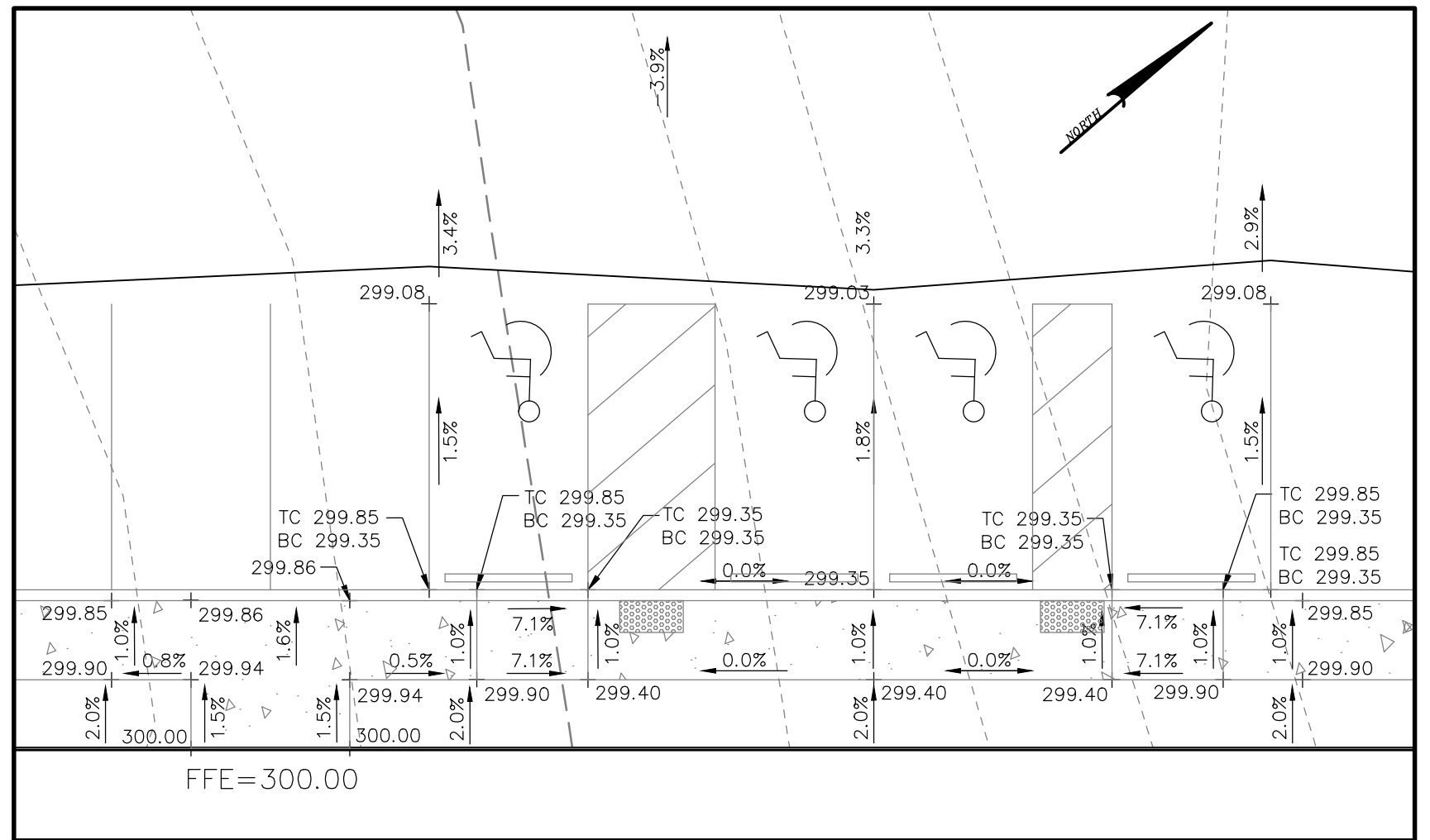


LEGEND

	BENCHMARK
	CONCRETE MONUMENT
	FOUND PROPERTY MARKER
	CALCULATED PROPERTY MARKER
	SIGN
	MAILBOX
	LIGHT POLE
	GUY WIRE
	UTILITY POLE
	GAS METER
	GAS VALVE
	WATER VALVE
	WATER METER
	HYDRANT
	INLET
	SANITARY MANHOLE
	STORM MANHOLE
	ELECTRIC MANHOLE
	UNKNOWN STRUCTURE
	ELECTRIC BOX
	CABLE BOX
	TELEPHONE BOX
	TREE LINE
	FENCE LINE
	RIGHT OF WAY LINE
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	MAJOR CONTOUR (5')
	MINOR CONTOUR (1')
	EASEMENT LINE
	RAILROAD TRACKS
	SOIL TYPE BOUNDARY LINE
	SOIL TYPE DESIGNATION
	PROPOSED SETBACK LINE
	PROPOSED PAVEMENT
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED PAVEMENT MARKING
	PROPOSED CLEAR SITE TRIANGLE
	PROPOSED TRESTLE LINE
	PROPOSED CONTOUR LINE
	PROPOSED SPOT ELEVATION
	PROPOSED FINISHED FLOOR ELEVATION
	PROPOSED PIPE OUTLET PROTECTION
	PROPOSED TOP OF WALL
	PROPOSED BOTTOM OF WALL
	PROPOSED TOP OF CURB
	PROPOSED BOTTOM OF CURB

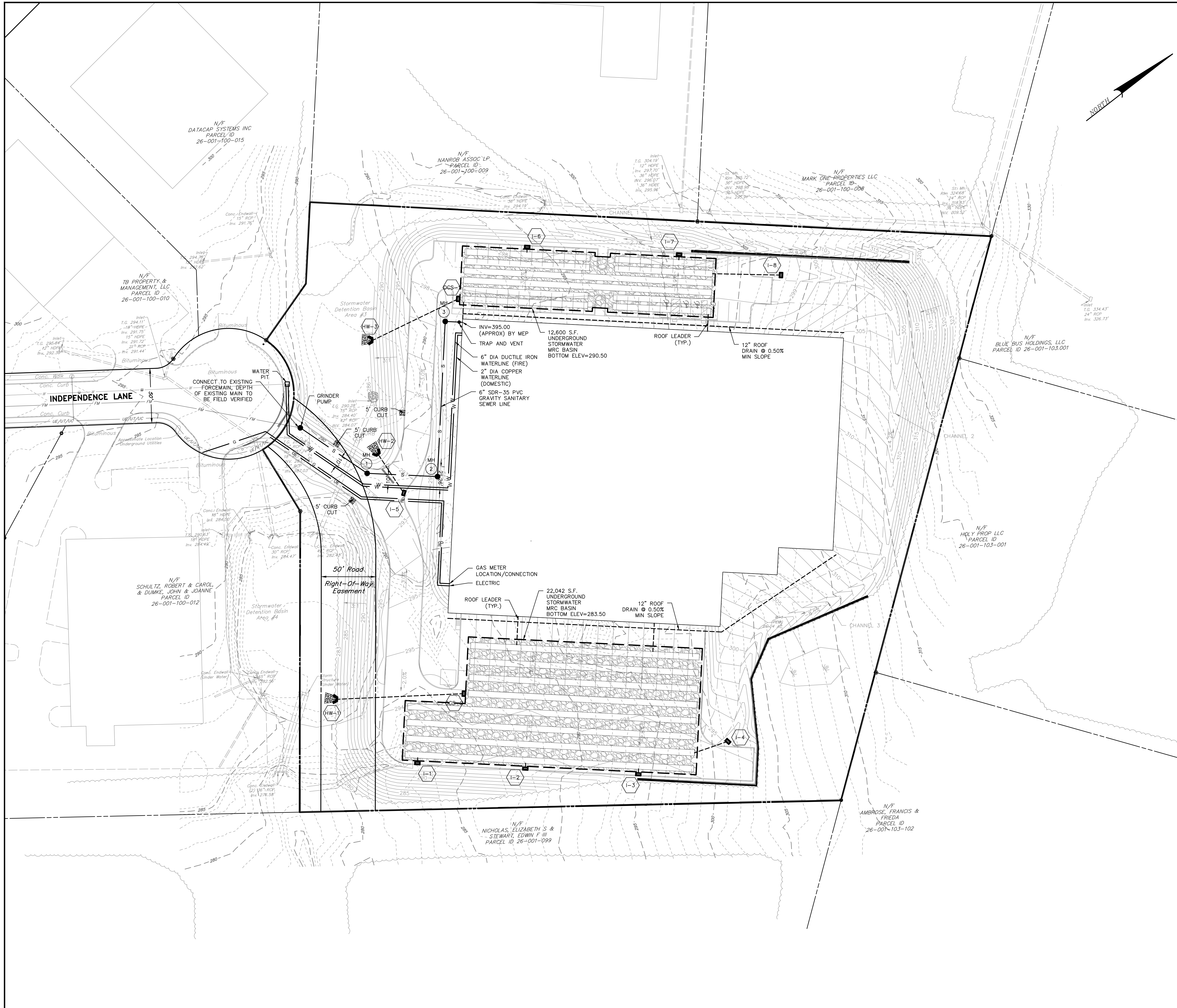


FOR RETTEW ASSOCIATES BY:		NO.	DATE
MANAGER: KIM M. FASNACHT		111902019	
DESIGNED BY: KMF	CHKD BY: MJB		
SURV. CHIEF: JAM	DATA COLLECTOR: JAM		
DRAWN BY: JMS	CHKD BY: JAM		
DRAWING REFERENCE:			
CLIENT: 101 INDEPENDENCE LANE ASSOCIATES, LLC			
ONE TOWER BRIDGE			
100 FRONT STREET, SUITE 560			
WEST CONSHOHOCKEN, PA 19428			
SCALE: 1"=40'			
SCALE: 1"=80'			
SCALE: 1"=120'			
RETTEW ASSOCIATES, INC. Lancaster, PA 17603			
Phone: (610) 738-8955			
Email: rettew@rettew.com			
Website: www.rettew.com			
Engineers • Planners • Surveyors • Landscape Architects			
Preliminary/Final Land Development Plan			
101 INDEPENDENCE LANE			
NEW BRITAIN TOWNSHIP			
BUCKS COUNTY, PA			
DATE:	6/9/2022		
SHEET NO.	7 OF 20		
DWG. NO.	111902019		

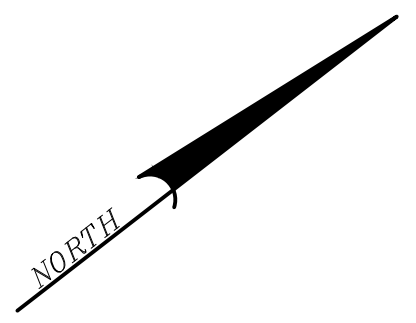


HC INSET
SCALE 1"=10'

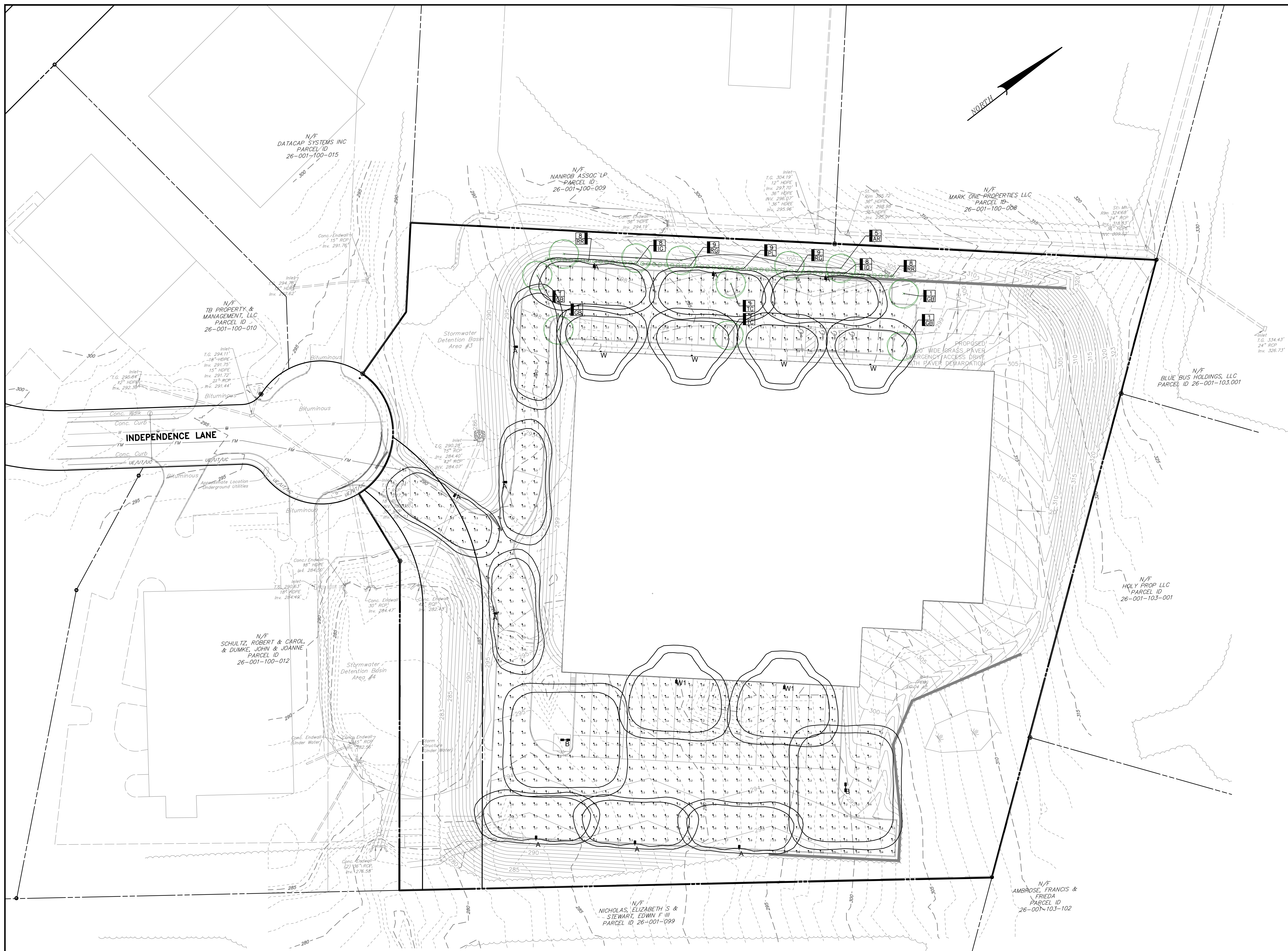
NOT FOR CONSTRUCTION/NOT FOR BIDDING



LEGEND	
	BENCHMARK
	CONCRETE MONUMENT
	FOUND PROPERTY MARKER
	CALCULATED PROPERTY MARKER
	SIGN
	MAILBOX
	LIGHT POLE
	GUY WIRE
	UTILITY POLE
	GAS METER
	GAS VALVE
	WATER VALVE
	WATER METER
	HYDRANT
	INLET
	SANITARY MANHOLE
	STORM MANHOLE
	ELECTRIC MANHOLE
	UNKNOWN STRUCTURE
	ELECTRIC BOX
	CABLE BOX
	TELEPHONE BOX
	TREE LINE
	FENCE LINE
	RIGHT OF WAY LINE
	PROPERTY LINE
	ADJOINER PROPERTY LINE
	MAJOR CONTOUR (5')
	MINOR CONTOUR (1')
	EASEMENT LINE
	PROPOSED SETBACK LINE
	PROPOSED PAVEMENT
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED PAVEMENT MARKING
	PROPOSED CLEAR SITE TRIANGLE
	PROPOSED TRELNE
	PROPOSED CONTOUR LINE
	PROPOSED WATER LINE
	PROPOSED SANITARY SEWER LINE
	PROPOSED SANITARY SEWER STRUCTURE LABEL
	PROPOSED MANHOLE
	PROPOSED STORM INLET
	PROPOSED STORM HEADWALL/ENDWALL
	PROPOSED PIPE OUTLET PROTECTION
	EXISTING STORM PIPE
	PROPOSED STORM PIPE
	PROPOSED STORM STRUCTURE LABEL

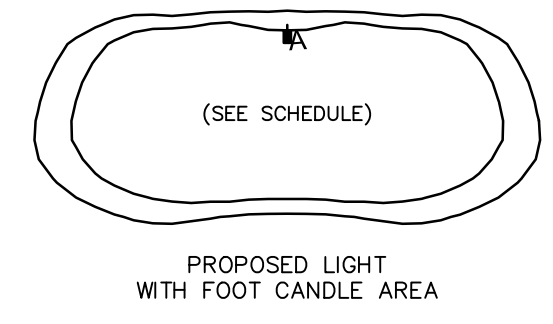


RETTIEW <small>RETTIEW Associates, Inc. Lancaster, PA 17603 Phone (800) 738-8995 Email: rettiew@rettiew.com Website: www.rettiew.com</small>	UTILITY PLAN PRELIMINARY/FINAL LAND DEVELOPMENT PLAN 101 INDEPENDENCE LANE	CLIENT 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428	MANAGER: KIM M. FASNAUGHT DESIGN BY: KMF SURV. CHIEF: JMS DRAWN BY: JAM	DRAWING REFERENCE: C:\CAD\System\Software\Autodesk\Temp\AutoCAD_Visual\111902019-Prelim_Final_ID_Plan.dwg	SCALE 1"=40' 0' 20' 40' 80' 120'	DATE: 6/9/2022 SHEET NO.: 8 OF 20 DWG. NO.: 111902019	BUCKS COUNTY, PA NEW BRITAIN TOWNSHIP
FOR RETIEW ASSOCIATES BY:		NO.		REVISION		DATE	



LEGEND

EXISTING BOUNDARY LINE	---
PROPOSED LOT LINE	----
EXISTING RIGHT-OF-WAY LINE	-----
EXISTING CURB	=====
PROPOSED CURB	=====
EXISTING PAVEMENT	=====
PROPOSED PAVEMENT	=====
EXISTING ZONING BOUNDARY	-----
EXISTING VEGETATION	DECIDUOUS TREE EVERGREEN TREE
EXISTING TREELINE	-----
PROPOSED DECIDUOUS TREE	
PROPOSED SHRUB	
LANDSCAPING TAG	QUANTITY IDENTIFICATION SYMBOL



- ### GENERAL NOTES
- THE APPLICANT IS REQUIRED TO MAINTAIN AND GUARANTEE ALL PLANT MATERIAL UNTIL THE END OF THE EIGHTEEN-MONTH MAINTENANCE PERIOD.
 - MANUFACTURER CUT SHEETS FOR ALL PROPOSED LIGHTING SHALL BE PROVIDED.

<p>FOR RETNEW ASSOCIATES BY:</p>	<p>NO. DATE</p>
<p>MANAGER: KIM M. FASNACHT</p>	<p>DESIGN BY: KMF</p>
<p>CLIENT 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428</p>	<p>SCALE 1"=40' 0' 20' 40' 80' 120'</p>
<p>REVISIONS:</p>	<p>DRAWING REFERENCE: C:\CAD\System\Software\Autodesk\Temp\DWG\TempDWG_Visualize_1938_11182019-Prim_Final_D_Plan.dwg</p>
<p>RETNEW Associates, Inc. Lancaster, PA 17603 Phone (800) 738-8955 Email: retnew@retnew.com Website: www.retnew.com</p>	<p>BUCKS COUNTY, PA NEW BRITAIN TOWNSHIP</p>
<p>LANDSCAPE & LIGHTING PLAN PRELIMINARY/FINAL LAND DEVELOPMENT PLAN 101 INDEPENDENCE LANE</p>	<p>DATE: 6/9/2022 SHEET NO. 9 OF 20 DWG. NO. 111902019</p>

TOWNSHIP REQUIREMENTS TABLE

SECTION #	REQUIREMENT	AREA	REQUIRED LANDSCAPING	PROVIDED LANDSCAPING
§27-2904.h.1.	LOTS WITH MORE THAN 30 PARKING SPACES SHALL REQUIRE MIN. 5% OF TOTAL PAVED AREA TO BE LANDSCAPED.	MIN. 5% OF PROPOSED PAVING	858 SF OF LANDSCAPE AREA	±1,400 SF OF LANDSCAPE AREA
§27-2904.h.2.	ONE DECIDUOUS TREE SHALL BE REQUIRED FOR EVERY 4,000 SF OF PAVED AREA.	17,160 SF PROPOSED PAVED AREA	5 DECIDUOUS TREES	5 DECIDUOUS TREES
§22-713.3.A.	ALL 10 FT BY 18 FT PLANTING ISLANDS SHALL CONTAIN ONE SHADE TREE.	6 PLANTING ISLANDS	6 TREES	6 TREES
§22-713.5.B.1.	ONE EVERGREEN SHRUB SHALL BE PLANTED FOR EVERY FIVE FEET ALONG THE PERIMETER OF OFF-STREET PARKING AREAS.	APPROX. 290 LF OF PERIMETER	58 EVERGREEN SHRUBS @ 5 FT O.C.	58 EVERGREEN SHRUBS @ 5 FT O.C.

SHADE TREE PLANT SCHEDULE

SYM. KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE/CONDITIONS
AR	5	Acer rubrum 'Red Sunset'	Red Sunset Maple	MIN 3" CAL. B&B
GB	4	Ginkgo biloba (Male Only)	Maidenhair	MIN 3" CAL. B&B
TC	2	Tilia cordata	Little Leaf Linden	MIN 3" CAL. B&B

SHRUB PLANT SCHEDULE

SYM. KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE/CONDITIONS
IG	16	Ilex glabra	Inkberry Holly	MIN 3" GAL CONT.; MIN 2.5' HT
PL	9	Prunus laurocerasus 'Otto Luyken'	Otto Luyken Cherry Laurel	MIN 3" GAL CONT.; MIN 2.5' HT
RG	18	Rhododendron 'Glacier'	Glacier Azalea	MIN 3" GAL CONT.; MIN 2.5' HT
RR	16	Rhododendron 'Robles'	Rose Robles Encore Azalea	MIN 3" GAL CONT.; MIN 2.5' HT

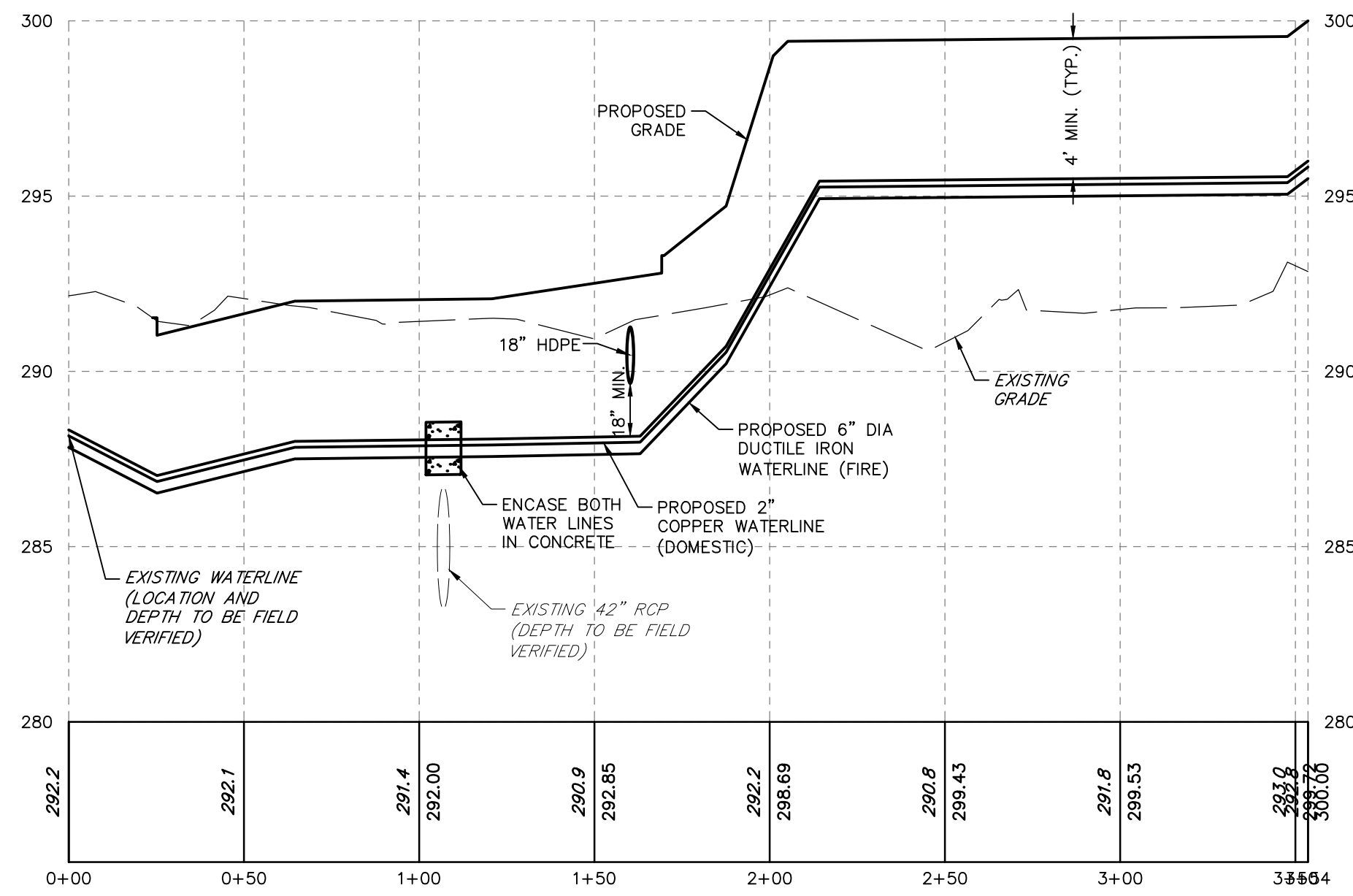
CALCULATION SUMMARY

LABEL	QTY	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
ALL CALCS @ GRADE		ILLUMINANCE	FC	2.32	7.5	0.1	23.20	75.00
PROPERTY LINE		ILLUMINANCE	FC	0.00	0.1	0.0	NA	NA
FRONT LOT		ILLUMINANCE	FC	2.36	5.5	0.6	3.93	9.17
TRUCK DOCK AREA		ILLUMINANCE	FC	2.07	7.0	0.1	20.70	70.00

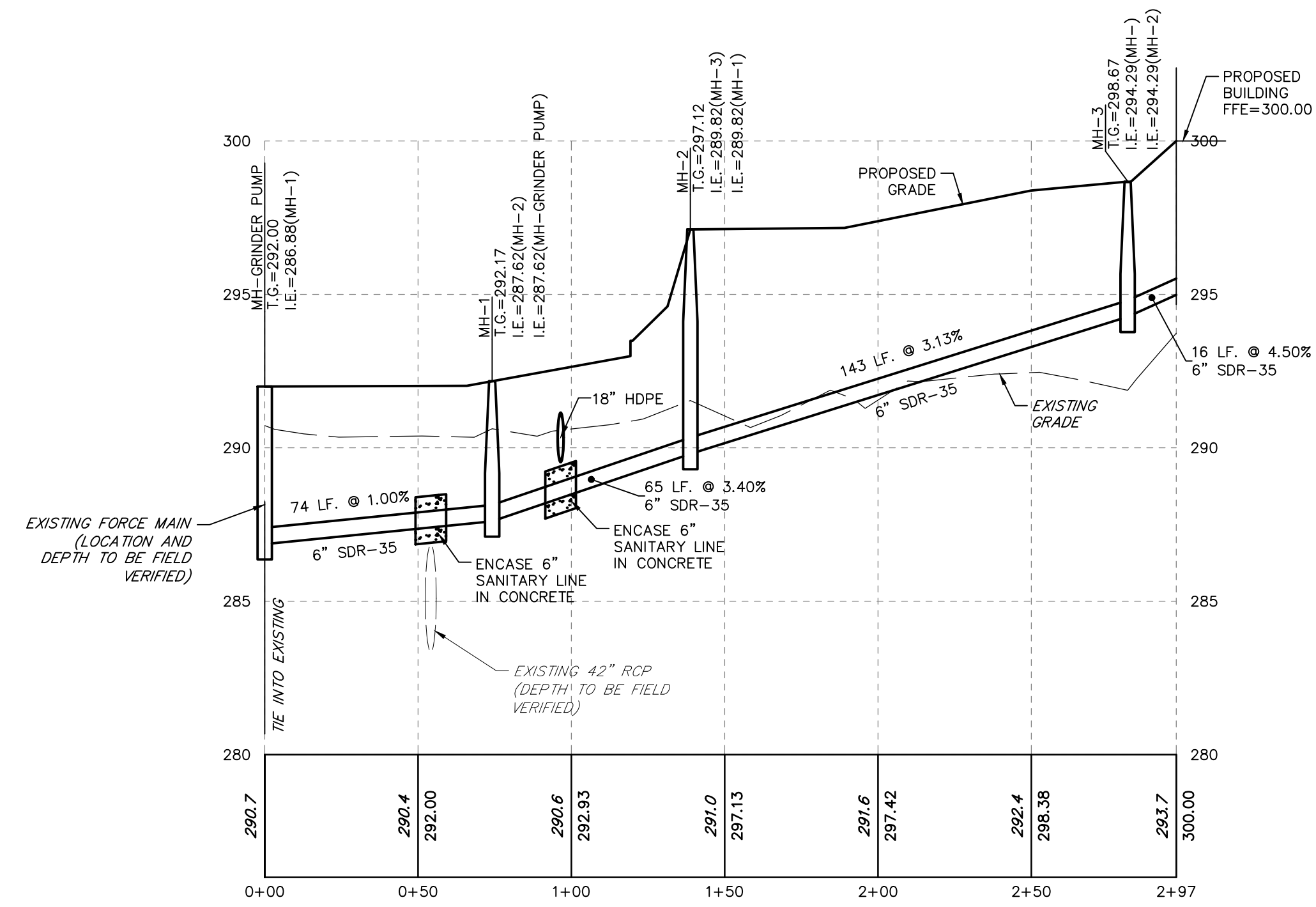
LUMINAIRE SCHEDULE

SYM.	QTY	LABEL	ARRANGEMENT	DESCRIPTION	LLD	LDD	LLF	ARR.	LUM.	LUMENS	ARR.	WATTS
■	10	A	SINGLE	MRS-LED-15L-SIL-3-50-70CRI-IL-SINGLE-20' MH	1.000	1.000	0.950		10196			111
■	2	B	D180°	MRS-LED-15L-SIL-FI-50-70CRI-D180-20' MH	1.000	1.000	0.950		29224			222
■	4	W	SINGLE	XWM-FI-LED-08L-50-15' MH	1.000	1.000	0.980		8465			64
■	2	WI	SINGLE	MRS-LED-15L-SIL-FI-50-70CRI-WALL MOUNT@20'MH	1.000	1.000	0.950		14612			111

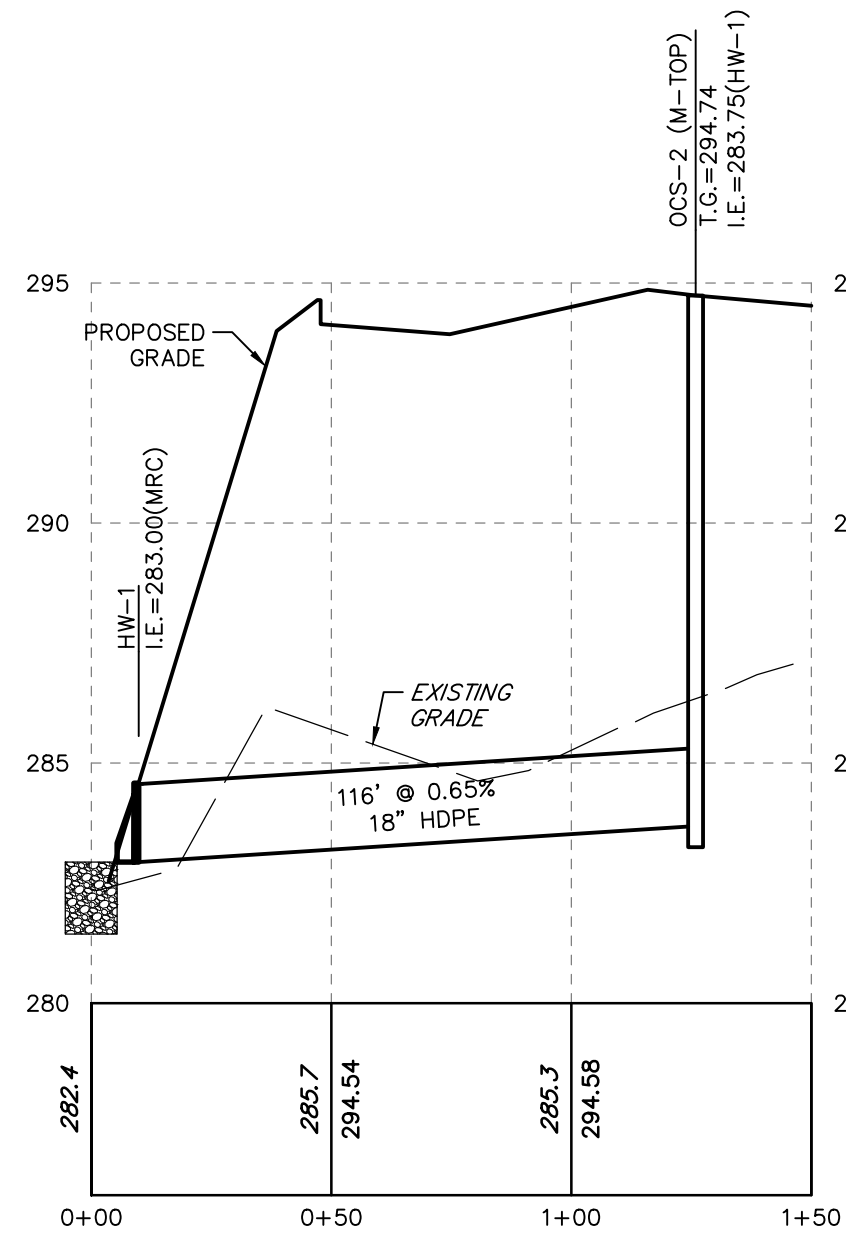
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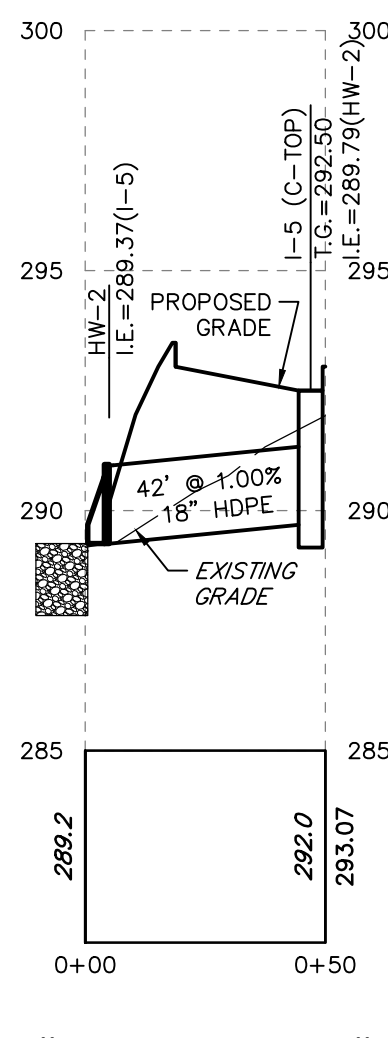
"WATERLINE"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



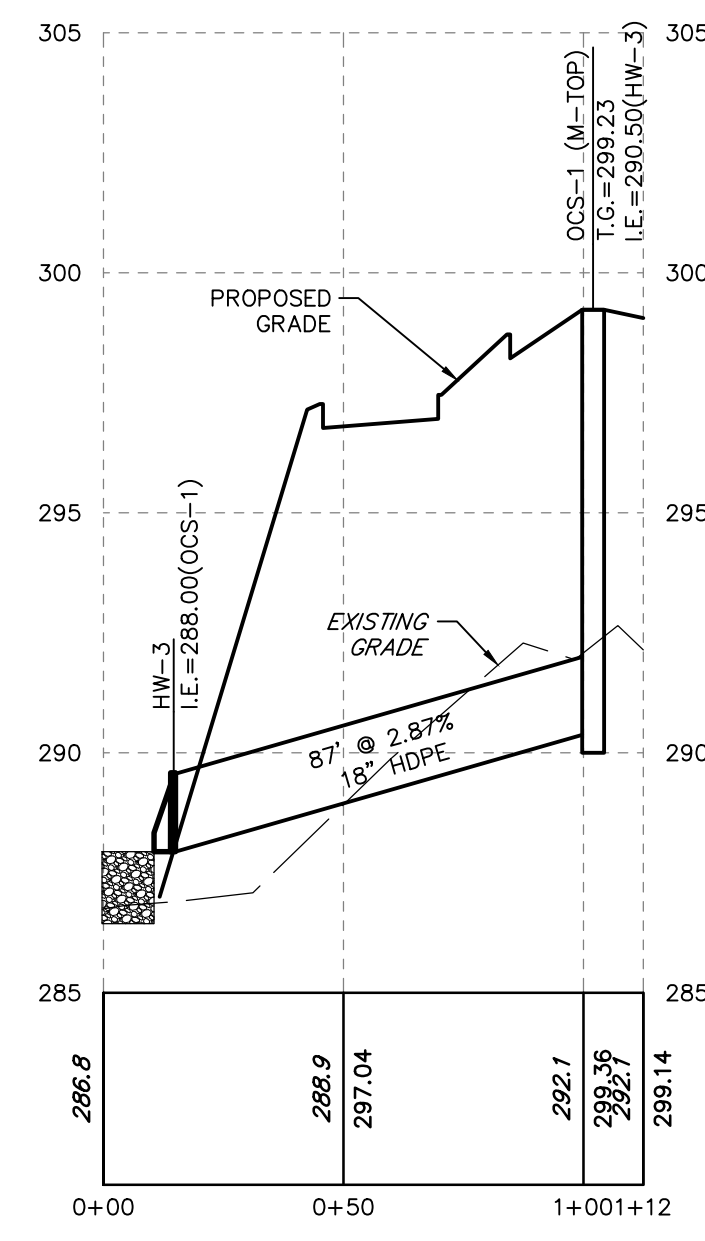
"SANITARY SEWER"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



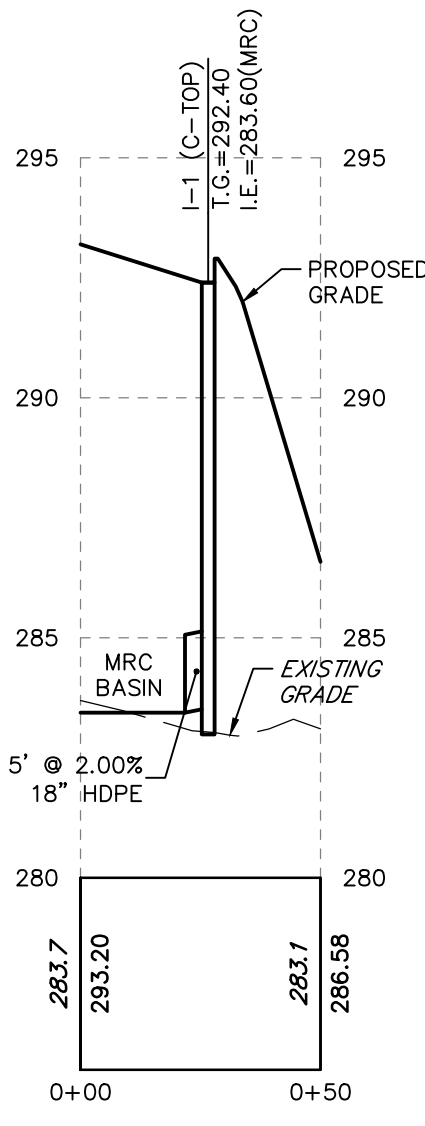
"HW-1 TO OCS-2"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



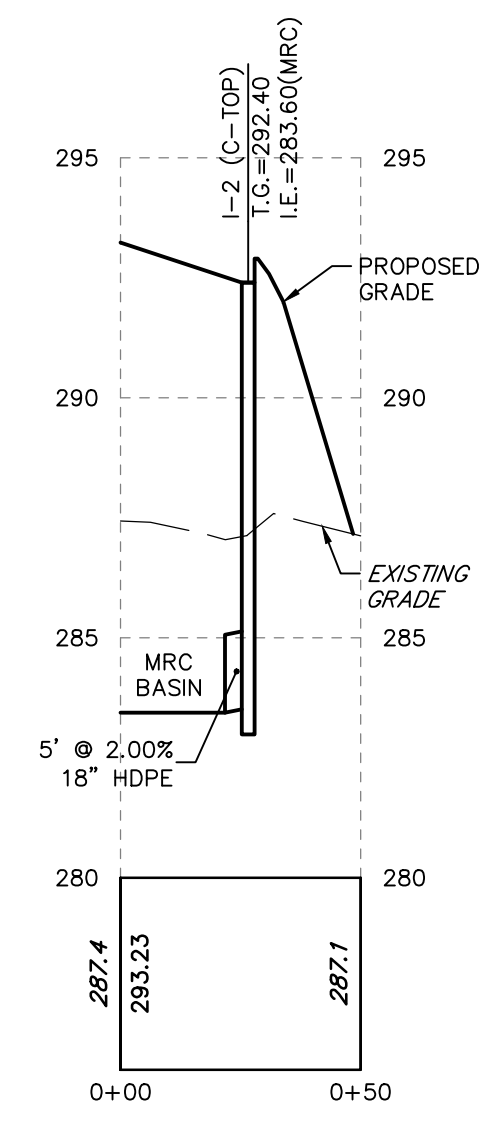
"HW-2 TO I-5"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



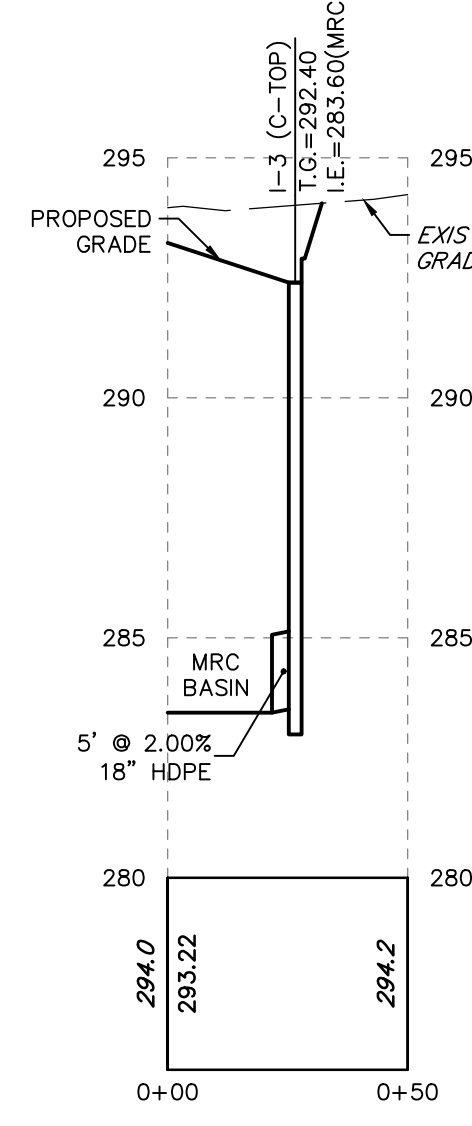
"HW-3 TO OCS-1"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



