HISTORIC PRESERVATION COMMISSION - SEPTEMBER 15, 2026 AGENDA

Tuesday, September 15, 2026 at 7:30 PM

Online via Zoom

CALL TO ORDER

OPEN PUBLIC MEETINGS STATEMENT

Notice of this meeting has been given to the Hopewell Valley News, Trenton Times and was posted on the bulletin board at Borough Hall at 30 North Main Street and on the Borough website according to the regulations of the Open Public Meetings Act.

ROLL CALL

PUBLIC COMMENTS

Meeting open to public for comments.

Please raise your hand and when the secretary acknowledges you state your name and address for the record. There will be a total of 15 minutes allotted for public comments.

APPROVAL OF MINUTES

1. *August 18, 2026 Minutes

APPLICATIONS

2. 25-005 12 N. Main Street - Block 205, Lot 22 - Design Discussion
3. Pennington School - Old Main (For Discussion Only)

OTHER BUSINESS

4. Signage Initiative
5. Certified Local Government Status
6. Street Trees in the Historic District
7. Historic District Resident Notice
8. Designation of Additional Properties
9. Land Use Ordinances

DISCUSSION

ADJOURNMENT

*Indicates Action May Be Taken

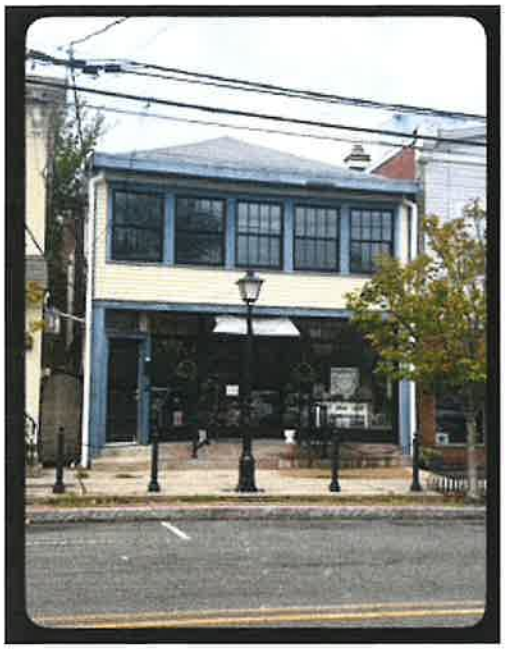
Planning

From: Eric Holtermann
Sent: Thursday, September 10, 2026 3:16 PM
To: Planning
Subject: [EXTERNAL] 12 N Main St

This message is from a sender outside of your organization.

Pennington HPC:
Bruce Vinci, owner of 12 N Main St (new storefront approved last year) submitted a few preliminary design ideas for the second floor of the building, which he would like to upgrade. Photos below for discussion

1. Existing condition



2. Windows replaced

3. New windows + metal awning

4. New windows + larger awning

5. New windows + fabric awning

6. Perhaps something more fanciful?

Eric Holtermann, AIA
HMRARCHITECTS
24 N. MAIN STREET
PENNINGTON, NEW JERSEY 08534
609-452-1070 - HMR-ARCHITECTS.COM
holtermann@hmr-architects.com

MASTER PLAN
PRELIMINARY & FINAL SITE PLAN

PREPARED FOR

THE PENNINGTON SCHOOL

BLOCK 701, LOT 4, BLOCK 502, LOT 4, BLOCK 206, LOT 10 & BLOCK 205, LOT 1

SITUATED IN

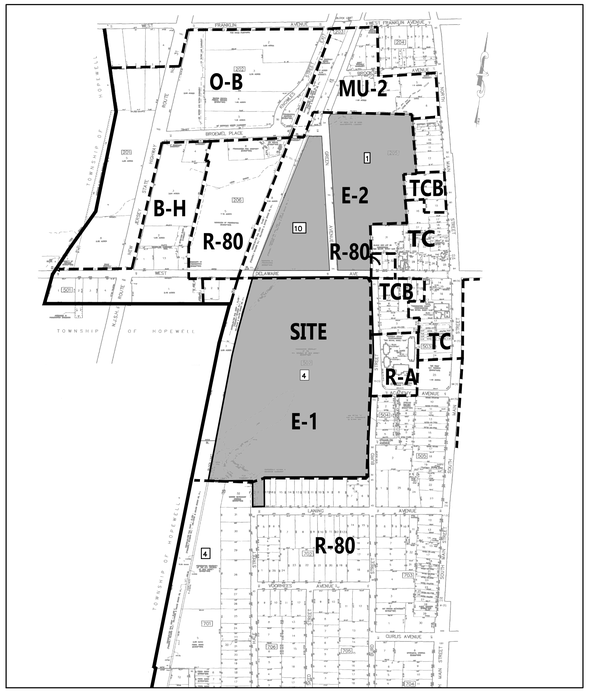
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

OWNER/APPLICANT
THE PENNINGTON SCHOOL
112 WEST DELAWARE AVE.
PENNINGTON , NEW JERSEY 08534

PROPERTY OWNERS WITHIN 200' OF SITE

PENNINGTON BOROUGH

BLOCK/LOT	ADDRESS	OWNER
205 1	QUEEN STREET	15B THE PENNINGTON SCHOOL W DELAWARE AVENUE PENNINGTON NJ 08534
205 32	WEST DELAWARE AVE	1 THE BRICK MALT CONDOMINIUM 25 WEST DELAWARE AVE PENNINGTON NJ 08534
205 31.01	W DELAWARE AVE	4C BLACKWELL A & M C/O J MCARDY 115 LEWISBROOK RD PENNINGTON NJ 08534
205 32	25 W DELAWARE AVE	2 BLACKWELL A & M C/O J MCARDY 115 LEWISBROOK RD PENNINGTON NJ 08534
205 33	29-31 W DELAWARE AVE	15B THE PENNINGTON SCHOOL 112 WEST DELAWARE AVE PENNINGTON NJ 08536
206 34	35 A&B W DELAWARE AVE	15B THE PENNINGTON SCHOOL 112 WEST DELAWARE AVE PENNINGTON NJ 08534
205.01 1	21 W DELAWARE AVE UNIT 1	4A WHITE FRANK M & NAN M 30 LOCKSTONG RD TRENTON NJ 08628
205.02 1	23 W DELAWARE AVE FLR 02	4A DEVOTACE KIMBERLY & JOHN T. 5074 BEACON HILL CT DOYLESTOWN PA 18902
205.02 2	23 W DELAWARE AVENUE	2 COOKE MATTHEW A & RITA F 39 DELAWARE AVE EWING NJ 08628.2003
205.03 1	23 W DEL AVE REAR UNIT 6	4A GFSN OF PENNINGTON, LLC 1 VANNOY AVE PENNINGTON NJ 08534
206 8	W DELAWARE AVENUE	15C PENNINGTON BOROUGH 30 N MAIN ST PENNINGTON NJ 08534
206 8	GREEN AVENUE - REAR STATE ASSESSED	5A CONSOLIDATED RAIL CORPORATION - - 00000
206 9	GREEN AVENUE - REAR STATE ASSESSED	5B CONSOLIDATED RAIL CORPORATION - - 00000
206 10	W DELAWARE AVENUE	15F THE PENNINGTON SCHOOL 112 W DELAWARE AVENUE PENNINGTON NJ 08534
206 11	V L W DELAWARE	15C BOROUGH OF PENNINGTON 30 N MAIN ST PENNINGTON, NJ 08534
502 1	W DELAWARE AVE	4A MERITER SC LLC 902 CARNEGIE CENT STE 450 PRINCETON NJ 08540.6330
502 2	142 W DELAWARE AVE	2 LEVIN MICHAEL & WINDY 142 W DELAWARE AVE PENNINGTON NJ 08534
502 3	W DELAWARE AVENUE STATE ASSESSED	5A CONSOLIDATED RAIL CORPORATION - - 00000
502 5	80 BURD ST	2 ALLEN WALTER F.C MILLER A N ALLEN 80 BURD ST PENNINGTON NJ 08534
502 6	103 LAKING AVE.	3 HELD ISAAC & JOANN L 103 LAKING AVE. PENNINGTON NJ 08534
502 7	105 LAKING AVE.	2 BRADY SUSAN B 105 LAKING AVE. PENNINGTON NJ 08534
502 8	107 LAKING AVE.	2 FERRERI CONOR G & MAURA H 107 LAKING AVE. PENNINGTON NJ 08534
502 9	111 LAKING AVE	1 FOSTER PROPERTIES, LLC 197 WOODAMORA RD PENNINGTON, NJ 08534
502 10	115 LAKING AVE.	2 MCMANIMON EDWARD J III & CHRISTINA 115 LAKING AVE. PENNINGTON NJ 08534
502 11	117 LAKING AVE.	2 KEENE, ANDREW R & KATE E 117 LAKING AVE PENNINGTON, NJ 08534
502 13	119 LAKING AVE.	2 MCCOOL,DAVID & PEIRCE,MAGGIE A 119 LAKING AVE PENNINGTON, NJ 08534
502 14	121 LAKING AVE.	2 DOBSON, GERALD E. JR. & SARA A. 121 LAKING AVE. PENNINGTON NJ 08534
502 15	125 LAKING AVE.	2 ARTHUR SUSAN 125 LAKING AVE. PENNINGTON NJ 08534
502 16	129 LAKING AVE.	2 PFEIFFENBERGER GEORGE WILL & SUSAN 129 LAKING AVE. PENNINGTON NJ 08534
502 17	131 LAKING AVE.	2 MYERS JAMES R & SUSAN M 131 LAKING AVE. PENNINGTON NJ 08534
503 1	ACADEMY AVE	1 ACADEMY COURT CONDOMINIUMS ACADEMY AVE PENNINGTON NJ 08534
503 2	25 BURD ST	15D THE PENNINGTON SCHOOL 112 W DELAWARE AVE PENNINGTON NJ 08534
503 3.01	17-19 BURD ST	2 171921 BURD ST, LLC 17-19 BURD ST PENNINGTON, NJ 08534
503 3.02	21 BURD ST	1 171921 BURD ST, LLC 17-19 BURD ST PENNINGTON, NJ 08534
503 4	13 BURD ST	2 SABIN CAROLYN M 13 BURD STREET PENNINGTON NJ 08534
503 5	11 BURD ST	2 ANDREEN ROBERT R & CHERYL F 11 BURD STREET PENNINGTON NJ 08534
503 6	9 BURD ST	2 DEVOE ROBIN 9 BURD ST PENNINGTON NJ 08534
503 7	7 BURD ST	2 PRAPAS, LORI & PRAPASSIRIPHAN, PITI 7 BURD ST PENNINGTON, NJ 08534
503 8.01	30 W DELAWARE AVE	2 ADIYNSA, ELSHIYA S. & JAK CARMELO A 30 WEST DELAWARE AVE PENNINGTON, NJ 08534
503 8.02	32 W DELAWARE	1 ELLIS JEFFREY & ZAIDA 32 WEST DELAWARE AVE PENNINGTON, NJ 08534
503 9	24 W DELAWARE AVE	2 MALLEY CHRISTOPHER & MEYER ESTES DC 24 W DELAWARE AVE PENNINGTON NJ 08534
503.01 1	13 ACADEMY COURT	2 MANSON, LINDSAY 13 ACADEMY COURT PENNINGTON, NJ 08534
503.01 2	14 ACADEMY COURT	2 CURTISS, EVAN H & KARA L 14 ACADEMY COURT PENNINGTON, NJ 08534
503.01 3	15 ACADEMY COURT	2 CLEFFI ROCKY P 15 ACADEMY COURT PRINCETON NJ 08534
503.01 4	16 ACADEMY COURT	2 MC CARTY, NAOMI 16 ACADEMY COURT PENNINGTON NJ 08534
503.02 1	17 ACADEMY COURT	2 HEADCOCK LINDA M 17 ACADEMY COURT PENNINGTON NJ 08534
503.02 2	18 ACADEMY COURT	1 IANNARELLI,JOSEPH R & O'CONNER,MEGHAN 18 ACADEMY COURT PENNINGTON, NJ 08534
503.02 3	19 ACADEMY COURT	2 WATSON,GREGORY 19 ACADEMY COURT PENNINGTON, NJ 08534
503.02 4	20 ACADEMY COURT	2 HALLOY, SHANNON M. 20 ACADEMY COURT PENNINGTON, NJ 08534
503.04 1.01	1 ACADEMY COURT	2 MARTIN, MICHAEL 1 ACADEMY COURT PENNINGTON, NJ 08534
503.04 1.02	2 ACADEMY COURT	2 HERNANDEZ, REX & RICHARDS, LORI 2327 NEBRASKA AVE. NW WASHINGTON DC 20016
503.04 2.01	3 ACADEMY COURT	2 ABBOT DAVID B & MARIE L 1918 RIVER RD WEST TRENTON NJ 08628
503.04 2.02	4 ACADEMY COURT	2 PATRICK MURPHY 4 ACADEMY COURT PENNINGTON NJ 08534
503.04 2.03	5 ACADEMY COURT	2 CRITCHO, KATELEEN 5 ACADEMY COURT PENNINGTON, NJ 08534
503.04 2.04	6 ACADEMY COURT	2 BRUYIL, KELLY L. 6 ACADEMY COURT PENNINGTON, NJ 08534
503.04 2.05	7 ACADEMY COURT	2 KANTHOUSE, RYAN & MARVIN 7 ACADEMY CT PENNINGTON NJ 08534
503.04 3.01	8 ACADEMY COURT	2 HELFANT, CHARLOTTE 8 ACADEMY COURT PENNINGTON, NJ 08534
503.04 3.02	9 ACADEMY COURT	2 SIEBER, CRAIG H 417 BURD ST PENNINGTON J 08534
503.04 3.03	10 ACADEMY COURT	2 LEONE, BARBARA J PO BOX 711 HIGHLANDVILLE NA 18037
503.04 3.04	11 ACADEMY COURT	2 PETERS, STEPHANNIE 11 ACADEMY COURT PENNINGTON, NJ 08534
503.04 3.05	12 ACADEMY COURT	2 FRASER ELIZABETH J 12 ACADEMY COURT PENNINGTON NJ 08534
504 1	1 ACADEMY STREET	2 MYERS, DAVID 1 ACADEMY AVE PENNINGTON, NJ 08534
504 2	106 CRANLEY AVE	2 CASH FLORENCE E 106 CRANLEY AVE PENNINGTON NJ 08534
504 3	110 CRANLEY AVE	2 HODSON ROBERT 110 CRANLEY AVE PENNINGTON NJ 08534
504 5	112 CRANLEY AVE	2 SMOLNIK SCOTT M & QUINTO LYNNE S 112 CRANLEY AVE PENNINGTON NJ 08534
504 6	114 CRANLEY AVE	2 HITCHEN TRUST 1 HOPEWELL-WERTS ROAD HOPEWELL NJ 08525
504 1	17 LAKING AVE.	2 WILLIAMS DONALD H & JOYCE S 17 LAKING AVE. PENNINGTON NJ 08534
505 1	121 BURD ST	15F CYRUS TEMPLE MASONIC LODGE C\OJM HERMAN, P.O. BOX 53 PENNINGTON NJ 08534
505 3	117 CRANLEY AVE	1 BOWEN DOROTHY B & PHYLLIS C 117 CRANLEY AVE PENNINGTON NJ 08534
505 5	113 CRANLEY AVE	2 JOHNSON JAMES R 113 CRANLEY AVE. PENNINGTON, NJ 08534
505 6	CRANLEY AVE	15D BETHEL AME CHURCH 97 S CRANLEY AVENUE PENNINGTON, NJ 08534
505 7	109 CRANLEY AVE	2 JHA DEVI LLC 109 CRANLEY AVE PENNINGTON, NJ 08534
505 8	CRANLEY AVE	15D THE FIRST BAPTIST CHURCH OF PENN PO BOX 157 PENNINGTON NJ 08534
506 25	CRANLEY AVE	15D 1ST BAPTIST CHURCH OF PENNINGTON PO BOX 157 PENNINGTON NJ 08534
505 25	15 LAKING AVE.	4A NJ BELL TELEPHONE C/O DUFF & PHELPS PO BOX 2749 ADDISON TX 75001
701 1	HALE STREET - REAR STATE ASSESSED	5A CONSOLIDATED RAIL CORPORATION - - 00000
701 3	HALE STREET - REAR STATE ASSESSED	5B CONSOLIDATED RAIL CORPORATION - - 00000
701 33	212 HALE ST	2 WITTROP, WILLIAM J. & JACQUELINE 212 HALE STREET PENNINGTON, NJ 08534
701 32	210 HALE ST	15F THE PENNINGTON SCHOOL 112 WEST DELAWARE AVE PENNINGTON, NJ 08534
700 4	213 HALE ST	2 KLEY, KEVIN S & ZIMNI, JULIA 213 HALE STREET PENNINGTON, NJ 08534
702 9	211 HALE STREET	2 PHILLIPS DAVID E & REGINA 211 HALE STREET PENNINGTON, NJ 08534
702 6	126 LAKING AVE	2 HARRIS, ANTHONY D & KAREN E 126 LAKING AVE PENNINGTON, NJ 08534
702 7	124 LAKING AVE	2 GRIMES THOMAS A & ELIZABETH B 124 LAKING AVE. PENNINGTON NJ 08534



SITE LOCATION MAP

GRAPHIC SCALE
0 250 500 1000
1 INCH = 500 FT

DATE: MAY 20, 2022

INDEX OF SHEETS

SHEET No.	TITLE
1	COVER SHEET
2	OVERALL KEY PLAN
3A-3C	EXISTING CONDITIONS & DEMOLITION PLANS
4A-4D	SITE PLANS
5A-5D	GRADING, DRAINAGE & UTILITY PLANS
6	LANDSCAPING PLAN
7A-7D	LIGHTING PLANS
8A-8D	SOIL EROSION & SEDIMENT CONTROL PLANS
9A-9D	SOIL MANAGEMENT & PREPARATION PLANS
10	SOIL EROSION & SEDIMENT CONTROL NOTES
11-16	CONSTRUCTION DETAILS
17	FIRE TRUCK TURNING DIAGRAM

ZONING DATA: BLOCK 502, LOT 4 (E-1 EDUCATION ZONE)			
REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MIN. LOT SIZE			
MIN. LOT AREA	10 ACRES	29.282 AC.	29.282 AC.
MIN. LOT WIDTH	100 FT	809 FT	809 FT
PRINCIPAL BUILDING			
MIN. FRONT YARD SETBACK	50 FT	7.8 FT (e)	NO CHANGE
MIN. SIDE YARD SETBACK	20 FT	35.5 FT	NO CHANGE
MIN. REAR YARD SETBACK	50 FT	136.5 FT	NO CHANGE
MAX. LOT COVERAGE	30%	26.09%	29.52%
MAX. BUILDING HEIGHT	3 STORY (45 FT)	3 STORY	3 STORY
ACCESSORY STRUCTURE (PRESS BOX) PER SECTION 215-12			
MIN. FRONT YARD SETBACK	50 FT		
MIN. SIDE YARD SETBACK	10 FT	5.6 FT (e)	7.2 FT (v)
MIN. REAR YARD SETBACK	10 FT		
PARKING SPACES			
TOTAL NUMBER	238*	280	241
A.D.A PARKING	7	10	12

(e) = EXISTING NON CONFORMING CONDITION PREVIOUSLY APPROVED
(v) = PROPOSED VARIANCE
*NUMBER OF PARKING SPACES APPROVED UNDER PREVIOUS RESOLUTION

UTILITIES OPERATING IN PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

Public Service Electric & Gas Co.
Manager - Corporate Properties
80 Park Plaza T6B
Newark, NJ 07102

NUI Corp. – Elizabethtown Gas
One Elizabethtown Plaza
P.O. Box 1208
Newark, NJ 07102

Verizon Communications, Inc.
Corporate Secretary
540 Broad Street
Newark, NJ 07101

Comcast Cable
960 Prospect Street
Trenton, NJ 08618

AT&T
Corporate Secretary
295 North Maple Avenue
Basking Ridge, NJ 07920

Pennington Borough Water and Sewer
30 North Main Street
Pennington, NJ 08534

OTHER

Mercer County Planning Division
640 South Broad Street, Room 412
P.O. Box 8068
Trenton, NJ 08650-8068

New Jersey Department of Transportation
P.O. Box 600
Trenton, NJ 08625-0600

HOPEWELL TOWNSHIP

BLOCK	LOT	ASSESSED IN NAME AND ADDRESS
66	1.01	Montgen SC LLC 902 Carnegie Center/ 400 Princeton, NJ 08540
66	2	Richard B. & Joan M. Lutzow 1836 Edmund Road Abington, PA 19001
66	3	Conrail- Delaware Bound Brook RR 2001 Market St. Fir. 25B Philadelphia, PA 19101

I CONSENT TO THE FILING OF THIS SITE PLAN WITH THE PLANNING BOARD

OWNER DATE

112 WEST DELAWARE AVENUE, PENNINGTON, NEW JERSEY 08534
ADDRESS

SITE PLAN OF : PENNINGTON SCHOOL
BLOCK 502, LOT 4
TAX MAP : 2 & 5 DATE : 12/10/07
ADDRESS : 112 WEST DELAWARE AVENUE, PENNINGTON, NEW JERSEY 08534

I HEREBY CERTIFY THAT I HAVE PREPARED THIS SITE PLAN AND THAT ALL DIMENSIONS AND INFORMATION IS CORRECT

5/20/22
JAMES A. BASH DATE
N.J. PROFESSIONAL ENGINEER NO. 24GE05225800

I HAVE REVIEWED THIS SITE PLAN AND CERIFY THAT IT MEETS ALL CODES AND ORDINANCES UNDER MY JURISDICTION

MUNICIPAL ENGINEER DATE

APPROVED BY THE BOROUGH PLANNING BOARD

PLANNING BOARD CHAIRMAN DATE

PLANNING BOARD SECRETARY DATE

VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

5/20/22
JAMES A. BASH **DATE**
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 24GE05225800

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIFICALLY PREPARED FOR THE OWNER NAMED HEREON AND 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.

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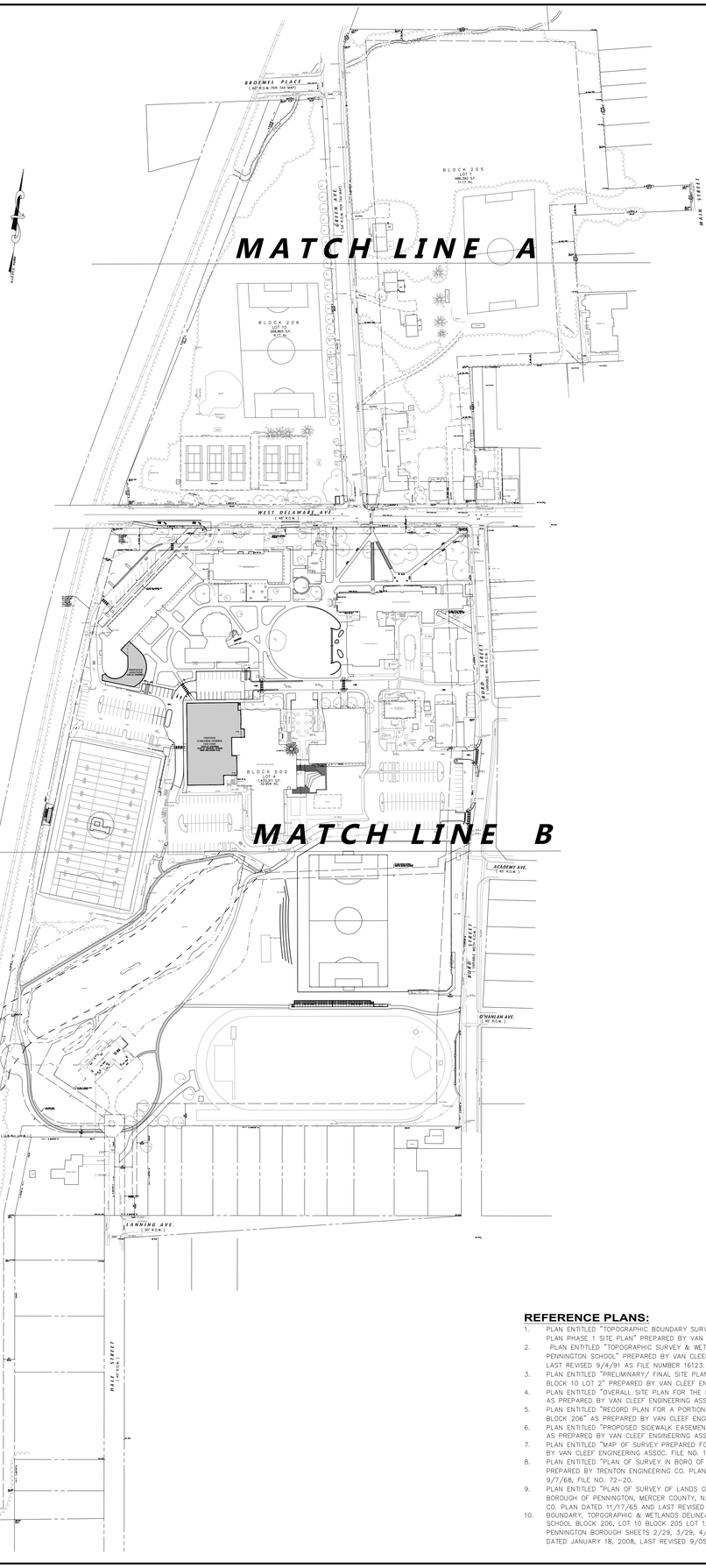


DEMOLITION NOTES

1. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL, STATE AND LOCAL REGULATIONS.
2. PROCEED WITH DEMOLITION IN A SYSTEMATIC MANNER, FROM THE TOP OF THE STRUCTURE(S) TO THE GROUND.
3. COMPLETE DEMOLITION WORK ABOVE EACH FLOOR OR TIER BEFORE DISTURBING ANY OF THE SUPPORTING MEMBERS OF THE LOWER LEVELS.
4. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
5. REMOVE STRUCTURAL FRAMING MEMBERS AND LOWER THEM TO THE GROUND BY MEANS OF HOISTS, DERRICKS OR OTHER SUITABLE METHODS.
6. BREAK UP CONCRETE SLABS-ON-GRADE, UNLESS OTHERWISE DIRECTED BY OWNER.
7. LOCATE DEMOLITION EQUIPMENT THROUGHOUT THE STRUCTURE AND REMOVE MATERIALS SO AS TO NOT IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING.
8. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING AND SUPPORTS TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURES TO BE DEMOLISHED (AND ADJACENT FACILITIES, IF APPLICABLE).
9. DEMOLISH AND REMOVE ALL FOUNDATION WALLS, FOOTINGS AND OTHER MATERIALS WITHIN THE AREA OF THE DESIGNATED FUTURE BUILDING. ALL OTHER FOUNDATION SYSTEMS, INCLUDING BASEMENTS, SHALL BE DEMOLISHED TO A DEPTH OF NOT LESS THAN ONE FOOT BELOW PROPOSED PAVEMENT OR, BREAK BASEMENT FLOOR SLABS. SEAL ALL OPEN UTILITY LINES WITH CONCRETE. CONTRACTOR TO REVIEW STRUCTURE PRIOR TO DEMOLITION TO DETERMINE IF BASEMENT, CRAWL SPACE OR ANY SUB-STRUCTURE EXISTS. ANY SUB-STRUCTURE, INCLUDING BASEMENTS SHALL BE REMOVED IN ITS ENTIRETY OR AS DIRECTED BY OWNER.
10. ERECT AND MAINTAIN COVERED PASSAGEWAYS IN ORDER TO PROVIDE SAFE PASSAGE FOR PERSONS AROUND THE AREA OF DEMOLITION. CONDUCT ALL DEMOLITION OPERATIONS IN A MANNER THAT WILL PREVENT DAMAGE AND PERSONAL INJURY TO STRUCTURES, ADJACENT BUILDINGS AND ALL PERSONS.
11. REFRAIN FROM USING ANY EXPLOSIVES WITHOUT PRIOR WRITTEN CONSENT OF OWNER AND APPLICABLE GOVERNMENT AUTHORITIES.
12. CONDUCT DEMOLITION SERVICES IN SUCH A MANNER TO INSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED FACILITIES WITHOUT PRIOR WRITTEN PERMISSION OF OWNER AND ANY APPLICABLE GOVERNMENTAL AUTHORITIES. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY APPLICABLE GOVERNMENT REGULATIONS.
13. USE WATERING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS, AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK.
14. ACCOMPLISH AND PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
15. COMPLETELY FILL BELOW GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES AND FOUNDATIONS WITH SOIL MATERIALS IN ACCORDANCE WITH THE GEO-TECHNICAL REPORT, CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. STONES USED WILL NOT BE LARGER THAN 6 INCHES IN DIMENSION. MATERIAL FROM DEMOLITION MAY NOT BE USED AS FILL PRIOR TO PLACEMENT OF FILL MATERIALS, UNDERTAKE ALL NECESSARY ACTION IN ORDER TO INSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH, AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN LOOSE DEPTH AND COMPACT EACH LAYER AT PLACEMENT TO 95% OPTIMUM DENSITY. GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE SURFACE DRAINAGE.
16. REMOVE FROM THE DESIGNATED SITE, AT THE EARLIEST POSSIBLE TIME, ALL DEBRIS, RUBBISH, AND SALVAGEABLE ITEMS, HAZARDOUS AND COMBUSTIBLE SERVICES. REMOVED MATERIALS MAY NOT BE STORED, SOLD OR BURNED ON THE SITE. REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND AUTHORITIES.
17. DISCONNECT, SHUT OFF AND SEAL IN CONCRETE ALL UTILITIES SERVING THE STRUCTURE(S) TO BE DEMOLISHED BEFORE THE COMMENCEMENT OF THE DESIGNATED DEMOLITION. MARK FOR POSITION ALL UTILITY DRAINAGE AND SANITARY LINES AND PROTECT ALL ACTIVE LINES. CLEARLY IDENTIFY BEFORE THE COMMENCEMENT OF DEMOLITION SERVICES THE REQUIRED INTERRUPTION OF ACTIVE SYSTEMS THAT MAY AFFECT OTHER PARTIES, AND NOTIFY ALL APPLICABLE UTILITY COMPANIES TO INSURE THE CONTINUATION OF SERVICE.
18. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL PROCEDURES ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTION REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS NECESSARY.

NOTES

1. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM OR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION.
2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE DISCONNECTED AND CAPPED AT THE MAIN FOR WATER, AT THE CLEAN-OUT FOR SEWER AND SHUT-OFF VALVE OR MAIN FOR GAS IN ACCORDANCE WITH MUNICIPAL AND LOCAL UTILITY REQUIREMENTS.
4. ALL EXISTING DEBRIS SHALL BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH MUNICIPAL AND LOCAL UTILITY COMPANY REQUIREMENTS.

UTILITY NOTES

1. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICES CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER & SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME. SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
4. WATER SERVICE MATERIALS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTORS PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
5. ALL WATER MAIN SHALL BE CEMENT-LINED, CLASS 52 DUCTILE IRON PIPE, UNLESS OTHERWISE DESIGNATED.
6. THE MINIMUM DIAMETER FOR DOMESTIC WATER SERVICES SHALL BE 1 INCH.
7. SEWER MAINS SHALL BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. WHERE THIS IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SEWER MAIN AT LEAST 18 INCHES BELOW THE WATER MAIN. ALL SEWER MAINS SHALL BE SDR-35 PVC PIPE UNLESS OTHERWISE DESIGNATED.
8. ALL SEWER PIPE INSTALLED WITH LESS THAN 3 FEET OF COVER, GREATER THAN 20 FEET OF COVER OR WITHIN 18 INCHES OF A WATER MAIN, SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE. ALL DUCTILE IRON SEWER PIPE SHALL BE CEMENT-LINED, CLASS 52 PIPE, FURNISHED WITH SEWER COAT, OR APPROVED EQUAL.
9. WHERE SANITARY SEWER LATERALS ARE GREATER THAN 10' DEEP AT CONNECTION TO THE SEWER MAIN, CONCRETE DEEP LATERAL CONNECTIONS ARE TO BE UTILIZED.
10. LOCATION & LAYOUT OF GAS, ELECTRIC & TELECOMMUNICATION UTILITY LINES AND SERVICES SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE, ACTUAL LOCATION & LAYOUT OF THESE UTILITIES & SERVICES ARE TO BE PER THE APPROPRIATE UTILITY PROVIDER.
11. ALL SEWER AND WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATORY AUTHORITY'S RULES AND REGULATIONS.
12. ALL PROPOSED UTILITIES TO BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
13. MANUFACTURED REINFORCED CONCRETE STORM PIPE TO CONFORM TO ASTM C-76, CLASS III, UNLESS OTHERWISE DESIGNATED. MANUFACTURED REINFORCED CONCRETE ELLIPTICAL STORM PIPE TO CONFORM TO ASTM C-507, CLASS HE-III, UNLESS OTHERWISE DESIGNATED. REINFORCED CONCRETE STORMWATER PIPE TO BE INSTALLED IN ACCORDANCE WITH AMERICAN CONCRETE PIPE ASSOCIATION INSTALLATION GUIDELINES AND MORTAR OR PERFORMED FLEXIBLE JOINT SEALANTS IN ACCORDANCE WITH THE ASTM C 990 TO BE UTILIZED TO PROVIDE A SILT-TIGHT JOINT. WHERE SPECIFICALLY INDICATED, REINFORCED CONCRETE STORM PIPE JOINTS SHALL BE WATERTIGHT AND CONFORM TO ASTM C-443.
14. HDPE DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNULAR EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2306. SOLID PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM D3212. PERFORATED PIPE SHALL HAVE GASKETED SILT-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM F477. HDPE PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HDPE PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURE RECOMMENDATIONS.
15. PIPE LENGTHS ON THIS PLAN HAVE BEEN MEASURED AS THE DISTANCE BETWEEN THE CENTER POINT OF THE 2 CONNECTED STRUCTURES. ACTUAL PHYSICAL PIPE LENGTH FOR INSTALLATION IS EXPECTED TO BE LESS AND SHOULD BE ACCOUNTED FOR BY THE CONTRACTOR ACCORDINGLY.
16. FIELD VERIFY THAT THE EXISTING WATER MAIN HAS ADEQUATE COVER PER THE GOVERNING UTILITY AUTHORITY SPECIFICATIONS. REPLACE ALL SECTIONS WHERE ADEQUATE COVER IS NOT MET.

REFERENCE DATUM:

1. VERTICAL DATUM USED BASED ON REF. PLAN NO. 1 AND NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83

GENERAL NOTES:

1. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SURVEY. THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT OF WAYS, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT COMPREHENSIVE TITLE SEARCH.
2. THIS MAP REFLECTS EXISTING SITE CONDITIONS AS THE RESULT OF A FIELD SURVEY PERFORMED BY VAN CLEEF ENGINEERING ASSOCIATES ON 11/22/21.
3. THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. CALL 1-800-272-1000 TO ORDER UTILITY MARKOUTS.
7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

REFERENCE PLANS:

1. PLAN ENTITLED "TOPOGRAPHIC BOUNDARY SURVEY FOR THE PENNINGTON SCHOOL MASTER PLAN PHASE 1 SITE PLAN" PREPARED BY VAN CLEEF ENGINEERING ASSOC. DATED 1/31/22.
2. PLAN ENTITLED "TOPOGRAPHIC SURVEY & WETLANDS DELINEATION MAP FOR THE PENNINGTON SCHOOL" PREPARED BY VAN CLEEF ENGINEERING ASSOC. DATED 6/13/91, LAST REVISED 9/4/91 AS FILE NUMBER 1612.3.
3. PLAN ENTITLED "PRELIMINARY/ FINAL SITE PLAN PREPARED FOR THE PENNINGTON SCHOOL, BLOCK 10 LOT 2" PREPARED BY VAN CLEEF ENGINEERING ASSOC. FILE NO. 234001.
4. PLAN ENTITLED "OVERALL SITE PLAN FOR THE PENNINGTON SCHOOL LOT 10, BLOCK 206" AS PREPARED BY VAN CLEEF ENGINEERING ASSOC. FILE NO. 263008.
5. PLAN ENTITLED "RECORD PLAN FOR A PORTION OF THE PENNINGTON SCHOOL LOT 10, BLOCK 206" AS PREPARED BY VAN CLEEF ENGINEERING ASSOC. FILE NO. 225143
6. PLAN ENTITLED "PROPOSED SIDEWALK EASEMENT PLAN PREPARED FOR BLOCK 10, LOT 2" AS PREPARED BY VAN CLEEF ENGINEERING ASSOC. FILE NO. FOLDER
7. PLAN ENTITLED "MAP OF SURVEY PREPARED FOR LOTS 9 & 15, BLOCK 6" AS PREPARED BY VAN CLEEF ENGINEERING ASSOC. FILE NO. 122111
8. PLAN ENTITLED "PLAN OF SURVEY IN BORO OF PENNINGTON, MERCER COUNTY, N.J." AS PREPARED BY TRENTON ENGINEERING CO. PLAN DATED 9/18/67 AND LAST REVISED 9/7/68, FILE NO. 72-20.
9. PLAN ENTITLED "PLAN OF SURVEY OF LANDS OF THE PENNINGTON SCHOOL IN THE BOROUGH OF PENNINGTON, MERCER COUNTY, N.J." AS PREPARED BY TRENTON ENGINEERIN CO. PLAN DATED 11/17/65 AND LAST REVISED 12/23/65.
10. BOUNDARY, TOPOGRAPHIC & WETLANDS DELINEATION SURVEYS FOR THE PENNINGTON SCHOOL BLOCK 206, LOT 10 BLOCK 205 LOT 1, BLOCK 701 LOT 4, AND BLOCK 502 LOT 4 PENNINGTON BOROUGH SHEETS 2/29, 3/29, 4/29, 5/29 BY VAN CLEEF ENGINEERING DATED JANUARY 18, 2008, LAST REVISED 9/05/08 MARKED AS FILE NO. 265014.

ADA NOTES

ALL SLOPES INDICATED ARE ACTUAL. CONTRACTOR TO REFER TO LATEST ADA GUIDELINES AND NJ BARRIER FREE SUBCODE (NJAC 5:23-7) FOR SLOPE LIMITS. AT THE TIME OF PLAN DESIGN, THE SLOPE LIMITS ARE AS FOLLOWS:

SIDEWALKS / ACCESSIBLE ROUTES

- RUNNING SLOPE: 1:20 (5%) MAX.
- CROSS SLOPE: 1:48 (2.08%) MAX. 1.0% MIN.
- INTERSECTION SLOPE: 1:48 (2.08%) MAX. IN ALL DIRECTIONS
- CHANGE IN LEVELS: ¼" MAX. HEIGHT OR ½" MAX. HEIGHT WITH BEVELED EDGE
  BEVELED EDGE SLOPE OF 1:2 (50%) MAX.
- GAPS: ½" MAX. WIDTH ELONGATED OPENINGS SHALL BE PLACED SO LONG DIMENSION IS PERPENDICULAR TO PATH OF TRAVEL

CURB RAMP

- SLOPE: 1:12 (8.3%) MAX.
- SIDE FLARE SLOPE: 1.10 (10%) MAX. (WHERE PEDESTRIANS CROSS RAMP)
- BOTTOM LANDING: 48" MIN. LENGTH; WIDTH TO MATCH CURB RAMP; 1:48 MAX. (2.08%) IN ALL DIRECTIONS
- TOP LANDING: 36" MIN. LENGTH WIDTH TO MATCH CURB RAMP; 1:48 MAX. (2.08%) CROSS SLOPE AND 1:20 (5%) RUNNING SLOPE

ACCESSIBILITY PARKING STALLS

- SPACE AND ACCESS AISLE SLOPE: 1:48 MAX. (2.08%) IN ALL DIRECTIONS

CROSSWALKS

- RUNNING SLOPE: 1:20 (5%) MAX.
- CROSS SLOPE: 1:48 (2.08%) MAX.
- CHANGE IN LEVELS: ¼" MAX. HEIGHT OR ½" MAX. HEIGHT WITH BEVELED EDGE
  BEVELED EDGE SLOPE OF 1:2 (50%) MAX.
- GAPS: ½" MAX. WIDTH ELONGATED OPENINGS SHALL BE PLACED SO LONG DIMENSION IS PERPENDICULAR TO PATH OF TRAVEL

RAMPS

- SLOPE: 1:12 (8.3%) MAX.
- EXISTING RAMPS: SLOPE: 1.10 (10%) MAX FOR RISE OF 6"; 1:8 (12.5%) MAX. FOR MAX. RISE OF 3'
- MAX. RISE: 30"
- MIN. CLEAR WIDTH: 36"
- MIN. LANDING CLEAR LENGTH: 60"
- MAX. CROSS SLOPE: 1:48 (2.08%)

GRADING NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER REGISTERED WITHIN THE STATE WHERE THE WORK IS BEING PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATION SET FORTH IN THE SOILS REPORT.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MIN. SLOPE AGAINST ALL ISLAND GUTTERS, CURBS AND 1.0% ON ALL OTHER IMPERVIOUS SURFACES TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY EFFECT THE PUBLIC SAFETY OR PROJECT COST, MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTORS OWN RISK.
3. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
4. REFER TO SITE PLAN FOR ADDITIONAL NOTES.
5. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERCEDE IN ALL CASES. CONTRACTOR MUST NOTIFY ENGINEER OF RECORD OF ANY CONFLICT IMMEDIATELY.
6. MAXIMUM CROSS SLOPE OF 2% ON ALL SIDEWALKS.
7. CONTRACTOR TO ENSURE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS IN ADA PARKING SPACES AND ADA ACCESS AISLES. CONTRACTOR TO ENSURE A MAXIMUM OF 5% RUNNING SLOPE AND 2% CROSS SLOPE ALONG ALL OTHER PORTIONS OF ACCESSIBLE ROUTE, WITH THE EXCEPTION OF RAMPS AND CURB RAMPS. CONTRACTOR SHALL CLARIFY ANY QUESTIONS CONCERNING CONSTRUCTION IN ADA AREAS WITH THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
8. THE OWNER SHALL RETAIN A QUALIFIED GEO-TECHNICAL ENGINEER TO TEST SOIL PERMEABILITY AND PROVIDE CONSTRUCTION PHASE INSPECTION OF THE BASIN BOTTOM SOILS AND ANY FILL MATERIALS WITHIN ANY PROPOSED INFILTRATION OR RETENTION BASIN TO COMPARE RESULTS TO DESIGN CRITERIA.
9. CONTRACTOR IS TO REMOVE EXISTING UNSUITABLE OR OVERLY COMPACT SOIL OR ROCK AS NEEDED TO ACHIEVE REQUIRED PERMEABILITY AS DIRECTED BY THE OWNERS GEO-TECHNICAL ENGINEER, AND NEW FILL. IF NEEDED, SHALL HAVE AN IN PLACE PERMEABILITY GREATER THAN OR EQUAL TO THE DESIGN CRITERIA.
10. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE OWNER'S GEO-TECHNICAL ENGINEER PRIOR TO ONSET OF CONSTRUCTION TO SUBMIT AND CONFIRM THE CONTRACTOR'S PROPOSED MEANS AND MATERIALS AND TO SCHEDULE INSPECTIONS FOR BOTTOM OF BASIN, REMOVAL OF UNSUITABLE SOIL, FILL PLACEMENT, AND FINAL BASIN PERMEABILITY TESTING.
11. THE CONTRACTOR IS RESPONSIBLE FOR AS-BUILT PLANS AND GRADE CONTROL UNLESS DEFINED OTHERWISE ELSEWHERE IN THE CONTRACT DOCUMENTS.

MERCER COUNTY NOTES

1. ALL SIDEWALK AND CURB LOCATED ALONG THE PROPERTY FRONTAGE THAT IS DETERIORATED OR PRESENTS A TRIPPING HAZARD SHALL BE REPLACED UNDER THE DIRECTION OF THE COUNTY ENGINEER OR HIS/HER REPRESENTATIVE(S).
2. ALL CONSTRUCTION OR RECONSTRUCTION WITHIN THE COUNTY R.O.W. SHALL BE PERFORMED TO COUNTY STANDARDS AND MEET PROWAG STANDARDS. ALL DRIVEWAYS APRONS, CURBS AND SIDEWALKS SHALL BE DESIGNED TO COUNTY STANDARDS AND MEET THE SATISFACTION OF THE COUNTY ENGINEER.

