PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

STATEMENT OF INTENT

THE PURPOSE OF THE PLAN IS TO OBTAIN APPROVAL TO CONSOLIDATE PARCEL ID# 09.9.2.22 & PARCEL ID# 09.9.2.22-2 WHICH WILL ALLOW CONSTRUCTION OF AN ADDITIONAL APARTMENT COMPLEX OF 30 TWO-BEDROOM APARTMENTS WITH AN APPROXIMATE GROSS BUILDING AREA OF 28,920 SQ.FT.

RECORD NOTES

1. THE PROJECT IS LOCATED IN THE MARSHALLS CREEK AND POND CREEK WATERSHEDS, WHICH HAVE A CHAPTER 93 STREAM DESIGNATION OF HQ-CWF, MF. NO ACTIVITIES ARE PROPOSED THAT WILL NEGATIVELY IMPACT THE WATER QUALITY.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
3. NOTIFY THE PA ONE CALL SYSTEM, 1-800-242-1776, AT LEAST 3 DAYS PRIOR TO THE START OF CONSTRUCTION.
4. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION.
5. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES.
6. WETLAND BOUNDARIES WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (JANUARY 1987), SUBSEQUENT GUIDANCE DOCUMENTS, AND APPLICABLE REGIONAL SUPPLEMENTS.
7. THERE ARE NO DESIGNATED FLOOD AREAS WITHIN THE PROPOSED LAND DEVELOPMENT AREA.
8. BY APPROVAL OF THIS PLAN THE TOWNSHIP HAS NEITHER CONFIRMED NOR DENIED THE EXISTENCE AND/OR EXTENT OF ANY WETLAND AREAS WHETHER OR NOT DELINEATED ON THE PLAN, AND ANY ENCROACHMENT THEREON FOR ANY REASON WHATSOEVER SHALL BE THE SOLE RESPONSIBILITY OF THE SUBDIVIDER AND/OR DEVELOPER, HIS HEIRS, SUCCESSORS AND ASSIGNS AND SHALL BE SUBJECT TO THE JURISDICTION OF THE ARMY CORPS OF ENGINEERS AND/OR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE SAID ENCROACHMENT SHALL CONFORM TO THE RULES AND REGULATIONS OF THE JURISDICTIONAL AGENCIES.
9. THIS PLAN IS UNDER AND SUBJECT TO ALL OF THE RULES, REGULATIONS, REQUIREMENTS AND RESTRICTIONS AS SET FORTH IN THE MIDDLE SMITHFIELD TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND THE MIDDLE SMITHFIELD TOWNSHIP ZONING ORDINANCE, AS BOTH ARE AMENDED.
10. APPROVAL OF THIS PLAN DOES NOT NEGATE OR ALTER ANY EXISTING EASEMENTS, RIGHT-OF-WAY, RESTRICTIONS, OR OTHER ENCUMBRANCES PLACED UPON THE PROPERTIES, UNLESS SPECIFICALLY NOTED ON THE PLANS, DEEDS, OR EASEMENT AGREEMENTS PROVIDED AS PART OF THE APPROVED LAND DEVELOPMENT APPLICATION.
11. THE APPLICANT, HIS HEIRS, SUCCESSORS OR ASSIGNS WILL IMPLEMENT ALL REGULATIONS AND OBTAIN ALL PERMITS AND APPROVALS AS REQUIRED BY ANY AND ALL LOCAL, STATE OR FEDERAL AGENCIES AND AUTHORITIES, AND DOES HEREBY ACKNOWLEDGE AND AGREE THAT IF SAID PERMITS AND APPROVALS ARE NOT OBTAINED AS REQUIRED, THEN ANY AND ALL APPROVALS GIVEN BY MIDDLE SMITHFIELD TOWNSHIP WILL BECOME NULL AND VOID WITH NO FURTHER ACTION ON THE PART OF THE TOWNSHIP.
12. THE OWNERS, THEIR HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS AND ASSIGNS, SHALL MAKE PROVISION AND BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, OPERATION AND REPAIR OF ANY AND ALL STORMWATER MANAGEMENT FACILITIES AND CONTROLS DEPICTED ON THIS PLAN AND OTHER PLANS AND DOCUMENTS SUPPORTING THE SAME, INCLUDING, BUT NOT LIMITED TO, ALL INFILTRATION DEVICES, BUFFERS, DETENTION BASINS, INLETS, SWALES, PIPES, BERMS AND SPREADERS. MIDDLE SMITHFIELD TOWNSHIP IS HEREBY GRANTED THE RIGHT TO INSPECT ALL PERMANENT STORMWATER MANAGEMENT FACILITIES AND CONTROLS AT ANY REASONABLE TIME. IF MIDDLE SMITHFIELD TOWNSHIP DETERMINES AT ANY TIME THAT ANY OF SAID STORMWATER MANAGEMENT FACILITIES OR CONTROLS HAVE BEEN ELIMINATED, ALTERED OR IMPROPERLY MAINTAINED, THE THEN OWNER SHALL BE ADVISED OF THE CORRECTIVE MEASURE REQUIRED AND BE AFFORDED A REASONABLE PERIOD OF TIME TO TAKE THE NECESSARY CORRECTIVE ACTION. MIDDLE SMITHFIELD TOWNSHIP SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, OF INGRESS, EGRESS AND REGRESS TO ANY AND ALL OF THE STORMWATER MANAGEMENT FACILITIES AND CONTROLS, AS WELL AS UPON AND WITHIN THE UTILITY AND DRAINAGE EASEMENTS AS SHOWN ON THIS PLAN, FOR THE PURPOSE OF INSTALLATION, MAINTENANCE AND/OR REPAIR DUE TO THE FAILURE OR NEGLECT OF THE OWNER TO PERFORM THE SAME WITHIN THE TIME REQUIRED, OR FOR EMERGENCY REMEDIES TO THE STORMWATER MANAGEMENT FACILITIES AND CONTROLS IF NECESSARY. IF MIDDLE SMITHFIELD TOWNSHIP ELECTS TO PERFORM SUCH INSTALLATION, MAINTENANCE AND/OR REPAIR, ALL COST AND EXPENSES INCURRED BY MIDDLE SMITHFIELD TOWNSHIP IN RELATION TO ANY WORK PERFORMED BY MIDDLE SMITHFIELD TOWNSHIP PURSUANT TO THE PROVISIONS OF THIS COVENANT AND/OR THE ENFORCEMENT OF THE SAME, SHALL BE THE JOINT AND SEVERAL RESPONSIBILITY OF THE OWNER AND ANY OCCUPIER OF THE PROPERTY WHO VIOLATED THE PROVISIONS OF THIS COVENANT, PAYABLE BY THE OWNER AND/OR OCCUPIERS OF THE PROPERTY, THEIR HEIRS, ADMINISTRATORS, EXECUTORS, SUCCESSORS AND ASSIGNS UPON DEMAND BY MIDDLE SMITHFIELD TOWNSHIP, AND SHALL CONSTITUTE A LIEN AGAINST THE PROPERTY UNTIL PAID IN FULL. THE REMEDIES OF MIDDLE SMITHFIELD TOWNSHIP PURSUANT TO THIS COVENANT ARE IN ADDITION TO ALL OTHER RIGHTS AND REMEDIES AVAILABLE TO MIDDLE SMITHFIELD TOWNSHIP, ITS SUCCESSORS AND ASSIGNS, PURSUANT TO ANY STATUTE, ORDINANCE, AT LAW OR IN EQUITY. ALL OF THE FOREGOING IS MORE PARTICULARLY AND AT LARGE PROVIDED IN THAT CERTAIN STORMWATER MANAGEMENT AGREEMENT AND DECLARATION OF EASEMENT BETWEEN THE OWNER AND THE TOWNSHIP DATED JANUARY 27, 2026, THE TERMS AND PROVISIONS OF WHICH ARE INCORPORATED HEREIN BY REFERENCE. THIS COVENANT SHALL RUN WITH THE LAND.
13. PER TRIP GENERATION MANUAL 11TH EDITION FOR MULTI-FAMILY HOUSING, LOW RISE USE (210 3 LEVELS), THIS DEVELOPMENT WILL GENERATE APPROXIMATELY 18 PEAK HOUR TRIP ENDS AND 203 AVERAGE DAILY TWO-WAY TRIP ENDS. THESE TRIP ENDS FALL BELOW 50 HOURLY TRIP ENDS AND 800 DAILY TRIP ENDS, SO A TRAFFIC IMPACT STUDY IS NOT REQUIRED.
14. A CONDITIONAL USE APPROVAL WAS GRANTED BY MIDDLE SMITHFIELD TOWNSHIP BOARD OF SUPERVISORS ON SEPTEMBER 18, 2023.
15. BUILDINGS SHALL NOT BE OCCUPIED UNTIL THE DRIVEWAY AND PARKING AREAS HAVE BEEN PAVED WITH PERVIOUS PAVEMENT.
16. REFER TO PLAT BOOK 93 PAGE 73 THROUGH PAGE 79 FOR RECORDED LAND DEVELOPMENT PLANS FOR MT. NEBO APARTMENTS.

CONSERVATION EASEMENT

1. THE AREA DENOTED ON SHEET 4 OF THIS PLAN SET AS "WOODED STEEP SLOPE CONSERVATION AREA", DESCRIBED BY BEARINGS AND DISTANCES, AND WITH AN AREA OF 3.15 ACRES, IS SUBJECT TO A CONSERVATION EASEMENT ENFORCEABLE BY THE MIDDLE SMITHFIELD TOWNSHIP, OR ITS DULY AUTHORIZED AGENT. THE CONSERVATION AREA SHALL BE PERMANENTLY PRESERVED AS A WOODED AREA, AND NOT BE USED FOR ANY PURPOSE EXCEPT OPEN SPACE AND PASSIVE RECREATION. THE CONSERVATION AREA SHALL NOT BE FURTHER SUBDIVIDED OR DEVELOPED FOR BUILDINGS, EXCEPT APPROVED BUILDINGS FOR NON-COMMERCIAL RECREATION OR TO SUPPORT MAINTENANCE OF THE LAND.
2. RESIDENTS OF THE PROPERTY SHALL HAVE ACCESS TO THE CONSERVATION AREA FOR PASSIVE RECREATION USE. THE LANDOWNER, ITS SUCCESSORS AND ASSIGNS (COLLECTIVELY "LANDOWNER"), SHALL ESTABLISH AND MAINTAIN A WALKING TRAIL TO THE CONSERVATION AREA AND ADJACENT AREAS, AS DEPICTED IN SHEET PAGE 12 OF 21 (POST CONSTRUCTION STORMWATER MANAGEMENT PLAN) OF THIS PLAN SET. OWNERSHIP AND MAINTENANCE OF THIS LAND SHALL REMAIN WITH THE OWNER OF THE SUBJECT PARCEL. NO TRAILS OR ANY OTHER IMPROVEMENTS ARE REQUIRED TO BE CONSTRUCTED WITHIN THE CONSERVATION AREA AS PART OF THIS PROJECT.
3. THE TOWNSHIP, ITS AGENTS AND EMPLOYEES, ARE AUTHORIZED TO ENTER UPON THE PROPERTY AND INSPECT THE CONSERVATION AREA WHENEVER THE TOWNSHIP DEEMS NECESSARY. IN THE EVENT THE LANDOWNER FAILS TO MAINTAIN THE CONSERVATION AREA IN THE REQUIRED CONDITION, THE TOWNSHIP MAY, BUT IS NOT OBLIGATED TO, ENTER UPON THE PROPERTY AND TAKE SUCH NECESSARY AND PRUDENT ACTION TO MAINTAIN THE CONSERVATION AREA AND TO CHARGE THE COSTS OF THE MAINTENANCE TO THE LANDOWNER.
4. IN THE EVENT THE TOWNSHIP, PURSUANT TO THE CONSERVATION EASEMENT, PERFORMS WORK OF ANY NATURE, OR EXPENDS ANY FUNDS IN PERFORMANCE OF SAID WORK FOR LABOR, USE OF EQUIPMENT, SUPPLIES, MATERIALS, AND THE LIKE ON ACCOUNT OF THE LANDOWNER'S FAILURE TO COMPLY WITH THE EASEMENT, THE LANDOWNER SHALL REIMBURSE THE TOWNSHIP UPON DEMAND, WITHIN 30 DAYS OF RECEIPT OF INVOICE THEREOF, FOR ALL COSTS INCURRED BY THE TOWNSHIP HEREUNDER. IF NOT PAID WITHIN SAID 30-DAY PERIOD, THE TOWNSHIP MAY (1) ENTER A LIEN AGAINST THE PROPERTY IN THE AMOUNT OF SUCH COSTS, (2) DEDUCT THE COSTS FROM ANY ESCROW ACCOUNT OR OTHER FINANCIAL SECURITY HELD BY THE TOWNSHIP IN CONNECTION WITH THE PROPERTY'S DEVELOPMENT, OR (3) PROCEED TO RECOVER ITS COSTS THROUGH PROCEEDINGS IN EQUITY OR AT LAW AGAINST THE LANDOWNER, AS AUTHORIZED BY LAW. ALL SUCH REMEDIES SHALL BE CUMULATIVE.
5. THE LANDOWNER SHALL INDEMNIFY THE TOWNSHIP AND ITS AGENTS AND EMPLOYEES (COLLECTIVELY THE "TOWNSHIP") AGAINST ANY AND ALL DAMAGES, ACCIDENTS, CASUALTIES, OCCURRENCES OR CLAIMS WHICH MIGHT ARISE OR BE ASSERTED AGAINST THE TOWNSHIP FOR THE PRESENCE, EXISTENCE OR MAINTENANCE OF THE CONSERVATION AREA. IN THE EVENT A CLAIM IS ASSERTED AGAINST THE TOWNSHIP, THE LANDOWNER SHALL DEFEND, AT ITS OWN EXPENSE, ANY SUIT BASED ON SUCH CLAIM. IF ANY JUDGMENT OR CLAIMS AGAINST THE TOWNSHIP SHALL BE ALLOWED, THE LANDOWNER SHALL PAY ALL COSTS AND EXPENSES IN CONNECTION THEREWITH.
6. THE CONSERVATION EASEMENT AND REQUIREMENTS CONTAINED HEREIN SHALL CONSTITUTE A COVENANT RUNNING WITH THE PROPERTY AND/OR EQUITABLE SERVITUDE, AND SHALL BE BINDING ON THE LANDOWNER, ITS ADMINISTRATORS, EXECUTORS, ASSIGNS, HEIRS AND ANY OTHER SUCCESSORS IN INTERESTS, IN PERPETUITY.

A REQUEST IS HEREBY :MADE FOR A MODIFICATION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND/OR THE PUBLIC ROAD REGULATIONS

NAME OF PROJECT: MT. NEBO APARTMENTS
APPLICANT(S): MT. NEBO APARTMENTS, LLC PHONE NO. 570-424-0540
ADDRESS: 432 GRANGE RD, MT. POCONO, PA 18344-7128

SECTION/SUBSECTION INVOLVED: 170-79-B
REASON FOR MODIFICATION: RESIDENTIAL REQUIREMENT IS MEANT FOR SINGLE FAMILY RESIDENCES AND LARGE WOODED AREA WILL BE PRESERVED BY CONCENTRATIVE DEVELOPMENT IN A SMALL PORTION OF THE SITE.
MODIFICATION REQUESTED: POST CONSTRUCTION STORMWATER MANAGEMENT REGULATIONS

SECTION/SUBSECTION INVOLVED: SWO-160-13-B
REASON FOR MODIFICATION: RAINFALL DEPTHS FROM THIS PROGRAM ARE MORE SPECIFIC TO THE AREA OF DEVELOPMENT THAN THOSE PROVIDED IN THIS SECTION.

APPLICANTS DECLARATION OF MODIFICATION REQUEST:

I HEREBY DECLARE THAT THE ABOVE REQUESTED MODIFICATION IS THE MINIMUM REQUIRED TO COMPLETE THE ABOVE PROJECT IN FULL ACCORDANCE WITH ALL REMAINING STANDARDS, REGULATIONS AND REQUIREMENTS OF MIDDLE SMITHFIELD TOWNSHIP.

DATE OF APPLICATION: _____ (SIGNATURE) _____ (PRINT AND TITLE)

MIDDLE SMITHFIELD TOWNSHIP PLANNING COMMISSION: (RECOMMENDATIONS/ACTION)

_____ MODIFICATION APPROVED.
_____ MODIFICATION APPROVED SUBJECT TO SPECIFIED CONDITIONS.
_____ MODIFICATION REJECTED.

DATE OF ACTION: _____ _____ (CHAIRMAN, PLANNING COMMISSION)

MIDDLE SMITHFIELD TOWNSHIP BOARD OF SUPERVISORS: (ACTION)

_____ MODIFICATION APPROVED.
_____ MODIFICATION APPROVED SUBJECT TO SPECIFIED CONDITIONS.
_____ MODIFICATION REJECTED.

DATE OF ACTION: _____ _____ (CHAIRMAN, BOARD OF SUPERVISORS)

THE GRANTING OR REJECTION OF THE ABOVE REQUESTED MODIFICATION IN NO WAY RELIEVES THE APPLICANT OF RESPONSIBILITY OF CONFORMANCE WITH ALL OTHER ORDINANCES, STANDARDS, REGULATIONS AND REQUIREMENTS OF MIDDLE SMITHFIELD TOWNSHIP.

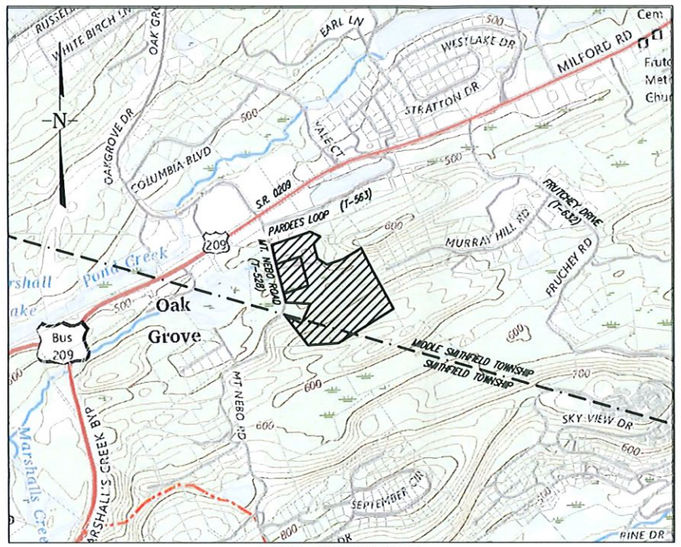
OWNER/DEVELOPER/APPLICANT

MT. NEBO APARTMENTS, LLC
432 GRANGE RD
MT. POCONO, PA 18344-7128
PHONE: 570-424-0504

PLAN PREPARER

HanoverEngineering
Pocono Office
3355 Route 611, Suite 1 P:570.688.9550
Bartonsville, PA 18321-7822 F:570.688.9768
HanoverEng.com

"CALL BEFORE YOU DIG"
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE – STOP CALL.
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776
THIS PROJECT'S DESIGNER INQUIRY NO.



USGS LOCATION MAP

SCALE 1" = 1,000'
QUADRANGLE: BUSHKILL, 2023

SITE DATA:

	MT. NEBO	MT. NEBO II
PARCEL ID#:	09.9.2.22	09.9.2.22-2
GIS PIN#:	09732300911784	09732300826052
DEED REFERENCED:	DBV 2516, PG 567	DBV 2619, PG 6051
TOTAL TRACT AREA:	38.32 ACRE (DEED) 37.93 ACRE (ACTUAL)	3.2 ACRE (DEED) 2.94 ACRE (ACTUAL)
PROPOSED GROSS BUILDING AREA:	35,320 SQ. FT.	35,320 SQ. FT.
EXISTING USE:	APARTMENT COMPLEX	HOUSEHOLD UNIT
PROPOSED USE:	N/A	APARTMENT COMPLEX (CONDITIONAL USE)
EXISTING SEWER:	PUBLIC SEWER	N/A
EXISTING WATER:	PUBLIC WATER	N/A
PROPOSED SEWER:	N/A	PUBLIC SEWER
PROPOSED WATER:	N/A	PUBLIC WATER
ZONING DISTRICT:	C-1 COMMERCIAL	C-1 COMMERCIAL
LOTS:	ONE	ONE
NEW ROADS:	ZERO	ZERO

	EXISTING	PROPOSED
TOTAL SITE AREA:	38.3 ACRES	41.5 ACRES
SITE AREA LESS R.O.W.'S:	37.2 ACRES	40.1 ACRES
LAND RESOURCE PROTECTION AREA:	13.2 ACRES	14.7 ACRES
ADJUSTED TRACT AREA:	24 ACRES	25.4 ACRES
PERMITTED DENSITY :	6 UNITS PER ACRE	6 UNITS PER ACRE
MAXIMUM NUMBER OF UNITS PERMITTED:	144	152
UNITS PROPOSED:	96	126
LOT REQUIREMENTS	**EXISTING**	**PROPOSED**
MINIMUM LOT AREA: 0.5 ACRES	37.93 ACRES	40.87 ACRES
MAXIMUM IMPERVIOUS COVERAGE: 60%	2.9%	3.4%
MAXIMUM BUILDING HEIGHT: 5 STORIES	< 5 STORIES	< 5 STORIES
MAXIMUM BUILDING AREA: 40%	2.37%	2.8%
SETBACKS:	**EXISTING**	**PROPOSED**
FRONT YARD: 50 FT	50 FT	50.1 FT
REAR YARD: 50 FT	108.79 FT	108.79 FT
SIDE YARD (EACH SIDE): 30 FT	30 FT	30 FT
MINIMUM LOT WIDTH: 150 FT	VARIES	VARIES
PARKING REQUIREMENTS:	**EXISTING**	**PROPOSED**
REQUIRED MINIMUM: 1.46(PRIOR), 1.7(NEW) SPACES/UNIT:	141 SPACES	192 (51 NEW) SPACES
TOTAL SPACES PROVIDED:	160 SPACES	215 (55 NEW) SPACES
MINIMUM SIZE: 9' X 18'	9' X 18'	9' X 18'
HANDICAP PARKING REQUIRED:	6 SPACES	7 (1 NEW) SPACES
TOTAL HANDICAP PARKING PROVIDED:	8 SPACES	11 (3 NEW) SPACES

LAND DEVELOPMENT PLANS

* CS-1	COVER SHEET
* RP-1 TO RP-2	RECORD PLAN
* EP-1	EASEMENT PLAN
EF-1	EXISTING FEATURES AND DEMOLITION PLAN
GP-1 TO GP-2	GRADING & UTILITY PLAN
SWP-1 TO SWP-2	STORMWATER PLAN AND PROFILE SHEET
UP-1 TO UP-2	UTILITY PLAN AND PROFILE SHEET
LL-1	LANDSCAPE PLAN & DETAILS
LL-2	LIGHTING PLAN & DETAILS
DET-1 TO DET-3	STANDARD CONSTRUCTION DETAIL SHEET
* PCSM-1 TO PCSM-3	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
ESPC-1 TO ESPC-3	EROSION AND SEDIMENT POLLUTION CONTROL PLAN
TTT-1	TRUCK TURNING TEMPLATE

ALSO PLANS

* LLA-1	LOT LINE ADJUSTMENT PLAN

* PLAN TO BE RECORDED

CERTIFICATION OF OWNERSHIP AND ACKNOWLEDGEMENT OF PLAN:

COMMONWEALTH OF PENNSYLVANIA :
: SS:
COUNTY OF MONROE :

ON THIS, THE _____ DAY OF _____, 2025 BEFORE ME, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED MT. NEBO APARTMENTS, LLC, WHO BEING DULY SWORN, ACCORDING TO THE LAW, DOTH DEPOSE AND SAY THAT HE IS THE OWNER OF PROPERTY SHOWN AND DEPICTED ON THIS PLAN, THAT THE PRELIMINARY/FINAL LAND DEVELOPMENT PLAN THEREOF WAS MADE AT HIS DIRECTION THAT HE ACKNOWLEDGES THE SAME TO BE BY HIS OWN ACT AND PLAN AND DESIRES THE SAME TO BE RECORDED ACCORDING TO LAW.

WITNESS MY HAND AND SEAL THE DAY AND DATE ABOVE WRITTEN.

_____
MT. NEBO APARTMENTS, LLC
ANTHONY MAULA, MANAGING MEMBER

SWORN AND SUBSCRIBED BEFORE THIS _____ DAY OF _____, 2025.

_____

REQUIRED PERMIT CERTIFICATION

COMMONWEALTH OF PENNSYLVANIA :
: SS:
COUNTY OF MONROE :

ON THIS THE _____ DAY OF _____, 2025, BEFORE ME, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED MT. NEBO APARTMENTS, LLC WHO BEING DULY SWORN, ACCORDING TO LAW DOTH DEPOSE AND SAY THAT HE IS THE OWNER OF THE PROPERTY SHOWN AND DEPICTED ON THIS PLAN, HEREBY CERTIFY THAT HE AND HIS HEIRS OR ASSIGNS WILL IMPLEMENT ALL REQUIREMENTS AND OBTAIN ALL PERMITS AS REQUIRED BY ANY AND ALL LOCAL, STATE OR FEDERAL AGENCIES AND DO ALSO AGREE THAT IF THE SAID PERMITS ARE NOT OBTAINED AS REQUIRED ANY AND ALL APPROVALS GIVEN BY MIDDLE SMITHFIELD TOWNSHIP WILL BECOME NULLIFIED AND BE VOIDED WITH NO FURTHER ACTION ON THE PART OF THE TOWNSHIP.

WITNESS MY HAND AND SEAL THE DAY AND DATE ABOVE WRITTEN.

_____
MT. NEBO APARTMENTS, LLC
ANTHONY MAULA, MANAGING MEMBER

SWORN AND SUBSCRIBED BEFORE THIS _____ DAY OF _____, 2025.

_____

MIDDLE SMITHFIELD TOWNSHIP PLANNING COMMINSSION CERTIFICATE OF REVIEW:

AT A PUBLIC MEETING HELD ON _____ 2025 THE PLANNING COMMISSION OF MIDDLE SMITHFIELD TOWNSHIP REVIEWED AND BY A MOTION, DULY CARRIED, DOES HEREBY RECOMMEND APPROVAL OF THE SAID PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR THE PROPERTY OF MT. NEBO APARTMENTS, LLC AS SHOWN HEREON.

_____
CHAIRMAN

_____
SECRETARY

MIDDLE SMITHFIELD TOWNSHIP BOARD OF SUPERVISORS CERTIFICATE OF REVIEW AND APPROVAL:

AT A PUBLIC MEETING HELD ON _____ 2025 THE BOARD OF SUPERVISORS OF MIDDLE SMITHFIELD TOWNSHIP REVIEWED AND BY A MOTION, DULY CARRIED, DOES HEREBY APPROVE, ENDORSE AND SEAL THE SAID MINOR SUBDIVISION PLAN FOR THE PROPERTY OF MT. NEBO APARTMENTS, LLC AS SHOWN HEREON.

_____
CHAIRMAN

_____ _____
SUPERVISOR SUPERVISOR

AFFIDAVIT OF PLAN SUBMISSION

THIS PRELIMINARY/FINAL LAND DEVELOPMENT PLAN WAS SUBMITTED TO THE MONROE COUNTY PLANNING COMMISSION FOR REVIEW ON APRIL 18, 2025

_____
SALVATORE J. CAIAZZO, P.E.

CERTIFICATE OF ACCURACY AND COMPLIANCE:

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON, AS WELL AS ALL RELATED DRAWINGS AND DOCUMENTS SUBMITTED HEREWITH ARE TRUE AND CORRECT TO THE ACCURACY REQUIRED BY AND ARE IN COMPLETE COMPLIANCE WITH THE MIDDLE SMITHFIELD TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND/OR THE MIDDLE SMITHFIELD TOWNSHIP ZONING ORDINANCE AND WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND FOR WHICH I ACCEPT FULL AND COMPLETE RESPONSIBILITY.