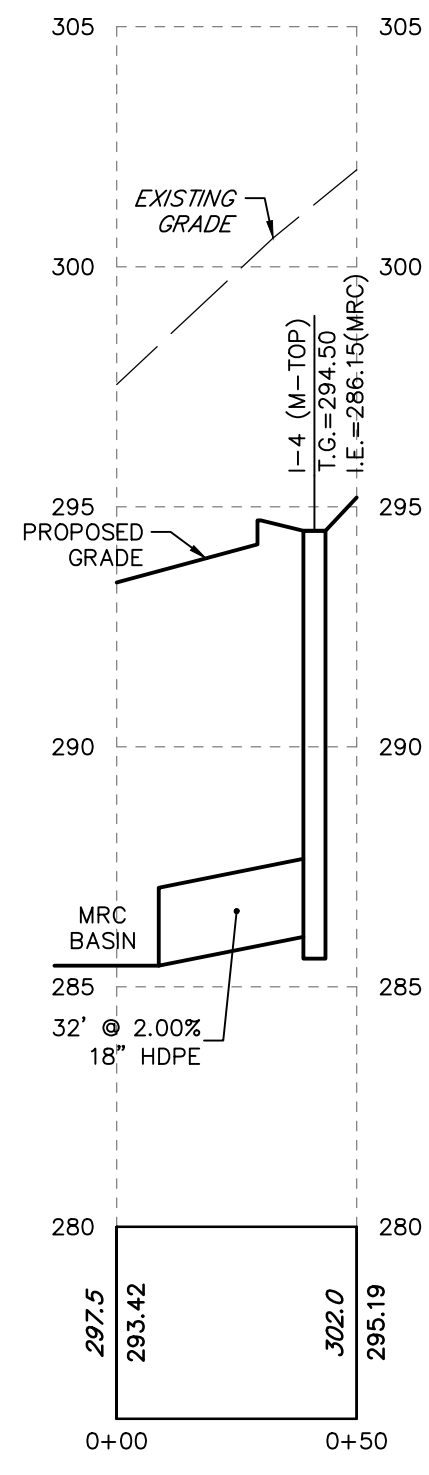
"I-1 TO MRC"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



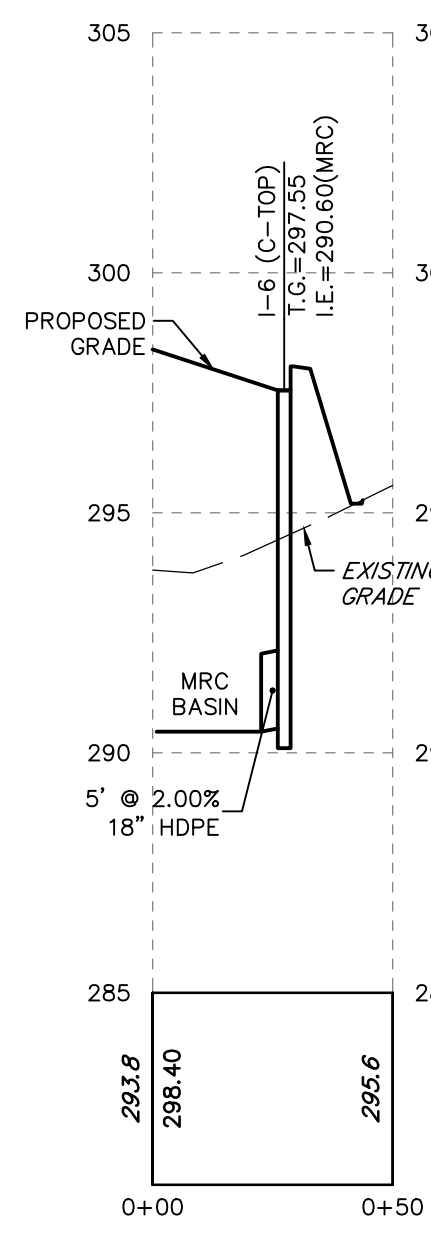
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HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



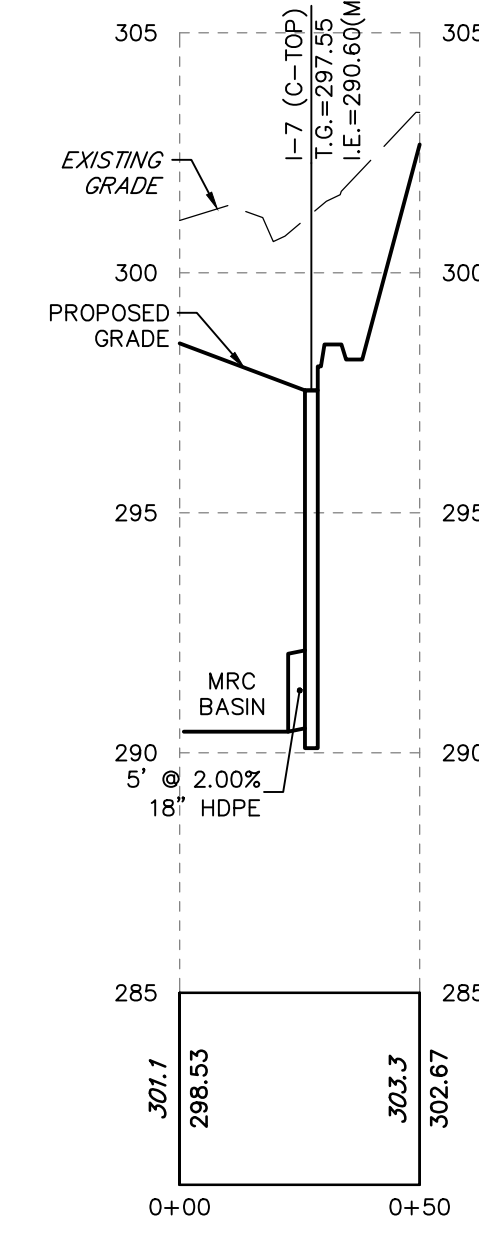
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HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



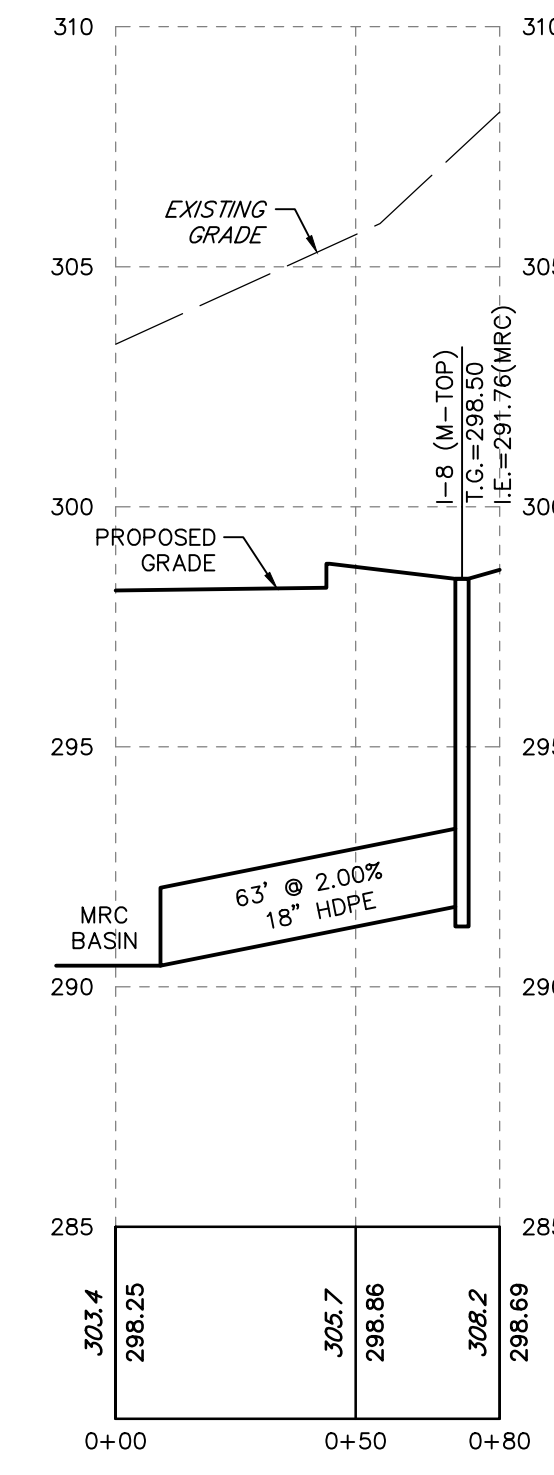
"I-4 TO MRC"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



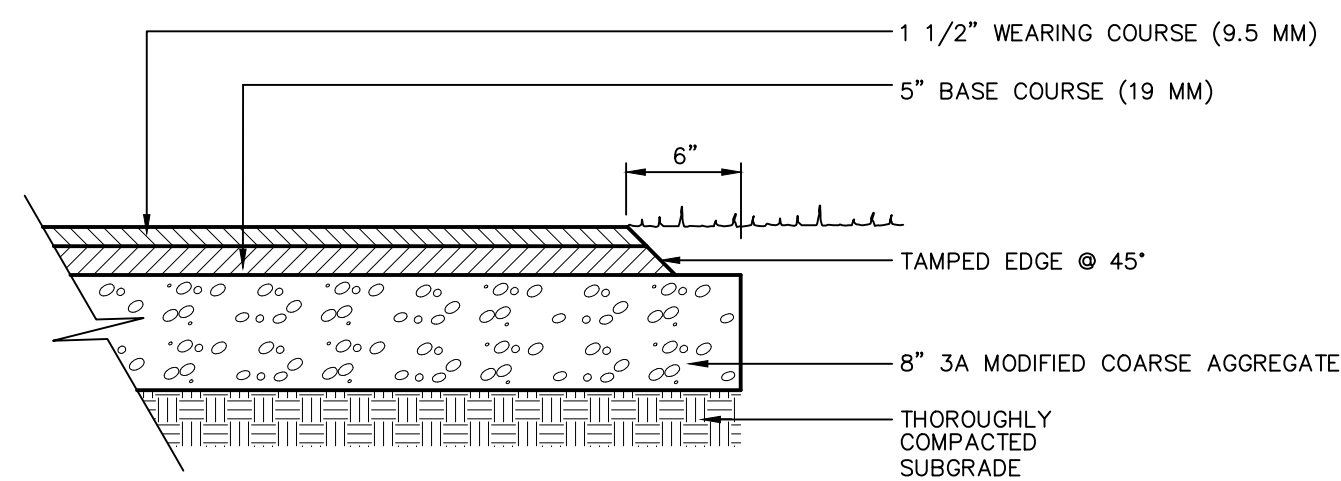
"I-6 TO MRC"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



"I-7 TO MRC"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'

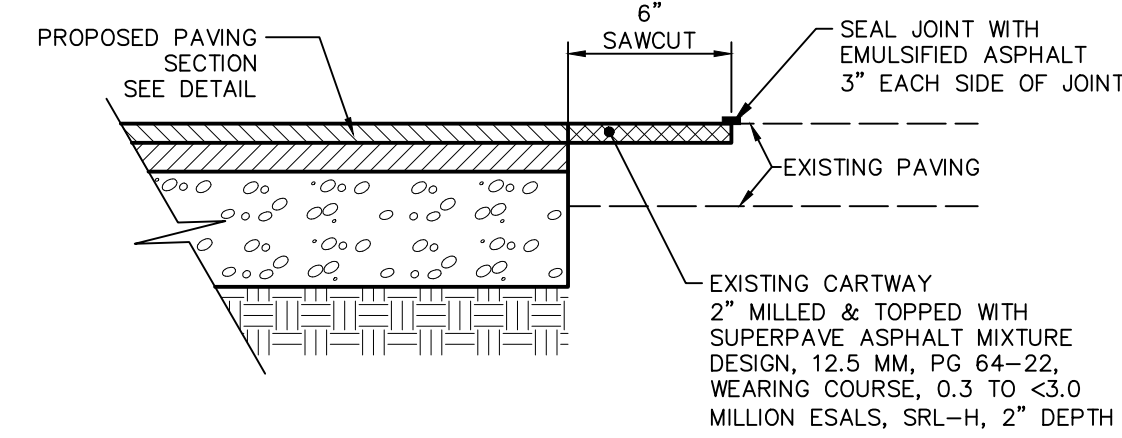


"I-8 TO MRC"
HORIZONTAL SCALE - 1"=40'
VERTICAL SCALE - 1"=4'



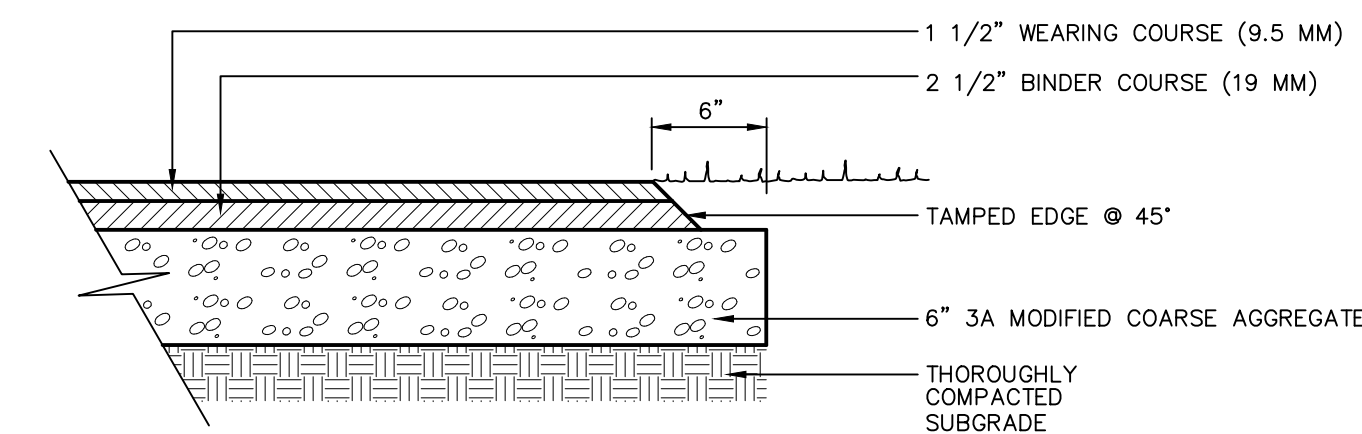
BITUMINOUS HEAVY DUTY PAVING SECTION

NOT TO SCALE
PV-P004



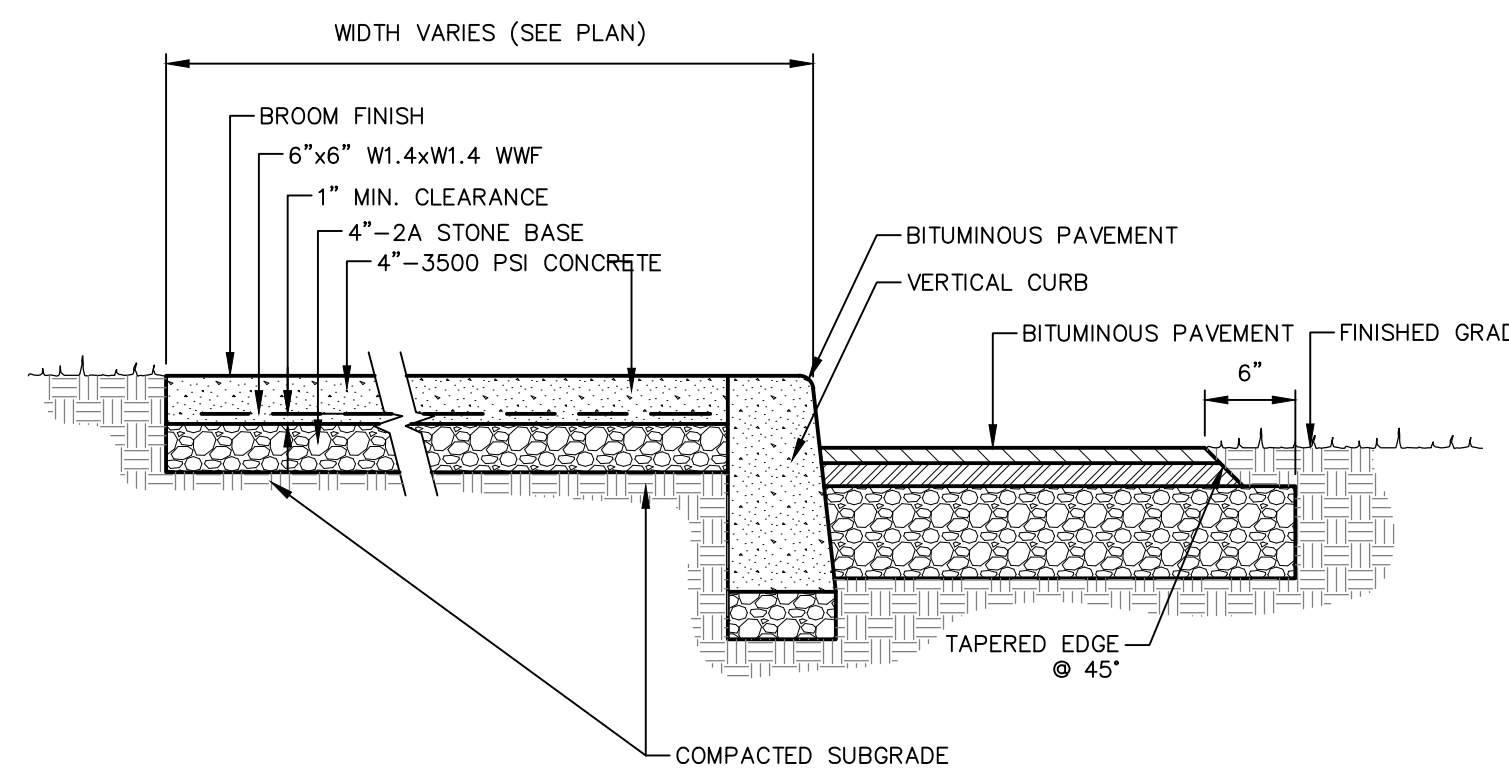
PAVING SAWCUT

NOT TO SCALE



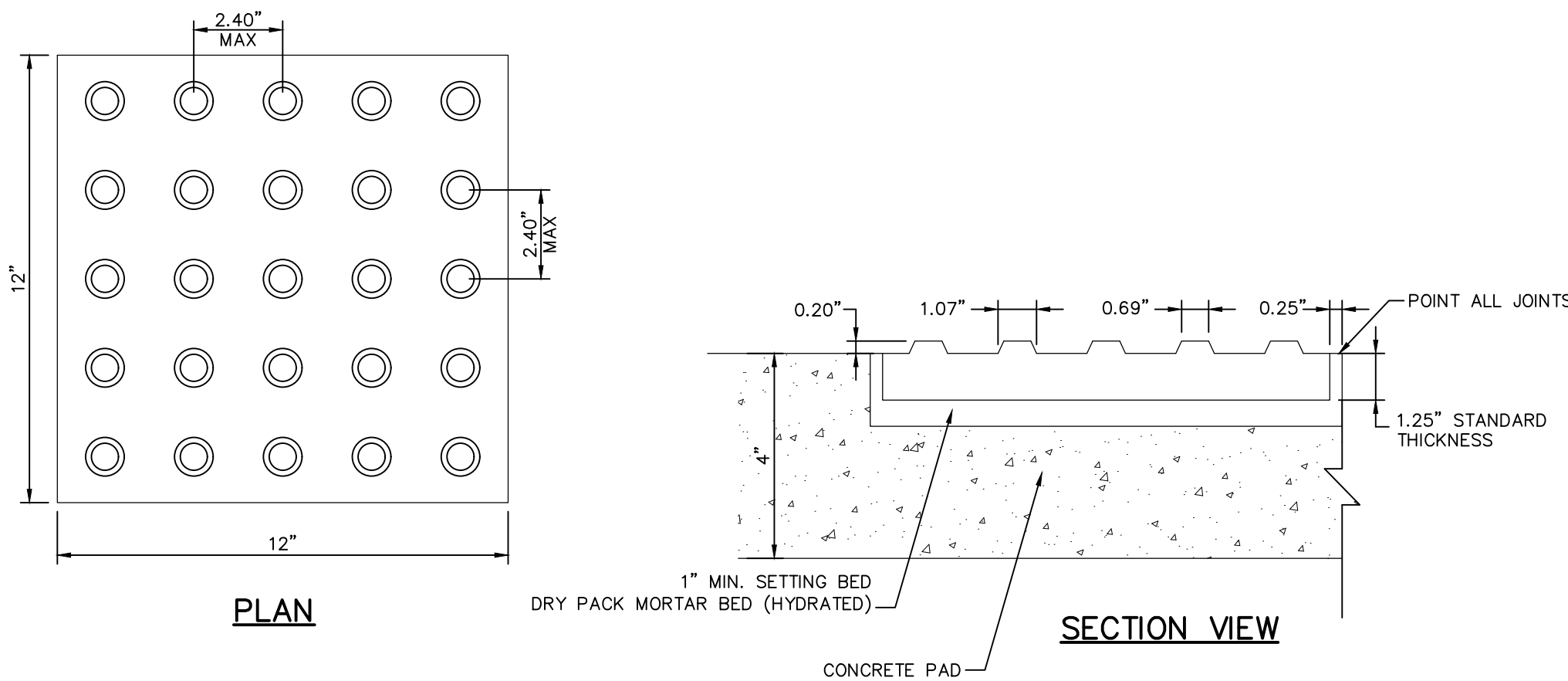
BITUMINOUS LIGHT DUTY PAVING SECTION

NOT TO SCALE
PV-P004



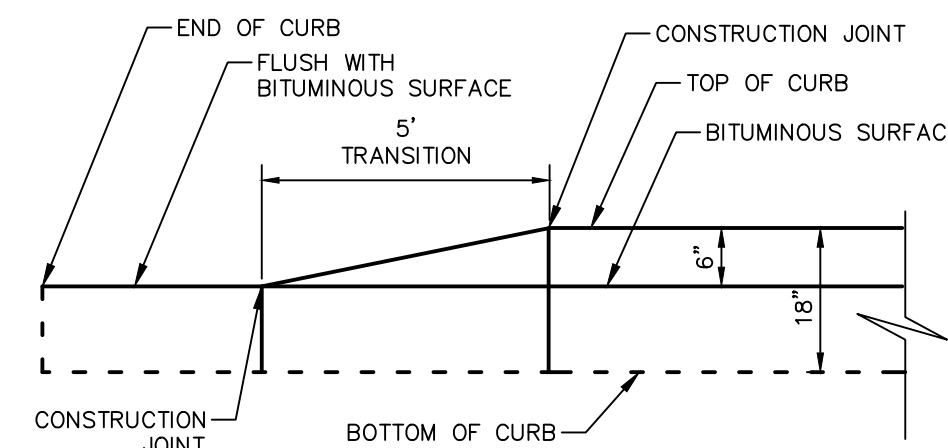
CONCRETE WALK / VERTICAL CURB / BITUMINOUS PAVING SECTION

NOT TO SCALE
PV-007



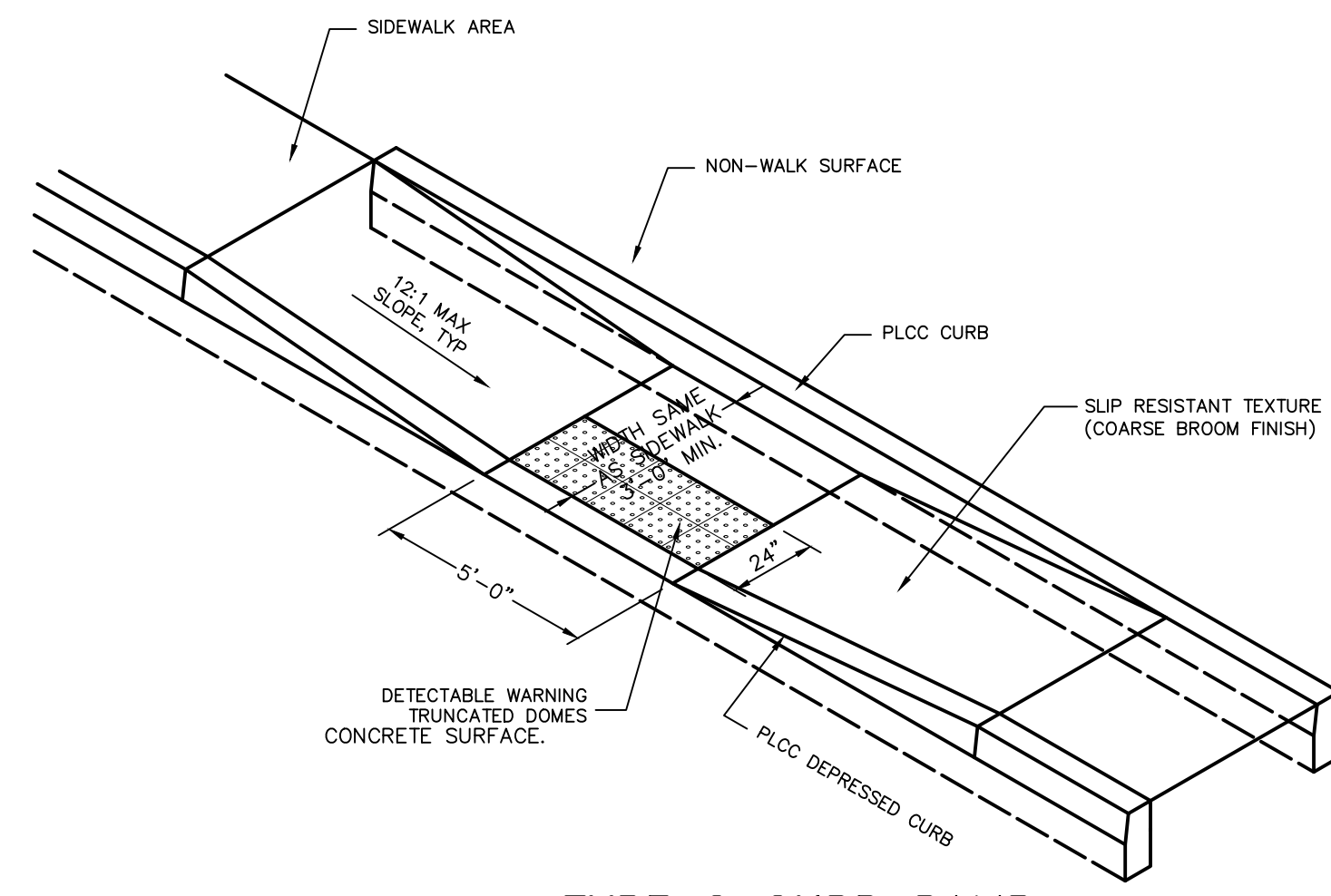
DETECTABLE WARNING SURFACE

NOT TO SCALE



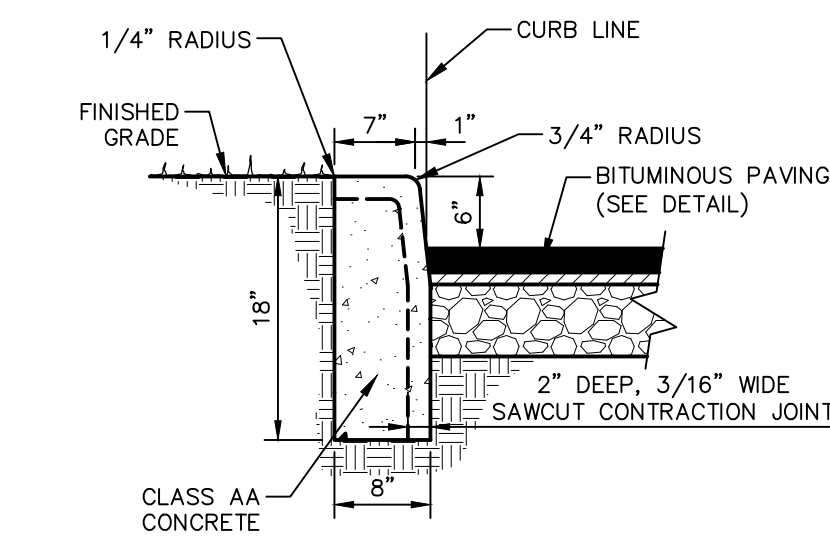
CURB TAPER TRANSITION DETAIL (ACCESS DRIVE ENTRANCES)

NOT TO SCALE



TYPE 2 CURB RAMP

NOT TO SCALE

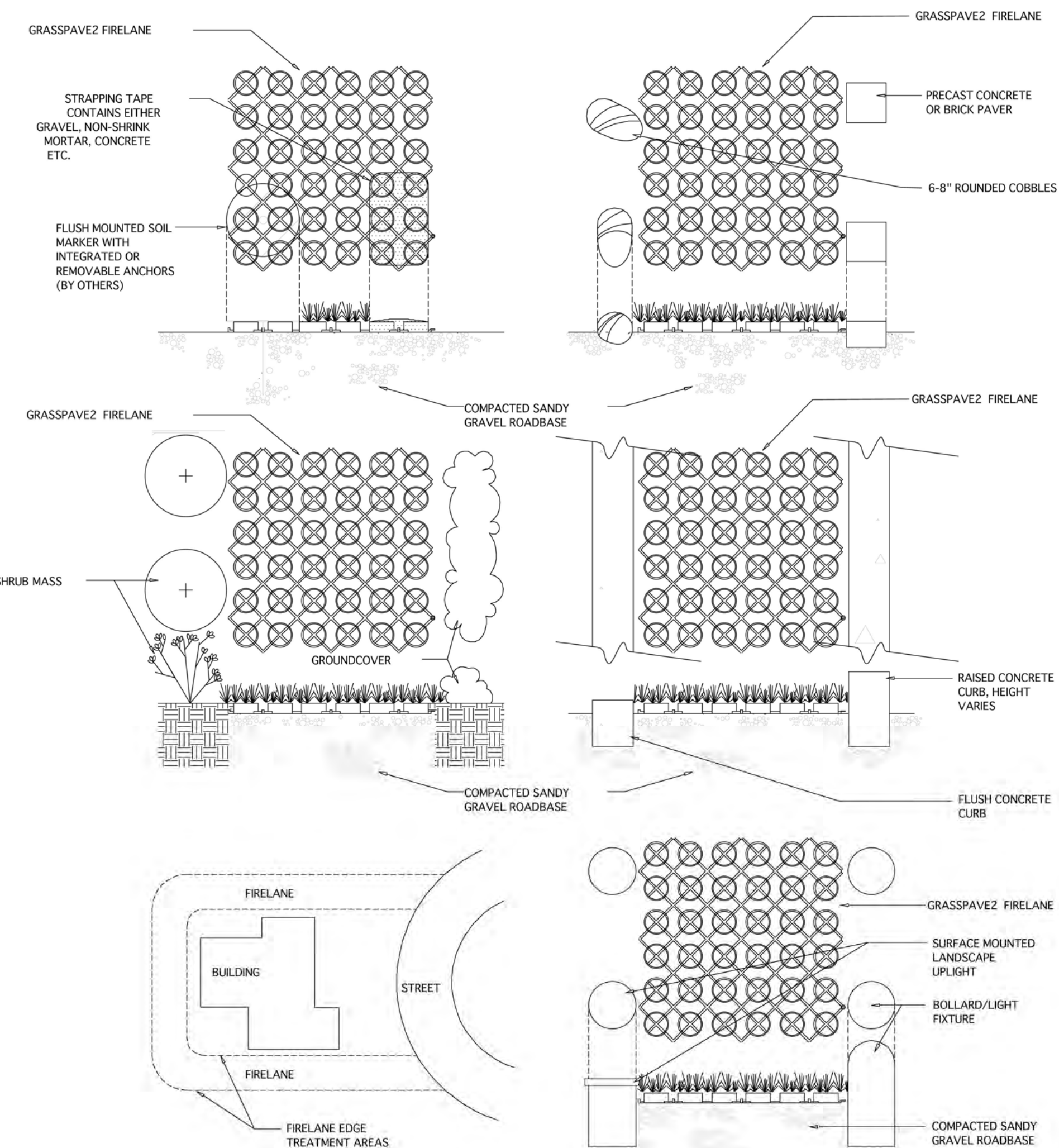


6\"/>

NOT TO SCALE
01-002

GRASSPAVE2 Firelane Detail

Use this detail for delineating a Grasspave2 firelane



NOTE: THIS DETAIL IS SCHEMATIC IN NATURE. DESIGNER SHALL SPECIFY SPACING AND DESIGN OF EDGE TREATMENTS. SPACING WILL VARY WITH TURF TYPE, SLOPE, FIRE DEPARTMENT REQUIREMENTS, ETC.



Invisible Structures, Inc.
GP2Firelane11.dwg



303-233-8383
www.invisiblestructures.com
V4.1

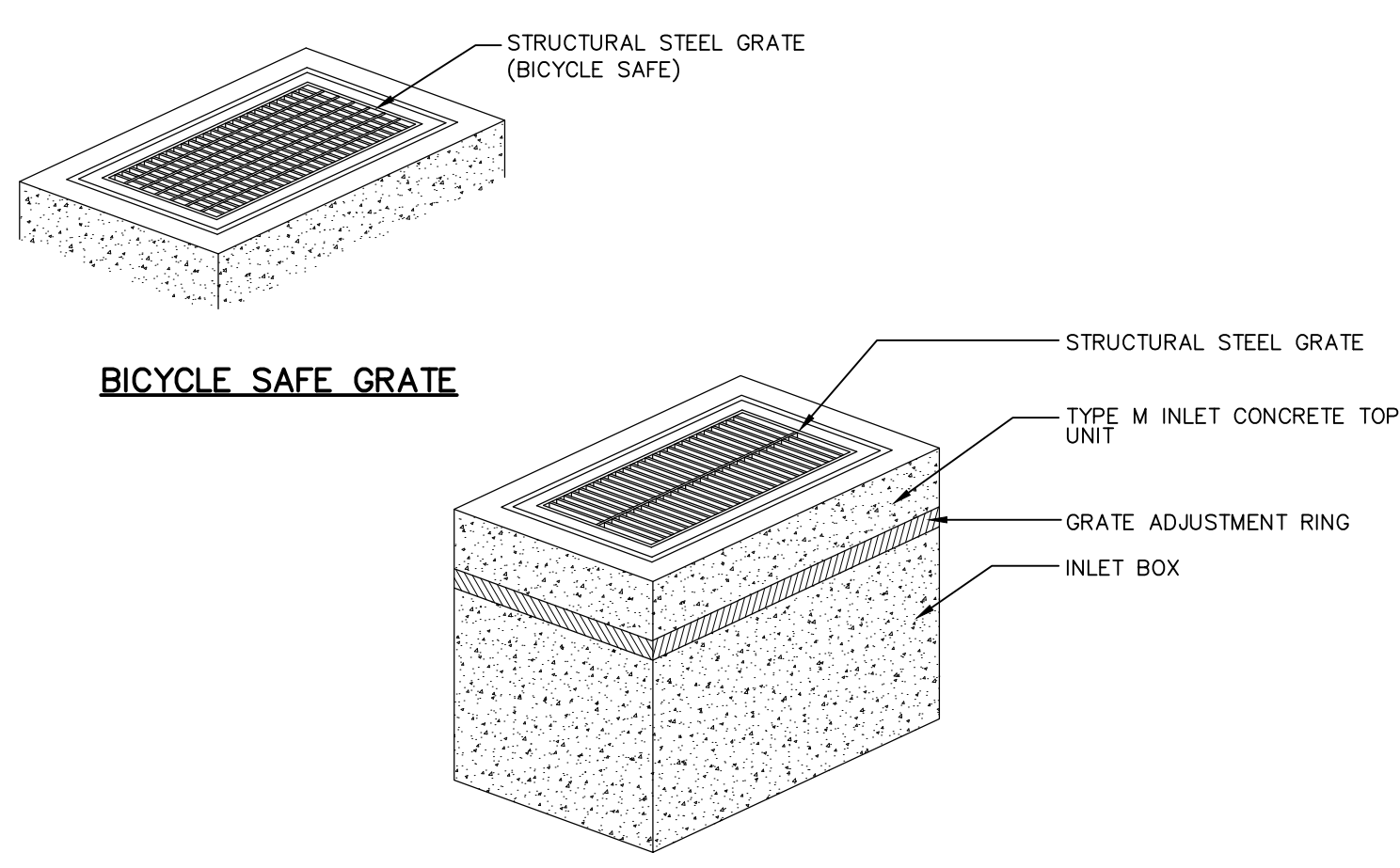
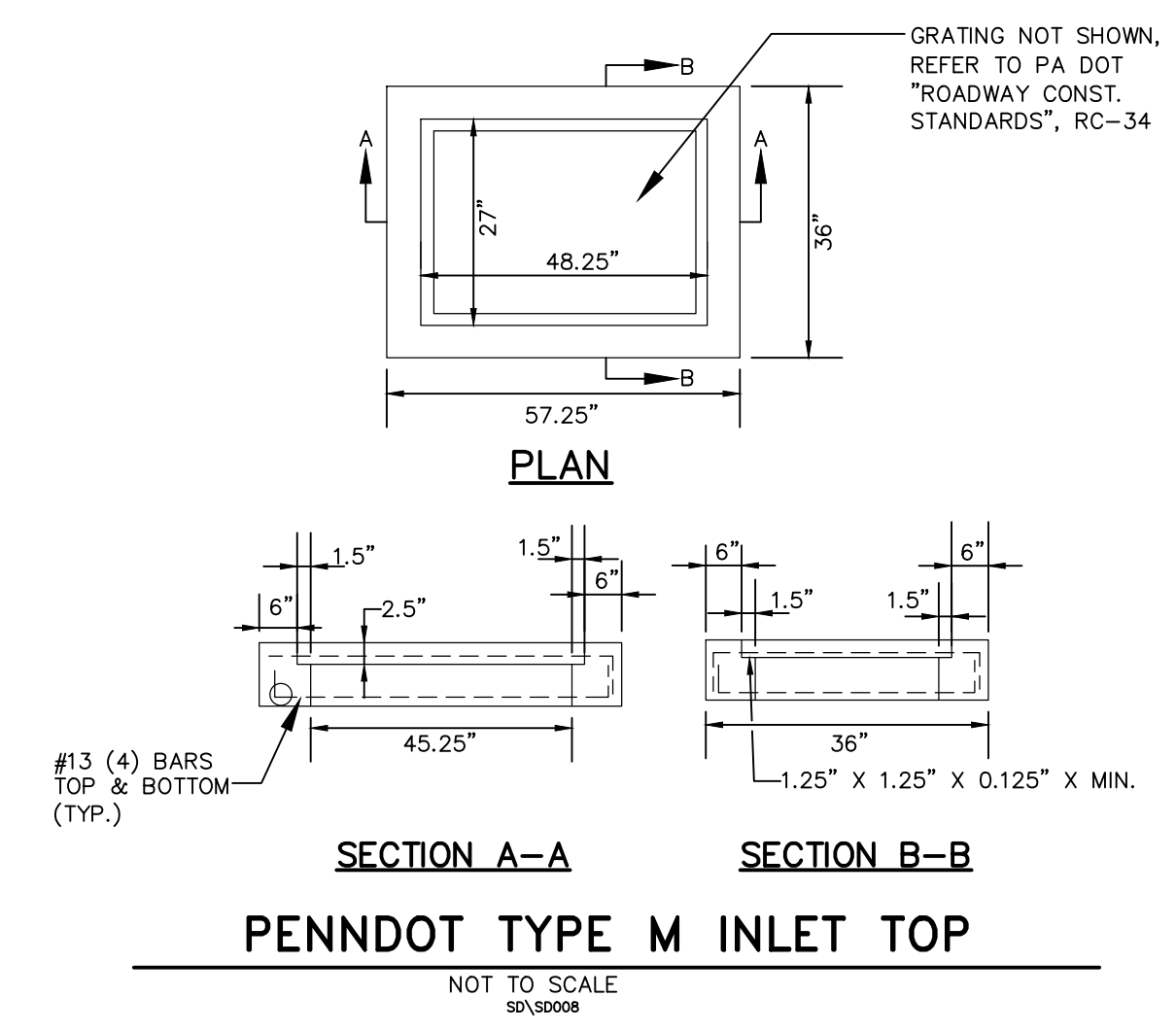
GRASS PAVED EMERGENCY ACCESS