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
x 100.00	GRADE ELEVATION	x 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

GRAPHIC SCALE
0 60 120 240
1 INCH = 120 FT

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL IMPRESSED, OR COLORIZED 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.

SERIAL NO. _____

NEW JERSEY ONE CALL 811 Know what's below. Call before you dig. 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES
IF YOU'RE GOING TO DIG, BLAST OR DRILL
THREE (3) WORKING DAYS NOTICE
REMEMBER
IT'S THE LAW!
Dig Safely.

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	4/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE: MAY 20, 2022
SCALE: 1"=120'
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE05225800
5/20/22
DATE

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

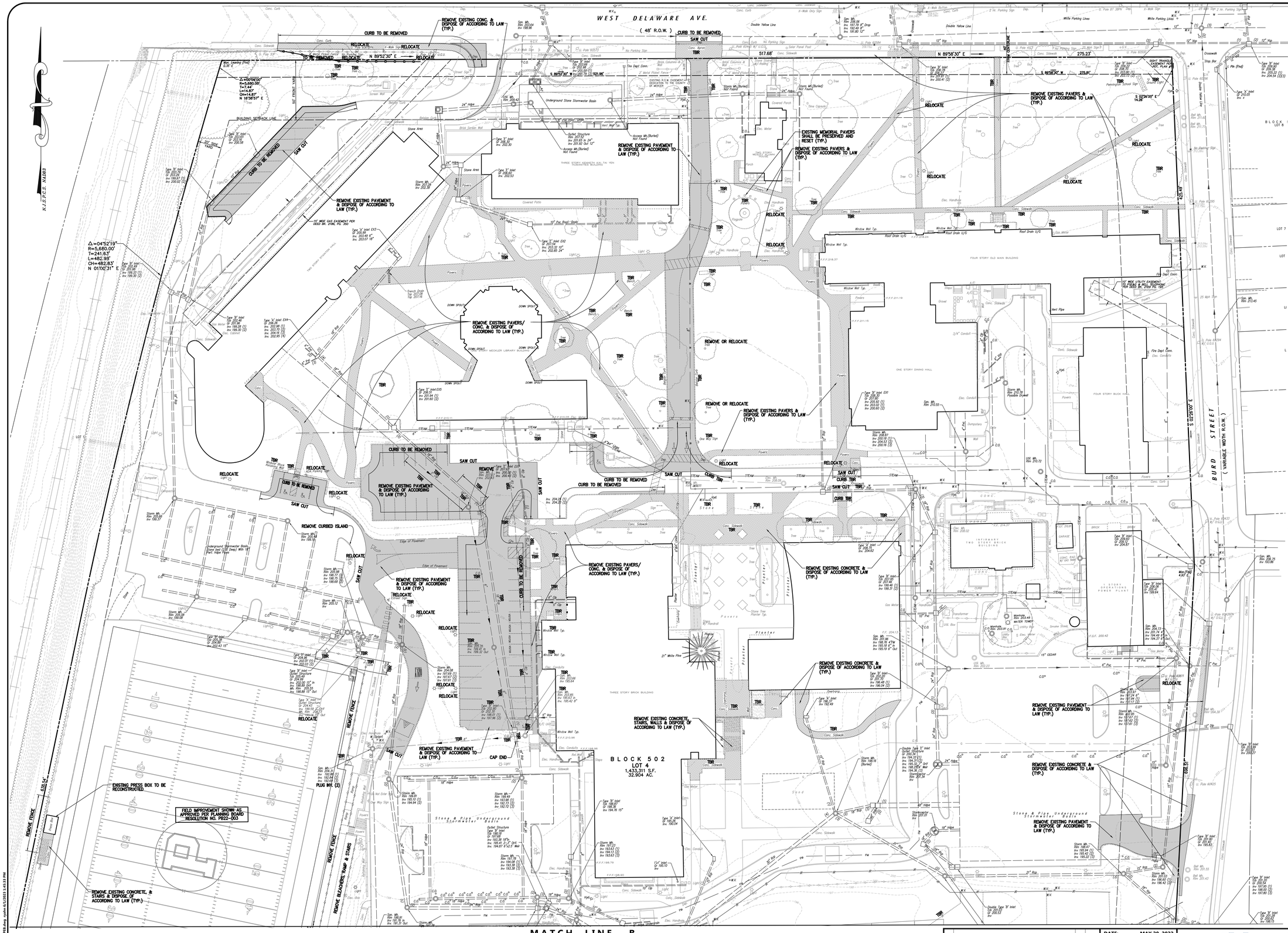
OVERALL KEY PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

02
17

F:\JobNo\2020\PEB\DWG\PLAN_PENNCHL_SITEPLAN_2802PEB.dwg, Ferguson 5/26/2023 4:26:54 PM

MATCH LINE A

BLOCK 206
LOT 10
268,865 S.F.
6.17 Ac.
LOT 8
LOT 11
LOT 31
LOT 32
LOT 33
LOT 34
LOT 36
N 22°31'15" E
979.33'
S 14°29'10" E
304.56'
S 89°52'30" W
481.83'
N 89°52'30" E
517.68'
S 87°43'05" W
253.96'
S 89°58'30" W
240.70'
N 89°58'30" E
275.23'
S 00°26'40" E
306.40'
N 00°26'40" W
306.40'
50' FRONT YARD
25' SIDE YARD
20' SIDE YARD
WEST DELAWARE AVE.
(48' R.O.W.)
CURB TO BE REMOVED
SAW CUT
TBR
RELOCATE
REMOVE EXISTING CONC. & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING CONCRETE & DISPOSE OF ACCORDING TO LAW (TYP.)
Tennis Courts
Basketball Court
Baseball Field
Infield Mix
Backstop
Bleacher
Bench
Chain Link Fence
Scoreboard
Stone Parking Area
Paved Path
Paved Driveway
Side Driveway
Stone Driveway
Existing Dwelling
Deck
Brick
Fence
Conc. Sidewalk
Conc. Curb
Conc. Patio
Gravel
Grass
Garden Area
Shed
Dugout
Flagpole
Crosswalk
Double Yellow Line
White Parking Lines
Stop Bar
Gas Line
Electric Line
Telephone Line
Overhead Wires
Guide Rail
Hydr.
Buried Headwall
Inv. 189.43
Elev. 186.69
Tree 'B' Inlet
Dia. 205.20
Inv. 199.65 (1)
Inv. 199.53 (2)
Tree 'B' Inlet
Dia. 205.20
Inv. 200.75 (1)
Inv. 200.67 (2)
Tree 'B' Inlet
Dia. 205.78
Inv. 192.43
Tree 'B' Inlet
Dia. 205.20
Inv. 199.53
Tree 'B' Inlet
Dia. 205.20
Inv. 199.80 (1)
Inv. 199.70 (2)
Tree 'B' Inlet
Dia. 205.20
Inv. 199.80 (1)
Inv. 191.07 (2)
Tree 'B' Inlet
Dia. 205.78
Inv. 200.11
Tree 'B' Inlet
Dia. 205.78
Inv. 200.71
Sm. MH
Rim 197.41
Sm. MH
Rim 203.33
Sm. MH
Rim 209.10
Inv. 192.69 (1)(2)
Inv. 192.59 (3)
Sm. MH
Rim 209.20
Inv. 200.28
Sm. MH
Rim 203.04
Inv. 193.04
Inv. 192.94 6" Drop
Inv. 192.45 8"
Inv. 191.80 12"
Sm. MH
Rim 203.33
Inv. 192.63
Inv. 192.53
Inv. 192.43
Inv. 192.33
Broken Mon. (Fnd) 0.04' N
Bent Pipe (Fnd)
I. Pin (Fnd)
Mon. (Fnd)
Rail Mon. (Fnd) 0.43' W
Mon. (Fnd) 0.48' W
0.18' S
Elec. Meter/Panel
Gas Shut Off
Hydr.
Post & Chain
Post & Chain Gate
Post & Chain Fence
Chain Link Fence
Pine Tree
Tree
Shrub
Bush
Boulder
Stone Drainage
Pipe Outlet on Bank
Compositing Area
Shed
Bus Stop Sign
No Parking Sign
No Parking Within Drive Sign
No Parking Anytime Sign
Stop Sign
Speed Limit Sign
Yield Sign
Walk Only Sign
Walk Button
Yield Sign
Speed Limit Sign
2 Hr. Parking Sign
Utility Pole
Guy Wire
Light Pole
Solar Panel Post
Pole 6054
Pole 6055
Pole 6056
Pole 6057
Pole 6058
Pole 6059
Pole 6060
Pole 6061
Pole 6062
Pole 6063
Pole 6064
Pole 6065
Pole 6066
Pole 6067
Pole 6068
Pole 6069
Pole 6070
Pole 6071
Pole 6072
Pole 6073
Pole


WEST DELAWARE AVE.
(48' R.O.W.)
BURD STREET
(VARIABLE WIDTH R.O.W.)
N.J.S.P.C.S. NAD83
MATCH LINE B
BLOCK 502
LOT 4
1,433,311 S.F.
32.904 AC.
BLOCK 1
LOT 8
LOT 7
LOT
Δ=04°52'19"
R=5,680.00'
T=241.63'
L=482.98'
CH=482.83'
N 01°00'31" E
Δ=00°08'00"
R=5,680.00'
T=7.44'
L=14.87'
CH=14.87'
N 18°36'57" E
N 89°52'30" E
517.68'
S 89°52'30" W
275.23'
S 02°26'00" E
275.8'
S 02°26'00" E
14.25'
S 02°26'00" E
625.49'
625.54'
625.57'
BUILDING SETBACK LINE
50' FRONT YARD
15' WIDE GAS EASEMENT PER DEED BK. 2186, PG. 305
EXISTING MEMORIAL PAVERS SHALL BE PRESERVED AND RESET (TYP.)
EXISTING PRESS BOX TO BE RECONSTRUCTED
FIELD IMPROVEMENT SHOWN AS APPROVED PER PLANNING BOARD RESOLUTION NO. PB22-003
REMOVE EXISTING CONC. & DISPOSE OF ACCORDING TO LAW (TYP.)
CURB TO BE REMOVED
SAW CUT
RELOCATE
REMOVE EXISTING PAVEMENT & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVERS & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVERS/ CONC. & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE OR RELOCATE
REMOVE CURBED ISLAND
REMOVE EXISTING CONCRETE & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING CONCRETE, STAIRS, WALLS & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVEMENT & DISPOSE OF ACCORDING TO LAW (TYP.)
CAP END
REMOVE FENCE
REMOVE BLEACHERS, RAMP & STAIRS
REMOVE EXISTING PAVERS & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING CONCRETE & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVEMENT & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING CONCRETE & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVEMENT & DISPOSE OF ACCORDING TO LAW (TYP.)
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REMOVE EXISTING PAVEMENT & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVERS & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVERS & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING PAVERS/ CONC. & DISPOSE OF ACCORDING TO LAW (TYP.)
REMOVE EXISTING CONCRETE, & STAIRS & DISPOSE OF ACCORDING TO LAW (TYP.)
THREE STORY KENNETH RAU TAI YEN SCHWARTZ BUILDING
THREE STORY BRICK BUILDING
FOUR STORY OLD MAIN BUILDING
ONE STORY DINING HALL
FOUR STORY BUCK HALL
INFIRMARY TWO STORY BRICK BUILDING
3 STORY OPERATIONS POWER PLANT
GARAGE
GREENHOUSE
Underground Stone Stormwater Basin
Underground Stormwater Basin (Stone bed (Std. Dwg) With 18" Perf. Hdpe Pipe)
Stone & Pipe Underground Stormwater Basin
Outlet Structure Type 'SI' Inlet
Sump Pit
Double Type 'S' Inlet
Type 'A' Inlet
Type 'B' Inlet
Type 'C' Inlet
Type 'D' Inlet
Type 'E' Inlet
Type 'F' Inlet
Type 'G' Inlet
Type 'H' Inlet
Type 'I' Inlet
Type 'J' Inlet
Type 'K' Inlet
Type 'L' Inlet
Type 'M' Inlet
Type 'N' Inlet
Type 'O' Inlet
Type 'P' Inlet
Type 'Q' Inlet
Type 'R' Inlet
Type 'S' Inlet
Type 'T' Inlet
Type 'U' Inlet
Type 'V' Inlet
Type 'W' Inlet
Type 'X' Inlet
Type 'Y' Inlet
Type 'Z' Inlet
Storm Mh.
Sanitary Mh.
Fire Dept Conn.
Fire Hydrant
Utility Pole
Light
Gas Meter
Gas Valve
Gas Box
Electric Meter
Electric Box
Electric Manhole
Electric Handhole
Transformer
Telephone Box
Telephone Manhole
Utility Box
Utility Manhole
Sanitary Manhole
Water Valve
Water Box
Water Meter
Water Manhole
Monitoring Well
Flagpole
Bench
Trash Can
Bike Rack
Bollard
Dumpster
Generator
Vent Pipe
Roof Drain
Window Well
Window Well Typ.
Roof Drain U/G
Downspout
Down Spout
Footing Drain
Footing Drain Top 207.18
Footing Drain Top 207.18
Footing Drain Top 207.18

MATCH LINE B

REMOVE EXISTING CONCRETE, & STEPS & DISPOSE OF ACCORDING TO LAW (TYP.)

REMOVE EXISTING IRRIGATION IN BASE BALL & MULTI-PORPOSE FIELD AREA AS SHOWN

MODIFIED TRANSITION AREA FROM THE PRIOR NJDEP TRANSITION AREA WAIVERS-AVERAGING PLAN NJDEP FILE NO. 1108-07-0001.1 AND THE ECOLSCIENCES' DECEMBER 2020 WETLANDS DELINEATION

LIMIT OF TRAIL REMOVAL

REMOVE EXISTING CHAIN LINK FENCE

RELOCATE

O'HANLAN AVE. (45' R.O.W.)

BURD STREET (VARIABLE WIDTH R.O.W.)

LANNING AVE. (50' R.O.W.)

BLOCK LIMIT

LOT 32 · LOT 15 · LOT 14 · LOT 13 · LOT 12 · LOT 11 · LOT 10 · LOT 9 · BLOCK 502 LOT 8 · LOT 5

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE/PAVER REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

REFERENCE DATUM:

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7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

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SERIAL NO. _____

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR DRILL CALL 811 THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW! Dig Safely.

REV	DESCRIPTION		DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22
		AUTH	DATE

DATE: MAY 20, 2022
SCALE: 1"=30'
DESIGNED BY: JAB
DRAWN BY: RRF/RKV
CHECKED BY: PDQ
JOB NO. 20-02-PEB

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005
5/20/22
DATE

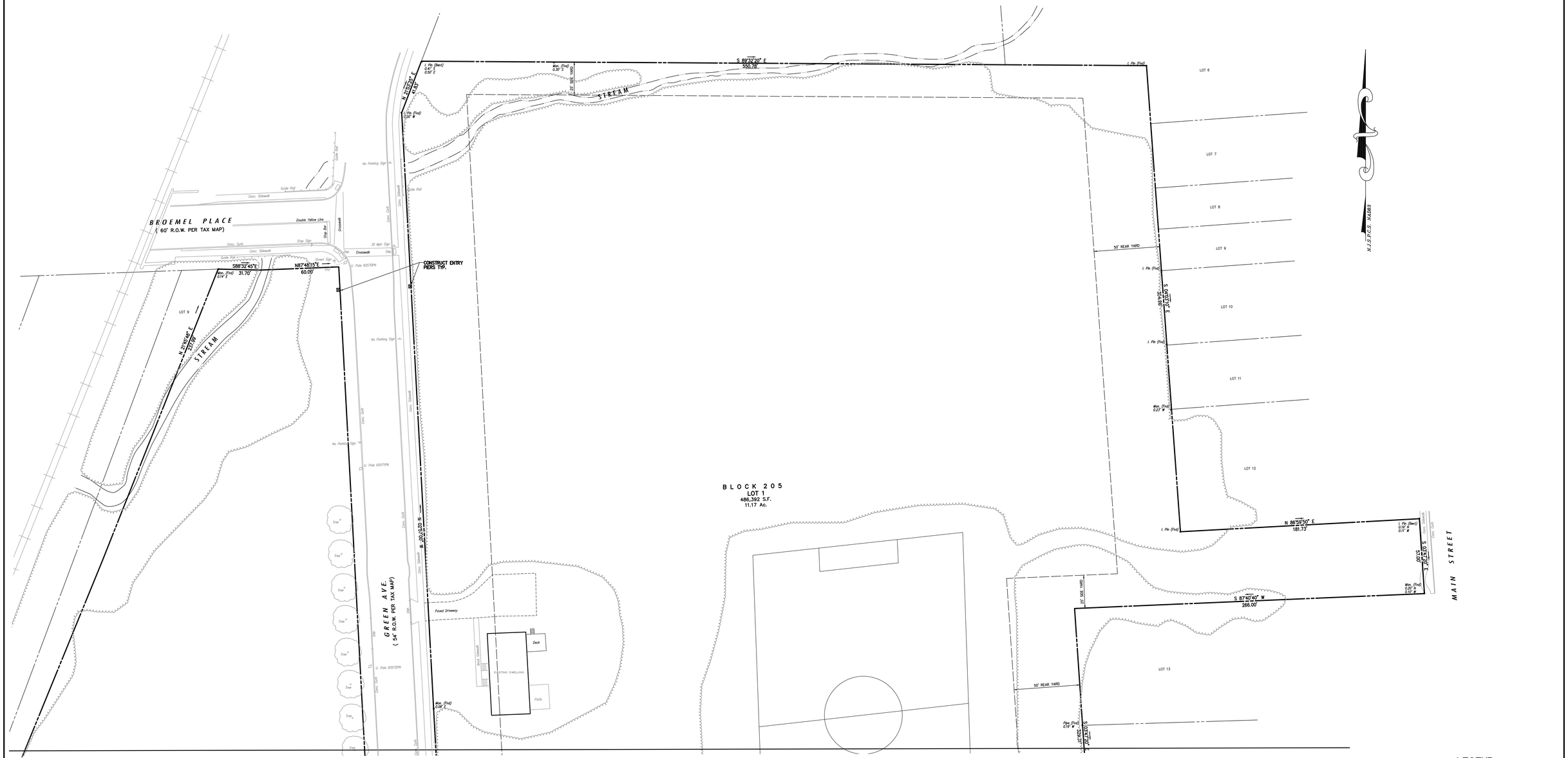
Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

EXISTING CONDITIONS & DEMOLITION PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

03C
17

P:\Jobs\20-02PEB\ENGR\DWG\PLAN_PENNSCH_SITEPLAN_2022PEB.dwg 5:48:59 PM 6/1/2023



LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
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	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	POROUS PAVEMENT	
N/A	PAVEMENT	
N/A	POROUS PAVERS	
	TALL PIER	
	SHORT PIER	

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SITE PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
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PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

04A
17

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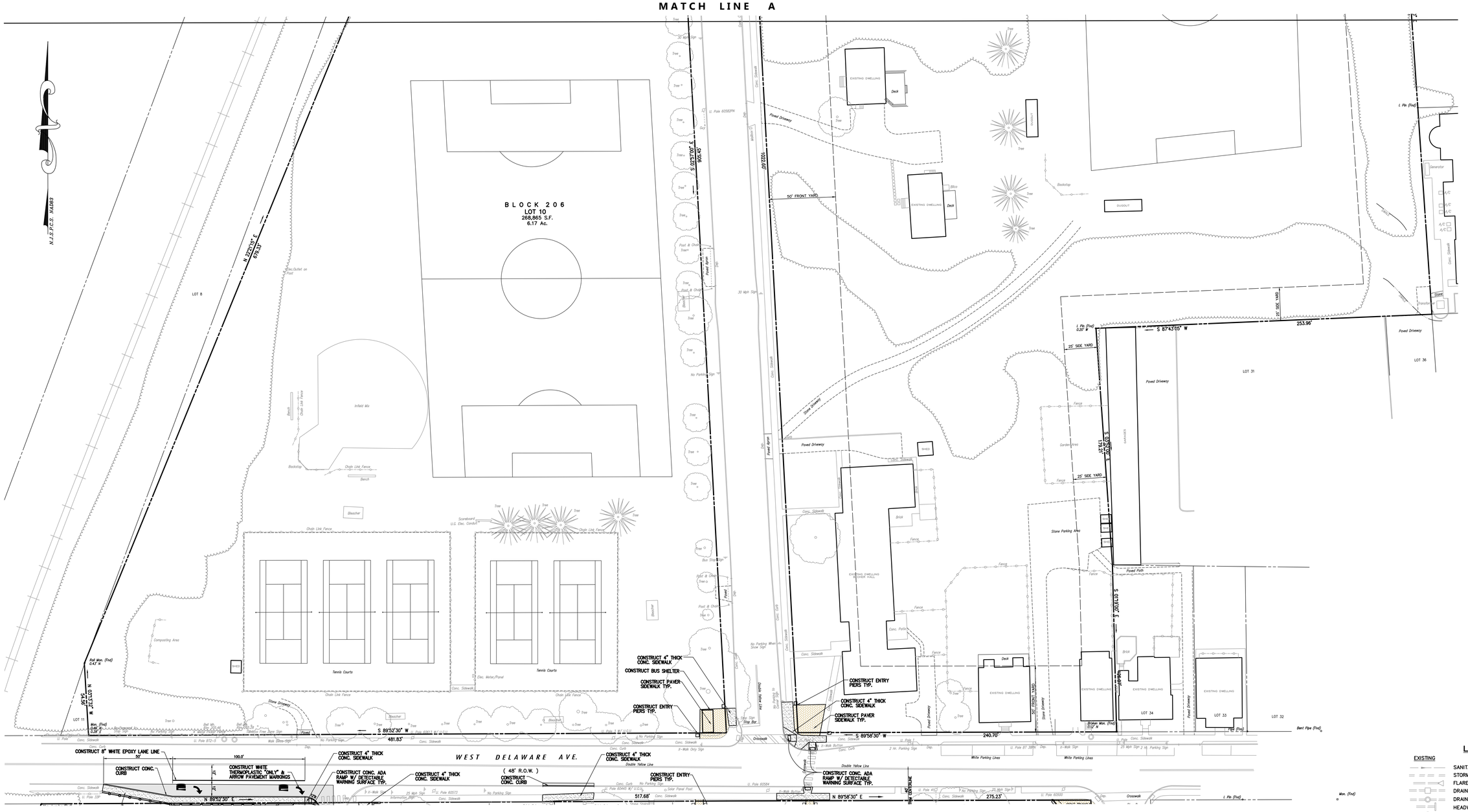
811 NEW JERSEY ONE CALL — Know what's below. Call before you dig. 811 or 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES
IF YOU'RE GOING TO DIG, BLAST OR DRILL
THREE (3) WORKING DAYS NOTICE
REMEMBER
IT'S THE LAW!
Dig Safely.

F:\Jobs\2002PEB\DWG\PLAN\PENNSCH_SITEPLAN_2002PEB.dwg, rpalm 6/1/2023 1:56:14 PM

MATCH LINE A


N.J.S.P.C.S. NAD83
N 22°31'16" E
878.33'
LOT 8
LOT 11
BLOCK 206
LOT 10
268,865 S.F.
6.17 Ac.
S 12°27'30" E
966.46'
Tennis Courts
Tennis Courts
Infield Mix
Backstop
Chain Link Fence
Bench
Bleacher
Scoreboard
U.G. Elec. Conduit
Composting Area
Shed
Stone Driveway
Roll Mon. (Found) 0.43' N
N 01°17'10" W
56.56'
Mon. (Found) 0.46' W 0.18' S
Bollard
Post & Chain
Tree
Conc. Sidewalk
Conc. Curb
Conc. Gutter
Conc. Driveway
Paved Apron
Utility Pole
Guy
Conc. Meter/Panel
Elec. Outlet on Post
Bench
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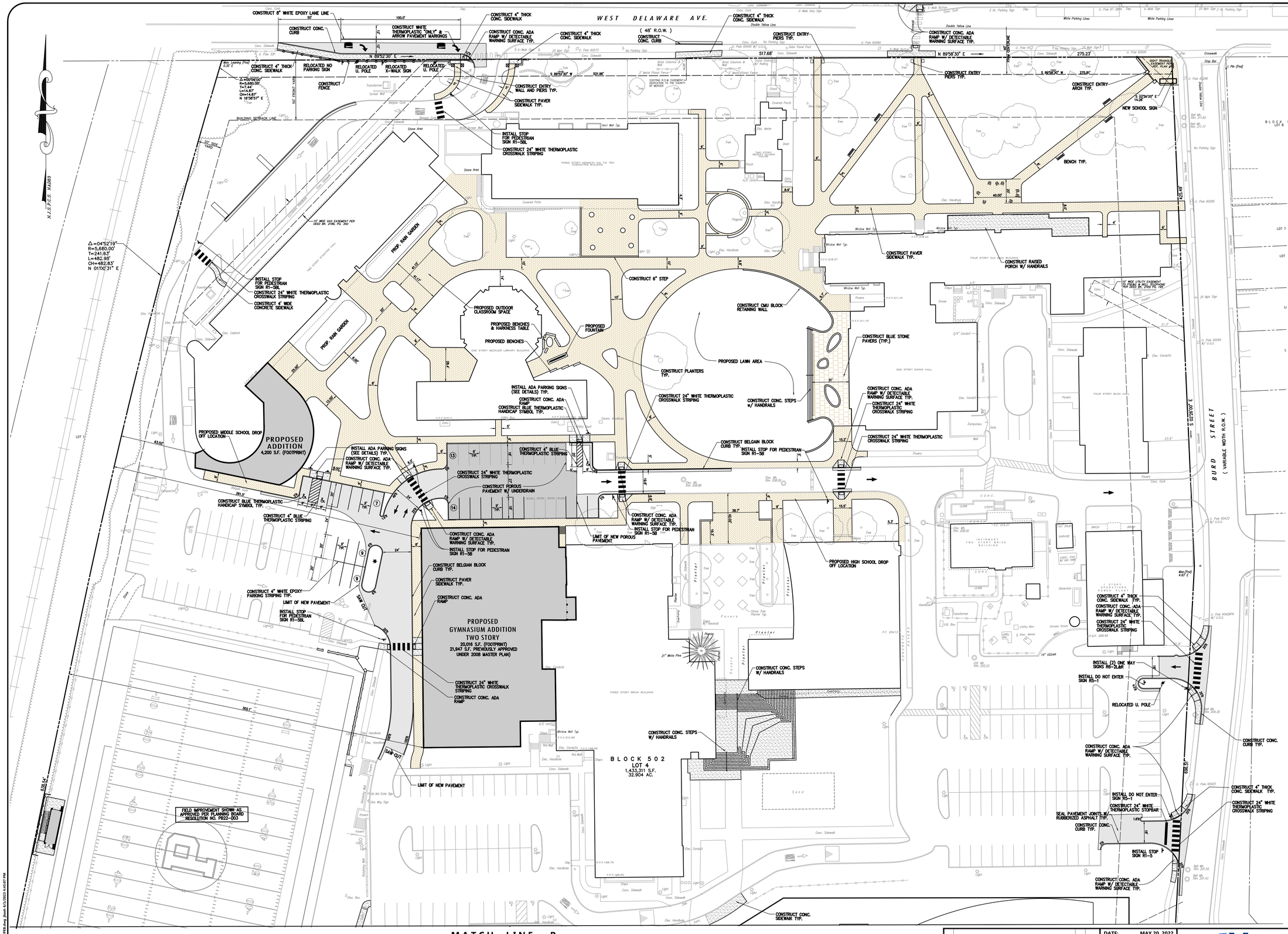
Backstop
Bench
Scoreboard
Bleacher
Tennis Courts
Tennis Courts
Chain Link Fence
Chain Link Fence
Chain Link Fence
Chain Link Fence
Conc. Sidewalk
Conc. Curb
No Parking Sign
Stop Sign
Crosswalk
Bus Stop Sign
Bus Shelter
Solar Panel
Post & Chain
Tree
Bollard
Conc. Sidewalk
Conc. Curb
Conc. Gutter
Conc. Sidewalk
Conc. Patio
Fence
Deck
EXISTING DWELLING
Paved Driveway
Paved Path
Paved Apron
Stop Bar
Double Yellow Line
White Parking Lines
Brick
Fence
Garden Area
Stone Parking Area
Fence
Fence
Fence



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W	WATER MAIN	W
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E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100'	CONTOUR ELEVATION	100
N/A	POROUS PAVEMENT	
N/A	PAVEMENT	
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04C
17

F:\Jobfile\2002PEB\DWG\PLN_PENNCH_SITEPLAN_2002PEB.dwg Josh 6/1/2023 4:45:07 PM

MATCH LINE B

N.A.S.P.C.S. NJGRS

N 175°08'52" E

N 76°08'52" W
10.00'

STATE OPEN WATER WETLANDS BUFFER LINE

50' WETLANDS BUFFER LINE

50' WETLANDS BUFFER LINE

MODIFIED TRANSITION AREA

MODIFIED TRANSITION AREA

MODIFIED TRANSITION AREA

MODIFIED TRANSITION AREA

CENTERLINE OF FORMER STREAM

WETLANDS
74,449 S.F.
1.71 AC.

MODIFIED TRANSITION AREA FROM THE PRIOR NJDEP TRANSITION AREA WAIVERS--AVERAGING PLAN NJDEP FILE NO. 1108-07-0001.1 AND THE ECOLSCIENCES' DECEMBER 2020 WETLANDS DELINEATION

PREMANUFACTURED BRIDGE 8' WIDE X 40' LONG (FHA GP9 BRIDGE & FHW GP17A PATHS PREVIOUSLY APPROVED UNDER NJDEP PERMIT # 1108-07-0001.1 LUP 210001)

6' WIDE MULCH TRAIL SYSTEM (FHA GP9 BRIDGE & FHW GP17A PATHS PREVIOUSLY APPROVED UNDER NJDEP PERMIT # 1108-07-0001.1 LUP 210001)

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15' WIDE DRAINAGE EASEMENT
EASEMENT CONTAINS NO DRAINAGE PIPES FOR DRAINAGE STRUCTURES

TURF OUTFIELD BASEBALL FIELD
SEE DETAIL PLANS FOR STRIPING LAYOUT TYP.

INFIELD AREA/ BASE LINE AREA

SOCCER FIELD (175' X 295')

EARTH BERM MODULAR BLOCK RETAINING WALLS

90.0'

90.0'

GREEN TURF

R=95'

R=60'

R=15'

60.5'

58.0'

38.0'

18.0'

R=15'

50' FRONT

CONSTRUCT 6' WIDE MULCH WALKWAY

CONSTRUCT ALUMINUM BLEACHERS W/ ADA RAMP

CONSTRUCT 4" THICK CONC. SIDEWALK

CONSTRUCT CHAIN LINK FENCE TO MATCH EXISTING

CONSTRUCT 4" THICK CONC. SIDEWALK

CONSTRUCT CMU BLOCK RETAINING WALL

PROP. 12' WIDE GRASS PAVE STABILIZED SURFACE FOR EMERGENCY ACCESS TO FIELD

50' REAR

VAR. WIDTH FIRE ACCESS EASEMENT

15' WIDE & VARIABLE WIDTH DRAINAGE EASEMENT

BLOCK LIMIT

N 89°49'55" W 186.37'

178.70'

175.01'

25' REAR

200.00'

CONSTRUCT BOLLARDS WITH CHAIN

40' FRONT

N 00°10'10" E

S 00°10'05" W

EMERGENCY ACCESS EASEMENT

40' FRONT

N 89°49'55" W 74.63'

N 89°49'55" W 695.00'

S 00°10'05" W 217.12'

BURD STREET
(VARIABLE WIDTH R.O.W.)

O'HANLAN AVE.
(45' R.O.W.)

LANNING AVE.
(50' R.O.W.)

EXISTING DWELLING
LOT 32

SHED

EXISTING DWELLING
LOT 5

GARAGE

LOT 15 | LOT 14 | LOT 13 | LOT 12 | LOT 11 | LOT 10 | LOT 9 | BLOCK 502 LOT 8

LOT 16

LOT 16

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	POROUS PAVEMENT	
N/A	PAVEMENT	
N/A	POROUS PAVERS	
	TALL PIER	
	SHORT PIER	

REFERENCE DATUM:

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2. THIS MAP REFLECTS EXISTING SITE CONDITIONS AS THE RESULT OF A FIELD SURVEY PERFORMED BY VAN CLEEF ENGINEERING ASSOCIATES ON 11/22/21.
3. THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. CALL 1-800-272-1000 TO ORDER UTILITY MARKOUTS.
7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	5/31/22

DATE: MAY 20, 2022
SCALE: 1"=30'
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005
5/20/22
DATE

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

SITE PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

04D
17

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, EMBOSSED, OR COLORIZED 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.

SERIAL NO. _____

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLADE OR TRENCH, CALL OR CLICK AT LEAST THREE (3) WORKING DAYS NOTICE REMEMBER
IT'S THE LAW!
Know what's Below. Call before you dig. or 1-800-272-1000
Dig Safely.

J:\jobfile\2002PEB\DWG\PLN_PENNSCH_SITEPLAN_20021PEB.dwg, jbash 6/1/2023 4:46:44 PM

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
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W	WATER MAIN	W
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X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE/PAVER REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION DEBRIS TO BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.
2. CONTRACTOR TO PROVIDE SECURE STAGING AREA ON-SITE. LOCATION TO BE AGREED UPON BY SCHOOL.
3. CONTRACTOR TO MAINTAIN SAFE PEDESTRIAN ACCESS FOR SCHOOL STAFF AND STUDENTS DURING CONSTRUCTION.
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8. ALL CONCRETE SIDEWALK TO BE ADA COMPLIANT WITH A MAX. CROSS SLOPE OF 2.0% AND A MAX. RUNNING SLOPE OF 5.0% SIDEWALK WITH A RUNNING SLOPE GREATER THAN 5% REQUIRES AN ADA COMPLIANT HANDRAIL. NO SIDEWALK SHALL HAVE A RUNNING SLOPE GREATER THEN 8.33%
9. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE CONFINED TO THE DESIGNATED WORK AREA. NO USE OF ADDITIONAL AREA, EVEN FOR EQUIPMENT OR MATERIAL STORAGE, IS PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE OWNER. DESIGNATED WORK AREA SHALL BE DETERMINED AT PRE-CONSTRUCTION MEETING
10. ALL DISTURBED AREAS TO BE STABILIZED WITH 5 INCHES OF TOPSOIL, FERTILIZER, LIME, MULCH AND TACK WITHIN LIMIT OF DISTURBANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE., CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND AND ALL OF THE EXISTING INFRASTRUCTURE THE CONTRACTOR DAMAGED DURING CONSTRUCTION.
12. ALL BACKFILL, FILL AREAS AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% UNLESS OTHERWISE NOTED ON THE PLANS.

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GRADING, DRAINAGE & UTILITY PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
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BLOCK 701, LOT 4, BLOCK 502, LOT 4,
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PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

05A
17

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SERIAL NO. _____

811 Know what's below. Call before you dig 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR EXCAVATE THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW! Dig Safely.

MATCH LINE A

N.J.S.P.C.S. NAD83

N 22°31'15" E 679.33'

BLOCK 206
LOT 10
268,865 S.F.
6.17 Ac.

LOT 8

LOT 11

LOT 31

LOT 36

LOT 34

LOT 33

LOT 32

WEST DELAWARE AVE.
(48' R.O.W.)

S 87°43'05" W 253.96'

S 89°52'30" W 481.83'

N 89°52'30" E 517.68'

S 00°16'55" E 206.63'

S 00°16'55" E 206.40'

S 00°16'55" E 206.40'

N 00°16'55" W 206.40'

S 89°58'30" W 240.70'

N 89°58'30" E 275.23'

20' SIDE YARD

25' SIDE YARD

50' FRONT YARD

EXISTING DWELLING

Deck

Brick

DUGOUT

Backstop

Tennis Courts

Basketball Court

Inf. Pole 605SRPM

Hyd. at W.V.

Buried Headwall Inv. 189.43 Bot. 186.69

Tree 'B' Inlet Rim 199.65 (1) Inv. 199.53 (2)

Tree 'B' Inlet Rim 205.07 Inv. 198.65 (1) Inv. 198.53 (2)

Tree 'B' Inlet Rim 205.00 Inv. 192.43 8" Inv. 192.43 8" Drop Inv. 192.43 8" Inv. 191.80 12"

Tree 'B' Inlet Rim 205.00 Inv. 191.90 12" Inv. 191.90 (1) Inv. 191.07 (2)

Tree 'B' Inlet Rim 205.78 Inv. 200.78

Tree 'B' Inlet Rim 205.78 Inv. 200.71

Sign Mh Rim 209.10 Inv. 192.69 (1)(2) Inv. 192.59 (3)

Sign Mh Rim 209.30 Inv. 204.90

Tree 'B' Inlet Rim 209.30 Inv. 205.28

Sign Mh Rim 209.33

Broken Mon. (Found) 0.04' N

I. Pin (Found) 0.20' W

I. Pin (Found)

Pipe (Found)

Bent Pipe (Found)

Mon. (Found)

Rail Mon. (Found) 0.43' W

Rail Mon. (Found) 0.48' W

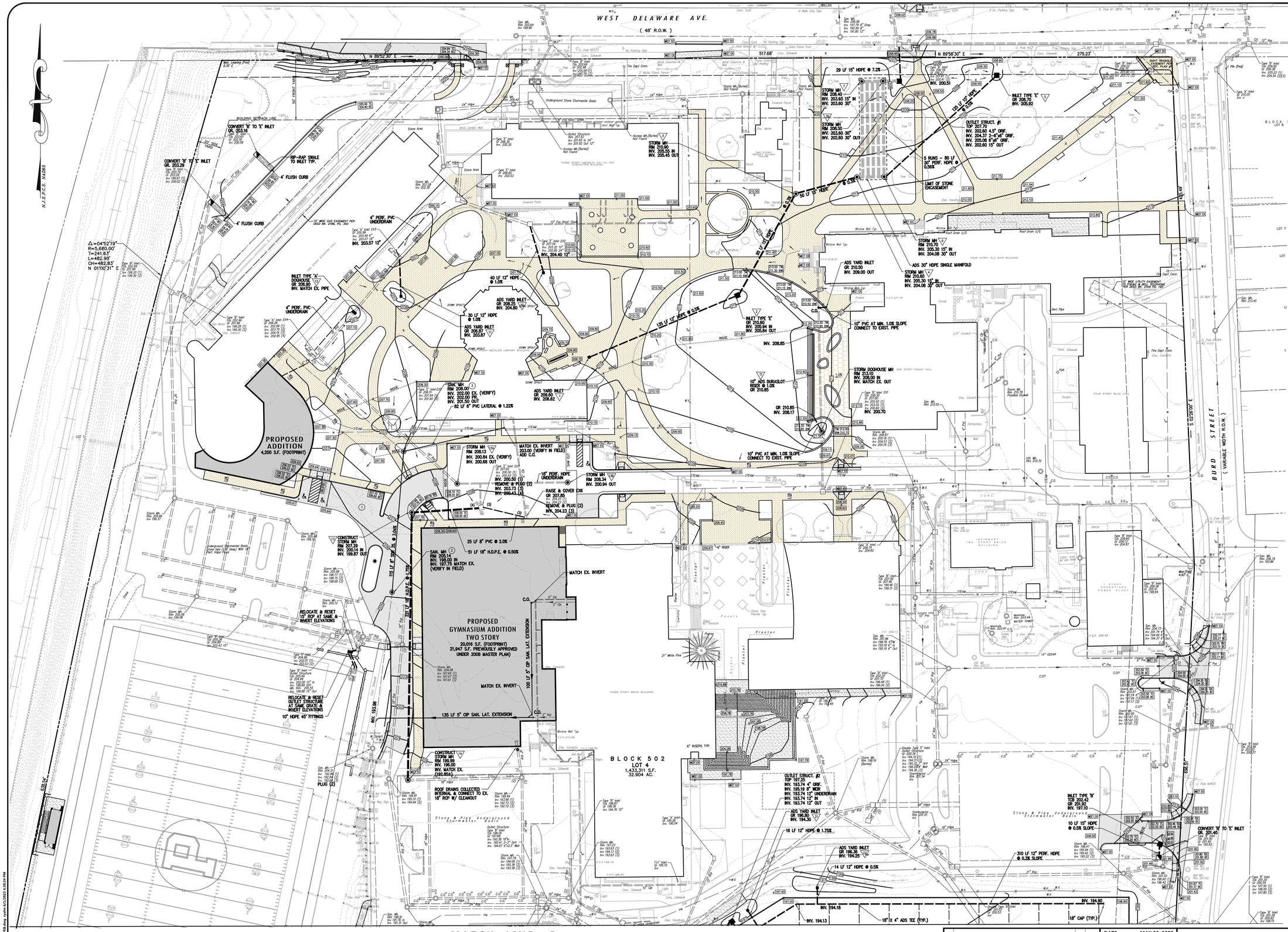
Rail Mon. (Found) 0.18' E

Rail Mon. (Found) 0.08' W

Rail Mon. (Found) 0.08' E

Rail Mon. (Found) 0.08' E

Rail Mon. (Found) 0.08' W



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BMP SUMMARY:

POROUS PAVER DRIVE NORTH OF OLD MAIN BUILDING:
BMP AREA = 7,369 SF
MAX. CONTRIBUTORY AREA = 22,107 SF
TOTAL DRAINAGE AREA = 61,363 SF
CONTRIBUTORY AREA = 14,674 SF

POROUS PAVEMENT PARKING NORTH OF GYMNASIUM:
BMP AREA = 6,565 SF
MAX. CONTRIBUTORY AREA = 19,695 SF
TOTAL DRAINAGE AREA = 57,748 SF
CONTRIBUTORY AREA = 18,895 SF

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
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	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
x 100.00	GRADE ELEVATION	x 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE/PAVER REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