_____ DATE
SALVATORE J. CAIAZZO, P.E.
REGISTRATION NO. 075270
HANOVER ENGINEERING ASSOCIATES, INC.
3355 ROUTE 611, SUITE 1
BARTONSVILLE, PA 18321-7822
P:570-688-9550

COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
SALVATORE J. CAIAZZO
ENGINEER
PE075270

CERTIFICATE OF ACCURACY AND COMPLIANCE:

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON, AS WELL AS ALL RELATED DRAWINGS AND DOCUMENTS SUBMITTED HEREWITH ARE TRUE AND CORRECT TO THE ACCURACY REQUIRED BY AND ARE IN COMPLETE COMPLIANCE WITH THE MIDDLE SMITHFIELD TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND/OR THE MIDDLE SMITHFIELD TOWNSHIP ZONING ORDINANCE AND WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND FOR WHICH I ACCEPT FULL AND COMPLETE RESPONSIBILITY.

_____ DATE
KERRY T. HAHN, P.L.S. (SU SURVEY)
HANOVER ENGINEERING ASSOCIATES, INC.
252 BROADHEAD ROAD, SUITE 100
BETHLEHEM, PA. 18017-8614
P:610-691-5644

PRELIMINARY/FINAL LAND DEVELOPMENT (RECORD SHEET 1 OF 3)

NO.	REVISIONS	DATE	DRAWN BY: CLA	CHECKED BY: SJC
			SCALE: AS NOTED	DATE: 04/18/2025
				PROJECT NO. PA-1240
				SHEET NO. CS-1

SEAL:

PLAN TITLE: COVER SHEET
PROJECT TITLE: MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

HanoverEngineering
Pocono Office
3355 Route 611, Suite 1 P:570.688.9550
Bartonsville, PA 18321-7822 F:570.688.9768
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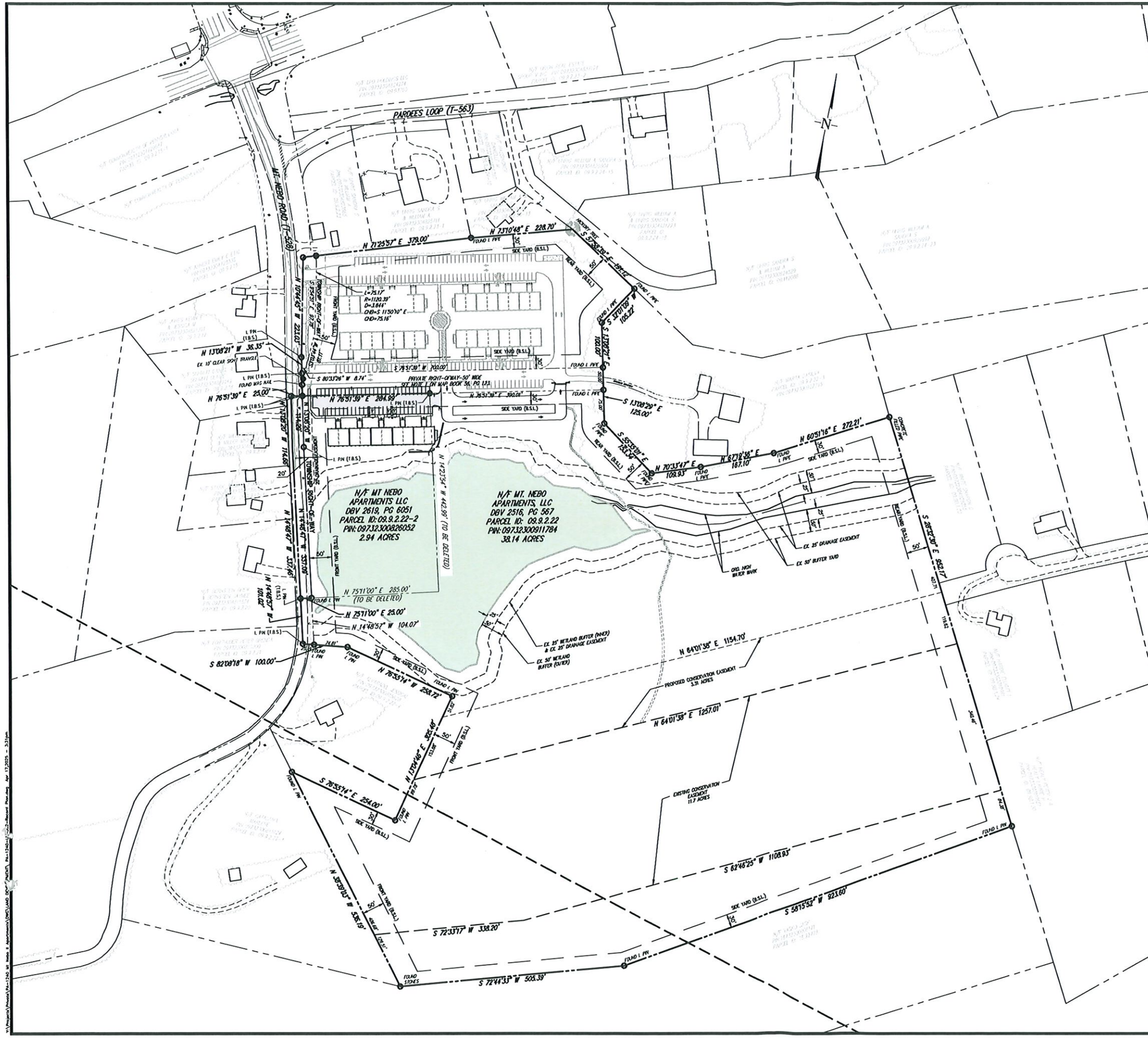
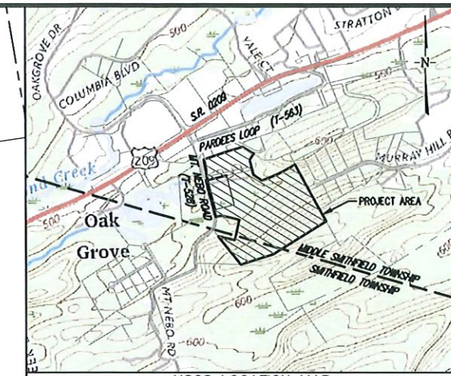




USGS LOCATION MAP

SCALE: 1" = 1000'
QUADRANGLE: BUSHKILL, 2023

OWNER/DEVELOPER/APPLICANT

MT. NEBO APARTMENTS, LLC
432 GRANGE RD
MT. POCONO, PA 18344-7128
PHONE: 570-424-0604

PLAN PREPARER

HanoverEngineering

Pocono Office

3355 Route 611, Suite 1 P:570.688.9550
Bartonsville, PA 18321-7822 F:570.688.9768

HanoverEng.com

RESTRICTION COVENANTS:

1. A 20 FOOT WIDE SLOPE EASEMENT IS GRANTED TO MIDDLE SMITHFIELD TOWNSHIP ALONG THE RIGHT OF WAY OF TOWNSHIP ROAD 528 (MT. NEBO ROAD)
2. A 10 FOOT WIDE UTILITY EASEMENT SHALL EXIST ALONG TOWNSHIP ROAD 528 (MT. NEBO ROAD).
3. A 20 FOOT WIDE DRAINAGE EASEMENT SHALL EXIST ALONG TOWNSHIP ROAD 528 (MT. NEBO ROAD)
4. A 25 FOOT WIDE UTILITY EASEMENT CENTERED ON THE CONSTRUCTED PIPE IS GRANTED TO PA AMERICAN WATER COMPANY FOR MAINTENANCE ACCESS TO THE WATERLINE.
5. A 25 FOOT WIDE UTILITY EASEMENT CENTERED ON THE CONSTRUCTED PIPE IS GRANTED TO MIDDLE SMITHFIELD TOWNSHIP FOR MAINTENANCE ACCESS TO THE SEWER LINE.

"CALL BEFORE YOU DIG"

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE – STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

THIS PROJECT'S DESIGNER INQUIRY NO.

LEGEND

- PROPERTY LINE
- ADJOINER LINE
- TOWNSHIP RIGHT-OF-WAY LINE
- PENNDOT RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF TREE LINE
- EDGE OF GRAVEL/STONE
- WETLAND BUFFER/DRAINAGE EASEMENT
- FENCE
- CONCRETE SIDEWALK
- FORESTED WETLANDS
- EPHEMERAL/INTERMITTENT STREAM
- PERENNIAL STREAM
- TOWNSHIP LINE
- UTILITY POLE
- EDGE OF TREE LINE
- CONCRETE CURB
- CONCRETE SIDEWALK TO BE SET
- T.B.S.
- POLE MOUNTED LIGHT
- WALL MOUNTED LIGHT
- MAILBOX
- SIGN
- RETAINING WALL
- WETLAND BUFFER/DRAINAGE EASEMENT

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: RECORD PLAN

PROJECT TITLE: MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

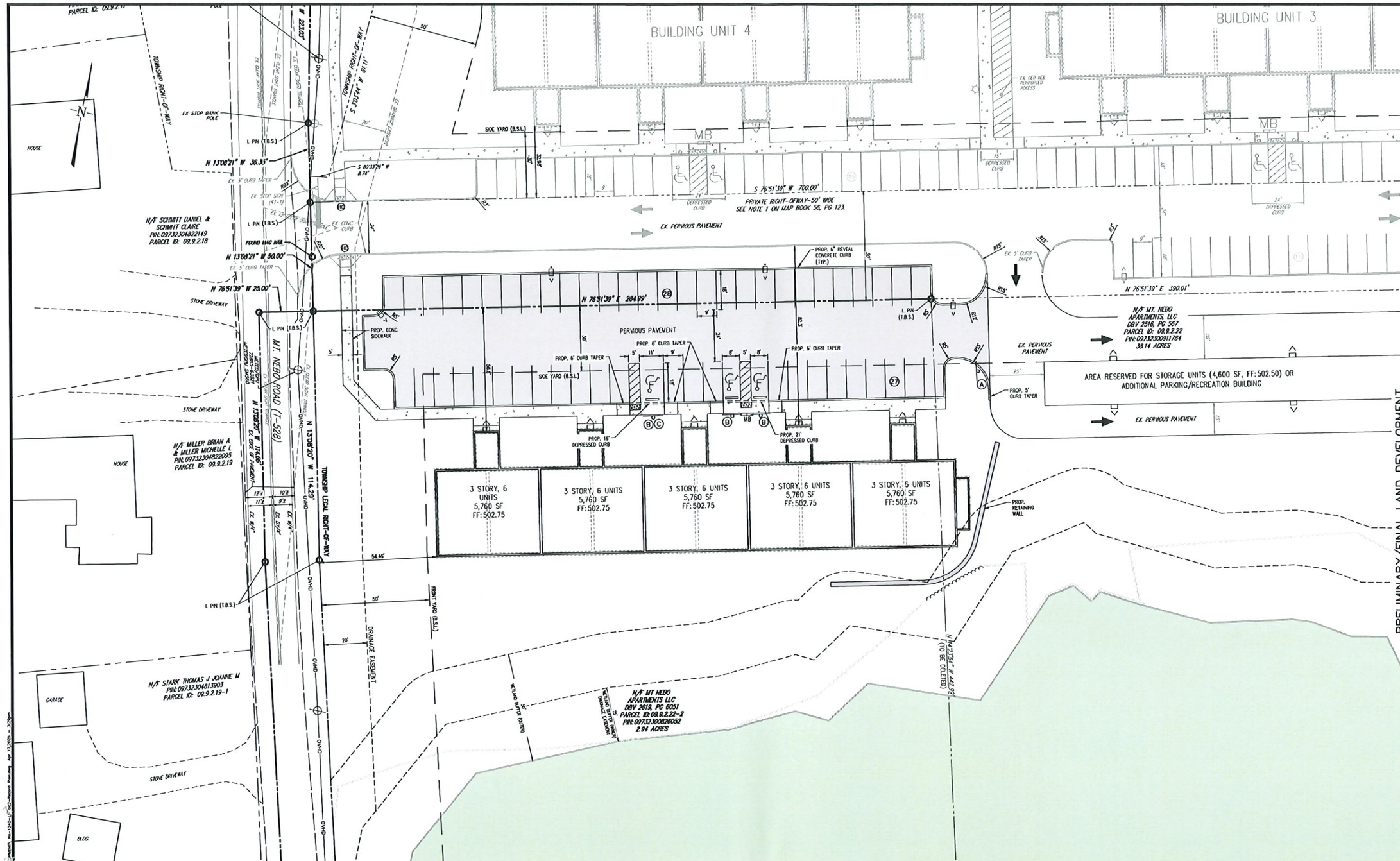
1" = 100'

HanoverEngineering

Pocono Office
3355 Route 611, Suite 1 P:570.688.9550
Bartonsville, PA 18321-7822 F:570.688.9768
HanoverEng.com

NO.	REVISIONS	DATE	DRAWN BY: CLA	CHECKED BY: SJC
			SCALE: 1"=100'	DATE: 04/18/2025
				PROJECT NO. PA-1240
				SHEET NO. RP-1

SEAL



LEGEND

- PROPERTY LINE
- ADJACENT LINE
- TOWNSHIP RIGHT-OF-WAY LINE
- PENNDOT RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF TREE LINE
- EDGE OF GRAVEL/STONE
- WETLAND BUFFER/DRAINAGE EASEMENT
- STORMWATER PIPE
- FENCE
- CONCRETE SIDEWALK
- UTILITY POLE
- FORESTED WETLANDS
- EPHEMERAL/INTERMITTENT STREAM
- PERENNIAL STREAM
- TOWNSHIP LINE
- EDGE OF TREE LINE
- CONCRETE CURB
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- SIGN
- RETAINING WALL
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SIGN SCHEDULE

SYMBOL	QUANTITY	DESCRIPTION	AREA	HEIGHT
A	1	PDHOOT R1-1 "STOP" TYPE 3-HIGH INTENSITY SHEETING	30"X30"	8'
B	3	PDHOOT R7-8 "RESERVED PARKING"	12"x18"	8.5'
C	1	PDHOOT R7-8A "VAN ACCESSIBLE"	12"x18"	8.5'

SIGNAGE NOTE:
ALL SITE AND BUILDING SIGNAGE WILL BE INSTALLED IN CONFORMITY WITH ARTICLE 1320 OF THE CITY OF BETHLEHEM ZONING ORDINANCE. DETAILED DRAWINGS WITH DESIGNED DIMENSIONS OF THE PROPOSED SIGNS WILL BE PROVIDED TO THE CITY FOR APPROVAL PRIOR TO OBTAINING ANY REQUIRED PERMITS FOR THEIR CONSTRUCTION.

ADA RAMP NOTES:

1. ALL ADA CURB RAMPS SHALL CONFORM TO PDHOOT PUBLICATION 72M RC-67M OF JUNE 1, 2010 OR THE LATEST REVISION.
2. ALL PROPOSED PEDESTRIAN CURB RAMPS TO HAVE "RED" TRUNCATED DOME DETECTABLE WARNING AREAS THAT COMPLY WITH THE CURRENT PDHOOT DESIGN MANUAL AND ADA REQUIREMENTS.

RESTRICTION COVENANTS:

1. A 20 FOOT WIDE SLOPE EASEMENT IS GRANTED TO MIDDLE SMITHFIELD TOWNSHIP ALONG THE RIGHT OF WAY OF TOWNSHIP ROAD 528 (MT. NEBO ROAD)
2. A 10 FOOT WIDE UTILITY EASEMENT SHALL EXIST ALONG TOWNSHIP ROAD 528 (MT. NEBO ROAD).
3. A 20 FOOT WIDE DRAINAGE EASEMENT SHALL EXIST ALONG TOWNSHIP ROAD 528 (MT. NEBO ROAD)
4. A 25 FOOT WIDE UTILITY EASEMENT CENTERED ON THE CONSTRUCTED PIPE IS GRANTED TO PA AMERICAN WATER COMPANY FOR MAINTENANCE ACCESS TO THE WATERLINE.
5. A 25 FOOT WIDE UTILITY EASEMENT CENTERED ON THE CONSTRUCTED PIPE IS GRANTED TO MIDDLE SMITHFIELD TOWNSHIP FOR MAINTENANCE ACCESS TO THE SEWER LINE.

OWNER/DEVELOPER/APPLICANT

MT. NEBO APARTMENTS, LLC
432 GRANGE RD
MT. POCONO, PA 18344-7128
PHONE: 570-424-0504

PLAN PREPARER

HanoverEngineering
Pocono Office
3355 Route 611, Suite 1
Bartonsville, PA 18321-7822
P:570.688.9550
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"CALL BEFORE YOU DIG"
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE – STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776
THIS PROJECT'S DESIGNER INQUIRY NO.

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: RECORD PLAN
PROJECT TITLE: MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

1" = 20'

NO.	REVISIONS	DATE	DRAWN BY: CLA	SCALE: 1"=20'	CHECKED BY: SJC	DATE: 04/18/2025	PROJECT NO. PA-1240	SHEET NO. RP-2

SEAL:

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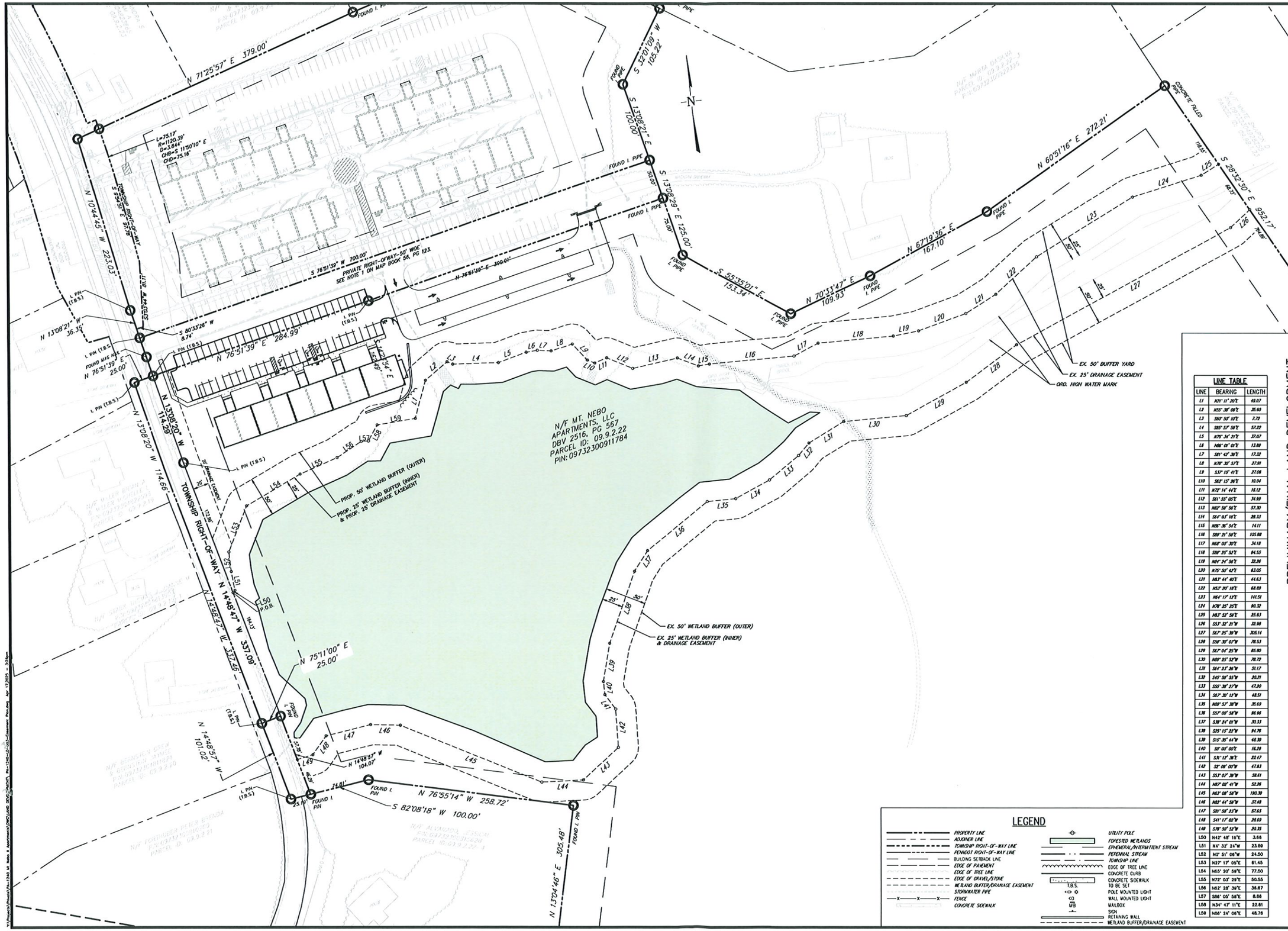

LINE TABLE

LINE	BEARING	LENGTH
L1	N71° 11' 20"E	48.07
L2	N55° 38' 08"E	35.60
L3	S80° 50' 10"E	7.73
L4	S85° 57' 59"E	57.22
L5	N75° 34' 21"E	37.07
L6	N88° 01' 01"E	13.88
L7	S81° 47' 30"E	17.32
L8	N78° 30' 57"E	27.91
L9	S37° 15' 41"E	27.08
L10	S82° 15' 28"E	10.04
L11	N72° 14' 44"E	16.12
L12	S81° 55' 05"E	34.69
L13	N82° 59' 58"E	57.30
L14	S64° 03' 18"E	28.33
L15	N86° 36' 54"E	14.11
L16	S89° 21' 58"E	105.88
L17	N68° 00' 30"E	34.18
L18	S59° 25' 52"E	84.55
L19	N84° 24' 56"E	32.96
L20	N75° 50' 42"E	63.05
L21	N83° 44' 40"E	44.63
L22	N57° 20' 18"E	68.89
L23	N64° 17' 12"E	141.51
L24	N78° 25' 25"E	80.32
L25	N83° 52' 56"E	25.83
L26	S53° 32' 21"W	33.98
L27	S82° 25' 38"W	305.14
L28	S59° 30' 07"W	78.53
L29	S82° 04' 25"W	85.90
L30	N89° 25' 52"W	78.72
L31	S64° 23' 26"W	51.17
L32	S45° 59' 55"W	30.21
L33	S55° 38' 27"W	47.30
L34	S67° 30' 13"W	68.57
L35	N89° 57' 38"W	35.69
L36	S57° 07' 58"W	86.96
L37	S38° 24' 08"W	30.33
L38	S25° 15' 22"W	84.76
L39	S15° 35' 44"W	68.39
L40	S0° 00' 00"E	18.29
L41	S31° 12' 38"E	32.47
L42	S2° 08' 00"W	47.83
L43	S53° 07' 38"W	58.61
L44	N82° 00' 41"W	52.26
L45	N62° 08' 58"W	180.39
L46	N82° 44' 58"W	37.48
L47	S81° 58' 23"W	57.65
L48	S41° 17' 02"W	28.69
L49	S78° 50' 52"W	30.35
L50	N42° 48' 15"E	3.66
L51	N4° 32' 24"W	23.88
L52	N7° 51' 06"W	24.50
L53	N33° 17' 05"E	61.45
L54	N65° 20' 56"E	77.50
L55	N72° 03' 29"E	50.55
L56	N62° 28' 39"E	36.67
L57	S86° 05' 58"E	8.06
L58	N34° 47' 11"E	22.81
L59	N56° 24' 06"E	48.76

LEGEND

- PROPERTY LINE
- ADJOINER LINE
- TOWNSHIP RIGHT-OF-WAY LINE
- PENNDOT RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF TREE LINE
- EDGE OF GRAVEL/STONE
- WETLAND BUFFER/DRAINAGE EASEMENT
- STORMWATER PIPE
- FENCE
- CONCRETE SIDEWALK
- UTILITY POLE
- FORESTED WETLANDS
- EPHEMERAL/INTERMITTENT STREAM
- PERENNIAL STREAM
- TOWNSHIP LINE
- EDGE OF TREE LINE
- CONCRETE CURB
- CONCRETE SIDEWALK TO BE SET
- POLE MOUNTED LIGHT
- WALL MOUNTED LIGHT
- MAILBOX
- SIGN
- RETAINING WALL
- WETLAND BUFFER/DRAINAGE EASEMENT

NO.	REVISIONS	DATE

SEAL

DRAWN BY: CLA
CHECKED BY: SJC
SCALE: AS NOTED
DATE: 9/18/2025
PROJECT NO. PA-1240
SHEET NO. EP-1

PLAN TITLE: PRELIMINARY/FINAL LAND DEVELOPMENT

PROJECT TITLE: EASEMENT PLAN
MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

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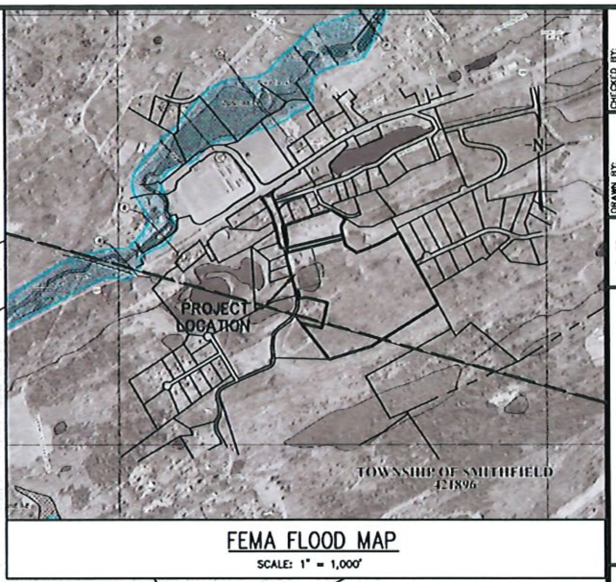

FEMA FLOOD MAP

SCALE: 1" = 1,000'

SOIL CHART

SYMBOL	SOIL TYPE
BeC	BEKSON-ROCK OUTCROP COMPLEX, 8 TO 25 PERCENT SLOPES
BeF	BEKSON-ROCK OUTCROP COMPLEX, 25 TO 70 PERCENT SLOPES
MaC	MARDIN CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES
Mp	MUCKY PEAT, DEEP
Ms	MUCKY PEAT, SHALLOW
Sh	SHEFFIELD SILT LOAM
Wb	WAYLAND SILTY CLAY LOAM
WyB	WYOMING GRAVELLY SANDY LOAM, 3 TO 8 PERCENT SLOPES
WyC	WYOMING GRAVELLY SANDY LOAM, 8 TO 15 PERCENT SLOPES

SLOPES TABLE

SLOPE	COLOR	AREA	DISTURBED	PERMITTED DISTURBED	UNDISTURBED
15% TO 25%	▢	362,494 SF 8.32 AC	4,299 SF 0.10 AC OR 1.2%	35%	358,195 SF 8.22 AC
25% +	▨	619,267 SF 14.22 AC	3,291 SF 0.08 AC OR 0.6%	10%	615,976 SF 14.14 AC