NOT TO SCALE

TOWNSHIP PAVEMENT RESTORATION

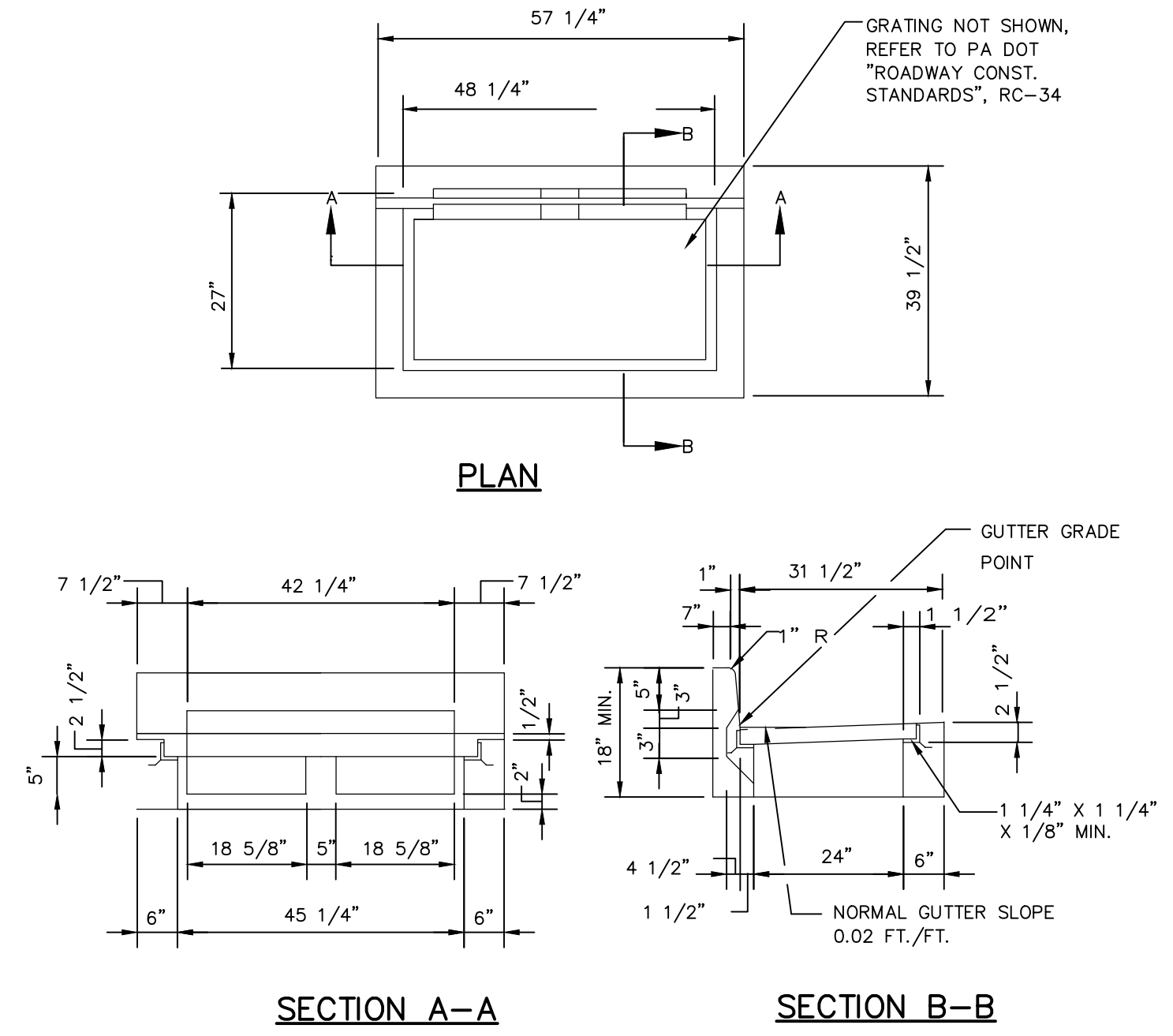
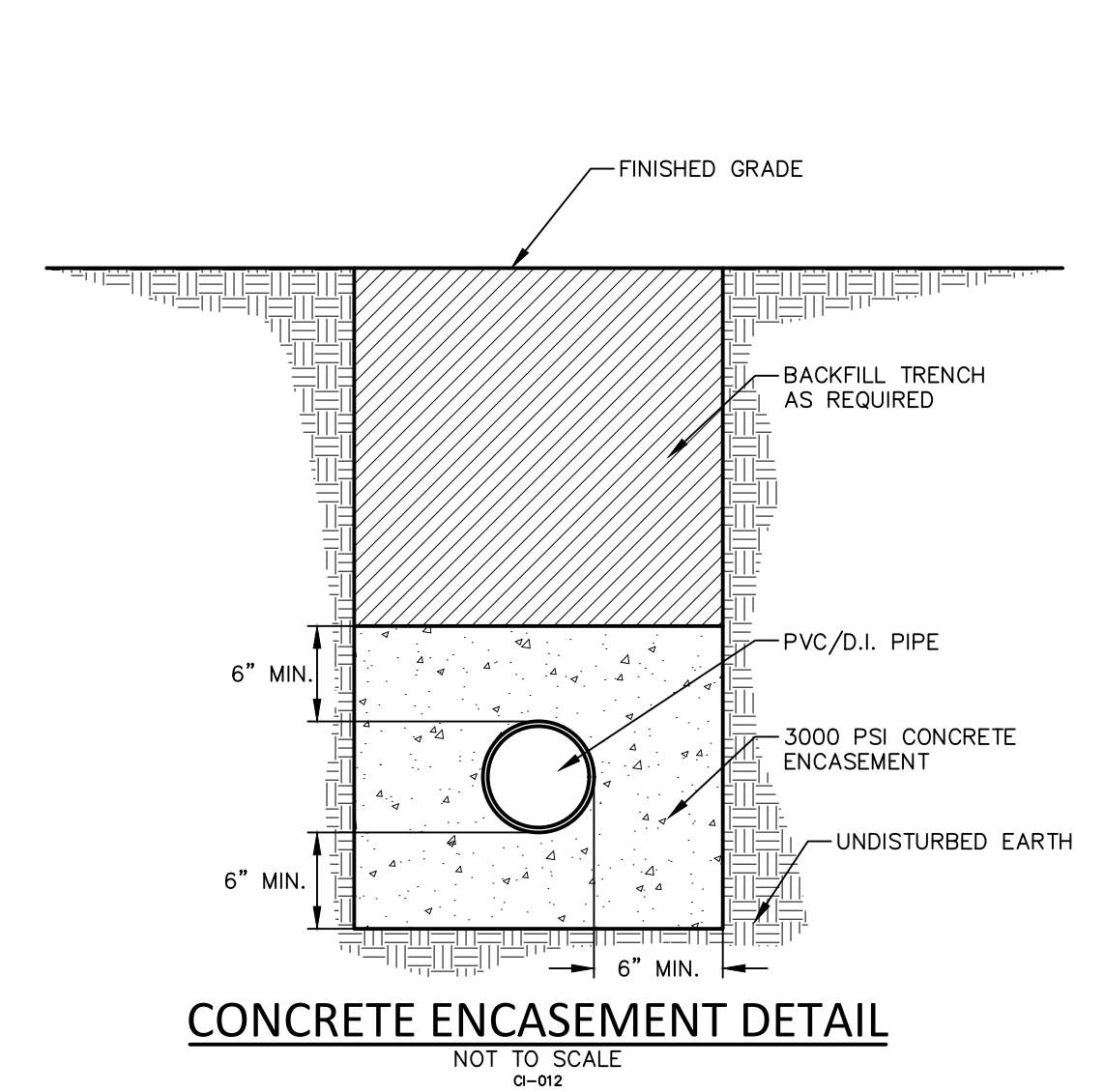
NOT TO SCALE

NO.		DATE	
FOR RETTEW ASSOCIATES BY:			
MANAGER:	KIM M. FASNACHT	CHD BY:	KMF
DESIGN BY:	KMF	RELEASER NO.:	DATA COLLECTOR
SURV. CHIEF:	JMS	CHD BY:	JAM
DRAWN BY:	JMS	DRAWING REFERENCE:	
<p>FILES: 111902019-SV-BASE 111902019-SV-DRG 111902019-LD-02AD 111902019-SV-0205 111902019-LD-UTL 111902019-SV-0205 111902019-SV-0205</p>			
CLIENT:	101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428	AS NOTED	
SITE/UTILITY DETAILS		BUCKS COUNTY, PA	
PRELIMINARY/FINAL LAND DEVELOPMENT PLAN		NEW BRITAIN TOWNSHIP	
101 INDEPENDENCE LANE		DATE: 6/9/2022	
DWG. NO. 111902019		SHEET NO. 11 OF 20	

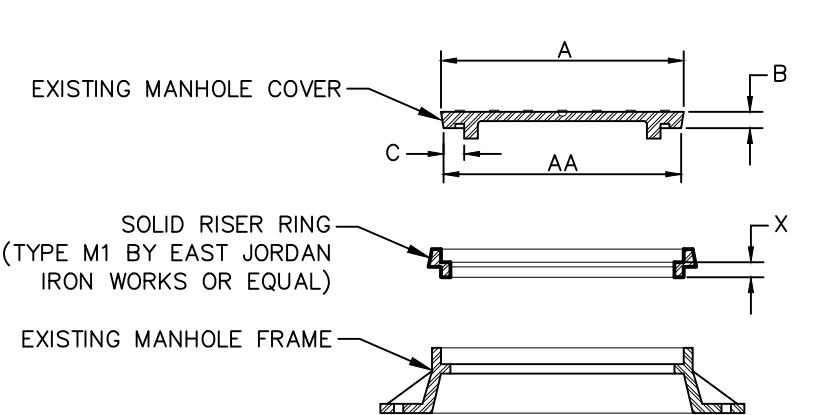
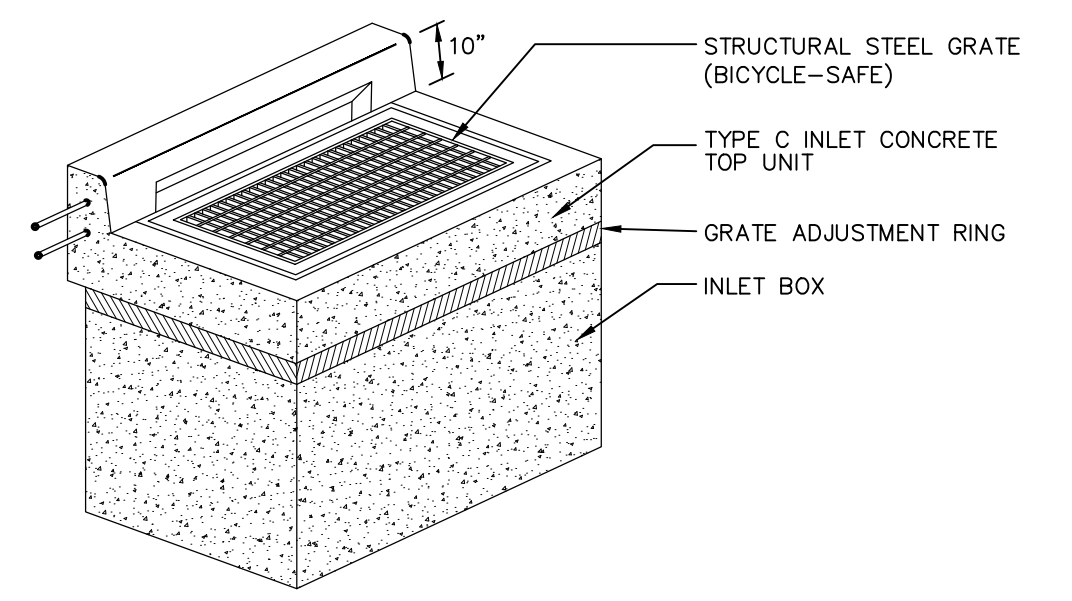


- NOTES:**
1. INLET BOXES PER PENNDOT PUB 72, LATEST EDITION.
 2. PROVIDE MANHOLE STEPS WHEN THE DEPTH BETWEEN THE FINISHED GRADE ELEVATION AND THE TOP OF BOTTOM SLAB ELEVATION IS GREATER THAN 5'-0" PER PENNDOT PUB 72, LATEST EDITION.

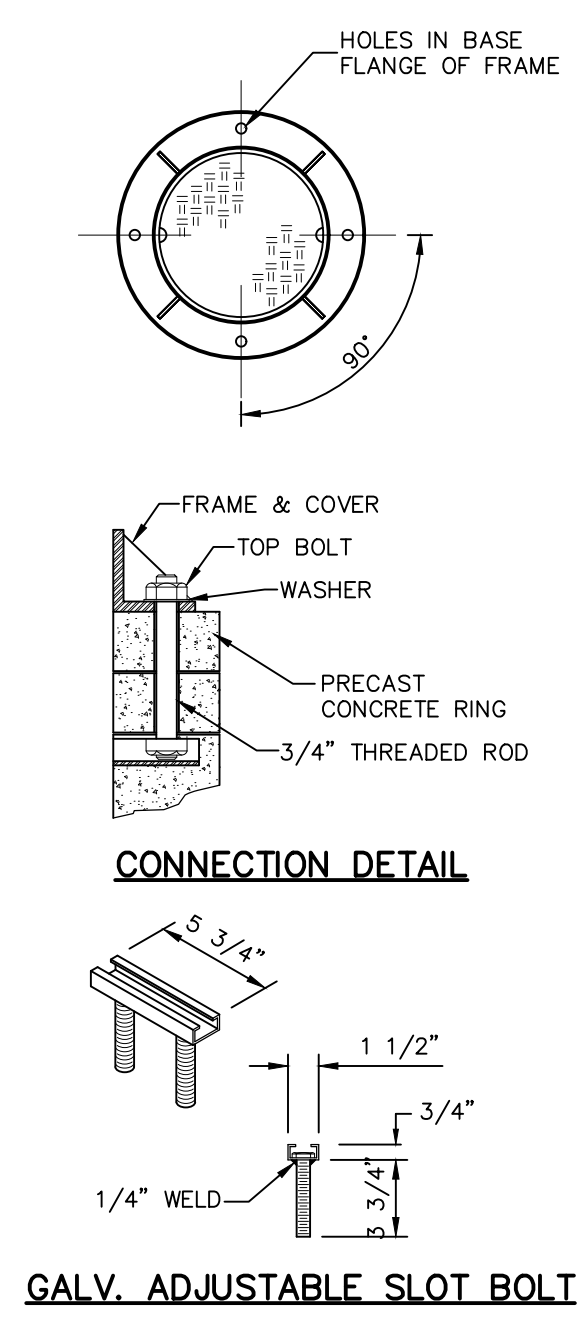
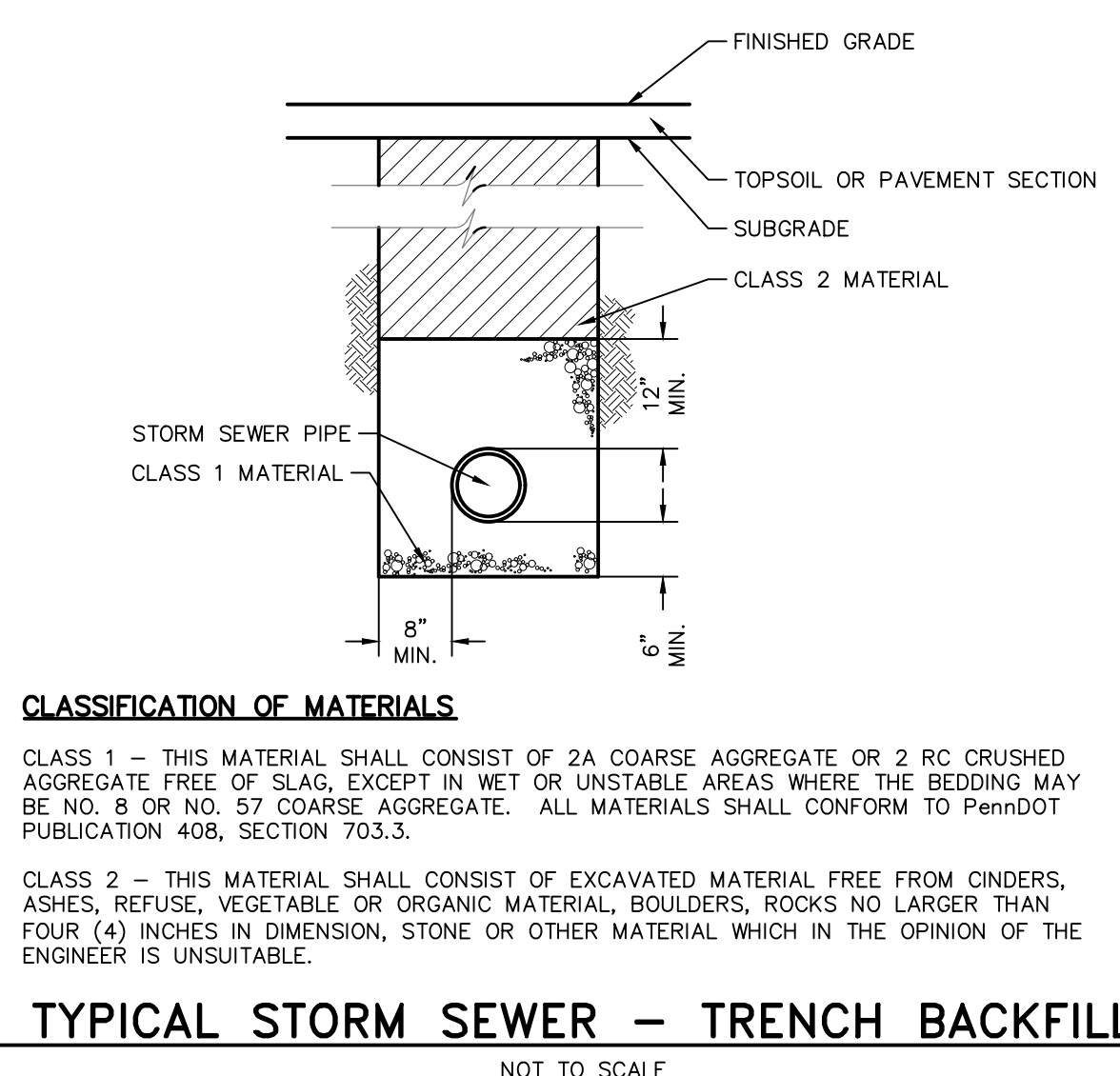
PENNDOT TYPE M INLET
NOT TO SCALE
SP150003



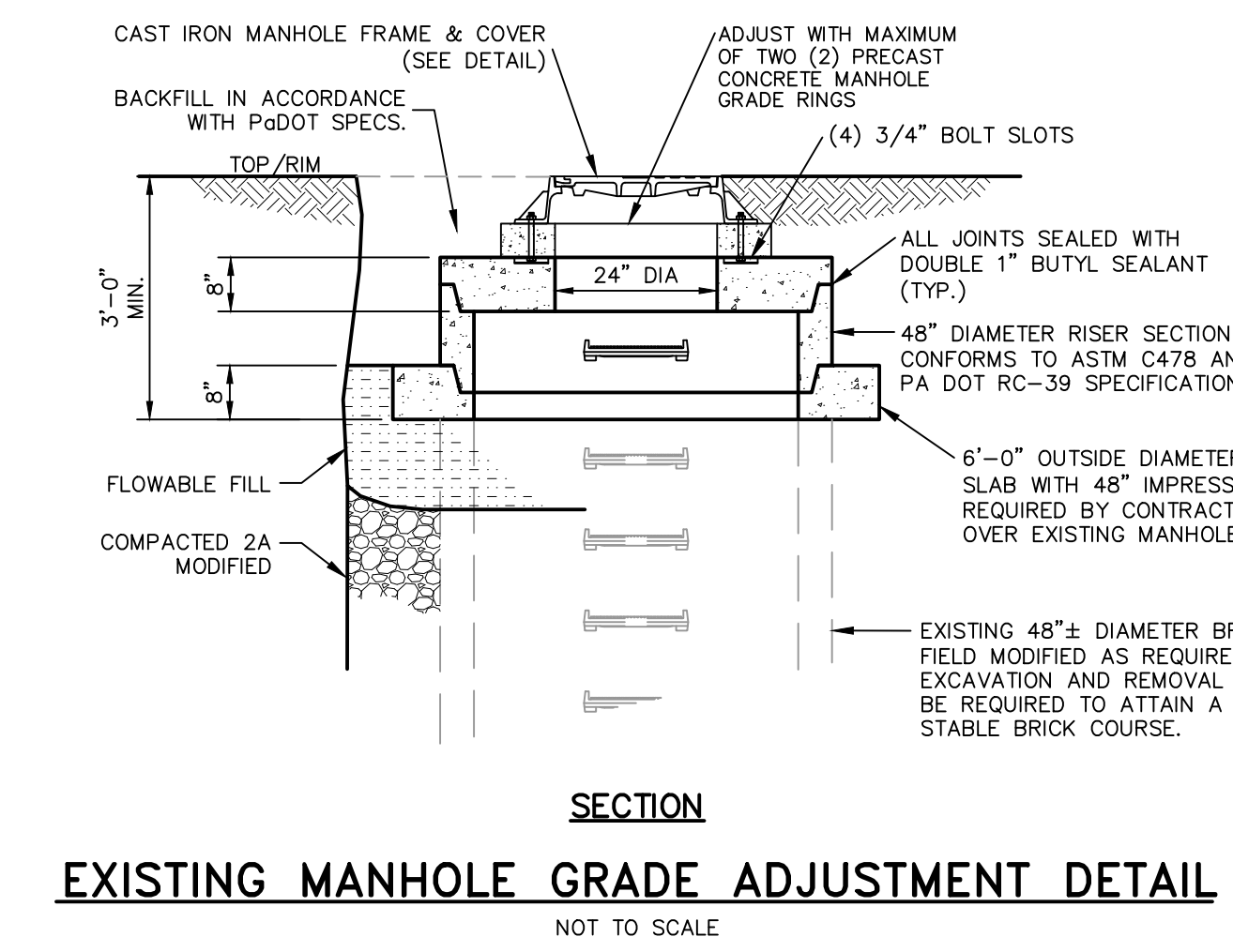
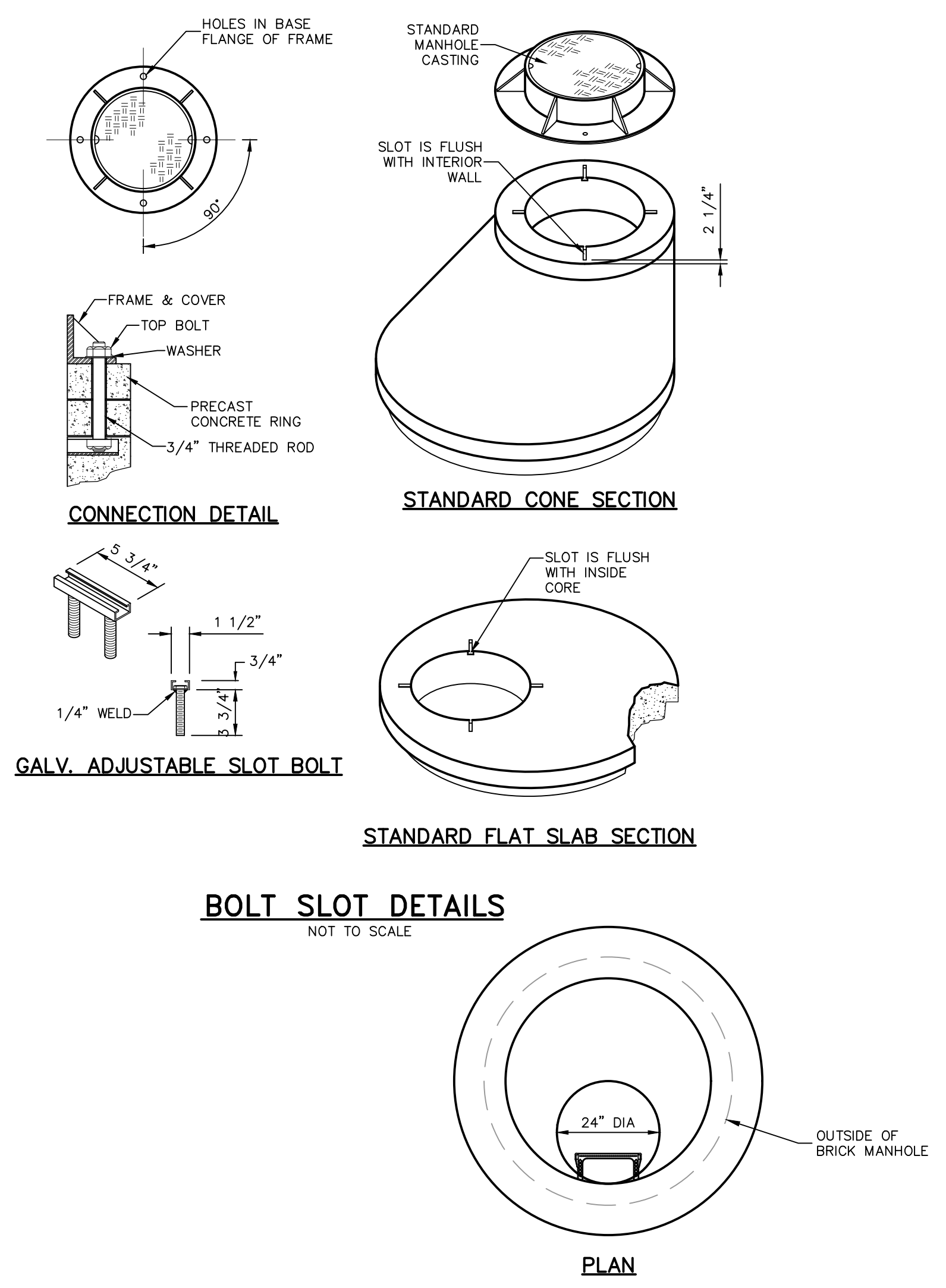
PENNDOT TYPE C INLET
NOT TO SCALE
SP150001



MANHOLE RISER RING DETAIL
NOT TO SCALE



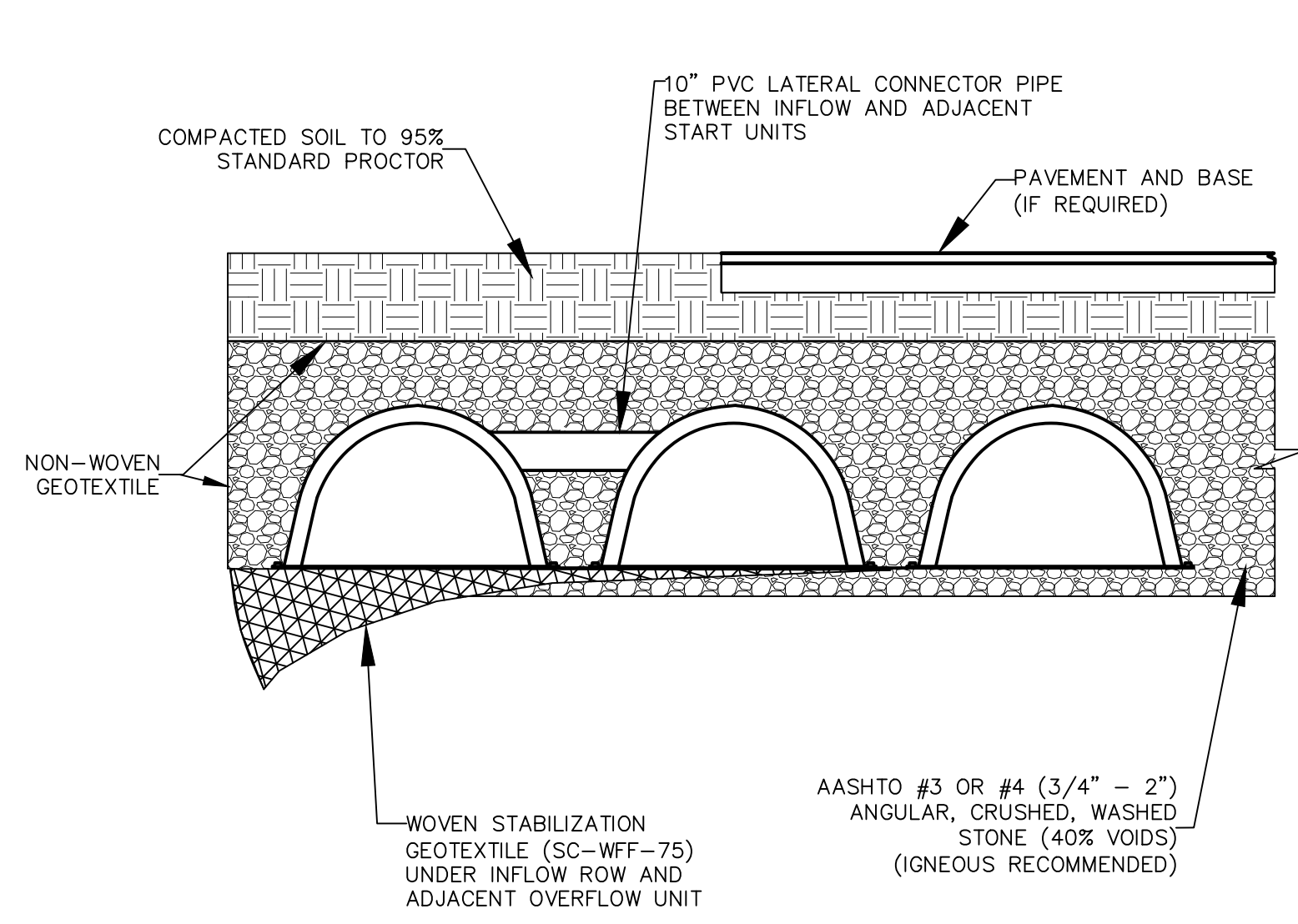
BOLT SLOT DETAILS
NOT TO SCALE



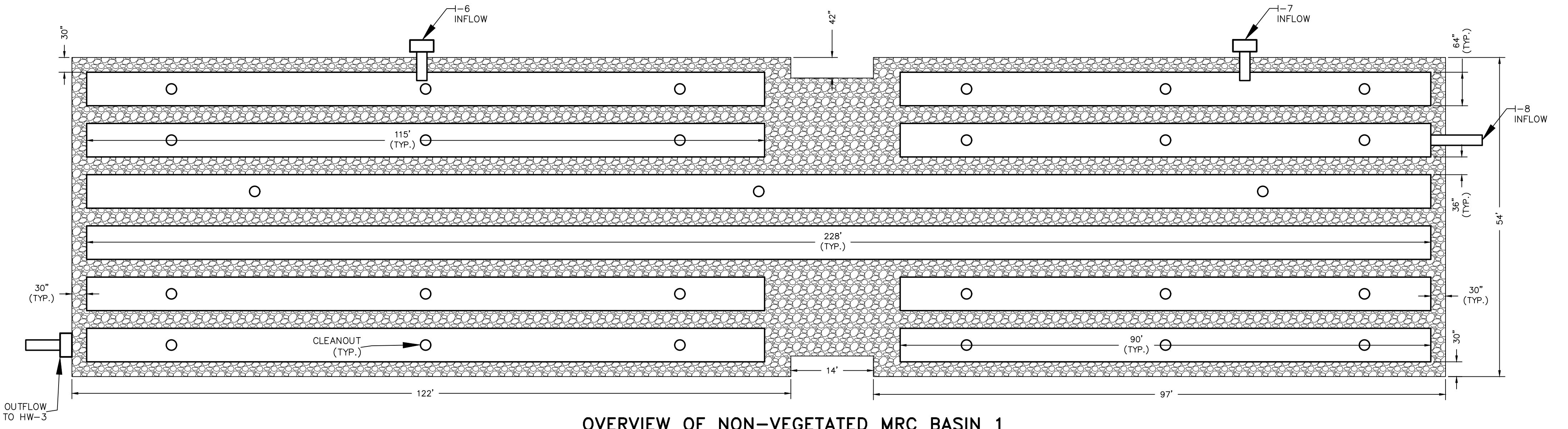
- NOTES:**
1. PRECAST CONCRETE MANHOLE SHALL CONFORM TO A.S.T.M. SPEC. C-478.
 2. MANHOLE SHALL HAVE BITUMASTIC COATING ON EXTERIOR WALLS.
 3. MAINTAIN UNIFORM GRADE THROUGH MANHOLE. (MINIMUM 0.10 FT FALL)
 4. ALL OPENINGS AROUND PIPES SHALL BE FINISHED WITH NON-SHRINK GROUT AND KOR-N-SEAL SERIES CONNECTORS OPENINGS SHALL BE CAST AT TIME OF MANHOLE CASTING.
 5. CONTRACTOR MAY USE PRECAST CHANNELS.
 6. SEAL GRADE RINGS WITH TWO ROWS OF BUTYL RUBBER SEALING COMPOUND ON OPPOSITE SIDES OF ANCHOR BOLTS.
 7. SEAL JOINTS BETWEEN MANHOLE SECTIONS WITH TWO RINGS OF BUTYL RUBBER SEALING COMPOUND.
 8. BACKFILL MANHOLES WITH NO. 57 STONE TO 6" BELOW FINISHED GRADE UNLESS REQUIRED OTHERWISE BY SPECIFICATIONS.
 9. CONCRETE FILL SHALL BE 3000 PSI, TYPE II.

MANHOLE NOTES
NOT TO SCALE
SP150001A

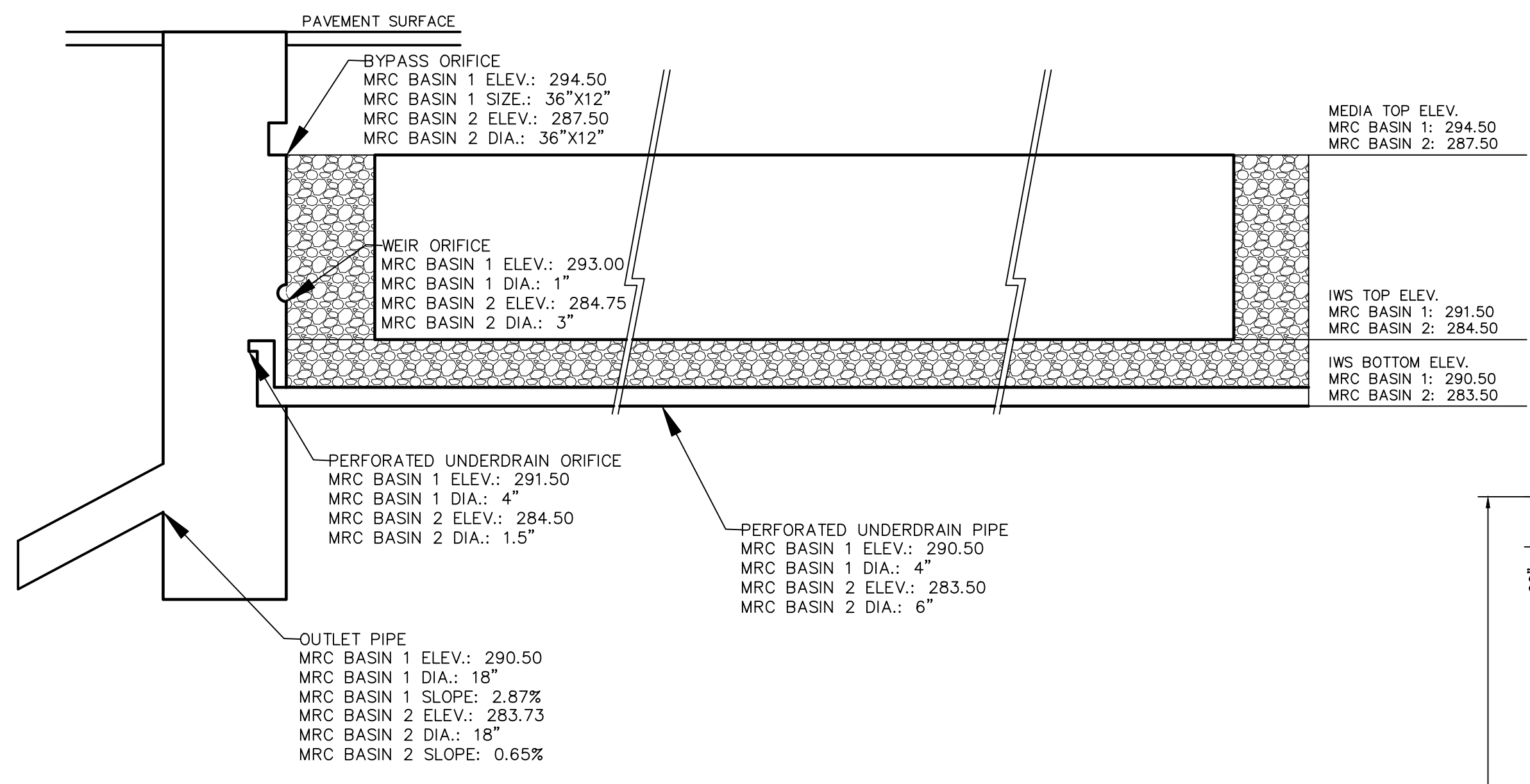
FOR RETTEW ASSOCIATES BY:		NO.		DATE	
MGR: KIM M. FASNACHT		CHKD BY: KMF		NO.	
DESIGN BY: KMF		SURV. CHIEF: JAM		DATE	
FIELDBOOK NO. DATA COLLECTOR		CHKD BY: JAM		NO.	
DRAWN BY: JMS		DATE		NO.	
DRAWING REFERENCE:		DATE		NO.	
CLIENT: 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428		AS NOTED		NO.	
RETTAW Associates, Inc. Lancaster, PA 17603 Phone: (800) 738-8995 Email: retaw@retaw.com Website: www.retaw.com		BUCKS COUNTY, PA		NO.	
SITE/UTILITY DETAILS PRELIMINARY/FINAL LAND DEVELOPMENT PLAN		101 INDEPENDENCE LANE		NO.	
DATE: 6/9/2022		SHEET NO. 12 OF 20		NO.	
DWG. NO. 111902019		DATE		NO.	