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SERIAL NO. _____

NEW JERSEY ONE CALL 811 — Know what's below. Call before you dig or 1-800-272-1000
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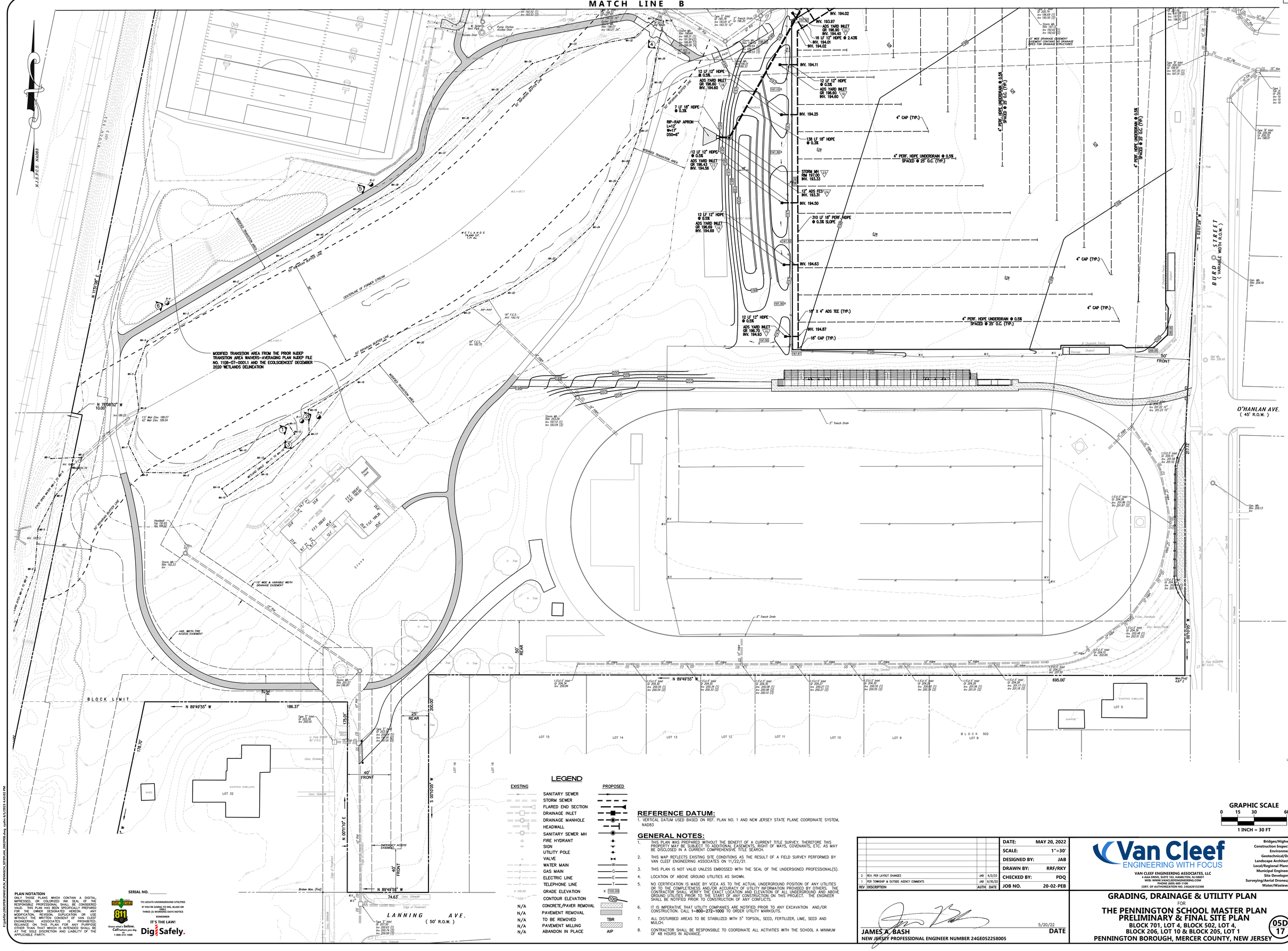
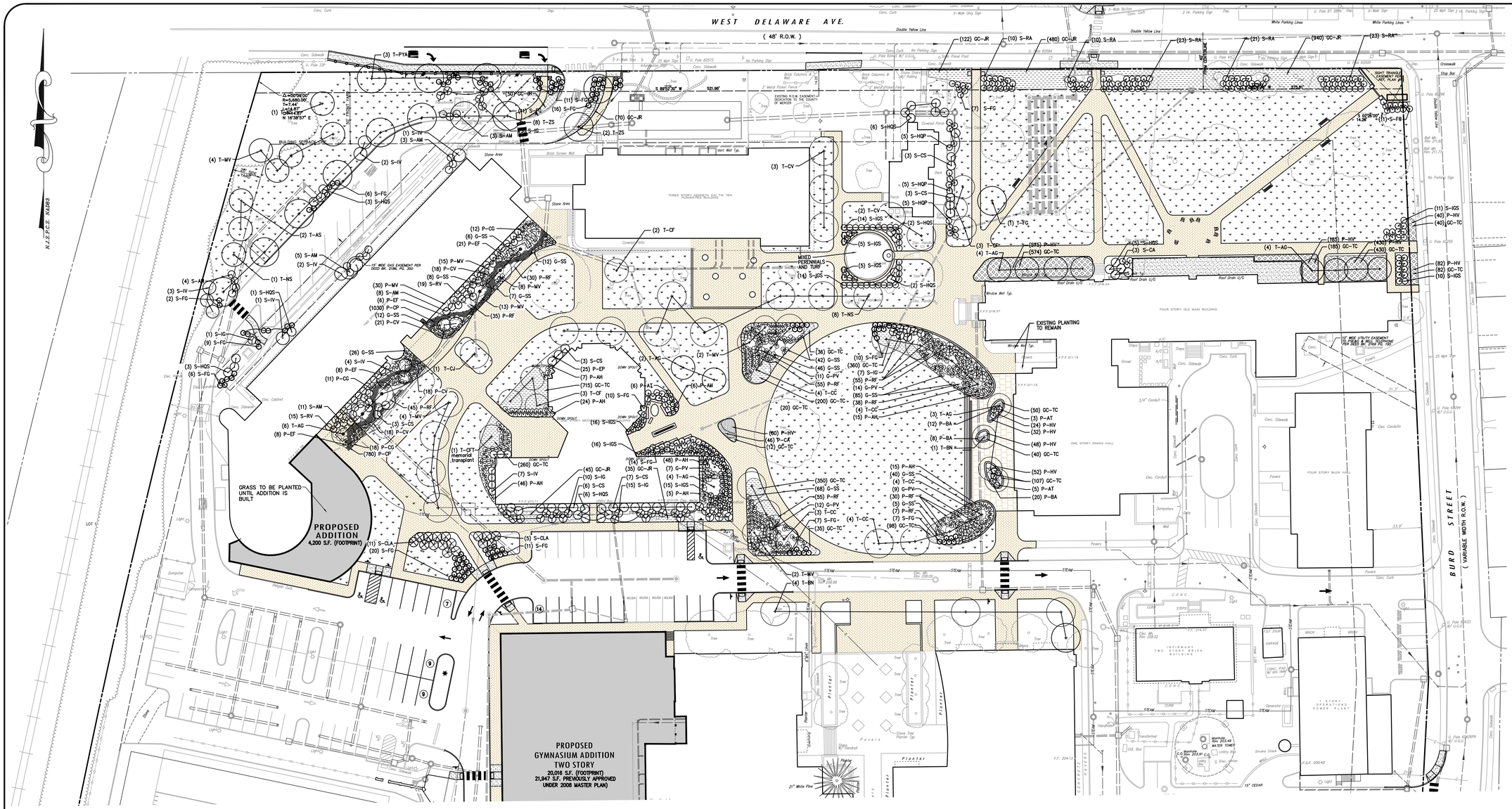
05C 17

F:\Jobs\x\2002PEB\DWG\PLN_PENNSCH_SITEPLAN_2002PEB.dwg sjahn 6/1/2023 4:39:24 PM

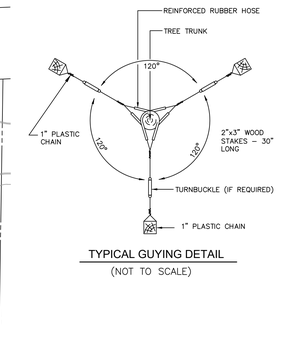
MATCH LINE B


N 13°51'08" E
N 76°08'52" W
10.00'
S 00°10'05" W
217.12'
N 00°11'00" E
175.01'
N 89°49'55" W
186.37'
178.70'
S 00°10'05" W
200.00'
N 89°49'55" W
74.63'
695.00'
50' REAR
40' FRONT
25' REAR
40' FRONT
50' FRONT
O'HANLAN AVE.
(45' R.O.W.)
BURD STREET
(VARIABLE WIDTH R.O.W.)
LANNING AVE.
(50' R.O.W.)
BLOCK LIMIT
WETLANDS
74,449 SF.
1.71 AC.
MODIFIED TRANSITION AREA
50' RIPARIAN BUFFER LINE
CENTERLINE OF FORMER STREAM
MODIFIED TRANSITION AREA FROM THE PRIOR NJDEP TRANSITION AREA WAIVERS--AVERAGING PLAN NJDEP FILE NO. 1108-07-0001.1 AND THE ECOLSCIENCES' DECEMBER 2020 WETLANDS DELINEATION
N.J.S.P.C.S. NJAD83
EXISTING DWELLING
LOT 32
LOT 5
GARAGE
SHED
LOT 15
LOT 14
LOT 13
LOT 12
LOT 11
LOT 10
LOT 9
LOT 8
LOT 16
BLOCK 502
INV. 193.97
ADS YARD INLET GR 196.93 INV. 194.40
16 LF 12" HDPE @ 2.43%
INV. 194.01
INV. 194.02
INV. 194.11
12 LF 12" HDPE @ 0.5%
ADS YARD INLET GR 196.60 INV. 194.60
INV. 194.25
138 LF 18" HDPE @ 0.3%
STORM MH RIM 197.00 INV. 193.33
12" ADS FES INV. 193.31
INV. 194.50
310 LF 18" PERF. HDPE @ 0.3% SLOPE
INV. 194.63
18" X 4" ADS TEE (TYP.)
INV. 194.87
18" CAP (TYP.)
4" CAP (TYP.)
4" PERF. HDPE UNDERDRAIN @ 0.5% SPACED @ 25' O.C. (TYP.)
7 LF 18" HDPE @ 0.3%
RIP-RAP APRON L=12' W=7' D50=6"
12 LF 12" HDPE @ 0.5%
ADS YARD INLET GR 196.43 INV. 194.56
ADS YARD INLET GR 196.09 INV. 194.69
ADS YARD INLET GR 196.70 INV. 194.93
18" F.E.S. INV. 192.72
18" F.E.S. INV. 192.72
STATE SPECIAL RULE MIN. 25' WIDTH
50' RIPARIAN BUFFER LINE
MODIFIED TRANSITION AREA
5" Trench Drain
15" HDPE
12" HDPE
15" Wall
Conc. Sidewalk
Conc. Driveway
Conc. Curb
Conc. Gutter
Edge of Pavement
Top of Embankment
Toe of Embankment
Tree
Utility Pole
Guy Wire
Fence
Storm MH
Sanitary MH
Inlet
Manhole
Pump Station Access Door
Wet Well
Dry Well
Pump Station Access Door
Shed
Gazebo
Stone Patio
Stone Walk
Rubber Chips
Stone Wall
Wood Fence
Chain Link Fence
Concrete Pad
Handicap Top 197.63 Bot. 196.63
Storm MH Rim 193.23 Inv.
Storm MH Rim 196.87
Storm MH Rim 193.39 Inv 193.07 (1) Inv 193.04 (2)
Storm MH Rim 199.31 Inv 197.09 (1) Inv 196.80 (1) Inv 196.09 (1)
Storm MH Rim 199.03 Inv 196.83 (1)
Storm MH Rim 199.03 Inv 196.83 (1)
Storm MH Rim 197.00 Inv 193.33
Storm MH Rim 204.16 Inv
Storm MH Rim 209.13 Inv
Storm MH Rim 206.45
Top 3" Inlet Gr 200.09 Inv 197.35 (1) Inv 197.35 (2)
Top 3" Inlet Gr 200.09 Inv 196.01
Top 4" Inlet Gr 205.19 Inv 199.19
Top 4" Inlet Gr 205.19 Inv 199.19
Top 3" Inlet Gr 200.09 Inv 196.83
Top 3" Inlet Gr 200.09 Inv 196.83
Top 3" Inlet Gr 200.09 Inv 196.83



GENERAL LANDSCAPING NOTES:

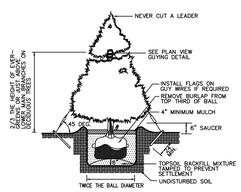
1. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY; AND SHALL HAVE NORMAL, WELL-DEVELOPED BRANCHES AND VIGOROUS FIBROUS ROOT SYSTEMS. ALL PLANTS SHALL BE NURSERY-GROWN UNLESS OTHERWISE STATED; THEY SHALL HAVE BEEN GROWING UNDER THE SAME CLIMATE CONDITIONS AS THE MUNICIPALITY FOR AT LEAST TWO (2) YEARS PRIOR TO DATE OF PLANTING. ALL PLANTS WHICH ARE FOUND UNSUITABLE IN GROWTH OR CONDITION OR WHICH ARE NOT TRUE TO NAME SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE PLANTS.
2. ALL PLANT MATERIAL SHALL BE TWICE TRANSPLANTED, NURSERY-GROWN OF SPECIMEN QUALITY. THEY SHALL BE OF SYMMETRICAL GROWTH OR TYPICAL OF THE VARIETY AND SUPPLIED FROM SOURCES IN THE SAME HARDINESS ZONE AS THE DEVELOPMENT IS LOCATED AND FREE OF INSECT AND DISEASE PROBLEMS OR OBJECTIONABLE DISFIGUREMENTS. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
3. ALL PRECAUTIONS CUSTOMARY IN GOOD TRADE PRACTICE SHALL BE TAKEN IN PREPARING PLANTS FOR MOVING. ALL BALLED AND BURLAPPED PLANTS SHALL BE DUG TO MEET OR EXCEED THE "USDA STANDARDS FOR NURSERY STOCK".
4. ALL PLANT MATERIAL SHALL MEET THE STANDARDS OF AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN (1990), OR MOST RECENT EDITION, AND THE HEIGHT, SPREAD AND/OR CALIPER FOR TREES AND SHRUBS LISTED IN SECTION 515.1, RECOMMENDED PLANT LIST.
5. PLANTS SHALL BE PACKED, TRANSPORTED AND HANDLED WITH UTMOST CARE TO INSURE ADEQUATE PROTECTION AGAINST INJURY.
6. ANY PLANT MATERIAL WHICH DOES NOT SURVIVE SHALL BE REPLACED BY THE DEVELOPER. FINANCIAL SECURITY SHALL BE POSTED WITH THE TOWNSHIP IN AN AMOUNT EQUAL TO THE ESTIMATED COST OF TREES AND PLANTINGS, TO BE RELEASED TWENTY FOUR (24) MONTHS FROM TOWNSHIP ACCEPTANCE OF THE INSTALLATION AND SATISFACTORY REPLACEMENT OF ALL DEAD PLANTINGS.
7. ONLY THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING AND LIGHTING LAYOUT PURPOSES. PROPOSED TREES SHALL NOT BE PLANTED WITHIN TEN (10) FEET OF UNDERGROUND UTILITIES AND FIFTEEN (15) FEET OF OVERHEAD UTILITIES.
8. NO PLANTING LAYOUT MODIFICATIONS OR PLANT SUBSTITUTES WILL OCCUR WITHOUT THE APPROVAL OF THE TOWNSHIP ENGINEER. THERE WILL BE NO PRIOR APPROVAL TO MODIFICATIONS OCCURRING IN THE FIELD.
9. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
10. ALL SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL SHRUBBERY MATERIAL LOCATED WITHIN SIGHT TRIANGLES SHALL NOT EXCEED A MATURE HEIGHT OF 3' ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL SHADE TREES PLANTED OR EXISTING IN SIGHT TRIANGLES SHALL BE PRUNED SO AS NOT TO HAVE BRANCHES BELOW 7'-0".
11. ALL PLANT MATERIAL SHALL BE PROPERLY GUYED, STAKED, WRAPPED AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. 1" PLASTIC CHAINS SHALL BE ATTACHED TO THE TREE AT TWO-THIRDS THE HEIGHT OF THE TREE AND SHOULD BE LOCATED AT POINTS SO AS NOT TO SPLIT THE TRUNKS OF MULTI-STEMMED TREES. PROVIDE TWO TO THREE TREE STAKES PER TREE AS NOTED ON THE PLANS. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. PROVIDE TREE WRAP WITH A 50% OVERLAP. CUT AND REMOVE BURLAP FROM THE TOP 1/3 OF THE ROOT BALL.
12. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL IF WET SOIL CONDITIONS EXIST, THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH SAND.
13. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT DID TO EXISTING GRADE.
14. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING ALL PLANT MATERIAL SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS.
15. OPTIMUM PLANTING & SEEDING DATES ARE BETWEEN FEBRUARY 15 AND MAY 1 OR BETWEEN AUGUST 15 AND OCTOBER 15.
16. ALL PLANTING BEDS SHALL RECEIVE MINIMUM NATURAL 4" DEPTH OF SHREDDED HARDWOOD BARK.
17. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF 2 YEARS.



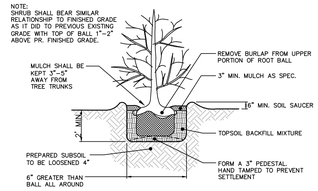
TYPICAL GUYING DETAIL
(NOT TO SCALE)

PENNINGTON PLANTING SCHEDULE - MAIN CAMPUS

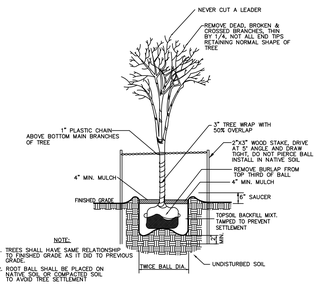
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOTS	SPACING	NATIVE	NOTES
		TREES						
T-AG	23	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	8' - 10' Ht	B&B	as shown	YES	Multistem, no suckering at base
T-AS	2	Acer saccharum	Sugar Maple	8' - 10' Ht	B&B	as shown	YES	Full, dense, upright growth
T-BN	5	Betula nigra	River Birch	8' - 10' Ht	B&B	as shown	YES	Multistem, no suckering at base
T-CC	19	Cercis canadensis 'Forest Pansy'	Eastern Redbud	8' - 10' Ht	B&B	as shown	YES	Specimen quality
T-CF	8	Cornus florida f. rubra	Pink Flowering Dogwood	8' - 10' Ht	B&B	as shown	YES	Full, dense, upright growth
T-CFT	1	Cornus florida	Flowering Dogwood	- -	TRANSPLANT	as shown	YES	Memorial Transplant
T-CJ	1	Cercidiphyllum japonicum	Katsura Tree	8' - 10' Ht	B&B	as shown	NO	Full, dense, upright growth
T-CV	5	Chionanthus virginicus	White Fringetree	8' - 10' Ht	B&B	as shown	YES	Multistem, no suckering at base
T-FG	1	Fagus grandifolia	American Beech	8' - 10' Ht	B&B	as shown	YES	Full, dense, upright growth
T-MV	12	Magnolia virginiana	Sweetbay Magnolia	8' - 10' Ht	B&B	as shown	YES	Multistem, no suckering at base
T-NS	10	Nyssa sylvatica	Black Gum	8' - 10' Ht	B&B	as shown	YES	Full, dense, upright growth
T-PYA	3	Prunus yedoensis 'Akebono'	Yoshino Cherry	6'-8' Ht	B&B	as shown	NO	Single stem, full
T-QA	7	Quercus alba	White Oak	8' - 10' Ht	B&B	as shown	YES	Full, dense, upright growth
T-ZS	10	Zelkova serrata	White Oak	8' - 10' Ht	B&B	as shown	NO	Full, dense, upright growth
		SHRUBS						
S-AM	34	Aronia melancharpa	Black Chokecherry	5 gal	container	as shown	YES	Full, dense, symmetrical growth
S-CA	3	Ceanothus americanus	New Jersey Tea	5 gal	container	as shown	YES	Full, dense, symmetrical growth
S-CLA	16	Clethra alnifolia	Summersweet	5 gal	container	as shown	YES	Full, dense, symmetrical growth
S-CS	25	Cornus sericea	Red Twig Dogwood	10 gal	container	as shown	YES	Full, dense, symmetrical growth
S-FG	152	Fothergilla gardenii	Dwarf Witchalder	5 gal	container	as shown	NO	Full, dense, symmetrical growth
S-HQP	15	Hydrangea quercifolia 'Pee Wee'	Pee Wee Oakleaf Hydrangea	5 gal	container	as shown	NO	Full, dense, symmetrical growth
S-HQS	28	Hydrangea quercifolia 'Snow Queen'	Snow Queen Oakleaf Hydrangea	5 gal	container	as shown	NO	Full, dense, symmetrical growth
S-IG	38	Ilex glabra	Inkberry Holly	10 gal	container	as shown	YES	Full, dense, symmetrical growth
S-IGS	189	Ilex glabra 'Shamrock'	Shamrock Inkberry Holly	5 gal	container	as shown	YES	Full, dense, symmetrical growth
S-IV	20	Ilex verticillata	Common Winterberry	10 gal	container	as shown	YES	Full, dense, symmetrical growth
S-RA	91	Rhus aromatica 'Gro-Low'	Grow-Low Fragrant Sumac	5 gal	container	24" o.c.	YES	Full, dense, symmetrical growth
S-RV	34	Rhododendrom viscosum	Swamp Azalea	5 gal	container	as shown	YES	Full, dense, symmetrical growth
		GRASSES						
G-PV	53	Panicum virgatum	Switchgrass	2 gal	container	as shown	YES	
G-SS	357	Schizachyrium scoparium	Little Bluestem	1 gal	container	as shown	YES	
		PERENNIALS						
P-AH	166	Amsonia hubrichtii	Blue Star	2 gal	container	as shown	NO	
P-AT	14	Amsonia tabernaemontana	Willow Blue Star	2 gal	container	as shown	YES	Full, dense, symmetrical growth
P-BA	44	Baptisia australis	Blue False Indigo	1 gal	container	12" o.c.	YES	
P-CA	46	Carex appalachica	Appalachian sedge	1 gal	container	12" o.c.	YES	
P-CG	41	Chelone glabra	Turtlehead	1 gal	container	as shown	YES	
P-CP	1810	Carex pensylvanica	Pennsylvania Sedge	1 gal	container	8" o.c.	YES	
P-CV	75	Coreopsis verticillata 'Moonbeam'	Tickseed Moonbeam	1 gal	container	as shown	YES	
P-EF	43	Eupatorium fistulosum	Joe Pye's Weed	2 gal	container	as shown	YES	Variety 'Album' or 'Bartered Bride' or 'Ivory Tower'
P-EP	25	Echinacea purpurea	Purple coneflower	1 gal	container	as shown	YES	Full, dense, symmetrical growth
P-HV	1350	Huchera villosa	Hairy alumroot	1 gal	container	12" o.c.	YES	Full, dense, symmetrical growth
P-MV	66	Mertensia virginica	Virginia Bluebells	1 gal	container	18" o.c.	YES	Plant goes dormant in summer
P-RF	350	Rudbeckia fulgida	Black-Eyed Susan	1 gal	container	20" o.c.	YES	Leave seedheads through winter
		GROUNDCOVERS						
G-JR	1673	Juniperus rigida conferta	Shore Juniper	2 gal	container	24" o.c.	NO	
G-TC	3766	Tiarella cordifolia 'Pink Skyrocket'	Pink Skyrocket Foamflower	1 gal	container	12" o.c.	YES	



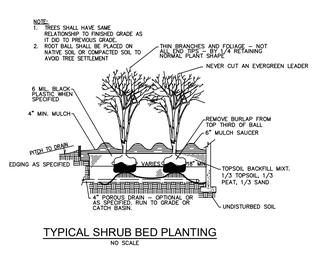
GUYING FOR EVERGREENS / DECIDUOUS TREES OVER 4" CAL.
NO SCALE



TYPICAL PLANTING FOR EVERGREEN AND DECIDUOUS SHRUBS
NOT TO SCALE



TYPICAL PLANTING FOR TREES TO 3 1/2" CAL.
NO SCALE



TYPICAL SHRUB BED PLANTING
NO SCALE

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

PLAN NOTATION

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SERIAL NO. _____

NEW JERSEY ONE CALL 811
Know what's below. Call before you dig. 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES
IF YOU'RE GOING TO DIG, BLAST OR DRILL
THREE (3) WORKING DAYS NOTICE
REMEMBER
IT'S THE LAW!
Dig Safely.

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE: MAY 20, 2022
SCALE: 1"=30'
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

5/20/22
JAMES A. BASH — DATE
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
A AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

LANDSCAPING PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4, BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

06
17

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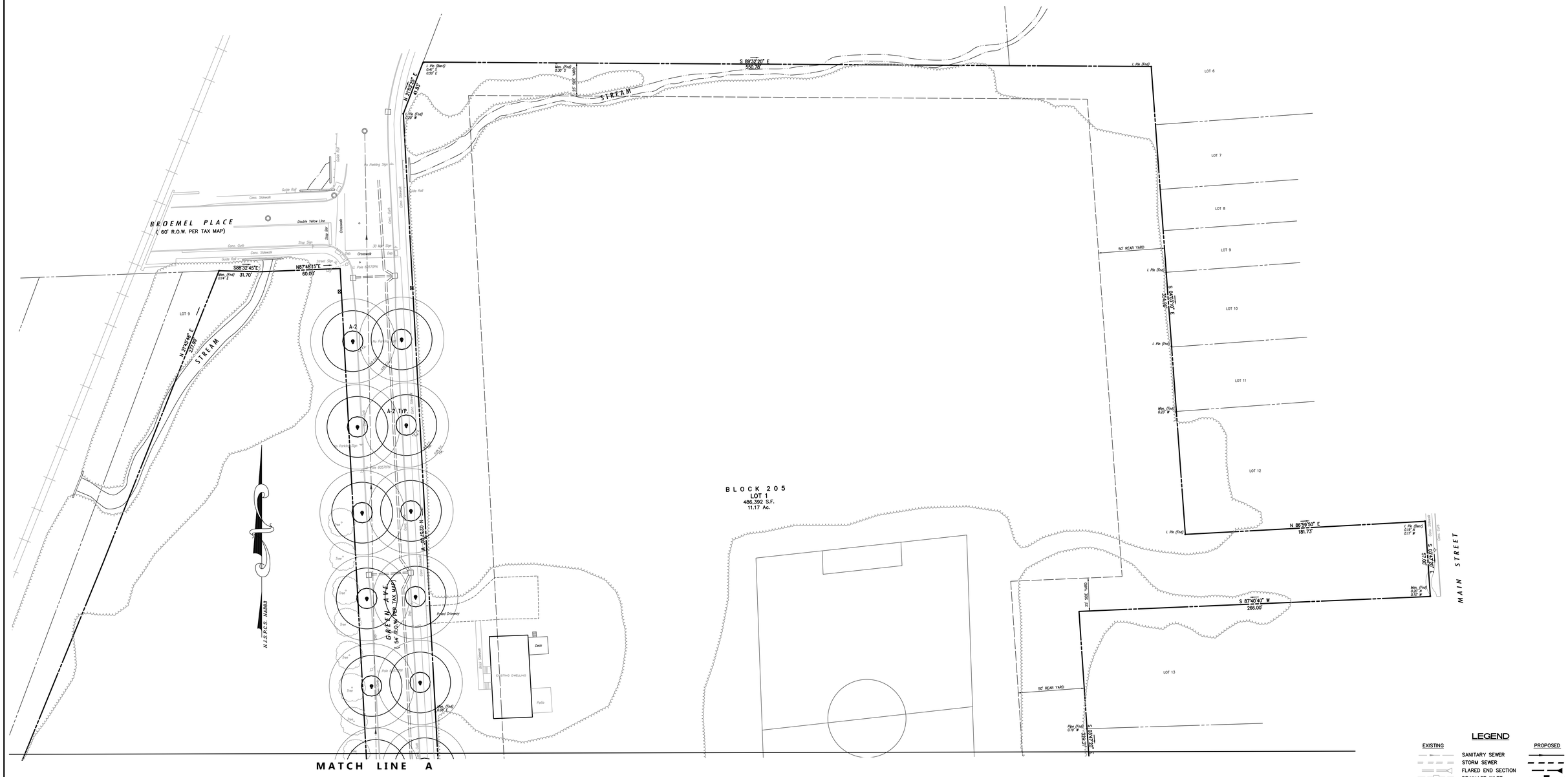

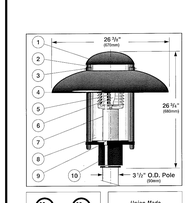

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Union Made Affiliated with IBEW Local 363

SELUX Corp. © 2002
PO Box 1090, 5 Lumen Lane
Highland, NY 12528
TEL: (845) 691-7723
FAX: (845) 691-6749
E-mail: selux@selux.com
Web Site: www.selux.com/usa
SAS-040347 (ipa V3.0)

1. Fixture Cover - Aluminum cover with white painted interior for maximum fixture efficiency; has industrial felt gasketing for air circulation. Cover removes for lamp access.

2. Cover Support - Machined support connected to fixture cover with architectural Allen head nut detail.

3. Cover Set Screw - Two stainless steel set screws in cover support loosely provide attachment of fixture cover and support to 4" (20mm) diameter connection rods. Loosening screws allows removal of fixture cover without tools.

4. Fixture Hood - Aluminum shade with white painted interior for maximum reflectivity.

5. Shielding - Select one of the following: Prismatic diecast aluminum Type F aluminum Specular Type E aluminum Type V white lucent, Type V MITR 150 reflector, Type V MITR 180 reflector, or borosilicate glass refractor in either Type III or Type V distribution.

6. Lamp - One coated, base down, medium base ED-17 metal halide, 150 watt, 4" high; pressure sodium up to 150w. Lamp provided by others.

7. Electrostock - Extruded aluminum tubing houses core and coil ballast. Pulse rated porcelain, medium base socket is mounted to die-cast aluminum socket cup for maximum heat dissipation and ease of relamping. Socket cup attaches to electrostock with two stainless steel screws and is easily removable for ballast service. Consult factory for more detailed ballast information.

8. Diffuser - Clear, U.V. stabilized, acrylic with minimum wall thickness of 0.125" (3mm).

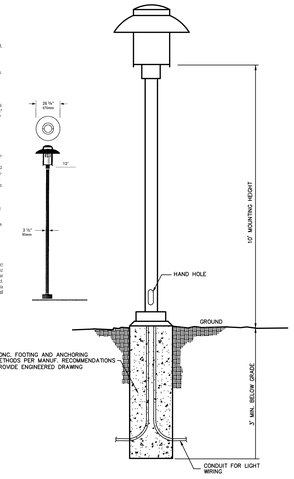
9. Gasketing - Continuous, molded neoprene gasket provides weatherproofing, dust, and insect control at diffuser base.

10. Pole Filter - Self-leveling, die-cast aluminum, filter base secured to pole with two, stainless steel, Allen head set screws. 3"ID (50mm) I.D. external filter for 3 ½" (90mm) O.D. poles.

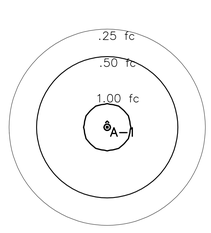
Exterior Luminaire Finish - SELUX utilizes a high quality, TGIC polyester powder. All SELUX luminaires and poles undergo a five stage intensive pre-treatment process where product is thoroughly cleansed, phosphated and sealed. SELUX powder coated products provide excellent salt spray corrosion resistance, UV and ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). RAL colors (SP) are available, please specify RAL#.

In a coming effort to offer the best product to our customers, changes in specifications, ratings, specifications or materials may or may not warrant versions and supersede all other printed or electronic versions.

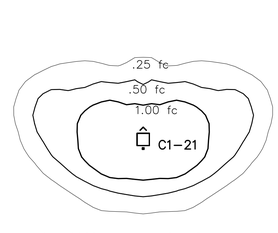


TYPE "A" LIGHT DETAIL
N.T.S.



Luminaire A

NEW
Selux
"Saturn Serie
100 W HPS
Type V
Single
10 ft pole



Luminaire C1*

NEW

EMCO
"Ecolume"
70 W HPS
Type II
Single head
16 ft straight
square pole

* See 2008 Approved Site Plan for complete details

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
x 100.00	GRADE ELEVATION	x 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE/PAVER REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

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THREE (3) WORKING DAYS NOTICE
REMEMBER
IT'S THE LAW!
Dig Safely.

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION DEBRIS TO BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.
2. CONTRACTOR TO PROVIDE SECURE STAGING AREA ON-SITE. LOCATION TO BE AGREED UPON BY SCHOOL.
3. CONTRACTOR TO MAINTAIN SAFE PEDESTRIAN ACCESS FOR SCHOOL STAFF AND STUDENTS DURING CONSTRUCTION.
4. CONTRACTOR TO PROVIDE EMERGENCY ACCESS TO SCHOOL AT ALL TIMES.
5. ALL SEDIMENT DROPPED, SPILLED OR TRACKED ON PAVED SURFACES TO BE REMOVED IMMEDIATELY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SOIL IMPORT OR EXPORT PERMIT(S) REQUIRED, INCLUDING FEES.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL ON-SITE SAFETY AND SECURITY. ALL SAFETY PRECAUTIONS MUST BE UNDERTAKEN AND MAINTAINED AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES. NO SEPARATE PAYMENT SHALL BE MADE FOR ON-SITE SAFETY & SECURITY. THE COSTS OF ONSITE SAFETY AND SECURITY SHALL BE INCLUDED IN COST OF THE WORK.
8. ALL CONCRETE SIDEWALK TO BE ADA COMPLIANT WITH A MAX. CROSS SLOPE OF 2.0% AND A MAX. RUNNING SLOPE OF 5.0%. SIDEWALK WITH A RUNNING SLOPE GREATER THAN 5% REQUIRES AN ADA COMPLIANT HANDRAIL. NO SIDEWALK SHALL HAVE A RUNNING SLOPE GREATER THEN 8.33%.
9. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE CONFINED TO THE DESIGNATED WORK AREA. NO USE OF ADDITIONAL AREA, EVEN FOR EQUIPMENT OR MATERIAL STORAGE, IS PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE OWNER. DESIGNATED WORK AREA SHALL BE DETERMINED AT PRE-CONSTRUCTION MEETING
10. ALL DISTURBED AREAS TO BE STABILIZED WITH 5 INCHES OF TOPSOIL, FERTILIZER, LIME, MULCH AND TACK WITHIN LIMIT OF DISTURBANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND ANY ALL OF THE EXISTING INFRASTRUCTURE THE CONTRACTOR DAMAGED DURING CONSTRUCTION.
12. ALL BACKFILL, FILL AREAS AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% UNLESS OTHERWISE NOTED ON THE PLANS.

REFERENCE DATUM:

1. VERTICAL DATUM USED BASED ON REF. PLAN NO. 1 AND NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83

GENERAL NOTES:

1. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SURVEY. THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT OF WAYS, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT COMPREHENSIVE TITLE SEARCH.
2. THIS MAP REFLECTS EXISTING SITE CONDITIONS AS THE RESULT OF A FIELD SURVEY PERFORMED BY VAN CLEEF ENGINEERING ASSOCIATES ON 11/22/21.
3. THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. CALL **1-800-272-1000** TO ORDER UTILITY MARKOUTS.
7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE:	MAY 20, 2022
SCALE:	1"=30'
DESIGNED BY:	JAB
DRAWN BY:	RRF/RKY
CHECKED BY:	PDQ
JOB NO.	20-02-PEB

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE05225800
5/20/22
DATE

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

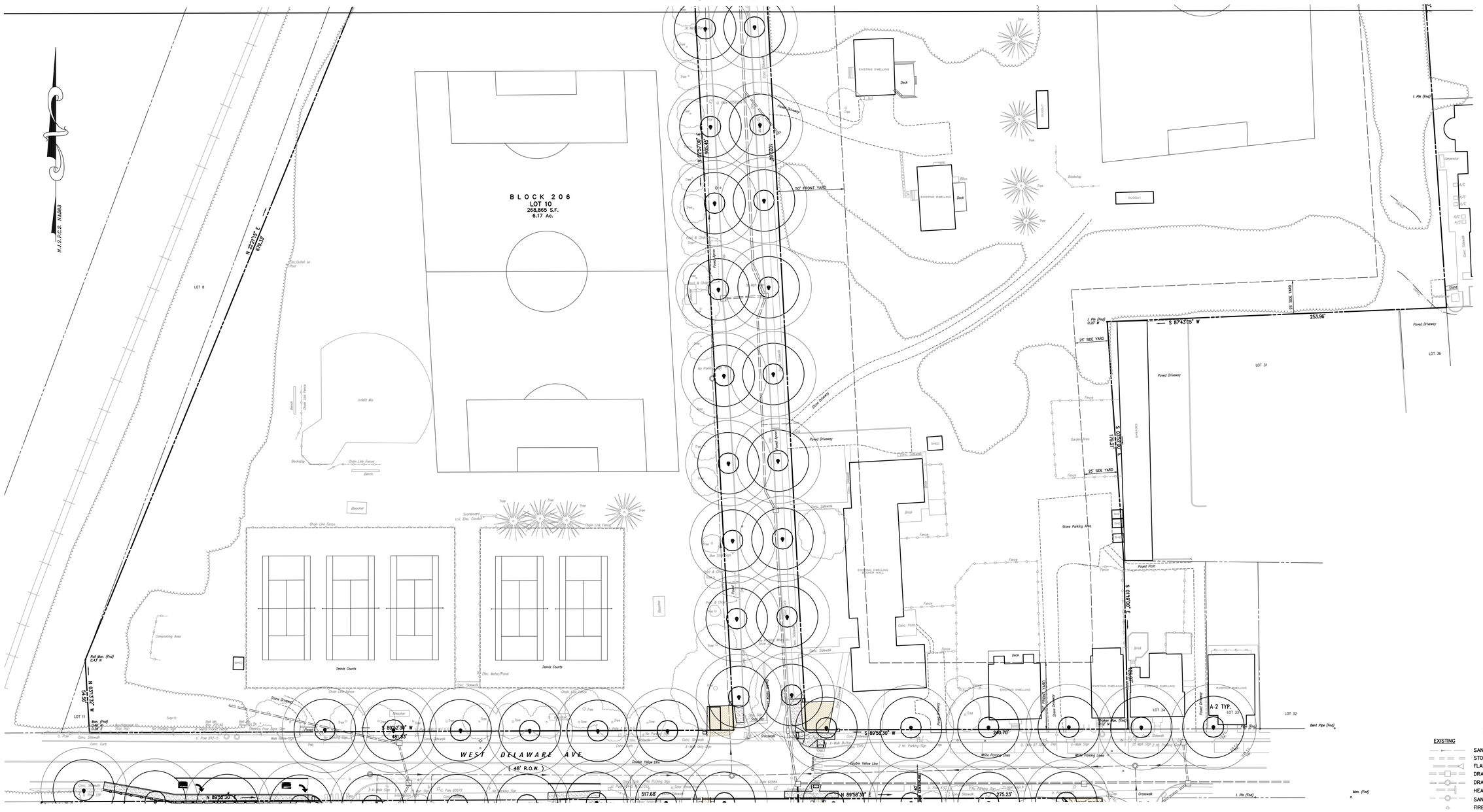
Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

LIGHTING PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4, BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

07A
17

I:\jobfile\2002PEB\DWG\PLN_PENNGTN_SITEPLAN_2002PEB.dwg, sysin 6/1/2023 2:05:06 PM

MATCH LINE A



LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE/PAVER REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION DEBRIS TO BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.
2. CONTRACTOR TO PROVIDE SECURE STAGING AREA ON-SITE. LOCATION TO BE AGREED UPON BY SCHOOL.
3. CONTRACTOR TO MAINTAIN SAFE PEDESTRIAN ACCESS FOR SCHOOL STAFF AND STUDENTS DURING CONSTRUCTION.
4. CONTRACTOR TO PROVIDE EMERGENCY ACCESS TO SCHOOL AT ALL TIMES.
5. ALL SEDIMENT DROPPED, SPILLED OR TRACKED ON PAVED SURFACES TO BE REMOVED IMMEDIATELY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SOIL IMPORT OR EXPORT PERMIT(S) REQUIRED, INCLUDING FEES.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL ON-SITE SAFETY AND SECURITY. ALL SAFETY PRECAUTIONS MUST BE UNDERTAKEN AND MAINTAINED AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES. NO SEPARATE PAYMENT SHALL BE MADE FOR ON-SITE SAFETY & SECURITY. THE COSTS OF ONSITE SAFETY AND SECURITY SHALL BE INCLUDED IN COST OF THE WORK.
8. ALL CONCRETE SIDEWALK TO BE ADA COMPLIANT WITH A MAX. CROSS SLOPE OF 2.0% AND A MAX. RUNNING SLOPE OF 5.0%. SIDEWALK WITH A RUNNING SLOPE GREATER THAN 5% REQUIRES AN ADA COMPLIANT HANDRAIL. NO SIDEWALK SHALL HAVE A RUNNING SLOPE GREATER THEN 8.33%.
9. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE CONFINED TO THE DESIGNATED WORK AREA. NO USE OF ADDITIONAL AREA, EVEN FOR EQUIPMENT OR MATERIAL STORAGE, IS PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE OWNER. DESIGNATED WORK AREA SHALL BE DETERMINED AT PRE-CONSTRUCTION MEETING
10. ALL DISTURBED AREAS TO BE STABILIZED WITH 5 INCHES OF TOPSOIL, FERTILIZER, LIME, MULCH AND TACK WITHIN LIMIT OF DISTURBANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND AND ALL OF THE EXISTING INFRASTRUCTURE THE CONTRACTOR DAMAGED DURING CONSTRUCTION.
12. ALL BACKFILL, FILL AREAS AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% UNLESS OTHERWISE NOTED ON THE PLANS.

REFERENCE DATUM:

1. VERTICAL DATUM USED BASED ON REF. PLAN NO. 1 AND NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83

GENERAL NOTES:

1. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SURVEY. THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT OF WAYS, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT COMPREHENSIVE TITLE SEARCH.
2. THIS MAP REFLECTS EXISTING SITE CONDITIONS AS THE RESULT OF A FIELD SURVEY PERFORMED BY VAN CLEEF ENGINEERING ASSOCIATES ON 11/22/21.
3. THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. CALL 1-800-272-1000 TO ORDER UTILITY MARKOUTS.
7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

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LIGHTING PLAN
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BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

07B
17

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED TO BE THE PLANS AND DESIGNS OFFICIALLY 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.

SERIAL NO. _____

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLASE OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER
IT'S THE LAW!
Dig Safely.