LEGEND

PROPERTY LINE
ADJOINER LINE
TOWNSHIP RIGHT-OF-WAY LINE
PENNDOT RIGHT-OF-WAY LINE
EDGE OF PAVEMENT
EDGE OF TREE LINE
EDGE OF GRAVEL/STONE
WETLAND BUFFER/DRAINAGE EASEMENT
STORMWATER PIPE
—W— WATER MAIN
—SAN— SANITARY SEWER LINE
—OVHD— OVERHEAD ELECTRIC LINE
—X— FENCE
CONCRETE SIDEWALK
SANITARY MANHOLE
SANITARY CLEANOUT
UTILITY POLE
FIRE HYDRANT
WATER VALVE
STORMWATER INLET
FORESTED WETLANDS
EPHEMERAL/INTERMITTENT STREAM
PERENNIAL STREAM
TOWNSHIP LINE
500 MAJOR CONTOUR
501 MINOR CONTOUR
BeF SOIL TYPE & BOUNDARY
T.B.R. TO BE REMOVED
T.B.S. TO BE SET

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: EXISTING FEATURES PLAN

PROJECT TITLE: MT. NEBO II APARTMENTS

SEAL:

0 50 100 200 400
1" = 100'

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

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DATE: 04/18/2025
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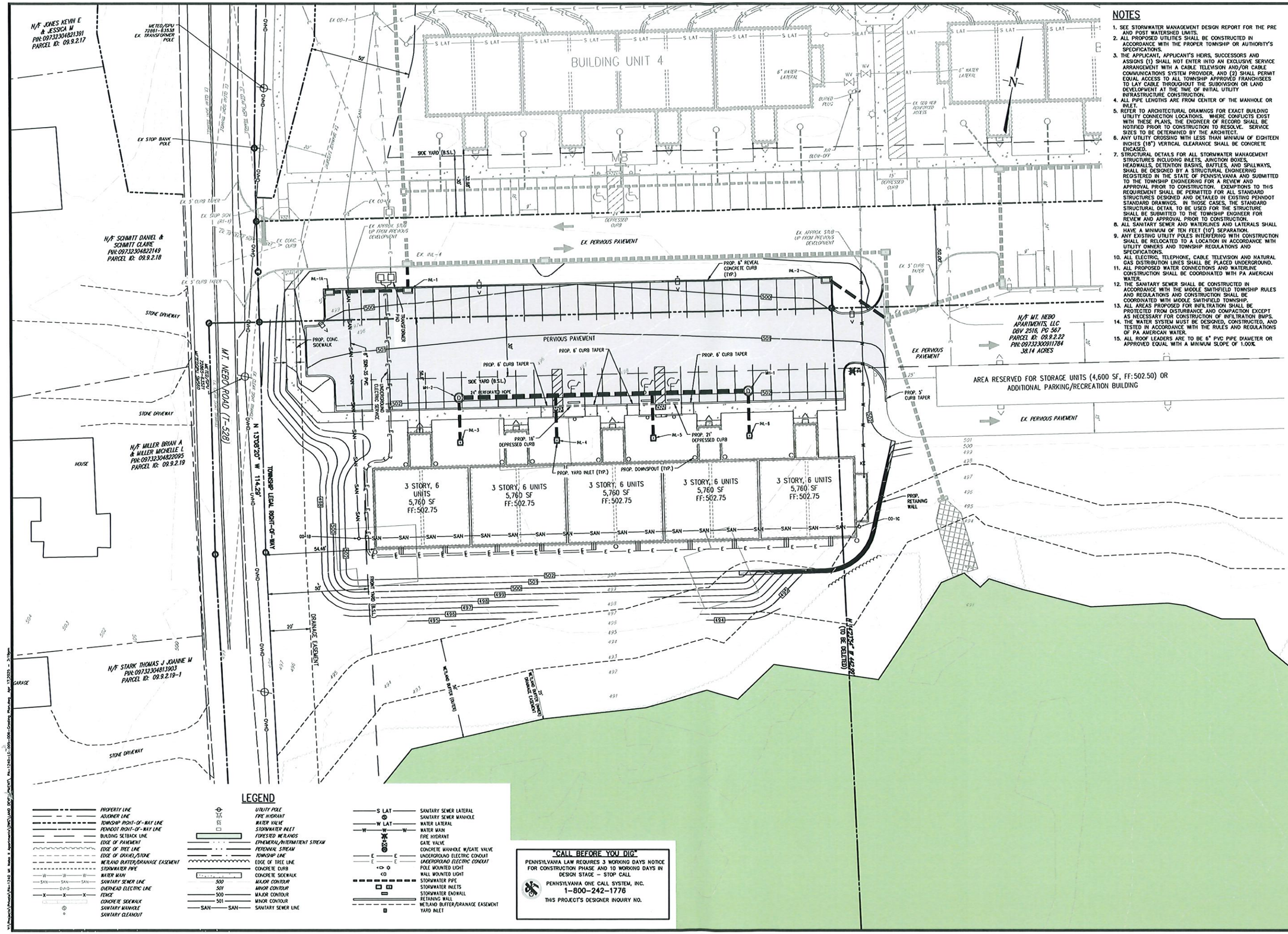

NOTES

1. SEE STORMWATER MANAGEMENT DESIGN REPORT FOR THE PRE AND POST WATERSHED LIMITS.
2. ALL PROPOSED UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROPER TOWNSHIP OR AUTHORITY'S SPECIFICATIONS.
3. THE APPLICANT, APPLICANT'S HEIRS, SUCCESSORS AND ASSIGNS (1) SHALL NOT ENTER INTO AN EXCLUSIVE SERVICE ARRANGEMENT WITH A CABLE TELEVISION AND/OR CABLE COMMUNICATIONS SYSTEM PROVIDER, AND (2) SHALL PERMIT EQUAL ACCESS TO ALL TOWNSHIP APPROVED FRANCHISEES TO LAY CABLE THROUGHOUT THE SUBDIVISION OR LAND DEVELOPMENT AT THE TIME OF INITIAL UTILITY INFRASTRUCTURE CONSTRUCTION.
4. ALL PIPE LENGTHS ARE FROM CENTER OF THE MANHOLE OR INLET.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS. WHERE CONFLICTS EXIST WITH THESE PLANS, THE ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE. SERVICE SIZES TO BE DETERMINED BY THE ARCHITECT.
6. ANY UTILITY CROSSING WITH LESS THAN MINIMUM OF EIGHTEEN INCHES (18") VERTICAL CLEARANCE SHALL BE CONCRETE ENCASED.
7. STRUCTURAL DETAILS FOR ALL STORMWATER MANAGEMENT STRUCTURES INCLUDING INLETS, JUNCTION BOXES, HEADWALLS, DETENTION BASINS, BAFFLES, AND SPILLWAYS, SHALL BE DESIGNED BY A STRUCTURAL ENGINEERING REGISTERED IN THE STATE OF PENNSYLVANIA AND SUBMITTED TO THE TOWNSHIP ENGINEERING FOR A REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. EXEMPTIONS TO THIS REQUIREMENT SHALL BE PERMITTED FOR ALL STANDARD STRUCTURES DESIGNED AND DETAILED IN EXISTING PENNDOT STANDARD DRAWINGS. IN THOSE CASES, THE STANDARD STRUCTURAL DETAIL TO BE USED FOR THE STRUCTURE SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
8. ALL SANITARY SEWER AND WATERLINES AND LATERALS SHALL HAVE A MINIMUM OF TEN FEET (10') SEPARATION.
9. ANY EXISTING UTILITY POLES INTERFERING WITH CONSTRUCTION SHALL BE RELOCATED TO A LOCATION IN ACCORDANCE WITH UTILITY OWNERS AND TOWNSHIP REGULATIONS AND SPECIFICATIONS.
10. ALL ELECTRIC, TELEPHONE, CABLE TELEVISION AND NATURAL GAS DISTRIBUTION LINES SHALL BE PLACED UNDERGROUND.
11. ALL PROPOSED WATER CONNECTIONS AND WATERLINE CONSTRUCTION SHALL BE COORDINATED WITH PA AMERICAN WATER.
12. THE SANITARY SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MIDDLE SMITHFIELD TOWNSHIP RULES AND REGULATIONS AND CONSTRUCTION SHALL BE COORDINATED WITH MIDDLE SMITHFIELD TOWNSHIP.
13. ALL AREAS PROPOSED FOR INFILTRATION SHALL BE PROTECTED FROM DISTURBANCE AND COMPACTION EXCEPT AS NECESSARY FOR CONSTRUCTION OF INFILTRATION BMPS.
14. THE WATER SYSTEM MUST BE DESIGNED, CONSTRUCTED, AND TESTED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF PA AMERICAN WATER.
15. ALL ROOF LEADERS ARE TO BE 6" PVC PIPE DIAMETER OR APPROVED EQUAL WITH A MINIMUM SLOPE OF 1.00%.

LEGEND

PROPERTY LINE
ADJOINER LINE
TOWNSHIP RIGHT-OF-WAY LINE
PENNDOT RIGHT-OF-WAY LINE
BUILDING SETBACK LINE
EDGE OF PAVEMENT
EDGE OF TREE LINE
EDGE OF GRAVEL/STONE
WETLAND BUFFER/DRAINAGE EASEMENT
STORMWATER PIPE
WATER MAIN
SANITARY SEWER LINE
OVERHEAD ELECTRIC LINE
FENCE
CONCRETE SIDEWALK
SANITARY MANHOLE
SANITARY CLEANOUT
UTILITY POLE
FIRE HYDRANT
WATER VALVE
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TOWNSHIP LINE
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CONCRETE CURB
CONCRETE SIDEWALK
500 MAJOR CONTOUR
501 MINOR CONTOUR
500 MAJOR CONTOUR
501 MINOR CONTOUR
SAN SAN SANITARY SEWER LINE
S LAT SANITARY SEWER LATERAL
SANITARY SEWER MANHOLE
W LAT WATER LATERAL
WATER MAIN
FIRE HYDRANT
GATE VALVE
CONCRETE MANHOLE W/GATE VALVE
E UNDERGROUND ELECTRIC CONDUIT
UNDERGROUND ELECTRIC CONDUIT
POLE MOUNTED LIGHT
WALL MOUNTED LIGHT
STORMWATER PIPE
STORMWATER INLETS
STORMWATER ENDWALL
RETAINING WALL
WETLAND BUFFER/DRAINAGE EASEMENT
YARD INLET

"CALL BEFORE YOU DIG"

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE – STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776
THIS PROJECT'S DESIGNER INQUIRY NO.

NO.	REVISIONS	DATE

DRAWN BY: CLA | CHECKED BY: SJC
SCALE: 1"=20' | DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. GP-1

SEAL

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: GRADING & UTILITY PLAN

PROJECT TITLE: MT. NEBO II APARTMENTS

1" = 20'

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

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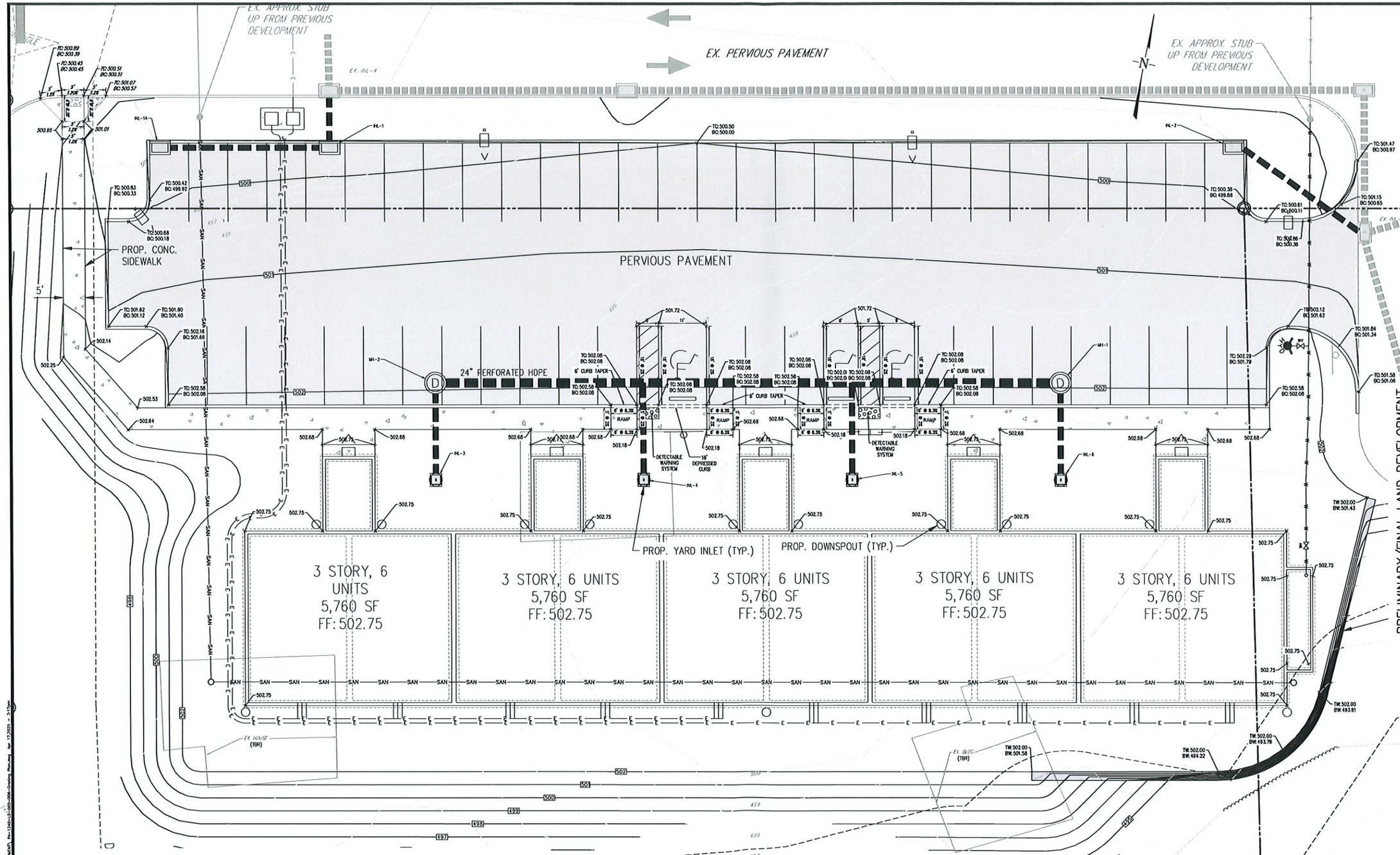

LEGEND

- PROPERTY LINE
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- WATER MAIN
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- 501 MINOR CONTOUR
- SAN SANITARY SEWER LINE
- S LAT SANITARY SEWER LATERAL
- SANITARY SEWER MANHOLE
- W LAT WATER LATERAL
- WATER MAIN
- FIRE HYDRANT
- GATE VALVE
- CONCRETE MANHOLE W/GATE VALVE
- E UNDERGROUND ELECTRIC CONDUIT
- E UNDERGROUND ELECTRIC CONDUIT
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- WALL MOUNTED LIGHT
- STORMWATER PIPE
- STORMWATER INLETS
- STORMWATER ENDWALL
- RETAINING WALL
- WETLAND BUFFER/DRAINAGE EASEMENT
- YARD INLET

"CALL BEFORE YOU DIG"

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE – STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

THIS PROJECT'S DESIGNER INQUIRY NO.

NOTES

1. SEE STORMWATER MANAGEMENT DESIGN REPORT FOR THE PIPE AND POST WATERSHED LIMITS.
2. ALL PROPOSED UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROPER TOWNSHIP OR AUTHORITY'S SPECIFICATIONS.
3. THE APPLICANT, APPLICANT'S HEIRS, SUCCESSORS AND ASSIGNS (1) SHALL NOT ENTER INTO AN EXCLUSIVE SERVICE ARRANGEMENT WITH A CABLE TELEVISION AND/OR CABLE COMMUNICATIONS SYSTEM PROVIDER, AND (2) SHALL PERMIT EQUAL ACCESS TO ALL TOWNSHIP APPROVED FRANCHISEES TO LAY CABLE THROUGHOUT THE SUBDIVISION OR LAND DEVELOPMENT AT THE TIME OF INITIAL UTILITY INFRASTRUCTURE CONSTRUCTION.
4. ALL PIPE LENGTHS ARE FROM CENTER OF THE MANHOLE OR INLET.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS. WHERE CONFLICTS EXIST WITH THESE PLANS, THE ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE. SERVICE SIZES TO BE DETERMINED BY THE ARCHITECT.
6. ANY UTILITY CROSSING WITH LESS THAN MINIMUM OF EIGHTEEN INCHES (18") VERTICAL CLEARANCE SHALL BE CONCRETE ENCASED.
7. STRUCTURAL DETAILS FOR ALL STORMWATER MANAGEMENT STRUCTURES INCLUDING INLETS, JUNCTION BOXES, HEADWALLS, DETENTION BASINS, BAFFLES, AND SPILLWAYS, SHALL BE DESIGNED BY A STRUCTURAL ENGINEERING REGISTERED IN THE STATE OF PENNSYLVANIA AND SUBMITTED TO THE TOWNSHIP ENGINEERING FOR A REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. EXEMPTIONS TO THIS REQUIREMENT SHALL BE PERMITTED FOR ALL STANDARD STRUCTURES DESIGNED AND DETAILED IN EXISTING PENNDOT STANDARD DRAWINGS. IN THOSE CASES, THE STANDARD STRUCTURAL DETAIL TO BE USED FOR THE STRUCTURE SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
8. ALL SANITARY SEWER AND WATERLINES AND LATERALS SHALL HAVE A MINIMUM OF TEN FEET (10') SEPARATION.
9. ANY EXISTING UTILITY POLES INTERFERING WITH CONSTRUCTION SHALL BE RELOCATED TO A LOCATION IN ACCORDANCE WITH UTILITY OWNERS AND TOWNSHIP REGULATIONS AND SPECIFICATIONS.
10. ALL ELECTRIC, TELEPHONE, CABLE TELEVISION AND NATURAL GAS DISTRIBUTION LINES SHALL BE PLACED UNDERGROUND.
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12. THE SANITARY SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MIDDLE SMITHFIELD TOWNSHIP RULES AND REGULATIONS AND CONSTRUCTION SHALL BE COORDINATED WITH MIDDLE SMITHFIELD TOWNSHIP.
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NO.	REVISIONS	DATE

DRAWN BY: CLA
CHECKED BY: SJC
SCALE: 1"=10'
DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. GP-2

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: GRADING & UTILITY PLAN

PROJECT TITLE: MT. NEBO II APARTMENTS

1" = 10'

MIDDLE SMITHFIELD TOWNSHIP
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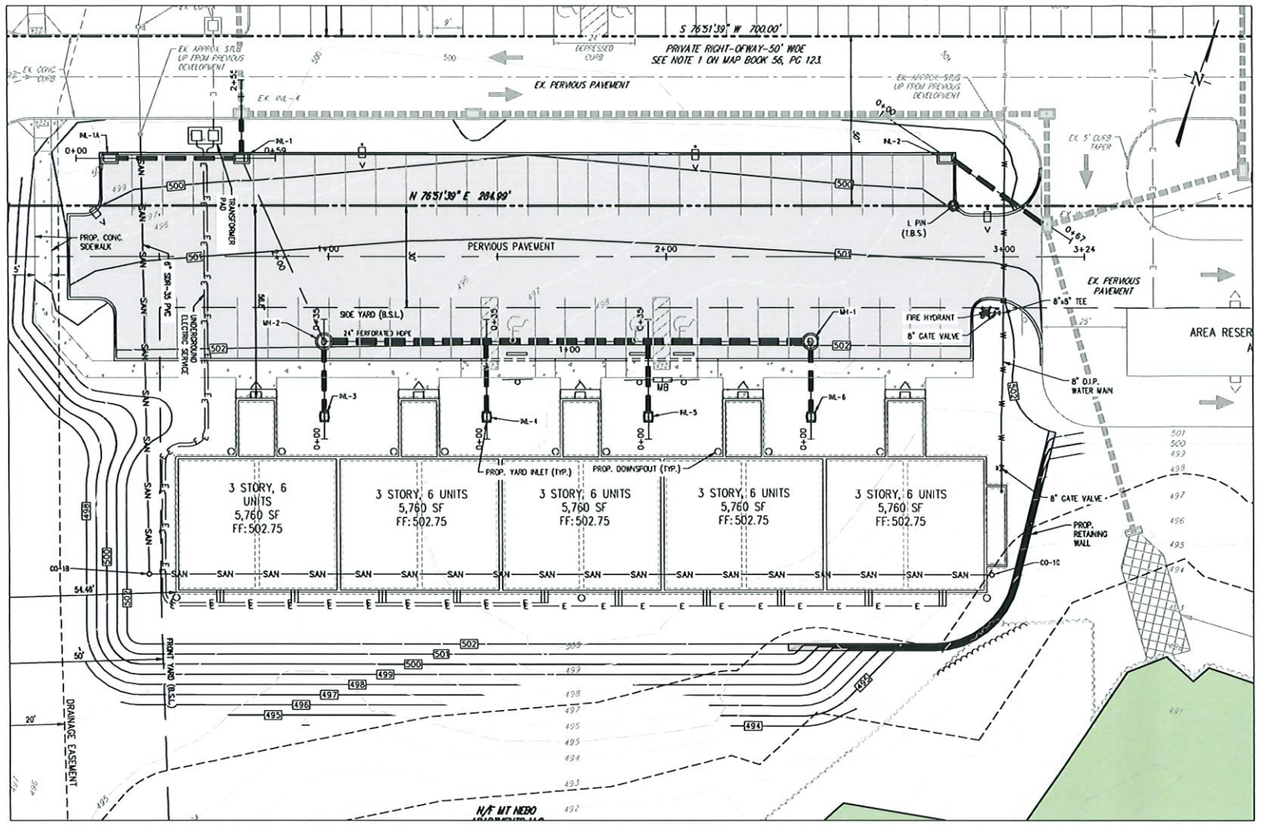
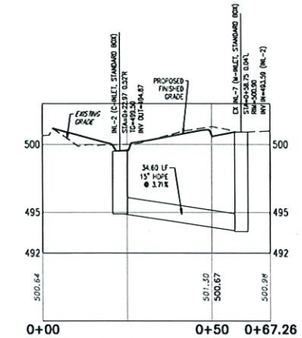
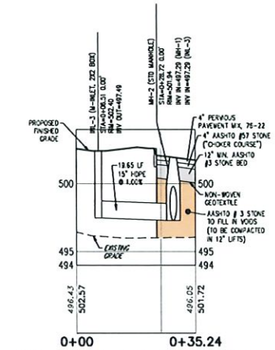




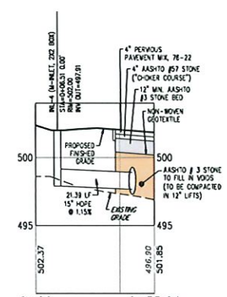
INL-2 TO EX INL-7 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



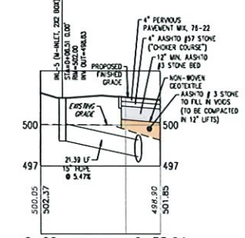
INL-3 TO MH-2 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



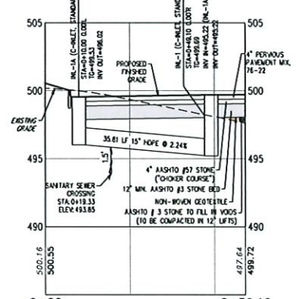
INL-4 TO PIPE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



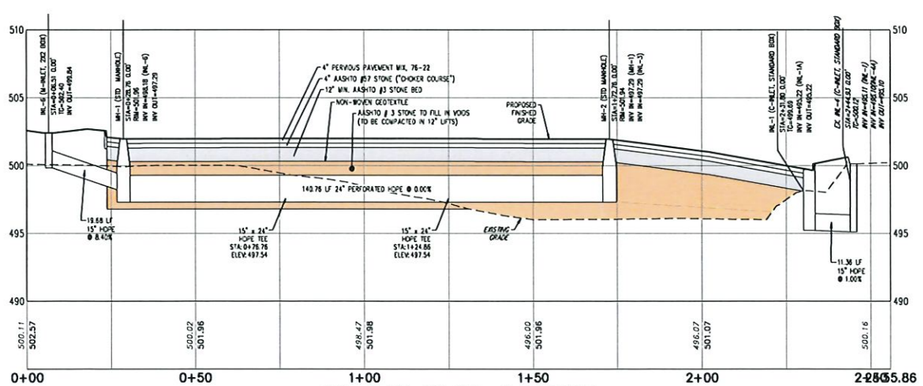
INL-5 TO PIPE 2 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



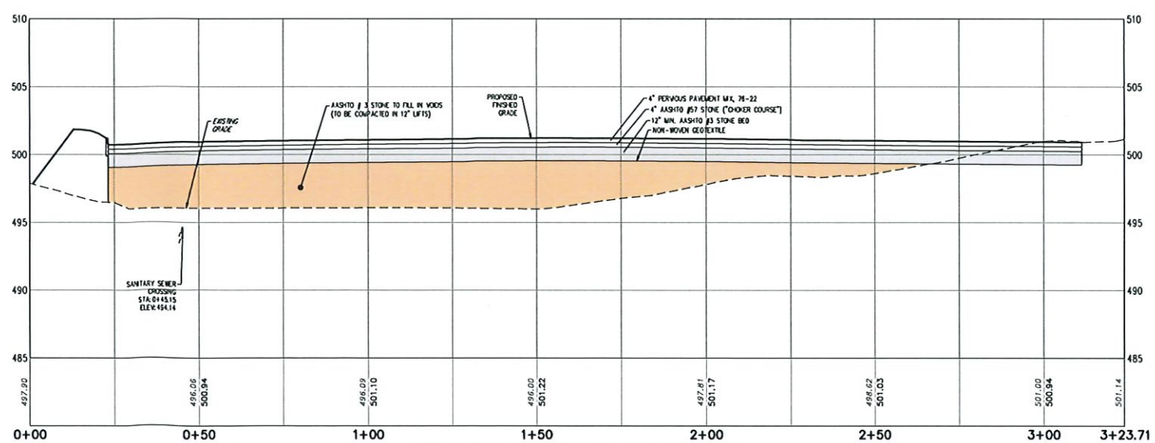
INL-1A TO INL-1 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



INL-6 TO EX INL-4 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



CENTERLINE PARKING LOT PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: STORMWATER PLAN & PROFILE SHEET

PROJECT TITLE: MT. NEBO II APARTMENTS

1" = 20'

NO.	REVISIONS	DATE

DRAWN BY: CLA
SCALE: 1"=20'
CHECKED BY: SJC
DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. SWP-1