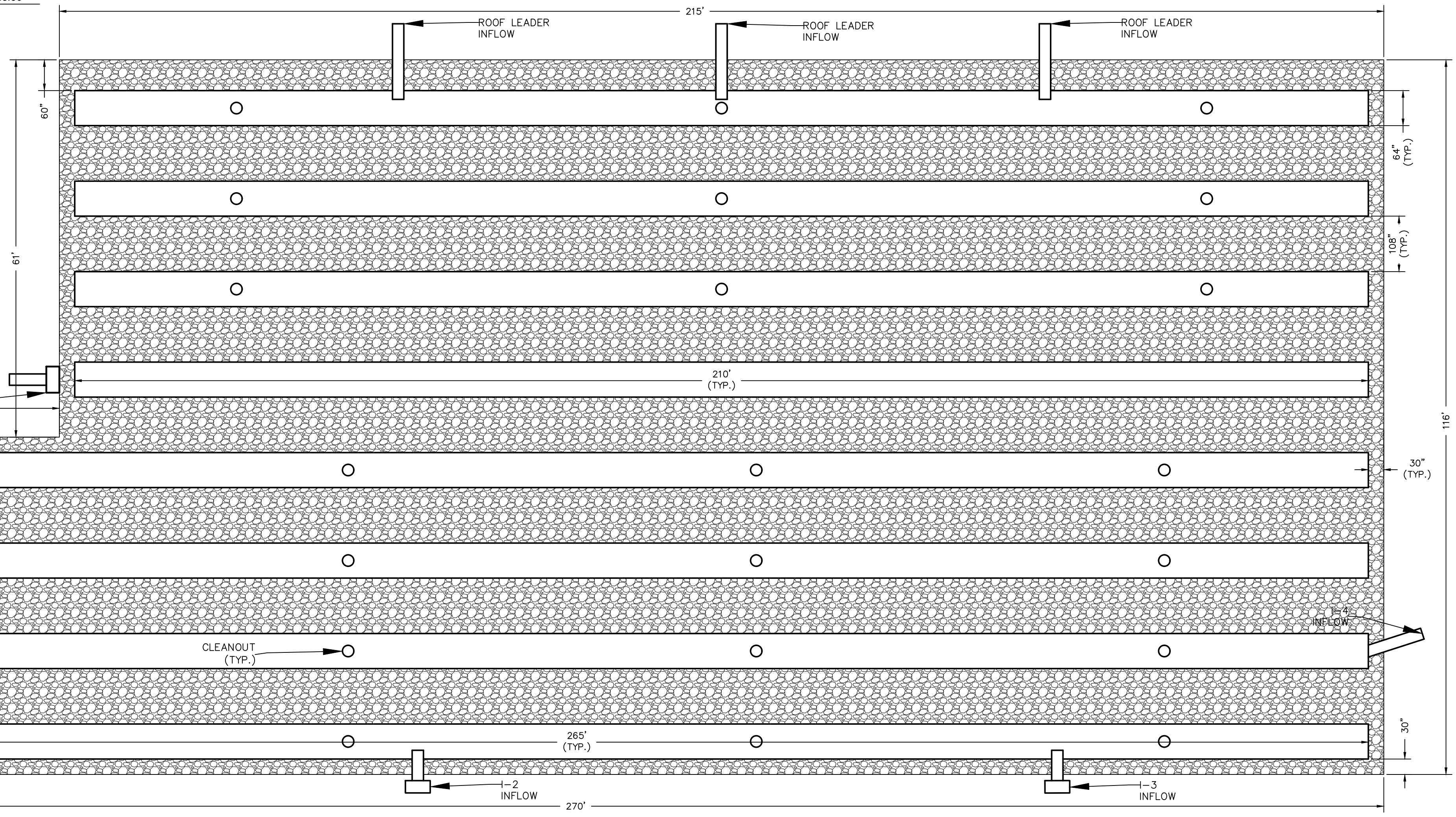
TYPICAL FRONT VIEW



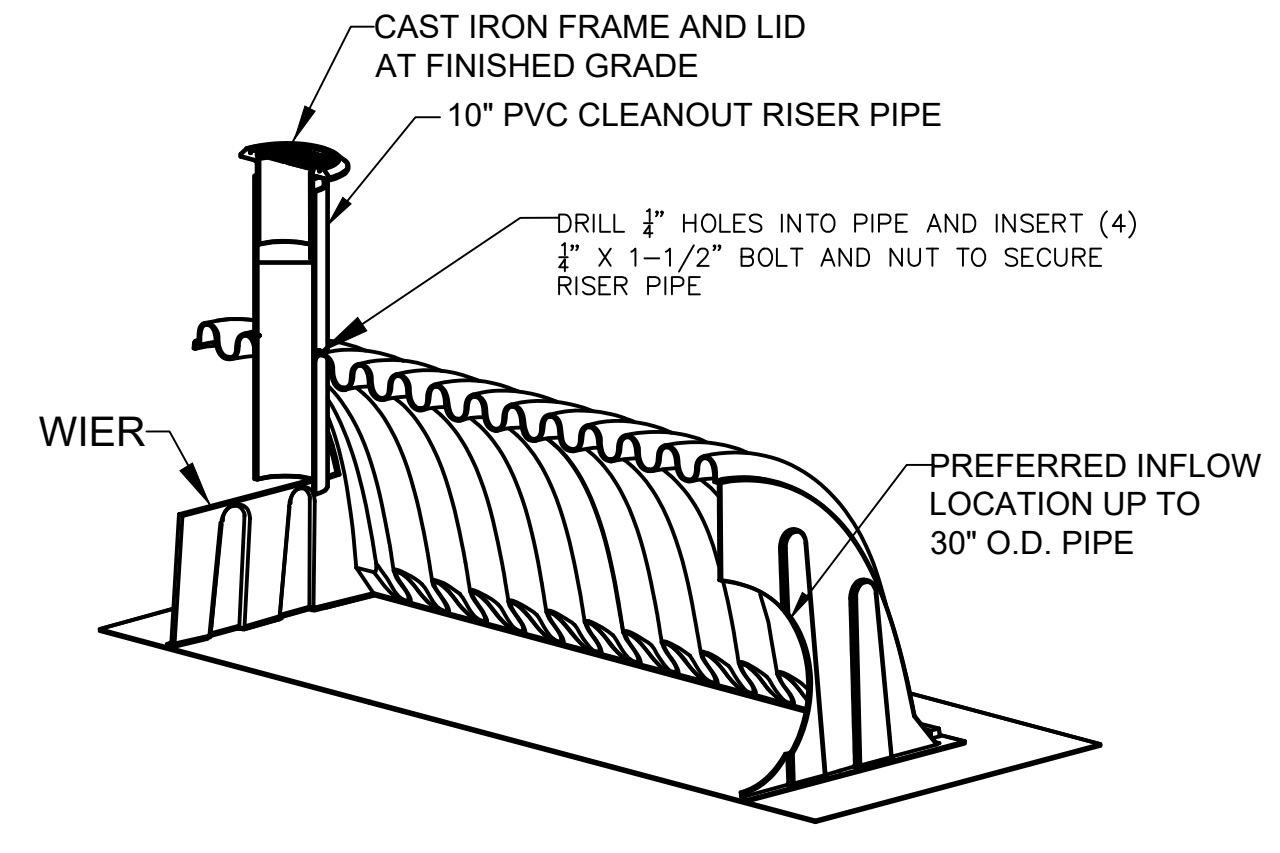
OVERVIEW OF NON-VEGETATED MRC BASIN 1



TYPICAL FRONT VIEW OF NON-VEGETATED MRC BASIN

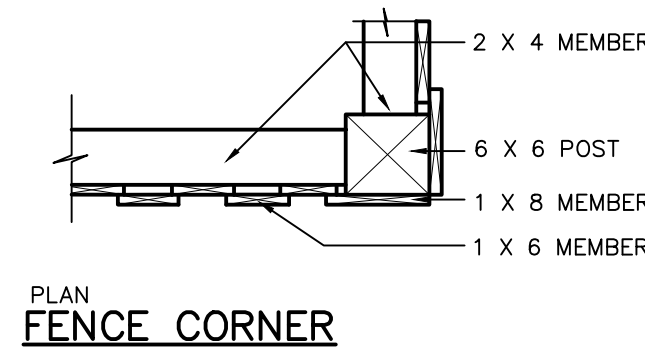
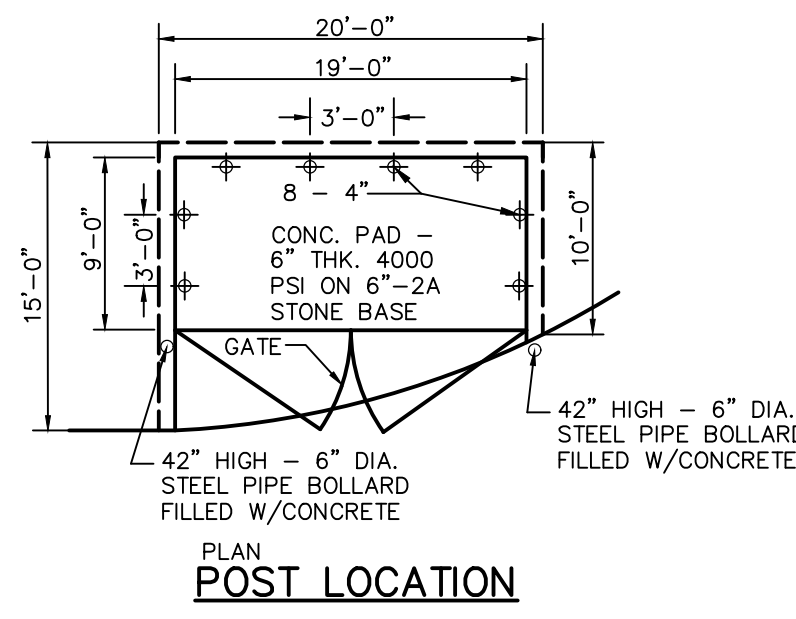
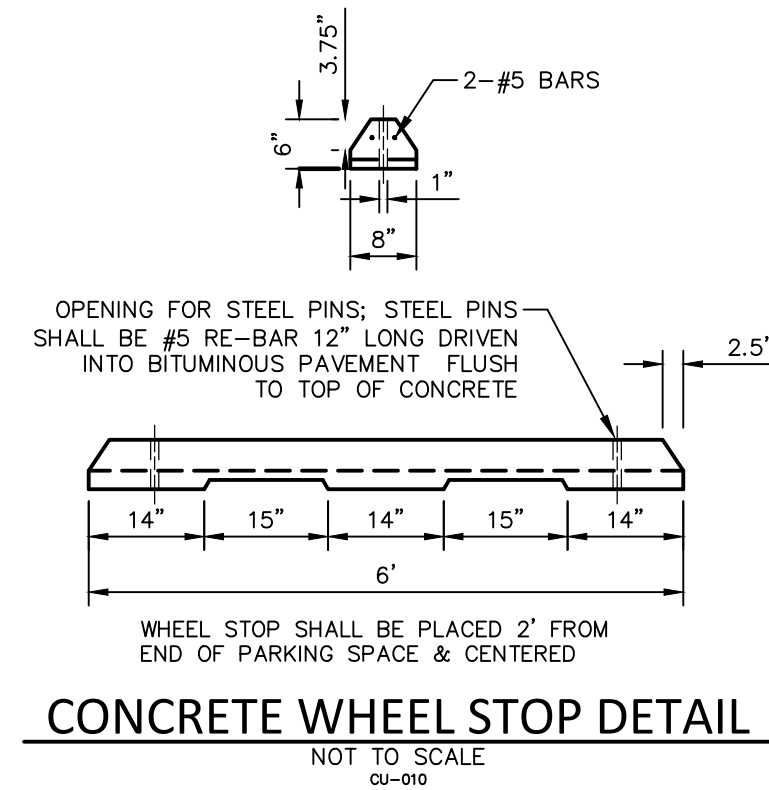
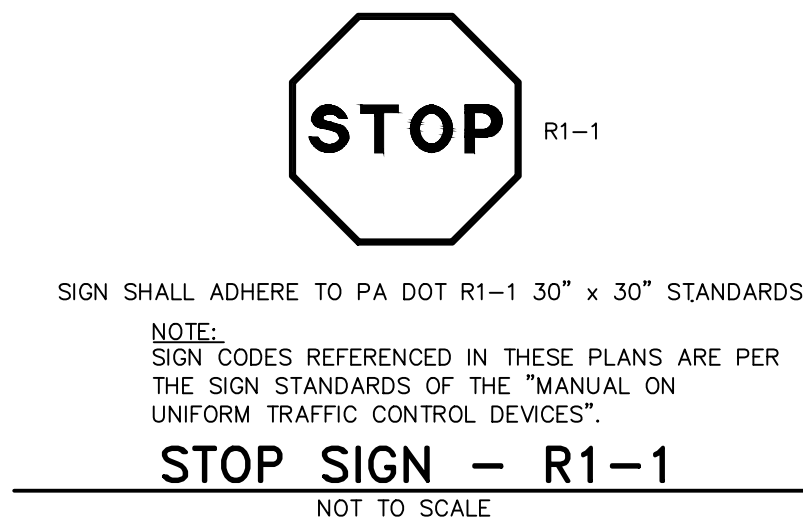
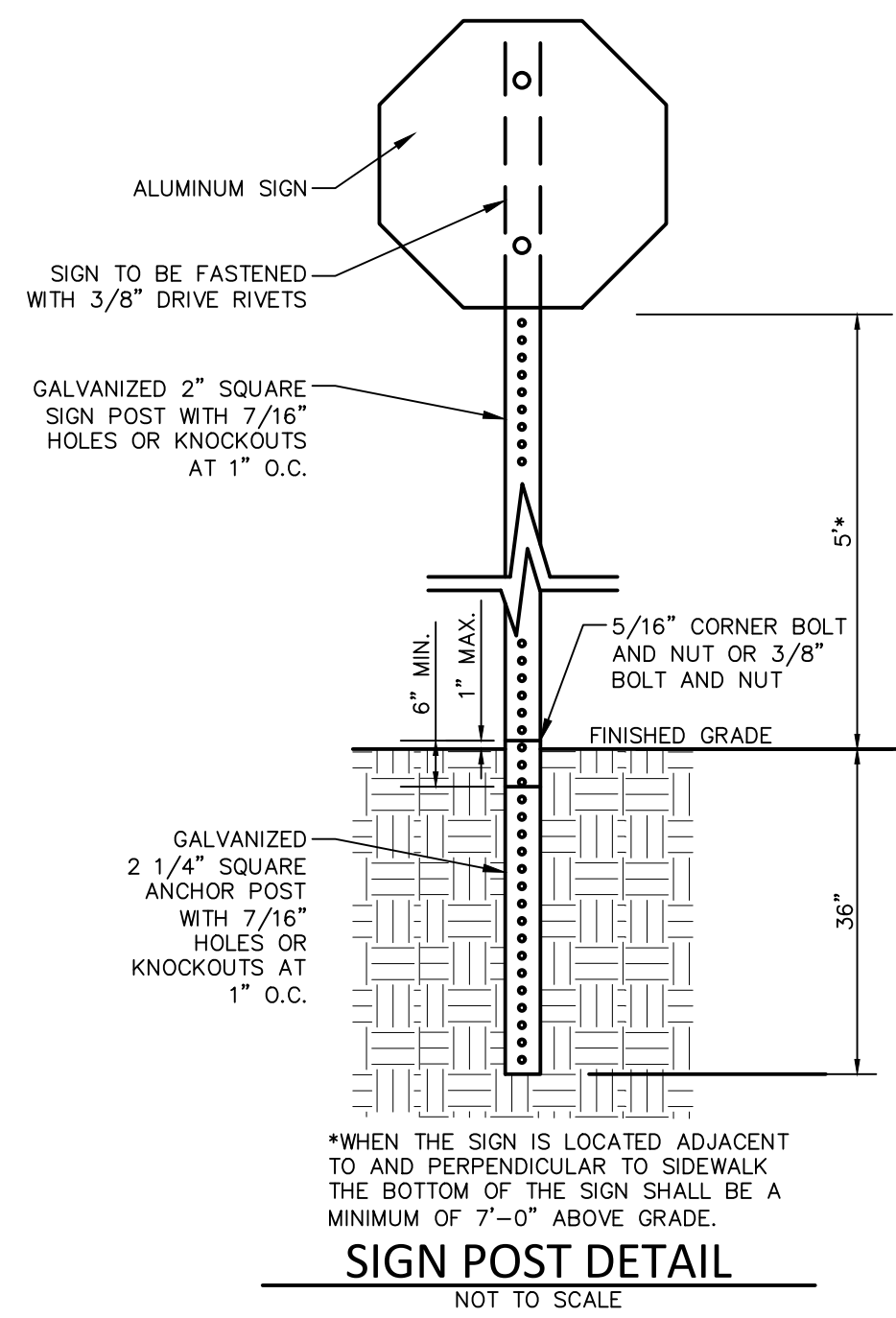


OVERVIEW OF NON-VEGETATED MRC BASIN 2

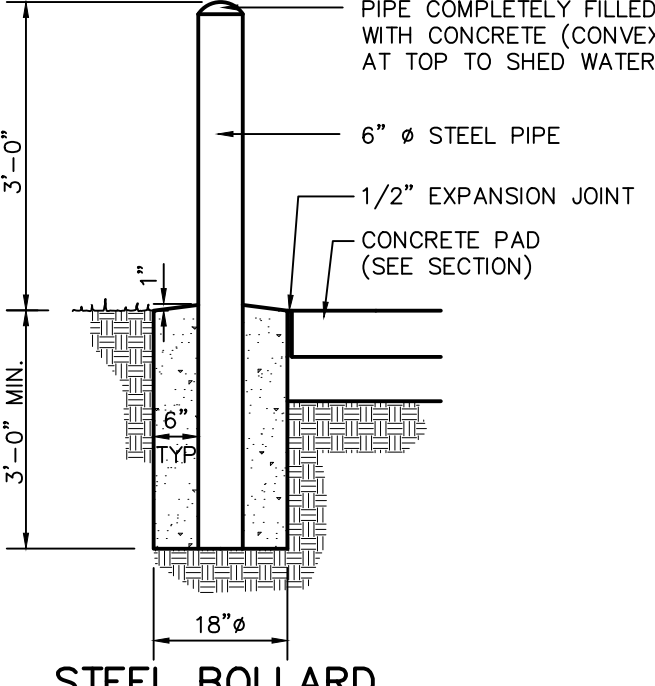
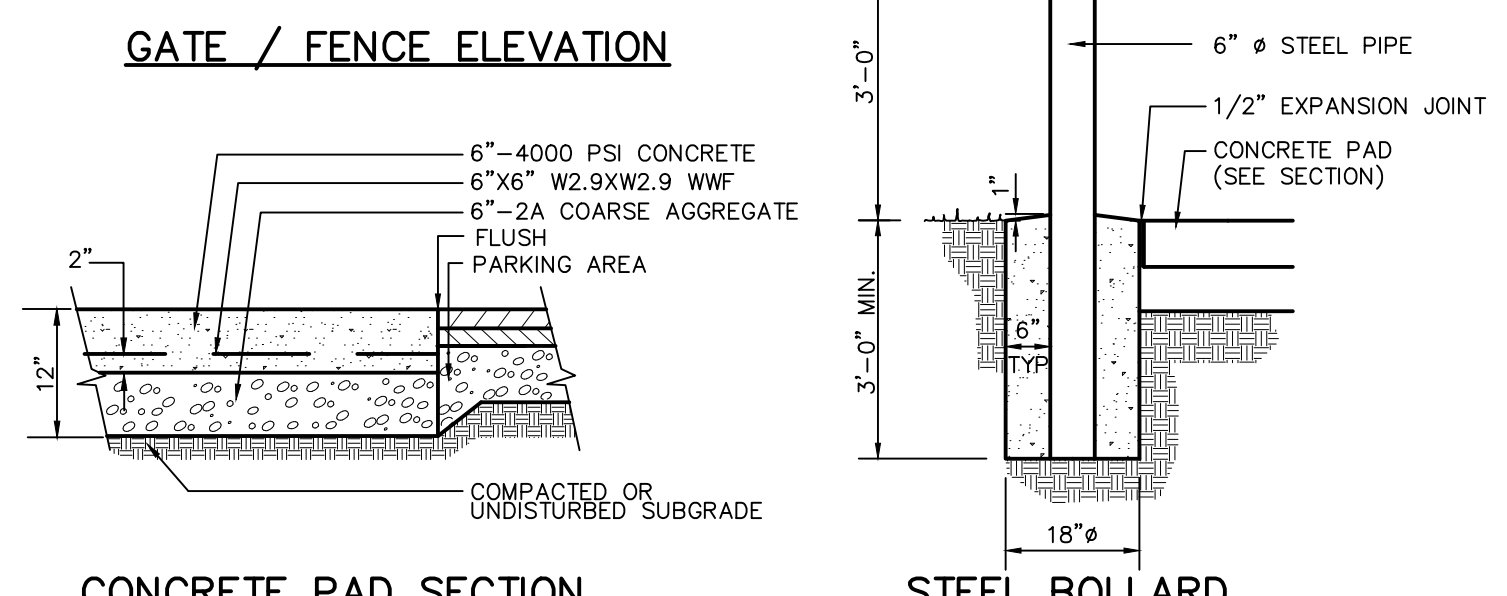
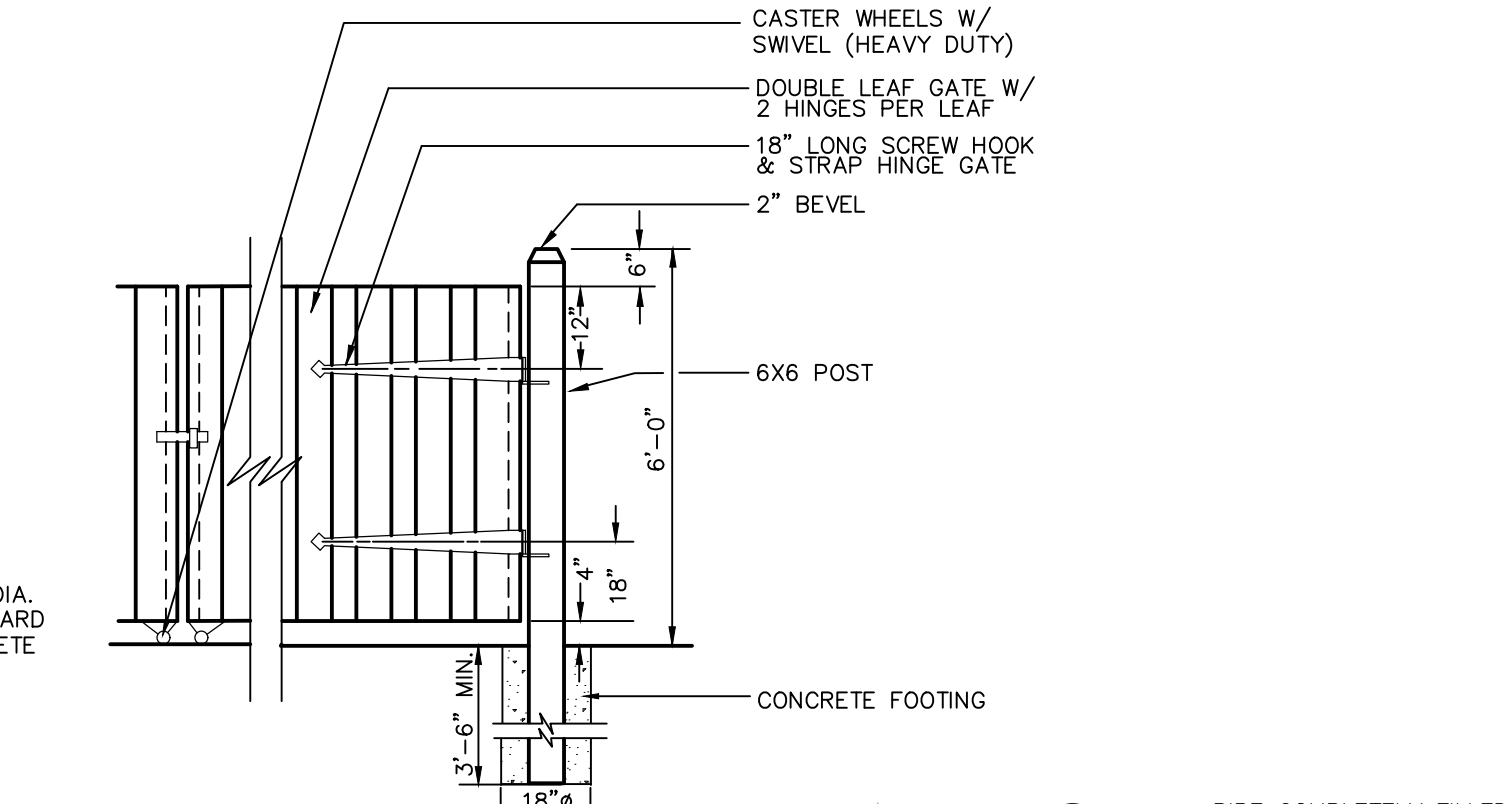


CHAMBER CLEANOUT

FOR RETTEW ASSOCIATES BY:		NO.	DATE
MANAGER: KIM M. FASNACHT	DESIGN BY: KMF	SURV. CHIEF: RELBROOK NO DATA COLLECTOR	DRAWN BY: JMS
CLIENT		AS NOTED	
101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428		BUCKS COUNTY, PA	
 RETTEW Associates, Inc. Lancaster, PA 17603 Phone (800) 738-8395 Email: rettew@rettew.com Website: www.rettew.com <small>Engineers • Planners • Surveyors • Landscape Architects CORPORATE OFFICE</small>		SITE/UTILITY DETAILS PRELIMINARY/FINAL LAND DEVELOPMENT PLAN 101 INDEPENDENCE LANE NEW BRITAIN TOWNSHIP	
DRAWING REFERENCE: C:\LAD\System\Software\Autodesk\Temp\ME\Autodesk\19136\111902019-Prelim_Final_LD_Plan.dwg		DATE: 6/9/2022	
SHEET NO. 13 OF 20		DWG. NO. 111902019	

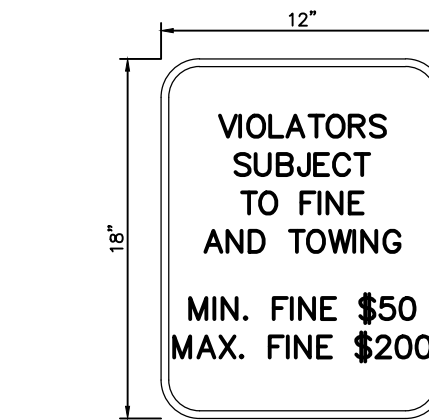


NOTE:
ALL MEMBERS TO BE PRESSURE TREATED SOUTHERN YELLOW PINE NO.1 LUMBER. ALL FASTENERS TO BE GALVANIZED STEEL. ALL WOOD MEMBERS TO HAVE MOISTURE CONTENT NO GREATER THAN 19%.



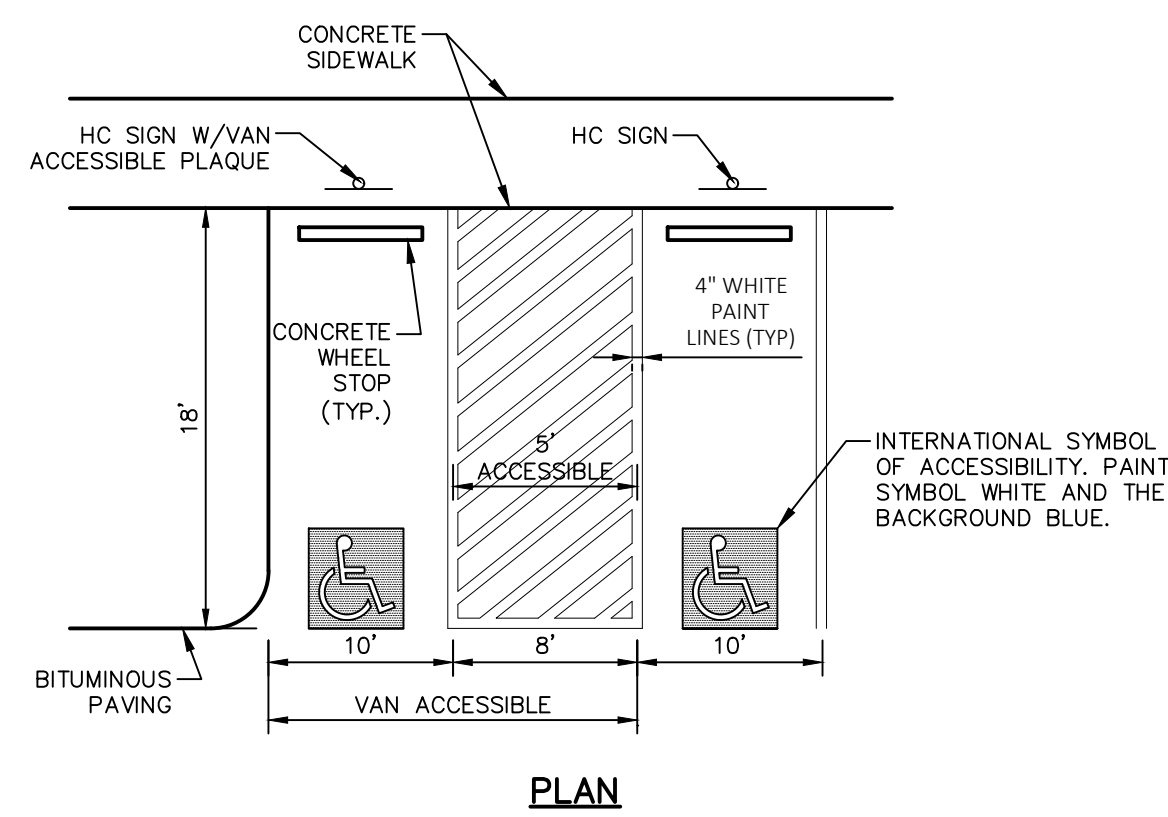
DUMPSTER ENCLOSURE W/ WOOD FENCE AND GATE

NOT TO SCALE



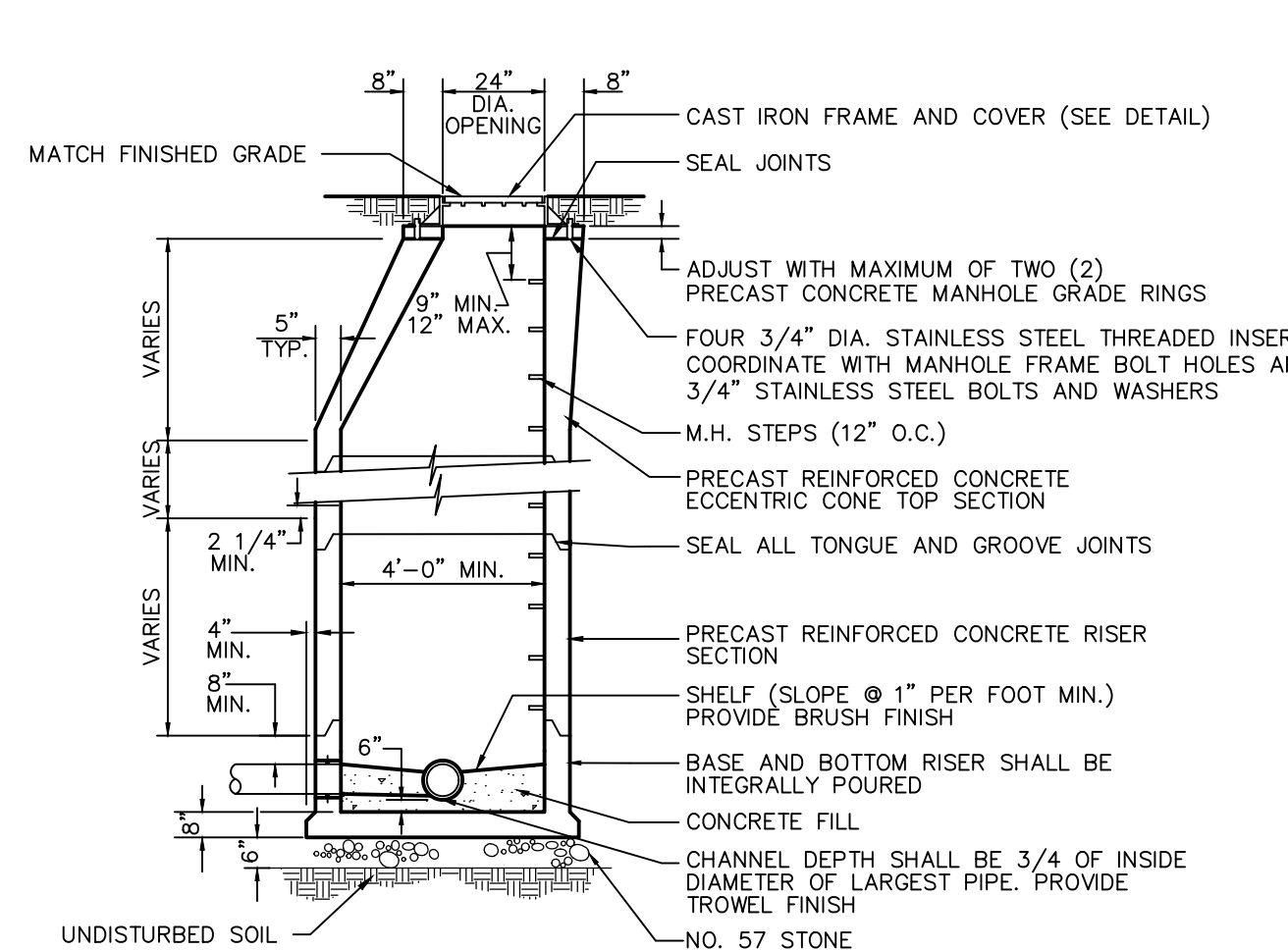
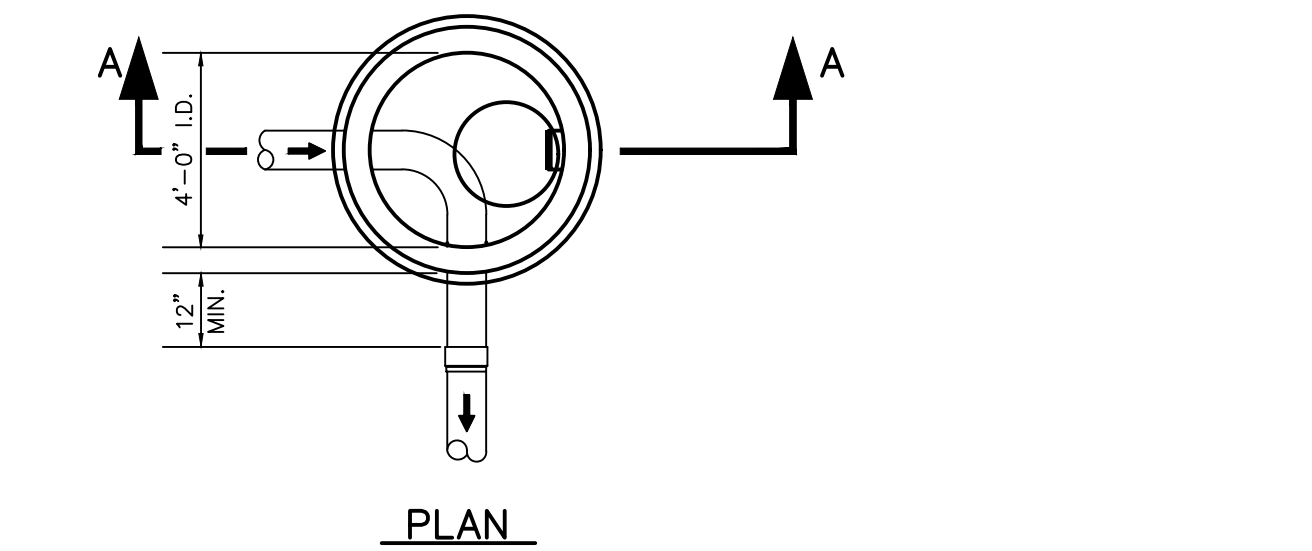
COLOR: LEGEND AND BORDER RED (REFLECTORIZED) BACKGROUND WHITE (REFLECTORIZED)

R7-8F



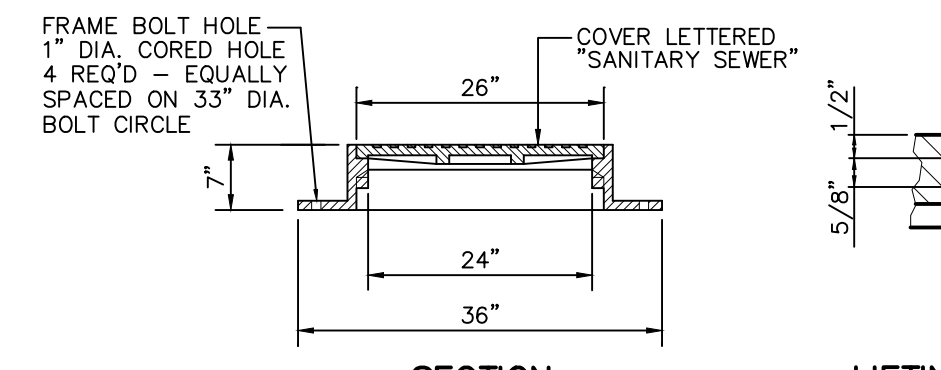
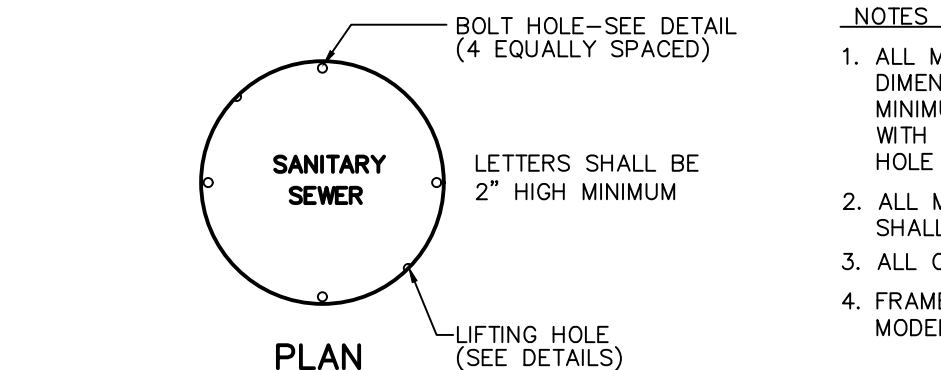
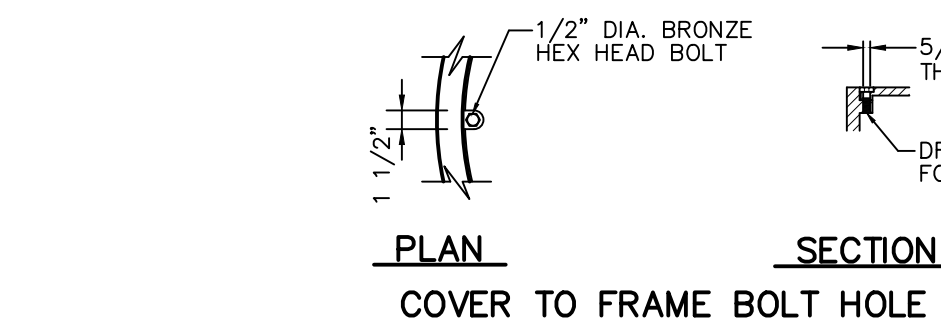
HANDICAP PARKING FACILITIES FOR STRAIGHT PARKING

NOT TO SCALE



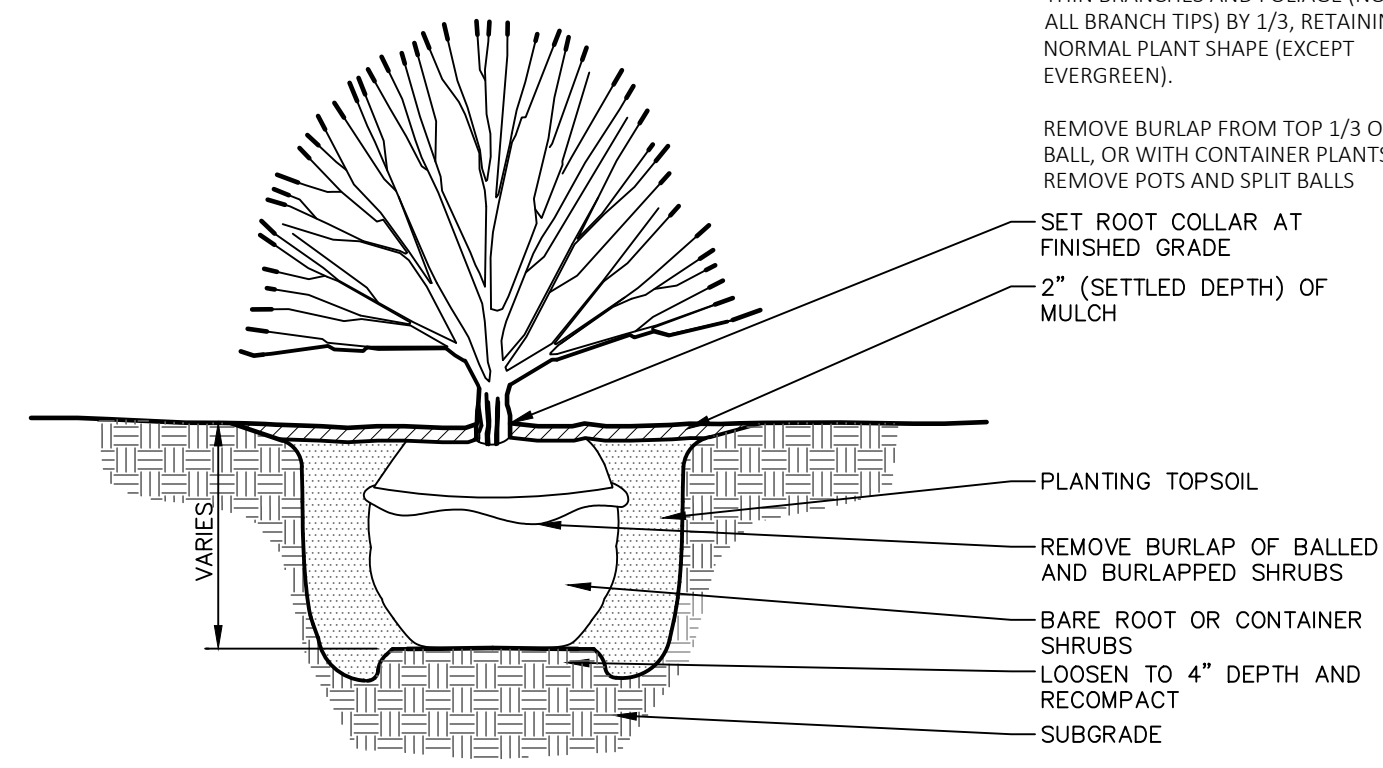
PRECAST CONCRETE MANHOLE

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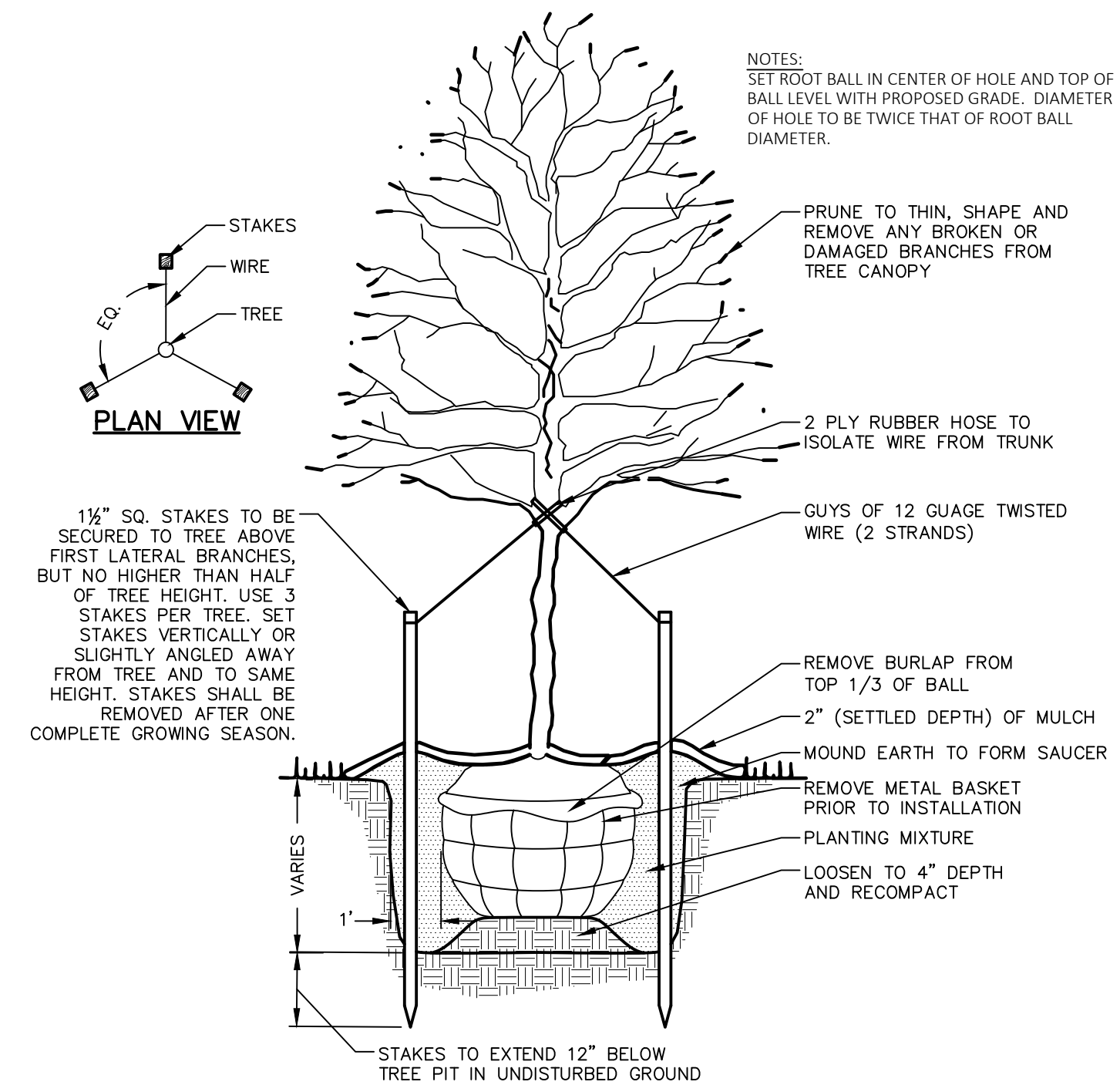
WATERTIGHT FRAME AND COVER