Know what's below. Call before you dig. or 1-800-272-1000

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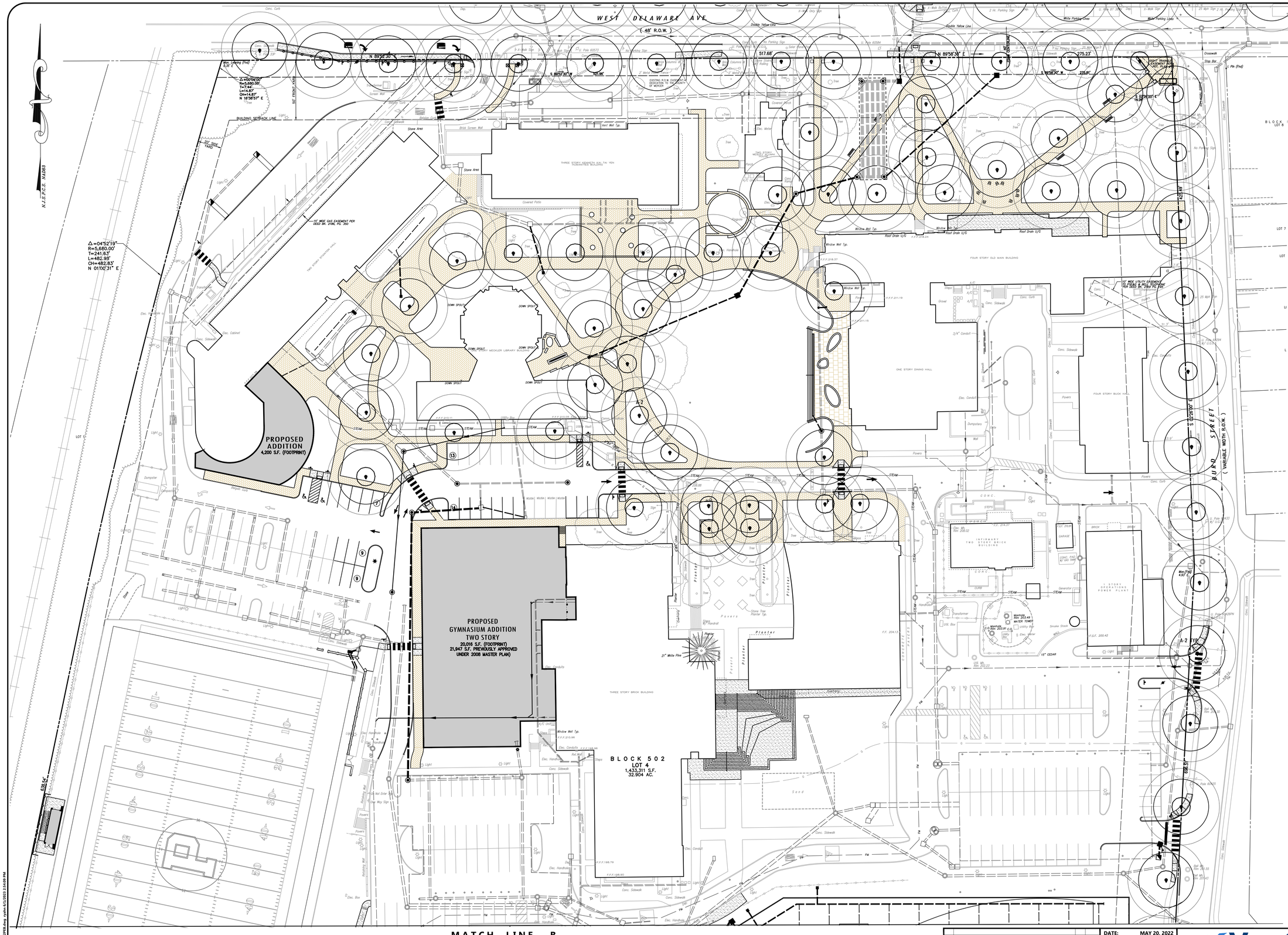
WEST DELAWARE AVE.
(48' R.O.W.)
N 89°58'30" E
517.68'
S 89°58'30" W
931.96'
N 89°58'30" E
275.23'
S 89°58'30" W
275.9'
S 00°26'00" E
1425.69'
S 00°26'00" E
1428.54'
S 00°26'00" E
1428.54'
BURD STREET
(VARIABLE WIDTH R.O.W.)
N.J.S.P.C.S. NAD83
BUILDING SETBACK LINE
50' FRONT YARD
15' WIDE GAS EASEMENT PER DEED BK. 2186, PG. 350
Δ=04°52'19"
R=5,680.00'
T=241.63'
L=482.98'
CH=482.83'
N 01°00'31" E
Δ=00°08'00"
R=5,680.00'
T=7.44'
L=14.87'
CH=14.87'
N 19°26'57" E
EXISTING R.O.W. EASEMENT DEDICATION TO PENNINGTON OF MOOER
PROPOSED ADDITION
4,200 S.F. (FOOTPRINT)
PROPOSED GYMNASIUM ADDITION
TWO STORY
20,016 S.F. (FOOTPRINT)
21,947 S.F. PREVIOUSLY APPROVED UNDER 2008 MASTER PLAN)
BLOCK 502
LOT 4
1,433,311 S.F.
32.904 AC.
BLOCK 1
LOT 8
LOT 7
LOT
THREE STORY KENNETH GAI-TAI YEN SCIENCE BUILDING
THE VERRY ELEVATION HALL
THE MOEHLER LIBRARY BUILDING
FOUR STORY OLD MAIN BUILDING
ONE STORY DINING HALL
FOUR STORY BUCK HALL
INFIRMARY TWO STORY BRICK BUILDING
3 STORY OPERATIONS POWER PLANT
THREE STORY BRICK BUILDING
Stone Area
Brick Screen Wall
Covered Patio
Covered Walk
Vent Wall Typ.
Window Well Typ.
Roof Drain T/G
Down Spout
Steam
Conc. Sidewalk
Conc. Curb
Asphalt
Dumpster
Dumpsters
Generator
Transformer
Utility Box
Utility Vault
Smoke Stack
Water Tower
Flagpole
Planter
Stone Tree Planter Typ.
Retaining Wall
Handrail
Ramp
Steps
Crosswalk
Stop Bar
Light Standard
Fire Hydrant
Sign
Tree
Shrub
Hedge
Fence
Gate
Guide Rail
Curb Inlet
Drainage Manhood
Sanitary Manhole
Gas Valve
Gas Meter
Electric Meter
Electric Manhole
Electric Box
Electric Cabinet
Electric Conduit
Transformer
Telephone Box
Telephone Manhole
Overhead Wires
Utility Pole
Guy Wire
Water Valve
Water Meter
Water Main
Gas Main
Sanitary Sewer
Storm Sewer
Drainage Inlet
Drainage Manhole
Headwall
Flared End Section
Concrete
Brick
Gravel
Sand
Grass
Mulch
Shrubs
Bollard
Do Not Enter Sign
One Way Sign
No Parking Sign
Stop Sign
Speed Limit Sign
Double Yellow Line
White Parking Lines
Parking Sign
Street Sign
Light
Light Standard
Flood Light
Wall Pack Light
Pole Light
Conc. Curb
Conc. Sidewalk
Conc. Gutter
Conc. Steps
Conc. Pad w/ Gas Tank
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Conc. Pad w/ Handrail
Conc. Pad w/ Ramp
Conc. Pad w/ Steps
Conc. Pad w/ Planter
Conc. Pad w/ Stone Tree Planter Typ.
Conc. Pad w/ Covered Walk
Conc. Pad w/ Covered Patio
Conc. Pad w/ Vent Wall Typ.
Conc. Pad w/ Window Well Typ.
Conc. Pad w/ Roof Drain T/G
Conc. Pad w/ Down Spout
Conc. Pad w/ Steam
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Conc. Pad w/ Conc.

MATCH LINE B

N.J.S.P.C.S. NAD83

N 17°51'08" E

STATE OPEN WATER WETLANDS BUFFER LINE

50' TRANSITION BUFFER LINE

MODIFIED TRANSITION AREA

WETLANDS 74,449 S.F. 1.71 AC.

CENTERLINE OF FORMER STREAM

MODIFIED TRANSITION AREA FROM THE PRIOR NJDEP TRANSITION AREA WAIVERS--AVERAGING PLAN NJDEP FILE NO. 1108-07-0001.1 AND THE ECOLSCIENCES' DECEMBER 2020 WETLANDS DELINEATION

N 76°08'52" W 10.00'

WETLAND SHELF

STATE OPEN WATER WETLANDS BUFFER LINE

50' BUFFER LINE

50'

"15' WIDE & VARIABLE WIDTH DRAINAGE EASEMENT

VAR. WIDTH FIRE ACCESS EASEMENT

Stone Path

Stone Stairs

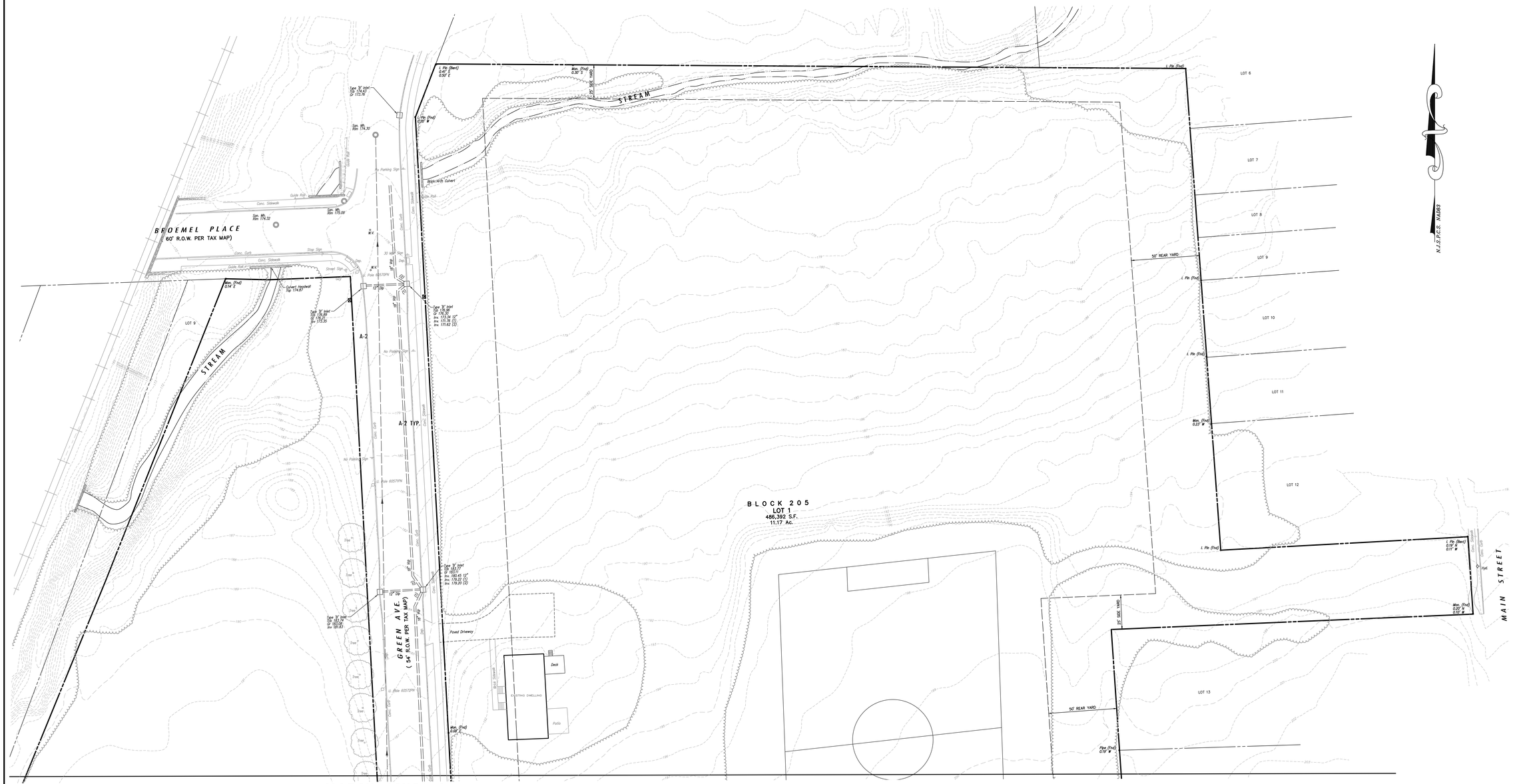
Stone Wall

Flower Beds

Stone Wall

Stone Wall

Stone Wall



LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
	LIMIT OF DISTURBANCE	
	SILT FENCE	
	INLET PROTECTION	

TOTAL PROJECT DISTURBANCE:
393,351 S.F. (9.030 AC.)

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION DEBRIS TO BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.
2. CONTRACTOR TO PROVIDE SECURE STAGING AREA ON-SITE. LOCATION TO BE AGREED UPON BY SCHOOL.
3. CONTRACTOR TO MAINTAIN SAFE PEDESTRIAN ACCESS FOR SCHOOL STAFF AND STUDENTS DURING CONSTRUCTION.
4. CONTRACTOR TO PROVIDE EMERGENCY ACCESS TO SCHOOL AT ALL TIMES.
5. ALL SEDIMENT DROPPED, SPILLED OR TRACKED ON PAVED SURFACES TO BE REMOVED IMMEDIATELY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SOIL IMPORT OR EXPORT PERMIT(S) REQUIRED, INCLUDING FEES.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL ON-SITE SAFETY AND SECURITY. ALL SAFETY PRECAUTIONS MUST BE UNDERTAKEN AND MAINTAINED AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES. NO SEPARATE PAYMENT SHALL BE MADE FOR ON-SITE SAFETY & SECURITY. THE COSTS OF ONSITE SAFETY AND SECURITY SHALL BE INCLUDED IN COST OF THE WORK.
8. ALL CONCRETE SIDEWALK TO BE ADA COMPLIANT WITH A MAX. CROSS SLOPE OF 2.0% AND A MAX. RUNNING SLOPE OF 5.0% SIDEWALK WITH A RUNNING SLOPE GREATER THAN 5% REQUIRES AN ADA COMPLIANT HANDRAIL. NO SIDEWALK SHALL HAVE A RUNNING SLOPE GREATER THEN 8.33%
9. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE CONFINED TO THE DESIGNATED WORK AREA. NO USE OF ADDITIONAL AREA, EVEN FOR EQUIPMENT OR MATERIAL STORAGE, IS PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE OWNER. DESIGNATED WORK AREA SHALL BE DETERMINED AT PRE-CONSTRUCTION MEETING
10. ALL DISTURBED AREAS TO BE STABILIZED WITH 5 INCHES OF TOPSOIL, FERTILIZER, LIME, MULCH AND TACK WITHIN LIMIT OF DISTURBANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE., CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND AND ALL OF THE EXISTING INFRASTRUCTURE THE CONTRACTOR DAMAGED DURING CONSTRUCTION.
12. ALL BACKFILL, FILL AREAS AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% UNLESS OTHERWISE NOTED ON THE PLANS.

REFERENCE DATUM:

1. VERTICAL DATUM USED BASED ON REF. PLAN NO. 1 AND NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83

GENERAL NOTES:

1. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SURVEY. THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT OF WAYS, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT COMPREHENSIVE TITLE SEARCH.
2. THIS MAP REFLECTS EXISTING SITE CONDITIONS AS THE RESULT OF A FIELD SURVEY PERFORMED BY VAN CLEEF ENGINEERING ASSOCIATES ON 11/22/21.
3. THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. CALL **1-800-272-1000** TO ORDER UTILITY MARKOUTS.
7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

REV	DESCRIPTION		DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/03
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE:	MAY 20, 2022
SCALE:	1"=30'
DESIGNED BY:	JAB
DRAWN BY:	RRF/RKY
CHECKED BY:	PDQ
JOB NO.	20-02-PEB

JAMES A. BASH — 5/20/22
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE05225800 — DATE

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

SOIL EROSION & SEDIMENT CONTROL PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

08A
17

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED 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. VAN CLEEF ENGINEERING ASSOCIATES FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

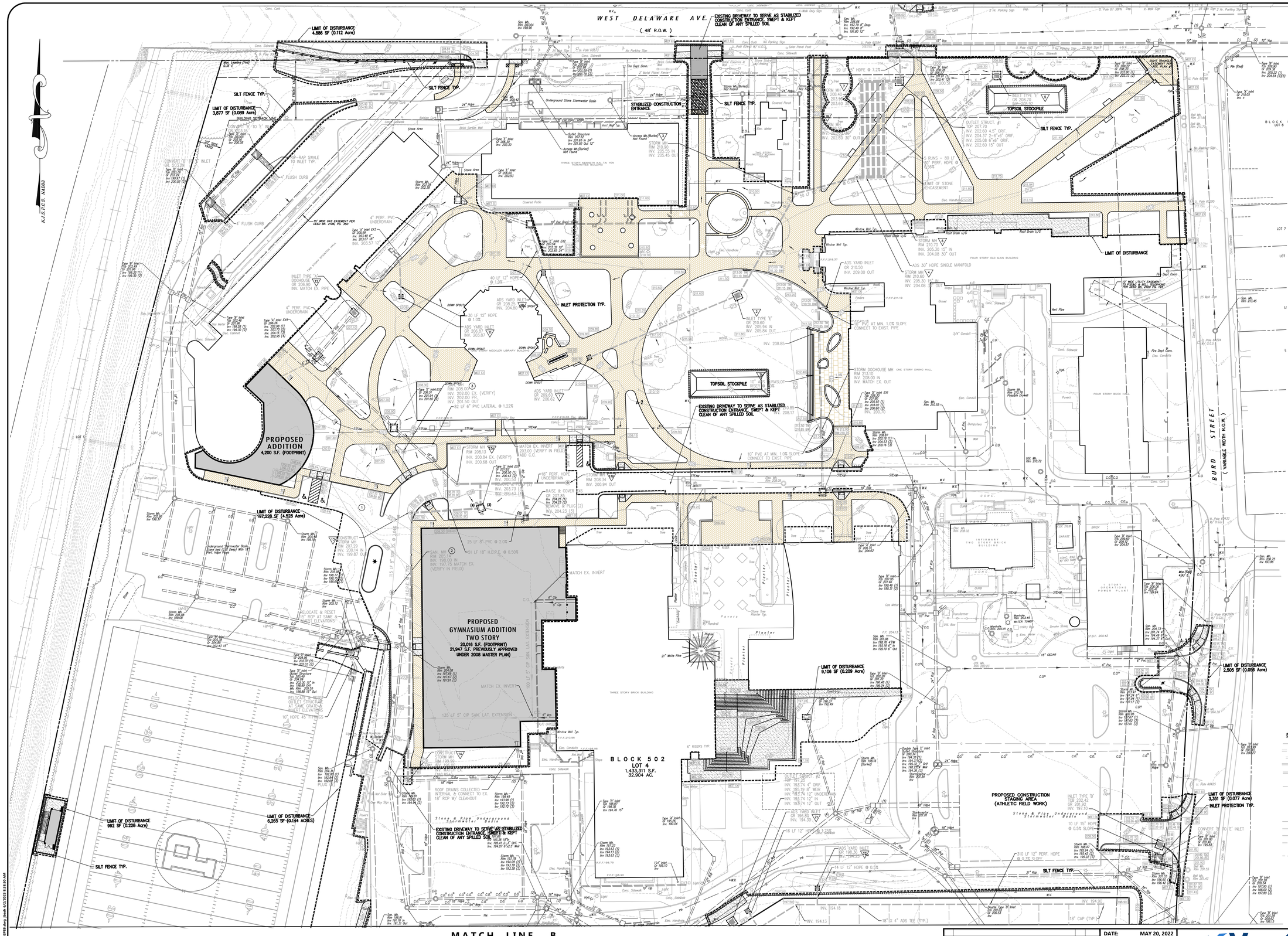
SERIAL NO. _____

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW!
Know what's below. Call before you dig 1-800-272-1000
Dig Safely.

F:\Jobs\JOBDEPT\DWG\PLANS\PENNSCL_SITEPLAN_20029B.dwg, Jbash 6/2/2023 8:15:59 AM

MATCH LINE A

N.J.S.P.C.S. NAD83
BLOCK 206
LOT 10
268,865 S.F.
6.17 Ac.
LOT 8
LOT 11
LOT 31
LOT 32
LOT 33
LOT 34
LOT 36
WEST DELAWARE AVE.
(48' R.O.W.)
50' FRONT YARD
25' SIDE YARD
Tennis Courts
Tennis Courts
Infield Mix
Backstop
Bleacher
Bench
Chain Link Fence
Scoreboard
Composting Area
Stone Driveway
Paved Driveway
Side Driveway
Paved Path
Stone Parking Area
Garden Area
Gazebo
Shed
Deck
Brick
Fence
Conc. Sidewalk
Conc. Curb
Conc. Patio
Duquot
Backstop
Bent Pipe (Fnd)
I. Pin (Fnd)
Rail Mon. (Fnd) 0.43' W
Mon. (Fnd) 0.48' W
0.18' E
Broken Mon. (Fnd) 0.04' W
Mon. (Fnd)
Gas Outlet on Shed
Post & Chain Typ.
Post & Chain
Bollard
Hyd.
Spot Elevs.
Sign Table
Sign Table
Sign Table



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LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
	CONTOUR ELEVATION	100
	LIMIT OF DISTURBANCE	
	SILT FENCE	
	INLET PROTECTION	

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

TOTAL PROJECT DISTURBANCE: 393,351 S.F. (9.030 AC.)

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE:	MAY 20, 2022
SCALE:	1"=30'
DESIGNED BY:	JAB
DRAWN BY:	RRF/RKY
CHECKED BY:	PDQ
JOB NO.	20-02-PEB

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005
5/20/22
DATE

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VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
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CERT. OF AUTHORIZATION NO. 24GA28132300

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SOIL EROSION & SEDIMENT CONTROL PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

08C 17

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SERIAL NO. _____

811 NEW JERSEY ONE CALL
Know what's below. Call before you dig or 1-800-272-1000
TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW!
Dig Safely.

F:\Jobs\x\2002PEB\DWG\PLAN_PENNINGTON_SITEPLAN_2002PEB.dwg Jbash 6/2/2023 8:38:09 AM

MATCH LINE B

N.A.S.P.E.G.S. NAD83

STABILIZED CONSTRUCTION ENTRANCE

INLET PROTECTION TYP.

SILT FENCE TYP.

LIMIT OF DISTURBANCE
157,656 SF (3.619 ACRES)

LIMIT OF DISTURBANCE
5,386 SF (0.124 ACRE)

LIMIT OF DISTURBANCE
1,942 SF (0.045 ACRE)

MODIFIED TRANSITION AREA FROM THE PRIOR NJDEP TRANSITION AREA WAIVERS–AVERAGING PLAN NJDEP FILE NO. 1108–07–0001.1 AND THE ECOLSCIENCES' DECEMBER 2020 WETLANDS DELINEATION

50' TRANSITION BUFFER LINE

MODIFIED TRANSITION AREA

WETLANDS
74,449 SF.
1.71 AC.

CENTERLINE OF FORMER STREAM

EMERGENCY ACCESS EASEMENT

15' WIDE & VARIABLE WIDTH DRAINAGE EASEMENT

VAR. WIDTH FIRE ACCESS EASEMENT

TOTAL PROJECT DISTURBANCE:
393,351 S.F. (9.030 AC.)

BURD STREET
(VARIABLE WIDTH R.O.W.)

O'HANLAN AVE.
(45' R.O.W.)

LANNING AVE.
(50' R.O.W.)

LOT 32 · LOT 15 · LOT 14 · LOT 13 · LOT 12 · LOT 11 · LOT 10 · LOT 9 · BLOCK 502 LOT 8 · LOT 5

EXISTING DWELLING · GARAGE · SHED

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
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Dig Safely.

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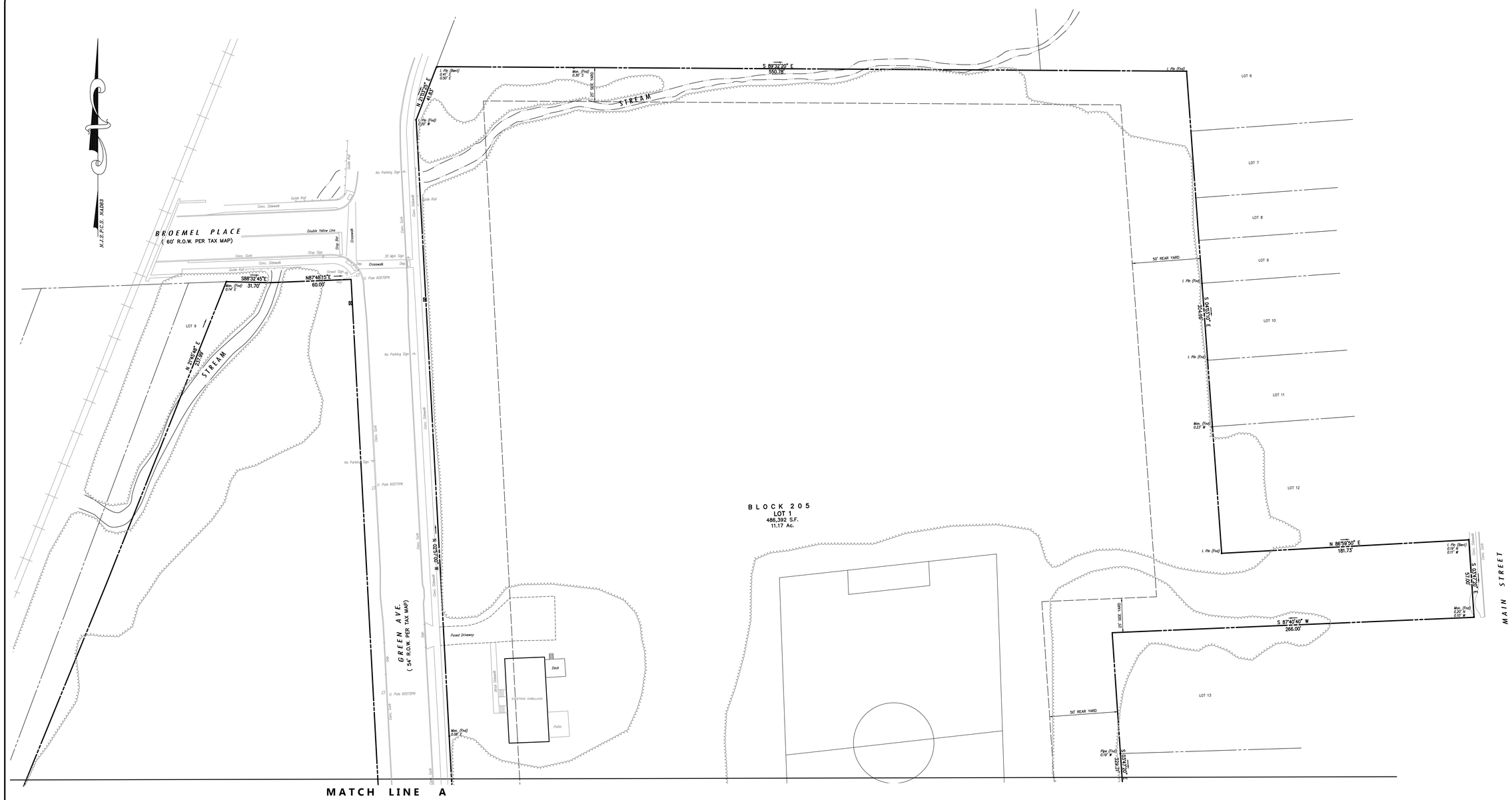


Soil De-compaction and Testing Requirements

Soil Compaction Testing Requirements

1. Subgrade soils **prior to the application of topsoil** (see permanent seeding and stabilization notes for topsoil requirements) shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent vegetative cover.

2. Areas of the site which are subject to compaction testing and/or mitigation are **graphically denoted** on the certified soil erosion control plan.

3. **Compaction testing locations** are denoted on the plan. A copy of the plan or portion of the plan shall be used to mark locations of tests, and attached to the compaction mitigation verification form, available from the local soil conservation district. This form must be filled out and submitted prior to receiving a certificate of compliance from the district.

4. In the event that testing indicates compaction in excess of the maximum thresholds indicated for the simplified testing methods (see details below), the contractor/owner shall have the option to perform either (1) compaction mitigation over the entire mitigation area denoted on the plan (excluding exempt areas), or (2) perform additional, more detailed testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation. Additional detailed testing shall be performed by a trained, licensed professional.

Compaction Testing Methods

A. Probing Wire Test (see detail)
B. Hand-held Penetrometer Test (see detail)
C. Tube Bulk Density Test (licensed professional engineer required
D. Nuclear Density Test (licensed professional engineer required)

Note: Additional testing methods which conform to ASTM standards and specifications, and which produce a dry weight, soil bulk density measurement may be allowed subject to District approval.

Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.

Procedures for Soil Compaction Mitigation

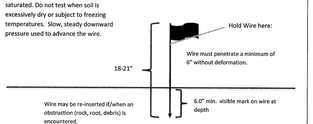
Procedures shall be used to mitigate excessive soil compaction **prior to placement of topsoil** and establishment of permanent vegetative cover.

Restoration of compacted soils shall be through deep scarification/tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.). In the alternative, another method as specified by a New Jersey Licensed Professional Engineer maybe substituted subject to District Approval.

Simplified Testing Methods

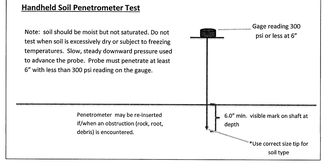
Probing Wire Test- 15.5 ga steel wire (survey flag)

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the wire.



Handheld Soil Penetrometer Test

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the probe. Probe must penetrate at least 6" with less than 300 psi reading on the gauge.



SOIL MANAGEMENT LEGEND

SOIL COMPACTION TESTING AREAS

RECOMMENDED SOIL COMPACTION TEST LOCATION

GRAPHIC SCALE
0 15 30 60
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F:\Jobfile\2002PEB\DWG\PLN_PENNSCH_SITEPLAN_2002PEB.dwg, rpalm 6/1/2023 3:02:41 PM

MATCH LINE A

LEGEND

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G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE/PAVER REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

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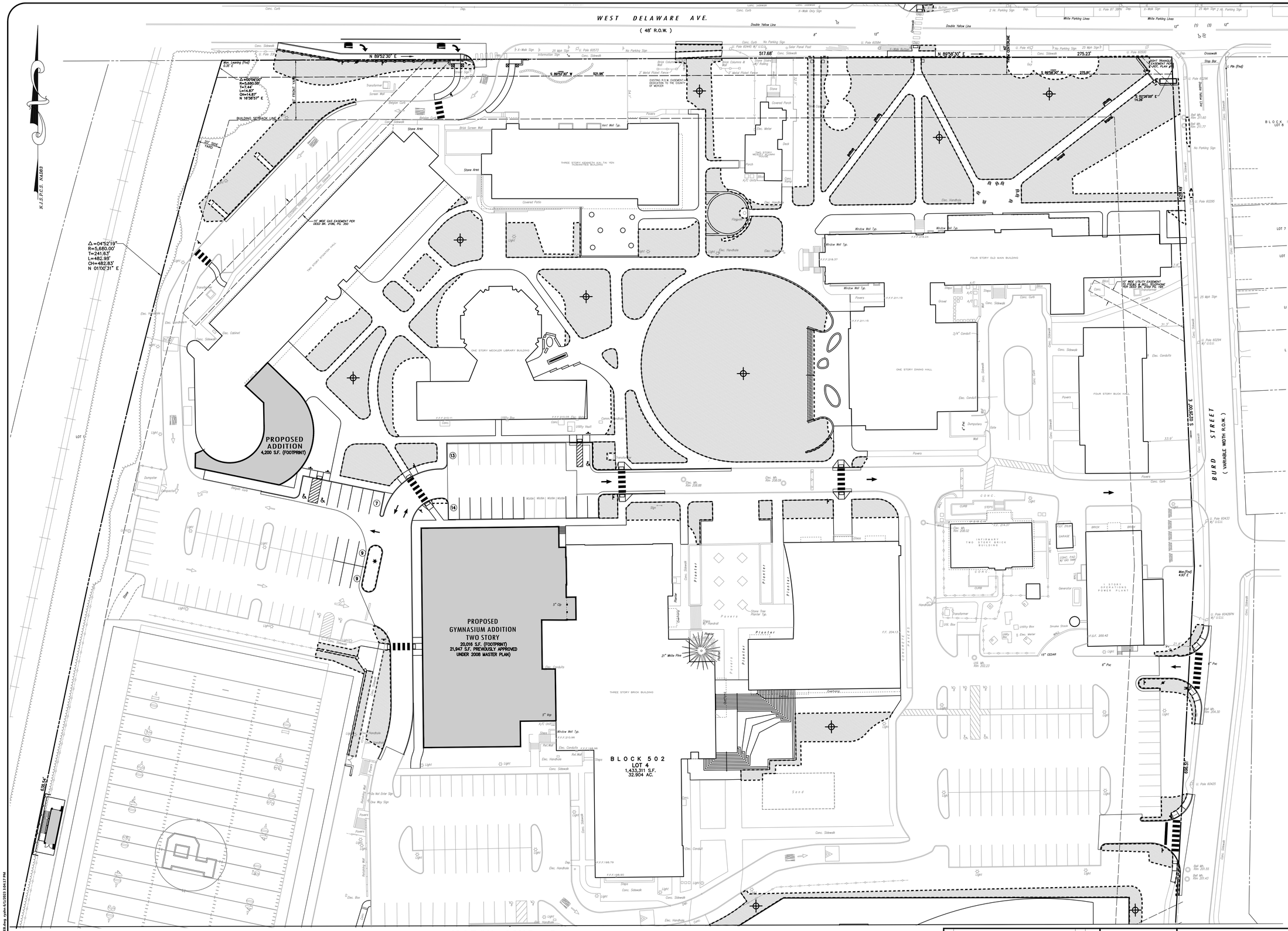

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1. VERTICAL DATUM USED BASED ON REF. PLAN NO. 1 AND NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83

GENERAL NOTES:

1. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SURVEY. THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT OF WAYS, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT COMPREHENSIVE TITLE SEARCH.
2. THIS MAP REFLECTS EXISTING SITE CONDITIONS AS THE RESULT OF A FIELD SURVEY PERFORMED BY VAN CLEEF ENGINEERING ASSOCIATES ON 11/22/21.
3. THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. CALL **1-800-272-1000** TO ORDER UTILITY MARKOUTS.
8. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
9. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION DEBRIS TO BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.
2. CONTRACTOR TO PROVIDE SECURE STAGING AREA ON-SITE. LOCATION TO BE AGREED UPON BY SCHOOL.
3. CONTRACTOR TO MAINTAIN SAFE PEDESTRIAN ACCESS FOR SCHOOL STAFF AND STUDENTS DURING CONSTRUCTION.
4. CONTRACTOR TO PROVIDE EMERGENCY ACCESS TO SCHOOL AT ALL TIMES.
5. ALL SEDIMENT DROPPED, SPILLED OR TRACKED ON PAVED SURFACES TO BE REMOVED IMMEDIATELY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SOIL IMPORT OR EXPORT PERMIT(S) REQUIRED, INCLUDING FEES.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL ON-SITE SAFETY AND SECURITY. ALL SAFETY PRECAUTIONS MUST BE UNDERTAKEN AND MAINTAINED AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES. NO SEPARATE PAYMENT SHALL BE MADE FOR ON-SITE SAFETY & SECURITY. THE COSTS OF ONSITE SAFETY AND SECURITY SHALL BE INCLUDED IN COST OF THE WORK.
8. ALL CONCRETE SIDEWALK TO BE ADA COMPLIANT WITH A MAX. CROSS SLOPE OF 2.0% AND A MAX. RUNNING SLOPE OF 5.0%. SIDEWALK WITH A RUNNING SLOPE GREATER THAN 5% REQUIRES AN ADA COMPLIANT HANDRAIL. NO SIDEWALK SHALL HAVE A RUNNING SLOPE GREATER THEN 8.33%.
9. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE CONFINED TO THE DESIGNATED WORK AREA. NO USE OF ADDITIONAL AREA, EVEN FOR EQUIPMENT OR MATERIAL STORAGE, IS PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE OWNER. DESIGNATED WORK AREA SHALL BE DETERMINED AT PRE-CONSTRUCTION MEETING
10. ALL DISTURBED AREAS TO BE STABILIZED WITH 5 INCHES OF TOPSOIL, FERTILIZER, LIME, MULCH AND TACK WITHIN LIMIT OF DISTURBANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND AND ALL OF THE EXISTING INFRASTRUCTURE THE CONTRACTOR DAMAGED DURING CONSTRUCTION.
12. ALL BACKFILL, FILL AREAS AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% UNLESS OTHERWISE NOTED ON THE PLANS.

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE/PAVER REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. ANY PLAN AS SIGNED SPECIFICALLY PREPARED FOR THE OWNER NAMED THEREON. 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.

SERIAL NO. _____

NEW JERSEY ONE CALL 811 Know what's below. Call before you dig or 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW! Dig Safely.

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE:	MAY 20, 2022
SCALE:	1"=30'
DESIGNED BY:	JAB
DRAWN BY:	RRF/RKY
CHECKED BY:	PDQ
JOB NO.	20-02-PEB

5/20/22
JAMES A. BASH — DATE
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
A AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

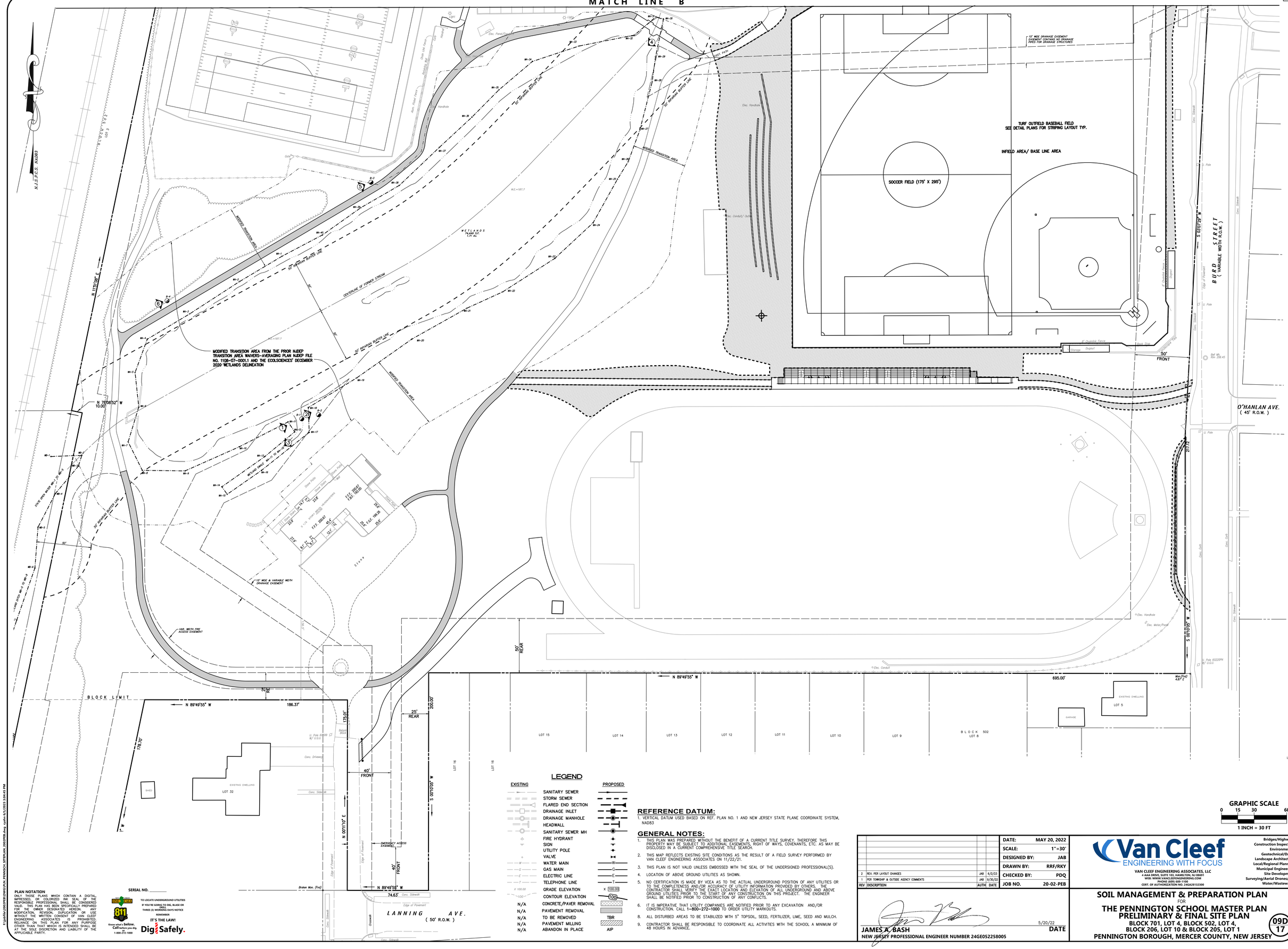
Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

SOIL MANAGEMENT & PREPARATION PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4, BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

09C 17

P:\Jobs\2020\PEB\DWG\FAL_PENNSCH_SITEPLAN_2002PEB.dwg sjahn 6/1/2023 3:04:17 PM

MATCH LINE B


N.J.S.P.C.S. NAD83
N 11°51'08" E
N 78°08'52" W
10.00'
STATE OPEN WATER WETLANDS
50' TRANSITION BUFFER LINE
MODIFIED TRANSITION AREA
WETLANDS
74,449 S.F.
1.71 AC.
CENTERLINE OF FORMER STREAM
MODIFIED TRANSITION AREA FROM THE PRIOR NJDEP TRANSITION AREA WAIVERS--AVERAGING PLAN NJDEP FILE NO. 1108-07-0001.1 AND THE ECOLSCIENCES' DECEMBER 2020 WETLANDS DELINEATION
WETLAND DRAIN
50' TRANSITION BUFFER LINE
MODIFIED TRANSITION AREA
50' TRANSITION BUFFER LINE
MODIFIED TRANSITION AREA
50' TRANSITION BUFFER LINE
MODIFIED TRANSITION AREA
15' WIDE DRAINAGE EASEMENT
EASEMENT CONTAINS NO DRAINAGE PIPES FOR DRAINAGE STRUCTURES
TURF OUTFIELD BASEBALL FIELD
SEE DETAIL PLANS FOR STRIPING LAYOUT TYP.
INFIELD AREA/ BASE LINE AREA
SOCCER FIELD (175' X 295')
50' FRONT
BIRD STREET
(VARIABLE WIDTH R.O.W.)
S 03°07'29" W
217.12'
S 00°10'05" W
O'HANLAN AVE.
(45' R.O.W.)
Storm Path
Storm Drain
Inlet
Manhole
Top=100.00
Inv=97.00
FFE=100.67
FFE=100.00
FFE=100.26
Steps
Steps
Ramp
Ramp
Steps
Steps
Ramp
Ramp
Steps
Steps
Ramp
Ramp

MANAGEMENT OF HIGH ACID PRODUCING SOILS

Where Applicable
This practice is applicable to any high acid-producing soil materials. Such materials have been found in the Coastal Plain areas of Burlington, Camden, Cumberland, Gloucester, Mercer, Middlesex, Monmouth, Ocean, Salem and Somerset Counties.

Methods and Materials
1. Limit the excavation area and exposure time when high acid-producing soils are encountered.
2. Topsoil stripped from the site shall be stored separately from temporarily stockpiled high acid-producing soils.
3. Stockpiles of high acid-producing soil should be located on level land to minimize its movement, especially when this material has a high clay content.
4. Temporarily stockpiled high acid-producing soil material to be stored more than 48 hours should be covered with properly anchored, heavy grade sheets of polyethylene where possible. If not possible, stockpiles shall be covered with a minimum of 3 to 6 inches of wood chips to minimize erosion of the material. Silt fence shall be installed at the toe of the slope to contain movement of the stockpiled material. Topsoil shall not be applied to the stockpiles to prevent topsoil contamination with high acid-producing soil.
5. High acid-producing soils with a pH of 4.0 or less or containing iron sulfide (including borrow from cuts or dredged sediment) shall be ultimately placed or buried with limestone applied at the rate of 10 tons per acre (or 460 pounds per 1,000 square feet of surface area) and covered with a minimum of 12 inches of settled soil with a pH of 5.0 or more except as follows:
   a. Areas where trees or shrubs are to be planted shall be covered with a minimum of 24 inches of soil with a pH or 5 or more.
   b. Disposal areas shall not be located within 24 inches of any surface of a slope or bank, such as berms, stream banks, ditches, and others, to prevent potential lateral leaching damages.
6. Equipment used for movement of high acid-producing soils should be cleaned at the end of each day to prevent spreading of high acid-producing soil materials to other parts of the site, into streams or stormwater conveyances, and to protect machinery from accelerated rusting.
7. Non-vegetative erosion control practices (stone tracking pads, strategically placed limestone check dam, sediment barrier, wood chips) should be installed to limit the movement of high acid-producing soils from, around, or off the site.
8. Following burial or removal of high acid-producing soil, topdosing and seeding of the site (see Temporary Vegetative Cover for Soil Stabilization, Permanent Vegetative Cover for Soil Stabilization, and Topsoiling), monitoring must continue for a minimum of 6 months to ensure there is adequate stabilization and that no high acid-producing soil materials emerge. If problems still exist, the affected area must be treated as indicated above to correct the problem.

MAINTAINING VEGETATION

Methods and Materials

A preventive maintenance program anticipates requirements and accomplishes work when it can be done with least effort and expense to insure adequate vegetative cover.

Maintenance should occur on a regular basis, consistent with favorable plant growth, soil, and climatic conditions. This involves regular seasonal work for mowing, fertilizing, liming, watering, pruning, fire control, weed and pest control, reseeding, and timely repairs.

The degree of preventive maintenance needed depends upon the type of vegetation and its proposed function or use.