SEAL

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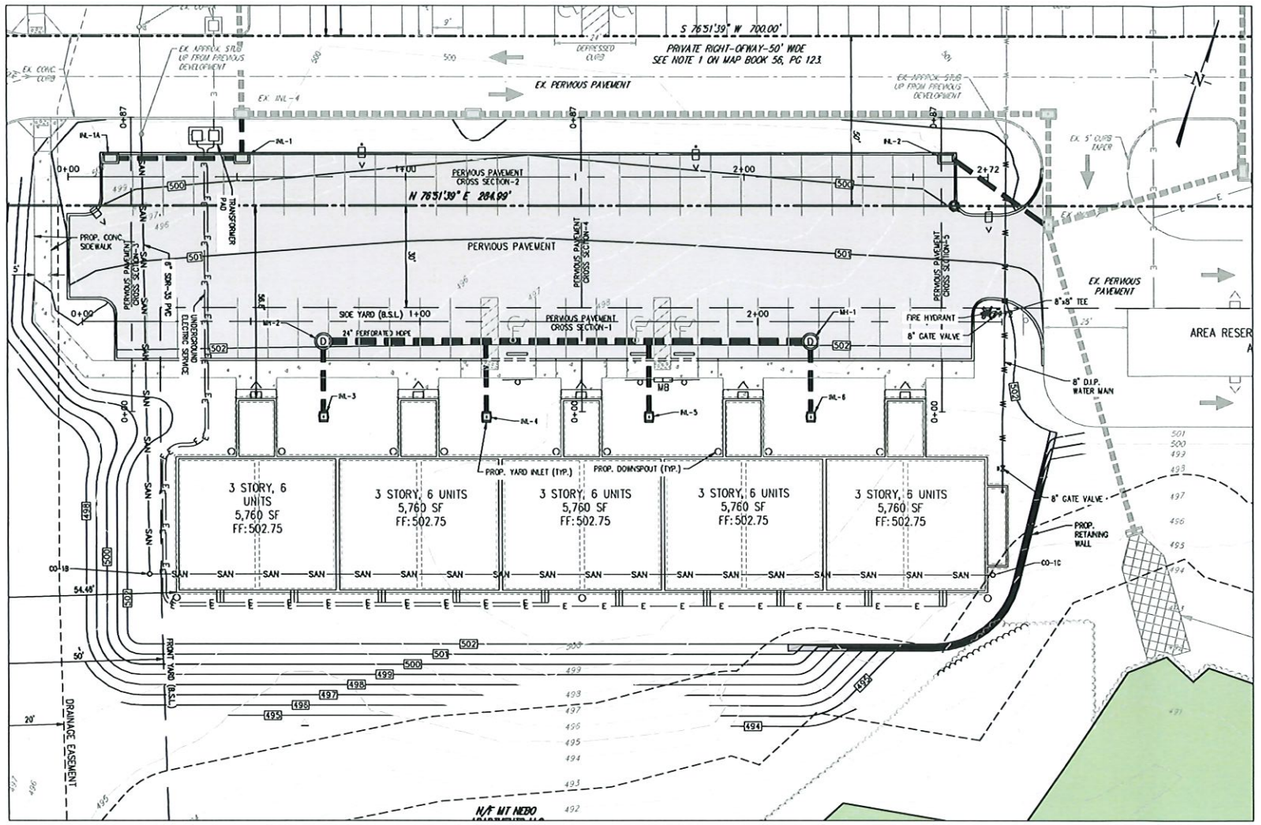
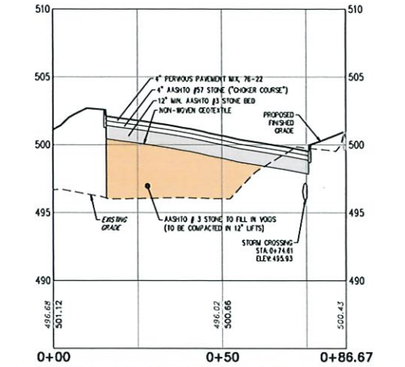
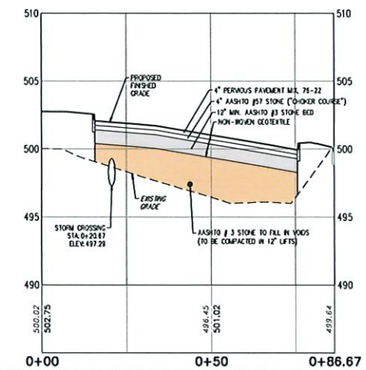




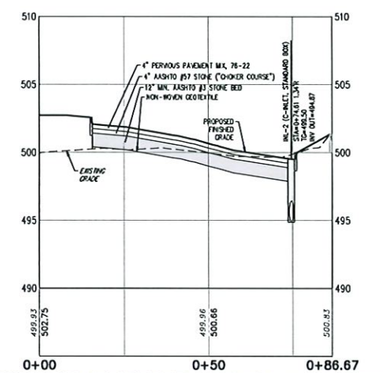
PERVIOUS PAVEMENT SECTION-3 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



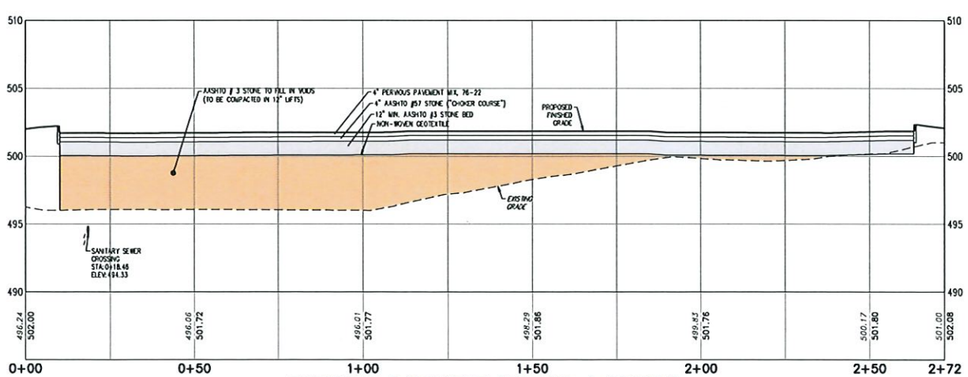
PERVIOUS PAVEMENT SECTION-4 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



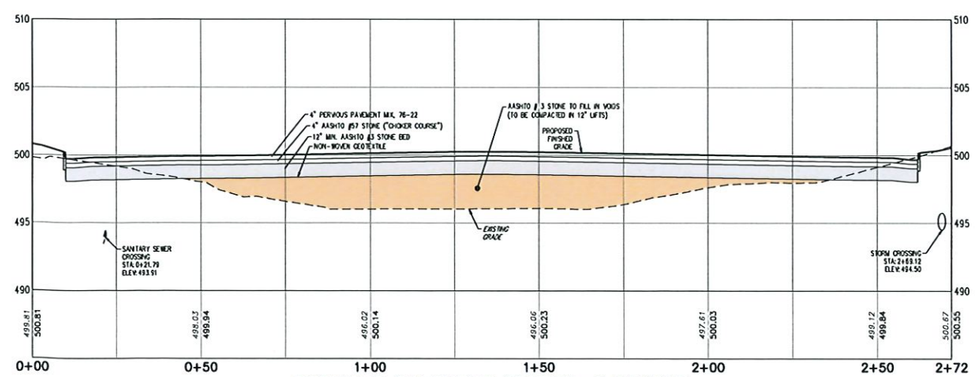
PERVIOUS PAVEMENT SECTION-5 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



PERVIOUS PAVEMENT SECTION-1 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



PERVIOUS PAVEMENT SECTION-2 PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: STORMWATER PLAN & PROFILE SHEET

PROJECT TITLE: MT. NEBO II APARTMENTS

1" = 20'

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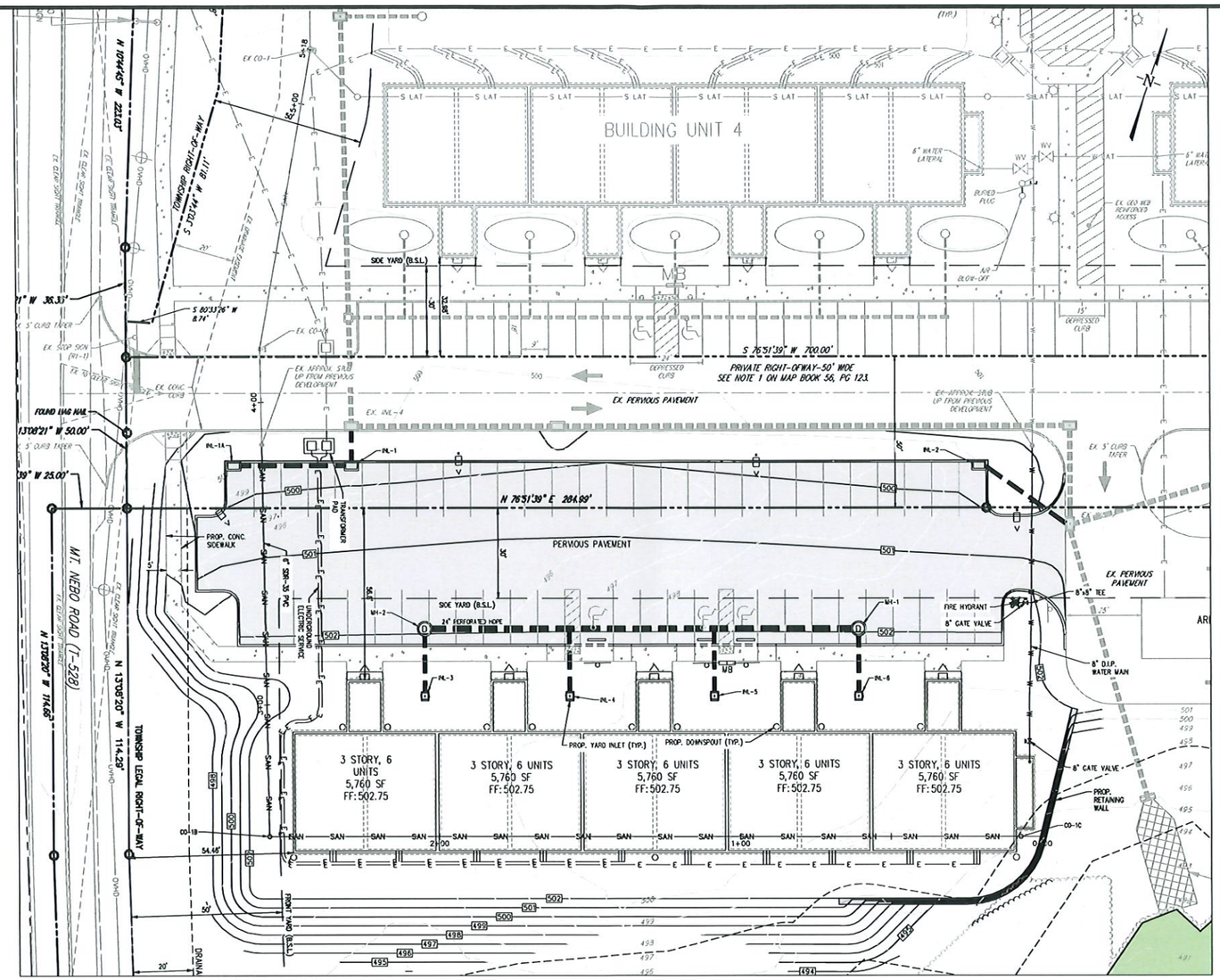
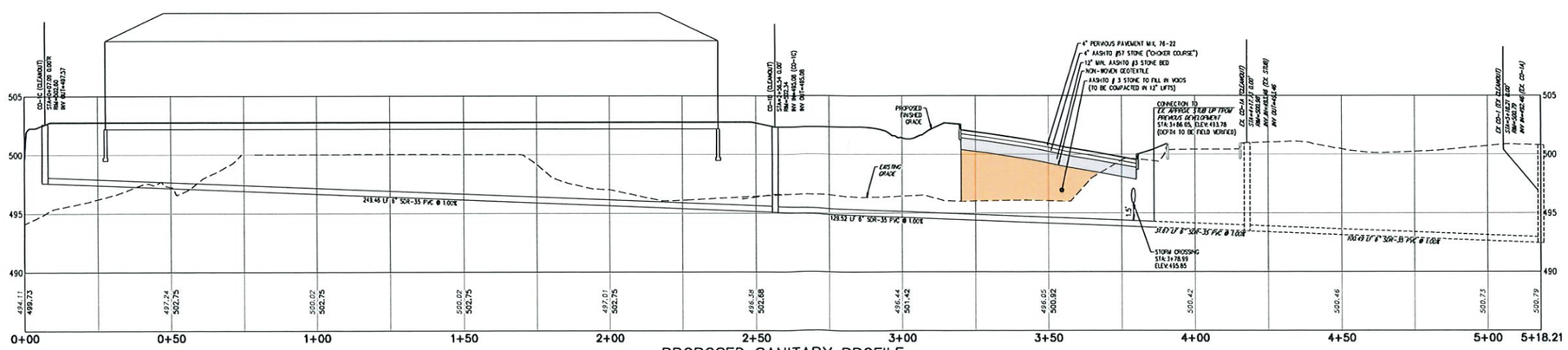
SEAL:





PROPOSED SANITARY PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: UTILITY PLAN & PROFILE SHEET

PROJECT TITLE: MT. NEBO II APARTMENTS

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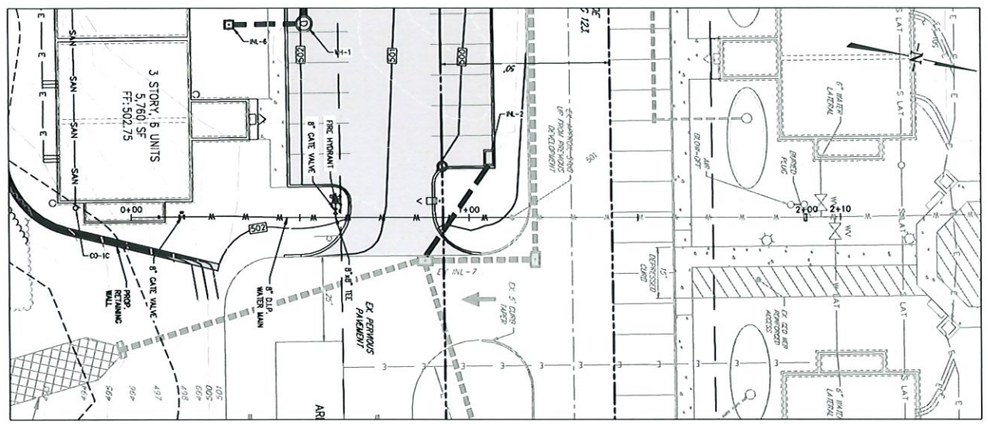
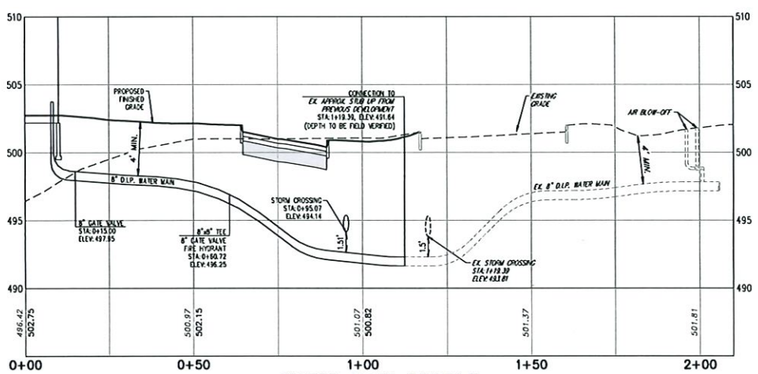
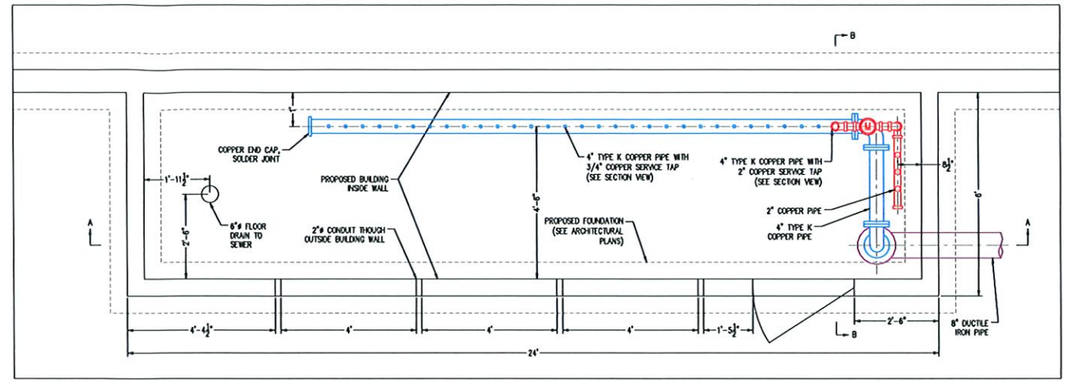
SHEET NO. UP-1





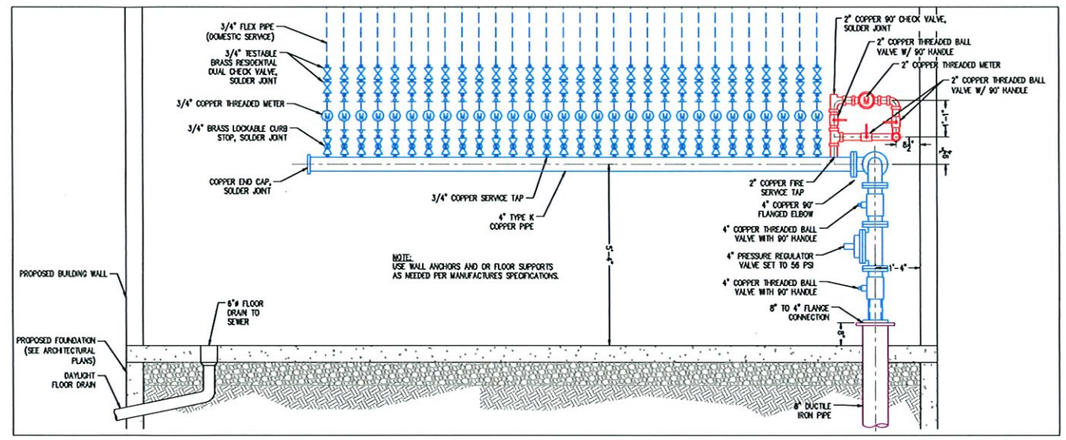
WATER MAIN PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



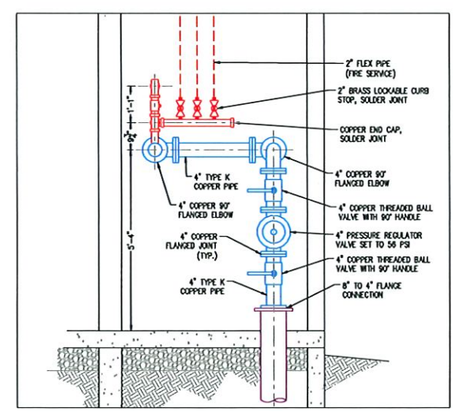
WATER SERVICE MODEL PLAN VIEW

SCALE: 1" = 2'



WATER SERVICE MODEL SECTION A–A

SCALE: 1" = 2'



WATER SERVICE MODEL SECTION B–B

SCALE: 1" = 2'

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: UTILITY PLAN & PROFILE SHEET

PROJECT TITLE: MT. NEBO II APARTMENTS

1" = 20'

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DRAWN BY: CLA
SCALE: 1"=20'
CHECKED BY: SJC
DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. UP-2

GENERAL PLANTING NOTES:

1. THE CONTRACTOR MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITES AND FACILITES PRIOR TO BEGINNING CONSTRUCTION. CALL PENNSYLVANIA ONE CALL 1-800-242-1776.
2. THE CONTRACTOR SHALL LAYOUT AND REVIEW ALL PLANT MATERIAL AND PLANT LOCATIONS WITH ARCHITECT OR OWNER PRIOR TO INSTALLATION.
3. SUBSTITUTE SPECIES CAN BE SELECTED AND SHALL BE APPROVED BY THE CITY FORESTER.
4. FIELD CONDITIONS MAY DICTATE MINOR ADJUSTMENTS TO THE LOCATION OF PLANT MATERIAL. BEFORE MAJOR ADJUSTMENTS OF PLANT LOCATIONS OCCUR, THE CONTRACTOR SHALL NOTIFY THE OWNER OR THE ARCHITECT.
7. SUBSTITUTIONS: WHEN PLANTS OF A SPECIFIED TYPE OR SIZE ARE NOT AVAILABLE WITHIN A REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE CONTRACTOR, IF APPROVED BY THE OWNER OR THEIR REPRESENTATIVE. THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF ANY PLANT MATERIALS THAT HE FEELS WILL NOT BE AVAILABLE, PRIOR TO SUBMITTING A BID ON THIS PROJECT. IF A BID IS RECEIVED WITHOUT SUCH QUALIFICATION, IT WILL BE ASSUMED NO SUCH SUBSTITUTIONS WILL BE PROPOSED.
8. ALL AREAS DISTURBED DURING PLANTING ACTIVITY SHALL BE REESTABLISHED AS PERMANENT LAWN WITH THE SPECIFIED SEED MIX AS SUPPLIED BY NORTHAMPTON SEED COMPANY:
   55% CREEPING RED FESCUE
   40% FINE LEAFED PERENNIAL RYEGRASS
   5% KENTUCKY BLUEGRASS
   % EQUALS PROPORTION BY WEIGHT
   SEED AT A RATE OF SIX POUNDS PER 1,000 SQUARE FEET AS SUPPLIED BY NORTHAMPTON SEED COMPANY OR APPROVED EQUAL.
9. ALL TREE AND SHRUB GROUPINGS MAY BE COMPLETELY ENCOMPASSED WITHIN ONE LARGE MULCH BED AT EACH PLANT GROUPING LOCATION. THE MULCH BED SHALL TYPICALLY EXTEND MINIMALLY 2' – 0" PAST THE DRIP ZONE OF TREES OR SHRUBS.
10. AFTER INSTALLATION, A PROTECTIVE MULCH SHALL BE APPLIED TO ALL PLANTS TO PREVENT MOISTURE LOSS KEEP MULCH 2-3" AWAY FROM THE TRUNK OF THE TREE.
11. THE CONTRACTOR SHALL APPLY A PRE-EMERGENT WEED KILLER, PREEN (OR APPROVED EQUAL), TO TOPSOIL PRIOR TO MULCHING ACTIVITIES. WATER ACTIVATE IF NECESSARY.
12. TREES IN LEAF WHEN PLANTED SHALL BE TREATED WITH ANTI-DESICCANT SUCH AS WILT-PROOF.
13. PREPARATION OF PLANTING SOIL: BEFORE MIXING, CLEAN TOPSOIL OF ROOTS, VEGETATION, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH. PLANTING SOIL FOR TREES, SHRUBS, AND GROUND COVER SHALL BE A MIXTURE BY VOLUME OF THE FOLLOWING:
   50% TOPSOIL
   50% ORGANIC MATTER
14. THE CONTRACTOR IS RESPONSIBLE FOR ANY ADJUSTMENTS TO SOIL PH, FERTILITY, AND/OR DRAINAGE CONDITIONS NECESSARY TO ENSURE PROPER GROWING CONDITIONS FOR PROPOSED PLANTINGS.
15. THE CONTRACTOR IS RESPONSIBLE FOR WATERING, WEEDING, FERTILIZING, AND MAINTAINING ALL NEWLY PLANTED PLANTINGS FOR A PERIOD OF THIRTY DAYS AFTER PLANTING. A WATER SOURCE IS AVAILABLE ON SITE.
16. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF PLANT MATERIAL AT THE APPROPRIATE TIME OF YEAR.
17. ALL NEW PLANT MATERIAL SHALL BE WARRANTED FOR A PERIOD OF 18 MONTHS FROM DATE OF FINAL ACCEPTANCE.
18. ALL PLANTS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
19. ALL TREES AND SHRUBERRY SHALL BE OF STANDARD NURSERY STOCK FREE OF DISEASE AND INSECT INFESTATION.
20. PLANTING MATERIAL SHALL BE BALLED AND BURLAPED STOCK. CUT BURLAP AROUND THE ROOT BALL AND FOLD IT DOWN AT LEAST 1/2 WAY.
21. ALL PLANTINGS SHALL INCORPORATE A PEAT MOSS MIXTURE.
22. SHOULD ON-SITE TOPSOIL BE OF INSUFFICIENT VOLUME FOR TREE, SHRUB AND LAWN PLANTING, TOPSOIL SHALL BE IMPORTED TO THE SITE OR EXISTING SITE.
    SOILS AMENDED TO PROVIDE FOR ADEQUATE GROWING MEDIUM DEPTHS.

LANDSCAPING REQUIREMENTS:

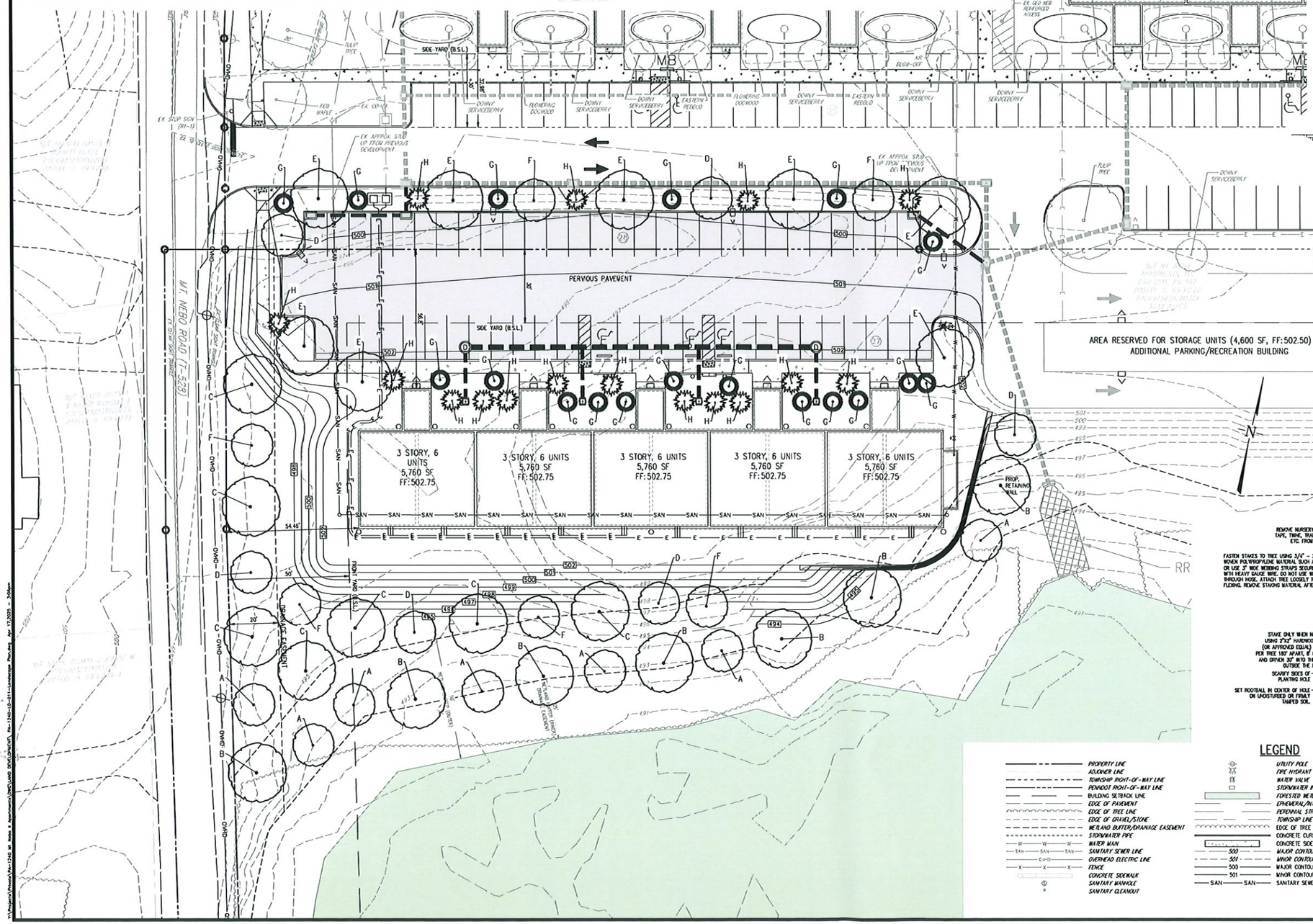
SECTION 107.79.A:
ONE DECIDUOUS SHADE TREE/EACH 50 FT OF RIGHT-OF-WAY FRONTAGE ON MT. NEBO ROAD.
220 FT OF NON WOODED ROW = 5 TREES REQUIRED
5 TREES PROPOSED