NOT TO SCALE



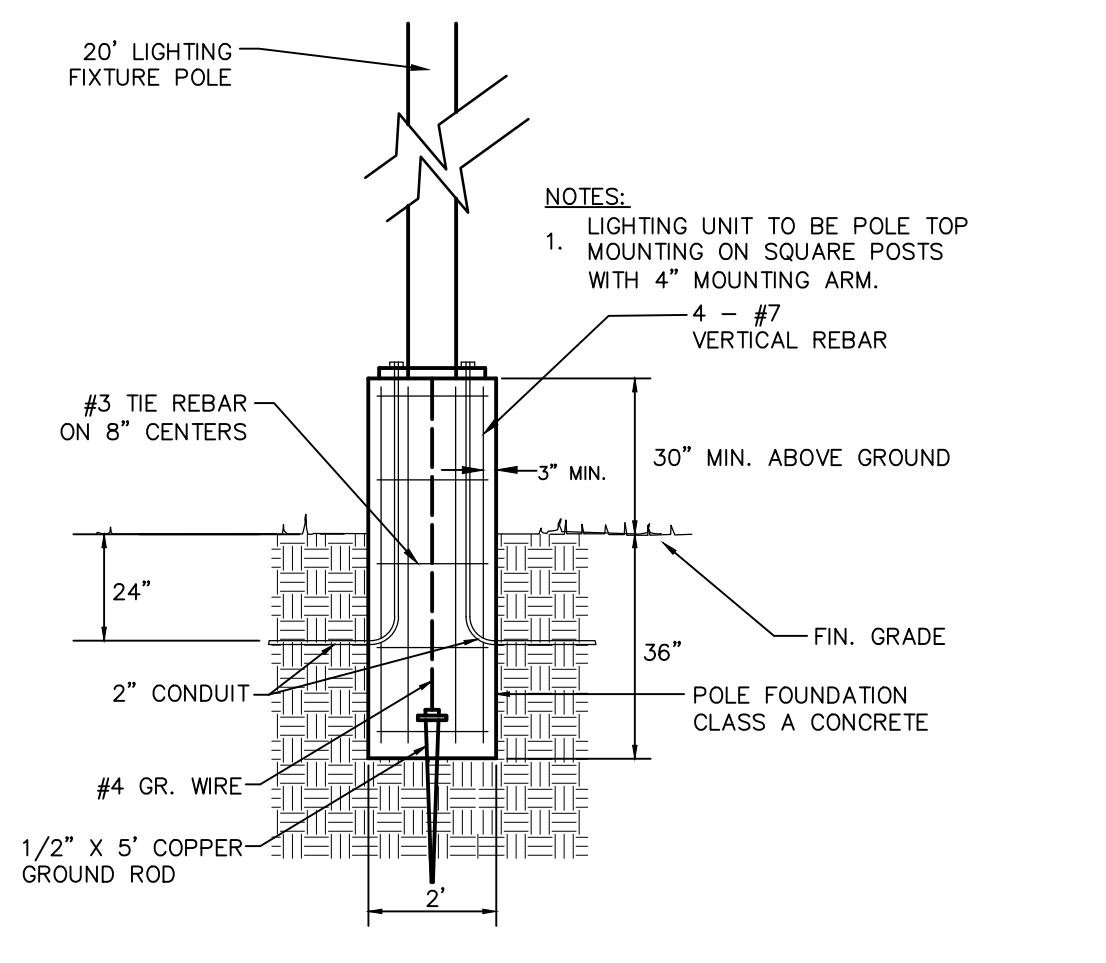
SHRUB PLANTING

NOT TO SCALE



DECIDUOUS TREE PLANTING

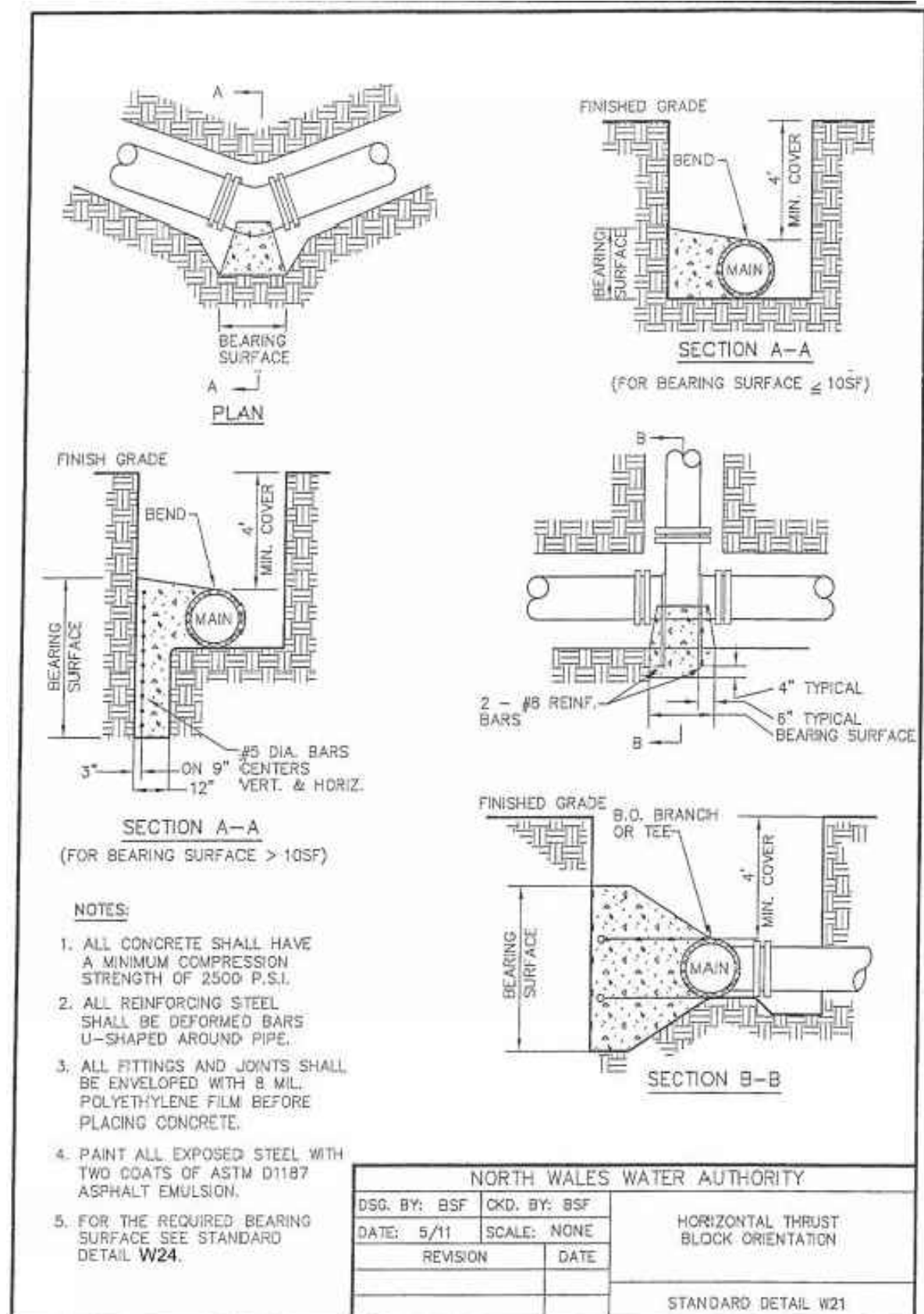
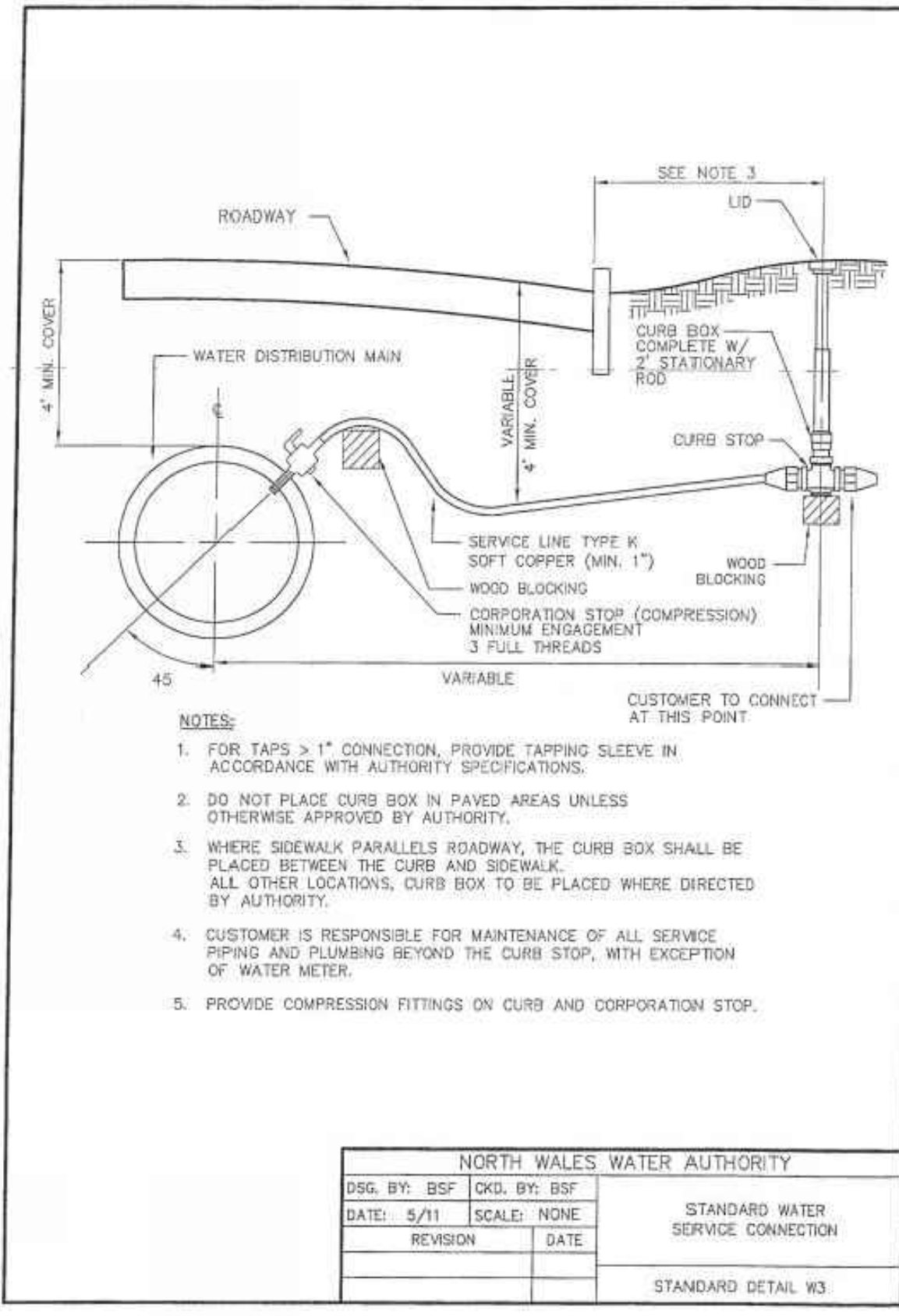
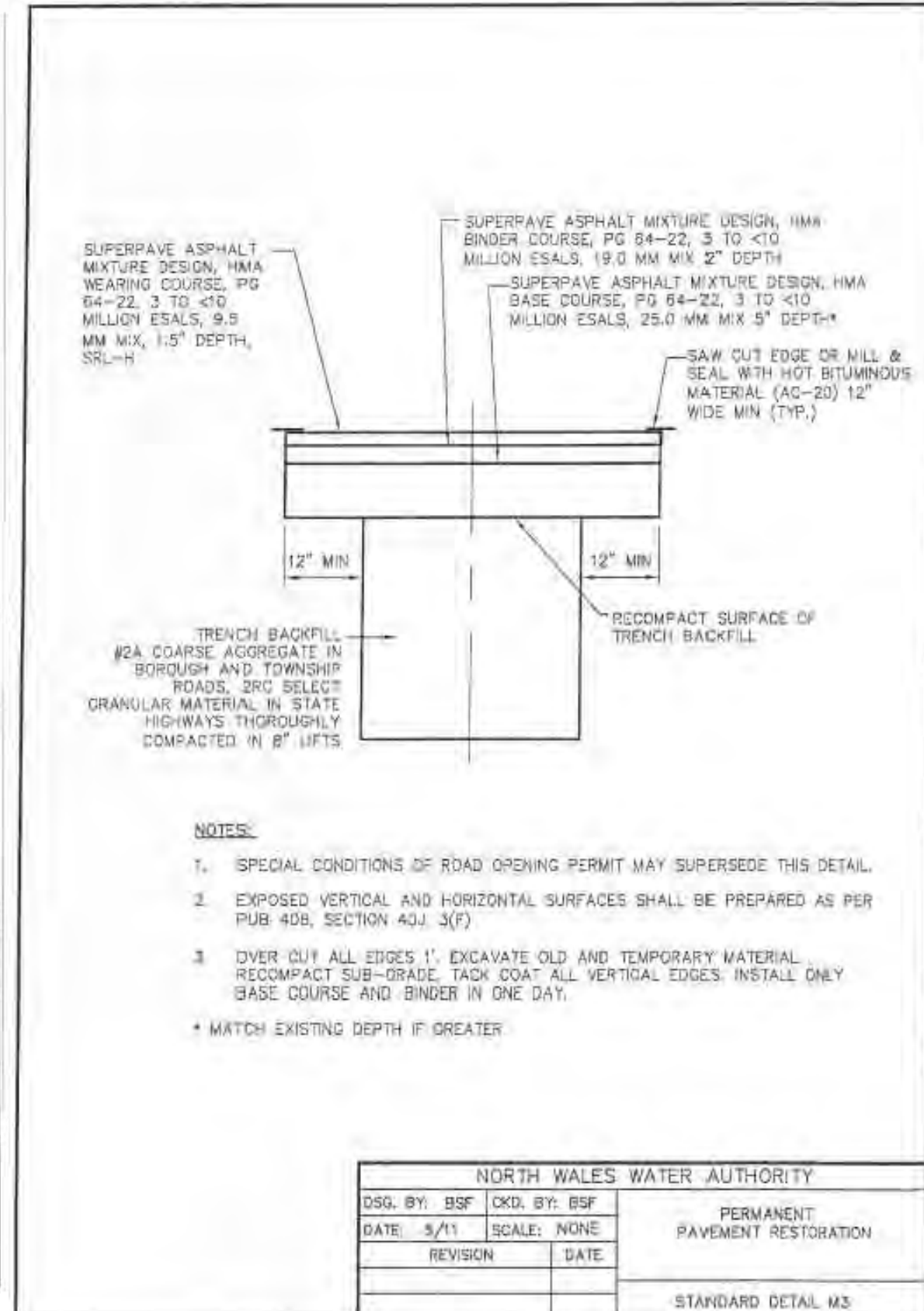
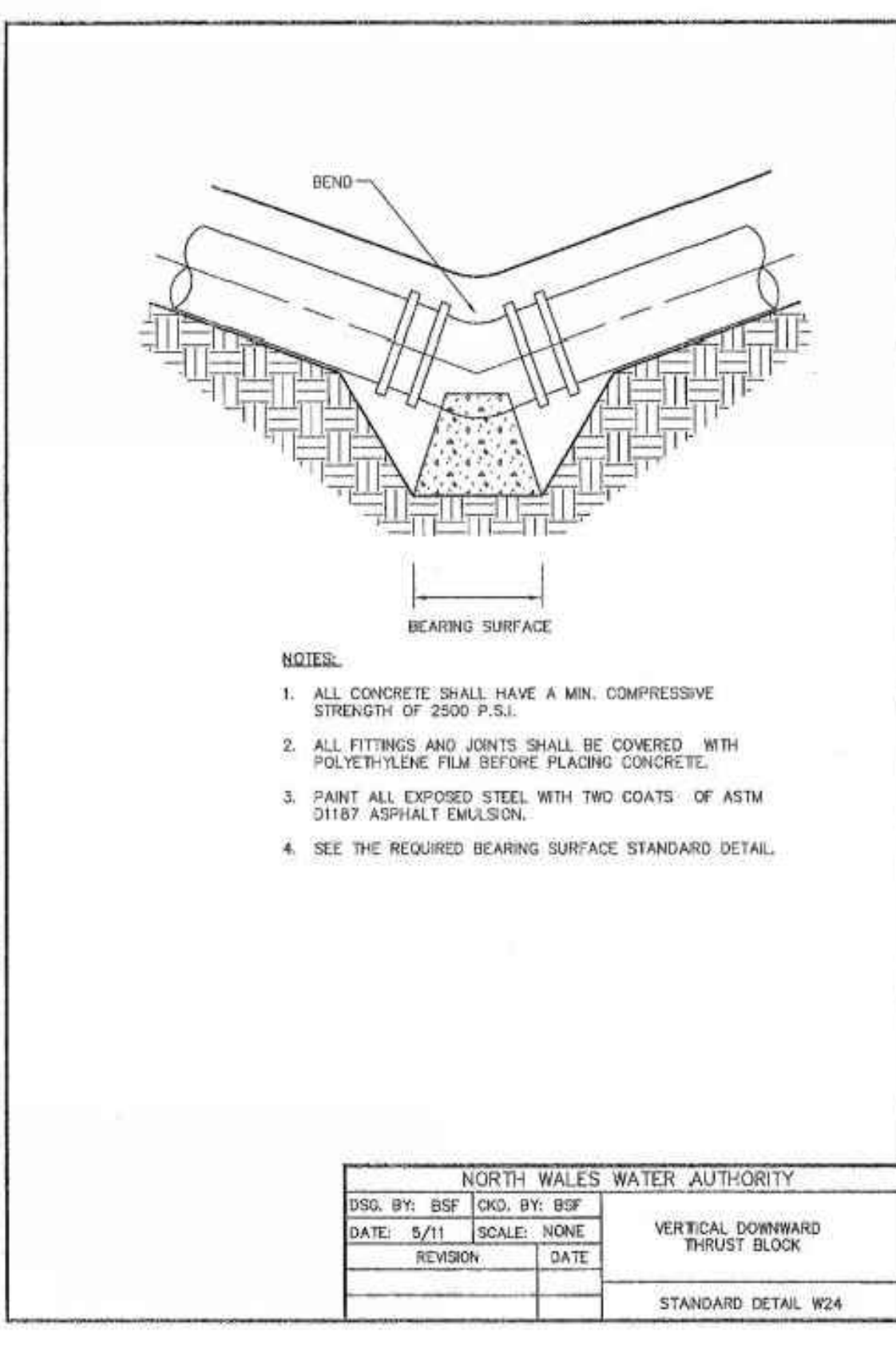
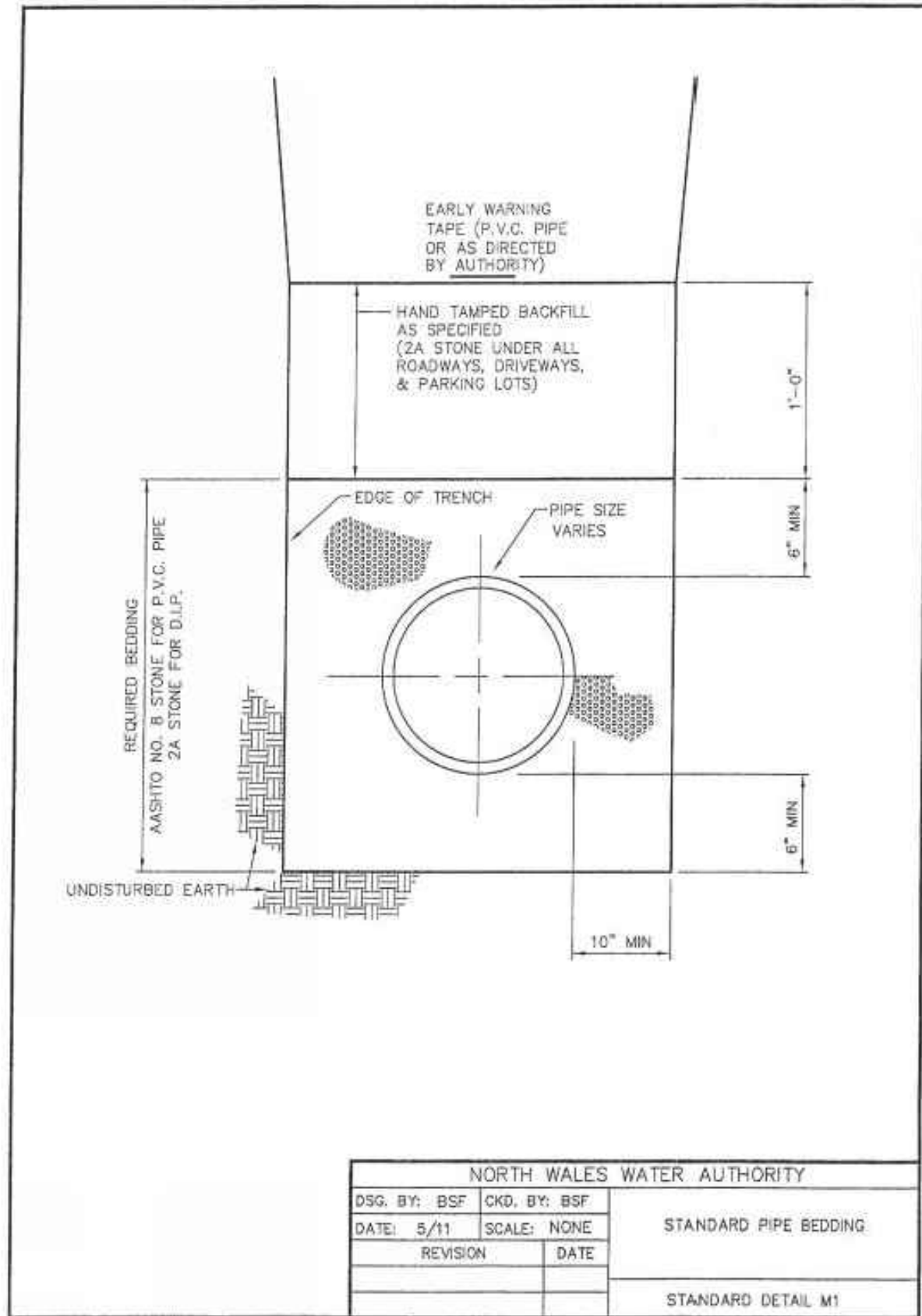
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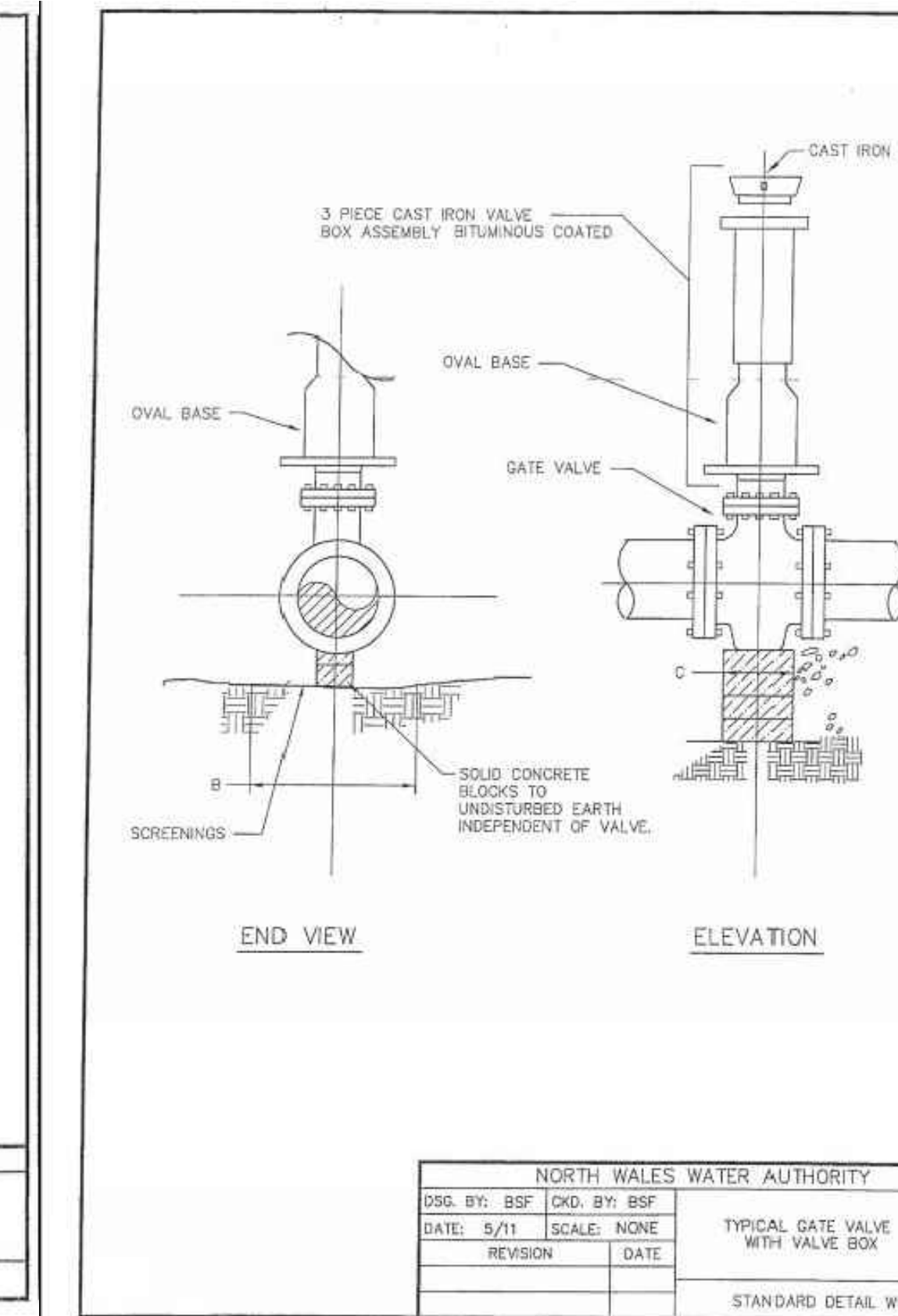
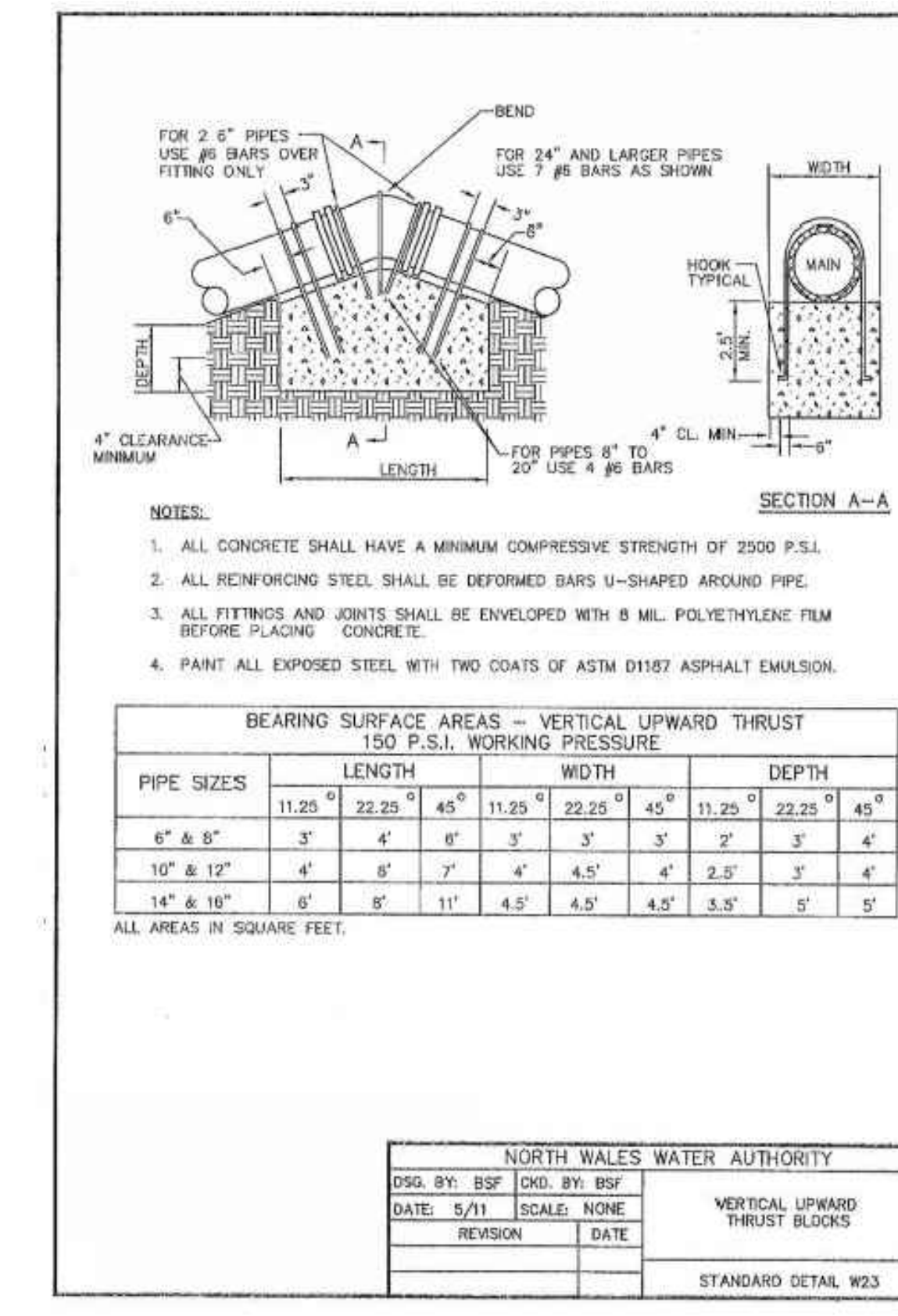
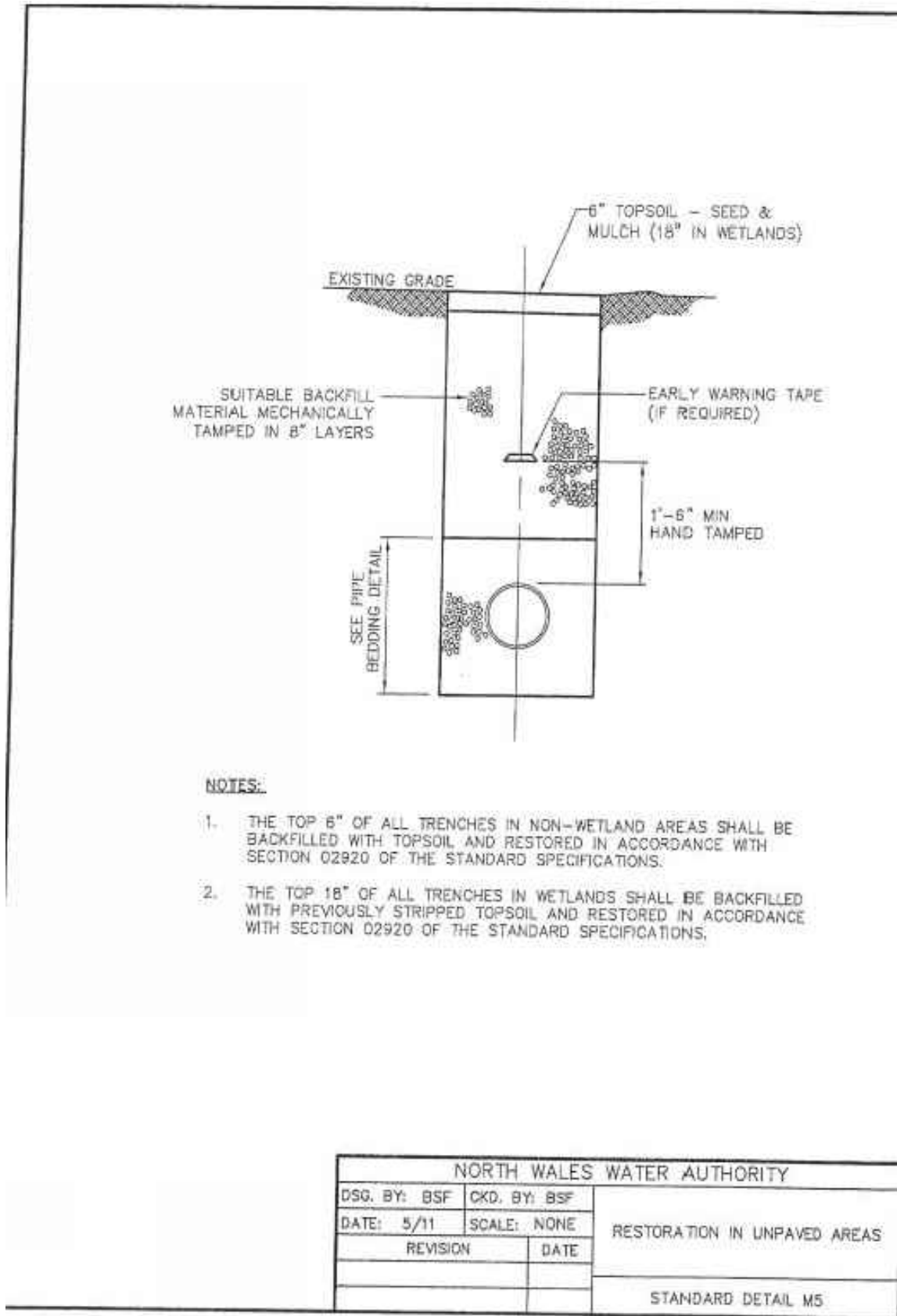
LIGHT FOUNDATION

NOT TO SCALE

FOR REVIEW ASSOCIATES BY:		NO.	DATE
MGR: KIM M. FASNACHT			
DESIGN BY: KMF	CHKD BY: KMF		
SURV. CHIEF: FELBROOK NO. DATA COLLECTOR	CHKD BY: JAM		
DRAWING REFERENCE:			
CLIENT: 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428			
PROJECT: 111802019-SV-BASE, 111802019-SV-TOPG, 111802019-LD-DEAD, 111802019-LD-DEAD, 111802019-SV-UGS, 111802019-LD-UTL, 111802019-SV-UTL, 111802019-SV-DRTH			
MANAGER: KIM M. FASNACHT			
DESIGN BY: KMF			
SURV. CHIEF: FELBROOK NO. DATA COLLECTOR			
DRAWN BY: JAM			
CHECKED BY: JAM			
DRAWING REFERENCE:			
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REVISION			
NO.			
DATE			
AS NOTED			
BUCKS COUNTY, PA			
NEW BRITAIN TOWNSHIP			
SITE/UTILITY DETAILS			
PRELIMINARY/FINAL LAND DEVELOPMENT PLAN			
101 INDEPENDENCE LANE			
DATE: 6/9/2022			
SHEET NO. 14 OF 20			
DWG. NO. 111902019			



BEARING SURFACE AREAS HORIZONTAL THRUST & VERTICAL DOWNWARD THRUST 150 P.S.I. WORKING PRESSURE		3"		4"		6"		8"	
PIPE SIZE	DEPTH	DEGREE OF BEND OR DEFLECTION		DEGREE OF BEND OR DEFLECTION		DEGREE OF BEND OR DEFLECTION		DEGREE OF BEND OR DEFLECTION	
SOFT CLAY (1,000#/SF)	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SILT (3,000#/SF)	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SANDY SILT (5,000#/SF)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SAND (8,000#/SF)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SANDY CLAY (8,000#/SF)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HARD CLAY (8,000#/SF)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



FOR RETNEW ASSOCIATES BY: [Signature]

MANAGER: KIM M. FASNACHT
DESIGN BY: CHK BY: KMF
SURV. CHIEF: RETNEW NO. DATA COLLECTION
DRAWN BY: JMS
DATE: 5/11

CLIENT: 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428

REVISIONS:

NO.	DATE	REVISION
1		
2		
3		
4		
5		
6		
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8		
9		
10		

AS NOTED

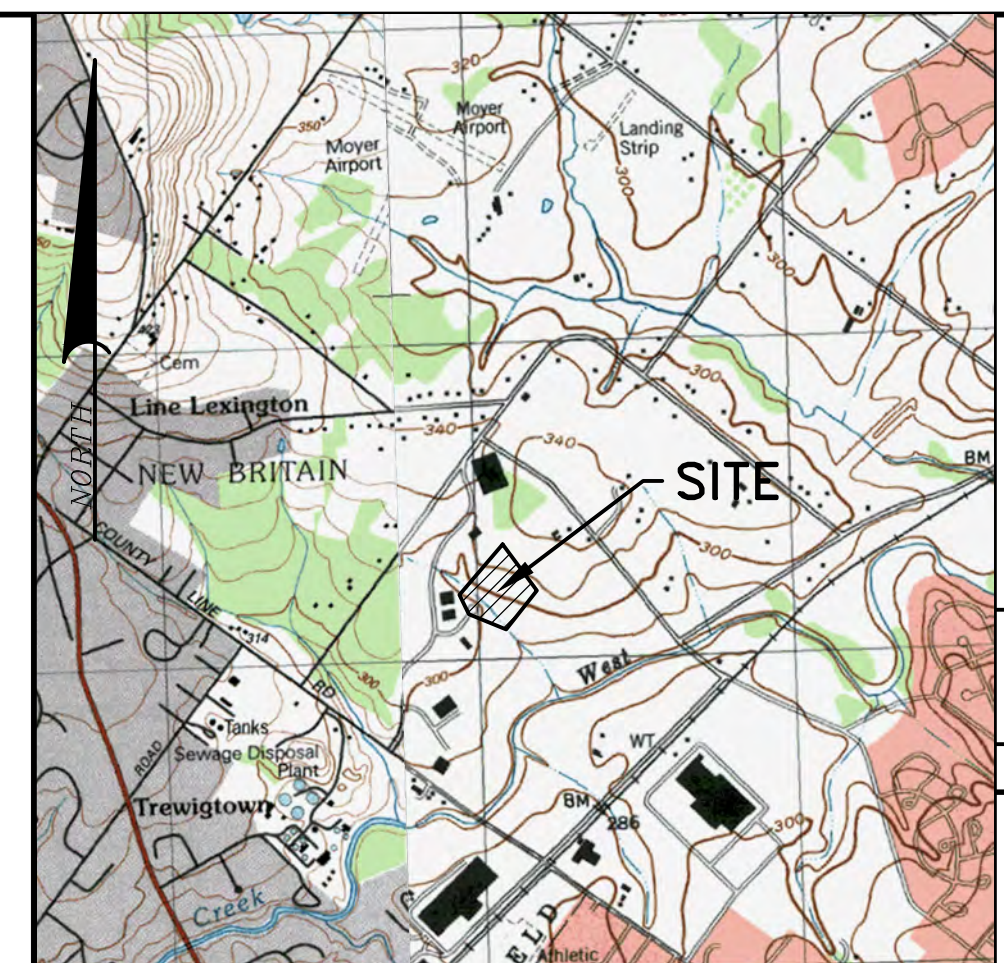
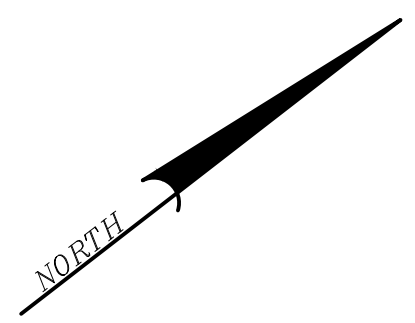
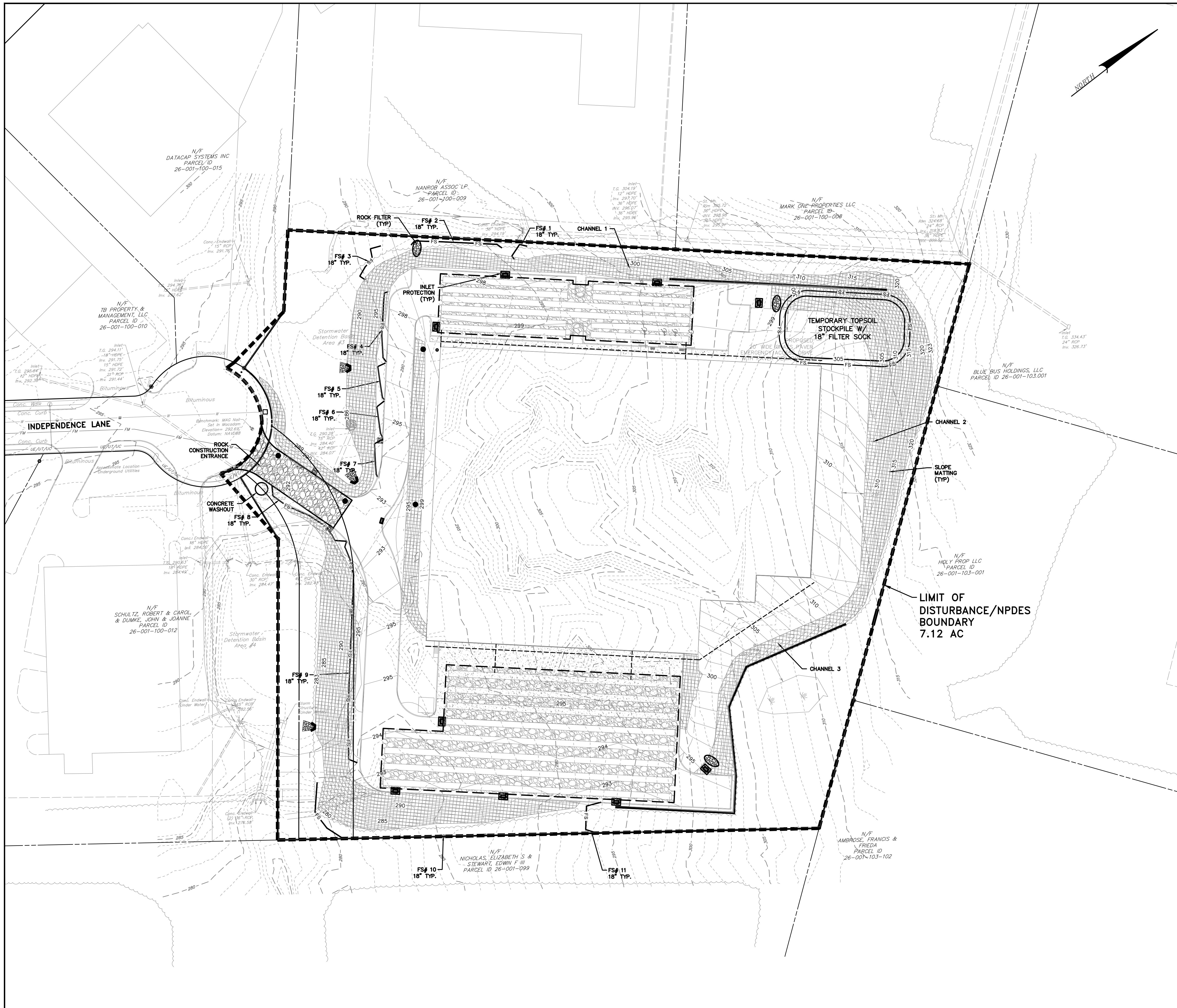
BUCKS COUNTY, PA

DATE: 6/9/2022

SHEET NO. 15 OF 20

DWG. NO. 111902019

NOT FOR CONSTRUCTION/NOT FOR BIDDING



7.5 MIN. QUADRANGLE MAP: DOYLESTOWN, PA
LOCATION MAP
 SCALE - 1"=800'

LEGEND	
	BENCHMARK
	FOUND PROPERTY MARKER
	CALCULATED PROPERTY MARKER
	SEWER
	MAILBOX
	LIGHT POLE
	GUY WIRE
	UTILITY POLE
	GAS METER
	GAS VALVE
	WATER VALVE
	WATER METER
	HYDRANT
	INLET
	SANITARY MANHOLE
	STORM MANHOLE
	ELECTRIC MANHOLE
	UNKNOWN STRUCTURE
	ELECTRIC BOX
	CABLE BOX
	TELEPHONE BOX
	TREE LINE
	RIGHT OF WAY LINE
	PROPERTY LINE
	ADJOINER PROPERTY LINE
	MAJOR CONTOUR (5')
	MINOR CONTOUR (1')
	GS CONTOUR (2')
	EASEMENT LINE
	PROPOSED SETBACK LINE
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED PAVEMENT MARKING
	PROPOSED TREELINE
	PROPOSED FENCE
	PROPOSED CONTOUR LINE
	PROPOSED SPOT ELEVATION
	PROPOSED FINISHED FLOOR ELEVATION
	PROPOSED PIPE OUTLET PROTECTION
	LIMITS OF DISTURBANCE/NPDES BOUNDARY
	TEMPORARY INLET PROTECTION
	TEMPORARY ROCK
	TEMPORARY ROCK FILTER

SOILS CLASSIFICATION	
AbA:	ABBOTTSTON SILT LOAM, 0 TO 3 PERCENT SLOPES
ReB:	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES
RiC:	REAVILLE CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES

RECEIVING WATER CLASSIFICATION WATER QUALITY DESIGNATION	
-	UNNAMED TRIBUTARY TO WEST BRANCH NESHAMNY CREEK
-	DESIGNATED USE: WARM WATER FISHES (WWF) AND MIGRATORY FISH (MF)
-	EXISTING USE: NO SEPARATE CLASSIFICATION

NO.	DATE	REVISION

FOR RETTEW ASSOCIATES BY:	
MANAGER:	KIM M. FASNACHT
DESIGN BY:	CHKD BY: KMF
SURV. CHIEF:	FELDBROOK NO. DATA COLLECTOR
DRAWN BY:	CHKD BY: JAM
DRAWING REFERENCE:	C:\CAD\System\Software\Autodesk\Temp\AutoCAD_Vtemp\DWG_Vtemp\111902019-Plan.dwg

CLIENT	
101 INDEPENDENCE LANE ASSOCIATES, LLC	ONE TOWER BRIDGE
100 FRONT STREET, SUITE 560	WEST CONSHOHOCKEN, PA 19428

RETTEW
 RETTEW Associates, Inc. Lancaster, PA 17603
 Phone (800) 738-8395
 Email: rettew@rettew.com
 Website: www.rettew.com

Engineers • Planners • Surveyors • Landscape Architects
 Environmental Scientists

EROSION & SEDIMENT CONTROL PLAN PRELIMINARY/FINAL LAND DEVELOPMENT PLAN	
101 INDEPENDENCE LANE	
NEW BRITAIN TOWNSHIP BUCKS COUNTY, PA	
DATE:	6/9/2022
SHEET NO.	16 of 20
DWG. NO.	111902019

NOT FOR CONSTRUCTION/NOT FOR BIDDING

EROSION AND SEDIMENT CONTROL (ESC) 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 NOTIFY 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 RECONSTRUCTION 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 PLAN 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 MAP(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 2:1V 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 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.
- 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 DATA. CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE OPERATOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF A REGULATED SUBSTANCE OCCURRED ON THE SITE.
- 13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, UNDER UNDISTURBED VEGETATED AREAS. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- 14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY ONTO ANY ROADS.
- 15. 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. THE OPERATOR MUST MAINTAIN AND MAKE AVAILABLE TO LANCASTER COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENEWING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.
- 16. 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.
- 17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 18. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEPS, FLAPLINGS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- 19. 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 OF 20% SAND AND SHOULD HAVE A MINIMUM OF 40% AND A MAXIMUM OF 70% SAND. THE COMPOST PORTION OF THE ENGINEERED SOIL SHOULD NOT CONTAIN WOODY DEBRIS OR RESSEMBLE MULCH.
- 20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLUPPAGE, 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.
- 21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOIL, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 25. SEEPS OR SPRINGS ENCONTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDING AREAS WITHIN 50 FEET OF A SURFACE WATER OR OTHER OBSTRUCTION SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.
- 31. 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 EROSION OF DISTURBED AREAS. SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 32. 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.
- 33. FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO IMMEDIATELY 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 PENALTIES OF 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.
- 34. IN THE EVENT OF SINKHOLE DISCOVERY A PROFESSIONAL GEOLOGIST OR ENGINEER WILL BE CONTACTED CONCERNING MITIGATION. ADDITIONALLY, THE LANCASTER COUNTY CONSERVATION DISTRICT AND THE NEW BRITAIN TOWNSHIP GEOTECHNICAL CONSULTANT WILL BE MADE AWARE OF THE SINKHOLE DISCOVERY IMMEDIATELY.
- 35. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- 36. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C. PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
- 37. AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. ON BUFFERS, CLEARING, SOIL DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARING BRUSH, DISCHARGING BURNING PRODUCTS, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.
- 38. ALL WETLANDS MUST BE DELINEATED AND PROTECTED WITH ORANGE SAFETY FENCE PRIOR TO ANY EARTHMOVING ACTIVITY.
- 39. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- 40. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

- 41. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3%:1V OR STEEPER, WITHIN 50 FEET OF A SURFACE WATER, AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
- 42. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 8" LAYERED LIFTS AT 95% DENSITY.