1. Mowing is a recurring practice and its intensity depends upon the function of the ground cover. On high to moderate (A to B) maintenance areas, such as lawns, certain recreation fields, and picnic areas, mowing will be frequent (2 to 7 day intervals) and typically at a height of 2.5 to 3 inches. Return clippings to the lawn unless too long to the turf to reduce the amount of fertilizer needed to maintain the turf by as much as 50%. Some turf mixtures can be managed as natural areas requiring only one (cool season mixtures) or two (warm season mixtures) mowings per year. Mowing of naturalized areas is typically done at heights no less than 4 inches and should not be done between April 1st and July 15th to avoid disturbing ground nesting birds. The large amount of clipping usually generated by mowing naturalized areas will need to be removed and/or dispersed so the vegetation is not smothered. Burning of naturalized areas is sometimes used to manage naturalized turfs. Low maintenance (D) areas may be left unmowed to permit natural succession. See pg. 4–13 footnote #4, Maintenance Levels A, B, C and D in the Standard for Permanent Vegetative Cover, Table 4–3.
2. Incorporation of organic matter (for example, mature compost) into the soil will substantially reduce the need for fertilizer and irrigation inputs.
3. Fertilizer and lime should be applied as needed to maintain a dense stand of desirable species. Frequently mowed areas and those on sandy soils will require more frequent fertilization but at lower rates/application.
4. Lime requirement should be determined by soil testing every 2 or 3 years. Fertilization may increase the need for liming. Contact the local county extension office for details on soil testing and fertilization and pest control recommendations online at http://njaes.rutgers.edu/county/.
5. Fertilization and additions of other soil amendments are not recommended for managing native vegetation such as in the Pinelands National Reserve. See the Standard for Permanent Vegetative Stabilization for specific requirements in the PNR.
6. Weed invasion may result from abusive mowing and from inadequate fertilizing and liming. Many newly established grasses will not survive if mowed at heights below 2.5 inches and at intervals greater than 7 days. Brush invasion is a common consequence of lack of mowing. The amount of weeds or brush that can be tolerated in any vegetated area depends upon the intended use of the area. Drainage ways may require rapid infestation by weed and woody plants. These should be controlled, since they often reduce drainage way efficiency. Control of weeds or brush is accomplished by using herbicides or mechanical methods.
7. Fire hazard is greater where dry vegetation has accumulated. The taller the vegetation, the greater the hazard.
8. Prune trees and shrubs to remove dead or damaged branches. Remove undesirable or pernicious plants in accord with Standard for Vegetative Cover and enhance quality of permanent vegetative cover.

REPAIRING VEGETATION

Methods and Materials

1. Site Preparation
   A. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with Standard for Land Grading.
   B. Immediately prior to seeding and topsoil application, the subsoil shall be evaluated for compaction in accordance with the Standard for Land Grading .
   C. Topsoil should be handled only when it is dry enough to work without damaging the soil structure. A uniform application to a depth of 5 inches (unsettled) is required on all sites. Topsoil shall be amended with organic matter, as needed, in accordance with the Standard for Topsoiling.
   D. Install needed erosion control practices or facilities such as diversions, grade–stabilization structures, channel stabilization measures, sediment basins, and waterways.
2. Seedbed Preparation
   A. Uniformly apply ground limestone and fertilizer to topsoil which has been spread and firmed, according to soil test recommendations such as offered by Rutgers Cooperative Extension. Soil sample mailers are available from the local Rutgers Cooperative Extension offices (http://njaes.rutgers.edu/county/). Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet of 10–20–10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise and incorporated into the surface 4 inches. If fertilizer is not incorporated, apply one–half rate application of the above fertilizer, seedbed preparation and repeat another one–half rate application of the same fertilizer within 3 to 5 weeks after seeding.
   B. Work lime and fertilizer into the topsoil as nearly as practical to a depth of 4 inches with a disc, spring–tooth harrow, or other suitable equipment. The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonably uniform seedbed is prepared.
   C. High acid producing soil. Soils having a pH of 4 or less or containing iron sulfide should be covered with a minimum of 12 inches of soil having a pH of 5 or more before initiating seedbed preparation. See Standard for Management of High Acid–Producing Soils for specific requirements.
3. Seeding
   A. Select a mixture from Table 4–3 or use a mixture recommended by Rutgers Cooperative Extension or Natural Resources Conservation Service which is approved by the Soil Conservation District. Seed germination shall have been tested within 12 months of the planting date. No seed shall be accepted with a germination test date more than 12 months old unless retested.
   1. Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent vegetation is established prior to a report of compliance inspection. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage with the specified seed mixture for the seeded area and mowed once.
   2. Warm–season mixtures are appropriate which maximize growth at temperatures between 85o F and above. See Table 4–3 mixtures 1 to 7. Planting rates for warm–season grasses shall be the amount of Pure Live Seed (PLS) as determined by germination testing results.
   3. Cool–season mixtures are grasses and legumes which maximize growth at temperatures below 85oF. Many grasses become active at 65oF. See Table 4–3, mixtures 8–20. Adjustment of planting rates to compensate for the amount of PLS is not required for cool season grasses.
   B. Conventional Seeding is performed by applying seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked seedings, seed shall be incorporated into the soil within 24 hours of seedbed preparation to a depth of 1/4 to 1/2 inch, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on coarse–textured soil.
   C. After seeding, firming the soil with a corrugated roller will assure good seed–to–soil contact, restore capillarity, and improve emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized.
   D. Hydroseeding is a broadcast seeding method usually involving a truck, or trailer–mounted tank, with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Short–fibered mulch may be applied with a hydroseeder following seeding. (also see Section 4–Mulching below). Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. When poor seed to soil contact occurs, there is a reduced seed germination and growth.
4. Mulching
   Mulching is required on all seeding. Mulch will protect against erosion before grass is established and will promote faster and earlier establishment. The existence of vegetation sufficient to control soil erosion shall be deemed compliance with this mulching requirement.
   A. Straw or Hay. Unrotted small grain straw, hay free of seeds, to be applied at the rate of 1/2 to 2 tons per acre (1 to 90 pounds per 1,000 square feet), except that where a crimper is used instead of a liquid mulch–binder (tackifying or adhesive agent), the rate of application is 3 tons per acre. Mulch chopper–blowers must not grind the mulch. Hay mulch is not recommended for establishing fine turf or lawns due to the presence of weed seed. Application – Spread mulch uniformly by hand or mechanically so that at least 85% of the soil surface is covered. For uniform distribution of hand–spread mulch, divide area into approximately 1,000 square feet sections and distribute 70 to 90 pounds within each section. Anchoring shall be accomplished immediately after placement to minimize loss by wind or water. This may be done by one of the following methods, depending upon the size of the area, steepness of slopes, and costs.
      1. Peg and Twine. Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss–cross and a square pattern. Secure twine around each peg with two or more round turns.
      2. Mulch Nettings – Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed.
      3. Crimper (mulch anchoring tool) – A tractor–drawn implement, somewhat like a disc harrow, especially designed to push or cut some of the broadcast long fiber mulch 3 to 4 inches into the soil so as to anchor it and leave part standing upright. This technique is limited to areas traversable by a tractor, which must operate on the contour of slopes. Straw mulch rate must be 3 tons per acre. No backfiring or otherwise ignited is required.
   B. Liquid Mulch–Binders – May be used to anchor salt hay, hay or straw mulch.
      a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance.
   b. Use one of the following:
      (1) Organic and Vegetable Based Binders – Naturally occurring, powder–based, hydrophilic materials when mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membroned networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turf grass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state.
      (2) Synthetic Binders – High polymer synthetic emulsion, miscible with water when diluted and, following application of mulch, drying and curing, shall no longer be soluble or dispersible in water. Binder shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass.
      Note: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.
   C. Wood–fiber or paper–fiber mulch – shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as recommended by the product manufacturer) and may be applied by a hydroseeder. Mulch shall not be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding periods in spring and fall.
   D. Pelletized mulch – compressed and extruded paper and/or wood fiber product, which may contain co–polymers, tackifiers, fertilizers, and coloring agents. The dry pellets, when applied to a seeded area and watered, form a mulch mat. Pelletized mulch shall be applied in accordance with the manufacturer's recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60–75 lbs/1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has been found to be beneficial for use on small lawn or renovation areas, seeded areas where weed free mulch is desired or on sites where straw mulch and tackifier agent are not practical or desirable. Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage.
   E. Wood–Cellulose Fiber Mulch – shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as recommended by the product manufacturer) and may be applied by a hydroseeder. This mulch shall not be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding periods in spring and fall.
   F. Pelletized mulch – Compressed and extruded paper and/or wood fiber product, which may contain co–polymers, tackifiers and coloring agents. The dry pellets, when applied to a seeded area and watered, forms mulch mat. Pelletized mulch shall be applies in accordance with the manufacturers recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60–75 lbs./1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has been found to be beneficial for use on small lawn or renovation areas, seeded areas where weed free mulch is desired or on sites where straw mulch and tackifier agent are not practical or desirable. Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage.

Table 4–2
Permanent Stabilization Mixtures for Various Uses

Application	PLANTING MIXTURES BY SOIL DRAINAGE CLASS/1 (see Table 4–3)		
	Excessively Drained	Well to Moderately Well Drained	Somewhat Poorly to Poorly Drained
Residential/commercial lots	10, 12, 15	6, 10, 12, 13, 14, 15	16
Pond and channel banks, dikes, berms and dams	2, 5, 6, 10	5, 6, 7, 8, 9, 15	2, 8, 16, 17
Drainage ditches, swales, detention basins	2, 9, 11	2, 7, 9, 11, 12, 17	2, 9, 16, 17
Filter Strips	12	11, 12	11, 12
Grasses waterway, spillways	2, 3, 9, 10, 12	6, 7, 9, 10, 11, 12	2, 9, 11,12
Recreation areas, athletic fields	5, 12, 15, 18	12, 13, 14, 15, 18	16
Special Problem Sites Steep slopes and banks, roadsides, borrow areas	2, 3, 4 ,6	2, 3, 5, 7, 8, 9, 10, 15, 20	2, 9, 10, 11, 12
Sand and gravel pits, Sanitary landfills	1, 2, 3, 4, 6, 20	1, 2, 3, 4, 5, 6, 8, 15, 20	2, 8
Dredged material, spoilbanks, Borrow areas	2, 3, 6, 20	2, 3, 6, 11,	2,8
Streambanks & shorelines 2	2, 8, 20, 21a	2, 8, 19b, 20, 21a, 21b	2, 8, 19a, 21a,b,c,d
Utility rights–of–way	3,7,180	3, 7	8, 9, 17

1. Refer to Soil Surveys for drainage class descriptions.
2. Refer to Soil Bioengineering Standard for additional seed mixtures.
3. Spillways only
4. See Appendix E for description of turf grasses and cultivars

Table 4–3
Standards for Soil Erosion and Sediment Control in New Jersey January 2014

PERMANENT VEGETATIVE MIXTURES, PLANTING DATES AND PLANTING RATES[1]

SEED MIXTURE [2]	PLANTING RATE/3	PLANTING DATES								MAINTENANCE LEVELS 4	REMARKS
		PLANT HARDINESS ZONES (see Figure 4-1):									
		Zone 5b, 6a		Zone 6b			Zone 7a, 7b				
	Inches	Per 1000 sq. ft.	Per Acre	4/1-7/31	8/1-10/1	3/1-4/30	5/1-8/14	8/15-9/15	9/16-10/1	3/1-4/30	5/1-8/14	8/15-9/15	9/16-10/1		
WARM SEASON SEED MIXTURES															
1. Switchgrass and/or Coastal panicgrass plus Indiangrass or Eastern Gamagrass		15 15 15	35 35 35	O	O		O		O					A-D	Use Switchgrass if pH <4.0. Switchgrass is superior wildlife cover. Eastern Gamagrass is superior wildlife cover. Bushy provides quick cover
2. Deertongue or Switchgrass Bushy		15 20 60	35 45 140	O	O		O		O					C-D	
3. Switchgrass Deertongue Little Bluestem plus Partridge pea		15 10 5 4 10	35 25 10 10 25	O	O		O		O					C-D	Pinelands mixture
4. Switchgrass Deertongue Little Bluestem Sand lovegrass Coastal panicgrass		10 10 5 4 10	25 25 10 10 25	O	O		O		O					C-D	Native warm-season mixture.
5. Bermudagrass (Cynodon dactylon) Zoysiagrass (spp)		15 30	0.35 0.70	O	O		O		O					A-D	Bermudagrass has superior salt tolerance. Zoysia has greater wear tolerance
COOL SEASON SEED MIXTURES		130	3	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O		Ground low-maintenance mixture.
6. Fine Fescue (Blend) Creeping red fescue Chewings fescue Strong Creeping Red Fescue Sheep fescue plus Perennial ryegrass plus White clover (see note at right)		45 30 5	1 .70 .10											B-D	White clover can be overseeded when sod is establish lawns
7. Strong Creeping red fescue Kentucky bluegrass Perennial ryegrass or Redtop plus White clover		130 50 50 5	3 1 1 .10	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	B-D	Suitable waterway mixture Check Irrigation more drought tolerant Use Redtop for increased drought tolerance.
8. Tall fescue (turf-type) or Strong Creeping red fescue or Perennial ryegrass Timothy		30 30 30 20	1 .70 .60	O	A[5]		O	A[5]		O	A[5]			B-D	Tall fescue best drought tolerant. Use Creeping red fescue or Sheep fescue in heavy shade Use Timpeo to suppress woody vegetation.
9. Deertongue Redtop Wild rye (Elymus) Switchgrass		20 2 15 25	.45 .05 .35 .65				O						O	C-D	Native wet mix.
10. Tall fescue (turf type) Perennial ryegrass or White clover (see note at right)		265 20 60 5	6 .5 1.40 .10	O	A[5]	A[5]	O	A[5]	A[5]	O	A[5]	A[5]	O	A-C	white clover can be excluded on lawn sites
11. Kentucky Bluegrass Tall Fescue Tall fescue		68 45 23	0.65 1 .5	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	C-D	Filter strip use for nutrient uptake.
12. Tall-type Tall fescue plus Birdsfoot trefoil		130	3	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	C-D	Tall is a managed filter strip for nutrient uptake.
13. Hard Fescue and/or Chewing fescue and/or Strong creeping red fescue Perennial ryegrass or Ky. bluegrass (blend)		175 45 45	4 1 1	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	A-C	General lawn/recreation.
14. Tall fescue Ky. bluegrass (blend) Perennial ryegrass (blend)		265 20 20	6 0.50 0.50	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	A-B	Athletic field 3 mixtures of Kentucky Bluegrass.
15. Hard fescue Chewings fescue Strong Creeping red fescue Perennial ryegrass		130 45 45 10	3 1 1 .25	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	C-D	Low-maintenance fine fescue lawn mix.
16. Rough bluegrass Strong Creeping red fescue		90 130	2 3	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	C-D	Moist shade.
17. Creeping bentgrass Creeping red fescue Alkali-redtop		45 45 5	1 1 .10	A	A[5]	O	A	A[5]	O	A	A[5]	A[5]	O	B-D	Use bentgrass under better conditions. Saltgrass will only persistent under saline conditions
18. Hard or Sheeps fescue N. E. wildflower mixture		25 .92	0.60 0.55	O	A	O	O	A	O	O	A	O	O	C-D	Required Wildflower mix. Hydroseeding not recommended.
19. a. Smooth cordgrass b. Saltmeadow cordgrass		96pl 96pl				O			O	Before July 1			O	D	Planted in the intertidal zone. Planted above mean high tide.
20. American Beachgrass		72pl	45			Before April 1			O				O	D	Coastal Panicgrass may be substituted between intertidal and foredune
21. a. Pygmycost willow b. Dwarf willow c. Redosier dogwood d. Silky dogwood		14pl 14pl 14pl 14pl		Before May 10			Before May 10			Before July 1				D	Also refer to Chapters 7.1 and 7.2 of the NRCS Engineering Field Handbook.

Table 4–3 Footnotes:

1. See Appendix B for descriptions of turf grass mixtures and cultivars. The actual amount of warm–season grass mixture used in Table 3 (seed mix 1–7) shall be adjusted to reflect the amount of PLS as determined by germination testing results. No adjustment is required for cool–season grasses (seed mixtures 8–20).
2. Seeding mixtures and/or rates not listed above may be used if recommended by the local Soil Conservation District, Natural Resources Conservation Service; recommendations of Rutgers Cooperative Extension may be used if approved by the Soil Conservation District. Legumes (white clover, flatpea, lespedeza) should be mixed with proper innoculant prior to planting.
3. Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent vegetation is established prior to a report of compliance inspection. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage of the seeded area with the specified seed mixture and mowed once. Seedbed preparation and repeat another one–half rate application of the same fertilizer within 3 to 5 weeks after seeding.
4. Maintenance Level:
   A: Intensive mowing, (2–4 days), fertilization, lime, pest control and irrigation (Examples – high–maintenance lawns, commercial and recreation areas, public facilities).
   B: Frequent mowing, (4–7 days), occasional fertilization, lime and weed control (Examples – home lawns, commercial sites, school sites).
   C: Periodic mowing (7–14 days), occasional fertilization and lime (Examples – home lawns, parks).
   D: Infrequent or no mowing, fertilization and lime the first year of establishment (Examples – roadsides, recreation areas, public open spaces)
5. Summer seedings should only be conducted when the site is irrigated. Mixes including white clover require that at least six weeks of growing season remain after seeding to ensure establishment before freezing conditions.

STANDARD FOR STABILIZATION WITH MULCH ONLY

Where Applicable
This practice is applicable to areas subject to erosion, where the season and other conditions may not be suitable for growing an erosion–resistant cover or where stabilization is needed for a short period until more suitable protection can be applied.

Methods and Materials

1. Site Preparation
   A. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with Standards for Land Grading
   B. Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways. See Standards 11 through 42.
2. Protective Materials
   A. Unrotted small–grain straw, at 2.0 to 2.5 tons per acre, is spread uniformly at 90 to 115 pounds per 1,000 square feet and anchored with a mulch anchoring tool, liquid mulch binders, or netting tie down. Other suitable materials may be used if approved by the Soil Conservation District. The approved rates above have been met when the mulch covers the ground completely upon visual inspection, so the soil cannot be seen below the mulch.
   C. Synthetic or organic soil stabilizers may be used under suitable conditions and in quantities as recommended by the manufacturer.
   D. Wood–fiber or paper–fiber mulch at the rate of 1,500 pounds per acre (or according to the manufacturer's requirements) may be applied by a hydroseeder.
   E. Mulch netting, such as paper jute, wood netting, cotton, or plastic, may be used.
   F. Woodchips applied uniformly to a minimum depth of 2 inches may be used. Woodchips will not be used on areas where flowing water could wash them into or plug a storm drain inlet.
   G. Gravel, crushed stone, or slag at the rate of 9 cubic yards per 1,000 sq. ft. applied uniformly to a minimum depth of 3 inches may be used. See 2 e–1 (ASTM C–33) is recommended.
   3. Mulch Anchoring – should be accomplished immediately after placement of hay or straw mulch to minimize loss by wind or water. This may be done by one of the following methods, depending upon the size of the area and method usually involved.
      A. Peg and Twine – Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss–cross and a square pattern. Secure twine around each peg with two or more round turns.
      B. Mulch Netting – Staple paper, cotton, or plastic nettings over mulch. Use degradable netting in areas to be mowed. Netting is available in rolls of various widths. Use on slopes greater than 3 to 1.
      C. Crimper Mulch Anchoring Coulter Tool – A tractor–drawn implement especially designed to punch and anchor mulch into the soil surface and not chopping and cutting action of a disk harrow, so the use is limited to those slopes upon which the tractor can operate safely. Soil penetration should be about 3 to 4 inches. On sloping land, the operation should be on the contour.
      D. Liquid Mulch–Binders
      1. Applications should be heavier at edges where wind catches the mulch, in valleys, and at crests of banks. Remainder of area should be uniform in appearance.
      2. Use one of the following:
         a. Organic and Vegetable Based Binders – Naturally occurring, powder based, hydrophilic materials that mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membroned networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turf grass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state.
         b. Synthetic Binders – High polymer synthetic emulsion, miscible with water when diluted and, following application of mulch, drying and curing, shall no longer be soluble or dispersible in water. Binder shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass.
         Note: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

Where Applicable
On exposed soils that have the potential for causing off–site environmental damage.

Methods and Materials

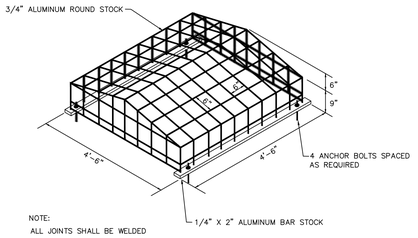
1. Site Preparation
   A. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with Standards for Land Grading, 19–1.
   B. Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways. See Standards 11 through 42.
   C. Immediately prior to seeding, the surface should be scarified 6" to 12" where there has been soil compaction. This practice is permissible only where there is no danger to underground utilities (cables, irrigation systems, etc.).
2. Seedbed Preparation
   A. Apply ground limestone and fertilizer according to soil test recommendations such as offered by Rutgers Co–operative Extension. Soil sample mailers are available from the local Rutgers Cooperative Extension offices. Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet of 10–20–10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise. Soil testing shall be performed on site and the lime application rate shall be based on the test results. Calcium carbonate is the equivalent and standard for measuring the ability of liming materials to neutralize soil acidity and supply calcium and magnesium to grasses and legumes. Limestone application rates shall be established through soil testing.
   B. Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment. The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonably uniform, fine seedbed is prepared.
   C. Remove from the surface all objects that would prevent good sod to topsoil contact and remove all other debris, such as wire, cable, tree roots, pieces of concrete, clods, lumps, or other unsuitable material.
   D. Inspect site just before sodding. If traffic has left the soil compacted, the area must be refilled and firmed in accordance with the above.
3. Sod Placement
   A. Sod strips should be laid on the contour, never up and down the slope, starting at the bottom of the slope and working up. Lightly roll or tamp sod with wood pegs, wire staples biodegradable plastic spikes, or split shingles (8 to 10 inches long by 3/4 inch wide).
   B. Surface water cannot always be kept from flowing over the face of the slope, but a capping strip of heavy jute or plastic netting, properly secured, along the crown of the slope and edges will provide extra protection against lifting and undercutting of sod. The same technique can be used to anchor sod in water–carrying channels and other critical areas. Wire staples must be used to anchor netting in channel work.
   F. Immediately following installation, sod should be watered until water penetrates the soil layer beneath sod to a depth of 1 inch. Maintain optimum water for at least two weeks.
   4. Topdressing – Since soil organic matter and slow release nitrogen fertilizer (water insoluble) are prescribed in Sections 1 and 2in this Standard, a follow–up topdressing is not mandatory, except where gross nitrogen deficiency exists in the soil to the extent that turf failure may develop, topdressing shall then be applied. Topdress with 10–0–10 or equivalent at 400 pounds per acre or 7 pounds per 1,000 square feet every 3 to 5 weeks until the gross nitrogen deficiency in the turf is ameliorated.

STANDARD FOR PERMANENT STABILIZATION WITH SOD

Where Applicable
On exposed soils that have a potential for causing off–site environmental damage. An immediate, permanent, vegetative cover is desired. Water (rain or irrigation) is required for success; access to irrigation is essential during drought.

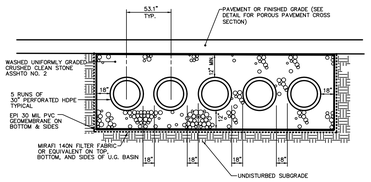
Methods and Materials

1. High quality cultivated sod is preferred over native or pasture sod.
2. Sod should be free of broadleaf weeds and undesirable coarse and fine weed grasses.
3. Sod should be of uniform thickness, typically 5/8 inch, plus or minus 1/4 inch, at time of cutting. Broadleaf weeds should be controlled by mowing before sod is cut.
4. Sod should be vigorous and dense and be able to retain its own shape and weight when suspended vertically with a firm grasp from the upper 10 percent of the strip. Broken pads and rolls or torn and uneven pads are not acceptable.
5. For drought sites, a sod of turf–type tall fescue or turf–type tall fescue mixed with Kentucky bluegrass is preferred over a 100% bluegrass sod. Although not widely available, a sod of fine fescue is also acceptable for drought sites.
6. Only moist, fresh, uniformly cut sod should be harvested, delivered, and installed within a period of 24 hours or less during summer months.
1. Site Preparation
   A. Grade as needed and feasible to permit the use of conventional equipment for timing, fertilizing, incorporation of organic matter, and other soil preparation procedures. All grading should be done in accordance with Standards for Land Grading.
   B. Topsoil should be handled only when it is dry enough to work without damaging the soil structure. A uniform application to a depth of 6 inches (unsettled) is required on all sites. See the Standard for Topsoiling for specific topsoil and soil amendment requirements.
   C. Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways
2. Soil Preparation
   A. Uniformly apply ground limestone, and fertilizer according to soil test recommendations such as offered by Rutgers Cooperative Extension offices (http://njaes.rutgers.edu/county/). Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet using 10–10–10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise and incorporated into the surface 4 inches. If fertilizer is not incorporated, apply ½ the rate described above during seedbed preparation and repeat another ½ rate application of the same fertilizer within 3 to 5 weeks after seeding. Soil testing shall be performed on site and the lime application rate shall be based on the test results. Calcium carbonate is the equivalent and standard for measuring the ability of liming materials to neutralize soil acidity and supply calcium and magnesium to grasses and legumes. Limestone application rates shall be established through soil testing.
   1. Pulverized dolomitic limestone is preferred for most soils south of the New Brunswick–Trenton line; however, the use of limestone is limited by soil testing.
   B. Work lime, and fertilizer into the topsoil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment to maximize growth at high temperatures, generally 85o F and above. See Table 4–3 mixtures 1 to 7. Planting rates for warm–season grasses shall be the amount of Pure Live Seed (PLS) as determined by germination testing results.
   3. Cool–season mixtures are grasses and legumes which maximize growth at temperatures below 85oF. Many grasses become active at 65oF. See Table 4–3, mixtures 8–20. Adjustment of planting rates to compensate for the amount of PLS is not required for cool season grasses.
   B. Conventional Seeding is performed by applying seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked seedings, seed shall be incorporated into the soil within 24 hours of seedbed preparation to a depth of 1/4 to 1/2 inch, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on coarse–textured soil.
   C. After seeding, firming the soil with a corrugated roller will assure good seed–to–soil contact, restore capillarity, and improve emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized.
   D. Hydroseeding is a broadcast seeding method usually involving a truck, or trailer–mounted tank, with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Short–fibered mulch may be applied with a hydroseeder following seeding. (also see Section 4–Mulching below). Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. When poor seed to soil contact occurs, there is a reduced seed germination and growth.
4. Mulching
   Mulching is required on all seeding. Mulch will protect against erosion before grass is established and will promote faster and earlier establishment. The existence of vegetation sufficient to control soil erosion shall be deemed compliance with this mulching requirement.
   A. Straw or Hay. Unrotted small grain straw, hay free of seeds, to be applied at the rate of 1/2 to 2 tons per acre (1 to 90 pounds per 1,000 square feet), except that where a crimper is used instead of a liquid mulch–binder (tackifying or adhesive agent), the rate of application is 3 tons per acre. Mulch chopper–blowers must not grind the mulch. Hay mulch is not recommended for establishing fine turf or lawns due to the presence of weed seed. Application – Spread mulch uniformly by hand or mechanically so that at least 85% of the soil surface is covered. For uniform distribution of hand–spread mulch, divide area into approximately 1,000 square feet sections and distribute 70 to 90 pounds within each section. Anchoring shall be accomplished immediately after placement to minimize loss by wind or water. This may be done by one of the following methods, depending upon the size of the area, steepness of slopes, and costs.
      1. Peg and Twine. Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss–cross and a square pattern. Secure twine around each peg with two or more round turns.
      2. Mulch Nettings – Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed.
      3. Crimper (mulch anchoring tool) – A tractor–drawn implement, somewhat like a disc harrow, especially designed to push or cut some of the broadcast long fiber mulch 3 to 4 inches into the soil so as to anchor it and leave part standing upright. This technique is limited to areas traversable by a tractor, which must operate on the contour of slopes. Straw mulch rate must be 3 tons per acre. No backfiring or otherwise ignited is required.
   B. Liquid Mulch–Binders – May be used to anchor salt hay, hay or straw mulch.
      a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance.
   b. Use one of the following:
      (1) Organic and Vegetable Based Binders – Naturally occurring, powder–based, hydrophilic materials when mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membroned networks of ins



NOTE:
ALL JOINTS SHALL BE WELDED

TOP OF STRUCTURE TRASH RACK
NOT TO SCALE



UNDERGROUND BASIN CROSS SECTION
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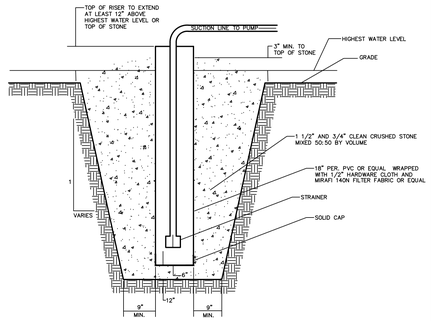
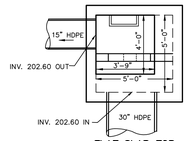


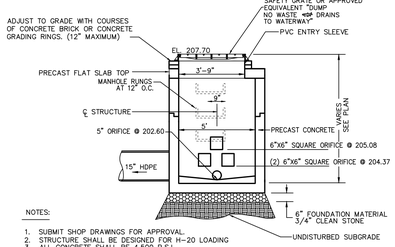
N O T E S:

1. PIT DIMENSIONS ARE VARIABLE, WITH THE MINIMUM DIAMETER BEING 2 TIMES THE STANDPIPE DIAMETER.
2. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 18" DIAMETER PVC PIPE. THEN WRAPPING THE PIPE WITH 1/2" HARDWARE CLOTH AND GEOTEXTILE FABRIC. THE PERFARTIONS SHALL BE 1/2" X 6" SLITS OR 1" DIAMETER HOLES.
3. A BASE OF FILTER MATERIAL CONSISTING OF CLEAN CRUSHED STONE SHOULD BE PLACED IN THE PIT TO DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHALL BE BACKFILLED WITH THE SAME FILTER MATERIAL.
4. THE STANDPIPE SHALL EXTEND 12" ABOVE THE LIP OF THE PIT OR THE RISER CREST ELEVATION AND THE FILTER MATERIAL SHALL EXTEND 3" MINIMUM ABOVE THE ANTICIPATED STANDING WATER ELEVATION.

DEWATERING SUMP
NOT TO SCALE



FLAT SLAB TOP

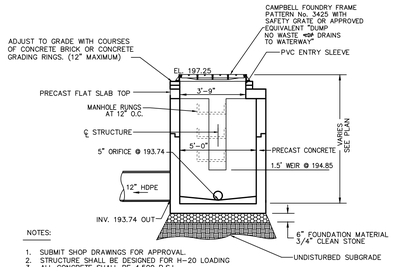


NOTES:
1. SUBMIT SHOP DRAWINGS FOR APPROVAL.
2. STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING
3. ALL CONCRETE SHALL BE 4,500 P.S.I.

SECTION

OUTLET CONTROL STRUCTURE #1
N.T.S.

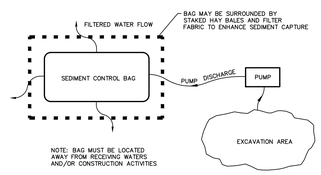
FLAT SLAB TOP



NOTES:
1. SUBMIT SHOP DRAWINGS FOR APPROVAL.
2. STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING
3. ALL CONCRETE SHALL BE 4,500 P.S.I.

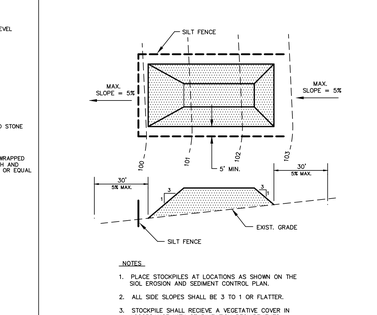
SECTION

OUTLET CONTROL STRUCTURE #2
N.T.S.



BAGS MUST BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BAGS MAY NOT BE REUSED.

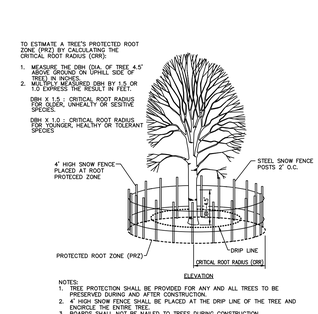
SEDIMENT CONTROL BAG
NOT TO SCALE



NOTES

1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECIEVE A VEGETATIVE COVER IN ACCORDANCE WITH STABILIZATION REQUIREMENTS.
4. SILT FENCE SHALL BE INSTALLED AS DETAILED HEREON.

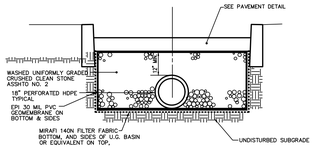
TOPSOIL STOCKPILE
NOT TO SCALE



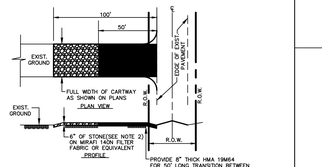
ELEVATION

NOTES:
1. TREE PROTECTION SHALL BE PROVIDED FOR ANY AND ALL TREES TO BE PRESERVED DURING AND AFTER CONSTRUCTION.
2. 4' HIGH SNOW FENCE SHALL BE PLACED AT THE DRIP LINE OF THE TREE AND ENCIRCLE THE ENTIRE TREE.
3. BOARDS SHALL NOT BE NAILED TO TREES DURING CONSTRUCTION.
4. ROOTS SHALL NOT BE CUT IN AN AREA INSIDE THE DRIP LINE OF THE TREE BRANCHES.
5. PRUNING OF LIMBS IF NECESSARY SHALL BE IN ACCORDANCE WITH TREE PRUNING DETAIL AND UNDER THE SUPERVISION OF A LICENSED NURSERYMAN.

TREE PROTECTION DURING CONSTRUCTION
NO SCALE



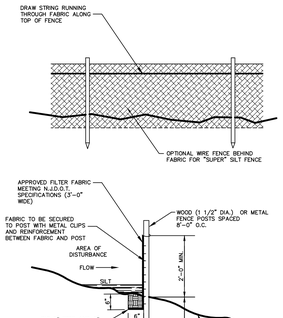
POROUS PAVEMENT UNDERGROUND BASIN CROSS SECTION
NOT TO SCALE



NOTES.

1. PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. STONE SIZE SHALL BE 1 1/2" CLEAN WASHED CRUSHED STONE.
3. THE THICKNESS OF THE STAB. CONST. ENT. SHALL NOT BE LESS THAN 6".
4. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINT OF INGRESS AND EGRESS.
5. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W. PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT.
6. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. WHERE TRACKING OF SOIL ONTO ROADWAYS IS A CONTINUAL OCCURRENCE, ALL CONTRACTORS, BOTH SITE AND DWELLING CONTRACTORS, SHALL BE REQUIRED TO BROOM/SWEEP THE ROADWAY AT TWO-HOUR INTERVALS MINIMUM AND PRIOR TO LEAVING THE CONSTRUCTION SITE AT THE DAY END.
8. WHERE SLOPE OF THE ACCESS ROAD EXCEEDS 5%, A STABILIZED BASE OF 6" MIX ASPHALT BASE COURSE HMA19M64 SHALL BE INSTALLED. THICKNESS OF BASE COURSE TO BE PRECRIBED BY THE LOCAL MUNICIPALITY

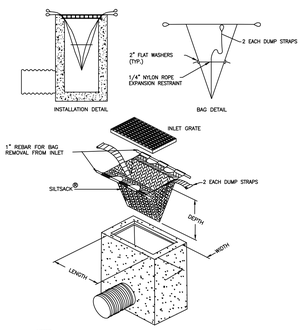
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES.

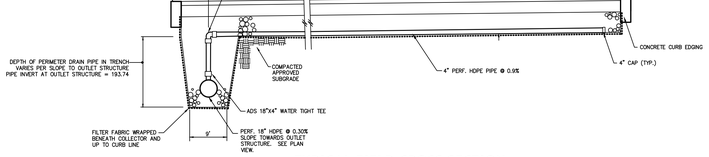
1. PLACE SILT FENCE AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. THE SLOPE OF THE LAND FOR AT LEAST 30 FEET ADJACENT TO ANY SILT FENCE SHALL NOT EXCEED 5%. IF SLOPE EXCEEDS 5%, SILT FENCE SHALL BE BACKED UP WITH SNOW FENCE.
3. SILT FENCE SHALL BE INSTALLED SO WATER CANNOT BYPASS THE FENCE AROUND IT'S ENDS.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE AS PROMPTLY AS POSSIBLE.
5. SILT FENCE SHALL BE REMOVED WHEN CONTRIBUTARY DRAINAGE AREA HAS BEEN STABILIZED IN AN APPROVED FASHION.

SILT FENCE WITH SUPER SILT FENCE OPTION
NOT TO SCALE



NOTES:
1. INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
2. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG IS 1/2 FULL.
3. DAMANGED FILTER BAGS SHOULD BE REPLACED.
4. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION.

FILTER BAG INLET PROTECTION
N.T.S.



TYPICAL FIELD CROSS SECTION
N.T.S.

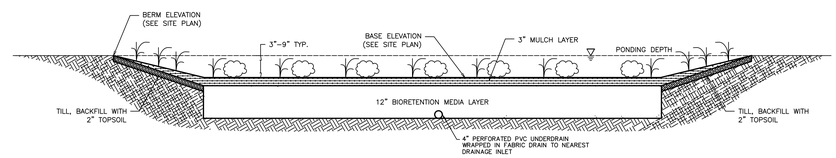
RAIN GARDEN SPECIFICATIONS:

CONSTRUCTION NOTES:

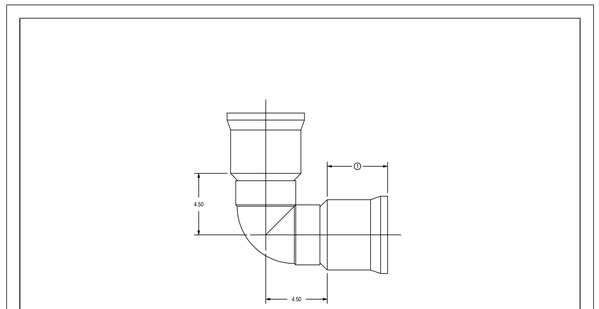
1. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PRIOR TO EXCAVATION INCLUDING ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY FIELD CONDITIONS DIFFER MATERIALLY FROM THOSE REPRESENTED ON THESE DRAWINGS AND THE SPECIFICATIONS OR IF, IN THE CONTRACTOR'S OPINION, SAID CONDITIONS CONFLICT WITH THE DESIGNS SHOWN HEREON.
3. THE ENGINEER SHALL INSPECT ALL PLANTING BED AREAS BEFORE MULCHING TO INSURE THAT ADEQUATE DRAINAGE EXISTS. IF ANY AREAS TO BE MULCHED SHOW EVIDENCE OF POOR DRAINAGE, THE CONTRACTOR SHALL TAKE CORRECTIVE ACTION.
4. THE CONTRACTOR SHALL AVOID DISTURBING ALL EXISTING TREES. ANY DISTURBANCE TO TREES OR TREE ROOTS MUST BE COORDINATED WITH THE PROPERTY OWNER.
5. DIMENSIONS AND SHAPE WILL VARY, REFER TO SITE PLAN.
6. RIVER STONE PROTECTION DIMENSIONS ARE TYPICAL AND MAY VARY PER SITE. CONSULT THE ENGINEER AND SITE PLAN FOR DIMENSIONS ON A PER SITE BASIS.
7. RIVER STONE PROTECTION SHALL SLOPE TO RAIN GARDEN BASE.
8. REFER TO SITE PLAN TO DETERMINE OUTLET TYPE (ROCK-LINED OVERFLOW OR DRAINTECH RISER).
9. REFER TO SITE PLAN FOR ALL ELEVATIONS AND INVERTS.
10. THE CONTRACTOR SHALL EXCAVATE 12" LOWER THAN THE BASE ELEVATION SHOWN ON THE SITE PLANS. THE SLOPES OF THE RAIN GARDEN SHALL BE AT A 2:1 MAXIMUM.
11. THE SUBGRADE OF THE RAIN GARDEN SHALL BE LEVEL TO ENSURE PROPER DRAINAGE. CONTRACTOR SHALL OBTAIN ENGINEER APPROVAL PRIOR TO BACKFILLING WITH 12" OF BIORETENTION MEDIA.
12. THE CONTRACTOR SHALL INSTALL OVERFLOW IF SPECIFIED IN SITE PLANS PRIOR TO BACKFILLING WITH BIORETENTION MEDIA.
13. THE BIORETENTION LAYER SHALL BE LEVEL TO ENSURE PROPER DRAINAGE. CONTRACTOR SHALL OBTAIN ENGINEER APPROVAL PRIOR TO SPREADING MULCH AND PLANTING.
14. THE RIVER STONE SHALL BE PLACED BELOW THE BOTTOM OF THE PIPE.
15. ALL DISTURBED AREAS EXCLUSIVE OF RAIN GARDEN AND SLOPED BERM SHALL BE RESTORED TO ORIGINAL CONDITIONS BY CONTRACTOR.
16. THE CONTRACTOR SHALL HAVE A PRE-CONSTRUCTION MEETING WITH THE PROJECT ENGINEER PRIOR TO ANY WORK ON SITE.

SPECIFICATIONS:

1. MAX COVER OVER TOP OF PIPE IS 4 FT. CONTACT ADS IF OTHERWISE GREATER.
2. THE APPROVAL OF MATERIALS AND MIXING OF SAND, COMPOST, AND SOIL SHALL BE DONE UNDER THE SUPERVISION OF THE PROJECT ENGINEER/LANDSCAPE ARCHITECT. BIORETENTION MEDIA SHALL CONSIST OF 70% SAND AND 30% COMPOST MIXTURE.
3. SAND SHALL AT THE MINIMUM CONFORM TO THE SIEVE ANALYSIS FOR CONCRETE AGGREGATE SAND (ASTM C-33). USGA TEE/GREEN SIEVE GRADATION MIX IS PREFERABLE WHERE AVAILABLE.
4. UNDERLYING SOILS SHALL BE TILLED/SCARIFIED PRIOR TO SPREADING/MIXING OF BIORETENTION MEDIA.
5. ALL BIORETENTION MEDIA SHALL BE PLACED FROM THE SIDES OF THE FACILITIES, AND IN NO EVENT SHALL ANY TRACKED OR WHEELED EQUIPMENT BE PERMITTED TO CROSS THE RAIN GARDEN.
6. RAIN GARDEN SHALL BE CONSTRUCTED TO DIMENSIONS INDICATED ON THE SITE PLAN.
7. 3-5 INCH DELAWARE RIVER STONE SHALL BE USED FOR STONE CHANNEL AND INLET/OUTLET PROTECTION.
8. NON-DYED, TRIPLE-SHREDDED HARDWOOD MULCH SHALL BE USED.
9. PLANTING OF RAIN GARDEN AND SLOPED BERM SHALL BE COMPLETED AS INDICATED ON THE SITE PLAN.
10. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 OR LATEST VERSION.



RAIN GARDEN CROSS SECTION
N.T.S.



1 - SEE DRAWING NO. 7001-110-275 FOR ADS N-12 & HANCOR DUAL WALL BELL INFORMATION
2 - DIMENSIONS ARE FOR REFERENCE ONLY ACTUAL DIMENSIONS MAY VARY
3 - DIMENSIONS ARE IN INCHES

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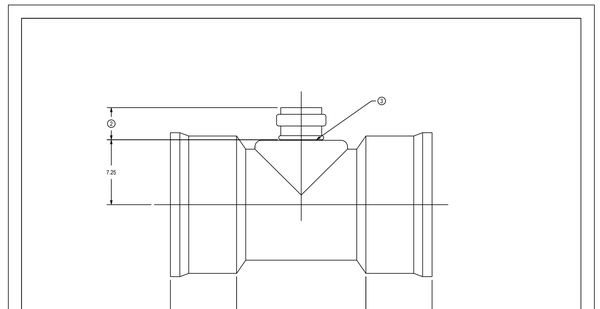
DRAWN BY	EBC	MATERIAL	PVC
DATE	5-16-06		
APP'D BY	CJA	PROJECT NO./NAME	
DATE	5-16-06		
DWG SIZE	A	SCALE 1:4	SHEET 1 OF 1

ADS Nyloplast
3126 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 4 IN ADS N-12 / HANCOR DUAL WALL ELBOW - 90 DEGREE

DWG NO. 049BAG REV A



1 - SEE DRAWING NO. 7001-110-275 FOR ADS N-12 & HANCOR DUAL WALL BELL INFORMATION
2 - SEE DRAWING NO. 0110-601-010 FOR GASKETED SWR BELL INFORMATION
3 - SEE DRAWING NO. 7003-110-031 FOR WATER TIGHT SWAGE JOINT DETAIL
4 - DIMENSIONS ARE FOR REFERENCE ONLY ACTUAL DIMENSIONS MAY VARY
5 - DIMENSIONS ARE IN INCHES

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DRAWN BY	EBC	MATERIAL	PVC
DATE	9-14-06		
APP'D BY	CJA	PROJECT NO./NAME	
DATE	9-14-06		
DWG SIZE	A	SCALE 1:6	SHEET 1 OF 1

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3126 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 12 X 4 ADS N-12 / HANCOR DUAL WALL TEE WITH GASKETED SWR BELL

DWG NO. 1201AG REV A

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	6/30/22

DATE: MAY 20, 2022
SCALE: AS NOTED
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

5/20/22
JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE05225800
DATE

CONSTRUCTION DETAILS
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

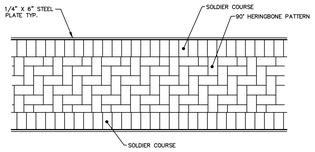
11
17

ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED 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.