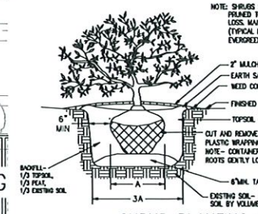
SECTION 170.79.B:
ONE DECIDUOUS SHADE TREE/EVERY 10 PARKING SPACES (AROUND PARKING AREAS)
PROPOSED 55 PARKING SPACES = 6 TREES REQUIRED
6 TREES PROPOSED

SECTION 170.79.B:
ONE DECIDUOUS TREE/DWELLING UNIT (CODES IN FRONT YARD)
PROPOSED 30 DWELLING UNITS = 30 TREES REQUIRED
30 TREES PROPOSED

PLANTING SCHEDULE

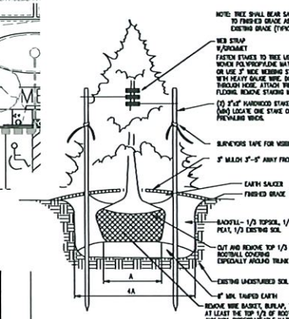
SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	HEIGHT	REMARKS
A	LIRIODENDRON TULIPIFERA	TULIP TREE	7	MIN. 3" TRUNK DIAMETER	40' – 60'+	FULL SUN TO PARTIAL SHADE
B	GINKGO BILOBA FASTIGIATA	MAIDEN HAIR TREE	7	MIN. 3" TRUNK DIAMETER	50' – 80'	FULL SUN TO PARTIAL SHADE (MALE SPECIES ONLY)
C	TILIA PETIOLARIS	SILVER LINDEN	7	MIN. 3" TRUNK DIAMETER	50' – 70'	FULL SUN TO PARTIAL SHADE
D	ACER RUBRUM	RED MAPLE	6	MIN. 3" TRUNK DIAMETER	40' – 70'	FULL SUN TO PARTIAL SHADE
E	CELTIS OCCIDENTALIS	COMMON HACKBERRY	8	MIN. 3" TRUNK DIAMETER	40' – 60'	FULL SUN
F	ACER SACCHARUM	SUGAR MAPLE	8	MIN. 3" TRUNK DIAMETER	40' – 80'	FULL SUN TO PARTIAL SHADE
TOTAL DECIDUOUS TREES = 41						
G	KALMIA LATIFOLIA	MOUNTAIN LAUREL	18	X	3' – 4'	ACIDIC SOIL, PARTIAL SHADE
H	RHODODENDRON MAXIMUM	PENNSYLVANIA RHODODENDRON	18	X	3' – 4'	ACIDIC SOIL, PARTIAL SHADE
TOTAL SHRUBS = 34						





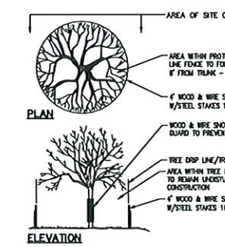
SHRUB PLANTING DETAIL

NOT TO SCALE



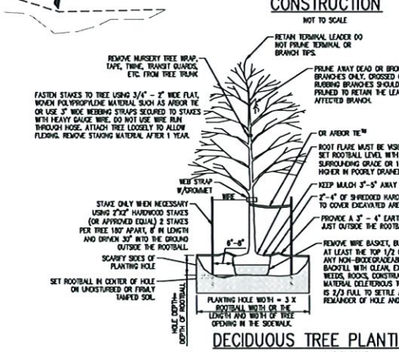
EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



TREE PROTECTION DURING SITE CONSTRUCTION

NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

LEGEND

- PROPERTY LINE
- ADJOINER LINE
- TOWNSHIP RIGHT-OF-WAY LINE
- PENNDOT RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF TREE LINE
- EDGE OF GRAVEL/STONE
- WETLAND BUFFER/DRAINAGE EASEMENT
- STORMWATER PIPE
- W — W — W WATER MAIN
- SAN — SAN — SAN SANITARY SEWER LINE
- OHWD OVERHEAD ELECTRIC LINE
- X — X — X FENCE
- CONCRETE SIDEWALK
- SANITARY MANHOLE
- SANITARY CLEANOUT
- UTILITY POLE
- FIRE HYDRANT
- WV WATER VALVE
- SI STORMWATER INLET
- FORESTED WETLANDS
- EPHEMERAL/INTERMITTENT STREAM
- PERENNIAL STREAM
- TOWNSHIP LINE
- EDGE OF TREE LINE
- CONCRETE CURB
- CONCRETE SIDEWALK
- 500 MAJOR CONTOUR
- 501 MINOR CONTOUR
- 500 MAJOR CONTOUR
- 501 MINOR CONTOUR
- SAN — SAN SANITARY SEWER LINE
- S LAT SANITARY SEWER LATERAL
- SANITARY SEWER MANHOLE
- W LAT WATER LATERAL
- W — W — W WATER MAIN
- FIRE HYDRANT
- GATE VALVE
- CONCRETE MANHOLE W/GATE VALVE
- E — E UNDERGROUND ELECTRIC CONDUIT
- E — E UNDERGROUND ELECTRIC CONDUIT
- POLE MOUNTED LIGHT
- WALL MOUNTED LIGHT
- STORMWATER PIPE
- STORMWATER INLETS
- STORMWATER ENDWALL
- RETAINING WALL
- WETLAND BUFFER/DRAINAGE EASEMENT
- YARD INLET
- EX. TREE OR SHRUB
- PROP. TREE OR SHRUB

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: LANDSCAPE PLAN & DETAILS

PROJECT TITLE: MT. NEBO II APARTMENTS

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DATE	REVISIONS	NO.

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CHECKED BY: SJC
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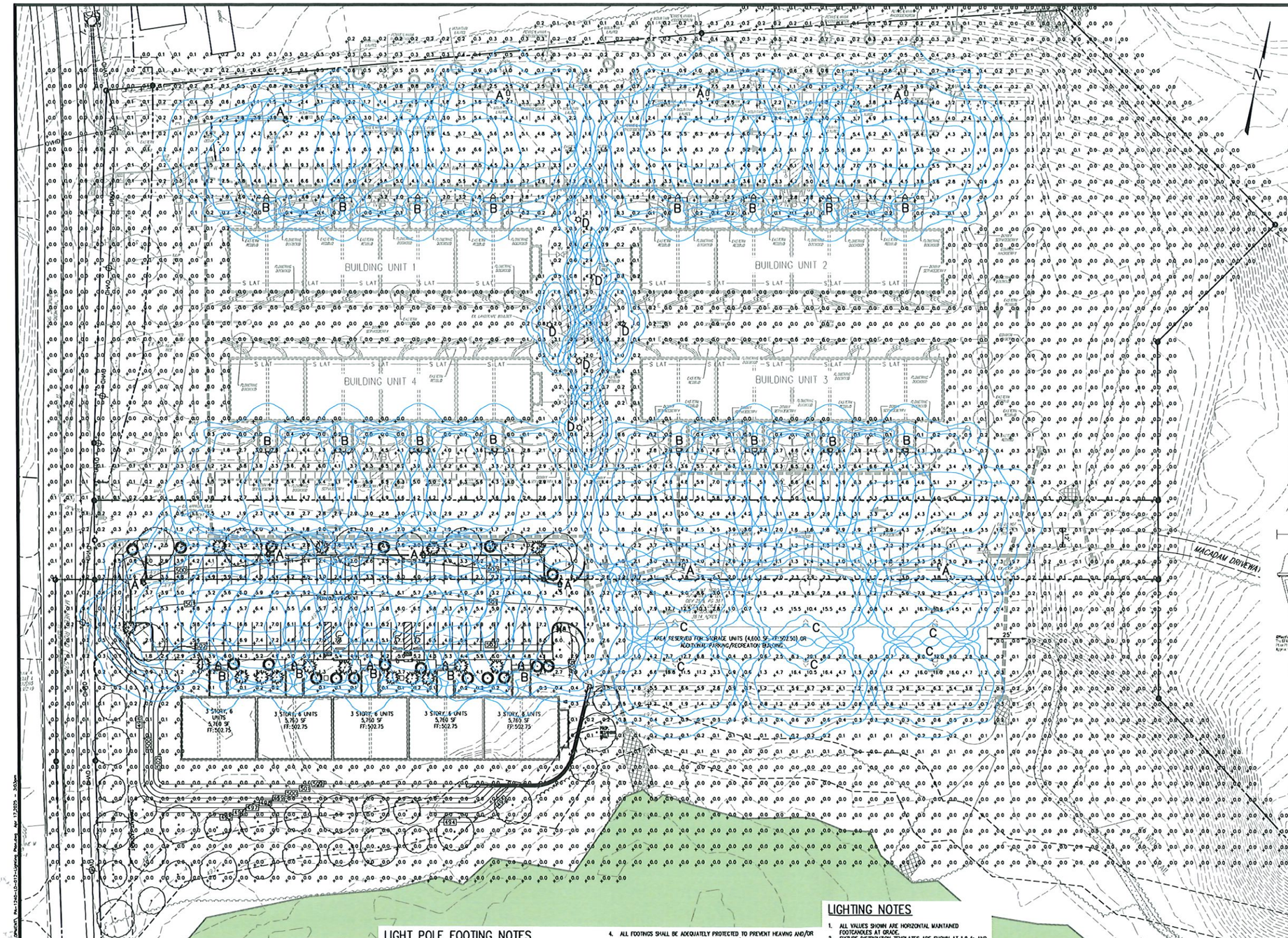
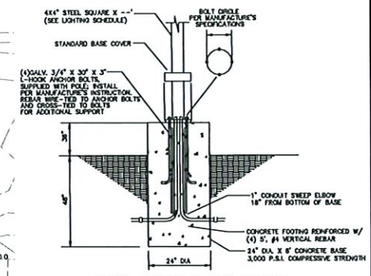
PROJECT NO. PA-1240
SHEET NO. LL-1

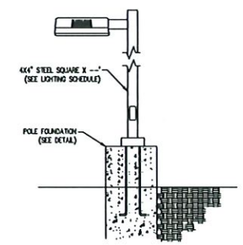
1" = 20'





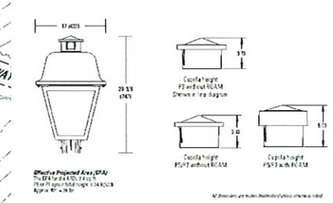
POLE FOUNDATION DETAIL

(NOT TO SCALE)



TYPICAL AREA LIGHT DETAIL

(NOT TO SCALE)



AMERICAN REVOLUTION DELUXE LED LIGHT FIXTURE

(NOT TO SCALE)

LEGEND

- PROPERTY LINE
- ADJOINER LINE
- TOWNSHIP RIGHT-OF-WAY LINE
- PENNDOT RIGHT-OF-WAY LINE
- EDGE OF PAVEMENT
- EDGE OF TREE LINE
- EDGE OF GRAVEL/STONE
- WETLAND BUFFER/DRAINAGE EASEMENT
- STORMWATER PIPE
- WATER MAIN
- SANITARY SEWER LINE
- OVERHEAD ELECTRIC LINE
- FENCE
- CONCRETE SIDEWALK
- SANITARY MANHOLE
- SANITARY CLEANOUT
- UTILITY POLE
- FIRE HYDRANT
- WATER VALVE
- STORMWATER INLET
- FORESTED WETLANDS
- EPHEMERAL/INTERMITTENT STREAM
- PERENNIAL STREAM
- TOWNSHIP LINE
- EDGE OF TREE LINE
- CONCRETE CURB
- CONCRETE SIDEWALK
- POLE MOUNTED LIGHT
- WALL MOUNTED LIGHT
- RETAINING WALL
- WETLAND BUFFER/DRAINAGE EASEMENT

LIGHT POLE FOOTING NOTES

COMPACTED FILL

1. ALL FILL SHALL BE PLACED ON VIRGIN SOIL THAT DOES NOT CONTAIN ANY ORGANIC MATTER. BEFORE PROCEEDING WITH ANY FILLING OPERATIONS, STRIP ALL TOPSOIL AND COMPACT THE EXISTING MATERIAL WITH A HEAVY VIBRATORY COMPACTOR MAKING A MINIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.
2. COMPACT FILL AND BACKFILL IN MAXIMUM 12" LAYERS (LOOSE) TO AT LEAST 95 PERCENT MAXIMUM MODIFIED DENSITY (ASTM D-155) UNDER THE SUPERVISION OF A TESTING LABORATORY APPROVED BY THE ARCHITECT/ENGINEER, AND PAID FOR BY THE GENERAL CONSTRUCTION CONTRACTOR.

FOUNDATION

1. ALL FOOTINGS SHALL BEAR UPON UNDISTURBED SOIL HAVING MINIMUM BEARING CAPACITY OF 1.50 TONS PER SQUARE FOOT (3.00 KSF). THIS REQUIRED BEARING CAPACITY TO BE VERIFIED IN FIELD DURING EXCAVATION. IF ANY UNUSUAL CONDITION IS REVEALED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY. FOUNDATION DESIGN WILL BE MODIFIED IF REQUIRED BY SUCH A SITUATION.
3. BACKFILLING SHALL BE DONE CAREFULLY WITH SMALL COMPACTION EQUIPMENT AFTER TEMPORARY BRACES AND SUPPORTS ARE PROVIDED. NO TRUCK OR BULLDOZER, ETC. SHALL BE ALLOWED CLOSER THAN SIX (6) FEET TO ANY FOOTING.
4. ALL FOOTINGS SHALL BE ADEQUATELY PROTECTED TO PREVENT HEAVING AND/OR MOVEMENT DUE TO FROST UNTIL AFTER BACKFILL/PAVING OPERATIONS.

SOILS NOTES

1. FOOTING DESIGN BASED ON ASSUMED MAXIMUM ALLOWABLE SOILS BEARING CAPACITY OF 2,000 PSF. CONTRACTOR RESPONSIBLE TO VERIFY ADEQUACY OF ASSUMED BEARING CAPACITY PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED IF INCONSISTENCIES EXIST.
2. SUBGRADE TO BE FREE OF ORGANICS AND BE SUITABLE COMPACTED MATERIAL.

CONCRETE NOTES

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS WITH A MINIMUM CEMENT CONTENT OF 600 POUNDS PER CUBIC YARD FOR ALL FOOTINGS.
2. ALL CONCRETE SHALL HAVE A SLUMP OF NO GREATER THAN 4; TO WITHIN A TOLERANCE OF 1.0".
3. ALL EXPOSED CONCRETE SHALL BE AIR-ENTRAINED 6 PERCENT (WITHIN 1 PERCENT TOLERANCE) CONFORMING TO ASTM C260.
4. REINFORCING STEEL BARS SHALL BE A MINIMUM ASTM A615, GRADE 60, AND SHALL BE FIELD WIRED IN PLACE.
5. ALL FRAMEWORK AND PLACEMENT CONCRETE SHALL COMPLY WITH GOOD CONSTRUCTION PRACTICES AND BE IN ACCORDANCE WITH ALL LOCAL GOVERNING CODES AND REGULATIONS AS WELL AS THE ACI AND UNIFORM BUILDING CODE.

LIGHTING NOTES

1. ALL VALUES SHOWN ARE HORIZONTAL MAINTAINED FOOTCANDLES AT GRADE.
2. FIXTURE DISTRIBUTION TEMPLATES ARE SHOWN AT 1.0 fc AND 0.25 fc FOR REFERENCE USE ONLY.
3. VALUES DO NOT INCLUDE CONTRIBUTION FROM ADJACENT STREET OR PROPERTY LIGHTING.
4. LUMINAIR POLE MOUNTING HEIGHT SHALL NOT EXCEED 20' FROM GRADE.
5. ALL WALL MOUNT LUMINARS SHALL BE INSTALLED HORIZONTALLY, I.E. LUMINAIR LENS FACING THE GROUND.
6. LIGHTING SHALL NOT EXCEED 0.5 FOOTCANDLES AT THE LOT LINE.
7. LIGHTING IN PARKING AREAS SHALL PROVIDE NON GLARE LIGHTS FOCUSED DOWNWARD. LIGHT FIXTURES SHALL NOT BE MOUNTED MORE THAN 25 FEET OR THE HEIGHT OF THE BUILDING, WHICHEVER IS LESS.

STATISTICS				
DESCRIPTION	SYMBOL	AVG	MAX	MIN
CALC ZONE #1	+	1.4 fc	32.0 fc	0.0 fc

LUMINAIRE SCHEDULE

SYMBOL	LABEL	QTY	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP	NUMBER LAMPS	LUMENS PER LAMP	LIGHT LOSS FACTOR	WATTAGE	MT. HEIGHT
	A	6	Spaulding	CL1-80L-4K-4	CIMARRON CL1	60 LEDs - 4000K - 70 CRI	1	15132.53	.95	135	20' 17' Pole 3' Base
	B	21	Spaulding	CL1-80L-4K-4	CIMARRON CL1	60 LEDs - 4000K - 70 CRI	1	15132.53	.95	135	20' Wall
	C	6	Spaulding	CL1-80L-4K-4	CIMARRON CL1	60 LEDs - 4000K - 70 CRI	1	15132.53	.95	135	10' Wall
	D	6	American Electric Lighting	AROL 10LEDE70 XXXX 3K R2 PY	American Revolution Deluxe LED with R2 distribution Polycarbonate Rain Panel Optic.	10 LEDs - 3000K	1	2052.715	1	28	8' Pole Foundation to be flush with grade

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: LIGHTING PLAN & DETAILS

PROJECT TITLE: MT. NEBO II APARTMENTS

1" = 30'

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
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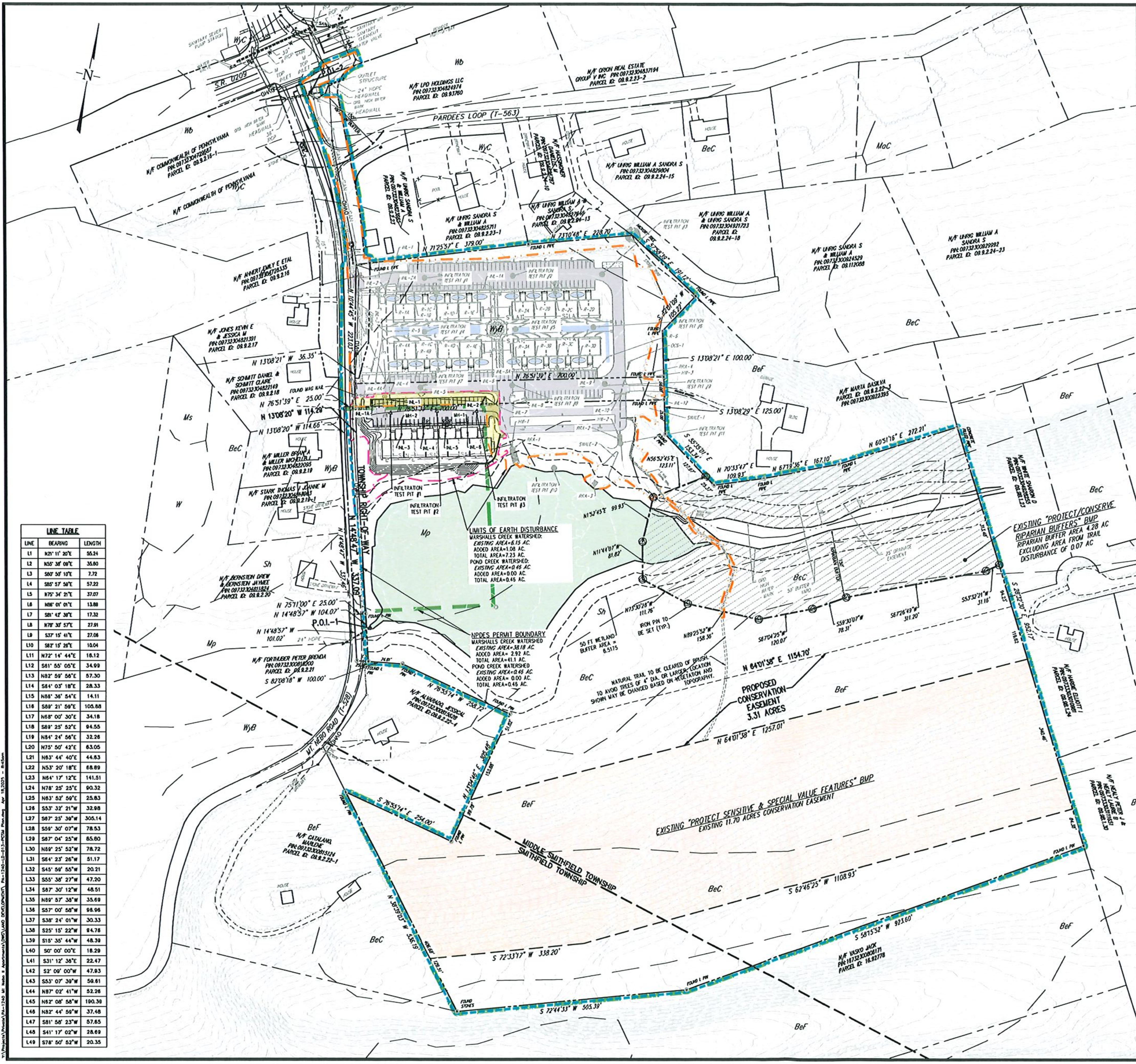
NO.	REVISIONS	DATE

SEAL

DRAWN BY: CLA
SCALE: 1" = 30'
CHECKED BY: SJC
DATE: 9/18/2025
PROJECT NO. PA-1240
SHEET NO. LL-2



LINE TABLE

LINE	BEARING	LENGTH
L1	N21° 11' 20"E	55.24
L2	N55° 38' 09"E	35.60
L3	S60° 50' 10"E	7.72
L4	S85° 57' 59"E	57.22
L5	N75° 34' 21"E	37.07
L6	N86° 01' 01"E	13.88
L7	S81° 42' 39"E	17.32
L8	N78° 30' 57"E	27.91
L9	S37° 15' 41"E	27.06
L10	S82° 15' 25"E	10.04
L11	N72° 14' 44"E	16.12
L12	S61° 55' 05"E	34.99
L13	N82° 59' 56"E	57.30
L14	S84° 03' 18"E	28.33
L15	N86° 36' 54"E	14.11
L16	S89° 21' 59"E	105.88
L17	N68° 00' 30"E	34.18
L18	S89° 25' 52"E	94.55
L19	N84° 24' 56"E	32.26
L20	N75° 50' 42"E	63.05
L21	N63° 44' 40"E	44.63
L22	N53° 20' 18"E	68.89
L23	N64° 17' 12"E	141.51
L24	N78° 25' 25"E	90.32
L25	N63° 52' 59"E	25.83
L26	S53° 32' 21"W	32.98
L27	S67° 25' 39"W	305.14
L28	S59° 30' 07"W	78.53
L29	S67° 04' 25"W	85.60
L30	N89° 25' 52"W	78.72
L31	S64° 23' 26"W	51.17
L32	S45° 59' 55"W	20.21
L33	S55° 38' 27"W	47.20
L34	S87° 30' 12"W	48.51
L35	N89° 57' 38"W	35.69
L36	S57° 00' 58"W	96.96
L37	S38° 24' 01"W	30.33
L38	S25° 15' 22"W	94.76
L39	S15° 35' 44"W	48.39
L40	S0° 00' 00"E	18.29
L41	S31° 12' 38"E	22.47
L42	S2° 09' 00"W	47.93
L43	S53° 07' 39"W	59.61
L44	N87° 02' 41"W	52.26
L45	N62° 08' 58"W	190.39
L46	N82° 44' 59"W	37.48
L47	S81° 58' 23"W	57.65
L48	S41° 17' 02"W	28.69
L49	S78° 50' 52"W	20.35

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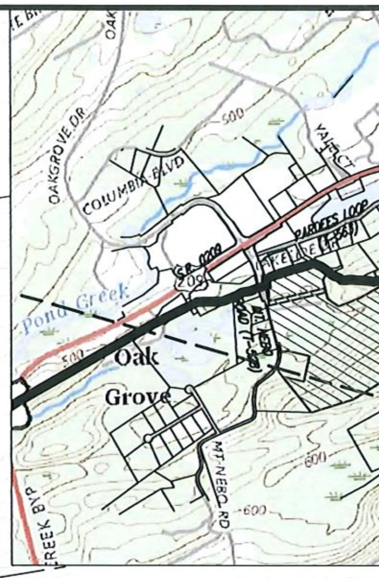

USGS LOCATION MAP

SCALE: 1" = 1000'

NOTES:

1. PERVIOUS PAVEMENT TO BE SWEPT WITH A STREET SWEEPER TWICE A YEAR MINIMUM, PREFERABLY QUARTERLY TO ENSURE CONTINUED FUNCTION.
2. NO EARTH DISTURBANCE SHALL OCCUR OUTSIDE OF THE LIMITS OF EARTH DISTURBANCE AS SHOW HEREIN WITHOUT OBTAINING A NEW NPDES PERMIT FOR SUCH WORK, ACCOUNTING FOR STORMWATER IMPACTS THAT WOULD OCCUR AS A RESULT.

SOIL CHART

SYMBOL	SOIL TYPE
BeC	BENSON-ROCK OUTCROP COMPLEX, 8 TO 25 PERCENT SLOPES
BeF	BENSON-ROCK OUTCROP COMPLEX, 25 TO 70 PERCENT SLOPES
MaC	MARDIN CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES
Mp	MUCKY PEAT, DEEP
Ms	MUCKY PEAT, SHALLOW
Sh	SHEFFIELD SILT LOAM
Wb	WAYLAND SILTY CLAY LOAM
WyB	WYOMING GRAVELLY SANDY LOAM, 3 TO 8 PERCENT SLOPES
WyC	WYOMING GRAVELLY SANDY LOAM, 8 TO 15 PERCENT SLOPES

LEGEND

- PROPERTY LINE
- ADJOINER LINE
- TOWNSHIP RIGHT-OF-WAY LINE
- PENNDOT RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF TREE LINE
- EDGE OF GRAVEL/STONE
- WETLAND BUFFER/DRAINAGE EASEMENT
- STORMWATER PIPE
- FENCE
- CONCRETE SIDEWALK
- SANITARY MANHOLE
- SANITARY CLEANOUT
- UTILITY POLE
- FIRE HYDRANT
- WATER VALVE
- STORMWATER INLET
- FORESTED WETLANDS
- EPHEMERAL/INTERMITTENT STREAM
- PERENNIAL STREAM
- TOWNSHIP LINE
- EDGE OF TREE LINE
- CONCRETE CURB
- CONCRETE SIDEWALK
- 500 MAJOR CONTOUR
- 501 MINOR CONTOUR
- 500 MAJOR CONTOUR
- 501 MINOR CONTOUR
- SANITARY SEWER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- CONCRETE MANHOLE W/GATE VALVE
- POLE MOUNTED LIGHT
- WALL MOUNTED LIGHT
- STORMWATER PIPE
- STORMWATER INLETS
- STORMWATER ENDWALL
- LIMIT OF DISTURBANCE
- NPDES PERMIT BOUNDARY
- RETAINING WALL
- WETLAND BUFFER/DRAINAGE EASEMENT
- 🟦 RAIN GARDEN AREA
- ⬜ PERVIOUS PAVEMENT AREA
- 🟧 WOODED STEEP SLOPE CONSERVATION AREA
- ▨ PROTECTED RIPARIAN BUFFER
- IRON PIN TO BE SET
- EXISTING LIMIT OF DISTURBANCE
- EXISTING NPDES PERMIT BOUNDARY
- 🟨 OVERLAPPING LIMIT OF DISTRURBANCE 0.27 AC.