MAINTENANCE EROSION AND SEDIMENT CONTROL

- 1. ALL EROSION AND SEDIMENT CONTROL FACILITIES MUST BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ALL FACILITIES THAT ARE DAMAGED, CLOGGED, OR CAN NO LONGER PERFORM AS DESIGNED, SHALL BE REPLACED. REFER TO DETAILS ON THE PLANS FOR SPECIFIC MAINTENANCE METHODS FOR EACH SEDIMENT TRAPPING DEVICE.
- 2. ALL SEDIMENT REMOVED FROM SEDIMENT TRAPPING DEVICES SHALL BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE EROSION OR SEDIMENTATION AND SHALL BE PLACED IN AN AREA WITHIN THE DEFINED LIMITS OF DISTURBANCE.
- 3. ANY PERMANENT SEEDED AREAS THAT BECOME ERODED OR DISTURBED SHALL HAVE THE TOPSOIL REPLACED, THE GRASS RESEED, AND THE MULCH REAPPLIED, OR, AT THE DISCRETION OF THE OWNER, SOG MAY BE INSTALLED.
- 4. THE NPDES PERMIT HOLDER SHALL BE RESPONSIBLE FOR MAINTENANCE OF EROSION AND SEDIMENT CONTROLS UNTIL THE SITE IS STABILIZED. PERMANENT STABILIZATION IS DEFINED AS "A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED" OR THE DISTURBED AREA IS COVERED WITH AN ACCEPTABLE BMP, WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION UNTIL SUCH TIME AS THIS STANDARD IS ACHIEVED, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENT CONTROL BMPs THAT ARE USED TO TREAT PROJECT RUNOFF MAY NOT BE REMOVED.

RECYCLING AND DISPOSAL

PROCEDURES, WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE, WILL BE UNDERTAKEN IN ACCORDANCE WITH DEPARTMENT REGULATIONS. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MEASURES ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. THE CONTRACTOR SHALL PLAN AND IMPLEMENT MEASURES FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL DURING CONSTRUCTION. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. DISPOSAL OF CONSTRUCTION WASTES SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE

- 1. IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SITE LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE RESTS ON THE APPLICANT. IF ALL CUT AND FILL MATERIALS WILL BE USED ON THE SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE OPERATOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF A REGULATED SUBSTANCE OCCURRED ON THE SITE.
- 2. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH PA DEP'S POLICY "MANAGEMENT OF FILL" DOCUMENT NUMBER 258-2182-773.
- 3. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREGGED MATERIAL, USED ASPHALT (NOT INCLUDING MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE), 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.
- 4. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTIONS 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.
- 5. FILL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH PA DEP'S MUNICIPAL OR RESIDENTIAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 267 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

ENGINEERED SOIL SPECIFICATIONS

- 1. ENGINEERED SOIL SHALL CONSIST OF SUITABLE TOPSOIL FROM ON-SITE (IF AVAILABLE) AND 20-30% COMPOST AMENDMENT OR MANUFACTURED SILT LOAM, LOAM, OR SANDY LOAM SOIL CONTAINING 20-30% COMPOST. THE MINERAL COMPONENT OF THE ENGINEERED SOIL SHOULD NOT CONTAIN GREATER THAN 20% CLAY AND SHOULD HAVE A MINIMUM OF 40% AND A MAXIMUM OF 70% SAND. THE COMPOST PORTION OF THE ENGINEERED SOIL SHOULD NOT CONTAIN WOODY DEBRIS OR RESSEMBLE MULCH.
- 2. COMPOST SHALL BE WELL-COMPOSTED, STABLE, AND WE-FREE ORGANIC MATTER PRODUCED BY COMPOSTING FEEDSTOCK, AND AS FOLLOWS:
 - FEED STOCK LIMITED TO LEAVES
 - pH OF 5.5 TO 8
 - SOLUBLE-SALT CONCENTRATION LEASS THAN 44S/M
 - MOISTURE CONTENT 35-55% BY WEIGHT
 - ORGANIC-MATTER CONTENT: 30-40% OF DRY WEIGHT
 - PARTICLE SIZE MINIMUM OF 98 PERCENT PASSING THROUGH A 3/4" INCH SIEVE
- 3. THE ENGINEERED SOIL IS TO BE INSTALLED WITH LIGHT MACHINERY TO AVOID COMPACTON WHILE BEING INSTALLED. A SOIL SAMPLE ANALYSIS SHOULD BE PERFORMED ON THE TOPSOIL PRIOR TO MIXING TO INSURE PROPER SOIL COMPOSITION. THE SEEDING SHALL BE INSTALLED DURING A TIME IN WHICH NO RAIN IS PREDICTED TO AIDE IN GERMINATION.

SOIL CONDITIONS

SOILS
 THE SOIL SURVEY OF LANCASTER COUNTY INDICATES THAT THE SOILS WITHIN THE PROJECT AREA ARE COMPRISED OF THE FOLLOWING:
 ABA – ABBOTTSTON SILT LOAM, 0 TO 3% SLOPES
 Rdb – READINGTON SILT LOAM, 3 TO 8% SLOPES
 RIC – REAVILLE CHANNERY SILT LOAM, 8 TO 15% SLOPES

THE FOLLOWING ADDRESSES POTENTIAL SOILS USE LIMITATIONS AND PROPOSED RESOLUTIONS:

- 1. CUTBANKS CAVE:
 - 1.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 1.B. RESOLUTIONS: THE SITE IMPROVEMENTS WILL REQUIRE BULK EXCAVATION. ADEQUATE SHORING IS TO BE USED FOR DEEP EXCAVATION AND TRENCH WORK.
- 2. CORROSIVE TO CONCRETE/STEEL:
 - 2.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 2.B. RESOLUTIONS: ALL PROPOSED PIPING WILL BE PLASTIC-BASED MATERIAL.
- 3. EASILY ERODIBLE
 - 3.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 3.B. RESOLUTIONS: CONTROL RUNOFF THROUGH IMPLEMENTATION OF E&S BMPs BEFORE IT DEVELOPS INTO AN EROSIIVE FORCE AND USE LAND ACCORDING TO ITS CAPABILITY.
- 4. HYDRIC/HYDRIC INCLUSIONS
 - 4.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 4.B. RESOLUTIONS: NO DISTURBANCE TO HYDRIC SOILS IS PROPOSED. A WETLAND STUDY WAS PERFORMED AND NO WETLANDS ARE PRESENT WITHIN THE PROJECT BOUNDARY.
- 5. LOW STRENGTH/LANSLIDE PRONE
 - 5.A. LIMITED SOILS: DUFFIELD
- 5.B. RESOLUTIONS: SOIL AMENDMENTS AND PROPER COMPACTION TECHNIQUES MAY BE NECESSARY DURING CONSTRUCTION. DO NOT COMPACT SOILS WHEN SATURATED.
- 6. SLOW PERCOLATION
 - 6.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 6.B. RESOLUTIONS: SOIL COMPACTION SHOULD BE LIMITED AS MUCH AS POSSIBLE IN THE PROPOSED INFILTRATION PCSM BMPs.
- 7. PIPING
 - 7.A. LIMITED SOILS: DUFFIELD
- 7.B. RESOLUTIONS: TRENCH BACKFILL SHALL BE PROPERLY COMPACTED WHEN CONSTRUCTING THE UNDERGROUND UTILITY LINES.
- 8. POOR SOURCE OF TOPSOIL
 - 8.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 8.B. RESOLUTIONS: PRESENCE OF GRAVEL OR ROCK FRAGMENTS IN THE TOPSOIL MAY MAKE VEGETATION ESTABLISHMENT DIFFICULT. PROPER PREPARATION (SANGING, LIMING, AND FERTILIZER APPLICATION, ETC.) OF THE TOPSOIL WILL AID IN VEGETATION ESTABLISHMENT.
- 9. FROST ACTION
 - 9.A. LIMITED SOILS: BEDINGTON
- 9.B. RESOLUTIONS: FROZEN FILL MATERIAL MUST NOT BE USED IN CONSTRUCTION, PLACE ASIDE AND ALLOW TO THAW AND DRY OUT PRIOR TO USE. DO NOT PLACE FILL ON FROZEN GROUND, ONLY EXCAVATE DURING FREEZING TEMPERATURES WHEN FILL CAN BE IMMEDIATELY PLACED AND COMPACTED.
- 10. SHRINK/SWELL
 - LIMITED SOILS: DUFFIELD
- 10.A. RESOLUTIONS: DO NOT COMPACT FILL MATERIAL THAT IS SATURATED BEYOND OPTIMUM MOISTURE CONTENT. INCORPORATION OF LIME AS A DRYING AGENT MAY BE NECESSARY.
- 11. POTENTIAL SINKHOLE
 - 11.A. LIMITED SOILS: DUFFIELD
- 11.B. RESOLUTIONS: CONSIDER A SINKHOLE BE UNCOVERED OR DEVELOP. NOTIFY THE ENGINEER AND UTILIZE THE SINKHOLE REMEDIATION DETAIL ON THE PLANS.
- 12. WETNESS
 - LIMITED SOILS: DUFFIELD
- 12.B. RESOLUTIONS: USE WET TOLERANT VEGETATION WITHIN THESE AREAS. INCORPORATION OF SAND INTO THE TOPSOIL MAY BE NECESSARY TO AID IN DRAINAGE.

CONSTRUCTION SEQUENCE

GENERAL

- 1. CONSTRUCTION WILL PROCEED IN A TIMELY MANNER IN ORDER TO LIMIT THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION. THE SEQUENCE OF EARTHMOVING ACTIVITIES SHALL BE APPROXIMATED AS FOLLOWS.
- 2. CHANGES OR ALTERATIONS TO THIS CONSTRUCTION SEQUENCE DUE TO FIELD CONDITIONS, CONSTRUCTION SCHEDULING, SEASONAL CONDITIONS OR OTHER INFLUENCES MUST BE APPROVED BY THE CONSERVATION DISTRICT.
- 3. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE COUNTY CONSERVATION DISTRICT FOR A FINAL INSPECTION.
- 4. FAILURE TO CORRECTLY INSTALL SEDIMENT CONTROL FACILITIES OR FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE CORRECTIVE ACTIONS TO IMMEDIATELY RESOLVE FAILURES OF SEDIMENT CONTROL FACILITIES MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW OF PENNSYLVANIA. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 5. AT LEAST (7) DAYS PRIOR TO BEGINNING PROPOSED CONSTRUCTION, THOSE INDIVIDUALS RESPONSIBLE FOR THE IMPLEMENTATION OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN (AND ASSOCIATED PERMITS) SHALL ARRANGE FOR A PRE-CONSTRUCTION MEETING WITH THE OWNER AND HIS CONTRACTOR/EXCAVATOR, NEW BRITAIN TOWNSHIP, RETEWF ASSOCIATES INC. (PLAN PREPARER), AND THE BUCKS COUNTY CONSERVATION DISTRICT.
- 6. PRIOR TO BEGINNING ANY PROPOSED CONSTRUCTION, AND IN ACCORDANCE WITH ALL APPLICABLE PENNSYLVANIA STATE LAW AND REQUIREMENTS, PA 1-CALL SHALL BE CONTACTED AT 1-800-242-1776 WITH A REQUEST FOR CONSTRUCTION.
- 7. THE PROPOSED LIMITS OF DISTURBANCE SHALL BE FIELD DELINEATED AS PART OF THE GRADE STAKING PROCESS. LIMITS OF DISTURBANCE SHALL BE DEFINED BY THE LIMITS OF PROPOSED GRADING AND AS INDICATED ON THE PLANS. CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE AREAS WITHIN THE LIMITS OF DISTURBANCE.
- 8. ALL ITEMS NEEDING INSPECTION SHALL BE COORDINATED BY THE OWNER AND/OR CONTRACTOR. ALL REQUESTS FOR REQUIRED INSPECTIONS BY THE CONTRACTOR ARE TO BE DEEMED AS APPROVED REQUESTS ON BEHALF OF THE OWNER.

SITE IMPROVEMENTS

- 9. INSTALL THE ROCK CONSTRUCTION ENTRANCE. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE DETAIL PROVIDED ON THE PLAN AND SHALL BE UTILIZED BY ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE.
- 10. INSTALL PERIMETER FILTER SOCKS AS SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE DETAILS. FILTER SOCKS SHALL BE INSTALLED PARALLEL TO THE CONTOURS OR CONSTRUCTED AT LEVEL ALIGNMENTS. ANY SOIL SECTION THAT HAS BEEN UNDERMINED OR TOPPED MUST IMMEDIATELY BE REPLACED OR REPAIRED.
- 11. STRIP TOPSOIL ACROSS REMAINDER OF THE SITE. THE TOPSOIL SHALL BE STOCKPILED AT A LOCATION WITHIN THE LIMITS OF DISTURBANCE AT THE CONTRACTOR'S DISCRETION UPON APPROVAL OF THE COUNTY CONSERVATION DISTRICT. PROVIDE FILTER SOCKS DOWNSLOPE OF EACH STOCKPILE TO CONTAIN SEDIMENT AT THE STOCKPILE LOCATION. THE STOCKPILE SHALL BE SEEDED WITH A TEMPORARY SEED MIXTURE AND MULCHED IF IT WILL REMAIN IN PLACE FOR MORE THAN 4 DAYS.
- 12. ROUGH GRADE SITE, MOVING CUT FROM ONE SIDE OF THE SITE TO FILL AREAS OF THE SITE THAT ARE UPSLOPE OF PERIMETER CONTROLS, GRADE ENTRANCE AND PARKING AREAS IN SUCH A WAY AS TO ALLOW FOR INSTALLATION OF THE STORM DRAINAGE SYSTEM TO BE INSTALLED FOR UNDERGROUND STORMWATER BASIN. IMMEDIATELY STABILIZE AREAS TRIBUTARY TO UNDER GROUND INFILTRATION BASIN UPON REACHING FINAL GRADE. INSTALL INLET FILTER BAGS AND COMPOST FILTER SOOK AROUND INLETS TRIBUTARY TO THE UNDERGROUND STORMWATER BASIN.
- 13. AS THE SITE IS BROUGHT TO FINAL GRADE, STABILIZE THESE AREAS IMMEDIATELY.
- 14. INSTALL WATER UTILITIES. ALL TRENCH SPOIL SHALL BE CONTAINED IN DUMP TRUCKS DURING INSTALLATION OPERATIONS. THERE IS TO BE NO TRENCH SPOIL PLACED WITHIN STREET RIGHT-OF-WAYS.
- 15. CONSTRUCT UNDERGROUND BASINS. CARE SHOULD BE TAKEN TO PREVENT COMPACTION OF BED BOTTOM (SEE PCSM PLAN FOR ADDITIONAL INFORMATION). INSTALL INLET FILTER BAGS AND COMPOST FILTER SOOK AROUND INLETS AND CATCH BASINS.
- 16. UPON COMPLETION OF UNDERGROUND BASINS AND INSTALL SUBBASE STONE CONSTRUCTION.
- 17. UPON COMPLETION OF INSTALLATION OF STORM DRAINAGE SYSTEM TO UNDER GROUND BASINS, INSTALL INLET FILTER BAGS AND COMPOST FILTER SOOK AROUND INLETS.
- 18. BEGIN BUILDING CONSTRUCTION.
- 19. INSTALL UTILITIES AND ROOF DRAINS. WATER AND SEWER SERVICE CONNECTION IN INDEPENDENCE LANE ARE TO BE OPEN CUT. ALL TRENCH SPOIL SHALL BE CONTAINED IN DUMP TRUCKS DURING INSTALLATION OPERATIONS. THERE IS TO BE NO TRENCH SPOIL PLACED WITHIN STREET RIGHT-OF-WAYS.
- 20. INSTALL CURBS, WALKS, AND PAVEMENT ON SITE.
- 21. INSTALL LANDSCAPE RESTORATION AREA AND LANDSCAPING (TREES AND SHRUBS).
- 22. AS SOON AS A PORTION OF THE SITE REACHES FINAL GRADE, APPLY TOPSOIL AMENDMENTS, SEED, AND MULCH OR EROSION CONTROL MATTING.
- 23. UPON CONCLUSION OF SITE IMPROVEMENT CONSTRUCTION ACTIVITIES, REMOVE ROCK CONSTRUCTION ENTRANCE AND FINISH CONSTRUCTING NORTH ENTRANCE.
- 24. ANY AREAS THAT HAVE BECOME ERODED SHALL BE REGRADED, RESEEDED, REMULCHED, AND RENEETED (WHERE REQUIRED) BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AREAS OF THE SITE ARE STABILIZED IN ACCORDANCE WITH CHAPTER 102 REGULATIONS.
- 25. ONCE COMPLETE STABILIZATION HAS BEEN ACHIEVED (UNIFORM 70% VEGETATIVE COVER), THE CONTRACTOR MAY BEGIN REMOVING TEMPORARY CONTROL FACILITIES. ANY REMAINING TEMPORARY EROSION AND SEDIMENT CONTROLS, SUCH AS FILTER SOCK, SILT FENCE, AND/OR ROCK FILTERS SHALL BE REMOVED AT THIS TIME. ANY DISTURBANCE CREATED DURING THIS PROCEDURE SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING.

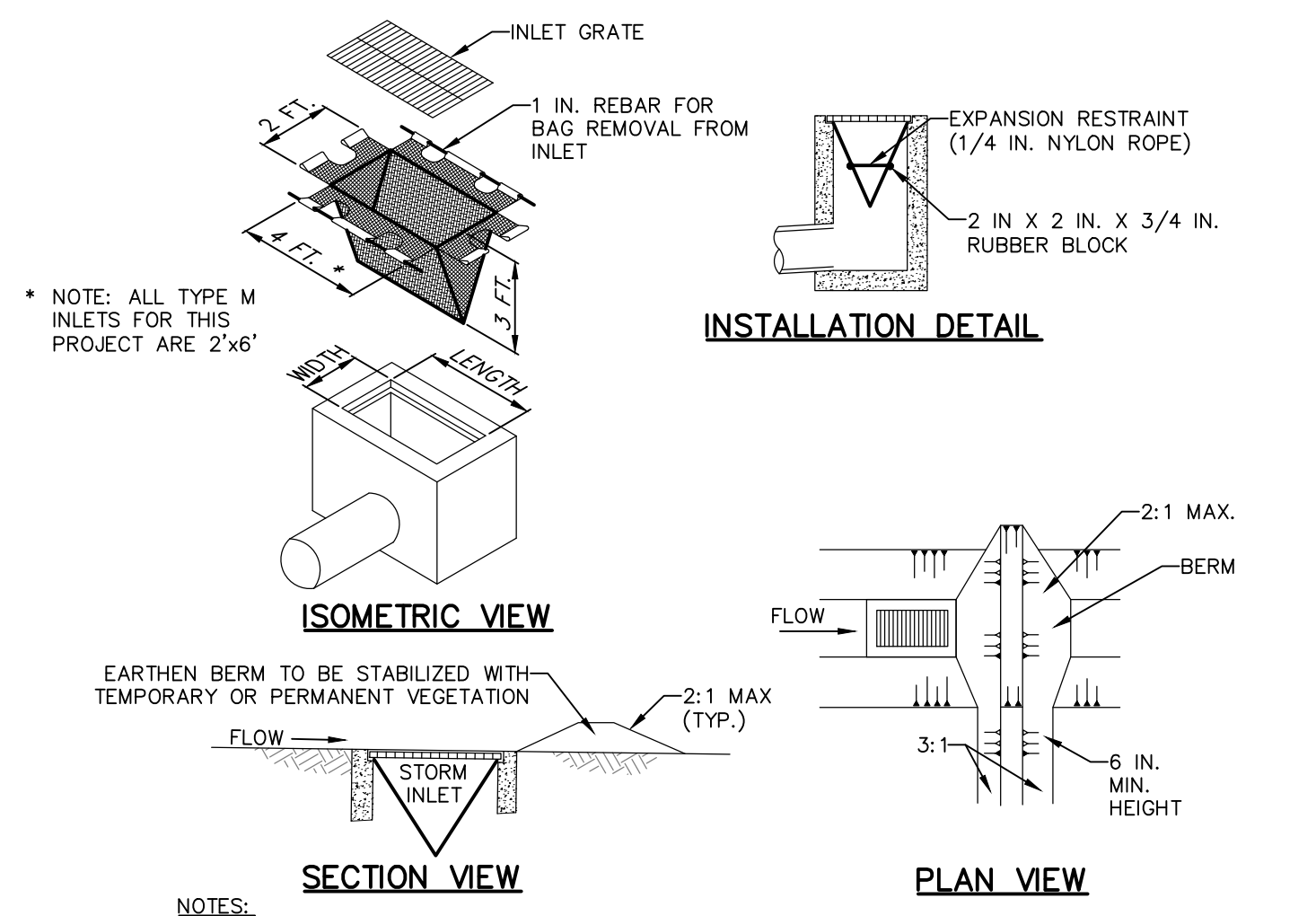
SEEDING SPECIFICATIONS

TABLE 11.4 Recommended Seed Mixtures				
Mixture Number	Species	Seeding Rate - Pure Live Seed ¹		
		Most Sites	Adverse Sites	
1	Spring oats (spring) or Annual ryegrass (spring or fall), or Winter wheat (fall), or Winter rye (fall)	10	15	
	Tall fescue, or Fine fescue, or Kentucky bluegrass, plus Redtop ²	25	30	
	Perennial ryegrass	15	20	
	Birdsfoot trefoil, plus	6	10	
3	Tall fescue	30	35	
	Tall fescue, plus	20	25	
4	Reed canarygrass	10	15	
	Crownvetch, plus	10	15	
5e	Tall fescue, or Perennial ryegrass	20	25	
	Crownvetch, plus Annual ryegrass	10	15	
6	Birdsfoot trefoil, plus	6	10	
	Crownvetch, plus	10	15	
	Tall fescue	20	30	
8	Faltpoa, plus	20	30	
	Tall fescue, or Perennial ryegrass	20	25	
9	Tall fescue, plus Redtop ²	10	20	
	Tall fescue, plus	40	60	
10	Fine fescue	10	15	
	Deergrass, plus	15	20	
11	Birdsfoot trefoil	6	10	
	Switchgrass, or Big bluestem, plus	15	20	
12	Redtop ²	3	3	
	Orchard grass, or Smooth bromegrass, plus	20	30	
13	Birdsfoot trefoil	6	10	

- PENN STATE, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND"
 1. PLS IS THE PRODUCT OF THE PERCENTAGE OF PURE-SEED TIMES PERCENTAGE GERMINATIONS DIVIDED BY 100. FOR EXAMPLE, TO SECURE THE ACTUAL PLANTING RATE FOR SWITCHGRASS, DIVIDE 12 POUNDS PLS SHOWN ON THE SEED TAG, THUS, IF THE PLS CONTENT OF A GIVEN SEED LOT IS 30%, DIVIDE 12 PLS BY 0.35 TO OBTAIN 34.3 POUNDS OF SEED REQUIRED TO PLANT ONE ACRE. ALL MIXTURES IN THIS TABLE ARE SHOWN IN TERMS OF PLS.
- 2. IF HIGH-GRADE SEED IS USED, FOR MOST SITES SEED SPRING OATS AT A RATE OF 2 BUSHELS PER ACRE, WINTER WHEAT AT 1.5 BUSHELS PER ACRE, AND WINTER RYE AT 1 BUSHEL PER ACRE. IF GERMINATION IS BELOW 90%, INCREASE THESE SUGGESTED SEEDING RATES BY 0.5 BUSHEL PER ACRE.
 - 3. THIS MIXTURE SHOULD NOT CUT SHORTER THAN 4 INCHES.
 - 4. KEEP SEEDING RATE TO THAT RECOMMENDED IN TABLE. THESE SPECIES HAVE MANY SEEDS PER POUND AND ARE VERY COMPETITIVE. TO SEED SMALL QUANTITIES OF SMALL SEEDS SUCH AS WEEDING LOVEGRASS AND BLUEGRASS, USE A FINE SAND/SILT, SAND, RICE HULLS, BUCKWHEAT HULLS, ETC.
 - 5. USE FOR HIGHWAY SLOPES AND SIMILAR SITES WHERE THE DESIRED SPECIES AFTER ESTABLISHED IS CROWN VETCH.
 - 6. USE ONLY IN EXTREME SOUTHEASTERN OR EXTREME SOUTHWESTERN PENNSYLVANIA. SERECIA LESPEDEZA IS NOT WELL ADAPTED TO MOST OF PA.
 - 7. DO NOT MOW SHORTER THAN 9 TO 10 INCHES.
 - 8. SEED MIXTURES CONTAINING CROWN VETCH SHOULD NOT BE USED IN AREAS ADJACENT TO WETLANDS OR STREAM CHANNELS DUE TO THE INVASIVE NATURE OF THE SPECIES.

TABLE 11.5
 Recommended Seed Mixtures for Stabilizing Disturbed Areas

Site Condition	Nurse Crop	Seed Mixture (Select one mixture)	
		1 plus	2 plus
Slopes and Banks (not mowed)	Well-drained	1 plus	3.5 B, or12'
	Variable drainage	1 plus	3 or7
Slopes and Banks (mowed)	Well-drained	1 plus	2 or10
	Well-drained	1 plus	2, 3, or13
Gullies and Eroded Areas	Well-drained	1 plus	3, 5, 7, or12'
	Erosion Control Facilities (B M Pa)	1 plus	2, 3, or4
Soil waterways, spillways, frequent water flow areas	Drainage ditches	1 plus	2 or3, or12'
	Shallow, less than 3 feet deep	1 plus	2 or7
Deep, not mowed	Pond banks, dikes, levees, dams, diversion channels, and occasional water flow areas	1 plus	2 or3, 5 or7
	For hay or silage on diversion channels and Occasional water flow areas	1 plus	3 or13
Highways	Non-mowed areas	1 plus	5 or6
	Pure crownvetch ²	1 plus	5, 7, 8, 9, or10
Well-drained	Variable drainage	1 plus	3 or7
	Poorly drained	1 plus	3 or7
Areas mowed several times per year	Well-drained	1 plus	3, 5, or10
	Utility Right-of-way	1 plus	5, 8, or12'
Well-drained	Variable drainage	1 plus	3 or7
	Well-drained areas for grazing/hay	1 plus	2, 3, or13
Effluent Disposal Areas	Well-drained	1 plus	3, 5, or4
	Sanitary Landfills	1 plus	3, 5, 7, 11, or12'
Surface mines	Spills, mine wastes, fly ash, slag,		

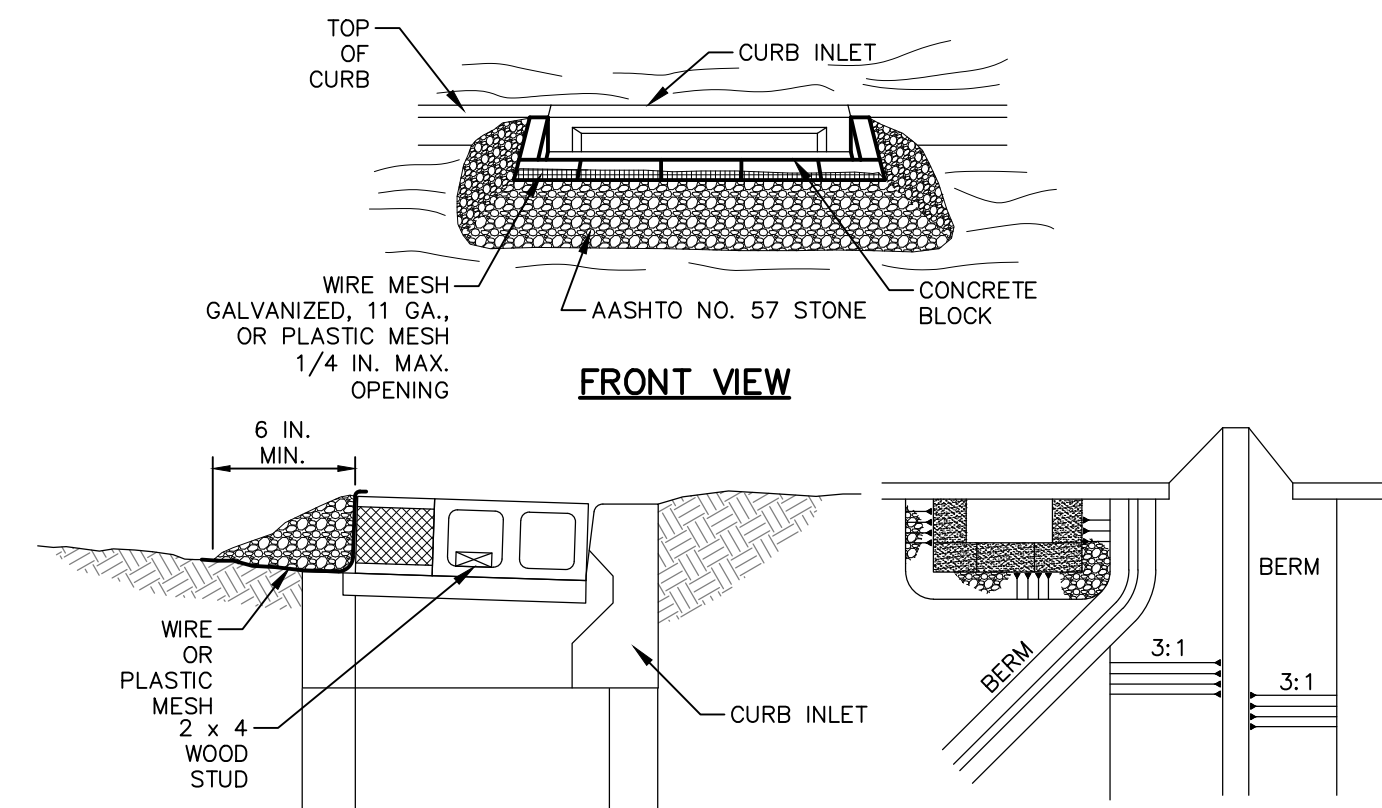


* NOTE: ALL TYPE M INLETS FOR THIS PROJECT ARE 2'x6'

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

CONSTRUCTION DETAIL #4-16 FILTER BAG INLET PROTECTION - TYPE M INLET

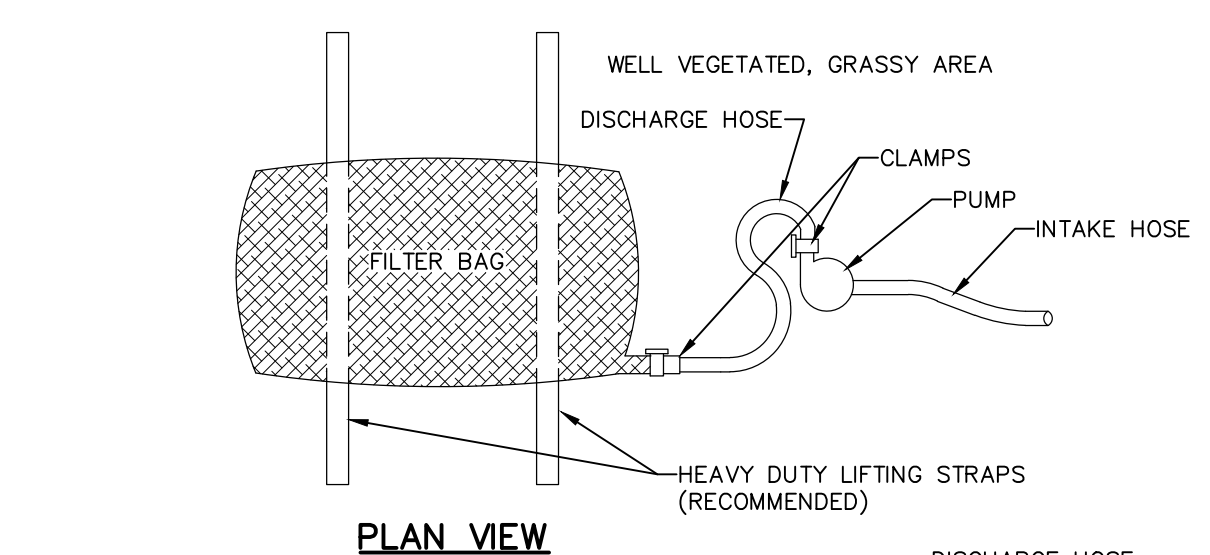
NOT TO SCALE



NOTES:
MAXIMUM DRAINAGE AREA = 1 ACRE.
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
ROLLED EARTHEN BERM SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.
FOR SYSTEMS DISCHARGING TO HO OR EV SURFACE WATER, A 6 INCH THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE.
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

CONSTRUCTION DETAIL #4-17 STONE AND CONCRETE BLOCK INLET PROTECTION - TYPE C INLET

NOT TO SCALE



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

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

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%. CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HO OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

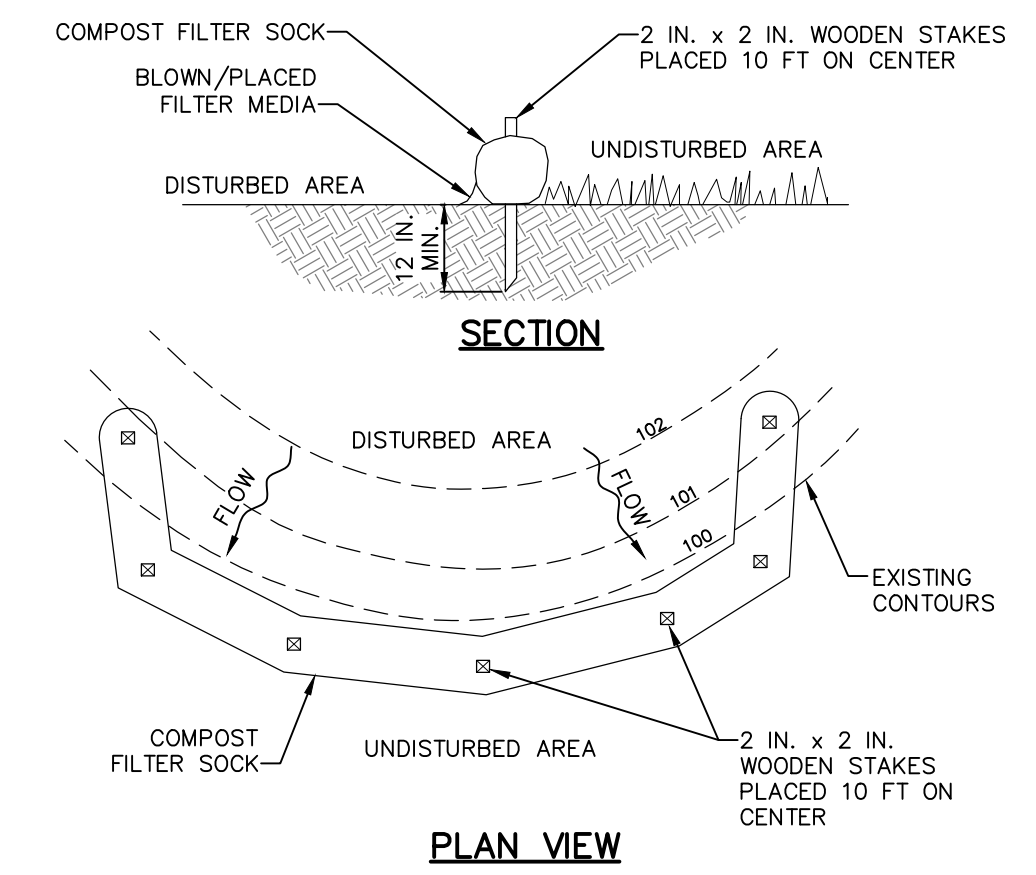
STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

NOT TO SCALE

NOTE: MINIMUM SPECIFICATIONS FOR FILTER SOCK FABRIC SHALL MEET THE FOLLOWING PER TABLE 4.1:
MATERIAL TYPE: 5 MIL HDPE
MATERIAL CHARACTERISTICS: PHOTO-DEGRADABLE
MESH OPENING: 3/8"
TENSILE STRENGTH: 26 PSI
MINIMUM FUNCTIONAL LONGEVITY: 9 MONTHS

TABLE 4.2
COMPOST STANDARDS

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



NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
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.
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.
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.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE

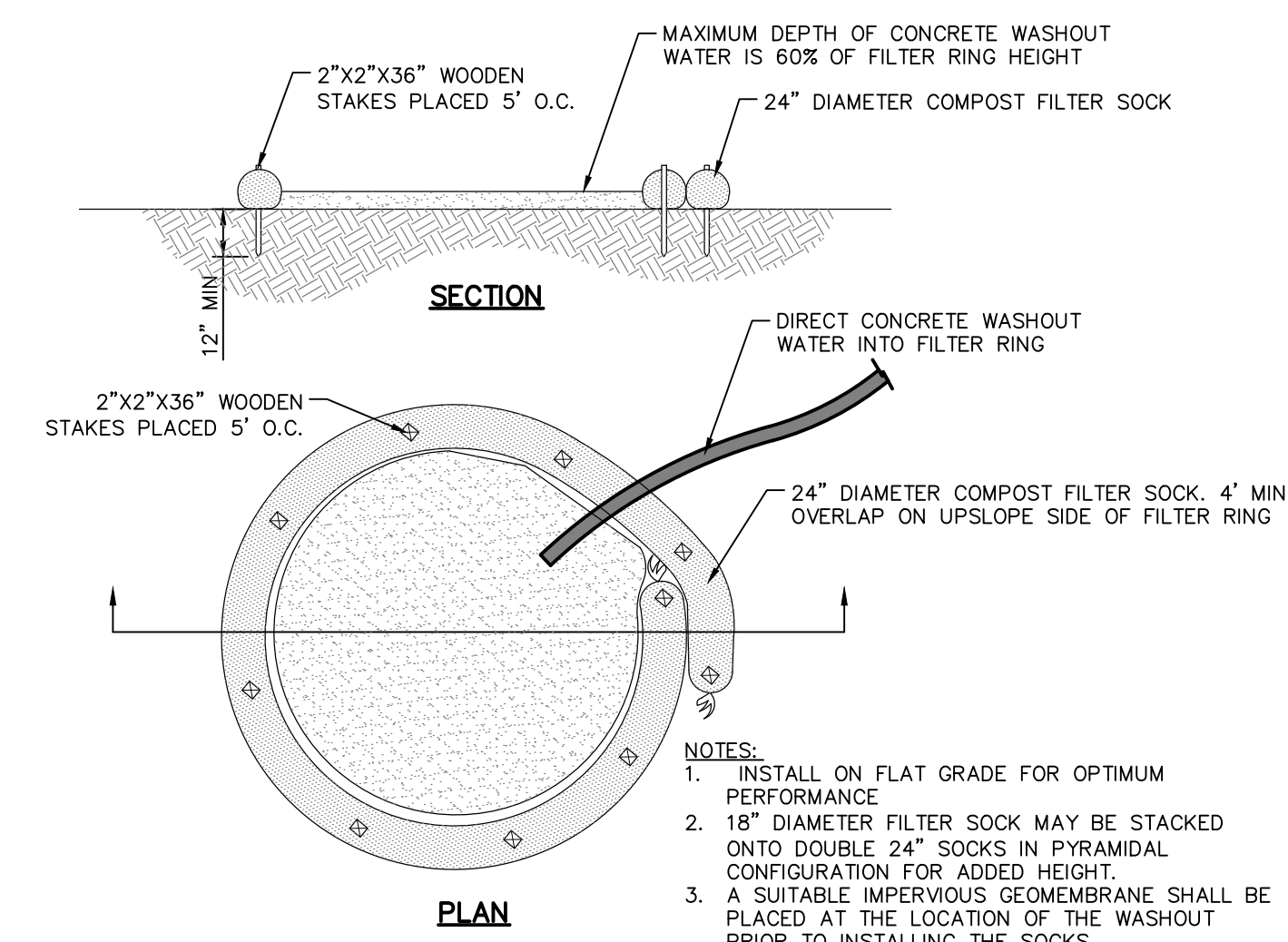


FIGURE #3.18 TYPICAL COMPOST SOCK WASHOUT INSTALLATION

NOT TO SCALE

NO.	DATE	REVISION

FOR RETIEW ASSOCIATES BY:

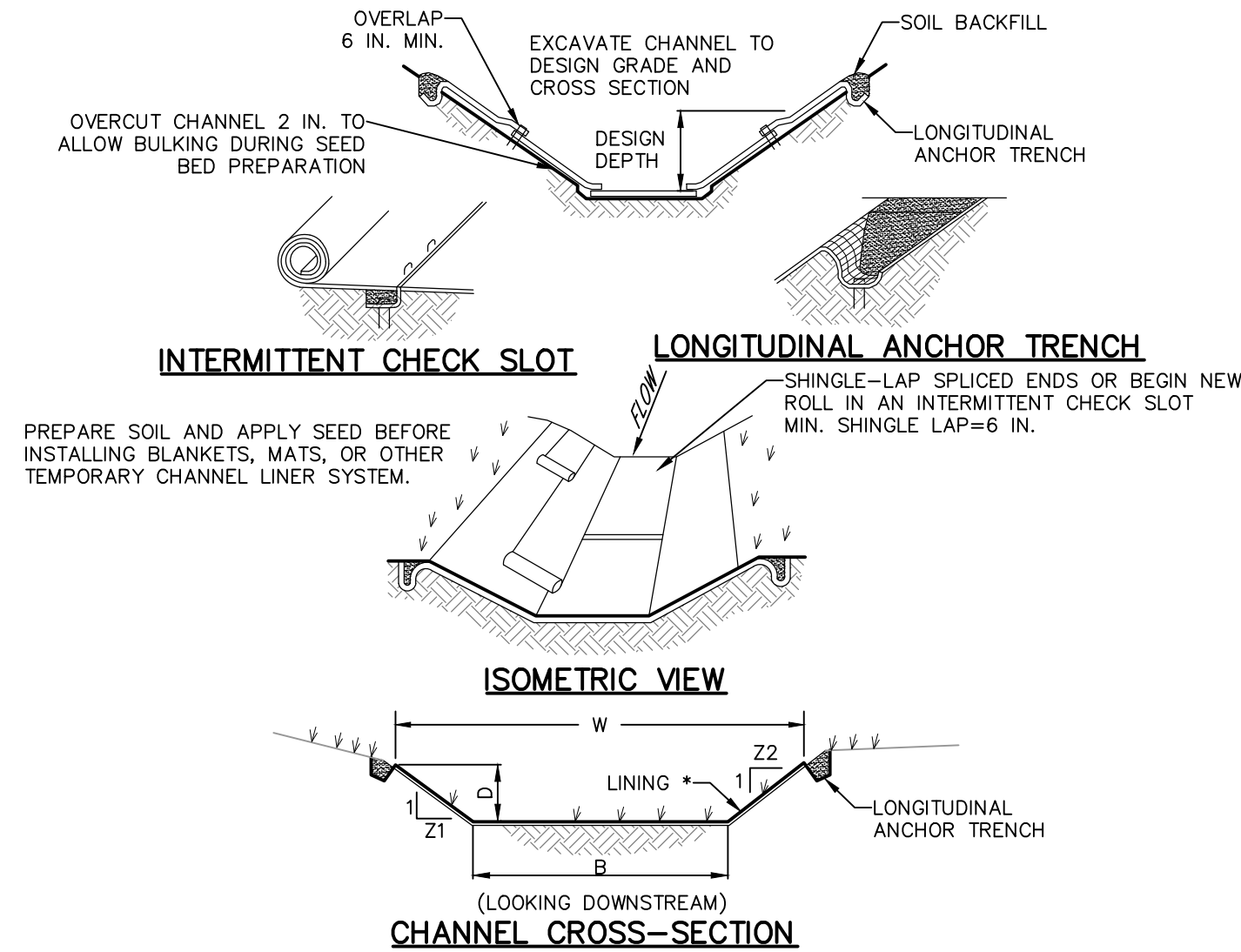
MANAGER: KIM M. FASNACHT
DESIGN BY: CHD BY: KMF
SURV. CHIEF: FELBROOK NO. DATA COLLECTOR
DRAWN BY: CHD BY: JAM
JMS
DRAWING REFERENCE: C:\ADD\System\Software\AutoDesk\Temp\A040\Temp\Draw_Ver\040\019-19136-111802019-Plan.dwg