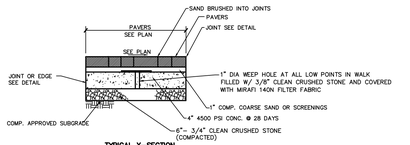
811 Know what's below. Call before you dig or 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES
IF YOU'RE GOING TO DIG, BLAST OR DRILL
THREE (3) WORKING DAYS NOTICE
REMEMBER
IT'S THE LAW!
Dig Safely.

P:\pdfs\2002\PERSP\DWG\PLN\PENNSCH_DETAILS_2002PER.dwg, rrykhn, 6/1/2023 4:50:33 PM



PAVER SIDEWALK PLAN VIEW
N.T.S.



TYPICAL X-SECTION

N O T E S :

1.) AT DRIVEWAY CROSSINGS, CONCRETE SHALL BE 6" THK. AND SHALL CONTAIN No. 10 6" X 6" WIRE MESH 2" UP FROM THE BOTTOM.

2.) EXPANSION JOINTS SHALL BE PROVIDED AT 20' (MAX.) INTERVALS JOINTS SHALL BE FILLED WITH 1/2" BIT. EXPANSION JOINT FILLER AND COVERED WITH 12" WIDE MIRAFI 140N FILTER FABRIC OR EQUAL.

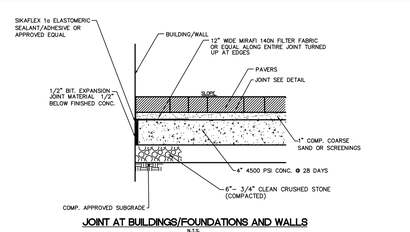
3.) ALL SIDEWALK THAT IS BROKEN, CRACKED OR OUT OF ALIGNMENT SHALL BE REPLACED PRIOR TO ACCEPTANCE.

4.) PAVER PATTERNS TO MATCH EXISTING.

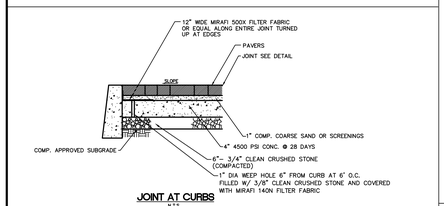
5.) SEE VARIOUS EDGE AND JOINT DETAILS.

6.) PAVERS TO MATCH EXISTING AS SPECIFIED BY OWNER.

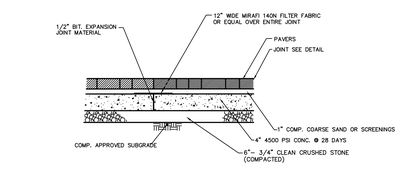
PAVER SIDEWALK CROSS-SECTION
N.T.S.



JOINT AT BUILDINGS/FOUNDATIONS AND WALLS
N.T.S.



JOINT AT CURBS
N.T.S.



TYPICAL EXPANSION JOINT
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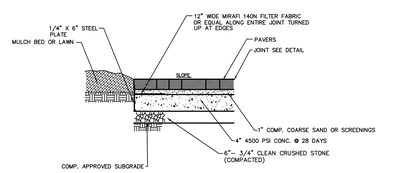
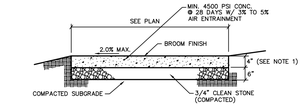


EDGES AT LAWN/PLANTING STRIPS



N O T E S :

1.) AT DRIVEWAY CROSSINGS, SIDEWALK SHALL BE 6" THK. AND SHALL CONTAIN No. 10 6" X 6" WIRE MESH 2" UP FROM THE BOTTOM OF THE SIDEWALK.

2.) THE TOWNSHIP ENGINEER SHALL APPROVE ALL SUBGRADES PRIOR TO THE POURING OF ANY CONCRETE.

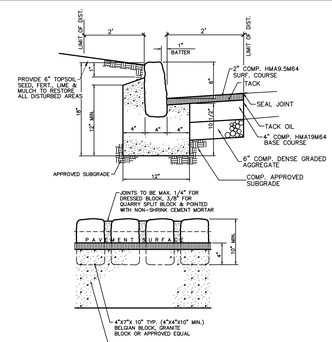
3.) EXPANSION JOINTS SHALL BE PROVIDED AT 20' (MAX.) INTERVALS JOINTS SHALL BE FILLED WITH 1/2" BIT. EXPANSION JOINT FILLER.

4.) ALL SIDEWALK THAT IS BROKEN, CRACKED OR OUT OF ALIGNMENT SHALL BE REPLACED PRIOR TO ACCEPTANCE.

5.) PROVIDE HALF DEPTH CONTRACTION JOINTS EVERY 4 FEET.

6.) ALL EXPOSED CONC. SURFACES TO BE TREATED WITH LUMISEAL PLUS CURE AND SEAL COMPOUND OR EQUIVALENT PER MANUFACTURER'S INSTRUCTIONS.

CONCRETE SIDEWALK
NO SCALE



N O T E S :

1.) ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH 3/4" CLEAN CRUSHED STONE. ALL SUBGRADES SHALL BE APPROVED BY THE TOWNSHIP ENGINEERING PRIOR TO POURING

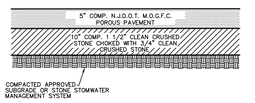
2.) CLEAN AND DAMPEN JOINTS PRIOR TO MORTARING.

3.) CURB SHALL BE TEMPORARILY BACKFILLED TO FINISHED GRADE WITH SOIL BEHIND AND STONE ON THE ROAD SIDE AS SOON AS IT HAS ATTAINED SUFFICIENT SUPPORTING STRENGTH OR WITHIN 24 HOURS OF POURING (WHICH EVER IS LESS).

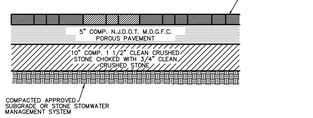
4.) WHEN NEW CURB IS INSTALLED ALONG AN EXISTING PAVED AREA, THE EXISTING PAVEMENT SHALL BE CUT 2 FEET IN FRONT OF THE NEW CURB FACE IN A STRAIGHT LINE WITH A CUTTING WHEEL OR PNEUMATIC HAMMER. THE NEW PAVEMENT SHALL BE TACKED AND BUTTED TO THE EXISTING PAVEMENT.

5.) BELGIAN BLOCK CURB IS PROHIBITTED AT H.C. RAMPS

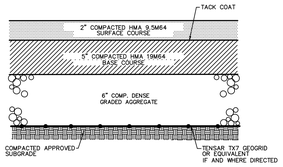
BELGIAN BLOCK CURB
NO SCALE



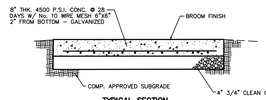
POROUS PAVEMENT CROSS-SECTION
NOT TO SCALE



POROUS PAVERS DETAILS
NOT TO SCALE

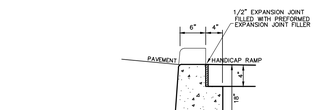


TYPICAL PAVEMENT CROSS-SECTION
NOT TO SCALE

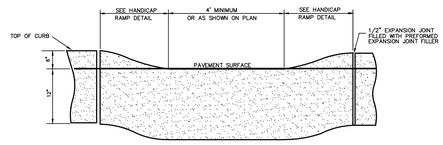


TYPICAL SECTION

CONCRETE PAD DETAIL
N.T.S.

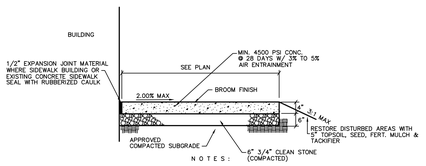


S E C T I O N



E L E V A T I O N

FULLY DEPRESSED CURB AT HANDICAP RAMP
NO SCALE



N O T E S :

1.) THE ENGINEER SHALL APPROVE ALL SUBGRADES PRIOR TO THE POURING OF ANY CONCRETE.

2.) EXPANSION JOINTS SHALL BE PROVIDED AT 20' (MAX.) INTERVALS JOINTS SHALL BE FILLED WITH 1/2" BIT. EXPANSION JOINT FILLER.

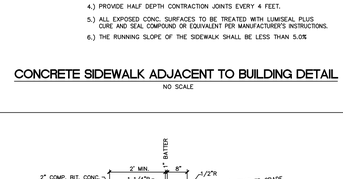
3.) ALL SIDEWALK THAT IS BROKEN, CRACKED OR OUT OF ALIGNMENT SHALL BE REPLACED PRIOR TO ACCEPTANCE.

4.) PROVIDE HALF DEPTH CONTRACTION JOINTS EVERY 4 FEET.

5.) ALL EXPOSED CONC. SURFACES TO BE TREATED WITH LUMISEAL PLUS CURE AND SEAL COMPOUND OR EQUIVALENT PER MANUFACTURER'S INSTRUCTIONS.

6.) THE RUNNING SLOPE OF THE SIDEWALK SHALL BE LESS THAN 5.0%

CONCRETE SIDEWALK ADJACENT TO BUILDING DETAIL
NO SCALE



N O T E S :

1.) ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH 3/4" CLEAN CRUSHED STONE.

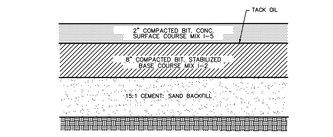
2.) EXPANSION JOINTS OF CELLULAR COMPRESSED MATERIAL TO BE PLACED AT 20' INTERVALS AND 1/4" PREMOLDED EXPANSION JOINTS TO BE PLACED LONGITUDINALLY ADJACENT TO ALL ABUTTING CONCRETE STRUCTURES AS THE ENGINEER MAY DIRECT. CONSTRUCTION JOINTS TO BE PROVIDED EVERY 20' ALTERNATING WITH EXPANSION JOINTS.

3.) CURB SHALL BE TEMPORARILY BACKFILLED TO FINISHED GRADE WITH SOIL BEHIND AND STONE ON THE ROAD SIDE AS SOON AS IT HAS ATTAINED SUFFICIENT SUPPORTING STRENGTH OR WITHIN 24 HOURS OF POURING (WHICH EVER IS LESS).

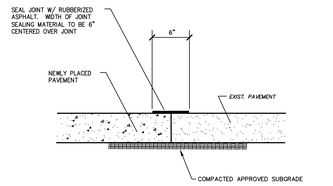
4.) WHEN NEW CURB IS INSTALLED ALONG AN EXISTING PAVED AREA, THE EXISTING PAVEMENT SHALL BE CUT 2 FEET IN FRONT OF THE NEW CURB FACE IN A STRAIGHT LINE AT A 45 DEGREE ANGLE WITH A CUTTING WHEEL OR PNEUMATIC HAMMER. THE NEW PAVEMENT SHALL BE TACKED AND BUTTED TO THE EXISTING PAVEMENT, IN ACCORDANCE WITH PAVEMENT WIDENING DETAIL.

5.) FACE FORMING MAY BE USED IF CONTRACTOR CAN DEMONSTRATE TO ENGINEER THAT UNDERMINING OF PAVEMENT WILL NOT OCCUR ANY FUTHER SUBJECT TO APPROVAL BY COUNTY ENGINEER OR COUNTY ROADS. HOWEVER, THE UNIT PRICE BID FOR CURB SHALL INCLUDE 2' MIN. PAVEMENT REPLACEMENT.

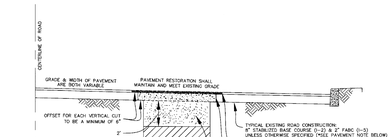
8"X9"X18" MERCER COUNTY CONCRETE CURB
NOT TO SCALE



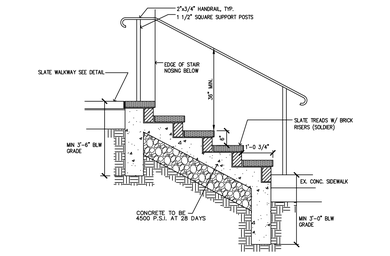
REPLACEMENT COUNTY ROAD PAVEMENT CROSS-SECTION
NOT TO SCALE



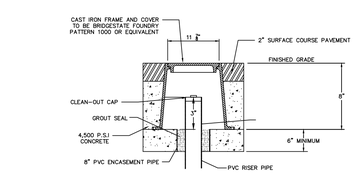
PAVEMENT JOINT SEALING
NOT TO SCALE



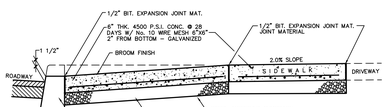
Mercer County Roadway – Utility Trench Detail



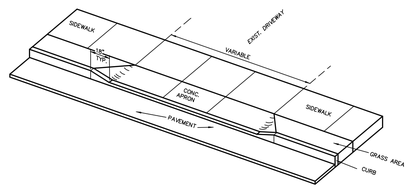
SLATE STEP AND HANDRAIL DETAIL
NOT TO SCALE



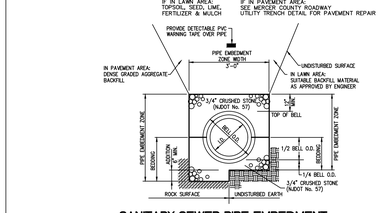
CLEANOUT FRAME AND COVER FOR USE ON PAVED AREAS
NOT TO SCALE



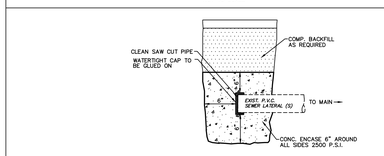
TYPICAL SECTION



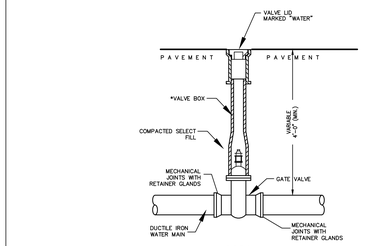
CONCRETE DRIVEWAY APRON DETAIL
N.T.S.



SANITARY SEWER PIPE EMBEDMENT
NOT TO SCALE



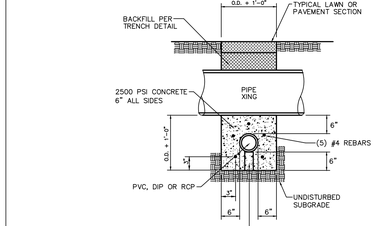
CAPPING OF SANITARY SEWER LATERAL (S)
NOT TO SCALE



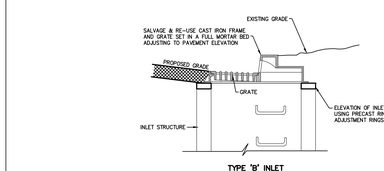
N O T E S :

1. VALVE BOX TO BE SET PLUMB.
2. VALVE BOX TO BE TYPE 5 1/4" ADJUSTABLE "BUFFALO STYLE" CAST
3. IRON AS MANUFACTURED BY MUELLER CO.
4. VALVE BOX SHALL BE FREE OF DIRT, ASPHALT AND ALL OTHER DEBRIS.
5. VALVE BOX LID SHALL BE MARKED WATER.

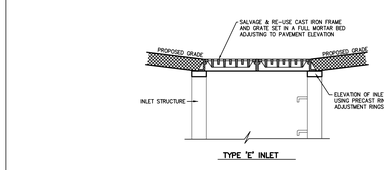
GATE VALVE AND VALVE BOX DETAIL
NOT TO SCALE



CONCRETE ENCASEMENT DETAIL
N.T.S.



TYPE 'B' INLET



TYPE 'E' INLET

RAISE INLET FRAME AND GRATE
N.T.S.

ONLY THOSE PLANS WHICH CONTAIN A DIGITAL IMPRESSED, OR COLORIZED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIFICALLY PREPARED FOR THE OWNER DESIGNATED HEREON. ANY UNAUTHORIZED USE, REUSE, REVISION OR ALTERATION 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.

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLADE OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW! Know what's below. Call before you dig. 1-800-272-1000 Dig Safely.

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE: MAY 20, 2022
SCALE: AS NOTED
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA0132300

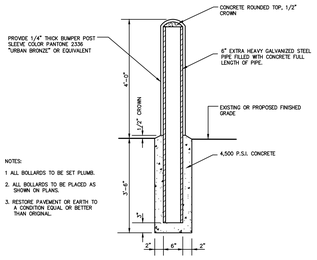
Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

5/20/22
JAMES A. BASH — DATE
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005

CONSTRUCTION DETAILS
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

12
17

J:\JobFile\2020\PENNSCH DETAILS_2020\PEB.dwg Ferguson 5/25/2023 10:45:53 AM



NOTES:

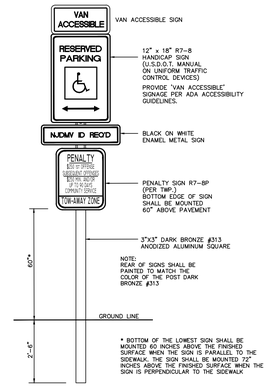
1. ALL BOLLARDS TO BE SET PLUMB.
2. ALL BOLLARDS TO BE PLACED AS SHOWN ON PLANS.
3. RESTORE PAVEMENT OR EARTH TO A CONDITION EQUAL OR BETTER THAN ORIGINAL.

PROTECTIVE BOLLARD DETAIL

NO SCALE

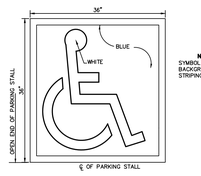
PEDESTRIAN CROSSING SIGN DETAIL

N.T.S.



HANDICAPPED PARKING SIGN

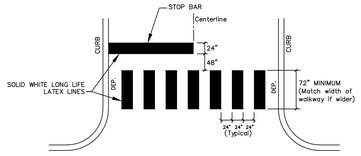
NOT TO SCALE



NOTE
SYMBOL SHALL HAVE BLUE BACKGROUND WITH WHITE STRIPING (LATEX)

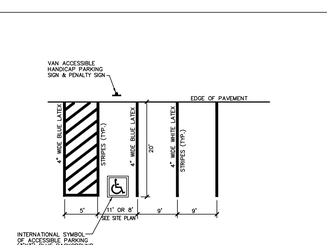
HANDICAPPED PARKING SYMBOL

NOT TO SCALE



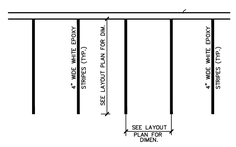
CROSSWALK AND STOP BAR STRIPING DETAIL

N.T.S.



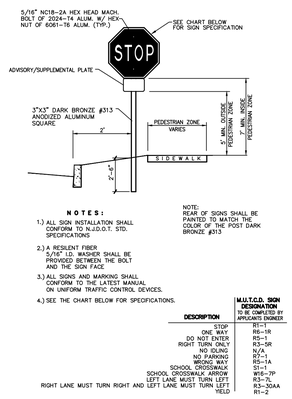
ADA UNIVERSAL PARKING SPACE DESIGN DETAIL

NOT TO SCALE



PARKING SPACE DETAIL

NOT TO SCALE



NOTES:

1.) ALL SIGN INSTALLATION SHALL CONFORM TO N.J.D.O.T. STD. SPECIFICATIONS

2.) A RESILIENT FIBER WASHER SHALL BE PROVIDED BETWEEN THE BOLT AND THE SIGN FACE.

3.) ALL SIGNS AND MARKING SHALL CONFORM TO THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

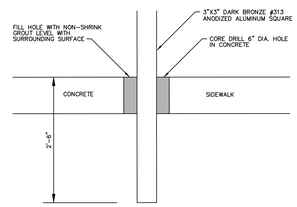
4.) SEE THE CHART BELOW FOR SPECIFICATIONS.

NOTE:
REAR OF SIGNS SHALL BE PAINTED TO MATCH THE COLOR OF THE POST DARK BRONZE #313

DESCRIPTION	M.U.T.C.D. SIGN DESIGNATION TO BE COMPLIED BY APPLICANTS ENGINEER
STOP	R1-1
ONE WAY	R6-1R
DO NOT ENTER	R5-1
RIGHT TURN ONLY	R3-5R
NO IDLING	N/A
NO PARKING	R7-1
WRONG WAY	R5-1A
SCHOOL CROSSWALK	S1-1
SCHOOL CROSSWALK STOP	R1-6/S1-1P
LEFT LANE MUST TURN LEFT	R3-7L
RIGHT LANE MUST TURN RIGHT AND LEFT LANE MUST TURN LEFT	R3-3DAA
YIELD	R1-2

WARNING AND/ OR REGULATORY SIGN DETAIL

N.T.S.



SIGN MOUNTING IN CONCRETE

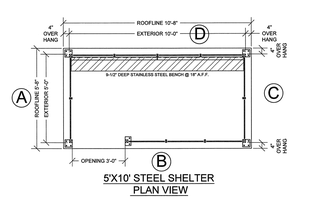
NOT TO SCALE

NOTES:

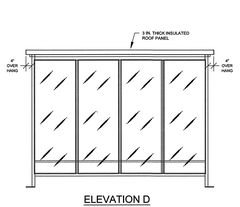
1. TO BE CONSTRUCTED OF WHITE THERMOPLASTIC MATERIAL

PAVEMENT MARKINGS DETAIL

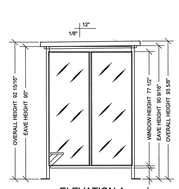
NOT TO SCALE



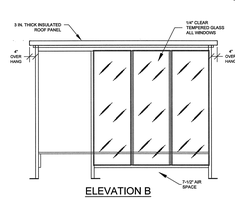
5'X10' STEEL SHELTER PLAN VIEW



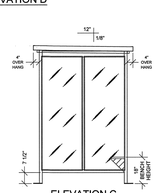
ELEVATION D



ELEVATION A



ELEVATION B



ELEVATION C

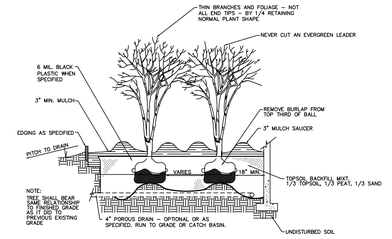
PANEL BUILT INC. OR EQUIVALENT

BUS SHELTER DETAIL

NOT TO SCALE

NOTE:

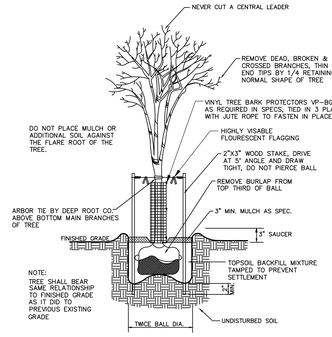
1. EACH SHELTER MUST BE ANCHORED TO CONCRETE PAD IN A MINIMUM OF FOUR (4) LOCATIONS. (SEE SHELTER ANCHOR DETAIL)
2. CONTRACTOR SHALL PROVIDE COLOR SAMPLES FOR SELECTION.



NOTE:
TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT DID TO PREVIOUS EXISTING GRADE

TYPICAL SHRUB BED PLANTING

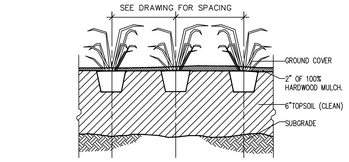
NO SCALE



NOTE:
TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT DID TO PREVIOUS EXISTING GRADE

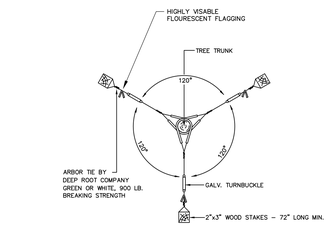
TYPICAL PLANTING FOR TREES TO 3 1/2" CAL

(NOT TO SCALE)



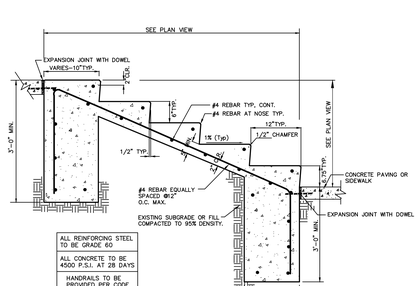
GROUNDCOVER PLANTING

NO SCALE



TYPICAL GUYING DETAIL

(NOT TO SCALE)

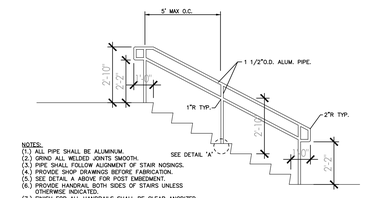


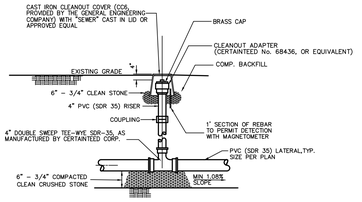
ALL REINFORCING STEEL TO BE GRADE 60
ALL CONCRETE TO BE 4500 P.S.I. AT 28 DAYS
HANDRAILS TO BE PROVIDED PER CODE

TYPICAL SECTION THROUGH STAIRS

N.T.S.

DETAIL 'A'


5" MAX O.C.
1 1/2"O.D. ALUM. PIPE.
2'-10"
11 1/2"
11"
17"
17"
17

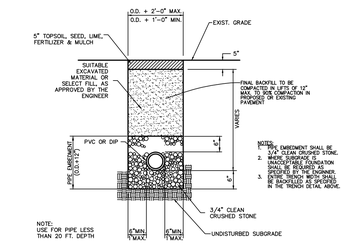


NOTES:

1. PIPE AND FITTINGS SHALL MEET ASTM 3034 (SDR 35) AS MANUFACTURED BY CERTAINTEED CORP. (215)341-7000, OR EQUIVALENT

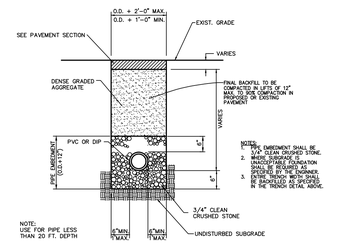
SANITARY CLEANOUT DETAIL

N.T.S.



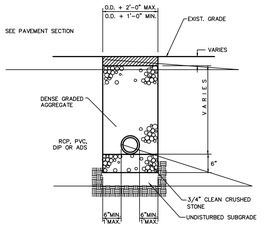
SANITARY SEWER TRENCH: OFF-ROAD

NOT TO SCALE



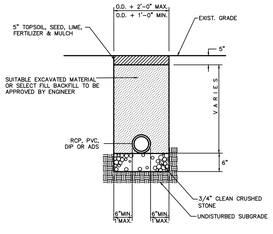
SANITARY SEWER TRENCH: PAVEMENT AND SIDEWALK AREAS

NOT TO SCALE



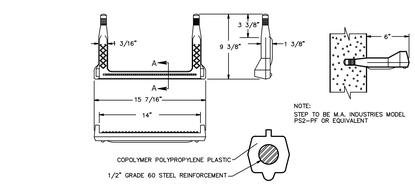
STORM SEWER TRENCH: PAVEMENT AND SIDEWALK

NOT TO SCALE



STORM SEWER TRENCH: OFF-ROAD

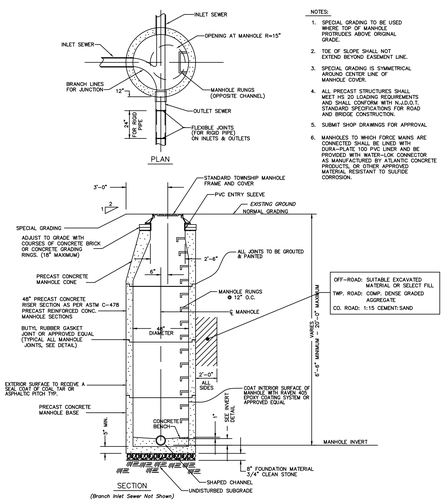
NOT TO SCALE



SECTION A–A

LADDER RUNG DETAIL

NOT TO SCALE

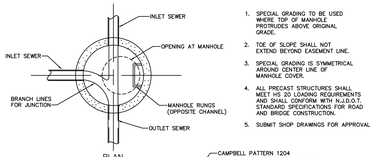


NOTES:

1. SPECIAL GRADING TO BE USED WHERE TOP OF MANHOLE PROTRUDES ABOVE ORIGINAL GRADE.
2. TOE OF SLOPE SHALL NOT EXTEND BEYOND EASEMENT LINE.
3. SPECIAL GRADING IS SYMMETRICAL AROUND CENTER LINE OF MANHOLE COVER.
4. ALL PRECAST STRUCTURES SHALL MEET HS 20 LOADING REQUIREMENTS AND SHALL CONFORM WITH N.J.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. SUBMIT SHOP DRAWINGS FOR APPROVAL
6. MANHOLES TO WHICH FORCE MAINS ARE CONNECTED SHALL BE LINED WITH DURA-PLATE 100 PVC LINER AND BE PROVIDED WITH WATER-LOK CONNECTOR AS MANUFACTURED BY ATLANTIC CONCRETE PRODUCTS, OR OTHER APPROVED MATERIAL RESISTANT TO SULFIDE CORROSION.

STANDARD SANITARY PRECAST MANHOLE

N.T.S.



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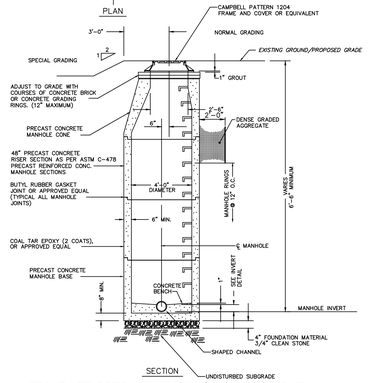
5. SUBMIT SHOP DRAWINGS FOR APPROVAL

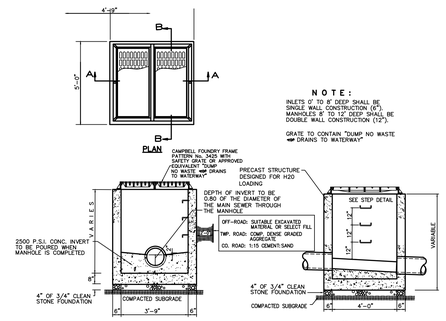


STANDARD PRECAST STORM SEWER MANHOLE

N.T.S.

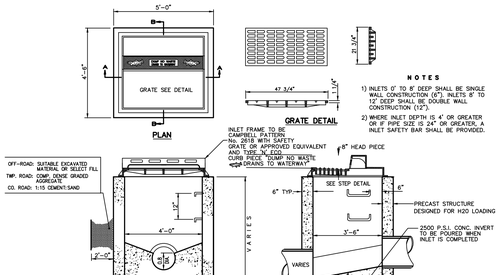
GENERAL STORM SEWER NOTES

1. ALL PRECAST DRAINAGE STRUCTURES SHALL CONTAIN REINFORCING STEEL AND BE DESIGNED FOR HS-20 LOADING.
2. SHOP DRAWINGS OF ALL PRECAST DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE OWNERS ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. ALL PRECAST STRUCTURES SHALL COMPLY WITH THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST REVISION.
3. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III PIPE UNLESS OTHERWISE NOTED ON THE PLANS.
4. ALL JOINTS SHALL BE MORTARED WITH 2:1 SAND MORTAR UNLESS OTHERWISE NOTED ON THE PLANS.
5. ANY DRAINAGE STRUCTURE THAT IS TO BE LEFT UNCOVERED FOR MORE THAN 8 HOURS SHALL BE PROTECTED WITH BARRICADES IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OR OSHA STANDARDS.
6. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS CONTRUCTION OF STORM SEWER PROGRESSES IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION.
7. ALL STORM SEWER CONSTRUCTION SHALL BEGIN AT THE LOWEST ELEVATION.



TYPE 'E' INLET

N.T.S.



TYPE 'B' INLET

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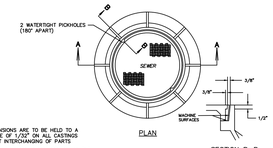
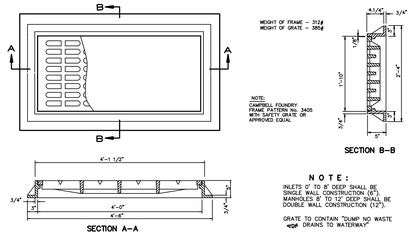


NOTES:

1. ALL DIMENSIONS ARE TO BE HELD TO A TOLERANCE OF 1/32" ON ALL CASTINGS TO PERMIT INTERCHANGING OF PARTS
2. CAMPBELL FOUNDRY #1202B OR EQUIVALENT MIN. WT. 425# WITH FLOW SEAL LID
3. SUBMIT SHOP DRAWINGS FOR APPROVAL
4. MANHOLE NUMBERS SHALL BE INDICATED ON CASTINGS, IN A MANNER ACCEPTABLE TO THE AUTHORITY'S ENGINEER.
5. FRAME SHALL BE SET FLUSH WITH THE STABILIZED BASE COURSE PAVING SURFACE ELEVATION. USE RESURFACING MANHOLE EXTENTION RINGS TO ADJUST TO TOP COURSE PAVING SURFACE ELEVATION.

SANITARY MH. FRAME AND COVER

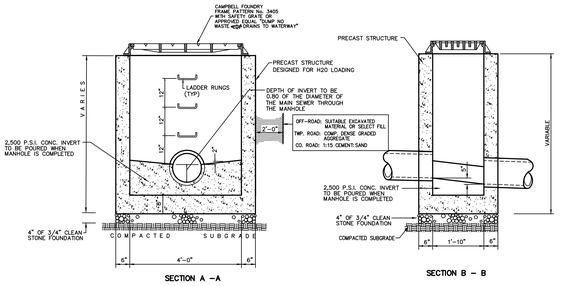
N.T.S.



NOTE:

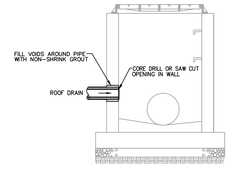
INLETS 0' TO 8' DEEP SHALL BE SINGLE WALL CONSTRUCTION (6"). MANHOLES 8' TO 12' DEEP SHALL BE DOUBLE WALL CONSTRUCTION (12").

GRATE TO CONTAIN "DUMP NO WASTE" DRAINS TO WATERWAY"



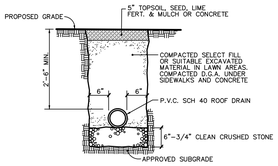
TYPE 'A' INLET

N.T.S.



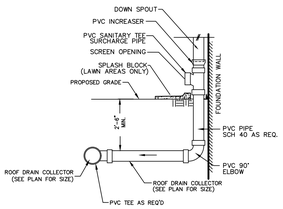
ROOF DRAIN CONNECTION TO INLET

N.T.S.



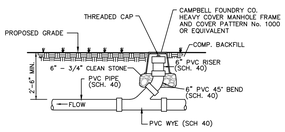
ROOF DRAIN/ ROOF DRAIN COLLECTOR TRENCH DETAIL

NOT TO SCALE



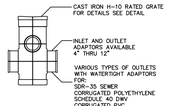
ROOF DRAIN CONNECTION W/ OVERFLOW

NOT TO SCALE

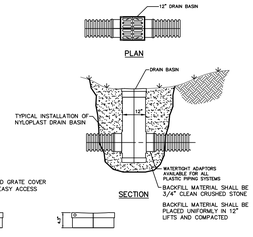


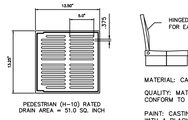
ROOF DRAIN CLEANOUT DETAIL

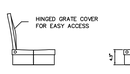
NOT TO SCALE



12" DRAIN BASIN DETAIL







MATERIAL: CAST IRON

QUALITY: MATERIAL SHALL CONFORM TO ASTM A48 – CLASS 30B

PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT

GRATE DETAIL

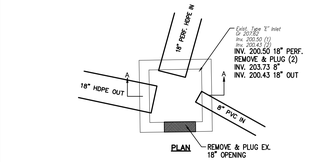
AS MANUFACTURED BY NYLOPLAST AMERICA INC. 800-859-0328 OR APPROVED EQUAL

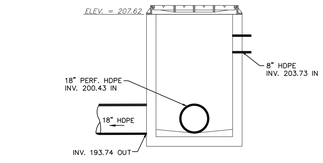
NOTES:

1. GRATES TO BE HINGED.
2. GRATES TO BE H-10 RATED FOR PEDESTRIAN USE.
3. BACKFILL SHALL BE 3/4" CLEAN CRUSHED STONE.

12" DRAIN BASIN DETAIL

NO SCALE





TYPE 'E' INLET EX7 DETAIL

N.T.S.

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE: MAY 20, 2022
SCALE: AS NOTED
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

5/20/22
JAMES A. BASH — DATE
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

CONSTRUCTION DETAILS

FOR

THE PENNINGTON SCHOOL MASTER PLAN PRELIMINARY & FINAL SITE PLAN

BLOCK 701, LOT 4, BLOCK 502, LOT 4, BLOCK 206, LOT 10 & BLOCK 205, LOT 1

PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

14
18

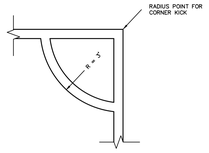
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED FINAL. THE PROFESSIONAL SHALL BE DEEMED TO HAVE GIVEN HIS/HER CONSENT TO THE OWNER DESIGNATED HEREON TO MAKE ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN 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.

4.)
5.)

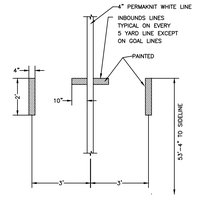
NEW JERSEY ONE CALL 811 Know what's below. Call before you dig. 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAZE OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW! Dig Safely.

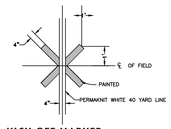
F:\Jobfile\2022\PEB\DWG\PLAN\PENNINGTON DETAILS_20229EB.dwg, rfergusson 5/23/2023 10:47:19 AM



SOCCER CORNER KICK DETAIL
N.T.S.

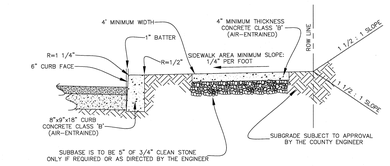


3 INBOUND LINE DETAIL
N.T.S.



2 KICK-OFF MARKER
N.T.S.

NOTE: 1/2" EXPANSION JOINTS OF CELLULAR COMPRESSION MATERIAL TO BE PLACED AT 20' INTERVALS AND 1/4" PREMOLDED EXPANSION JOINTS TO BE PLACED LONGITUDINALLY ADJACENT TO ALL ABUTTING CONCRETE STRUCTURES AS THE ENGINEER MAY DIRECT. CONSTRUCTION JOINTS TO BE PROVIDED EVERY 20' ALTERNATING WITH EXPANSION JOINTS.



REVISED: 2.04.14 CLASS 'B' CONCRETE
PER: GREG SANOUSKY, COUNTY ENGINEER

TYPICAL SECTION OF CURB & SIDEWALK DETAIL
SCALE: NTS

COUNTY OF MERCER
DEPARTMENT OF
TRANSPORTATION & INFRASTRUCTURE
DIVISION OF ENGINEERING
GREGORY SANOUSKY, P.E. P.L.S. COUNTY ENGINEER
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE NO. 36758
DRAWN BY: MIKE WILLIAMSON

8'X9'X18" MERCER COUNTY CONCRETE CURB
NOT TO SCALE

TURF CONSTRUCTION NOTES

1. ALL SYNTHETIC TURF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE SYNTHETIC TURF COUNCIL (STC), AMERICAN SPORTS BUILDERS ASSOCIATION (ASBA) AND THE NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NATIONAL FEDERATION), AS AMENDED.
2. ALL FIELD EVENT AND LINE MARKING DIMENSIONS TO BE CERTIFIED IN ACCORDANCE WITH SPECIFICATIONS ISSUED BY THE APPROPRIATE GOVERNING BODY.
3. STONE TO BE USED FOR STORMWATER MANAGEMENT SECTION OF INFIELD SHALL HAVE A VOID RATIO OF 0.4. SELECTED STONE SHALL BE APPROVED THE SYNTHETIC TURF SYSTEM MANUFACTURER FOR USE BENEATH THE TURF BASE STONE.
4. SYNTHETIC TURF INSTALLER SHALL PROVIDE A LETTER OF ACCEPTANCE OF THE INFIELD SUB GRADE INSTALLATION PRIOR TO PROCEEDING WITH SURFACING INSTALLATION.
5. ALL DIP STORM PIPE SHALL BE CLASS 52. ALL H.D.P.E. SHALL HAVE WATERTIGHT JOINTS.
6. ALL SOIL SHALL BE CLEANED FROM PAVED SURFACES AT THE END OF EACH WORK DAY.

FIELD LAYOUT NOTES

1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS.

2 ALL LINE WORK IS TO BE LAID OUT WITH A TOLERANCE OF 1/4 INCH.

3 ALL YARDLINES SHALL BE 4 INCH, WHITE, PERMAKNIT TURF. REFER TO DETAIL 1.

4 A 4 INCH WHITE, PERMAKNIT TURF LINE WILL SURROUND THE ENTIRE PLAYING FIELD. REFER TO DETAIL 1

5 24 INCH SHORT YARDLINE EXTENSIONS, 4 INCHES FROM THE SIDELINES SHALL BE 4 INCHES WIDE, WHITE, PAINTED LINES. REFER TO DETAIL 1.

6 THE COACHING BOX AND TEAM AREA SHALL BE PER NFSHSA RULES AND SHALL BE OUTLINED IN 4 INCH WHITE PAINTED TURF. REFER TO PLAN AND DETAIL 5.

7 THE TWO INBOUNDS LINES ARE 53 FEET 4 INCHES FROM THE SIDELINES. INBOUNDS LINES AND SHORT YARDLINE EXTENSIONS SHALL BE 24 INCHES LONG AND 4 INCHES WIDE, PAINTED, WHITE LINES. REFER TO DETAIL 3.

8 THE EXTRA POINT LINES ARE 6 FEET LONG, 4 INCHES WIDE, WHITE PAINTED LINES AT THE CENTERLINE OF THE FIELD AND THE 3 YARDLINE ON EACH END OF THE FIELD. REFER TO PLAN FOR LOCATION.

9 WHITE YARDLINE NUMBERS MEASURING 6 FEET IN HEIGHT AND 4 FEET IN WIDTH WITH THE TOP OF THE NUMBERS 27 FEET FROM THE INBOUND LINES ARE INLAID TURF. REFER TO DETAIL 4.

10 DIRECTIONAL ARROWS POINT TOWARD RESPECTIVE ENDZONES AND ARE WHITE, INLAID TURF AS DIMENSIONED ON DETAIL 4. THERE ARE NO ARROWS ON THE 50 YARDLINE.