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MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

PROJECT TITLE: MT. NEBO II APARTMENTS

20 0 10 20 40 80
1" = 20

SEAL:

NO.	REVISIONS	DATE

DRAWN BY: CLA
CHECKED BY: SJC
SCALE: 1"=20'
DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. PCSM-1

GENERAL MAINTENANCE SCHEDULE FOR STORMWATER MANAGEMENT BMPS

FREQUENCY	MAINTENANCE ACTIVITY	REMEDY
WEEKLY OR WHEN NEEDED	1. MOW LAWN AREAS – MOW WHEN NEEDED ✱ 2. CHECK FOR GARBAGE TO VEGETATED AREAS ✱ 3. CHECK FOR SIGNS OF EROSION ✱ 4. CHECK FOR STANDING WATERS IN DETENTION & INFILTRATION BMPS 72 HOURS AFTER STORM	1. DO NOT CUT SHORTER THAN RECOMMENDED – TURF COULD DIE OFF 2. DO NOT CUT SHORTER THAN RECOMMENDED – TURF COULD DIE OFF 3. RE-GRADE AND RE-SEED AFFECTED AREAS 4. TILL INFILTRATION AREA TO A DEPTH OF 8" AND RE-SEED
MONTHLY	1. INSPECT VEGETATION 2. MINIMUM MOWING OF VEGETATION IN VEGETATED SWALES	1. WATER, WEED, AND SEED/REPLANT AS NECESSARY 2. MOW VEGETATION IN SWALES TO 6 INCHES MINIMUM HEIGHT
EVERY 3 MONTHS	1. REMOVE SEDIMENT, TRASH, AND DEBRIS AROUND FACILITY 2. REMOVE INVASIVE WEEDS AROUND FACILITY ✱ 3. CHECK FOR STANDING WATER IN SWALES AND BASINS ✱ 4. CHECK FOR MOSQUITO-BREEDING HABITATS 5. CHECK FOR ANIMAL BURROWING AROUND FACILITY 6. CHECK BASIN PIPING FOR SEEPAGE AND SETTLING	1. RAKE OR PICK UP SEDIMENT, TRASH, AND DEBRIS 2. REMOVE WEEDS AND RE-SEED WHERE NECESSARY 3. REGRADE FLAT SPOT, IF THIS DOES NOT WORK, PROVIDE POSITIVE SLOPE WITH FILL 4. REMOVE MOSQUITO BREEDING HABITAT, INCLUDING WATER FILLED DEBRIS 5. REMOVE ANIMAL PRESENCE, FILL IN BURROW, REGRADE, AND RE-SEED 6. REMOVE CAUSE OF SEEPAGE, PIPING, AND/OR SETTLING; RESTORE AREA
EVERY 6 MONTHS	1. FERTILIZE LAWN AREA 2. CHECK FOR TREES AND WOODY VEGETATION AROUND FACILITY 3. MAINTENANCE OF STORMWATER STRUCTURES	1. NOT APPLICABLE 2. REMOVE VEGETATION, INCLUDING ROOTS, FILL-IN AND RE-SEED WHERE NECESSARY 3. REMOVE FLOATABLES, OIL, AND GREASE AND DISPOSE AT APPROPRIATE SITE AND REMOVE SEDIMENT WHEN DEPTH OF SEDIMENT ACCUMULATION IS > 1VAN	DEPTH OF SUMP
EVERY 12 MONTHS	1. CHECK FOR SETTLING AROUND FACILITY 2. INSPECT CLEAN OUT PORTS & OUTLET STRUCTURES 3. INSPECT FOR PROPER VEGETATION GROWTH AND MAINTAIN BISE COVER	1. FILL-IN SETTLED AREA, REGRADE, AND RE-SEED AREA 2. REMOVE DEBRIS AND SEDIMENT AS NECESSARY 3. WATER, WEED, SEED/REPLANT, AND MULCH AS NECESSARY

✱ ALSO AFTER EVERY MAJOR STORM EVENT (1" RAINFALL DEPTH)

MAINTENANCE AND OPERATION SCHEDULE FOR STORMWATER MANAGEMENT BMPS:

MUNICIPAL INSPECTIONS:

FREQUENCY	MAINTENANCE ACTIVITY
DURING CONSTRUCTION	1. INSPECT SUB GRADE PREPARATION OF PERVIOUS PAVEMENT 2. INSPECT STONE BASE COURSE INSTALLATION OF PERVIOUS PAVEMENT 3. INSPECT FINISH GRADE OF PERVIOUS PAVEMENT
AFTER CONSTRUCTION	1. INSPECT STORMWATER FACILITIES ONCE PER YEAR AND AFTER STORM EVENTS EXCEEDING 1-INCH

OPERATION & MAINTENANCE:

PERVIOUS PAVEMENT

- MAINTAIN ADJACENT PLANTED AREAS TO AVOID EROSION OF SOIL ONTO PERVIOUS PAVEMENT. INSPECT ADJACENT VEGETATION QUARTERLY FOR ANY DENUDED/BARE SPOTS OR ERODED AREAS. RE-SEED/RE-VEGETATE THESE AREAS IMMEDIATELY.
- DO NOT ALLOW CONSTRUCTION STAGING, SOIL/MULCH STORAGE, ETC. ON AN UNPROTECTED PERVIOUS PAVEMENT SURFACE
- REGULARLY REMOVE TRASH AND OTHER LITTER
- IMMEDIATELY CLEAN ANY DEPOSITED SOIL FROM PERVIOUS PAVEMENT.
- VACUUM PERVIOUS PAVEMENT BIANNUALLY TO QUARTERLY WITH A COMMERCIAL CLEANING UNIT.
- DO NOT APPLY SAND OR CINDERS ON PERVIOUS PAVEMENT FOR WINTER STORMS OR ANY OTHER PURPOSE.
- SNOW PLOW SHOULD BE SET SLIGHTLY HIGHER THAN USUAL FOR ERODED AREAS.

BMP 6.4.1 PERVIOUS PAVEMENT NOTES:

GENERAL NOTES AND SPECIFICATIONS

THE FOLLOWING NOTES AND SPECIFICATIONS HAVE BEEN TAKEN FROM THE PENNSYLVANIA STORMWATER BEST MANAGEMENT PRACTICES MANUAL, DATED DECEMBER 30, 2006.

1. STONE FOR INFILTRATION BEDS SHALL BE 2-INCH TO 1-INCH UNIFORMLY GRADED COARSE AGGREGATE, WITH A WASH LOSS OF NO MORE THAN 0.5%, AASHTO SIZE NUMBER 3 PER AASHTO SPECIFICATIONS, PART I, 19TH ED., 1998, OR LATER AND SHALL HAVE VOIDS OF 40% AS MEASURED BY ASTM-C29. CHOKER BASE COURSE AGGREGATE FOR BEDS SHALL BE ¾" TO ⅜" UNIFORMLY GRADED COARSE AGGREGATE AASHTO SIZE NUMBER 57 PER TABLE 4, AASHTO SPECIFICATIONS, PART I, 19TH ED., 1998.
2. THE INFILTRATION BED LINING SHALL BE 7 NON-WOVEN GEOTEXTILE PLACED ON UNCOMPACTED SUBGRADE. THE NON-WOVEN GEOTEXTILE SHALL CONSIST OF NEEDLED NON-WOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES:
   A. GRAB TENSILE STRENGTH (ASTM-D4632), GREATER THAN 120 LBS
   B. MULLEN BURST STRENGTH (ASTM-D3786), GREATER THAN 225 PSI
   C. FLOW RATE (ASTM-D4491), GREATER THAN 95 GAL/MIN/SF
   D. UV RESISTANCE AFTER 500 HRS (ASTM-D4355), 70%
   E. HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED. ACCEPTABLE TYPES INCLUDE MIRAFI 140N, AMOCO 4547, AND GEOTEX 451.
3. PIPES SHALL BE CONTINUOUSLY PERFORATED, SMOOTH INTERIOR, WITH A MINIMUM INSIDE DIAMETER OF 6-INCHES. HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL MEET AASHTO M252, TYPE S OR AASHTO M294 TYPE S.
4. BITUMINOUS SURFACE COURSE FOR PERVIOUS PAVING SHOULD BE TWO AND ONE-HALF (2.5) INCHES THICK WITH A BITUMINOUS MIX OF 5.75% TO 6% BY WEIGHT DRY AGGREGATE. IN ACCORDANCE WITH ASTM D4364, DRAIN DOWN OF THE BINDER SHALL BE NO GREATER THAN 0.3%. IF MORE ABSORPTIVE AGGREGATES, SUCH AS LIMESTONE, ARE USED IN THE MIX, THEN THE AMOUNT OF BITUMEN IS TO BE BASED ON THE TESTING PROCEDURES OUTLINED IN THE NATIONAL ASPHALT PAVEMENT ASSOCIATION'S INFORMATION SERIES 131 – "POROUS ASPHALT PAVEMENTS" (2002) OR PENNDOT EQUIVALENT.

USE HEAT ASPHALT BINDER MODIFIED WITH AN ELASTOMERIC POLYMER TO PRODUCE A BINDER MEETING THE REQUIREMENTS OF PG 76-22 AS SPECIFIED IN AASHTO MP-1. THE ELASTOMER POLYMER SHALL BE STYRENE-BUTADIENE-STYRENE (SBS), OR APPROVED EQUAL, APPLIED AT A RATE OF 3% BY WEIGHT OF THE TOTAL BINDER. THE COMPOSITE MATERIALS SHALL BE THOROUGHLY BLENDED AT THE ASPHALT REFINERY OR TERMINAL PRIOR TO BEING LOADED INTO THE TRANSPORT VEHICLE. THE POLYMER MODIFIED ASPHALT BINDER SHALL BE HEAT AND STORAGE STABLE.

AGGREGATE SHALL BE MINIMUM 100% CRUSHED MATERIAL AND HAVE A GRADATION OF:

U.S. STANDARD SIEVE SIZE	PERCENT PASSING
½ (12.5 mm)	100
⅜ (9.5 mm)	92–98
#4 (4.75 mm)	34–40
#8 (2.36 mm)	14–20
#16 (1.18 mm)	7–13
#30 (0.60 mm)	0–4
#200 (0.075 mm)	0–2

ADD HYDRATED LIME AT A DOSAGE RATE OF 1.0% BY WEIGHT OF THE TOTAL DRY AGGREGATE TO MIXES CONTAINING GRANITE. HYDRATED LIME SHALL MEET THE REQUIREMENTS OF ASTM C977. THE ADDITIVE MUST BE ABLE TO PREVENT THE SEPARATION OF THE ASPHALT BINDER FROM THE AGGREGATE AND ACHIEVE A REQUIRED TENSILE STRENGTH RATIO (TSR) OF AT LEAST 80% ON THE ASPHALT MIX WHEN TESTED IN ACCORDANCE WITH AASHTO T283. THE ASPHALTIC MIX SHALL BE TESTED FOR ITS RESISTANCE TO STRIPPING BY WATER IN ACCORDANCE WITH ASTM D-1664. IF THE ESTIMATED COATING AREA IS NOT ABOVE 80%, ANTI-STRIPPING AGENTS SHALL BE ADDED TO THE ASPHALT.

POROUS PAVEMENT SHALL NOT BE INSTALLED ON WET SURFACES OR WHEN THE AMBIENT AIR TEMPERATURE IS 50 DEGREES FAHRENHEIT OR LOWER. THE TEMPERATURE OF THE BITUMINOUS MIX SHALL BE BETWEEN 300 DEGREES FAHRENHEIT AND 350 DEGREES FAHRENHEIT (BASED ON THE RECOMMENDATIONS OF THE ASPHALT SUPPLIER).

SEQUENCE OF CONSTRUCTION

1. DUE TO THE NATURE OF CONSTRUCTION SITES, POROUS PAVEMENT AND OTHER INFILTRATION MEASURES SHOULD BE INSTALLED TOWARD THE END OF THE CONSTRUCTION PERIOD, IF POSSIBLE. ONCE THE SITE IS STABILIZED AND SEDIMENT STORAGE IS NO LONGER REQUIRED, THE BED IS EXCAVATED TO ITS FINAL GRADE AND THE POROUS PAVEMENT SYSTEM IS INSTALLED.
2. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT. METHODS TO MINIMIZE COMPACTION OF INFILTRATION AREAS INCLUDE: WORKING FROM THE PERIMETER AND WORKING ON TOP OF INSTALLED STONE OR EXISTING GRADE. CONSTRUCTION TRAFFIC SHOULD AVOID THESE AREAS TO THE GREATEST EXTENT PRACTICABLE.
3. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 8 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHALL BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE.
4. EARTHEN BERMS (IF USED) BETWEEN INFILTRATION BEDS SHOULD BE LEFT IN PLACE DURING EXCAVATION. THESE BERMS DO NOT REQUIRE COMPACTION IF PROVIDE STABLE DURING CONSTRUCTION.
5. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACE IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 18 IN. IT SHOULD ALSO BE SECURED AT LEAST 4 FT. OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO BED EDGE.
6. CLEAN (WASHED) UNIFORMLY GRADED AGGREGATE IS PLACED IN THE BED IN 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH THE CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE. ONCE BED AGGREGATE IS INSTALLED TO THE DESIRED GRADE, A +/- 1 IN LAYER OF CHOKER BASE COURSE (AASHTO #57) AGGREGATE SHOULD BE INSTALLED UNIFORMLY OVER THE SURFACE IN ORDER TO PROVIDE AN EVEN SURFACE FOR PAVING.
7. UPON COMPLETION OF WEARING COURSE OF POROUS PAVEMENT, VACUUM THE SURFACE WITH A VACUUM TRUCK.

CRITICAL STAGES

A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT FOR THE FOLLOWING CRITICAL STAGES OF CONSTRUCTION FOR THE POROUS PAVEMENT.

1. SUBGRADE PREPARATION
   A. VERIFICATION OF EXCAVATION TO PROPOSED INVERT DEPTH
   B. VERIFICATION OF LINER INSTALLATION
2. INSTALLATION OF UNDERDRAIN
   A. VERIFICATION OF PROPOSED INVERT DEPTH
   B. VERIFICATION OF PIPE TYPE AND SIZE
3. PLACEMENT OF BED AGGREGATE
   A. VERIFICATION OF STONE DEPTH AND TYPE
4. PLACEMENT OF CHOKER COURSE
   A. VERIFICATION OF STONE DEPTH AND TYPE
5. PLACEMENT OF POROUS PAVEMENT
   A. VERIFICATION OF PAVEMENT MIX
   B. VERIFICATION OF DEPTH
6. POROSITY TEST

RESPONSIBLE PARTY

1. DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE POROUS PAVEMENT.
2. ONCE ALL CONSTRUCTION HAS BEEN COMPLETED, THE PROPERTY OWNER WILL BECOME RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE POROUS PAVEMENT.

SEQUENCE OF CONSTRUCTION

1. STAKEOUT THE LIMITS OF EARTH DISTURBANCE. CLEAR AND GRUB THE AREA.
2. PREPARE GROUND UNDER WHERE PROPOSED FILTER SOCKS ARE SHOWN BY REMOVING LEAVES AND DEBRIS. INSTALL COMPOST FILTER SOCKS CS-1 THROUGH CS-3.
3. INSTALL ROCK CONSTRUCTION ENTRANCE RCE-1 AT PROPOSED SITE ENTRANCE.
4. DEMOLISH SITE FEATURES AS PROPOSED ON THE PLANS.
5. COMPLETE SITE EARTHWORK UNTIL ROUGH FINAL GRADE IS ACHIEVED, EXCEPTING PARKING LOT. TAKE CARE NOT TO COMPACT UNDERLYING SOILS IN PARKING LOT AREA.
6. INSTALL SANITARY SEWER RUN FROM EX. CO-1 TO CO-1C. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
7. INSTALL WATER LINE FROM EXISTING CONNECTION TO PROPOSED CONNECTION AS SHOWN ON THE PLAN. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
8. CONSTRUCTION OF FOUNDATION AND APARTMENT BUILDING MAY COMMENCE AT THIS POINT.
9. INSTALL STORM SEWER RUN FROM EX. IM-7 TO IM-2. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
10. INSTALL STORM SEWER RUN FROM EXISTING IM-4 TO IM-1B. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
11. INSTALL STORM SEWER RUN FROM MH-1 TO MH-2, INCLUDING IM-3, IM-4, IM-5, AND IM-6. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
12. CONSTRUCT THE UNDERGROUND INFILTRATION BASIN. AVOID COMPACTION OF SOILS UNDER PROPOSED INFILTRATION PRACTICES. METHODS TO MINIMIZE COMPACTION OF INFILTRATION AREAS INCLUDE: WORKING FROM THE PERIMETER. CONSTRUCTION TRAFFIC SHOULD AVOID THESE AREAS TO THE GREATEST EXTENT PRACTICABLE. THIS STAGE INCLUDES CRITICAL STAGES REQUIRING INSPECTION BY AN ENGINEER OR DESIGNEE. REFER TO SPECIFICS IN THE BMP SPECIFIC SEQUENCE. INFILTRATION TESTING SHALL BE CONDUCTED FOR INFILTRATION BED. THE MINIMUM INFILTRATION RATES TESTED MUST BE IN ACCORDANCE WITH THE INFILTRATION RATE USED FOR DESIGN OF THE BMP. TESTING OF THE FINAL INFILTRATION RATE SHALL BE WITNESSED BY A QUALIFIED PROFESSIONAL.
13. INSTALL ELECTRIC AND COMMUNICATION/FOUNDATIONS FOR LIGHT POSTS.
14. INSTALL CURBING AROUND THE PARKING LOT. STABILIZE THE PARKING LOT AREA WITH A TOP LAYER OF AASHTO #57 AGGREGATE, AS SPECIFIED IN THE LAND DEVELOPMENT PLAN DETAILS.
15. STABILIZE GRADED AREAS ACCORDING TO THE SPECIFICATIONS WITHIN THE ESPC PLANS. STABILIZE ALL SLOPES WITH NAG S-75 EROSION CONTROL MATTING OR AN APPROVED EQUAL. SEED AND MULCH.
16. SET ALL INLETS TO FINAL GRADE AND REMOVE INLET PROTECTION, ROCK CONSTRUCTION ENTRANCE, AND COMPOST SOCKS UPON ACHIEVING 70% VEGETATION IN ALL NON-PAVED SURFACES.
17. PAVE THE POROUS PARKING LOT WITH POROUS ASPHALT PAVEMENT AS SPECIFIED IN THE LAND DEVELOPMENT PLAN DETAILS. STRIPE PARKING LOT AND INSTALL SIGNS.

PCSM STANDARD NOTES:

GENERAL

THE MAINTENANCE OF THE STORMWATER FACILITIES ARE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE OWNER'S DEED AND THE DEEDS TO ANY SUBSEQUENT OWNER, SHALL NOTE THAT THE OWNER SHALL ACCEPT THE MAINTENANCE RESPONSIBILITIES OF ANY FACILITIES NOT DEDICATED. THE MUNICIPALITY SHALL BE PERMITTED TO INSPECT THE STORMWATER FACILITIES ON, AT LEAST, AN ANNUAL SCHEDULE TO ENSURE THAT ANY NECESSARY CORRECTIVE WORK IS PERFORMED IN A TIMELY MANNER.

ANY REVISIONS TO THE PCSM PLAN WILL REQUIRE CONSERVATION DISTRICT APPROVAL.

PERMIT TERMINATION

UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER §102.22(c)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §102.4 AND §102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS; AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.

THE NOTICE OF TERMINATION MUST INCLUDE:
(1) THE FACILITY NAME, ADDRESS AND LOCATION.
(2) THE OPERATOR NAME AND ADDRESS.
(3) THE PERMIT NUMBER.
(4) THE REASON FOR PERMIT TERMINATION.
(5) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH §102.8(m) AND PROOF OF COMPLIANCE WITH §102.8(m)(3).

PCSM REQUIREMENTS

PCSM REPORTING AND RECORDKEEPING: THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

LICENSED PROFESSIONAL OVERSIGHT OF CRITICAL STAGES. A LICENSED PROFESSIONAL OR A DESIGNEE SHALL BE PRESENT ONSITE AND BE RESPONSIBLE DURING CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN. THE CRITICAL STAGES MAY INCLUDE: THE INSTALLATION OF UNDERGROUND TREATMENT OR STORAGE BMPS, STRUCTURALLY ENGINEERED BMPS, OR OTHER BMPS AS DEEMED APPROPRIATE BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

FINAL CERTIFICATION: THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS: "I (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. §4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

(1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.

(2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS.

PCSM LONG TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

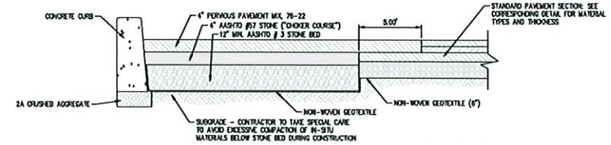
UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE FOR ALL PCSM BMPS ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE. THE DEPARTMENT OR CONSERVATION DISTRICT WILL CONDUCT A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION WITHIN 30 DAYS.

THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS.

FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPS AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEES, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER §102.7(b)(3) RELATING TO PERMIT TERMINATION.

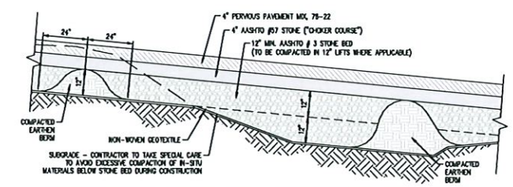
THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPS OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT.

A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS LOCATED ON THE PROPERTY.



BMP 6.4.1 PERVIOUS PAVEMENT PARKING LOT SECTION

NOT TO SCALE



COMPACTED EARTHEN BERM FOR PERVIOUS PAVEMENT

NOT TO SCALE

NO.	REVISIONS	DATE

DRAWN BY: CLA | CHECKED BY: SJC
SCALE: NOT TO SCALE | DATE: 5/18/2025
PROJECT NO. PA-1240
SHEET NO. PCSM-2

SEAL

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: POST CONSTRUCTION STORMWATER MANAGEMENT DETAIL SHEET

PROJECT TITLE: MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

HanoverEngineering
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3355 Route 611, Suite 1
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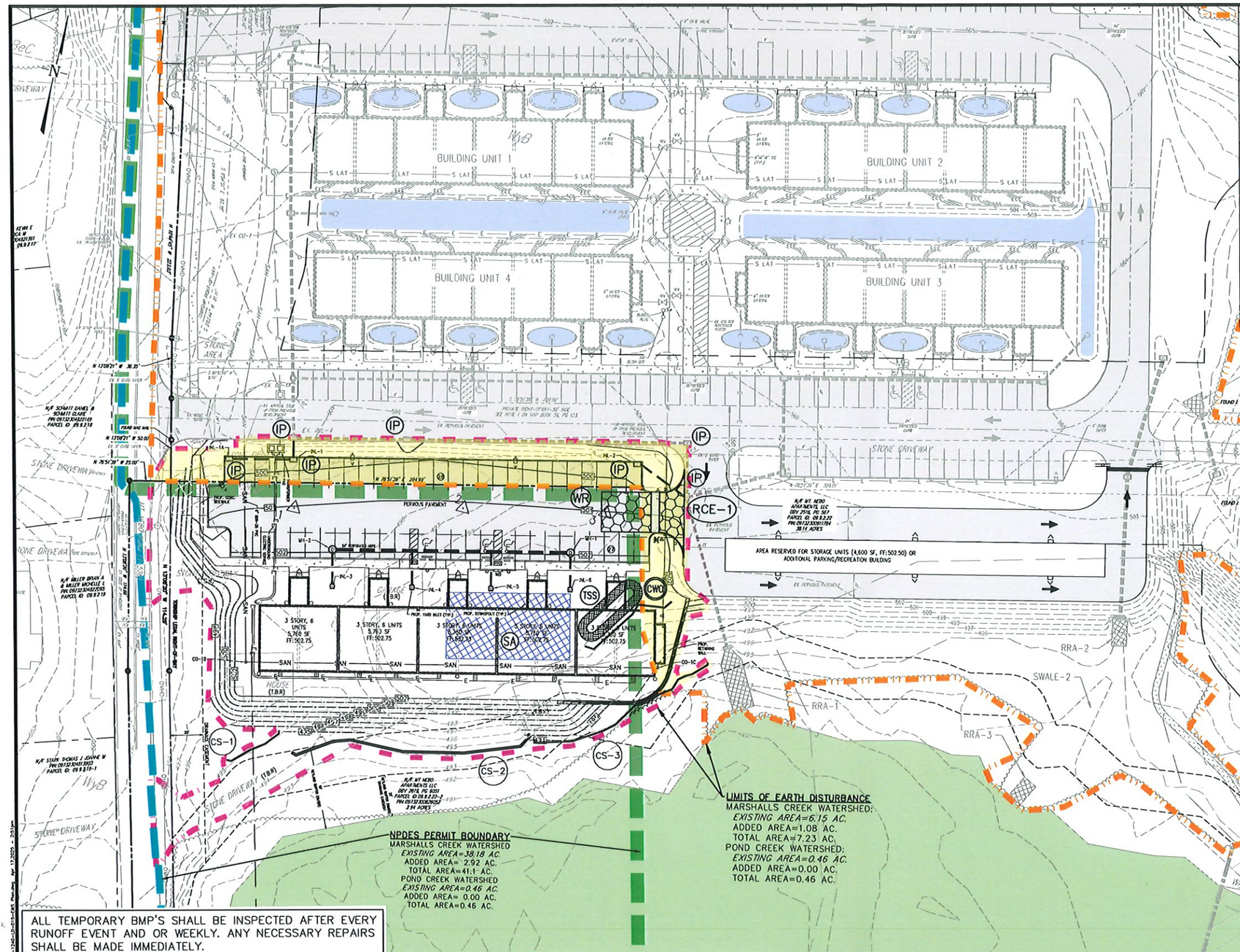
HanoverEng.com



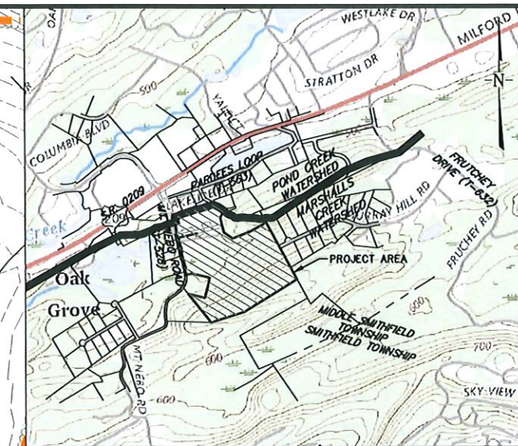
ALL TEMPORARY BMP'S SHALL BE INSPECTED AFTER EVERY RUNOFF EVENT AND OR WEEKLY. ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY.

LEGEND

PROPERTY LINE
ADJOINER LINE
TOWNSHIP RIGHT-OF-WAY LINE
PENNDOT RIGHT-OF-WAY LINE
EDGE OF PAVEMENT
EDGE OF TREE LINE
EDGE OF GRAVEL/STONE
WETLAND BUFFER/DRAINAGE EASEMENT
STORMWATER PIPE
WATER MAIN
SANITARY SEWER LINE
OVERHEAD ELECTRIC LINE
FENCE
CONCRETE SIDEWALK
SANITARY MANHOLE
SANITARY CLEANOUT
UTILITY POLE
FIRE HYDRANT
WATER VALVE
STORMWATER INLET
FORESTED WETLANDS
EPHEMERAL/INTERMITTENT STREAM
PERENNIAL STREAM
TOWNSHIP LINE
EDGE OF TREE LINE
CONCRETE CURB
CONCRETE SIDEWALK
MAJOR CONTOUR
MINOR CONTOUR
MAJOR CONTOUR
MINOR CONTOUR
SANITARY SEWER FORCE MAIN
SANITARY SEWER LINE
PROTECTED RIPARIAN BUFFER
SANITARY SEWER LATERAL
SANITARY SEWER MANHOLE
WATER LATERAL
WATER MAIN
FIRE HYDRANT
GATE VALVE
CONCRETE MANHOLE W/GATE VALVE
UNDERGROUND ELECTRIC CONDUIT
POLE MOUNTED LIGHT
WALL MOUNTED LIGHT
STORMWATER PIPE
STORMWATER INLETS
STORMWATER ENDWALL
LIMIT OF DISTURBANCE
NPDES PERMIT BOUNDARY
RETAINING WALL
WETLAND BUFFER/DRAINAGE EASEMENT
RAIN GARDEN AREA
PERVIOUS PAVEMENT AREA
EXISTING LIMIT OF DISTURBANCE
EXISTING NPDES PERMIT BOUNDARY
OVERLAPPING LIMIT OF DISTURBANCE 0.27 AC.