CLIENT: 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560 WEST CONSHOHOCKEN, PA 19428

AS NOTED

EROSION & SEDIMENT CONTROL DETAILS
PRELIMINARY/FINAL LAND DEVELOPMENT PLAN
101 INDEPENDENCE LANE
NEW BRITAIN TOWNSHIP
BUCKS COUNTY, PA

DATE: 6/9/2022
SHEET NO. 18 OF 20
DWG. NO. 111902019



* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	STATIONS	BOTTOM		TOP		Z1	Z2	LINING * (OR EQUIVALENT)	STAPLE PATTERN
		WIDTH B (FT)	DEPTH D (FT)	WIDTH W (FT)	DEPTH D (FT)				
1	ALL	2	1	8	3	3		NAG SC150	D
2	ALL	2	1	8	3	3		NAG S75	D
3	ALL	2	1	8	3	3		NAG SC150	D

NOTES:

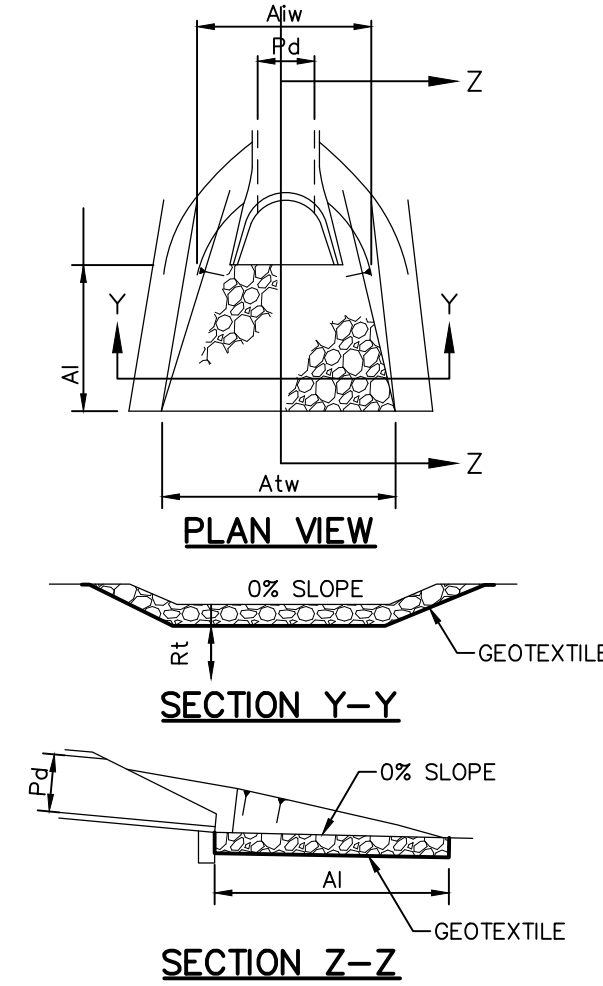
ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

**STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL**

NOT TO SCALE



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP		APRON	
		SIZE R--	THICK. RT (IN)	LENGTH Ai (FT)	TERMINAL WIDTH Atw (FT)
HW-1	18	4	18	9	5
HW-2	18	4	18	9	5
HW-3	18	4	18	9	5

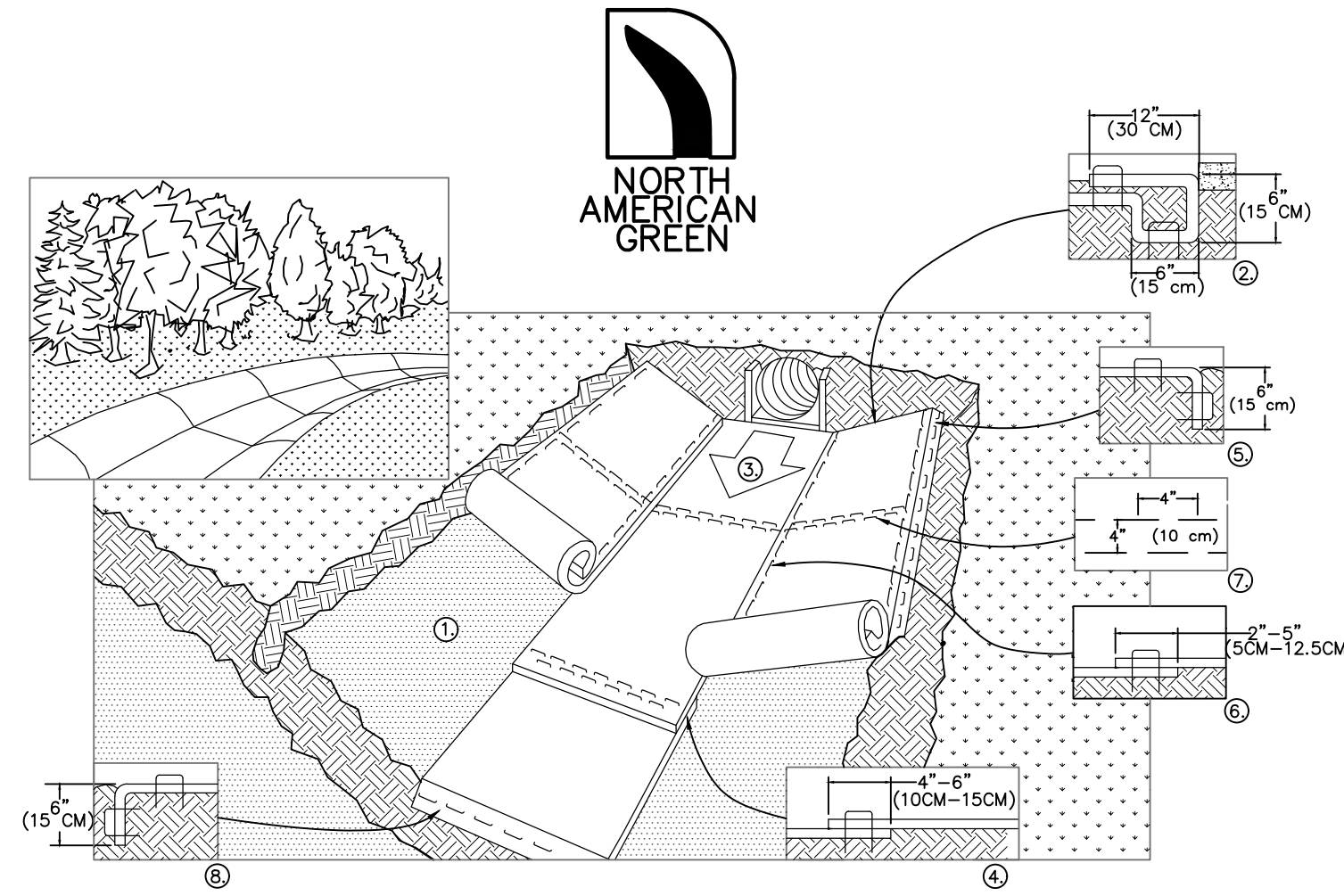
NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

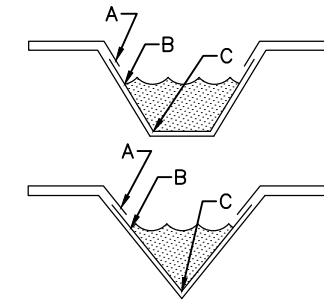
ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

**STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET
WITH FLARED END SECTION OR ENDWALL**

NOT TO SCALE



- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS.
- FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5cm-12.5cm) (DEPENDING ON BLANKET TYPE) AND STAPLED TO ENSURE PROPER SEAM ALIGNMENT. PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
- IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m-12m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



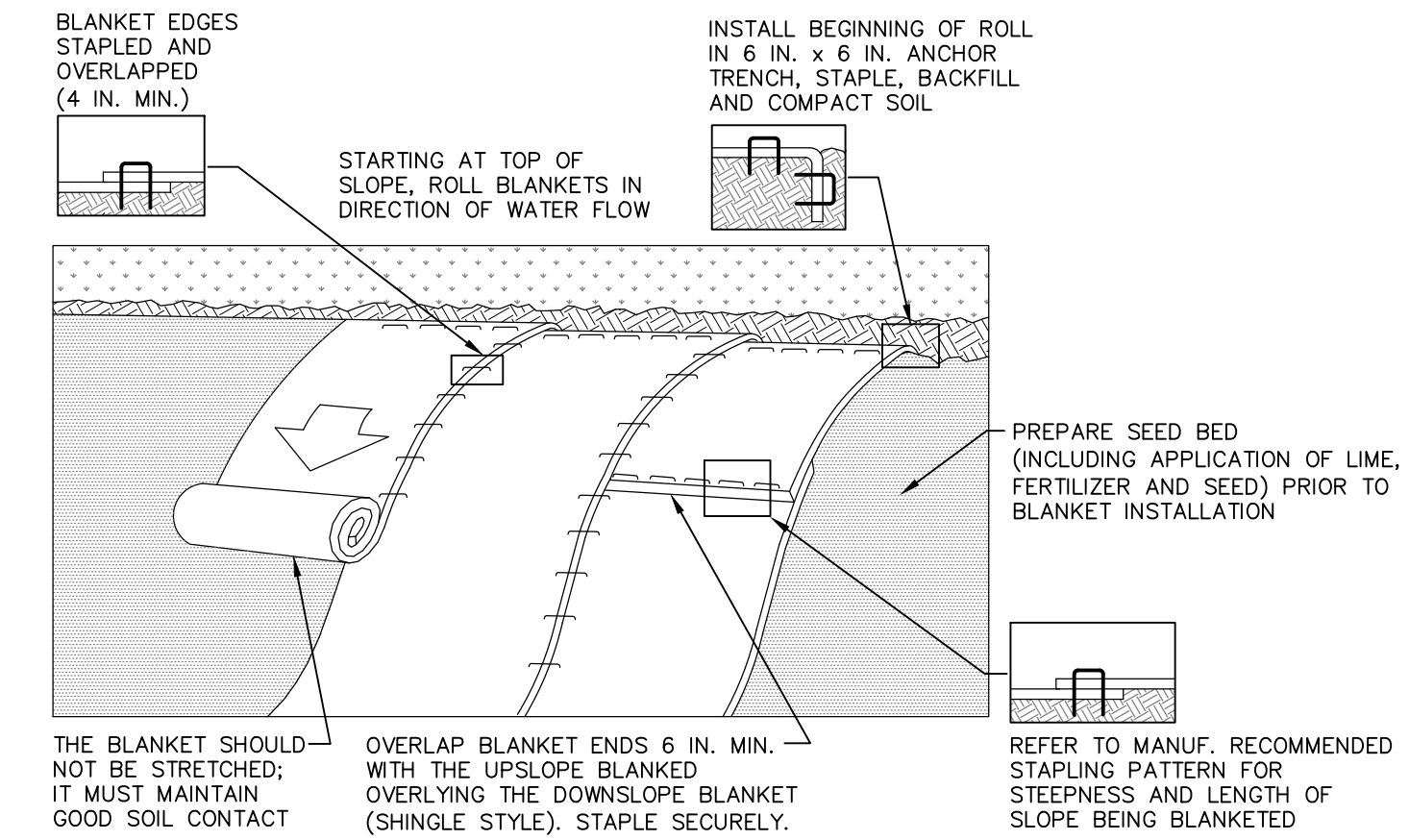
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
USA 1-800-772-2040 CANADA 1-800-448-2040
www.nogreen.com

CHANNEL INSTALLATION

NOT TO SCALE
ES/ES037



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PREPARE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLDS, STICKS, AND GRASS.

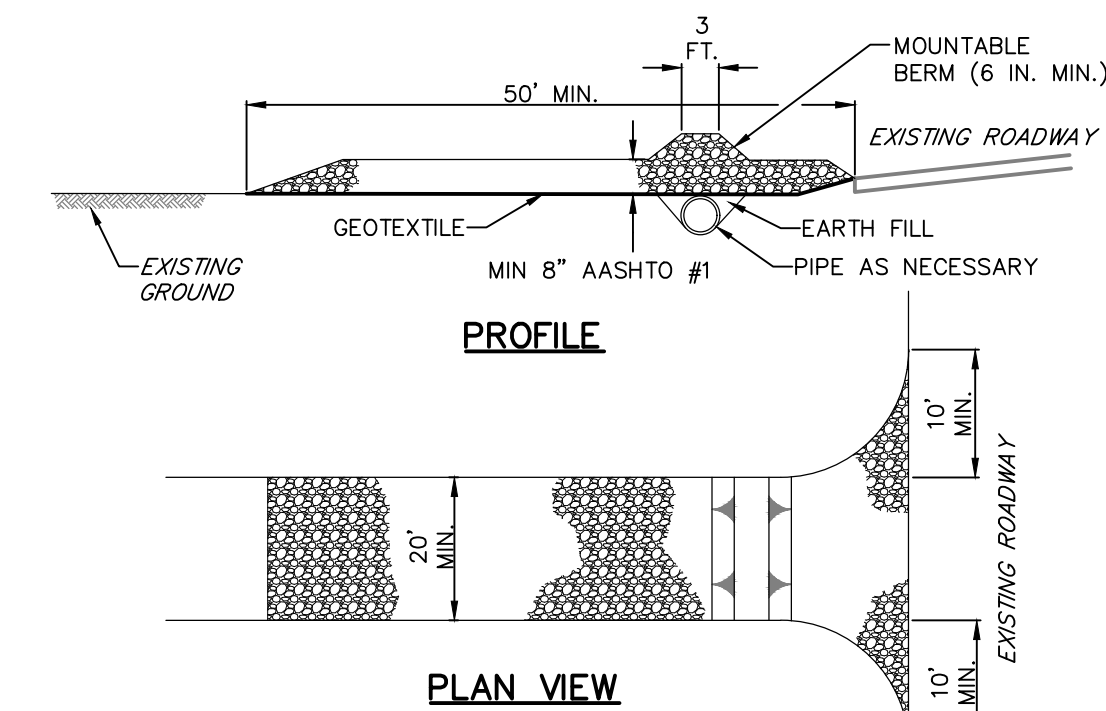
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

**STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION**

NOT TO SCALE



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

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

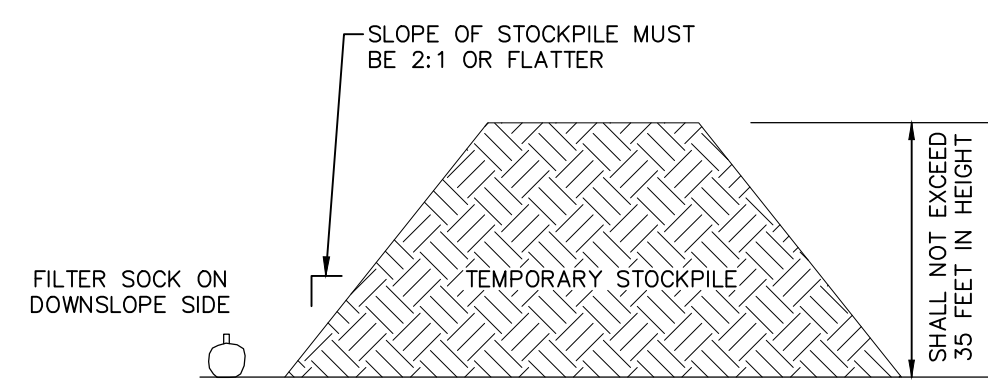
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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

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

**CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE**

NOT TO SCALE



TEMPORARY STOCKPILE DETAIL

NOT TO SCALE

NO.	DATE	REVISION

FOR RETIEW ASSOCIATES BY:

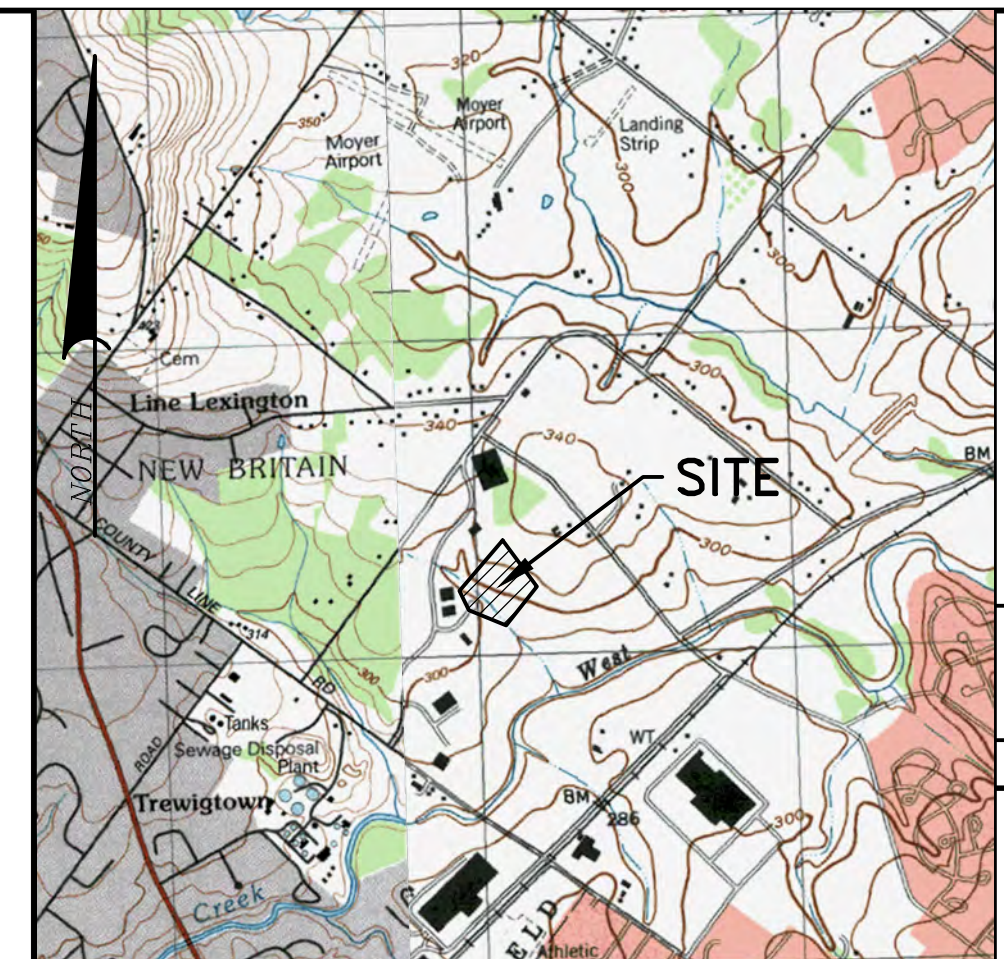
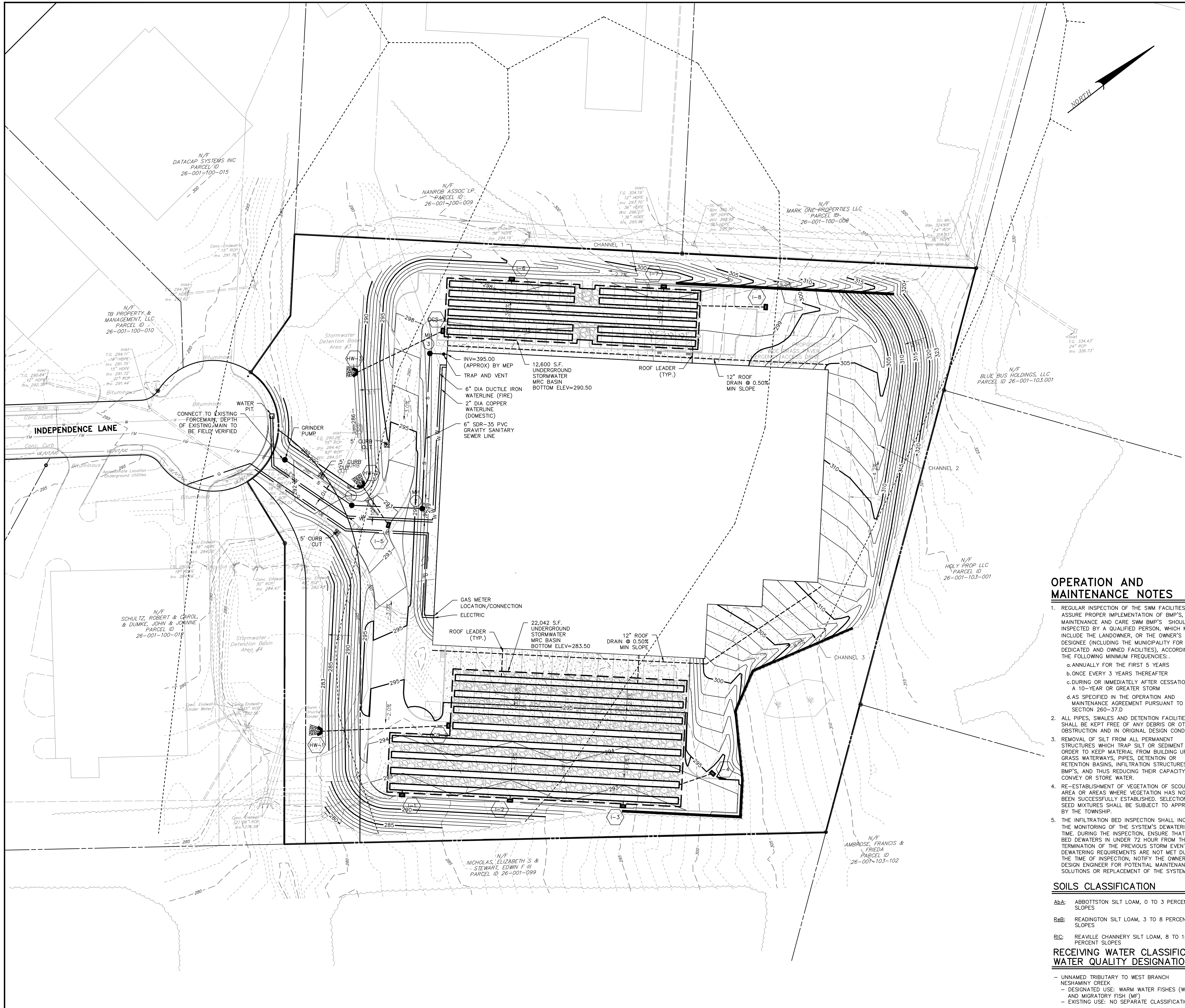
MANAGER: KIM M. FASNAUGHT
DESIGN BY: CHKD BY: KMF
SURV. CHIEF: FELBROCK NO. DATA COLLECTOR
DRAWN BY: CHKD BY: JAM

DRAWING REFERENCE:
C:\ADD\System\Software\Autodesk\Temp\ADD\Temp\Doc\Map\19136\111902019-Prelim-Title.LD Plot.dwg

CLIENT
101 INDEPENDENCE LANE ASSOCIATES, LLC
ONE TOWER BRIDGE
100 FRONT STREET, SUITE 560
WEST CONSHOHOCKEN, PA 19428

EROSION & SEDIMENT CONTROL DETAILS
PRELIMINARY/FINAL LAND DEVELOPMENT PLAN
101 INDEPENDENCE LANE
NEW BRITAIN TOWNSHIP
BUCKS COUNTY, PA

DATE:	6/9/2022
SHEET NO.	19 of 20
DWG. NO.	111902019



7.5 MIN. QUADRANGLE MAP: DOYLESTOWN, PA
LOCATION MAP
 SCALE - 1"=800'

LEGEND

	BENCHMARK
	CONCRETE MONUMENT
	FOUND PROPERTY MARKER
	CALCULATED PROPERTY MARKER
	SIGN
	MAILBOX
	LIGHT POLE
	GUY WIRE
	UTILITY POLE
	GAS METER
	WATER VALVE
	WATER METER
	HYDRANT
	INLET
	SANITARY MANHOLE
	STORM MANHOLE
	ELECTRIC MANHOLE
	UNKNOWN STRUCTURE
	ELECTRIC BOX
	CABLE BOX
	TELEPHONE BOX
	TREE LINE
	FENCE LINE
	WATER LINE
	GAS LINE
	SANITARY SEWER LINE
	UNDERGROUND ELECTRIC
	UNDERGROUND CABLE
	OVERHEAD ELECTRIC
	OVERHEAD TELEPHONE
	OVERHEAD CABLE
	STORM PIPE
	4" WHITE PAINT LINE
	4" DOUBLE YELLOW PAINT LINE
	RIGHT OF WAY LINE
	PROPERTY LINE
	ADJOINER PROPERTY LINE
	MAJOR CONTOUR (5')
	MINOR CONTOUR (1')
	GAS CONTOUR (2')
	EASEMENT LINE
	RAILROAD TRACKS
	SOIL TYPE BOUNDARY LINE
	SOIL TYPE DESIGNATION
	PROPOSED SETBACK LINE
	PROPOSED PAVEMENT
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED PAVEMENT MARKING
	PROPOSED CLEAR SITE TRIANGLE
	PROPOSED CONTOUR LINE
	PROPOSED SPOT ELEVATION
	PROPOSED FINISHED FLOOR ELEVATION
	PROPOSED PIPE OUTLET PROTECTION

OPERATION AND MAINTENANCE NOTES

- REGULAR INSPECTION OF THE SWM FACILITIES, TO ASSURE PROPER IMPLEMENTATION OF BMP'S, MAINTENANCE AND CARE SWM BMP'S SHOULD BE INSPECTED BY A QUALIFIED PERSON, WHICH MAY INCLUDE THE LANDOWNER, OR THE OWNER'S DESIGNEE (INCLUDING THE MUNICIPALITY FOR DEDICATED AND OWNED FACILITIES), ACCORDING TO THE FOLLOWING MINIMUM FREQUENCIES:
 - ANNUALLY FOR THE FIRST 5 YEARS
 - ONCE EVERY 3 YEARS THEREAFTER
 - DURING OR IMMEDIATELY AFTER CESSATION OF A 10-YEAR OR GREATER STORM
 - AS SPECIFIED IN THE OPERATION AND MAINTENANCE AGREEMENT PURSUANT TO SECTION 260-37.D
- ALL PIPES, SWALES AND DETENTION FACILITIES SHALL BE KEPT FREE OF ANY DEBRIS OR OTHER OBSTRUCTION AND IN ORIGINAL DESIGN CONDITION.
- REMOVAL OF SILT FROM ALL PERMANENT STRUCTURES WHICH TRAP SILT OR SEDIMENT IN ORDER TO KEEP MATERIAL FROM BUILDING UP IN GRASS WATERWAYS, PIPES, DETENTION OR RETENTION BASINS, INFILTRATION STRUCTURES, OR BMP'S, AND THUS REDUCING THEIR CAPACITY TO CONVEY OR STORE WATER.
- RE-ESTABLISHMENT OF VEGETATION OF SCoured AREA OR AREAS WHERE VEGETATION HAS NOT BEEN SUCCESSFULLY ESTABLISHED. SELECTION OF SEED MIXTURES SHALL BE SUBJECT TO APPROVAL BY THE TOWNSHIP.
- THE INFILTRATION BED INSPECTION SHALL INCLUDE THE MONITORING OF THE SYSTEM'S DEWATERING TIME. DURING THE INSPECTION, ENSURE THAT THE BED DEWATERS IN UNDER 72 HOUR FROM THE TERMINATION OF THE PREVIOUS STORM EVENT. IF DEWATERING REQUIREMENTS ARE NOT MET DURING THE TIME OF INSPECTION, NOTIFY THE OWNER AND DESIGN ENGINEER FOR POTENTIAL MAINTENANCE SOLUTIONS OR REPLACEMENT OF THE SYSTEM.

SOILS CLASSIFICATION

- AbA:** ABBOTTSTON SILT LOAM, 0 TO 3 PERCENT SLOPES
- ReB:** READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES
- RiC:** REAVILLE CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES

RECEIVING WATER CLASSIFICATION WATER QUALITY DESIGNATION

- UNNAMED TRIBUTARY TO WEST BRANCH NESHAMINY CREEK
- DESIGNATED USE: WARM WATER FISHES (WFF) AND MIGRATORY FISH (WF)
- EXISTING USE: NO SEPARATE CLASSIFICATION

DESIGN ENGINEER CERTIFICATION

I, DERYK SHAW, ON THIS DATE _____ HEREBY CERTIFY THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE NESHAMINY CREEK WATERSHED ACT 167 STORMWATER MANAGEMENT ORDINANCE OR PLAN.

LANDOWNER CERTIFICATION

ANY REVISION TO THE APPROVED SWM SITE PLAN MUST BE APPROVED BY THE MUNICIPALITY AND THAT A REVISED E&S PLAN MUST BE SUBMITTED TO THE CONSERVATION DISTRICT.

LANDOWNER: _____

DATE: _____

FOR REVIEW ASSOCIATES BY:	NO.	DATE
MANAGER:	KIM M. FASNACHT	CHKD BY:
DESIGN BY:	KMF	MJB
SURV. CHIEF:	FIELDBOOK NO.	DATA COLLECTOR:
DRAWN BY:	JMS	CHKD BY:
DRAWING REFERENCE:	C:\CAD\System\Software\Autodesk\Temp\DWG\Autodesk\19136\111902019-Prelim-Title.Dwg	
CLIENT:	101 INDEPENDENCE LANE ASSOCIATES, LLC	
PROJECT:	ONE TOWER BRIDGE	
ADDRESS:	100 FRONT STREET, SUITE 560	
CITY:	WEST CONSHOCKEN, PA 19428	
SCALE:	1"=40' / 1"=80' / 1"=120'	
PROJECT NAME:	PCSM PLAN PRELIMINARY/FINAL LAND DEVELOPMENT PLAN	
PROJECT ADDRESS:	101 INDEPENDENCE LANE	
PROJECT LOCATION:	NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA	
DATE:	6/9/2022	
SHEET NO.:	20 OF 20	
DWG. NO.:	111902019	



GILMORE & ASSOCIATES, INC.

ENGINEERING & CONSULTING SERVICES

July 20, 2022

File No. 22-01173

Matt West, Township Manager
New Britain Township
207 Park Avenue
Chalfont, PA 18914

Reference: 141 Independence Lane, Preliminary LD Plan Review 1
TMP# 26-001-100-011

Dear Matt:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the Land Development Plan for the above-referenced project. Upon review by our office, we offer the following comments for consideration:

I. Submission

- A. Preliminary/ Final Land Development Plan for 101 Independence Lane, prepared by Rettew Associates, Inc., dated June 9, 2022, consisting of twenty-one (21) sheets.
- B. Post Construction Stormwater Management Report prepared for 101 Independence Lane, prepared by Rettew Associates, Inc., dated June 2022.
- C. Wetland Resource Investigation for 101 Independence Lane, prepared by Rettew Associates, Inc., dated August 3, 2021, last revised November 3, 2021.
- D. Traffic Impact Assessment for 101 Independence Lane Warehouse, prepared by Traffic Planning and Design, Inc., dated April 6, 2022.
- E. Waiver letter for 141 Independence Lane, by Rettew Associates, Inc., dated June 9, 2022.
- F. Planning Module Mailer Application for 101 Independence Lane, prepared by Rettew Associates, Inc., dated May 24, 2022.

II. Reference Documentation

- A. New Britain Township Zoning Hearing Board Decision dated May 16, 2022.
- B. Final Plan Altomare/ Corkery Partnership – Lot #16-B, as prepared by Showalter & Associates, dated February 16, 2001, last revised October 3, 2001, Sheet 2 of 10 and Adjudication of the New Britain Township Board of Supervisors concerning the New Britain Corporation's conditional use application dated May 16, 2001.

III. General Information

The 7-acre property is located at the cul-de-sac end of Independence Lane on Lot 15 of the New Britain Business Park (NBBP), in the IO Industrial/Office Zoning District. The lot is vacant and noted to contain woodlands, steep slopes, wetlands, and two existing stormwater facilities. The Applicant is proposing to construct an 88,250-SF Warehouse building, Use K3, which is permitted by right within the IO District. The proposed improvements also include parking and loading areas and an emergency access drive around the perimeter of the building. Stormwater management will be provided through two underground basins that discharge into the two existing detention basins. The building will be serviced by public water and sewer.

BUILDING ON A FOUNDATION OF EXCELLENCE

IV. Review Comments

A. Zoning Hearing Board Decision

On May 16, 2022, the Township Zoning Hearing Board granted the Applicant's request for relief from the following Zoning Ordinance requirements subject to the Property and proposed building dimensions, size, location and appearance being in accordance with the exhibits and testimony presented and the non-residential building shall be in compliance with all reasonable requirements of the New Britain Township Fire Marshal:

1. §27-1802.a. – To permit the proposed building to be 42 feet high.
2. §27-2901.K. – To permit no less than 53 off-street parking spaces on the Property in connection with a warehouse use (use K3) on the Property.
3. §27-2904.g.5 – To permit the paved areas on the front parking lot to be 9.3 feet from exterior front structural wall of the proposed building.

B. Zoning Ordinance

We have identified the following issues regarding the requirements and provisions of the current New Britain Township Zoning Ordinance:

1. §27-201 – The definition of Lot Area specifies that areas of existing easements shall be excluded from the calculation. The Zoning Data table on Sheet 1 notes a proposed lot area of 7.071 acres and shall be revised to exclude the existing stormwater management and access easement areas.
2. §27-1802.b – The maximum building coverage ratio and maximum impervious surface ratio shall be based off the Ratio Base Site Area (See §27-201. Site Area, Ratio Base) and shall subtract out the 100% protected natural resources. The wetlands area is 100% protected and shall be deducted from the base site area in the Site Capacity Calculations. The maximum and proposed building coverage and impervious surface ratios shall be revised as necessary.
3. §27-1802.b – The proposed impervious surface ratio is 62.54% where 65% is the maximum permitted. A breakdown of the proposed impervious surfaces by building, sidewalk, paved area, etc. shall be provided to verify the impervious ratio listed on the plan.
4. §27-2400.d & h – Disturbance of wetlands margins shall be limited to 20% and any DEP regulations concerning activities in wetlands margins shall also be met through permitting. The "Layout Plan" shows a retaining wall along the perimeter of the 25-foot wetlands margin which will likely require disturbance within the wetlands margin area. A sufficient work area from the face of the wall shall be designated as disturbance and shall be marked in the field. In addition, the design engineer shall confirm that any wall tie backs or footers for the proposed variable height wall can constructed without exceeding the maximum permitted margin disturbance.
5. §27-2400.f.2 – No more than 50% of woodlands located upon a lot or site may be altered, regraded, cleared, or built upon. The Natural Resource Calculations table notes a total woodlands area of 3.18 acres and a disturbance area of 1.59 acres. This is not consistent with the existing and proposed tree lines shown on the Existing Conditions/ Demolition Plan. In addition, a site visit found that a portion of the site consists of low brush and scrub trees with minimal mature trees. The plans shall be revised to clarify the areas meeting the definition of woodlands. The woodland disturbance shall also consider any wall reinforcement that may require the removal of additional trees. The Natural Resource Calculations table shall be revised as necessary.
6. §27-2400.f.2.(a) – We offer the following comments regarding the proposed woodlands disturbance:

- a. Where more than 20% of the woodlands are being disturbed, all disturbed woodlands exceeding this 20% limit shall be replaced on an acre-for-acre basis through the planting of replacement trees. The actual number of replacement trees shall be calculated by multiplying the acreage of disturbance exceeding 20% by 200 trees per acre. All replacement trees shall have a minimum tree caliper of 3-1/2-inch DBH.
 - b. The planting of replacement trees shall be done in accordance with a woodlands management plan prepared by a licensed forester.
 - c. The planting of replacement trees shall occur on site, or on a property within New Britain Township designated and approved by the Board of Supervisors, unless the owner/developer offers a fee in lieu of the required replacement, such fee being approved by the Board of Supervisors, in its sole discretion.
7. §27-2401.c – Conservation easements shall be provided for the protection of the resource areas in accordance with the provisions of this Part. A defined easement shall be depicted, and a legal description submitted. A Declaration of Easements shall be prepared by the Township Solicitor and executed by the owner.
8. §27-2402.b – The Site Capacity Calculations note an area of 1.311 acres for existing streets ultimate rights-of-way. It appears this area is for the existing stormwater management and access easements and shall be listed under the 'existing easements' row of the calculations. The area of these easements shall be noted on the Layout Plan to confirm the areas listed in the calculations.
9. §27-2501 – The following comments related to the Traffic Impact Assessment shall be addressed:
- a. §27-2501.a.3 – Roadways and/or intersections experiencing levels of service D, E or F shall be noted as congested locations.
 - b. §27-2501.a.6 – In accordance with this section, all roadways and intersections showing a level of service below C should be considered deficient, and specific recommendations or options for the elimination of any problems shall be listed. Options shall be suggested in the narrative to address deficient movements at Line Lexington Road and Bethlehem Pike.
 - c. The square footage in the Traffic Impact Assessment of the proposed warehouse is not consistent with the area noted on the cover letter and plans. The square footage of the proposed warehouse should be clarified.

C. Subdivision and Land Development Ordinance Waivers

The following waivers from the Subdivision and Land Development Ordinance have been formally requested by the Applicant in a letter dated June 9, 2022:

1. §22-502.1.D.10.a – From the requirement that contour data be based on the New Britain Township Joint Sewage Authority vertical datum. The Applicant is proposing to use a benchmark elevation based on NAVD88, which we support.
2. §22-505 – From the requirement to provide a Community Impact Assessment Report, which we do not support.
3. §22-705.3.G. – From the requirement to mill and overlay the entire existing roadway width adjacent to development to a depth of 1-½ inches, which we do not support. Given the existing pavement conditions and the anticipated traffic from construction and proposed use, milling and overlay of the cul-de-sac is recommended.

4. §22-706.1.B & 2.B. – From the requirement that sidewalk be provided along the frontage of the proposed land development, which we do not support. We note that sidewalk currently exists along the northern side of Independence Lane, however, the existing sidewalk does not connect to the property frontage. We recommend the required sidewalk be installed at this time and extended to the existing sidewalk across the cul-de-sac bulb for a pedestrian walkway connection to the development.
5. If public improvement waivers are granted, Township Resolution 2007-12 requires a contribution towards future improvements based on 50% of the total estimated construction cost. An estimated cost of construction of any waived improvements shall be provided. The Board may adjust the amount based on onsite and offsite improvements not required by Ordinance at their sole discretion.

D. Subdivision and Land Development Ordinance

We offer the following comments with respect to the current New Britain Township Subdivision and Land Development Ordinance:

1. §22-403 – The plans are labeled as Preliminary/Final Land Development Plans. Based on the comments herein, we recommend that the project be considered as preliminary at this time.
2. §22-406.1 – The Applicant is responsible for any other required approvals, permits, etc. (i.e., BCPC, BCCD, PADEP, Fire Marshal, Chalfont New Britain Sewer Authority, North Penn Water Authority, Aqua, Township Road Opening Permit, Well Construction Permit, etc.) as applicable.
3. §22-502.1 – The following comments related to plan presentation shall be addressed:
 - a. The parcel address is 141 Independence Lane, however, the plans and supporting documentation reference 101 Independence Lane. All documentation shall note the 141 Independence Lane for the address of the land development project.
 - b. The signature line for the BCPC may be removed from the Cover Sheet if the signature is not required by the county courthouse.
 - c. The existing stormwater, driveway and roadway easements shall be labeled on the Layout Plan, Sh. 4.
 - d. The dimensions of the dumpster enclosure area shown on the Layout Plan shall be coordinated with the Dumpster Enclosure detail.
 - e. The Layout Plan notes 15 loading dock spaces, however, 16 spaces appear to be shown. The number of loading dock spaces should be clarified.
 - f. The list of drawings and the total sheet number should be revised to reflect the correct number of sheets provided in the plan set.
 - g. The locations of any man doors along the building shall also be identified on the plans.
4. §22-502.1.B – A copy of the deed for the subject tract and any other reference documents used to create the plans shall be submitted.
5. §22-502.1.D.(8)(a) – The location, size and species, of individual trees six inches in diameter or greater, when standing alone or in small stands shall be shown on the plan. Any individual tree to be removed shall be designated by an "X" marked on the tree on the plan.
6. §22-502.1.D.10.a – Stipulates site topography shall be determined by an on-site field survey. The cover sheet notes the gross site area as determined by an on-site survey as required. A general note shall be added stating the date of survey, responsible surveyor, and any reference notes regarding the survey.
7. §22-502.1.J – Construction details for the storm DW endwalls, loading dock area concrete, cross section for sidewalk, stop bar striping, curb cut, rip rap aprons, roof drain pipes, cleanouts and connections shall be added to the plans.

8. §22-704.4 – The Declaration of Covenants, Easements Conditions and Restrictions for the Road Right-of-Way Easement across TMP #26-1-100-11 dated April 16, 2002, states that no obstructions to the free and unhampered use of the easement shall be permitted without written approval of the Township. The plan proposes the entrance driveway within this easement. A note shall be added to the plans that it is acknowledged that the access driveway will need to be modified in order to accommodate the installation of the new street if and when constructed.
9. §22-705.14.A – The pavement construction of all streets, access drives and driveways shall be in accordance with the Township Standard Details. The Light and Heavy-Duty Paving Section details on Sheet 11 shall be revised to meet or exceed the paving standard of the attached Non-Residential and Multi-Residential Driveways, Parking Areas and Loading Areas Paving Section Detail.
10. §22-708.2.B – All parking stall striping shall be double-lined.
11. §22-706.3.G – The Detectable Warning Surface detail shall be revised to specify "brick red".
12. §22-706.13.A – Guiderail shall be provided along the emergency access due to the steep drop-off adjacent to the roadway.
13. §22-708.2.F – Where parking stalls are proposed adjacent to a sidewalk or walkway, the minimum width of the sidewalk or walkway shall be increased to a minimum width of six feet. The sidewalk adjacent to the parking stalls on the northwestern side of the building shall be widened to 6 feet.
14. §22-708.4.A – The following issues related to the Truck Turning Movements plan shall be addressed:
 - a. The plan shall show trucks entering and exiting the access to the cul-de-sac.
 - b. Turning templates for WB-62 trucks shall be provided. If WB-62 trucks can be accommodated, remove sign E where appropriate.
15. §22-708.4.B – The minimum width for access drives shall be 25 feet. The access drive to the parking spaces along the northwestern side of the building is 24 feet wide and shall be widened to provide the required 25-foot width.
16. §22-708.6.I – The minimum radius of curvature within a parking area shall be five feet. The typical curb radii throughout the parking lot shall be noted on the Layout Plan.
17. §22-710 – We note that a condition of the variances granted is for the Applicant to comply with all reasonable requirements of the New Britain Township Fire Marshal. We defer to the Township Fire Marshal for review of the plans with respect to water supply, fire hydrant placement, emergency access, etc. The emergency access is proposed to be delineated through a grass paver system and shrub mass along the edges. However, the Applicant's engineer submitted an informal sketch of the proposed building with an additional, conceptual retaining wall along the rear of the building. It appears that this potentially 13' high retaining wall would hinder access to the building during an emergency. There shall be free and clear access to the building from the emergency access drive.
18. §22-710.3.D – Fire lanes shall be designed to have adequate width, radii, and material strength to accommodate and support emergency vehicles. The radii of the center line of the emergency access around the building should be provided. In addition, a template of the fire truck used on the Fire Truck Turning Movements plan shall be provided. The template shall meet the New Britain Fire Truck Standards as attached.
19. §22-711.2. – The following comments related to E&S controls shall be addressed:
 - a. The limits of disturbance extend around the perimeter of the site and include the wetlands and woodlands areas to remain. The limits of disturbance shall be revised to extend along the perimeter of the natural resources to remain.