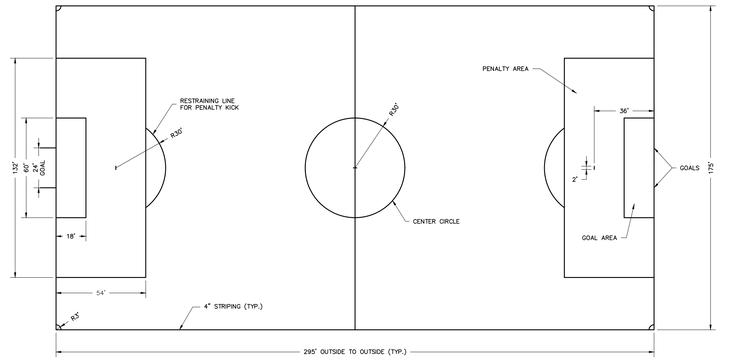
11 AN X WILL MARK THE SPOT OF THE KICKOFF AT THE 40 YARDLINE ON EACH END OF THE FIELD AND SHALL BE DIMENSIONED AS PER DETAIL 2. THE 40 YARDLINE IS WHITE PERMAKNIT TURF AND THE EXTENSIONS TO FORM THE X ARE PAINTED WHITE.

12 A DASHED LIMIT LINE AROUND THE FIELD SHALL BE 6 FEET FROM THE SIDELINES AND SHALL BE 12 INCHES LONG AND 4 INCHES IN WIDTH AT 24 INCH INTERVALS, WHITE IN COLOR AND PAINTED.

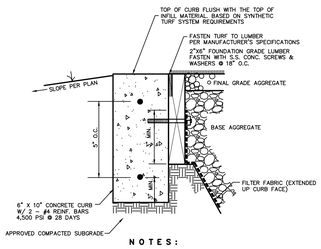
13 PYLON LOCATIONS AT THE INTERSECTIONS OF THE GOAL LINES AND THE ENDLINES WITH THE SIDELINES, AND THE ENDLINES AND THE EXTENSION OF THE INBOUNDS LINE SHALL BE 4 INCHES BY 4 INCHES. THE PYLONS WILL BE FREE-STANDING, WEIGHTED TYPE.

SOCCER LAYOUT NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
2. ALL LINE WORK IS TO BE LAID OUT WITH A TOLERANCE OF 1/4 INCH.
3. THE FIELD WILL BE STRIPED FOR 2 FIELDS, FOOTBALL AND SOCCER. ALL MARKINGS WILL BE PERMAKNIT OR INLAID LINES. REFER TO THE FOOTBALL FIELD LAYOUT PLAN ON THIS SHEET.
4. THE FOOTBALL FIELD WILL BE 4 INCH WHITE PERMAKNIT OR INLAID LINES. REFER TO THE FOOTBALL FIELD LAYOUT.
5. ALL SOCCER LINES ARE 4 INCH YELLOW PERMAKNIT SYSTEM TURF AS DIMENSIONED ON THE SOCCER LAYOUT PLAN.
6. THE SOCCER GOAL AREA IS 18 FEET BY 60 FEET. REFER TO PLAN FOR LACATION.
7. THE SOCCER PENALTY AREA IS 54 FEET BY 132 FEET. REFER TO PLAN FOR LOCATION.
8. THE PENALTY MARK IS A 2 FOOT LINE, 4 INCHES WIDE, 36 FEET FROM THE GOAL LINE AND CENTERED ON THE GOAL. THE RESTRAINING LINE FOR PENALTY KICKS IS AN ARC 30 FEET FROM THIS MARK OUTSIDE THE PENALTY AREA. REFER TO PLAN FOR LOCATION.
9. THE HALFWAY LINE FOR THE SOCCER FIELD IS A 4 INCH YELLOW LINE WITH A CIRCLE 0 FEET IN RADIUS IN THE CENTER OF THE FIELD. REFER TO PLAN FOR LOCATION. THE 50 YARD LINE OF THE FOOTBALL FIELD WILL BE WHITE AS SHOWN ON THE FOOTBALL LAYOUT PLAN AND THE SOCCER LINE WILL EXTEND BEYOND THE FOOTBALL SIDELINE.
10. THE CORNERS OF THE SOCCER FIELD SHALL HAVE A 3 FOOT RADIUS IN YELLOW DESIGNATING THE CORNER KICK AREA. REFER TO CORNER KICK DETAIL.



SOCCER LAYOUT PLAN
SCALE: N.T.S.

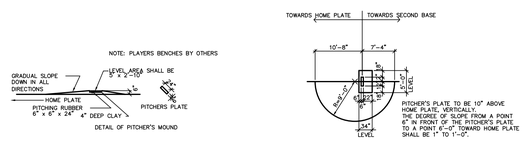


NOTES:

1.) ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH 3/4" CLEAN CRUSHED STONE.

2.) CONCRETE CURB SHALL BE PLACED ALONG THE SYNTHETIC TURF INFIELD.

TURF EDGE DETAIL
N.T.S.



FIELD LAYOUT NOTES

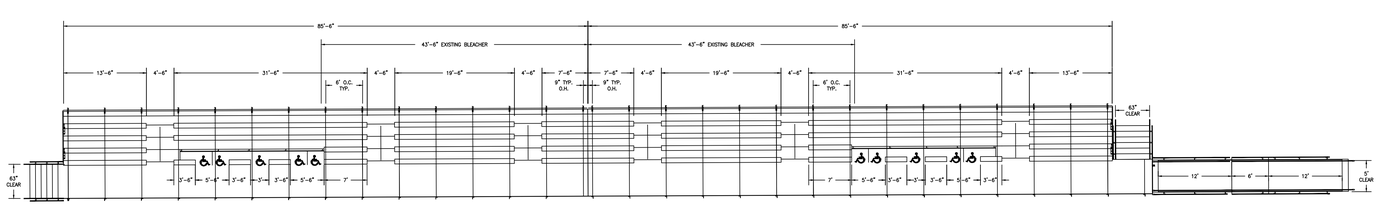
1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS.

2 ALL LINE WORK IS TO BE LAID OUT WITH A TOLERANCE OF 1/4 INCH.

3 SOFTBALL & BASEBALL FIELD LAYOUT SHALL BE COMPLIANT WITH THE LATEST VERSION OF STATE HIGH SCHOOL ASSOCIATIONS RULE BOOK.

NOTE: OWNER SHALL PROVIDE PLAYERS BENCHES

BASEBALL FIELD DETAIL
N.T.S.



TRACK BLEACHER DETAIL
SCALE: 1"=10'

ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED 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.

4.)

5.)

TO LOCATE UNDERGROUND UTILITIES
IF YOU'RE GOING TO DIG, BLAST OR DRILL
THREE (3) WORKING DAYS NOTICE
REMEMBER
IT'S THE LAW!
Know what's below. Call before you dig. or 1-800-272-1000
Dig Safely.

REV	DESCRIPTION	AUTH	DATE
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	5/30/22

DATE: MAY 20, 2022
SCALE: AS NOTED
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005
5/20/22
DATE

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

CONSTRUCTION DETAILS
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

15
17

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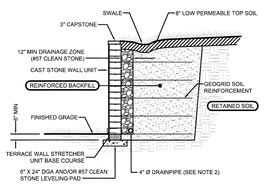
NOTES:

1. FOUNDATION SOILS SHALL BE PREPARED PER THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS PRIOR TO CONSTRUCTION.
2. OUTLET 4" MINIMUM DRAIN PIPE THROUGH THE WALL FACE OR INTO ONSITE DRAINAGE.
3. CAST STONE WALL UNIT CORE FILL AND 12" DRAINAGE ZONE SHALL BE FILLED WITH #57 CLEAN STONE MEETING THE FOLLOWING GRADATION:

SIEVE SIZE	% PASSING
1"	100 - 95
1/2"	100 - 25
No.4	0 - 10
No.8	0 - 5

4. ALL BASE UNITS SHALL BE TERRACE STRETCHER UNITS AND SHALL HAVE A MINIMUM EMBEDMENT DEPTH OF 6".
5. HIGH STRENGTH CONCRETE ADHESIVE SHALL BE USED BETWEEN UNITS ON EACH SUCCESSIVE COURSE BEGINNING AT THE TOP OF THE BASE UNITS.
6. CONSULT WITH LOCAL CODE OFFICIAL FOR WALLS GREATER THAN 4 FEET.



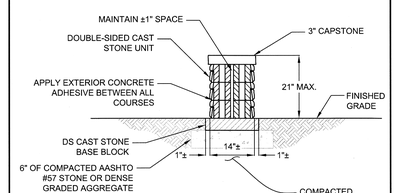
TYPICAL REINFORCED WALL SECTION

7

EP HENRY. 201 Park Ave. Woodbury, NJ 08096 (800)-444-3679 www.ephenry.com	TITLE: CAST STONE WALL TYPICAL REINFORCED WALL SECTION
	SCALE: NOT TO SCALE

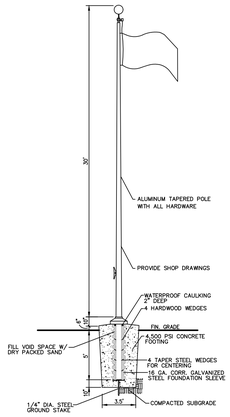
NOTES:

1. MAXIMUM 21" FREE STANDING WALL HEIGHT (NOT INCLUDING BURIED FOOTER BLOCK).
2. USE HIGH-STRENGTH CONCRETE ADHESIVE ON EACH BLOCK-TO-BLOCK CONTACT SURFACE AT EVERY SUCCESSIVE COURSE.
3. ENSURE UNITS ARE INSTALLED LEVEL FRONT-TO-BACK AND SIDE-TO-SIDE.
4. MAINTAIN ±1" SPACE BETWEEN BACK-TO-BACK UNITS.



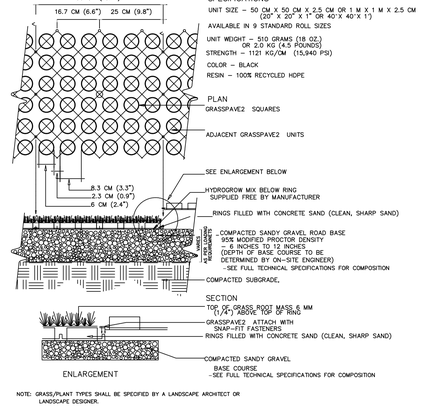
18

EP HENRY. 201 Park Ave. Woodbury, NJ 08096 (800)-444-3679 www.ephenry.com	TITLE: DOUBLE-SIDED CAST STONE WALL FREE-STANDING WALL SECTION
	SCALE: NOT TO SCALE



FLAGPOLE DETAIL

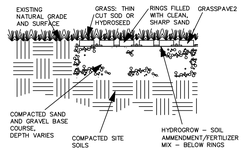
N.T.S.



NOTE: GRASS/PLANT TYPES SHALL BE SPECIFIED BY A LANDSCAPE ARCHITECT OR LANDSCAPE DESIGNER.

TYPICAL GRASSPAVE2 DETAIL

N.T.S.



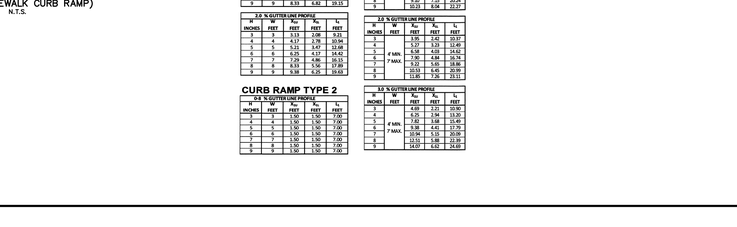
FLUSH GRASSPAVE2 EDGING

N.T.S.

SINGLE SIDED CAST STONE WALL*

SOIL FRICTION ANGLE GRID CHART | 27°

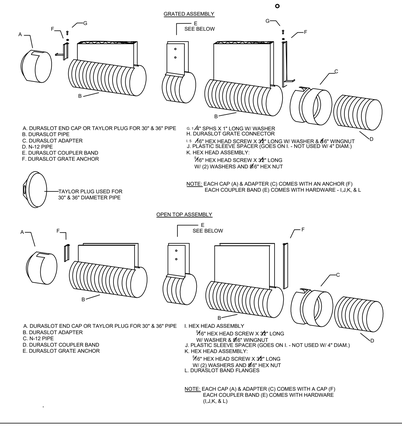
	Exposed Height H', (ft)	Total Height H, (ft)	No. of Cast Stone Courses	Grid Layers	Length L, (ft)	Layer Number - Place Grid at Elevation ft (ft) 1	2	3	4	5	6	7
Case 1 with ϕ = 27 degrees NO SURCHARGE NO SLOPE AT TOP OF WALL	1.8	2.3	4	1	4.0	1.0						
	2.3	2.8	5	1	4.0	1.0						
	2.8	3.3	6	2	4.0	1.0	2.0					
	3.3	3.8	7	2	4.0	1.0	2.5					
	3.8	4.3	8	2	4.0	1.0	2.5					
	4.3	4.8	9	3	5.0	1.0	2.5	3.5				
	4.8	5.3	10	3	5.0	1.0	2.5	3.5				
	5.3	5.8	11	3	5.0	1.0	2.5	4.0				
	5.8	6.3	12	4	6.0	1.0	2.5	4.0	5.0			
	6.3	6.8	13	4	6.0	1.0	2.5	4.0	5.0			
	6.8	7.3	14	4	7.0	1.0	2.5	4.0	5.5			
	7.3	7.8	15	5	7.0	1.0	2.5	4.0	5.5	6.5		
	7.8	8.3	16	5	7.0	1.0	2.5	4.0	5.5	6.5		
	8.3	8.8	17	5	7.5	1.0	2.5	4.0	5.5	7.0		

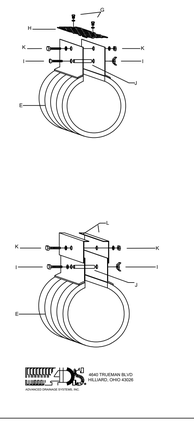


FRONT SIDE

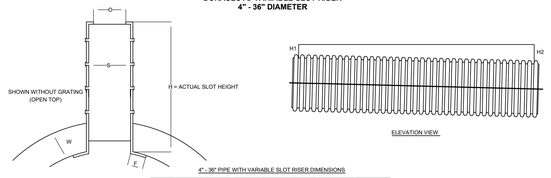
PROPOSED ENTRY PIERS

SCALE: N.T.S.





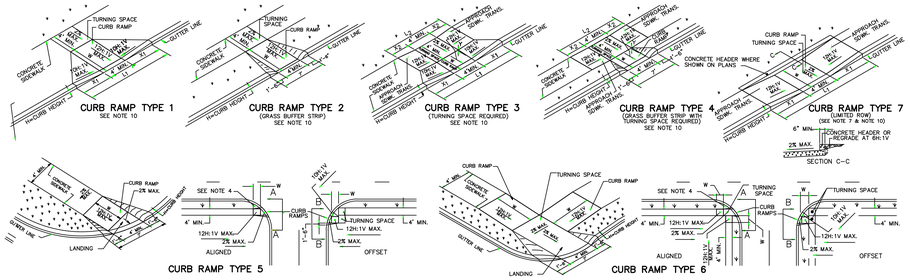
DURASLOT® VARIABLE SLOT RISER
4" - 36" DIAMETER



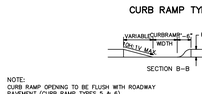
4" - 36" PIPE WITH VARIABLE SLOT RISER DIMENSIONS

PIPE DIAM	H	W	F	O	S	PRODUCT # (GRATED)	PRODUCT # (OPEN TOP)
4" (100mm)	VARIES	0.34"	0.5"	1.25"	1.75"	0490DS	0490DSOT
6" (150mm)	VARIES	0.5" (13mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	0690DS	0690DSOT
8" (200mm)	VARIES	0.625" (16mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	0890DS	0890DSOT
10" (250mm)	VARIES	0.75" (19mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	1090DS	1090DSOT
12" (300mm)	VARIES	1.125" (29mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	1290DS	1290DSOT
15" (375mm)	VARIES	1.25" (32mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	1590DS	1590DSOT
18" (450mm)	VARIES	1.5" (38mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	1890DS	1890DSOT
24" (600mm)	VARIES	1.875" (48mm)	1.0" (25mm)	1.75" (44mm)	2.25" (57mm)	2490DS	2490DSOT
30" (750mm)	VARIES	2.55" (65mm)	1" (25mm)	1.75" (45mm)	2.25" (57mm)	3090DS	3090DSOT
36" (900mm)	VARIES	2.85" (72mm)	1" (25mm)	1.75" (45mm)	2.25" (57mm)	3690DS	3690DSOT

NOTE:
A. SLOT HEIGHTS TO CONFORM TO DIMENSIONS ON PROJECT PLANS 'H' AT EACH END OF EACH LENGTH OF DURASLOT® TO BE DETAILED ON SLOT DIMENSIONS LAYOUTS FOR APPROVAL BEFORE PRODUCTION.
B. DIMENSION FROM GRADE TO PIPE INVERT: H (ACTUAL SLOT HEIGHT) + PIPE DIAMETER + RECESS (⅛"-¼")
C. H1 AND H2 VARY BASED ON PROJECT SPECIFICATIONS.



NOTE:
CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).



NOTES:
1. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
2. FOR DIMENSIONS SEE CD-606-3 AND CD-606-4
3. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT THE ENTIRE WIDTH OF THE RAMP (4 FEET MIN.) AT ALL CURB RAMPS.
4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
5. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
6. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
7. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, USE CURB RAMP TYPE 7, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.
8. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED. SEE PLANS.
9. THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR CURB RAMPS, BUT ONLY THE 12H:1V SLOPE MEASURED AS X_2 IS THE RUNNING SLOPE FOR TYPE 3 AND TYPE 4 CURB RAMPS. ENSURE THE RUNNING SLOPE OF CURB RAMPS DOES NOT REQUIRE ITS LENGTH TO EXCEED 15 FEET. THE RUNNING SLOPE MAY EXCEED THE 12H:1V MAX SLOPE SO AS NOT TO EXCEED THE 15 FEET MAXIMUM LENGTH.
10. CURB RAMP TYPE 1 THROUGH 7 ARE NORMALLY PLACED ON THE RADIUS RETURN AT THE INTERSECTION AND ON A TANGENT SECTION AS DRAWN.

CONCRETE SIDEWALK

(PUBLIC SIDEWALK CURB RAMP)

N.T.S.

DROPPED CURB AND CRADLE

CURB RAMP TYPE 1

H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3	3	2.50	2.50	9.00
4	4	3.33	3.33	20.67
5	5	4.17	4.17	12.33
6	6	5.00	5.00	14.00
7	7	5.83	5.83	15.67
8	8	6.67	6.67	17.33
9	9	7.50	7.50	19.00

2.0 % GUTTER LINE PROFILE

H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3	3	2.78	2.27	9.05
4	4	3.70	3.03	10.73
5	5	4.63	3.79	12.42
6	6	5.56	4.55	14.10
7	7	6.48	5.30	15.78
8	8	7.41	6.06	17.47
9	9	8.33	6.82	19.15

3.0 % GUTTER LINE PROFILE

H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3	3	3.13	2.08	9.21
4	4	4.17	2.78	10.94
5	5	5.21	3.47	12.68
6	6	6.25	4.17	14.42
7	7	7.29	4.86	16.15
8	8	8.33	5.56	17.89
9	9	9.38	6.25	19.63

CURB RAMP TYPE 2

H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3	3	1.50	1.50	7.00
4	4	1.50	1.50	7.00
5	5	1.50	1.50	7.00
6	6	1.50	1.50	7.00
7	7	1.50	1.50	7.00
8	8	1.50	1.50	7.00
9	9	1.50	1.50	7.00

CURB RAMP TYPE 7

H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3		4.00	3.00	10.00
4		4.00	4.00	12.00
5	4' MIN.	5.00	5.00	14.00
6	5' MIN.	6.00	6.00	16.00
7	7' MAX.	7.00	7.00	18.01
8		8.00	8.00	20.01
9		9.00	9.00	22.01

3.0 % GUTTER LINE PROFILE

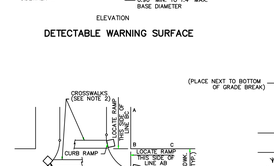
H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3		4.50	3.00	10.00
4		4.50	4.50	12.00
5	4' MIN.	5.68	4.47	14.15
6	5' MIN.	6.82	5.96	16.58
7	7' MAX.	7.96	6.25	18.21
8		9.10	7.05	20.34
9		10.23	8.04	22.27

4.0 % GUTTER LINE PROFILE

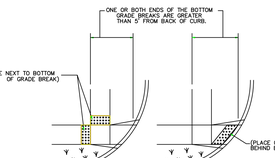
H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3		5.00	3.00	10.00
4		5.33	5.33	12.40
5	4' MIN.	6.58	4.03	14.62
6	5' MIN.	7.90	4.86	16.74
7	7' MAX.	9.22	5.65	18.86
8		10.53	6.45	20.99
9		13.85	7.24	23.31

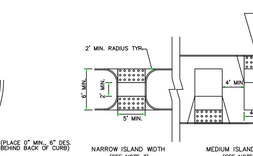
5.0 % GUTTER LINE PROFILE

H	W	X_{RD}	X_{FD}	L_T
INCHES	FEET	FEET	FEET	FEET
3		4.69	3.01	10.90
4		6.25	2.34	13.30
5	4' MIN.	7.82	1.68	15.49
6	5' MIN.	9.38	4.45	17.79
7	7' MAX.	10.94	5.13	20.09
8		12.51	5.85	22.39
9		14.07	6.62	24.69

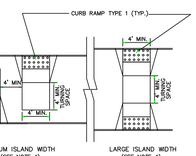


DETECTABLE WARNING SURFACE

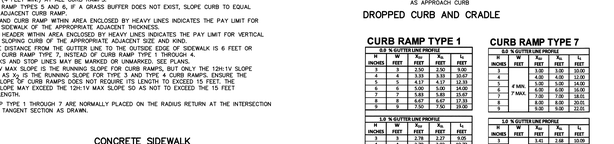




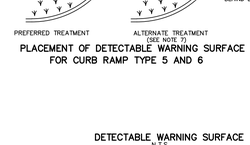
PEDESTRIAN RAILROAD CROSSING



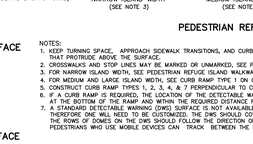
PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS



LOCATION OF CURB RAMP TYPES 1, 2, 3, 4, & 7 FOR CROSSING PARALLEL AND PERPENDICULAR TO HIGHWAY



PLACEMENT OF DETECTABLE WARNING SURFACE FOR CURB RAMP TYPE 5 AND 6

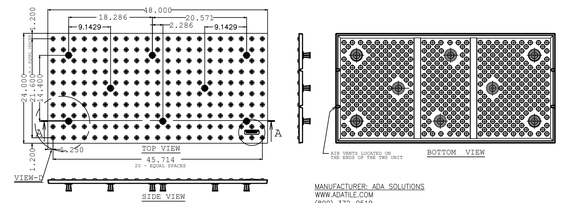


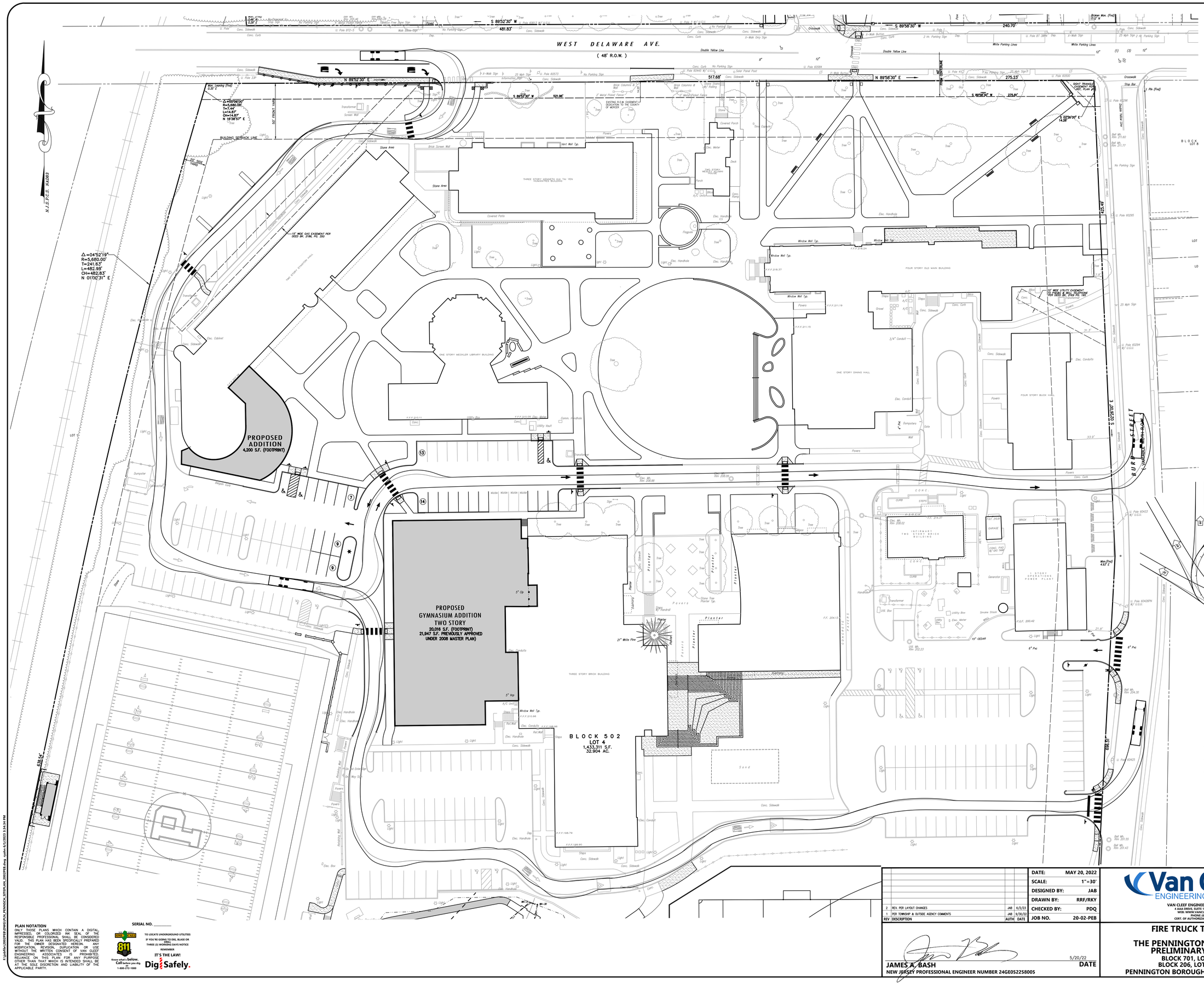
PEDESTRIAN REFUGE ISLAND

NOTES:
1. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
2. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
3. FOR NARROW ISLAND WIDTH, SEE PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS DETAIL.
4. FOR MEDIUM AND LARGE ISLAND WIDTH, SEE CURB RAMP TYPE 1 ON CD-606-1.
5. CONSTRUCT CURB RAMP TYPES 1, 2, 3, 4, & 7 PERPENDICULAR TO CURBLINE, AS SHOWN.
6. IF A CURB RAMP IS REQUIRED, THE LOCATION OF THE DETECTABLE WARNING SURFACE MUST BE AT THE BOTTOM OF THE RAMP AND WITHIN THE REQUIRED DISTANCE FROM THE RAIL.
7. A STANDARD DETECTABLE WARNING (DWS) SURFACE IS NOT AVAILABLE TO FIT THIS APPLICATION, AND THEREFORE ONE WILL NEED TO BE CUSTOMIZED. THE DWS SHOULD COVER THE ENTIRE WIDTH OF THE RAMP. THE ROWS OF DOMES ON THE DWS SHOULD FOLLOW THE DIRECTION OF TRAVEL OF THE RAMP, SO PEDESTRIANS WHO USE MOBILE DEVICES CAN TRACK BETWEEN THE DOMES.

DETECTABLE WARNING SURFACE

N.T.S.


18,000
20,571
9.1429
2.286
9.1429
24.000
24.400
1.200
TOP VIEW
45.714
20 - EQUAL SPACES
SIDE VIEW
VIEW A
VIEW B
SECTION A-A
BOTTOM VIEW
AIR VENTS LOCATED ON THE ENDS OF THE TWO UNIT
.250
.750
.750
.250
.750
.750
.250
.750
.750


WEST DELAWARE AVE.
(48' R.O.W.)
S 89°52'30" W
481.83'
N 89°52'30" E
517.68'
S 89°58'30" W
240.70'
N 89°58'30" E
275.23'
S 89°58'30" W
275.81'
S 00°29'00" E
14.28'
S 00°29'00" E
425.49'
S 00°29'00" E
686.51'
S 89°52'30" W
638.54'
Δ=04°52'19"
R=5,680.00'
T=241.63'
L=482.98'
CH=482.83'
N 01°00'31" E
S 00°29'00" E
R=5,680.00'
T=7.44'
L=14.87'
CH=14.87'
N 16°36'57" E
50' FRONT YARD
BUILDING SETBACK LINE
25' REAR YARD
15' WIDE GAS EASEMENT PER DEED BK. 2186, PG. 350
15' WIDE UTILITY EASEMENT PER DEED BK. 2186, PG. 350 & PLAT NO. 1625
EXISTING R.O.W. EASEMENT GRANTED TO THE COUNTY OF MERCER
RIGHT TRIANGLE EASEMENT PER MCI PLAN #1
N.J.S.P.C.S. NAD83
PROPOSED ADDITION
4,200 S.F. (FOOTPRINT)
PROPOSED GYMNASIUM ADDITION
TWO STORY
20,016 S.F. (FOOTPRINT)
21,947 S.F. PREVIOUSLY APPROVED UNDER 2008 MASTER PLAN)
BLOCK 502
LOT 4
1,433,311 S.F.
32.904 AC.
BLOCK 502
LOT 8
LOT 1
LOT
LO
BURD STREET
UNGRADED WIDTH-R.O.W.
THREE STORY KENNEDY-SAI-TAI YEN PLEASANTS BUILDING
ONE STORY MECKLER LIBRARY BUILDING
TWO STORY STANTON HALL
FOUR STORY OLD MAIN BUILDING
ONE STORY DINING HALL
FOUR STORY BUCK HALL
INFIRMARY TWO STORY BRICK BUILDING
1 STORY OPERATIONS POWER PLANT
THREE STORY BRICK BUILDING
TWO STORY WECKLER BUILDING ANNEX
GARAGE
GENERATOR
CONC. PAD W/ GAS VENT
CONC. CURB
CONC. SIDEWALK
BRICK SIDEWALK
STONE AREA
COVERED PORCH
COVERED PATIO
FLAGPOLE
DOCK
GAZEBO
PLANTER
STEPS
RAMP
SHED
GROVE
TENNIS COURT
BASKETBALL COURT
BASEBALL FIELD
SAND
GRASS
TRANSFORMER
UTILITY BOX
ELEC. METER
SMOKE STACK
ELEC. MANHOLE
ELEC. HANDHOLE
ELEC. CONDUITS
ELEC. CABINET
ELEC. BOX
UTILITY VAULT
UTILITY POLE
GUY WIRE
LIGHT
FLOOD LIGHT
DUMPSTER
GATE
WALL
RETAINING WALL
SCREEN WALL
BRICK SCREEN WALL
STONE TREE PLANTER TYP.
21" White Pine
15" CEDAR
6" Pvc
Mon. Leaning (Fnd) 0.35'
Mon (Fnd) 4.93' E
Broken Mon. (Fnd) 0.12' N
Stop Bar
L Pin (Fnd)
Crosswalk
Double Yellow Line
White Parking Lines
No Parking Sign
25 Mph Sign
X-Walk Sign
X-Walk Button
X-Walk Only Sign
2 Hr. Parking Sign
Bollard
Solar Panel Post
Info Sign
Flagpole
Gazebo
Ref. Mh Rim 271.60
Ref. Mh Rim 271.77
Ref. Mh Rim 204.30
Ref. Mh Rim 205.50
Ref. Mh Rim 200.43
Elec. Mh Rim 208.02
Elec. Mh Rim 208.09
Elec. Mh Rim 208.68
Comm. Handhole
Comm. Riser
F.F.E. 214.37
F.F.E. 204.12
F.F.E. 200.42
F.F.E. 218.24
F.F.E. 218.37
F.F.E. 211.19
F.F.E. 211.15
F.F.E. 210.11
F.F.E. 210.05
F.F.E. 210.96
F.F.E. 198.79
F.F.E. 198.90
U. Pole 60573
U. Pole 60611 W/ U.G.L.
U. Pole 60445 W/ U.G.L.
U. Pole 60584
U. Pole 60585
U. Pole 60586
U. Pole 60587
U. Pole 60588
U. Pole 60589
U. Pole 60590
U. Pole 60591
U. Pole 60592
U. Pole 60593
U. Pole 60594 W/ U.G.U.
U. Pole 60595
U. Pole 60596
U. Pole 60597
U. Pole 60598
U. Pole 60599
U. Pole 60600
U. Pole 60425
U. Pole 60433 W/ U.G.U.
U. Pole 60439PH W/ U.G.U.
U. Pole 60429PH W/ U.G.U.
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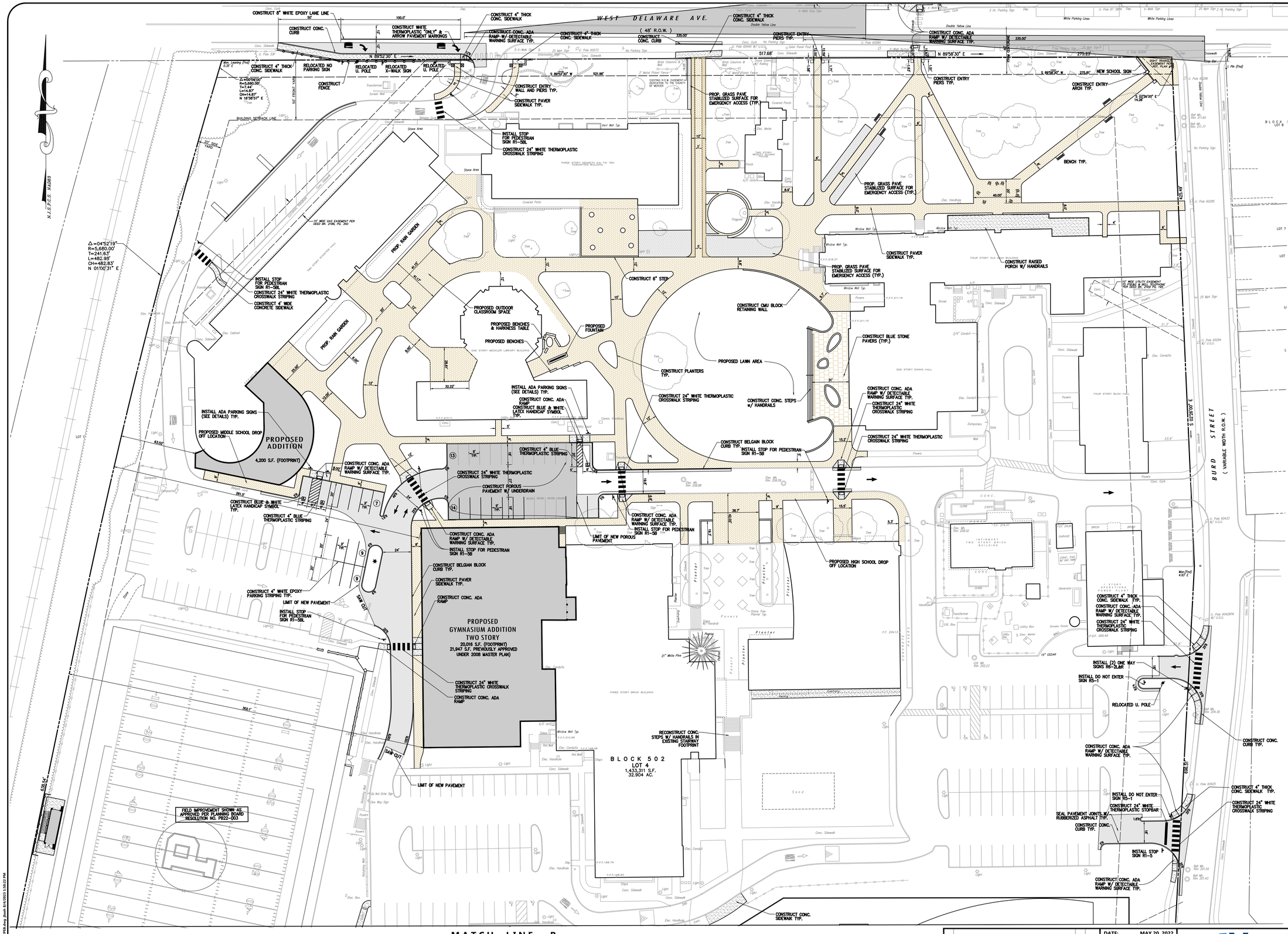

REFERENCE DATUM:

1. VERTICAL DATUM USED BASED ON REF. PLAN NO. 1 AND NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83

GENERAL NOTES:

1. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SURVEY, THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT OF WAYS, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT COMPREHENSIVE TITLE SEARCH.
2. THIS MAP REFLECTS EXISTING SITE CONDITIONS AS THE RESULT OF A FIELD SURVEY PERFORMED BY VAN CLEEF ENGINEERING ASSOCIATES ON 11/22/21.
3. THIS PLAN IS NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION, AND/OR CONSTRUCTION. CALL 1-800-272-1000 TO ORDER UTILITY MARKOUTS.
7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION DEBRIS TO BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.
2. CONTRACTOR TO PROVIDE SECURE STAGING AREA ON-SITE. LOCATION TO BE AGREED UPON BY SCHOOL.
3. CONTRACTOR TO MAINTAIN SAFE PEDESTRIAN ACCESS FOR SCHOOL STAFF AND STUDENTS DURING CONSTRUCTION.
4. CONTRACTOR TO PROVIDE EMERGENCY ACCESS TO SCHOOL AT ALL TIMES.
5. ALL SEDIMENT DROPPED, SPILLED OR TRACKED ON PAVED SURFACES TO BE REMOVED IMMEDIATELY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SOIL IMPORT OR EXPORT PERMIT(S) REQUIRED, INCLUDING FEES.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL ON-SITE SAFETY AND SECURITY. ALL SAFETY PRECAUTIONS MUST BE UNDERTAKEN AND MAINTAINED AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES. NO SEPARATE PAYMENT SHALL BE MADE FOR ON-SITE SAFETY & SECURITY. THE COSTS OF ONSITE SAFETY AND SECURITY SHALL BE INCLUDED IN COST OF THE WORK.
8. ALL CONCRETE SIDEWALK TO BE ADA COMPLIANT WITH A MAX. CROSS SLOPE OF 2.0% AND A MAX. RUNNING SLOPE OF 5.0%. SIDEWALK WITH A RUNNING SLOPE GREATER THAN 5% REQUIRES AN ADA COMPLIANT HANDRAIL. NO SIDEWALK SHALL HAVE A RUNNING SLOPE GREATER THEN 8.33%.
9. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE CONFINED TO THE DESIGNATED WORK AREA. NO USE OF ADDITIONAL AREA, EVEN FOR EQUIPMENT OR MATERIAL STORAGE, IS PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE OWNER. DESIGNATED WORK AREA SHALL BE DETERMINED AT PRE-CONSTRUCTION MEETING
10. ALL DISTURBED AREAS TO BE STABILIZED WITH 5 INCHES OF TOPSOIL, FERTILIZER, LIME, MULCH AND TACK WITHIN LIMIT OF DISTURBANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND AND ALL OF THE EXISTING INFRASTRUCTURE THE CONTRACTOR DAMAGED DURING CONSTRUCTION.
12. ALL BACKFILL, FILL AREAS AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% UNLESS OTHERWISE NOTED ON THE PLANS.

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	POROUS PAVEMENT	
N/A	PAVEMENT	
N/A	POROUS PAVERS	
	TALL PIER	
	SHORT PIER	

GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN A DIGITAL IMPRESSED, OR COLORIZED 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.

SERIAL NO. _____

811 NEW JERSEY ONE CALL
Know what's below. Call before you dig or 1-800-272-1000
TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER
IT'S THE LAW!
Dig Safely.

REV	DESCRIPTION	AUTH	DATE
3	PER FIRE REVIEW	JAB	8/4/23
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE: MAY 20, 2022
SCALE: 1"=30'
DESIGNED BY: JAB
DRAWN BY: RRF/RKY
CHECKED BY: PDQ
JOB NO. 20-02-PEB

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005
8/4/23
DATE

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

SITE PLAN
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

04C
17

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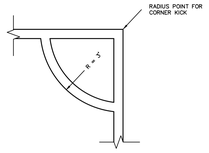
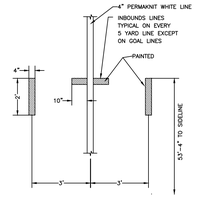
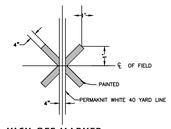


SOCCER CORNER KICK DETAIL
N.T.S.



3 INBOUND LINE DETAIL
N.T.S.



2 KICK-OFF MARKER
N.T.S.

TURF CONSTRUCTION NOTES

1. ALL SYNTHETIC TURF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE SYNTHETIC TURF COUNCIL (STC), AMERICAN SPORTS BUILDERS ASSOCIATION (ASBA) AND THE NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NATIONAL FEDERATION), AS AMENDED.
2. ALL FIELD EVENT AND LINE MARKING DIMENSIONS TO BE CERTIFIED IN ACCORDANCE WITH SPECIFICATIONS ISSUED BY THE APPROPRIATE GOVERNING BODY.
3. STONE TO BE USED FOR STORMWATER MANAGEMENT SECTION OF INFIELD SHALL HAVE A VOID RATIO OF 0.4. SELECTED STONE SHALL BE APPROVED THE SYNTHETIC TURF SYSTEM MANUFACTURER FOR USE BENEATH THE TURF BASE STONE.
4. SYNTHETIC TURF INSTALLER SHALL PROVIDE A LETTER OF ACCEPTANCE OF THE INFIELD SUB GRADE INSTALLATION PRIOR TO PROCEEDING WITH SURFACING INSTALLATION.
5. ALL DIP STORM PIPE SHALL BE CLASS 52. ALL H.D.P.E. SHALL HAVE WATERTIGHT JOINTS.
6. ALL SOIL SHALL BE CLEANED FROM PAVED SURFACES AT THE END OF EACH WORK DAY.

FIELD LAYOUT NOTES

1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS.

2 ALL LINE WORK IS TO BE LAID OUT WITH A TOLERANCE OF 1/4 INCH.

3 ALL YARDLINES SHALL BE 4 INCH, WHITE, PERMAKNIT TURF. REFER TO DETAIL 1.

4 A 4 INCH WHITE, PERMAKNIT TURF LINE WILL SURROUND THE ENTIRE PLAYING FIELD. REFER TO DETAIL 1

5 24 INCH SHORT YARDLINE EXTENSIONS, 4 INCHES FROM THE SIDELINES SHALL BE 4 INCHES WIDE, WHITE, PAINTED LINES. REFER TO DETAIL 1.

6 THE COACHING BOX AND TEAM AREA SHALL BE PER NFSHSA RULES AND SHALL BE OUTLINED IN 4 INCH WHITE PAINTED TURF. REFER TO PLAN AND DETAIL 5.

7 THE TWO INBOUNDS LINES ARE 53 FEET 4 INCHES FROM THE SIDELINES. INBOUNDS LINES AND SHORT YARDLINE EXTENSIONS SHALL BE 24 INCHES LONG AND 4 INCHES WIDE, PAINTED, WHITE LINES. REFER TO DETAIL 3.

8 THE EXTRA POINT LINES ARE 6 FEET LONG, 4 INCHES WIDE, WHITE PAINTED LINES AT THE CENTERLINE OF THE FIELD AND THE 3 YARDLINE ON EACH END OF THE FIELD. REFER TO PLAN FOR LOCATION.

9 WHITE YARDLINE NUMBERS MEASURING 6 FEET IN HEIGHT AND 4 FEET IN WIDTH WITH THE TOP OF THE NUMBERS 27 FEET FROM THE INBOUND LINES ARE INLAID TURF. REFER TO DETAIL 4.