SCS FEATURES

RCE WR — PROPOSED ROCK CONSTRUCTION ENTRANCE W/ WASH RACK
PROPOSED EROSION MATTING NAG S75 (SLOPES 3:1 OR GREATER)
SA — PROPOSED STAGING AREA
IP — PROPOSED INLET PROTECTION
TSS — TOPSOIL STOCKPILE



USGS LOCATION MAP

EROSION AND SEDIMENTATION NOTES:

1. CONTRACTOR SHALL NOT DISTURB AREAS DESIGNATED AS POST CONSTRUCTION STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICE FACILITIES TO BE UTILIZED FOR INFILTRATION PURPOSES. CONTRACTOR SHALL REFER TO THE POST CONSTRUCTION STORMWATER MANAGEMENT PLANS FOR EXACT LOCATIONS OF THE INFILTRATION FACILITIES.
2. SEE SHEET 16 FOR SEQUENCE OF CONSTRUCTION FOR ALL PERMANENT BMP'S.
3. CONTRACTOR SHALL SUPPLY SILT SOXX AS SPECIFIED OR APPROVED EQUAL. APPROVED EQUAL PRODUCT TO BE APPROVED BY DESIGN ENGINEER.
4. THE CONTRACTOR/OWNER SHALL INFORM MIDDLE SMITHFIELD TOWNSHIP AT LEAST 48 HOURS PRIOR TO BEGINNING THE INSTALLATION OF THE POST CONSTRUCTION STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (BMP'S).
5. UPON CONSTRUCTION OF INLETS SEAL THE TOPS OF THE INLETS AS SHOWN ON THE INLET TOP SEAL DETAIL.
6. THE CONTRACTOR SHALL AMEND AND RESTORE ALL DISTURBED AREAS IN THE LIMITS OF CONSTRUCTION BOUNDARY AS SHOWN ON THIS PLAN.

PROJECT OWNER/APPLICANT:

MT. NEBO APARTMENTS, LLC
117 PIPHER LANE
STROUDSBURG, PA 18360
PHONE: 570-424-0540

PLAN PREPARER:

SALVATORE CAIAZZO, PE
HANOVER ENGINEERING ASSOC., INC.
3355 ROUTE 611, SUITE 1
BARTONSVILLE, PA 18321-7822
570.688.9550

RECEIVING WATERS:

MARSHALLS CREEK AND POND CREEK – CHAPTER 93
CLASSIFICATION: HQ-CWF, MF
(HIGH QUALITY-COLD WATER FISHERY, MIGRATORY FISHES)

SOIL CHART

SYMBOL	SOIL TYPE
BeC	BONSON-ROCK OUTCROP COMPLEX, 8 TO 25 PERCENT SLOPES
BeF	BONSON-ROCK OUTCROP COMPLEX, 25 TO 70 PERCENT SLOPES
MaC	MARDIN CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES
Mp	MUCKY PEAT, DEEP
Ms	MUCKY PEAT, SHALLOW
Sh	SHOTTSFIELD SILT LOAM
Wb	WAYLAND SILTY CLAY LOAM
WyB	WYOMING GRAVELLY SANDY LOAM, 3 TO 8 PERCENT SLOPES
WyC	WYOMING GRAVELLY SANDY LOAM, 8 TO 15 PERCENT SLOPES

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE: EROSION & SEDIMENTATION CONTROL PLAN

PROJECT TITLE: MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

1" = 30'

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NO.	REVISIONS	DATE

DRAWN BY: CLA
SCALE: 1"=30'
CHECKED BY: SJC
DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. ESPC-1
SEAL

SEQUENCE OF CONSTRUCTION

ACTIVITIES PLANNED TO LIMIT EXPOSED AREAS AND REMOVAL OF TEMPORARY BMPS:

DUE TO THE EXISTING SOILS A ON THE SITE, CLEAN FILL MAY NEED TO BE BROUGHT TO THE SITE. ANY OFF-SITE BORROW OR STOCKPILE AREAS WILL REQUIRE AN APPROVED, SEPARATE EROSION AND SEDIMENTATION CONTROL PLAN, TO BE PREPARED BY THE CONTRACTOR. THE OPERATOR/CONTRACTOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE CONSERVATION DISTRICT AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL PROPOSED SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFF SITE.

ALL DISTURBED AREAS WHERE WORK WILL NOT BE PERFORMED WILL BE STABILIZED BY APPLYING MULCH AND SEEDING IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATIONS PROVIDED.
AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.

INSTRUCTIONS FOR STAGING OF EARTHMOVING ACTIVITIES

CONSTRUCTION MUST BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE. THIS SCHEDULE IS DESIGNED TO MINIMIZE SOIL EROSION AND SEDIMENTATION. THE CONTRACTOR MAY DEVIATE SLIGHTLY FROM THE STAGING OF PERMANENT SITE IMPROVEMENTS, BUT NO DEVIATION FROM THE RELATIVE ORDER OF EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE ALLOWED.

FACILITIES TO CONTROL THE TRANSPORT OF SOIL MATERIAL FROM THE CONSTRUCTION AREA SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBANCE OR PAVEMENT REMOVAL.

AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE COMPANY SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE LOCAL COUNTY CONSERVATION DISTRICT, AND THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER TO AN ON-SITE PRECONSTRUCTION MEETING.

AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.

BEFORE IMPLEMENTING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE CONTRACTOR MUST ASSURE THAT EACH SOIL OR BORROW AREA HAS AN EROSION AND SEDIMENTATION CONTROL PLAN APPROVED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 102 REGULATIONS.

THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN INCLUDING THE SOIL EROSION CONTROL DRAWINGS AND NARRATIVE SHALL BE AVAILABLE ON SITE AT ALL TIMES DURING EARTH DISTURBANCE.

NOTE: A MAJORITY OF THE PROJECT SITE WAS PREVIOUSLY USED AS A STAGING AREA, AND HAS 2 INCHES OF STONE AND GEOTEXTILE UNDERLAYMENT. THIS MATERIAL IS NOT SUITABLE FOR USE AS TOPSOIL. AFTER FINAL GRADE IS REACHED, TOPSOIL MATERIAL MAY HAVE TO BE IMPORTED FROM A PADEP-APPROVED OFF-SITE SOURCE. ALL AREAS TO BE GRASSED POST-CONSTRUCTION WILL REQUIRE SUITABLE TOPSOIL.

SEQUENCE OF CONSTRUCTION

1. STAKEOUT THE LIMITS OF EARTH DISTURBANCE. CLEAR AND GRUB THE AREA.
2. PREPARE GROUND UNDER WHERE PROPOSED FILTER SOCKS ARE SHOWN BY REMOVING LEAVES AND DEBRIS. INSTALL COMPOST FILTER SOCKS CS-1 THROUGH CS-3.
3. INSTALL ROCK CONSTRUCTION ENTRANCE RCE-1 AT PROPOSED SITE ENTRANCE.
4. DEMOLISH SITE FEATURES AS PROPOSED ON THE PLANS.
5. COMPLETE SITE EARTHWORK UNTIL ROUGH FINAL GRADE IS ACHIEVED, EXCEPTING PARKING LOT. TAKE CARE NOT TO COMPACT UNDERLYING SOILS IN PARKING LOT AREA.
6. INSTALL SANITARY SEWER RUN FROM EX. CO-1 TO CO-1C. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
7. INSTALL WATER LINE FROM EXISTING CONNECTION TO PROPOSD CONNECTION AS SHOWN ON THE PLAN. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
8. CONSTRUCTION OF FOUNDATION AND APARTMENT BUILDING MAY COMMENCE AT THIS POINT.
9. INSTALL STORMSEWER RUN FROM EX. INL-7 TO INL-2. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
10. INSTALL STORMSEWER RUN FROM EXISTING INL-4 TO INL-1A. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
11. INSTALL STORMSEWER RUN FROM MH-1 TO MH-2, INCLUDING INL-3, INL-4, INL-5, AND INL-6. ENSURE THAT ALL TRENCH EXCAVATION IS BACKFILLED AND STABILIZED AFTER EACH CONSTRUCTION PERIOD.
12. CONSTRUCT THE UNDERGROUND INFILTRATION BASIN. AVOID COMPACTION OF SOILS UNDER PROPOSED INFILTRATION PRACTICES. METHODS TO MINIMIZE COMPACTION OF INFILTRATION AREAS INCLUDES WORKING FROM THE PERIMETER. CONSTRUCTION TRAFFIC SHOULD AVOID THESE AREAS TO THE GREATEST EXTENT PRACTICABLE. THIS STAGE INCLUDES CRITICAL STAGES REQUIRING INSPECTION BY AN ENGINEER OR DESIGNEE. REFER TO SPECIFICS IN THE BMP SPECIFIC SEQUENCE. INFILTRATION TESTING SHALL BE CONDUCTED FOR INFILTRATION BED. THE MINIMUM INFILTRATION RATES TESTED MUST BE IN ACCORDANCE WITH THE INFILTRATION RATE USED FOR DESIGN OF THE BMP. TESTING OF THE FINAL INFILTRATION RATE SHALL BE WITNESSED BY A QUALIFIED PROFESSIONAL.
13. INSTALL ELECTRIC AND COMMUNICATION/FOUNDATIONS FOR LIGHT POSTS.
14. INSTALL CURBING AROUND THE PARKING LOT. STABILIZE THE PARKING LOT AREA WITH A TOP LAYER OF AASHTO #57 AGGREGATE AS SPECIFIED IN THE LAND DEVELOPMENT PLAN DETAILS.
15. STABILIZE GRADED AREAS ACCORDING TO THE SPECIFICATIONS WITHIN THE ESPC PLANS. STABILIZE ALL SLOPES WITH NAG S-75 EROSION CONTROL MATTING OR AN APPROVED EQUAL. SEED AND MULCH.
16. SET ALL INLETS TO FINAL GRADE AND REMOVE INLET PROTECTION, ROCK CONSTRUCTION ENTRANCE, AND COMPOST SOCKS UPON ACHIEVING 70% VEGETATION IN ALL NON-PAVED SURFACES.
17. PAVE THE PERVIOUS PARKING LOT WITH POROUS ASPHALT PAVEMENT AS SPECIFIED IN THE LAND DEVELOPMENT PLAN DETAILS. STRIPE PARKING LOT AND INSTALL SIGNS.

A LICENSED PROFESSIONAL OR A DESIGNEE SHALL BE PRESENT ONSITE AND BE RESPONSIBLE DURING CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN. CRITICAL STAGES INCLUDE THE FOLLOWING:

- DURING EXCAVATION AND BACKFILL OF THE PERVIOUS PAVEMENT AREAS AND RAIN GARDENS.
- AT FINAL SITE STABILIZATION AND RESTORATION.

BMP SPECIFIC CONSTRUCTION SEQUENCE

SEDIMENT TRAP

1. ENSURE ALL HVF AND PERIMETER BMP'S SUCH AS SILT SOCK ARE INSTALLED DOWNSLOPE OF THE SEDIMENT TRAPS.
2. STRIP TOPSOIL AND DISPOSE OF IN A TOPSOIL STOCKPILE AREA.
3. EXCAVATE AND CONSTRUCT SEDIMENT TRAP EMBANKMENT, COMPACTING IN NO MORE THAN 9 INCH LIFTS. THE FILL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS, WOODY VEGETATION, STONES LARGER THAN 6" IN ANY DIMENSION, AND ANY OTHER OBJECTIONABLE MATERIALS.
4. CONSTRUCT FILTER OUTLET AS SHOWN ON PROVIDED DETAILS.

PERVIOUS PAVEMENT

1. DUE TO THE NATURE OF CONSTRUCTION SITES, PERVIOUS PAVEMENT AND OTHER INFILTRATION MEASURES SHOULD BE INSTALLED TOWARD THE END OF THE CONSTRUCTION PERIOD, IF POSSIBLE. ONCE THE SITE IS STABILIZED AND SEDIMENT STORAGE IS NO LONGER REQUIRED, THE BED IS EXCAVATED TO ITS FINAL GRADE AND THE PERVIOUS PAVEMENT SYSTEM IS INSTALLED.
2. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT. METHODS TO MINIMIZE COMPACTION OF INFILTRATION AREAS INCLUDES WORKING FROM THE PERIMETER AND WORKING ON TOP OF INSTALLED STONE OR EXISTING GRADE. CONSTRUCTION TRAFFIC SHOULD AVOID THESE AREAS TO THE GREATEST EXTENT PRACTICABLE.
3. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHALL BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE.
4. EARTHEN BERMS (IF USED) BETWEEN INFILTRATION BEDS SHOULD BE LEFT IN PLACE DURING EXCAVATION. THESE BERMS DO NOT REQUIRE COMPACTION IF PROVEN STABLE DURING CONSTRUCTION.
5. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACE IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 IN. IT SHOULD ALSO BE SECURED AT LEAST 4 FT. OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO BED EDGE.
6. CLEAN (WASHED) UNIFORMLY GRADED AGGREGATE IS PLACED IN THE BED IN 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH THE CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE. ONCE BED AGGREGATE IS INSTALLED TO THE DESIRED GRADE, A +/- 1 IN LAYER OF CHOKER BASE COURSE (AASHTO #57) AGGREGATE SHOULD BE INSTALLED UNIFORMLY OVER THE SURFACE IN ORDER TO PROVIDE AN EVEN SURFACE FOR PAVING.
7. UPON COMPLETION OF WEARING COURSE OF PERVIOUS PAVEMENT, VACUUM THE SURFACE WITH A VACUUM TRUCK.

PERVIOUS PAVEMENT CRITICAL STAGES

A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT FOR THE FOLLOWING CRITICAL STAGES OF CONSTRUCTION FOR THE PERVIOUS PAVEMENT.

1. SUBGRADE PREPARATION
    a. VERIFICATION OF EXCAVATION TO PROPOSED INVERT DEPTH
    b. VERIFICATION OF LINER INSTALLATION
2. INSTALLATION OF UNDERDRAIN
    a. VERIFICATION OF PROPOSED INVERT DEPTH
    b. VERIFICATION OF PIPE TYPE AND SIZE
3. PLACEMENT OF BED AGGREGATE
    a. VERIFICATION OF STONE DEPTH AND TYPE
4. PLACEMENT OF CHOKER COARSE
    a. VERIFICATION OF STONE DEPTH AND TYPE
5. PLACEMENT OF PERVIOUS PAVEMENT
    a. VERIFICATION OF PAVEMENT MIX
    b. VERIFICATION OF DEPTH
6. PERMEABILITY TEST

REVEGETATION BEST MANAGEMENT PRACTICES:

AFTER EARTH DISTURBANCE ACTIVITY IS COMPLETED, THE DISTURBED AREA MUST BE REVEGETATED. THE VEGETATIVE COVER MUST BE A UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION. ANOTHER OPTION IS TO USE AN ACCEPTABLE BMP WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.

1. SEED MIXTURES - STANDARD SEED MIXTURES, SUCH AS THOSE DESCRIBED IN THE PENN STATE PUBLICATION "EROSION CONTROL & CONSERVATION PLANTING ON NONCROPLAND", THAT HAVE BEEN SHOWN TO BE EFFECTIVE IN STABILIZING AREAS IN PENNSYLVANIA ARE RECOMMENDED. THIS INFORMATION IS SUMMARIZED IN TABLES 13 THROUGH 16. ALTHOUGH THESE RECOMMENDED MIXTURES WILL BE SUITABLE FOR MOST SITES, THEY MAY NOT BE DESIRABLE FOR ALL SITUATIONS THAT MAY BE ENCOUNTERED (E.G. - A WELL SITE LOCATED IN A RESIDENTIAL AREA). IN SUCH INSTANCES, THE DEPARTMENT SHOULD BE CONTACTED FOR ADDITIONAL GUIDANCE. THE WEBSITE WWW.PLANT-MATERIALS.NRCS.USDA.GOV <HTTP://WWW.PLANT-MATERIALS.NRCS.USDA.GOV> IS ANOTHER EXCELLENT SOURCE OF INFORMATION.
    A. A SEED MIX SHOULD CONTAIN MORE THAN ONE VARIETY OF SEED AND INCLUDE THE APPLICATION RATE (E.G. LB./ACRE), AND GERMINATION SEASON.
    B. IF THE AREA TO BE VEGETATED IS A STEEP SLOPE (≥ 3:1), A STEEP SLOPE MIXTURE SHOULD BE USED. OTHER LIMITATIONS, SUCH AS DROUGHTY OR SATURATED CONDITIONS, ACID SOILS, AND SHADED AREAS SHOULD ALSO BE ADDRESSED BY THE PROPOSED SEEDING PLAN (SEE TABLES 13 THOUGH 16).
    C. WHEREVER TALL FESCUE IS PROPOSED, AN ENDOPHYTE FREE VARIETY (E.G. JOHNSTONE, BARCEL, OR FESTORINA) SHOULD BE USED.
    D. SEED MIXTURES SHOULD INCLUDE A LEGUME. WHEN USED IN AREAS DIFFICULT TO VEGETATE, LEGUME SEED LOTS SHOULD CONTAIN A CERTAIN AMOUNT OF HARD SEED (SEE TABLE 13 FOR RECOMMENDED SPECIFICATIONS). LEGUME SEED MUST BE INOCULATED IN ORDER TO FORM NODULES ON THE ROOTS WHICH FIX ATMOSPHERIC NITROGEN. USE ONLY SEED WHICH HAS BEEN FRESHLY AND PROPERLY INOCULATED.
    E. WARM SEASON GRASSES MAY HAVE SOME LIMITATIONS FOR USE IN EROSION CONTROL AND MUST BE CONSIDERED WHEN SELECTING A SEED MIXTURE, THEY GROW MUCH MORE SLOWLY DURING THE SPRING AND FALL MONTHS. THEY TEND TO FORM BUNCHES, RATHER THAN SOD. THEREFORE, THE COVERAGE MAY NOT BE AS UNIFORM AS DESIRED.
2. SOIL AMENDMENTS. A SOIL TEST IS RECOMMENDED TO DETERMINE THE TYPE AND RATE OF APPLICATION OF SOIL AMENDMENTS, ESPECIALLY WHEN THE COUNTY SOIL SURVEY INDICATES THE PRESENCE OF SOILS WITH LOW FERTILITY OR A PH RANGING BELOW 5.5 IT IS ALSO RECOMMENDED WHERE DIFFICULTIES HAVE BEEN ENCOUNTERED IN ESTABLISHING A GOOD COVER (E.G. ABANDONED MINED LANDS). THE COSTS OF SOIL TESTING ARE MINIMAL AND CAN RESULT IN HUGE SAVINGS IN SOIL AMENDMENTS AND THE COSTS OF RE-SEEDING. IN THE ABSENCE OF A SOIL TEST:
    A. THE LIMING RATE SHOULD BE AT LEAST 4 TO 5 TONS/ACRE (FOR STRIP MINED SITES CONTACT THE DEPARTMENT FOR ASSISTANCE). FOR TEMPORARY SEEDING, A LIMING RATE OF 2 TONS/ACRE IS ACCEPTABLE. NO MORE THAN 4 TONS/ACRE SHOULD BE ADDED TO AGRICULTURAL LAND.
    B. FERTILIZER SHOULD BE APPLIED AT THE RATE OFF 100LB N, 200 LB. OF P2O5, AND 200 LB. OF K2O PER ACRE (E.G. 1000 LB./ACRE OF 10-20-20 FERTILIZER). FOR TEMPORARY SEEDING, A RATE OF 50 LB. N, 50 LB. P2O5, 50 LB. K2O PER ACRE(E.G. 500 LB. OF 10-10-10 FERTILIZER) IS ACCEPTABLE.
3. MULCHING-MULCH ABSORBS RAINFALL IMPACT, INCREASES THE RATE OF INFILTRATION, REDUCES SOIL MOISTURE LOSS DUE TO EVAPORATION, MODERATES SOIL TEMPERATURES, PROVIDES A SUITABLE ENVIRONMENT FOR GERMINATION, AND PROTECTS THE SEEDING FROM INTENSE SUNLIGHT. ALL SEEDED AREAS SHOULD BE MULCHED UNLESS THE SEED MIXTURE IS DRILLED AND INCLUDES A NURSE CROP (SEE TABLE 4-17). MULCHING MAY ALSO BE USED AS A TEMPORARY STABILIZATION OF DISTURBED AREAS IN NON-GERMINATING SEASONS.
    A. THE MINIMUM APPLICATION RATE FOR HAY OR STRAW MULCH SHOULD BE 3 TONS/ACRE. ON STEEP SLOPES THE HAY OR STRAW SHOULD BE CRIMPED, TACKED, NETTED, OR OTHERWISE ANCHORED.
    B. WOOD CELLULOSE IS NOT RECOMMENDED FOR STEEP SLOPE (≥ 1:3 H:V) APPLICATIONS, WHERE USED, THE MINIMUM RATE OF APPLICATION SHOULD BE 1500 LB./ACRE.
    C. EROSION CONTROL BLANKETING (SEE FIGURE 4-24 SHOULD BE CONSIDERED FOR STEEP SLOPE (≥ 1:3 H:V) SITUATIONS AND IN CRITICAL AREAS (E.G. STREAM CROSSINGS, ADJACENT WETLANDS, ETC.)

TABLE 13 PLANT TOLERANCES OF SOIL LIMITATION FACTORS

SPECIES	① GROWTH HABIT	TOLERATES: WET SOIL	TOLERATES: DRY SITE	TOLERATES: LOW FERTILITY	TOLERATES: ② ACID SOIL (pH 5-5.5)	MINIMUM SEED SPECIFICATIONS ③: PURITY (%)	READY GERM (%)	HARD SEED (%)	TOTAL GERM (%)	SEEDS/lb (1,000s)
WARM-SEASON GRASSES										
DEERTONGUE	BUNCH	YES	YES	YES	YES	95	75		75	250
WEEPING LOVEGRASS	BUNCH	NO	YES	YES	YES	97	75		75	1,500
SWITCHGRASS ④	BUNCH	YES	YES	YES	YES	(60 PLS)				390
BIG BLUESTEM	BUNCH	NO	YES	YES	YES	(60 PLS)				150
COOL-SEASON GRASSES										
TALL FESCUE	BUNCH	YES	NO	YES	NO	95	80		80	227
REDTOP	SOD	YES	YES	YES	YES	92	80		80	5,000
FINE FESCUES	SOD	NO	NO	YES	NO	95	80		80	400
PERENNIAL RYEGRASS	BUNCH	YES	NO	NO	NO	95	85		85	227
ANNUAL RYEGRASS	BUNCH	YES	NO	YES	NO	95	85		85	227
KENTUCKY BLUEGRASS	SOD	NO	NO	NO	NO	85	75		75	2,200
REED CANARYGRASS	SOD	YES	YES	YES	NO	95	70		70	520
ORCHARDGRASS	BUNCH	YES	YES	YES	YES	95	80		80	654
TIMOTHY	BUNCH	YES	NO	YES	YES	95	80		80	1,230
SMOOTH BROMEGRASS	SOD	NO	YES	YES	NO	95	80		80	136
LEGUMES ⑤										
CROWNVETCH	SOD	NO	YES	YES	NO	98	40	30	65	120
BIRDSFOOT TREFOIL ⑥	BUNCH	YES	NO	YES	YES	98	60	20	80	400
FLATPEA	SOD	NO	NO	YES	YES	98	55	20	75	10
SERECIA LESPEDEZA	BUNCH	NO	YES	YES	YES	98	60	20	80	335
CEREALS										
WINTER WHEAT	BUNCH	NO	NO	NO	NO	98	85		85	15
WINTER RYE	BUNCH	NO	NO	YES	YES	98	85		85	18
SPRING OATS	BUNCH	NO	NO	NO	NO	98	85		85	13
SUNDANGRASS	BUNCH	NO	YES	NO	NO	98	85		85	55
JAPANESE MILLET	BUNCH	YES	NO	YES	YES	98	80		80	155

1. GROWTH HABIT REFERS TO THE ABILITY OF THE SPECIES TO EITHER FORM A DENSE SOD BY VEGETATIVE MEANS (STOLONS, RHIZOMES, OR ROOTS) OR REMAIN IN A BUNCH OR SINGLE PLANT FORM. IF SEEDED HEAVILY ENOUGH, EVEN BUNCH FORMERS CAN PRODUCE A VERY DENSE STAND. THIS IS SOMETIMES CALLED A SOD, BUT NOT IN THE SENSE OF A SOD FORMED BY VEGETATION MEANS.
2. ONCE ESTABLISHED, PLANTS MAY GROW AT A SOMEWHAT LOWER PH, BUT COVER GENERALLY IS ONLY ADEQUATE AT PH 6.0 OR ABOVE.
3. MINIMUM SEEDLOTS ARE TRULY MINIMUM, AND SEEDLOTS TO BE USED FOR REVEGETATION PURPOSES SHOULD EQUAL OR EXCEED THESE STANDARDS. THUS, DEERTONGUE GRASS SHOULD GERMINATE 75% OR BETTER. CROWNVETCH SHOULD HAVE AT LEAST 40% READILY GERMINABLE SEED AND 30% HARD SEED. COMMONLY, SEEDLOTS ARE AVAILABLE THAT EQUAL OR EXCEED MINIMUM SPECIFICATIONS. REMEMBER THAT DISTURBED SITES ARE ADVERSE FOR PLANT ESTABLISHMENT. READY GERMINATION REFERS TO SEED THAT GERMINATES DURING THE PERIOD OF THE GERMINATION TEST AND THAT WOULD BE EXPECTED, IF CONDITIONS ARE FAVORABLE, TO GERMINATE RAPIDLY WHEN PLANTED. THE OPPOSITE OF READY GERMINATION IS DORMANT SEED, OF WHICH HARD SEED IS ONE TYPE.
4. SWITCHGRASS SEED IS SOLD ONLY ON THE BASIS OF PURE LIVE SEED (PLS).
5. NEED SPECIFIC LEGUME INOCULANT, INOCULANT SUITABLE FOR GARDEN PEAS AND SWEETPEAS USUALLY IS SATISFACTORY FOR FLATPEA.
6. BIRDSFOOT TREFOIL IS ADAPTED OVER THE ENTIRE STATE, EXCEPT IN THE EXTREME SOUTHEAST WHERE CROWN AND ROOT ROTS MAY INJURE STANDS.

(NOW TABLE 11.3 P 287 OF MARCH 2012 PA DEP E&SPCP MANUAL.)

TABLE 14. RECOMMENDED PERMANENT SEED MIXTURES COOL AND WARM SEASON GRASSES

MIXTURE NUMBER	SEASON	SPECIES	SEEDING RATE lb./ac.
1	COOL	TALL FESCUE*,OR FINE FESCUE,PLUS REDTOP,OR PERENNAIL RYEFRASS,PLUS BIRDSFOOT TREFOIL	79 46 4 19 8
2	COOL	BIRDSFOOT TREFOIL,PLUS TALL FESCUE*	8 40
3	COOL	ORCHARDGRASS,OR SMOOTH BROMEGRASS,PLUS BIRDSFOOT TREFOIL	26 33 8
4	WARM	FLATPEA,PLUS TALL FESCUE*,OR PERENNIAL RYEGRASS	27 26 25
5	WARM	DEERTONGUE,PLUS BIRDSFOOT TREEFOIL	21 8
6	WARM	SWITCHGRASS,OR BIG BLUESTEM,PLUS BIRDSFOOT,TREFOIL	15 15 8

* USE ONLY ENDOPHYTE TREE VARIETIES SUCH AS JOHNSTONE, BARCEL OR FESTORINA.