- b. The sequence of construction shall be revised to include the retaining wall installation.
 - c. Inlet protection shall be provided for Inlet I-5.
 - d. Inlet protection shall be provided for the outlet structure grates of the existing basins.
 - e. It appears the topsoil stockpile will block drainage from the eastern side of the building during construction. It may also conflict with the installation of the building pad and roof drains. The stockpile should be relocated, or multiple, smaller piles provided.
 - f. The E&S Control Notes include specifications for engineered soils. The plans shall clarify where the engineered soils are specified.
 - g. Calculations shall be provided for the rip rap aprons at HW 1, 2, and 3.
 - h. A note shall be added to the sequence of construction requiring the contractor to clean out any accumulated silt within the existing or proposed basins and to permanently stabilize as necessary.
20. §22-711.3. – The following comments related to site grading shall be addressed:
- a. Based on the top of curb elevation of 298.05 and the proposed 299 contour adjacent to Inlet I-7, the proposed grading exceeds a 3:1 slope and it appears the flow from Channel 1 may overtop the swale and discharge into the parking lot. The grading and retaining wall shall be revised as necessary to ensure the flow remains within the channel.
 - b. The retaining wall on the northwestern side of the building has a maximum height of 9.5 feet. Fall protection shall be provided along the wall.
 - c. The area between the emergency access road and the loading dock has a slope of 3:1 with an elevation change of 4 feet. A guide rail should be provided along the emergency access road at this location.
 - d. Additional spot elevations shall be provided for the driveway entrance at the cul-de-sac to clarify the grading.
 - e. Spot elevations shall be provided for the dumpster enclosure area. Any sections of depressed curb should be identified as necessary.
 - f. It shall be clarified if a minimum 5-foot curb taper shall be provided on either side of the curb cut along the entrance drive.
 - g. The location of all inlets shall be shown on the Grading Plan.
 - h. Additional labels shall be provided for the existing contours within and around the basins.
21. §22-711.4.A – Based on the current layout, two retaining walls, exceeding 3 feet in height are proposed. Design plans, specifications and details, signed and sealed by a licensed professional engineer, shall be provided for review prior to plan approval. Wall style, finish and color should be coordinated with proposed building architecture. All retaining walls shall have fall protection on vertical elevation changes of 30 inches or greater and depending on the proximity to drives, parking, walkways, maintained landscape area, etc.
22. §22-711 – The Applicant will be required to secure the necessary NPDES and E&S Control permits from the Bucks County Conservation District and the Department of Environmental Protection.
23. §22-715.2.C.(2) – The amount of land to be dedicated for park and recreational areas for nonresidential land developments shall be 2,500 square feet per 4,000 square feet of building area. Based on a building area of 88,250 square feet, 55,156 SF of park and recreation area is required. The area shall be identified on the plan or a fee-in-lieu provided at the discretion of the Board in the amount of \$55,156.25.

24. §22-716 – Concrete monuments shall be placed at all property boundary corners, along the right-of-way of Independence Lane and along the existing and proposed easements at any location where markers do not currently exist.
25. §22-718 – We defer to the North Penn Water Authority (NPWA) for review of the water service connection from the existing main on Independence Lane. A copy of the approved agreement shall be submitted to the Township and our office prior to plan recording.
26. §22-720 – We note that a Sewage Planning Module Application Mailer has been submitted. A Sewage Facilities Planning Module shall be approved by the Township, Authority, and PADEP prior to final plan approval by the Township.
27. §22-720 – We defer to the Chalfont-New Britain Township Joint Sewer Authority (CNBJSA) for review of the connection to the force main from Independence Lane. A copy of the approved agreement shall be submitted to the Township and our office prior to plan recording.

E. Stormwater Management Comments

1. §22-712.4.I – The minimum freeboard through the emergency spillway shall be one foot. The modification to Basin 1 removes the spillway for the construction of the access driveway. In addition, the Modified Detention Basin 1 notes a 100-year water surface elevation of 292.90 which is higher than the entrance road elevation and may result in stormwater flows into the cul-de-sac and adjacent driveways (TMP# 26-001-100-012). The basin shall be revised to provide storage for the 100-year storm and minimum freeboard of 1 foot.
2. §22-712.4.Q – A wet-tolerant seed mix should be specified for the seeding of the disturbed areas within the existing basins.
3. §22-712.4.S.(5) - An emergency overflow weir shall be provided for the outlet structure in order to convey basin inflow in excess of design flows or in the event the outlet structure becomes blocked and is unable to convey the design flow. The minimum capacity of the emergency overflow weir shall be equivalent to the one-hundred-year peak inflow rate for the post-development design storm. The bypass orifice in the MRC Basins shall be modeled with the other orifices blocked to demonstrate they has the capacity to convey the 100-year storm.
4. §22-712.4.S.(7) – As-built plans shall be provided for any underground detention basin to verify it was constructed in accordance with the approved plan prior to backfilling of the basin. A note to this effect shall be included on the record plan and in the sequence of construction.
5. §22-712.13.C – When an applicant retains ownership of any stormwater management facility, such entity shall be responsible for repair and maintenance of the facility. The existing stormwater facilities shall be reviewed to determine if the facilities are functioning properly, in need of maintenance or repair, and being regularly maintained in accordance with the PA BMP Manual.
6. §26-123 – The proposed design utilizes the Managed Release Concept (MRC) developed by PADEP to meet the volume control requirement which is permitted for situations where infiltration is infeasible. We note that the proposed managed release concept is subject to PADEP approval. However, the following issues related to the design of the MRC basins should be addressed:
 - a. The soil test pits indicate that the MRC basins do not provide the 1-foot minimum separation between the bottom of the MRC BMP (at the underdrain elevation) and bedrock/groundwater. The PADEP MRC guidance recommends an additional 1 foot of soil media below the underdrain where the preferred separation does not exist.
 - b. The PADEP guidance for MRC basins states that a composite Curve Number is inadequate for modeling the 1.2 inch/2-hour storm due to the error associated with averaging of initial abstractions for storms less than or equal to the 2-year/24-hour storm. The stormwater report uses a weighted curve number for the flows to MRC Basins 1 and 2. Separate hydrographs for the pervious and impervious flows to these basins shall be provided to verify they meet the release rate requirement.

7. §26-123.1 The plans propose grading modifications to the existing Stormwater Detention Basin Areas #3 and #4 resulting in less volume within the facilities. The original stormwater report for the existing basins shall be provided to determine if the design included a minimum volume control below the basin outlet structures. If water volume control from the original design is reduced below this requirement by the reduction in basin volume, the proposed design shall include additional volume control to offset this reduction.
8. §26-123.2.C.(5)(c) – All open-air infiltration facilities shall be designed to completely infiltrate runoff volume within three days (72 hours) from the start of the design storm. Based on the pond report, Existing Basin 1 has a storage volume of 54,128 CF below the outlet structure grate, indicating that this storage volume will infiltrate over time. However, the infiltration results for Existing Basin 1 reported a 0.00 in/hr infiltration rate. Similarly, this is the case for Existing Basin 2. Additional documentation shall be provided to clarify the dewatering of these basins.
9. §26-125.9 – The following issues related to the modeling of the design in the stormwater management report shall be addressed:
 - a. The inlet label for the outlet structure in Existing basin 1 lists a 15" RCP at 284.40. This is not modeled in the Pond Report for Existing Basin 1. The 15" RCP invert shall be clarified, and the basin model revised accordingly.
 - b. Existing Basin 2 models two outlet structure grates at an elevation of 283.00. The Existing Conditions/ Demolition Plan notes that this outlet structure is underwater, and no grate or orifice openings are provided. The basin shall be drained sufficiently to determine the size and elevation of all openings in the outlet structure. In addition, the outlet structure should be inspected to determine why Basin 2 is not draining and outlet structure is submerged.
 - c. The invert elevation of 290.50 for the outlet pipe of MRC Basin 1 is lower than the 100-year water surface elevation of 292.90 in Modified Detention Basin 1. A similar situation occurs between MRC Basin 2 and Modified Detention Basin 2. The outflow from the MRC Basins shall consider the tailwater effect from the downslope basins.
10. §26-132 – The following discrepancies with the stormwater management design and plans shall be addressed:
 - a. The Typical Front View of Non-Vegetated MRC Basin detail on Sheet 13 does not appear to include the stone over the chambers modeled in the stormwater report. Based on the report, 6 inches of stone should be specified over MRC Basin 1 and 30 inches of stone over MRC Basin 2. The detail and report shall be revised as necessary to clarify the extent of the stone envelope.
 - b. The elevations of the 3-inch orifice and 18-inch outlet pipe for MRC Basin 2 modeled in the stormwater report shall be verified and coordinated with the elevations provided in the Typical Front View of Non-Vegetated MRC Basin detail on Sheet 13.
 - c. The 36"x12" bypass orifice at an elevation of 295.00 for MRC Basin 1 shall be verified and coordinated with the details on Sheet 13 that note an elevation of 294.50.
 - d. The slope of the pipe from Inlet I-4 shall be revised to match the chamber elevation of 283.50 in MRC Basin 2.
 - e. The Overview of Non-Vegetated MRC Basin 2 detail on Sheet 13 shows 3 roof drain connections, while the Utility Plan shows two connections. In addition, the Utility Plan shows two roof drain connections to MRC Basin 1 which are not shown on the detail. The details shall be revised as necessary to be consistent with the plans.
 - f. Spot elevations and dimensions for the existing basin spillways shall be provided to verify the spillways modeled in the report.
 - g. The details shall clarify how the weir orifice and bypass orifice will be provided for the MRC Basin to prevent stone from entering the structure.

- h. The openings of the 12-inch-high bypass orifices for both MRC basins exceed the height of the stone beds. The bypass orifice shall be revised as necessary to be contained within the stone envelope.
 - i. The location and number of underdrain pipes and the 10" PVC lateral pipes between chambers shall be shown on the overview layout detail on Sheet 13.
11. §26-164.1 – The Applicant shall sign an Operation and Maintenance (O&M) agreement with the municipality covering all stormwater facilities and BMPs that are to be privately owned. The O&M agreement shall be transferred with the transfer of ownership and shall be prepared by the Township Solicitor.
 12. Township Resolution #2022-02 – The Applicant will be required to pay a fee for the proposed onsite BMPs to provide a financial guarantee for the timely installation, proper construction and continued maintenance by the owner of the subject property. The fee shall be 5% of the total construction cost of the proposed BMPs. The Applicant's professional shall submit a cost estimate once the design is finalized.
 13. The owner's name listed on the Individual PCSM BMP Information on Sheet 21 is not consistent with the owner information provided on the Cover Sheet and shall be revised.

F. Landscape and Lighting Comments

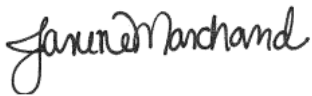
1. §22-713.3.C – All planting islands and strips shall be underlain by soil, not stone or bituminous material. The stone associated with MRC Basin #1 underlies the planting islands in the parking area. It shall be clarified that there's adequate soil depth in the planting islands to support tree growth.
2. §22-713.4.A – Street trees shall be planted every 30 feet along all existing streets. Due to the proposed accessway and existing Detention Basin Area #3, the street trees shall be proposed onsite in an informal arrangement.
3. §22-713.5.B(3) – Detention/Retention basins require one deciduous or evergreen tree planted every 20 feet, plus one deciduous or evergreen shrub every 10 feet along the basin perimeter, planted in an informal arrangement. Basin perimeter plantings shall be provided around the perimeter of the existing basins where modified and not within the future access easement.
4. §22-713.6.A – The location, dimensions, and spacing of required plantings shall be adequate for their proper growth and maintenance. The following comments regarding plant placement shall be addressed:
 - a. Trees and shrubs are proposed within Channel 1 which conflicts with the channel installation instructions provided on Sheet 19. The trees and shrubs shall be relocated as necessary.
 - b. It appears that the storm pipe from Inlet I-8 and OCS-1 conflict with the proposed parking island trees. We recommend a minimum distance of 10 feet between proposed plantings and all underground utilities. All utilities shall be shown on the landscape plan.
5. §27-713.6.D – The Landscape Plan shall contain plan notation stating that the applicant is required to maintain and guarantee all plant material until the end of the eighteen-month maintenance period.
6. §22-714.1.C – Lighting and corresponding illuminance values/statistics are provided for the parking and loading areas. However, illuminance values shall also be shown for the sidewalk along the front of the building to demonstrate that adequate lighting is provided.
7. §22-714.4.A. – Manufacturer cut sheets for all proposed lighting shall be provided.
8. §22-714.4.B. – The Light Foundation detail on Sheet 14 shall specify a minimum distance to curb. We recommend that a minimum distance of 3' to the face of curb be specified to prevent vehicular conflicts.
9. §22-714.4.C. – The proposed light within the dumpster enclosure shall be verified or relocated.

10. §22-714.7 – Illumination levels shall have intensities and uniformity ratios in accordance with current recommended IESNA standards. Nonresidential parking, loading facilities and drives associated with industrial uses shall demonstrate maintained footcandles of 0.4 minimum and a 4:1 Average:Minimum ratio. The statistics for the Truck Dock Area indicated in the Calculation Summary are not in compliance with the above-stated values and shall be revised.

Considering the extent of the required plan revisions identified in this letter, we may have additional comments relating to compliance with the Township Ordinances upon resubmission by the Applicant and upon review of the final plan requirements. In order to help expedite the review process of the resubmission of the plan, the Applicant shall submit a response letter which addresses each of the above comments. Changes that have been made to the application that are unrelated to the review comments shall also be identified in the response letter.

If you have any questions regarding the above, please contact this office.

Sincerely,



Janene Marchand, P.E.
Gilmore & Associates, Inc.
Township Engineers

JM/tw

cc: Michael Walsh, Assistant Manager
Ryan Gehman, Assistant Planning and Zoning Officer
Jeffrey P. Garton, Esq., Begley, Carlin, & Mandio
Christen Pionzio, cpionzio@hrmml.com
Kim Fasnacht, Rettew Associates, Inc.
Andy Miller, 101 Independence Lane Associates, LLC
Craig D. Kennard, P.E., E.V.P., Gilmore & Associates, Inc.



The Almshouse Neshaminy Manor Center 1260 Almshouse Road
Doylestown, Pennsylvania 18901 215.345.3400 FAX 215.345.3886
E-mail: planningcommission@buckscounty.org

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Evan J. Stone
Executive Director

MEMORANDUM

To: New Britain Township Board of Supervisors
New Britain Township Planning Commission

From: Staff of the Bucks County Planning Commission

Date: July 19, 2022

Subject: BCPC #12761
Preliminary Plan of Land Development for 101 Independence Lane
TMP #26-1-100-11
Applicant: 101 Independence Lane Associates, LLC
Owner: Same
Plan Dated: June 9, 2022
Date Received: June 17, 2022

This proposal has been reviewed by the Bucks County Planning Commission professional staff, which prepared the following comments in accordance with the Pennsylvania Municipalities Planning Code (Section 502).

GENERAL INFORMATION

Proposal: Construct an 88,250-square-foot warehouse on a 7.07-acre lot. The site is to be served by public water and sewer facilities.

Location: At the terminus of the Independence Lane cul-de-sac, approximately 500 feet northeast of its intersection with New Britain Boulevard.

Zoning: The IO Industrial Office District permits Use K3 Wholesale Business, Wholesale Storage and Warehousing by right on a minimum lot size of 3 acres with a minimum lot width of 200 feet. Minimum front, side, and rear yard requirements are 50, 25, and 50 feet, respectively.

The plan indicates that on April 21, 2022, the zoning hearing board granted relief from the following zoning ordinance provisions:

Section 27-1802.c.

to permit the proposed building to be 42 feet high

Section 27-2901.K.

to permit no less than 53 off-street parking spaces on the property in connection with the proposed K3 Wholesale Business, Wholesale Storage and Warehousing use on the property

Section 27-2904.g.5.

to permit the paved areas of the front parking lot to be 9.3 feet from the exterior front structural wall of the proposed building



Present Use: Vacant

COMMENTS

1. **Requested waivers**—The plan indicates that the applicant is requesting waivers from the following requirements of the subdivision and land development ordinance (SALDO):

Section 22-502.1.D.(10)(a)

to use the Chalfont-New Britain Township Joint Sewage Authority Vertical Datum, whereas contour lines are required to be measured at vertical intervals of 2 feet, as determined by an on-site field survey

Section 22-705.3.G.

from the requirement to mill and overlay the entire width of the roadway to a depth of 1.5 inches

Sections 22-706.1.B. & 2.B.

from constructing a sidewalk along the public right-of-way

Section 22-505

from the requirement to provide a community impact assessment report

The applicant has not provided the reasons for the waiver requests or the proposed changes in lieu of each requirement. Section 512.1.(b) of the Pennsylvania Municipalities Planning Code requires applicants to state in full the grounds and facts of unreasonableness or hardship on which the request for each waiver is based and the minimum modification necessary. The final plan should note all granted waivers.

2. **Wetlands mapping**—The plan indicates a small area of wetlands onsite along the northeastern property boundary. Note 26 on Sheet 1 of the plan references a wetlands investigation conducted on September 14, 2021. Per Section 22-502.1.B.(21) of the SALDO, the plan should be revised to provide a notation identifying the source of wetlands mapping so that compliance with the requirement in Section 27-2400.d. of the zoning ordinance can be verified.
3. **Watercourse**—Note 26 on Sheet 1 indicates that no streams were found on the site as a part of a wetlands investigation conducted on September 14, 2021. According to our records, it is possible that a tributary to West Branch Neshaminy Creek runs through the site along the boundary adjacent to the Independence Lane cul-de-sac bulb. Should this watercourse be present on the site, the plan should be revised to include it along with corresponding natural resource protection standards on Sheet 1. Section 27-2400.i. of the zoning ordinance outlines the requirements for providing a riparian buffer along this potential watercourse. A vegetative buffer around the watercourse will prevent runoff from more quickly entering the stream, which exacerbates streambank erosion and increases floodwaters during the flood cycle. In addition, absent a vegetative buffer, pesticides and herbicides will be able to flow directly into the stream's surface waters when it rains. Overall, this riparian buffer area would help maintain the future integrity of the stream channel and shoreline and reduce the impact of upland sources of pollution. The township should confirm the existence (or lack thereof) of this watercourse prior to plan approval. Should it be found to be present on the site, the relevant natural resource protection standards should also be met.
4. **Steep slopes**—Sheet 1 indicates that the steep slopes present on the site are not to be counted toward the natural resource protection standards as the slopes are "manmade." We note that the

site is vacant, and the steep slopes are a part of the site's natural, undisturbed condition. For this reason, we recommend the standards be upheld and met prior to plan approval.

5. **Tree protection**—The plan should identify the tree protection zone, indicate the location of tree protection fencing, and include tree protection details in compliance with Sections 27-201 of the zoning ordinance and Sections 22-713.2., 22-502.1.G.(3), and 22-502.1.G.(5) of the SALDO.
6. **Tree replacement**—Section 27-2400.f.2.(a) of the zoning ordinance provides that where more than 20 percent of the woodlands are being disturbed, all disturbed woodlands exceeding the 20 percent limit shall be replaced on an acre-for-acre basis through the planting of replacement trees. This plan surpasses this 20 percent threshold and is subject to the tree replacement provisions referenced above.
7. **Energy conservation**—Given the size of the project, we strongly encourage the use of alternative forms of energy generation and conservation. This may include green roofs, solar panels, geothermal systems, or a requirement that buildings meet a certified efficiency standard. The Bucks County Planning Commission recently completed a model alternative energy ordinance¹ to provide examples of various incentives which could be included to encourage the use and incorporation of alternative energy systems at the beginning of a residential or nonresidential development proposal.
8. **Stormwater management maintenance**—The applicant proposes stormwater basins, swales, storm piping, and appurtenances as a part of its stormwater BMPs on the site. We recommend the applicant provide a manual to the township and to the property owner detailing all required maintenance for the stormwater management facilities. This will help to ensure the long-term maintenance and performance of the stormwater facilities and make the property owner aware of their responsibilities for regular maintenance and repair of the facilities.
9. **Registered landscape architect**—We recommend that the landscape plan be prepared, signed, and sealed by a registered landscape architect licensed in the state of Pennsylvania.

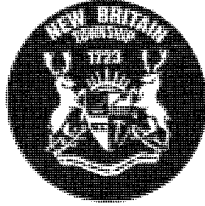
This review will be included in the Bucks County Planning Commission board materials for the August 3, 2022, meeting. It is not necessary for you to attend this meeting, but you are welcome to do so and to offer comments on the proposal to the BCPC board and staff.

In order that we may be more aware of your concerns, please send us a copy of all municipal decisions sent to this applicant.

JWS:emh

cc: 101 Independence Lane Associates, LLC (via email)
Kim Fasnacht, PMP, LEED AP, Rettew Associates, Inc. (via email)
Janene Marchand, PE, Gilmore & Associates, Township Engineer (via email)
Matt West, Township Manager (via email)

¹ <https://communityplanning-bucksgis.opendata.arcgis.com/pages/model-ordinances>



Township of New Britain

Office of Fire Marshal

July 21 2022

RE: Fire Marshal review of 141 Independence Lane Parcel # 26-001-100-011

Review By: Randal J. Teschner Fire Marshal

The following is a list of items to be addressed:

1. Due to the width of the Drives, there should be no parking on both sides of driveways (signs still needed on drive going across front of building)
2. Supply one Hydrant at the split in driveways
3. Fire lane appears to meet all requirements

**TOWNSHIP OF NEW BRITAIN
BUCKS COUNTY, PENNSYLVANIA**

ORDINANCE NO. 2022-_____

AN ORDINANCE OF THE TOWNSHIP OF NEW BRITAIN, BUCKS COUNTY, PENNSYLVANIA; PROVIDING FOR THE AMENDMENT OF CHAPTER 27 ZONING, PART 24, NATURAL RESOURCE PROTECTION STANDARDS AND CHAPTER 26, PART I STORMWATER MANAGEMENT, OF THE NEW BRITAIN TOWNSHIP CODE TO REGULATE DEVELOPMENT WITHIN THE MUNICIPALITY IN A MANNER CONSISTENT WITH THE PENNSYLVANIA STORM WATER MANAGEMENT ACT (ACT 167).

The Pennsylvania Storm Water Management Act (Act 167) requires municipalities to “adopt or amend, and shall implement such ordinances and regulations, including zoning, subdivision and development, building code, and erosion and sedimentation ordinances, as are necessary to regulate development within the municipality in a manner consistent with the applicable watershed storm water plan and the provisions of this act.”

NOW THEREFORE, be it, and it is hereby ENACTED and ORDAINED by the Board of Supervisors of the Township of New Britain, Bucks County, Commonwealth of Pennsylvania, as follows:

ARTICLE I. Amend §27-502.b.5 and 502.f to read:

§27-502.b.5 When an applicant is proposing a land development, the stormwater management facilities shall be designed to manage the runoff from the maximum impervious surface permitted for the entire site. For all other applications proposing a new principal building the stormwater management facilities shall be designed to manage the runoff from the total existing and proposed impervious surfaces on site installed since the adoption of the Stormwater Ordinance on April 1, 2011. Future permitted impervious surfaces shall be considered in the design, if possible. Where an applicant is permanently preserving natural resources and/or other portions of the site by the placement of a permanent conservation easement, either voluntarily or in accordance with the requirements of this chapter, those areas so preserved can be removed from the calculation of the maximum impervious surface permitted for the entire site at the option of the applicant by the recording of this restriction permanently against the property.

§27-502.f. Accessory Uses/Structures. The following provisions shall apply for all accessory uses/structures, unless otherwise stipulated in Part 3 of this chapter or unless there are more-restrictive applicable requirements provided for elsewhere in this chapter concerning accessory uses/structures:

1. No accessory structures shall be permitted in the required front yard setback area.

Commented [JM1]: Underlined or strikethrough, red font type are recommended changes from the 2022 MS4 Stormwater Ordinance Model.
Yellow highlighted font is a G&A recommended change.
Please reference the specific sections in the Code for context.

Commented [JM2]: Under B1-Use within the Watershed District.
Principal building to mean new house. This clarifies that constructing a new accessory structure for a B1 Use does not require stormwater management to accommodate EXISTING impervious. For instance, currently, installing an accessory pole barn of 1,500 sf requires the stormwater be designed to include the existing house, driveway, etc. retroactively. It can double or triple a project cost.

2. All accessory structures shall be located a minimum of 15 feet to the rear and the side of the principal building on the lot.
3. All accessory structures shall be located a minimum of 15 feet from the rear and side lot lines. Where the lot size is less than 25,000 square feet, however, the accessory structure shall be located a minimum of five feet from the rear lot line.
4. Stormwater facilities shall be designed to manage the proposed increase in runoff in accordance with the Township's Stormwater Ordinance.

ARTICLE II. Amend §27-2400.i to read:

Riparian Buffer. The riparian buffer shall include only the portion of land sloping towards the surface water bodies being protected and shall extend no more than 75 feet from each side of the watercourse, lake or pond, at bankfull flow edge, or shall extend the extent of the one-hundred-year floodplain, whichever is greater. No land disturbance shall be permitted within any riparian buffer except as permitted below. The buffer area will consist of two distinct protection zones.

1. Zone 1. This buffer area will begin at the edge of the lake, pond or ~~water course~~ watercourse and occupy a margin of land with a minimum width of 25 feet measured horizontally on a line perpendicular to the edge of water at bankfull flow or level. Open space uses that are primarily passive in nature may be permitted in Zone 1, including:
 - (a) Open space uses such as wildlife sanctuaries, nature preserves, forest preserves, fishing areas, passive areas for public or private parklands and reforestation.
 - (b) Customary agricultural practices in accordance with a soil conservation plan approved by the Bucks County Conservation District and a nutrient management plan in accordance with state requirements, if applicable.
 - (c) Regulated activities permitted by the Commonwealth and Township for stream or wetland crossing or other encroachment (i.e., farm vehicle and livestock, recreational trails for non-motorized use only, roads, sewer or water lines, and utility transmission lines) provided that any disturbance is offset by riparian corridor improvements as approved by the Township and all regulated activities designed to have the least impact on native plant species and other sensitive environmental features.
 - (d) Vegetation management in accordance with an approved landscape or open space management plan.
 - (e) Runoff to be buffered or filtered by Zone 1 will be limited to sheet flow or subsurface flow only. Concentrated flows must be converted to sheet flow or subsurface flows prior to entering Zone 1 for proposed stormwater management facilities.
 - (f) Whenever practicable invasive vegetation shall be actively removed, and the Riparian Buffer Easement shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the site.
2. Zone 2. This buffer zone will begin at the outer edge of Zone 1 and occupy a minimum width of 50 feet in addition to Zone 1. However, where the width of the one-hundred-year floodplain extends greater than 75 feet from the edge of water at bankfull flow or level, Zone 1 shall remain a minimum of 25 feet and Zone 2 shall extend from the outer edge of Zone 1

Commented [JM3]: Update Zoning to be consistent with OPTIONAL wording in DEP Model Ordinance

Commented [JM4]: Model Ordinance suggests 10 feet. Recommend keeping Ordinance as is at 50 feet.

to the outer edge of the one-hundred-year floodplain. Uses permitted in this buffer area include open space uses that are primarily passive in nature, including:

- (a) Open space uses such as wildlife sanctuaries, nature preserves, forest preserves and passive areas for public or private parklands, recreational trails [for non-motorized use only](#) and reforestation.
- (b) Customary agricultural practices in accordance with a soil conservation plan approved by the Bucks Conservation District.
- (c) Regulated activities permitted by the Commonwealth and Township for stream or wetland crossing or other encroachment (i.e., farm vehicle and livestock, recreational trails [for non-motorized use only](#), roads, sewer or water lines and utility transmission lines) provided that any disturbance is offset by riparian corridor improvements as approved by the Township [and all regulated activities designed to have the least impact on native plant species and other sensitive environmental features](#).
- (d) Recreational activities or uses not involving impervious surfaces such as playing fields or golf courses.
- (e) [Whenever practicable invasive vegetation shall be actively removed, and the Riparian Buffer Easement shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the site.](#)

ARTICLE III. Amend §26-106.

§26-106.1. Regulated activities that create [a net increase of](#) impervious surface [area](#) smaller than or equal to 1,000 square feet are exempt from the peak rate control requirements and the SWM site plan preparation located in Subpart D of this Part unless the activity is found to be a significant contributor of pollution to the waters of this commonwealth.

§26-106.2. Regulated activities that create [a net increase of](#) impervious surface [area](#) between 1,001 square feet up to and including 5,000 square feet are exempt only from the peak rate control requirements of this Part.

ARTICLE IV. Add the following Sections §26-108-111:

§26-108. Severability

In the event that a court of competent jurisdiction declares any section or provision of this Ordinance invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance.

§26-109. Compatibility with Other Requirements

Approvals issued and actions taken under this Ordinance do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance.

§26-110. Erroneous Permit

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an applicant is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the Municipality purporting to validate such a violation.

§26-111. **Waivers**

- A. If the Municipality determines that any requirement under this Ordinance cannot be achieved for a particular regulated activity, the Municipality may, after an evaluation of alternatives, approve measures other than those in this Ordinance, subject to Section 111, paragraphs B and C.
- B. Waivers or modifications of the requirements of this Ordinance may be approved by the Municipality if enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that the modifications will not be contrary to the public interest and that the purpose of the Ordinance is preserved. Cost or financial burden shall not be considered a hardship. Modification may be considered if an alternative standard or approach will provide equal or better achievement of the purpose of the Ordinance. A request for modifications shall be in writing and accompany the Stormwater Management Site Plan submission. The request shall provide the facts on which the request is based, the provision(s) of the Ordinance involved and the proposed modification.
- C. No waiver or modification of any regulated stormwater activity involving earth disturbance greater than or equal to one acre may be granted by the Municipality unless that action is approved in advance by the Department of Environmental Protection (DEP) or the delegated county conservation district.

ARTICLE V: Amend or Add Definitions §26-112.

AGRICULTURAL ACTIVITY Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity with the exception of hoop barns (high tunnels) only in accordance with Storm Water Management Act 15, Act of April 18, 2018, P.L. 91.

FLOODPLAIN Any land area susceptible to inundation by water from any natural source or as delineated by applicable FEMA maps and studies as being a special flood hazard area. Also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP).~~Department of Housing and Urban Development,~~

~~Federal Insurance Administration Flood Hazard Boundary Map as being a special flood hazard area.~~

GREEN INFRASTRUCTURE Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.

IMPERVIOUS SURFACE Surfaces which prevent the infiltration of water into the ground, including all buildings, streets, parking areas, driveways, roads, sidewalks, swimming pools, and any area in concrete, asphalt, pavers, compacted gravel, compacted stone or similar materials. Impervious surfaces also include other areas determined to be impervious by the Township Engineer. ~~Decks, parking areas, stone areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.~~

Commented [JM5]: Zoning Ordinance does not consider pool surface water as impervious. Revise one or the other to have consistent definitions. Current policy is to allow riverrock and pea gravel as pervious, but not stone driveways, walkways and slate.

LOW IMPACT DEVELOPMENT ~~Practices that will minimize proposed conditions runoff rates and volumes, which will minimize needs for artificial conveyance and storage facilities. Site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site.~~

Commented [JM6]: Do not recommend including this sentence from DEP's definition. Current policy is that regardless of using pervious materials, it becomes impervious over time.

PERVIOUS SURFACE A surface that allows the infiltration of water into the ground or any area not defined as impervious surface.

ARTICLE VI. Amend §26-121, -123 and -124 as follows:

~~§26-121.6.C For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Part unless the new impervious area is under 5,000 square feet. For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Ordinance; except that the volume controls in Section 123 and the peak rate controls of Section 124 do not need to be retrofitted to existing impervious areas that are not being altered by the proposed regulated activity.~~

§26-121.8.C To the maximum extent practicable, incorporate the techniques for low impact development practices (e.g., protecting existing trees, reducing area of impervious surface, cluster development, and protecting open space) described in the Pennsylvania Stormwater Best Management Practices Manual, Pennsylvania Department of Environmental Protection (PADEP) No. 363- 0300-002 (2006). ~~If methods other than green infrastructure and LID methods are proposed to achieve the volume and rate controls required under this Ordinance, the SWM Site Plan must include a detailed justification demonstrating that the use of LID and green infrastructure is not practicable.~~

Commented [JM7]: Optional per DEP

§26-121.11 ~~Normally dry, open top S~~ storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm, ~~unless otherwise approved by the Township Engineer.~~

Commented [JM8]: Waivers are often needed due to small project flows to the facility.

§26-123.2 The green infrastructure and low impact development practices provided in the BMP Manual shall be utilized for all regulated activities wherever possible. Volume controls shall be implemented using the design storm method in Subsection A or the simplified method in Subsection B below. For regulated activities equal to or less than one acre, this Part establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of economic considerations, the intrinsic limitations of the procedures associated with each methodology, and other factors. All regulated activities greater than one acre must use the design storm method. For small projects that propose 1,000 square feet or less of impervious Subsection D should be used.

§26-123.2.C(6) Soils. A soils evaluation of the project site shall be required to determine the suitability of infiltration facilities for all subdivisions and land developments, any projects that propose 5,000 sf or more of new impervious surface or as deemed necessary by the Township Engineer. A soils evaluation is recommended for all other applications. All regulated activities are required to perform a detailed soils evaluation by a qualified design professional which at minimum address soil permeability, depth to bedrock, and subgrade stability. The general process for designing the infiltration BMP shall be:

- (a) Analyze hydrologic soil groups as well as natural and man-made features within the site to determine general areas of suitability for infiltration practices. In areas where development on fill material is under consideration, conduct geotechnical investigations of sub-grade stability; infiltration may not be ruled out without conducting these tests.
- (b) Provide field tests such as double ring infiltrometer or hydraulic conductivity tests (at the level of the proposed infiltration surface) to determine the appropriate hydraulic conductivity rate. Perculation tests are not recommended for design purposes.
- (c) Design the infiltration structure based on field determined capacity at the level of the proposed infiltration surface and based on the safety factor of 50%.
- (d) If on-lot infiltration structures are proposed, it must be demonstrated to the municipality that the soils are conducive to infiltrate on the lots identified.
- (e) An impermeable liner will be required in detention basins where the possibility of groundwater contamination exists. A detailed hydrogeologic investigation may be required by the municipality.

Commented [JM9]: We have occasionally allowed this if the BMP conversion noted in the BMP Manual is used.

§26-123.2.D Small Project Stormwater Management Rate-Volume Control Requirements. This section applies to only small projects (residential and non-residential) that propose less than 1,000 square feet of new impervious.

§26-124.1.D Site Areas. The stormwater management site area is the only area subject to the management district criteria. The stormwater management site area includes sd on-site areas that are not proposed to be disturbed, but drain to a proposed stormwater management facility. Non-impacted areas or non-regulated activities bypassing the stormwater management facilities would not be subject to the management district criteria.

§26-125.2 Stormwater runoff peak discharges from all development sites with a drainage area greater than one acre shall be calculated using a generally accepted calculation technique that is based on the NRCS Soil Cover Complex Method. Table 26-125.1 summarizes acceptable

computation methods. The method selected by the design professional shall be based on the individual limitations and suitability of each method for a particular site. The municipality may allow the use of the Dekalb Rational Method ($Q=CIA$) to estimate peak discharges from drainage areas that contain one acre ~~of or~~ less.

ARTICLE VII. Amend §26-131

For any of the activities regulated by this Part, the preliminary or final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, the commencement of any earth disturbance, or activity may not proceed until the property owner or applicant or his/her agent has received written approval of a SWM site plan from the municipality. ~~and an Approval~~ of an adequate erosion and sediment (E&S) control plan review ~~is required from the municipality or~~ County Conservation District ~~for all earth disturbance activities exceeding 5,000 square feet including an adequate erosion and sediment control (E&SC) plan properly designed and implemented, and available on site. For earth disturbance activities less than 5,000 square feet, an E&SC plan is not required, but the appropriate BMPs are still required to be implemented. Swimming pool projects under 2,000 SF are exempt from Bucks County Conservation District E&S Review.~~

ARTICLE VIII. Amend §26-132.C.(9) & Add §26-132.C(11) to read as follows:

§26-132.C.(9) ~~The following signature block for the design engineer: "I, (Design Engineer), on this date (date of signature), hereby certify that the SWM site plan meets all design standards and criteria of the Neshaminy Creek Watershed Act 167 Stormwater Management Ordinance or Plan." The following signature block for the municipality:~~

~~"The Township Engineer, on this date _____ has reviewed and hereby certifies that the SWM Site Plan meets all design standards and criteria of the Municipal Ordinance Chapter 26, Part I."~~

§26-132.C.(11) A justification must be included in the SWM Site Plan if BMPs other than green infrastructure methods and LID practices are proposed to achieve the volume, rate and water quality controls under this Ordinance.

ARTICLE IX. Amend §26-134.2. & Add §26-134.3

§26-134.2. The municipality will notify the applicant in writing within 45 days whether the SWM site plan is approved or disapproved. If the SWM site plan involves a subdivision and land development plan, the notification period is 90 days. If a longer notification period is provided by other statute, regulation, or ordinance, the applicant will be so notified by the municipality. If the municipality disapproves the SWM site plan, the municipality shall cite the reasons for disapproval in writing. The Municipality also may approve the SWM Site Plan with conditions and, if so, shall provide the acceptable conditions for approval in writing.

§26-134.3. For any SWM Site Plan that proposes to use any BMPs other than green infrastructure and LID practices to achieve the volume and rate controls required under this

Commented [JM10]: Do not recommend this be added.

Ordinance, the Municipality will not approve the SWM Site Plan unless it determines that green infrastructure and LID practices are not practicable.

Commented [JM11]: Optional

ARTICLE X. Amend 26-135.5.

§26-135.5. The as-built submission shall include a certification of completion signed by a qualified professional verifying that all SWM BMPs have been constructed according to the approved plans and specifications. If any qualified professionals contributed to the construction plans, they must sign and seal the completion certificate. The latitude and longitude coordinates for all permanent SWM BMPs must also be submitted, at the central location of the BMPs. After receipt of the completion certification by the Municipality, the Municipality may conduct a final inspection. The Township Engineer shall conduct a final inspection once notified the project is completed and prior to the Township closing out the project or starting the maintenance period.

ARTICLE XI. Add §26-152.1.H

§26-152.1.H. Attendance at meetings.

ARTICLE XII. Amend §26-171 to read as follows:

1. Any drain or conveyance, whether on the surface or subsurface, that allows any nonstormwater discharge, including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the waters of the commonwealth is prohibited.
2. No person shall allow, or cause to allow, discharges into a regulated small MS4, or surface waters of this commonwealth which are not composed entirely of stormwater, except (A) as provided in Subsection 3 below, and (B) discharges allowed under a state or federal permit.
3. The following discharges are authorized unless they are determined to be significant contributors to pollution to a small regulated MS4 or to the waters of the commonwealth:
 - A. Discharges or flows from firefighting activities.
 - B. Discharge from potable water sources, including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).

C. ~~Non-contaminated irrigation water, water from lawn maintenance, landscape drainage, and flows from riparian habitats and wetlands.~~

D. ~~Air conditioning condensate~~ Non-contaminated HVAC condensation and water from geothermal systems.

E. ~~Springs.~~ Diverted stream flows and springs.

F. ~~Water from~~ Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.

G. ~~Flows from riparian habitats and wetlands.~~

H. ~~Uncontaminated water from foundations or from footing drains.~~

I. ~~Lawn watering.~~

J. ~~De chlorinated swimming pool discharges (per Department of Environmental Protection (PADEP) requirements).~~

K. ~~Uncontaminated groundwater.~~

~~L-G. Residential (i.e. not commercial) vehicle wash water where cleaning agents are not utilized. Water from individual residential car washing.~~

~~M. Routine external building wash down (which does not use detergents or other compounds). H. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.~~

4. In the event that the municipality or PADEP determines that any of the discharges identified in Subsection 3 significantly contribute to pollution of a regulated small MS4 or the waters of this commonwealth, the municipality or PADEP will notify the responsible person(s) to cease the discharge.

ARTICLE XIII. Amend §26-151 to read as follows:

§26-151.A. Fees shall be established by the municipality to cover plan review and construction inspection costs incurred by the municipality. All fees shall be paid by the applicant at the time of SWM site plan submission. A review and inspection fee schedule shall be established by resolution of the municipal governing body based on the size of the regulated activity and based on the municipality's costs for reviewing SWM site plans and conducting inspections pursuant to § 26-141. The municipality shall periodically update the review and inspection fee schedule to ensure that review costs are adequately reimbursed.

Commented [JM12]: See DEP's Management of Swimming Pool Discharges

§26-151.B. Fees may be established by the municipality to cover continued maintenance by the owner of the subject property. Small projects costing under \$500.00 may be exempt from this fee at the discretion of the Township.

ARTICLE XIV. Amend §26-161 to read as follows:

§26-161.2. For other regulated activities, the municipality ~~shall~~ may require a financial guarantee from the applicant.

ARTICLE XV. Amend §26-182 to read as follows:

§ 26-182 **Inspection.**

1. Stormwater management (SWM) best management practices (BMPs) should be inspected for proper operation by the landowner, or the owner's designee (including the municipality for dedicated and owned facilities), according to the following list of minimum frequencies:
 - A. Annually for the first five years,
 - B. Once every three years thereafter,
 - C. ~~During or immediately after the cessation of a ten year or greater storm, and/or as specified in the operations and maintenance (O&M) agreement.~~ Inspections should be conducted during or immediately following precipitation events. A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Inspection reports shall be submitted to the Municipality within 30 days following completion of the inspection.

ARTICLE XVI. Add §26-184.4.

§26-184.4. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the Municipality may provide a limited time period for the owner to correct the violation. In these cases, the Municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.

ENACTED and **ORDAINED** at a regular meeting of the

Board of Supervisors

on this _____ day of _____, 20____.

This Ordinance shall take effect immediately.

(Name) (Title)

(Name) (Title)

(Name) (Title)

ATTEST:

Secretary

DRAFT