10 DIRECTIONAL ARROWS POINT TOWARD RESPECTIVE ENDZONES AND ARE WHITE, INLAID TURF AS DIMENSIONED ON DETAIL 4. THERE ARE NO ARROWS ON THE 50 YARDLINE.

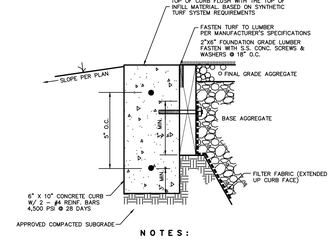
11 AN X WILL MARK THE SPOT OF THE KICKOFF AT THE 40 YARDLINE ON EACH END OF THE FIELD AND SHALL BE DIMENSIONED AS PER DETAIL 2. THE 40 YARDLINE IS WHITE PERMAKNIT TURF AND THE EXTENSIONS TO FORM THE X ARE PAINTED WHITE.

12 A DASHED LIMIT LINE AROUND THE FIELD SHALL BE 6 FEET FROM THE SIDELINES AND SHALL BE 12 INCHES LONG AND 4 INCHES IN WIDTH AT 24 INCH INTERVALS, WHITE IN COLOR AND PAINTED.

13 PYLON LOCATIONS AT THE INTERSECTIONS OF THE GOAL LINES AND THE ENDLINES WITH THE SIDELINES, AND THE ENDLINES AND THE EXTENSION OF THE INBOUNDS LINE SHALL BE 4 INCHES BY 4 INCHES. THE PYLONS WILL BE FREE-STANDING, WEIGHTED TYPE.

SOCCER LAYOUT NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
2. ALL LINE WORK IS TO BE LAID OUT WITH A TOLERANCE OF 1/4 INCH.
3. THE FIELD WILL BE STRIPED FOR 2 FIELDS, FOOTBALL AND SOCCER. ALL MARKINGS WILL BE PERMAKNIT OR INLAID LINES. REFER TO THE FOOTBALL FIELD LAYOUT PLAN ON THIS SHEET.
4. THE FOOTBALL FIELD WILL BE 4 INCH WHITE PERMAKNIT OR INLAID LINES. REFER TO THE FOOTBALL FIELD LAYOUT.
5. ALL SOCCER LINES ARE 4 INCH YELLOW PERMAKNIT SYSTEM TURF AS DIMENSIONED ON THE SOCCER LAYOUT PLAN.
6. THE SOCCER GOAL AREA IS 18 FEET BY 60 FEET. REFER TO PLAN FOR LACATION.
7. THE SOCCER PENALTY AREA IS 54 FEET BY 132 FEET. REFER TO PLAN FOR LOCATION.
8. THE PENALTY MARK IS A 2 FOOT LINE, 4 INCHES WIDE, 36 FEET FROM THE GOAL LINE AND CENTERED ON THE GOAL. THE RESTRAINING LINE FOR PENALTY KICKS IS AN ARC 30 FEET FROM THIS MARK OUTSIDE THE PENALTY AREA. REFER TO PLAN FOR LOCATION.
9. THE HALFWAY LINE FOR THE SOCCER FIELD IS A 4 INCH YELLOW LINE WITH A CIRCLE 0 FEET IN RADIUS IN THE CENTER OF THE FIELD. REFER TO PLAN FOR LOCATION. THE 50 YARD LINE OF THE FOOTBALL FIELD WILL BE WHITE AS SHOWN ON THE FOOTBALL LAYOUT PLAN AND THE SOCCER LINE WILL EXTEND BEYOND THE FOOTBALL SIDELINE.
10. THE CORNERS OF THE SOCCER FIELD SHALL HAVE A 3 FOOT RADIUS IN YELLOW DESIGNATING THE CORNER KICK AREA. REFER TO CORNER KICK DETAIL.

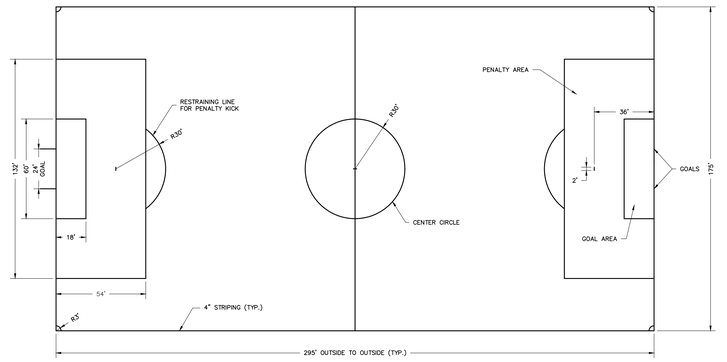


NOTES:

1.) ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH 3/4" CLEAN CRUSHED STONE.

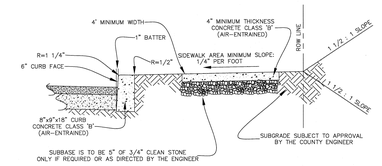
2.) CONCRETE CURB SHALL BE PLACED ALONG THE SYNTHETIC TURF INFIELD.

TURF EDGE DETAIL
N.T.S.



SOCCER LAYOUT PLAN
SCALE: N.T.S.

NOTE: 1/2" EXPANSION JOINTS OF CELLULAR COMPRESSION MATERIAL TO BE PLACED AT 20' INTERVALS AND 1/4" PREMOLDED EXPANSION JOINTS TO BE PLACED LONGITUDINALLY ADJACENT TO ALL ABUTTING CONCRETE STRUCTURES AS THE ENGINEER MAY DIRECT. CONSTRUCTION JOINTS TO BE PROVIDED EVERY 20' ALTERNATING WITH EXPANSION JOINTS.

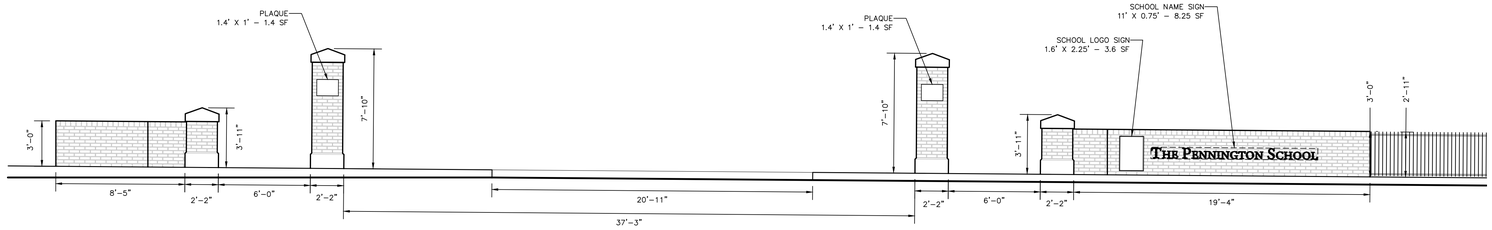


REVISED: 2.04.14 CLASS 'B' CONCRETE
PER: GREG SANOUSKY, COUNTY ENGINEER

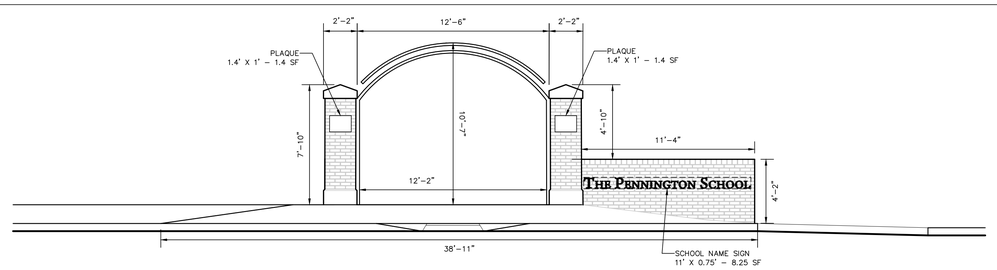
TYPICAL SECTION OF CURB & SIDEWALK DETAIL
SCALE: NTS

COUNTY OF MERCER
DEPARTMENT OF
TRANSPORTATION & INFRASTRUCTURE
DIVISION OF ENGINEERING
GREGORY SANOUSKY, P.E. P.L.S. COUNTY ENGINEER
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE NO. 36758
DRAWN BY: MIKE WILLIAMSON

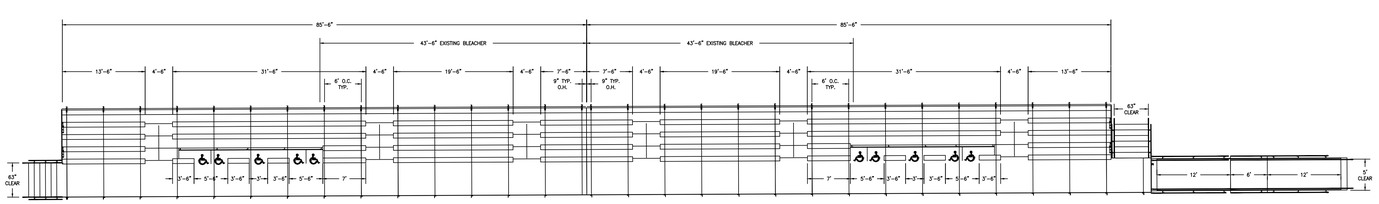
8'X9'X18" MERCER COUNTY CONCRETE CURB
NOT TO SCALE



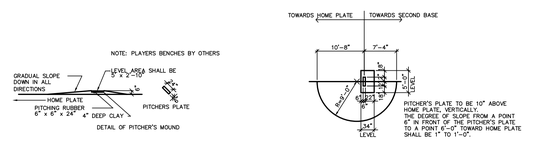
WESLEY DRIVE ENTRANCE DETAIL
SCALE: 1"=1'

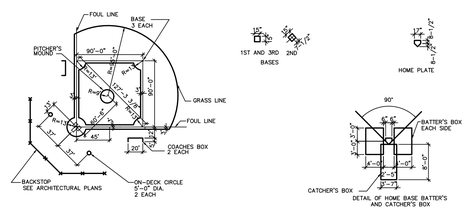


ENTRY ARCH DETAIL
SCALE: 1"=1'



TRACK BLEACHER DETAIL
SCALE: 1"=10'





FIELD LAYOUT NOTES

1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
2 ALL LINE WORK IS TO BE LAID OUT WITH A TOLERANCE OF 1/4 INCH.
3 SOFTBALL & BASEBALL FIELD LAYOUT SHALL BE COMPLIANT WITH THE LATEST VERSION OF STATE HIGH SCHOOL ASSOCIATIONS RULE BOOK.

NOTE: OWNER SHALL PROVIDE PLAYERS BENCHES

BASEBALL FIELD DETAIL
N.T.S.

REV	DESCRIPTION	AUTH	DATE
3	REV. TO ADD ENTRANCE DETAILS	JAB	8/4/23
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/30/22

DATE:	MAY 20, 2022
SCALE:	AS NOTED
DESIGNED BY:	JAB
DRAWN BY:	RRF/RKY
CHECKED BY:	PDQ
JOB NO.	20-02-PEB

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA28132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

CONSTRUCTION DETAILS
FOR
THE PENNINGTON SCHOOL MASTER PLAN PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

15
17

8/4/23
DATE

JAMES A. BASH
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE052258005

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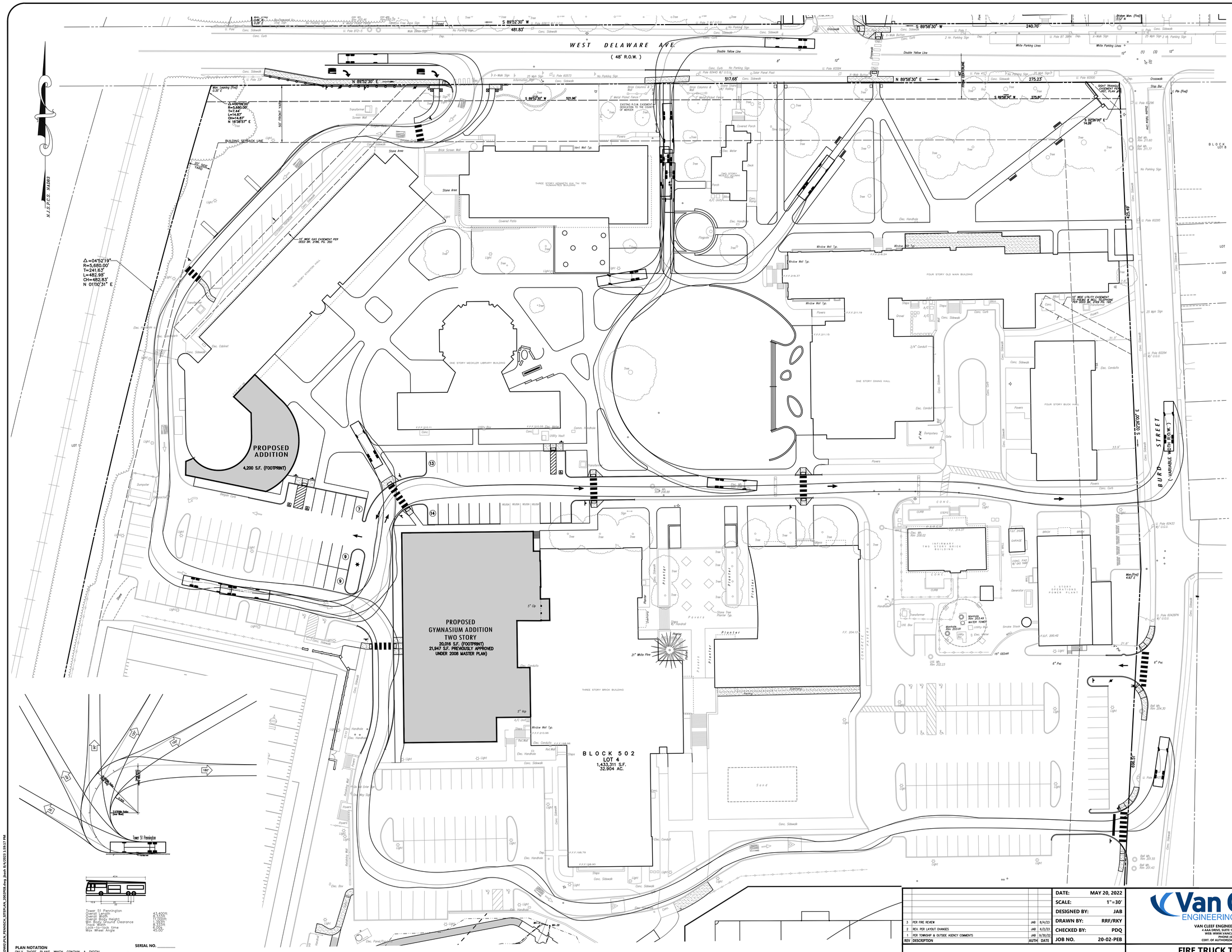
5.)

Know what's below. Call before you dig. or 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW! Dig Safely.

J:\public\2002PEB\DWG\PLN_PENNSCH_DETAILS_2002PEB.dwg Jobstmnt 8/4/2023 2:02:21 PM


WEST DELAWARE AVE.
(48' R.O.W.)
S 89°52'30" W
481.83'
N 89°52'30" E
517.68'
S 89°58'30" W
240.70'
N 89°58'30" E
275.23'
S 89°58'30" W
275.91'
S 00°26'00" E
125.49'
S 00°26'00" E
686.51'
S 00°26'00" E
14.28'
BURD STREET
(VARIABLE WIDTH R.O.W.)
N.J.S.P.C.S. NAD83
Δ=04°52'19"
R=5,680.00'
T=241.63'
L=482.98'
CH=482.83'
N 01°00'31" E
S 00°08'00" E
R=5,680.00'
T=7.44'
L=14.87'
CH=14.87'
N 16°36'57" E
50' FRONT YARD
BUILDING SETBACK LINE
50' REAR YARD
15' WIDE GAS EASEMENT PER DEED BK. 2186, PG. 350
EXISTING R.O.W. EASEMENT PER DEED OF THE COUNTY OF MERCER
PROPOSED ADDITION
4,200 S.F. (FOOTPRINT)
PROPOSED GYMNASIUM ADDITION TWO STORY
20,016 S.F. (FOOTPRINT)
21,947 S.F. PREVIOUSLY APPROVED UNDER 2008 MASTER PLAN)
BLOCK 502
LOT 4
1,433,311 S.F.
32.904 AC.
BLOCK
LOT 8
LOT
LOT 1
LOT 10
LOT 9
LOT 7
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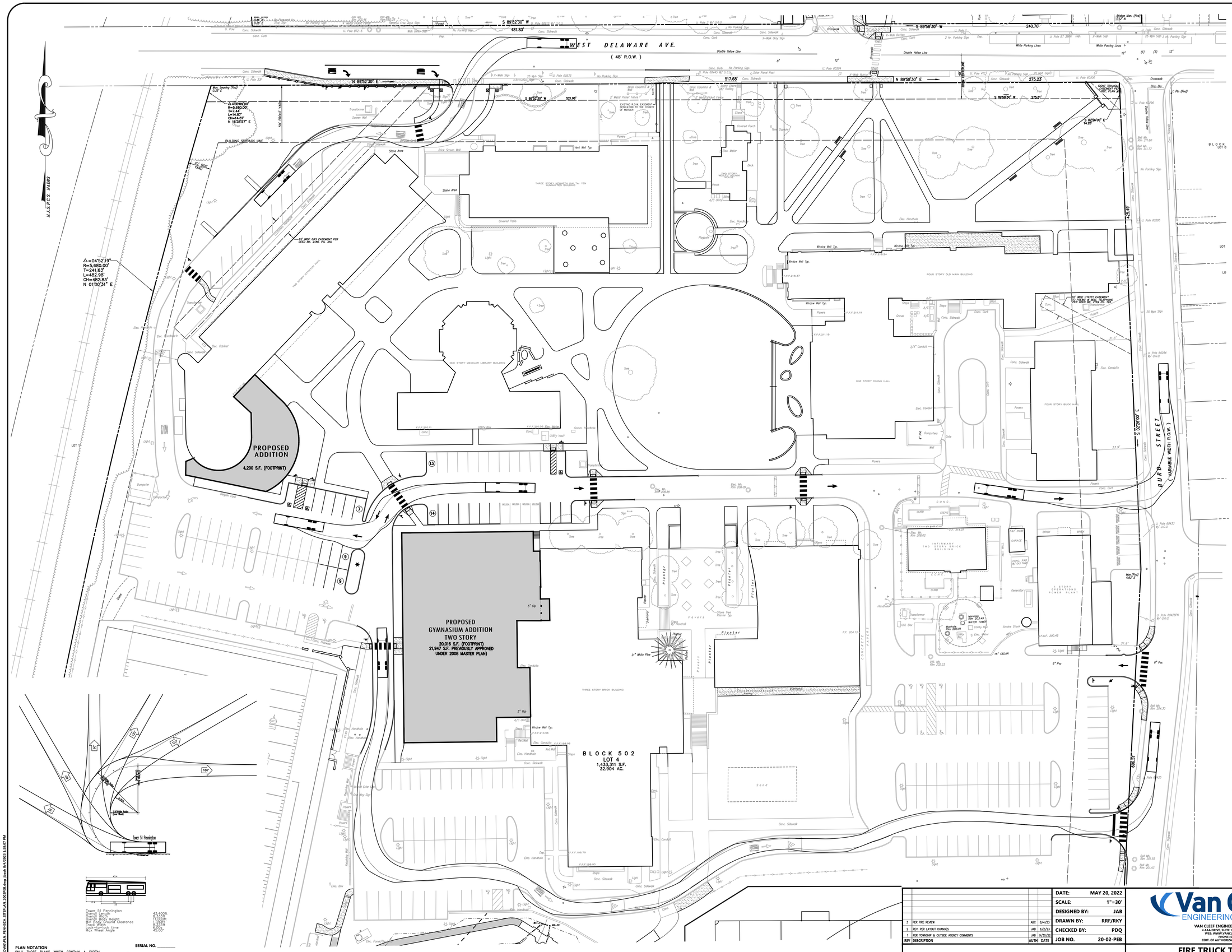

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4. LOCATION OF ABOVE GROUND UTILITIES AS SHOWN.
5. NO CERTIFICATION IS MADE BY VCEA AS TO THE ACTUAL UNDERGROUND POSITION OF ANY UTILITIES OR TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION ON THIS PROJECT. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF ANY CONFLICTS.
6. IT IS IMPERATIVE THAT UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND/OR CONSTRUCTION. CALL **1-800-272-1000** TO ORDER UTILITY MARKOUTS.
7. ALL DISTURBED AREAS TO BE STABILIZED WITH 5" TOPSOIL, SEED, FERTILIZER, LIME, SEED AND MULCH.
8. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL ACTIVITIES WITH THE SCHOOL A MINIMUM OF 48 HOURS IN ADVANCE.

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION DEBRIS TO BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.
2. CONTRACTOR TO PROVIDE SECURE STAGING AREA ON-SITE. LOCATION TO BE AGREED UPON BY SCHOOL.
3. CONTRACTOR TO MAINTAIN SAFE PEDESTRIAN ACCESS FOR SCHOOL STAFF AND STUDENTS DURING CONSTRUCTION.
4. CONTRACTOR TO PROVIDE EMERGENCY ACCESS TO SCHOOL AT ALL TIMES.
5. ALL SEDIMENT DROPPED, SPILLED OR TRACKED ON PAVED SURFACES TO BE REMOVED IMMEDIATELY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SOIL IMPORT OR EXPORT PERMIT(S) REQUIRED, INCLUDING FEES.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL ON-SITE SAFETY AND SECURITY. ALL SAFETY PRECAUTIONS MUST BE UNDERTAKEN AND MAINTAINED AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES. NO SEPARATE PAYMENT SHALL BE MADE FOR ON-SITE SAFETY & SECURITY. THE COSTS OF ONSITE SAFETY AND SECURITY SHALL BE INCLUDED IN COST OF THE WORK.
8. ALL CONCRETE SIDEWALK TO BE ADA COMPLIANT WITH A MAX. CROSS SLOPE OF 2.0% AND A MAX. RUNNING SLOPE OF 5.0%. SIDEWALK WITH A RUNNING SLOPE GREATER THAN 5% REQUIRES AN ADA COMPLIANT HANDRAIL. NO SIDEWALK SHALL HAVE A RUNNING SLOPE GREATER THEN 8.33%.
9. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE CONFINED TO THE DESIGNATED WORK AREA. NO USE OF ADDITIONAL AREA, EVEN FOR EQUIPMENT OR MATERIAL STORAGE, IS PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE OWNER. DESIGNATED WORK AREA SHALL BE DETERMINED AT PRE-CONSTRUCTION MEETING.
10. ALL DISTURBED AREAS TO BE STABILIZED WITH 5 INCHES OF TOPSOIL, FERTILIZER, LIME, MULCH AND TACK WITHIN LIMIT OF DISTURBANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND AND ALL OF THE EXISTING INFRASTRUCTURE THE CONTRACTOR DAMAGED DURING CONSTRUCTION.
12. ALL BACKFILL, FILL AREAS AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% UNLESS OTHERWISE NOTED ON THE PLANS.

FIRE DEPARTMENT NOTES:

1. ALL ACCESS ROUTES SHALL HAVE CLEAR VERTICAL CLEARANCE OF 13.5 FEET. ALL TREE BRANCH MUST BE TRIMMED TO THIS HEIGHT WHERE APPLICABLE AND CONSTANTLY MAINTAINED AT THAT HEIGHT.
2. SNOW MUST BE REMOVED FROM THE GRASS PAVE AREAS TO ENSURE EMERGENCY ACCESS IS MAINTAINED..
3. ANY/ALL OBSTRUCTION SUCH AS, BUT NOT LIMITED TO SIGNS AND STRUCTURES MUST BE OUTSIDE THE VEHICLE SWING PATH AS SHOWN ON THIS PLAN.

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM SEWER	
	FLARED END SECTION	
	DRAINAGE INLET	
	DRAINAGE MANHOLE	
	HEADWALL	
	SANITARY SEWER MH	
	FIRE HYDRANT	
	SIGN	
	UTILITY POLE	
	VALVE	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
T	TELEPHONE LINE	T
X 100.00	GRADE ELEVATION	X 100.00
100	CONTOUR ELEVATION	100
N/A	CONCRETE REMOVAL	
N/A	PAVEMENT REMOVAL	
N/A	TO BE REMOVED	TBR
N/A	PAVEMENT MILLING	
N/A	ABANDON IN PLACE	AIP

GRAPHIC SCALE

0 15 30 60

1 INCH = 30 FT

Tower 51 Pennington

Overall Length	43.60'01
Overall Width	8.5'01
Overall Body Height	11.00'01
Min Body Ground Clearance	1.30'01
Track Width	8.50'01
Lock-to-Lock time	6.00'01
Max Wheel Angle	45.00°

PLAN NOTATION

ONLY THOSE PLANS WHICH CONTAIN A DIGITAL, IMPRESSED, OR COLORIZED 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.

SERIAL NO. _____

811 Know what's below. Call before you dig. or 1-800-272-1000

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLASE OR DRILL THREE (3) WORKING DAYS NOTICE REMEMBER IT'S THE LAW! Dig Safely.

REV	DESCRIPTION	AUTH	DATE
3	PER FIRE REVIEW	ABC	8/4/23
2	REV. PER LAYOUT CHANGES	JAB	6/2/23
1	PER TOWNSHIP & OUTSIDE AGENCY COMMENTS	JAB	9/26/22

DATE:	MAY 20, 2022
SCALE:	1"=30'
DESIGNED BY:	JAB
DRAWN BY:	RRF/RKY
CHECKED BY:	PDQ
JOB NO.	20-02-PEB

JAMES A. BASH — 8/4/23
NEW JERSEY PROFESSIONAL ENGINEER NUMBER 24GE05225800 — DATE

Van Cleef ENGINEERING WITH FOCUS
VAN CLEEF ENGINEERING ASSOCIATES, LLC
4 AAA DRIVE, SUITE 103, HAMILTON, NJ 08691
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (609) 689-1100
CERT. OF AUTHORIZATION NO. 24GA20132300

Bridges/Highways
Construction Inspection
Environmental
Geotechnical/Dams
Landscape Architecture
Local/Regional Planning
Municipal Engineering
Site Development
Surveying/Aerial Drones/GIS
Water/Wastewater

FIRE TRUCK TURNING DIAGRAM
FOR
THE PENNINGTON SCHOOL MASTER PLAN
PRELIMINARY & FINAL SITE PLAN
BLOCK 701, LOT 4, BLOCK 502, LOT 4,
BLOCK 206, LOT 10 & BLOCK 205, LOT 1
PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY

17B
17

D:\Jobs\2020\PEB\DWG\PLN_PENNSCL_SITEPLAN_20229.dwg, Josh 8/4/2023 3:58:07 PM

Borough of Pennington – Schedule of Area, Yard and Building Regulations (1)

Zone		Minimum Lot Size				Minimum Yard Requirements (feet)					Maximum Building Height		Minimum Floor Area First Floor Multistory	Total
		Interior Lots		Corner Lot										
		Area (square feet)	Width (feet)	Area (square feet)	Width (feet)	Front Yard	Any Side Yard (2)(8)	Total Both Side Yards (9)	Rear Yard	Maximum Lot Coverage (3)	Stories	Feet		
Column No.1		*No. 2*	*No. 3*	*No. 4*	*No. 5*	*No. 6*	*No. 7*	*No. 8*	*No. 9*	*No. 10*	*No. 11*	*No. 12*	*No. 13*	*No. 14*
AH-1 through AH-5	Affordable Housing Overlays	See Sections 215-78.3 through 215-78.7 for Standards.												
R-80	Residence Zone	12,000	80	15,000	100	40	15	30	25	See Note 4.	3.0	35	900	1,200
R-100	Residence Zone	20,000	100	24,000	120	50	15	40	30	25%	3.0	35	1,000	1,400
R-A	Apartment-Townhouse Residence Zone	As specified for the R-80 Residence Zone												
	Attached Dwelling Units	See Section 215-69D												
TC	Town Center Zone	See Section 215-71E												
C-B	Crossroads Business Zone	20,000	100	22,500	100	50	20	50	20	50%	2.0	35		
E-1	Education Zone	10 acres	100			50	20	50	50	30%	3.0	45		
E-2	Education Zone	5 acres	100			50	20	50	50	30%	2.5	35		
E-3	Education Zone	5 acres	100	5 acres	100	50	20	50	50	30%	2.0	35		
HMU	Highway Mixed Use Zone	20,000	100	N/A	N/A	See Note 5	30	60	25	60%	3.0	45		
MU	Mixed Use Zone	20,000	100	N/A	N/A	See Note 6	30	60	25	60%	3.0	45		
MR	Mixed Residence Zone	See 215-78.1												
PR	Parks and Recreation	None.												

Notes:

(1) The requirements of this schedule shall apply to all uses within the respective zones, except for those specific uses enumerated thereunder.
(2) Side yards of corner lots, adjacent to a side street, shall be equal to the required front yard, subject to note 7, below.
(3) Total impervious surface.
(4) Fifty percent of the first 6,000 square feet plus 30% of the next 6,000 square feet plus 20% of all area over 12,000 square feet.
(5) Where parking is provided between a public street and principal building, the required front yard shall be 70 feet. Otherwise the required front yard shall be 25 feet. Where residential units are being added to existing buildings, the required setbacks shall be those that exist provided the footprint of the building is not expanded, in which case the setbacks noted above shall be applicable to the expanded part of the building.
(6) Where parking is provided between a public street and principal building, the required front yard shall be 50 feet. Otherwise the required front yard shall be 10 feet but in any event must be consistent with the prevailing setback of buildings within 200' of the site being developed. Where residential units are being added to existing buildings, the required setbacks shall be those that exist provided the footprint of the building is not expanded, in which case the setbacks noted above shall be applicable to the expanded part of the building.
(7) The required front yard shall be the lesser of prevailing setback or the front yard otherwise required in column No. 6.
(8) For attached dwellings, the side yard for the common property line where a wall is shared shall be 0 feet.
(9) For attached dwellings, the total side yard required shall be equal to column number 7, Any Side Yard.

BOROUGH OF PENNINGTON
ORDINANCE 2026-26

AN ORDINANCE AMENDING CHAPTER 215 "ZONING", TO IMPLEMENT RECOMMENDATIONS CONTAINED IN THE BOROUGH OF PENNINGTON MASTER PLAN ADOPTED BY THE PLANNING BOARD ON MAY 13, 2026

WHEREAS, the Borough of Pennington Planning Board, through a public process and in conformance with the requirements of the New Jersey Municipal Land Use Law, on May 13, 2026 adopted a new Master Plan; and

WHEREAS, the Land Use Plan Element adopted as part of the Borough Master Plan contained a number of recommendations for changes to zoning district boundaries, including the elimination of certain districts and overlay districts, the creation of new districts and amendments to existing zoning provisions; and

WHEREAS, the Mayor and Council desire to implement certain recommendations at this time.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Council of the Borough of Pennington, in the County of Mercer and State of New Jersey as follows:

Section I. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215-64 is hereby amended (with deletions crossed out and new language underlined) as follows:

§215-64 **Zoning Map.**
The boundaries of all zone districts shall be shown on a map attached to and made a part of this chapter and titled "Zoning Map", dated ~~March 2026~~ July 2026. Said map and all notations and references thereon are hereby incorporated into and declared to be a part of this chapter.

Section II. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.70 "O-R Office-Residence Zone" is hereby repealed in its entirety.

Section III. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.71.1 "TCB Town Center Buffer Zone" is hereby repealed in its entirety.

Section IV. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.73 "O-B Office (Building) Business Zone" is hereby repealed in its entirety.

Section V. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.74 "P-O Professional Office Zone" is hereby repealed in its entirety.

Section VI. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.77 "MU-1 Mixed Use Zone" is hereby repealed in its entirety and retitled "E-3 Education Zone" and is hereby amended (with deletions crossed out and new language underlined) as follows:

§215-77 E-3 Education Zone

A. Permitted primary uses. The permitted primary uses allowed in the E-3 Education Zone shall be as follows:
   (1) Public schools.
   (2) Administrative offices and facilities of the Hopewell Valley Regional School District.

B. Permitted secondary uses. The permitted secondary uses allowed in the E-3 Education Zone shall be as follows:
   (1) Garage and storage buildings necessary to store any vehicles, equipment or materials on the premises, in conjunction with a permitted primary use.
   (2) School-related off-street parking facilities, including those for the storage of school buses operated by the Hopewell Valley Regional School District.
   (3) School-related maintenance, utility and service facilities.
   (4) Playground equipment, sports courts and playing fields.
   (5) Signage.
   (6) Utility structures.
   (7) Fences.

Section VII. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.78 "MU-2 Mixed Use Zone" is hereby repealed in its entirety and retitled "PR Parks and Recreation Zone" and is hereby amended (with deletions crossed out and new language underlined) as follows:

§215-78 PR Parks and Recreation Zone.

A. Permitted primary uses. The permitted primary uses allowed in the PR Parks and Recreation Zone shall be as follows:
   (1) Publicly owned park and recreation facilities.
   (2) Cemeteries.

B. Permitted secondary uses. The permitted secondary uses allowed in the PR Parks and Recreation Zone shall be as follows:
   (1) Off-street parking facilities.
   (2) Restroom facilities.
   (3) Playing fields and sports courts.
   (4) Playground equipment and fitness stations.
   (5) Gazebos, pavilions and other shade structures.
   (6) Amphitheater, band shell or stage structures.
   (7) Gardens, community gardens and wildlife habitats.
   (8) Tables, benches, bike racks, seating and other site furniture.
   (9) Signage, including interpretive signage.
   (10) Sheds or other storage structures for maintenance equipment.
   (11) Other temporary uses approved by permit issued by the Borough, including but not limited to concerts, festivals, markets, vendors selling food or wares, concessions and food trucks.

Section VIII. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.78.2 "Route 31 Corridor Business Overlay Zone", is hereby repealed in its entirety.

Section X. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", section 215.72 "B-H Highway Business Zone", is hereby retitled "C-B Crossroads Business Zone" and is hereby amended (with deletions crossed out and new language underlined) as follows:

§ 215-72 C-B Crossroads Business Zone. The purpose of the Crossroads Business Zone is to provide opportunity for a variety of commercial uses that are compatible with the goal of reducing congestion, improving pedestrian safety, minimizing access points to adjacent roadways through shared access and improving stormwater management to address flooding.

A. Permitted primary uses. The permitted primary uses allowed in the C-B Crossroads Business Zone shall be as follows:

(1) Retail business and personal service establishments which are clearly of a community service character, such as, but not limited to, the following:
   (a) Retail shops and markets, including the sale of food items or clothing.
   (b) Drug and pharmaceutical stores.
   (c) Barbers, beauty salons and nail salons.
   (d) Makerspace, art galleries and studios for photography and dance.
   (e) Restaurants without drive through facilities.
   (f) Business and professional offices, banks, and financial institutions.
   (g) Commercial schools conducted for profit.
   (h) Medical, dental, physical therapy office or urgent care.
   (i) Distillery or craft brewery.
   (j) Commercial and indoor recreation including virtual reality and sports simulators.
   (j) Fitness studios and gyms.

.

(2) Other business uses similar in scale and service nature to those permitted above.

B. Permitted secondary uses. The permitted secondary uses allowed in the C-B Crossroads Business Zone shall be as follows:

(1) Off-street parking facilities for the use of customers and employees.

(2) Private garage space for the storage of commercial vehicles used in conjunction with a permitted business use.

C. Conditional uses. The conditional uses allowed in the C-B Crossroads Business Zone shall be as follows and shall

be further subject to the provisions of Article VIII:
(1) Public utility uses.
(2) Cannabis retailers (without cannabis consumption areas).
[Added 8-9-2021 by Ord. No. 2021-9]
(3) Cannabis delivery services.
[Added 8-9-2021 by Ord. No. 2021-9]
(4) Medical cannabis dispensaries (without cannabis consumption areas).
[Added 8-9-2021 by Ord. No. 2021-9]
D. Prohibited uses. Any use not hereby specifically permitted in the C-B Crossroads Business Zone is prohibited. The following uses are hereby specifically prohibited:
[Added 8-9-2021 by Ord. No. 2021-9[1]]
(1) Cannabis cultivators, cannabis manufacturers, cannabis wholesalers, cannabis distributors, medical cannabis cultivators, medical cannabis manufacturers and clinical registrants.
(2) Gas stations, service stations or a gas or service station in combination with a convenience store.
[1]Editor's Note: This ordinance also provided for the redesignation of former Subsection D as Subsection E.
E. Other provisions and requirements.
(1) Off-street parking space for the use of customers and employees shall be provided as provided below. Shared parking strategies may be utilized and are encouraged.
(a) Retail : one space for each 250 square feet of floor area.
(b) Distillery, craft brewer, personal service, fitness studios, gyms, makerspace and studios: one space for each 300 square feet of floor area.
(c) Professional, medical and business offices: one space for each 200 square feet of floor area.
(d) Restaurants: one space for each four seats, plus one space for each two employees.
(e) Commercial and indoor recreation: one space for each 350 square feet of floor area.
(2) Truck loading and unloading facilities shall be provided on the property in other than the front yard area in sufficient amount to permit the transfer of goods in other than a public street. Such space shall not infringe upon area required for off-street parking.
(3) Parking areas may be located within any of the required yard areas, provided they are not within 25 feet of the boundary of a residence zone or 10 feet of a street line. Driveways shall be limited to the number that are required for safe and reasonable access and shall be in accordance with the standards specified in Figure 1, or in the case of State or County roads, in accordance with applicable standards of the reviewing agency.[2] Wherever practical, acceleration and deceleration lanes shall be provided. Shared access and cross access is encouraged.
[2]Editor's Note: Figure 1 is included as an attachment to this chapter.
(5) Crosswalks at driveways shall utilize high-visibility markings to enhance pedestrian safety.
(6) All sidewalks shall be separated from the curb by a minimum of three feet.
(4) As further provided in Article VIII, the operating hours of cannabis retailers and medical cannabis dispensaries shall be exclusively from 9:00 a.m. to 8:00 p.m. daily.
[Added 8-9-2021 by Ord. No. 2021-9]

Section XI. Chapter 215 of the Borough Code “Zoning”, Article V “Nonconforming uses”, section 215.52 “Continuation of use of existing buildings”, is hereby amended (with deletions crossed out and new language underlined) as follows:

§ 215-52 Continuation of use of existing buildings.
Except as otherwise provided in this article, the lawful use of buildings existing at the date of the adoption of this chapter may be continued although such use or building does not conform to the regulations specified by this chapter for the zone in which such building is located; provided, however, that:
A. No nonconforming lot shall be further reduced in size.
B. No nonconforming building shall be enlarged, extended or increased, provided, however, that alterations or enlargements that do not increase the degree of nonconformity are permitted. Increasing the degree of nonconformity related to required front, side or rear yard setbacks shall be permitted so long as such alteration or enlargement represents a 25% or less increase as compared to the original length of the building plane or portion of the building plane that is nonconforming. Increasing the degree of nonconformity by construction or alteration is considered to be a further reduction of permitted front, side or rear yard setbacks or further increase over permitted lot coverage or further increase in building height..

Section XII. Chapter 215 of the Borough Code “Zoning”, Article V “Nonconforming uses”, section 215.57 “Alterations”, is hereby amended (with deletions crossed out and new language underlined) as follows:
§ 215-57 Alterations.

A nonconforming building that is partially destroyed may be reconstructed to its original condition but not enlarged or extended unless in conformance with the requirements of §215-52.B. Nothing in this section shall limit the ability to reconstruct only a portion of a building that is partially destroyed provided previous nonconforming conditions that existed at the time of partial destruction are not exceeded.

Section XIII. Chapter 215 of the Borough Code "Zoning", Article II "General Regulations", is hereby amended to add new section 215-28.1 "Keeping of chickens" as follows:

§ 215-28.1 Keeping of chickens. The keeping of chickens shall be permitted on residential properties in the R-80 and R-100 zones that conform to the minimum lot area requirement for the zone in which the property is located subject to the following requirements:

A. The keeping of chickens shall be prohibited on multiunit properties, including any property in common ownership as part of a homeowner's association or owned or maintained by a management company or landlord.
B. The keeping of chickens shall be prohibited on nonresidential properties and residential properties that do not meet the minimum lot size for the zone district in which the property is located.
C. A maximum of nine (9) chickens may be kept on any one property.
D. Roosters shall be prohibited.
E. Chickens shall be provided an enclosure which is covered, ventilated, and predator/rodent resistant. Said enclosure shall provide a minimum of four (4) square feet per bird when outdoor space of equal or greater space is provided or ten (10) square feet per bird where outdoor space of equal or greater space is not provided. Enclosures shall be located within rear yards only and only one (1) enclosure shall be permitted on any property.
F. Chickens and their enclosure shall be contained within an area completely enclosed by fencing a minimum of four (4) feet in height. Chickens shall not be permitted to roam freely outside of fenced areas.
G. The enclosure and any fenced run shall be well drained so there is no accumulation of moisture. The floors and walls of the enclosure shall be kept in a clean and sanitary condition, with all droppings collected at least weekly. Animal solid waste shall be kept in a covered and secured container until composted, applied as fertilizer or transported off-premises.
H. All enclosures shall be a minimum of 5 feet from a side or rear lot line.
I. Any exterior lighting proposed shall be shielded so as not to shine on adjacent properties.

Section XIV. Chapter 215 of the Borough Code "Zoning", Article VII "Zone Regulations", Section 215-66 concerning the Schedule of Area, Yard and Building Regulations, is hereby amended (with deletions crossed out and new language underlined) as noted below. The referenced Schedule of Area, Yard and Building Regulations dated July 2026 in the form attached to this ordinance is hereby adopted and substituted for the previous Schedule.

§ 215-66 Schedule of Area, Yard and Building Regulations.

The Schedule of Area, Yard and Building Regulations dated July 2026 sets forth the regulations of this chapter with respect to minimum lot size, yard widths, maximum lot coverage, maximum height and minimum floor area for each of the various zones. Unless modified elsewhere in this chapter, such standards shall be deemed to be the minimum requirements or maximum intensity permitted to each of the several zones.[1]

Section XV. Severability

If any section, part of any section, or clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional, such decision shall not affect the remaining provisions of this ordinance. The governing body of the Borough of Pennington declares that it would have passed the ordinance and each section and subsection thereof, irrespective of the fact that any one or more of the subsections, sentences, clauses or phrases may be declared unconstitutional or invalid.

Section XVI. ***Effective Date.***

This ordinance shall take effect immediately upon passage and publication as prescribed by law.

Introduced: Aug. 3, 2026

Advertised: _____

Public Hearing: _____

Adopted: _____

Published: _____

ATTEST: APPROVED:

_____ _____

Gian-Paolo Caminiti, Borough Clerk James Davy, Mayor

RECORD OF COUNCIL VOTE ON INTRODUCTION

COUNCILMAN	AYE	NAY	N.V.	A.B.	COUNCILMAN	AYE	NAY	N.V.	A.B.
Angarone	X				Rubenstein	S			
Chandler	M				Stern	X			
Kassler-Taub				X	Valenza				X

RECORD OF COUNCIL VOTE ON ADOPTION

COUNCILMAN	AYE	NAY	N.V.	A.B.	COUNCILMAN	AYE	NAY	N.V.	A.B.
Angarone					Rubenstein				
Chandler					Stern				
Kassler-Taub					Valenza				

Borough of Pennington Zoning Map

July 2026

Legend

- Pennington Crossroads Historic District
- AH Overlays
- R-80 Residence
- R-100 Residence
- R-A Apartment Townhouse
- MR Mixed Residence
- TC Town Center
- MU Mixed Use
- HMU Highway Mixed Use
- C-B Crossroads Business
- E-1 Education
- E-2 Education
- E-3 Education
- PR Parks Recreation

N W E S

0 0.25 Miles

Map Prepared by:
James T. Kyle, PP/AICP
NJ PP# 5667

KMA
KYLE+MCMANUS ASSOCIATES
POLICY PLANNING DESIGN

Sources: Esri, TomTom, Garmin, (c) OpenStreetMap contributors, and the GIS User Community,
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community