TABLE 15. RECOMMENDED TEMPORARY COVER OR NURSE CROPS

SPECIES	NURSE CROP SEEDING RATE lb/acre	TEMPORARY COVER SEEDING RATE lb/acre
FOR SPRING SEEDING (UP TO JUNE 15)		
ANNUAL REYGRASS,OR	5	40
SPRING OATS,OR	64	96
WINTER WHEAT,OR	30	180
WINTER RYE,OR	56	168
SPRINGOATS PLUS RYEGRASS(ANNUAL OR PERENNIAL)	64 (OATS) 10 (RYE)	64 (OATS) 20 (RYE)
FOR LATE SPRING & SUMMER SEEDING (JUNE 16-AUGUST 15)		
ANNUAL RYEGRASS,OR	5	40
JAPANESE OR FOXTAIL MILLET,OR	12	35
SUNDANGRASS,OR	10	40
SPRING OATS,OR	64	96
WINTER WHEAT,OR	30	180
WINTER RYE	36	168
FOR LATE SUMMER & FALL SEEDING (AUGUST16 AND LATER)		
ANNUAL RYEGRASS,OR	5	40
WINTER RYE,OR	56	168
WINTER WHEAT	30	180

TABLE 16. RECOMMENDED SEED MIXTURES FOR STABILIZING DISTURBED AREAS

SITE CONDITION	SEED MIXTURE (SELECT ONE MIXTURE)
CUT SLOPES AND FILLS (NOT MOWED)	
WELL-DRAINED	2,4, OR 6
VARIABLE DRAINAGE	2
CUT SLOPES AND FILLS (MOWED)	1
CUT SLOPES AND FILLS(GRAZED/HAY)	1,2,OR 3
GULLIES AND ERODED AREAS	2 OR 6
EROSION CONTROL BMPS	
CHANNELS, DRAINAGE DITCHES, TRAP EMBANKMENTS, ETC.	1 OR 2
FOR HAY OR SILAGE	2 OR 3
RIGHT-OF-WAY	
WELL-DRAINED	4 OR 6
VARIABLE DRAINAGE	2
WELL-DRAINED AREAS FOR GRAZING/HAY	2 OR 3
STRIP MINED AREAS	
SPOILS, WASTE AREAS, FLY ASH, SLAG, ETC. (LIME TO SOIL TEST)	2,4,OR 5
FOR GRAZING/HAY	2,3,OR 6

TABLE 17. MULCH APPLICATION RATES

MULCH TYPE	APPLICTION RATE (MIN.): PER ACRE	PER 1,000 sq.ft.	PER 1,000 sq.yd.	NOTES
STRAW	3 TONS	140 lb.	1,240 lb.	EITHER WHEAT OR OAT STRAW,FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN
HAY	3 TONS	140 lb.	1,240 lb.	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES
WOOD CELLULOSE	1,500 lb.	35 lb.	310 lb.	DO NOT USE ALONE IN WINTER DURING HOT AND DRY WEATHER, OR ON STEEP SLOPES(>3:1)
WOOD	1,000 lb. CELLULOSE	25 lb.	210 lb.	WHEN USED OVER STRAW OR HAY
WOOD CHIPS	4-6 TONS	185-275 lb.	1,650-2,500 lb.	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES

NOTE:
AFTER SOIL PH ANALYSIS IS PERFORMED, A SUITABLE MIX SHALL BE DETERMINED FROM THE TABLES.

UPLAND SEED MIX OPTION:

SHOWY NORTHEAST NATIVE WILDFLOWER MIX: ERNMX-153
ERNST CONSERVATION SEED
9006 MERCER PIKE
MEADVILLE, PA 16335-9299
TELEPHONE: 800-873-3321 / 814-336-2404
FAX: 814-336-5191
EMAIL: ernst@ernstseed.com
APPLICATION RATE: 15 lbs/acre (BULK) THOROUGHLY MIXED WITH ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) AT 10 lbs/acre.
NOTE: STRAW MULCH LIGHTLY AND COVER WITH JUTE MAT, INSTALLED PER MANUFACTURER'S SPECS.

PERCENT BY NO. OF SEEDS (NOT WEIGHT)	SCIENTIFIC NAME	COMMON NAME
15%	ANDROPOGON SCOPARIUS	LITTLE BLUESTEM
10%	BOUTELOUA CURTIPENDULA	SIDE OATS GRAMA
10%	ELYMUS VILLOSUS	SILKY WILD RYE
10%	SORGHASTRUM NUTANS	INDIAN GRASS
7%	CHAMAECRISTA FASCICULATA	PARTRIDGE PEA
6%	HELIOPSIS HELIANTHOIDES	OX EYE SUNFLOWER
5%	ANDROPOGON GERARDII, NIAGARA	NIAGARA BIG BLUESTEM
5%	PENSTEMON DIGITALIS	TALL WHITE BEARD TONGUE
5%	RUDBECKIA HIRTA	BLACK EYED SUSAN
5%	SENNA HEBECARPA	WILD SENNA
4%	ASTER PRENANTHOIDES/NOVIBELGI MIX	ZIGZAG ASTER/NEW YORK ASTER MIX
3%	HYPERICUM PYRAMIDATUM	GREAT ST. JOHN'S WORT
2.5%	ZIZIA AUREA	GOLDEN ALEXANDERS
2%	ASCLEPIAS SYRIACA	COMMON MILKWEED
2%	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
2%	TRADESCANTIA OHIOENSIS	OHIO SPIDERWORT
1.5%	ASTER NOVAEANGLIAE	NEW ENGLAND ASTER
1.5%	LUPINUS PERENNIS	WILD BLUE LUPINE
1.5%	MONARDA FISTULOSA	WILD BERGAMOT
1%	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO
1%	LESPEDEZA CAPITATA	ROUNDHEAD LESPEDEZA

STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES

1. VEHICLES AND EQUIPMENT SHALL ENTER ONLY FROM THE ROCK CONSTRUCTION ENTRANCES LOCATED OFF OF GOLDEN SLIPPER ROAD AS INDICATED BY THE PLANS.
2. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER. FILTER FENCE SHALL BE INSTALLED ON THE DOWNHILL SIDE OF THE STOCKPILE.
3. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
4. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF PERSON CONDUCTION THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIME AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST. ALL PREVENTATIVE AND REMEDIAL WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMP'S FAIL TO ALLEVIATE EROSION AND SEDIMENT POLLUTION THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:
    a. THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS.
    b. ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE RECURRENCE OF THE NON-COMPLIANCE.
    c. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
5. SHOULD UNFORESEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
6. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE COUNTY CONSERVATION DISTRICT.
7. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
8. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS. DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DISTANCE TO ACTIVE WATERWAY.
9. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 2, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUPPORT C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
10. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
11. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL SERIAL NO. xxxxxxx.
12. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO (CONSTRUCT THE SEDIMENT BASIN TAPS, ETC.) FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
13. EROSION AND SEDIMENT BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS.
14. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.
15. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PREPARER, AND THE COUNTY CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ON CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.
16. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
17. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF AN ACTIVITY, THE OPERATOR SHALL STABILIZE IMMEDIATELY THE DISTURBED AREAS TO PROTECT FROM ACCELERATED EROSION. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS, WHICH ARE EITHER AT GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
18. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
19. ALL STRUCTURES ASSOCIATED WITH THE CONSTRUCTION OF SEDIMENT REMOVAL FACILITIES MUST BE ON SITE PRIOR TO EARTH DISTURBANCE.
20. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.
21. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0TONS PER ACRE.
22. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
23. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
24. SEDIMENT REMOVED FROM E&S PC CONTROL & FACILITIES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
25. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., A 08 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE."
26. DIVERSION CHANNELS, SEDIMENT BASINS, SEDIMENT TRAPS AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
27. AT THE END OF EACH WORKING DAY, ANY SEDIMENT TRACKED OR CONVEYED ONTO A PUBLIC ROADWAY WILL BE REMOVED AND REDEPOSITED ONTO THE CONSTRUCTION SITE. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL TOOLS OR HAND TOOLS, BUT MUST NEVER BE WASHED OFF THE ROAD BY USE OF WATER.
28. ALL EXCAVATION FOR UTILITY LINE INSTALLATION SHALL BE LIMITED TO THE AMOUNT THAT CAN EXCAVATED, INSTALLED, BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY. ALL EXCAVATED MATERIAL SHALL BE DEPOSITED ON THE UPSLOPE SIDE OF THE TRENCH.
29. SEALED INLETS ARE SHOWN ON THE E&S PLAN AND CALLED OUT IN THE CONSTRUCTION SEQUENCE. THEY ARE IMPLEMENTED AS FOLLOWS:
30. REMOVE INLET GRATE; CUT ¾" MARINE GRADE PLYWOOD TO FIT INTO 1 ⅜" GRATE OFFSETS ON THE INLET TOP; SEAL THE MARINE GRADE PLYWOOD TO INLETS WITH CAULK TO CREATE WATERTIGHT SEALS AND TO PREVENT ANY SEDIMENT LADEN WATER FROM ENTERING THE INFILTRATION/UNDERGROUND DETENTION AREAS. THE MARINE GRADE PLYWOOD AND CAULKING WILL BE REMOVED FROM THE INLETS AFTER FINAL STABILIZATION HAS BEEN ACHIEVED AT THE APPROPRIATE TIME IN THE CONSTRUCTION SEQUENCE.

TRENCH EXCAVATION NOTES:

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATION TO A DISTANCE EQUAL TO TWO (2) TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED DURING THE SAME DAY.
5. WATER THAT ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

MAINTENANCE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES REQUIRED FOR THIS PROJECT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OFF-SITE EROSION AND SEDIMENT POLLUTION CONTROL RELATED TO THE PROJECT.
3. ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE CHECKED FOR DAMAGE WEEKLY AND AFTER EACH STORM. ALL FACILITIES THAT ARE DAMAGED OR CLOGGED, OR CAN NO LONGER FUNCTION AS INTENDED, SHALL BE REPLACED IMMEDIATELY.
4. ALL SEDIMENT REMOVED FROM SEDIMENT TRAPPING DEVICES SHALL BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE EROSION OR SEDIMENT POLLUTION. SUCH MATERIALS MAY BE DISPOSED ON SITE, IF SPREAD AND IMMEDIATELY STABILIZED WITH PROPER EROSION AND SEDIMENT POLLUTION CONTROLS INSTALLED.
5. ANY PERMANENT SEEDING AREAS THAT BECOME ERODED OR DISTURBED SHALL HAVE THE TOPSOIL REPLACED, THE GRASS RE-SOWN, AND MULCH APPLIED OR, AT THE DISCRETION OF THE OWNER, SOD MAY BE INSTALLED.
6. ANY EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE, RECYCLED OR DISPOSED OF BY AN APPROVED PA DEP MANNER.
7. THE CONTRACTOR SHALL DOCUMENT, IN WRITING, ALL INSPECTIONS, REPAIRS, AND REPLACEMENTS FOR EROSION AND SEDIMENT POLLUTION CONTROL BMPS.
    a. INSPECTION - ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED AFTER EACH RUNOFF EVENT AND/OR WEEKLY AND REPAIRS MADE AS NEEDED IMMEDIATELY. SEE THE EROSION AND SEDIMENTATION DETAIL SHEETS FOR THE SPECIFIC EROSION AND SEDIMENTATION POLLUTION CONTROL DETAILS. UNDER EACH DETAIL IS THE REQUIRED MAINTENANCE AND INSPECTION OF EACH BMP. UNDER NO CIRCUMSTANCES SHOULD SEDIMENT LADEN RUNOFF BE ALLOWED TO ENTER ANY OF THE RAIN GARDENS, INFILTRATION BASIN OR UNDERGROUND INFILTRATION BASIN.
    b. NO SOIL IS TO BE HAULED OFF SITE WITHOUT A SEPARATE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN REVIEWED FOR ADEQUACY BY THE TIOGA COUNTY CONSERVATION DISTRICT.
    c. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A UNIFORM MINIMUM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS.

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

SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

IF, FOR ANY REASON, THE DESIGNED FACILITIES OR MEASURES DO NOT PROVIDE THE NECESSARY PROTECTION, THE CONTRACTOR SHALL ADJUST THE EROSION CONTROL MEASURES AND SEDIMENT CONTROL MEASURES TO ACHIEVE A COMPLETE NON-ERODED STABILIZED SITE CONDITION.

GEOLOGIC/SOIL CONDITIONS ADDRESSED:

THE SOILS HAVE A 'K' FACTOR OF 0.15 AND ARE NOT HIGHLY ERODIBLE. THERE IS A POTENTIAL FOR A HIGH WATER TABLE FROM A FRAGIPAN LAYER. WATER IN TRENCHES WILL BE PUMPED INTO A FILTER BAG PRIOR TO OFFSITE DISCHARGE.

THERE SHOULD BE NO OTHER GEOLOGIC/SOIL CONDITIONS THAT HAVE POTENTIAL TO CAUSE POLLUTION.

RECYCLING AND DISPOSAL OF SITE MATERIALS:

1. THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. AND 287.1 ET. SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
2. THE CONTRACTOR MUST DEVELOP AND HAVE APPROVED BY THE LOCAL CONSERVATION DISTRICT, A SEPARATE EROSION AND SEDIMENT CONTROL PLAN FOR EACH SPOIL, BORROW, OR OTHER WORK AREA NOT DETAILED IN THE APPROVED PLAN, WHETHER LOCATED WITHIN OR OUTSIDE OF THE CONSTRUCTION LIMITS. THE PLAN SHALL BE IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 102.

ANTICIPATED CONSTRUCTION WASTE:

POTENTIAL CONSTRUCTION WASTES ANTICIPATED FROM THIS PROJECT INCLUDE BUT ARE NOT LIMITED TO: TOPSOIL/FILL MATERIAL, SANITARY WASTE, CONCRETE, AND GENERAL SOLID WASTE (PACKING MATERIALS, CUTTINGS, ETC.). A PORTABLE RESTROOM WILL BE PROVIDED. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIAL IN ACCORDANCE WITH THE DEPARTMENT OF SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260. LET. SEQ., 271.1 ET. SEQ., AND 287.1 ET. SEQ.

THERMAL IMPACT NOTE:

THERMAL IMPACTS DURING CONSTRUCTION SHALL BE AVOIDED THROUGH STAYING AND PROMOTING SHEET FLOW FROM THE SITE, AND THROUGH INFILTRATION IN EXISTING HYDROLOGIC GROUP A SOILS.

SOILS LIMITATIONS AND RESOLUTIONS CHART

SOIL LIMITATIONS	RESOLUTIONS
CUTBANKS CAVE	LAYBACK SLOPES
CORROSIVE TO CONCRETE/STEEL	CATHODIC PROTECTION AND/OR CORROSION RESISTANT CONCRETE
DROUGHTY	N/A
EASILY ERODIBLE	MAINTAIN EROSION BMPS
FLOODING	RAISE ELEVATION OUTSIDE FLOOD LEVEL OR POSTPONE CONSTRUCTION
DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	KNOW DEPTH TO SEASONAL HIGH WATER TABLE AND AVOID IMPACTS TO SITE DEVELOPMENT PLANS
HYDRIC/HYDRIC INCLUSIONS	AVOID
LOW STRENGTH/LANDSLIDE PRONE	LAYBACK SLOPES-DESIGN FOR CONDITION
SLOW PERCOLATION	DRAINAGE DITCH
PIPING	TEMPORARILY LOWER GROUND WATER TABLE OR PROVIDE FILTERS
POOR SOURCE OF TOPSOIL	AVOID REUSE AS TOPSOIL FOR SUPPORT OF VEGETATION
FROST ACTION	LOWER FOOTINGS BELOW FROST DEPTHS, PROVIDE POSITIVE SUBGRADE
SHRINK-SWELL	AVOID USE OF HIGHLY PLASTIC CLAYS IN BUILDING AREAS
POTENTIAL SINKHOLE	PLUG OR MITIGATE KNOWN SINKHOLES, PROVIDE POSITIVE SURFACE
PONDING	PROVIDE POSITIVE DRAINAGE
WETNESS	USE SUNNY WEATHER COMBINED WITH MECHANICAL ACTIONS TO LOWER GROUNDWATER TABLE OR AVOID USING THESE SOILS

PRELIMINARY/FINAL LAND DEVELOPMENT

PLAN TITLE:
EROSION & SEDIMENTATION CONTROL DETAIL SHEET

PROJECT TITLE:
MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

HanoverEngineering
Pocono Office
3355 Route 611, Suite 1
Bartonsville, PA 18321-7822
P:570.688.9550
F:570.688.9768
HanoverEng.com

SEAL:

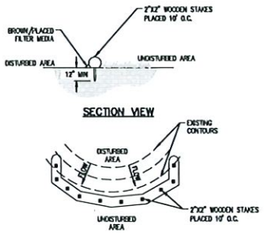
NO.	DATE	REVISIONS

DRAWN BY: CLA
CHECKED BY: SJC
DATE: 04/18/2025
SCALE: NOT TO SCALE
PROJECT NO. PA-1240
SHEET NO. ESPC-2

STANDARD CONSTRUCTION DETAIL # 4-1

COMPOST FILTER SOCK

NOT TO SCALE



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MAR. 2012). COMPOST SHALL MEET THE FOLLOWING STANDARDS:

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

GENERAL NOTES:

1. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (SEE FIGURE 4.1 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, MAR. 2012). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN OF FIGURE 4.2 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MAR. 2012). STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
3. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
4. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
5. BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 8 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

TABLE 4.1
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

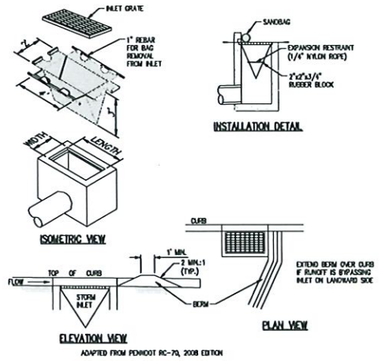
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO - DEGRADABLE	PHOTO - DEGRADABLE	BIO - DEGRADABLE	PHOTO - DEGRADABLE	PHOTO - DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		25 psi	25 psi	44 psi	202 psi
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING	HDPE BIAXIAL NET				
	CONTINUOUSLY WOUND				
	FUSION-WELD JUNCTURES				
	3/4" X 3/4" MAX. APERTURE SIZE				
OUTER FILTRATION MESH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER & NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
	3/16" MAX. APERTURE SIZE				
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					

SOCK NO.	DIA	LOCATION	SLOPE PERCENT	SLOPE LENGHT
CFS-1	12"	CLOSEST TO MT. NEBO ROAD	8%	205 FT
CFS-2	32"	MIDDLE CFS	8%	470 FT
CFS-3	12"	FARTHEST FROM MT. NEBO ROAD	8%	140 FT

STANDARD CONSTRUCTION DETAIL # 4-15

FILTER BAG INLET - TYPE C-INLET

NOT TO SCALE



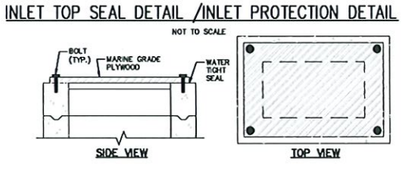
ADAPTED FROM PENNDOT RC-70, 2008 EDITION

GENERAL NOTES:

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

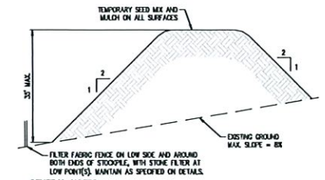
INLET TOP SEAL DETAIL /INLET PROTECTION DETAIL

NOT TO SCALE



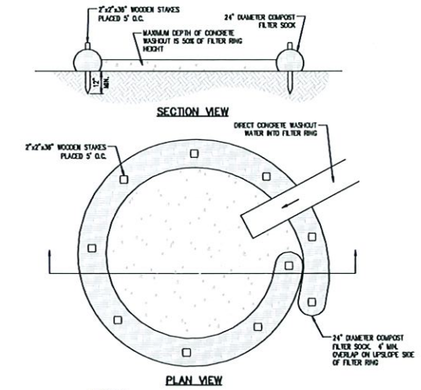
TOPSOIL STOCK PILE

NOT TO SCALE



GENERAL NOTES:

1. STOCKPILE TOPSOIL OR EXCAVATED SOIL MATERIAL AT LOCATIONS SHOWN FOR EACH PHASE OF CONSTRUCTION.
2. HEIGHT AND SIDE SLOPES SHALL NOT EXCEED MAXIMUM VALUES SHOWN ON DETAIL.
3. INSTALL FILTER FENCE PRIOR TO STOCKPILING OF MATERIAL. REPLACE ANY FENCE REMOVED FOR VEHICULAR ACCESS AFTER EACH WORK DAY.
4. APPLY A TEMPORARY SEED MIX AND MULCH WHEN PILE WILL REMAIN FOR 30 DAYS OR MORE.



NOTES:

1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

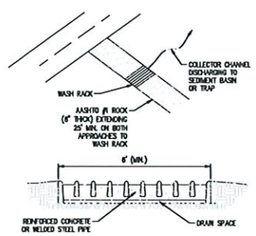
CONCRETE WASHOUT

NOT TO SCALE

STANDARD CONSTRUCTION DETAIL # 3-2

ROCK CONSTRUCTION ENTRANCE WITH WASH RACK

NOT TO SCALE



GENERAL NOTES:

1. WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
2. WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTED VEHICULAR TRAFFIC.
3. A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

MAINTENANCE:
ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SENDERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

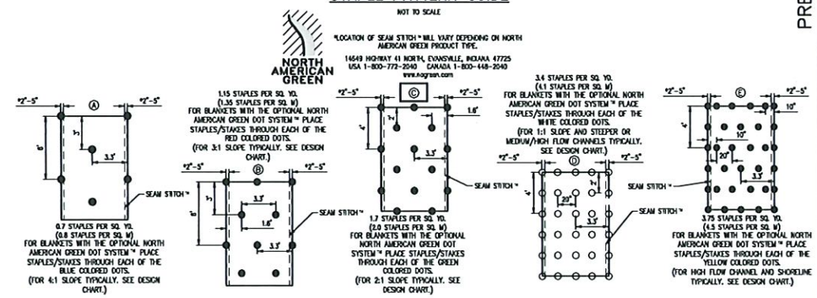
STAPLE PATTERN GUIDE

NOT TO SCALE

NORTH AMERICAN GREEN

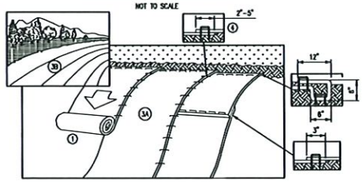
*LOCATION OF SEAM STITCH * WILL VARY DEPENDING ON NORTH AMERICAN GREEN PRODUCT TYPE.

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



SLOPE INSTALLATION

NOT TO SCALE

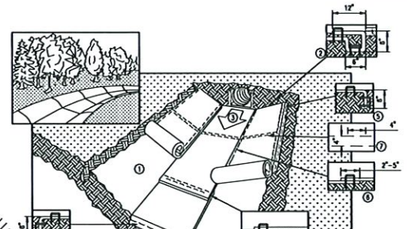


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKETS.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM *, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH * ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 8" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

CHANNEL INSTALLATION

NOT TO SCALE



NORTH AMERICAN GREEN
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USA 1-800-772-2040 CANADA 1-800-448-2040
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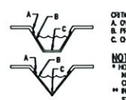

CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 8" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

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

NORTH AMERICAN GREEN
14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
USA 1-800-772-2040 CANADA 1-800-448-2040
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TABLE 4-9 RIP RAP GRADATION, FILTER BLANKET REQUIREMENTS, MAXIMUM VELOCITIES
(NOW TABLE 6.8 P 135 IN MARCH 2012 PA EARSPP MANUAL)

RIP RAP NO.	GRADED ROCK SIZE (IN.)				FILTER BLANKET REQUIREMENTS (1)		Vmax (FT/SEC)
	MAX 100% PASSING	D_{50} 15-50% PASSING	MIN. 0-15% PASSING	THICKNESS	SIZE NO.	PLACEMENT THICKNESS	
R-3	6	3	2	9	AASHTO #57	3	8.5
R-4	12	6	3	18	AASHTO #3	4	8.0
R-5	18	9	5	27	AASHTO #3	6	11.5
R-6	24	12	7	36	AASHTO #1	8	13.0
R-7	30	15	12	45	AASHTO #1	10	14.5
R-7 (Perm Out)	30	18	12	45	AASHTO #1	12	15.75
R-8	42	24	15	63	AASHTO #1	18	17.0

(1) THIS IS A GENERAL STANDARD. SOIL CONDITIONS AT EACH SITE SHOULD BE ANALYZED TO DETERMINE ACTUAL FILTER SIZE. A SUITABLE WOVEN OR NON-WOVEN GEOTEXTILE UNDERLAYMENT, USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, MAY BE SUBSTITUTED FOR THE FILTER STONE FOR GRADIENTS < 50%.

ROCK GRADATION CHART

AASHTO NUMBER	NSA NUMBER	PA NUMBER	6 1/2"	4"	3 1/2"	2 1/2"	2"	1 1/2"	1"	3/4"	1/2"	3/8"	#4	#8	#16	#30	#100	#200
1	FS-3		100			50									0			
2		4		100	90-100	25-60		0-15		0-5								
3		3A				100	90-100	35-70	0-15		0-5							
467							100	85		35-70		10-30	0-5					
	FS-2						100						50			0		
		2A					100			52-100		36-70	24-50	18-30	10-30		0-10	
57		2B						100	90-100	20-55	0-10	0-5						
		2NS						100	90-100		25-60		0-10	0-5				
									90-100		0-15							
67		2						100	90-100			20-55	0-10	0-5				
		1NS						100		90-100			0-15					
7									100	90-100	40-70	0-15	0-5					
8										100	85-100	10-30	0-10	0-5				
		1B								100	75-100	10-30	0-10					
10		1									100	75-100				10-30		
	FS-1										100				50	0		

PRELIMINARY/FINAL LAND DEVELOPMENT

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
PENNSYLVANIA

HanoverEngineering
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3355 Route 611, Suite 1
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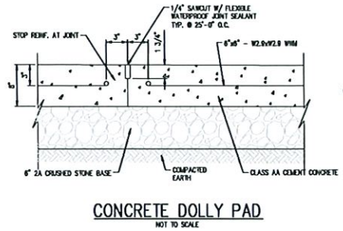
SEAL:

NO.	REVISIONS	DATE

DRAWN BY: CLA | CHECKED BY: SJC
SCALE: NOT TO SCALE | DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. ESPC-3

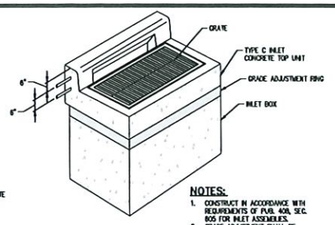
PLAN TITLE: EROSION & SEDIMENTATION CONTROL DETAIL SHEET
PROJECT TITLE: MT. NEBO II APARTMENTS

Y:\Projects\Pennsylvania\1240 MT Nebo II Apartments\DWG\LAND DEVELOPMENT\PA-1240-LDS-016-017-ESPC Detail Sheets.dwg Apr 17,2025 - 2:46pm



CONCRETE DOLLY PAD

NOT TO SCALE

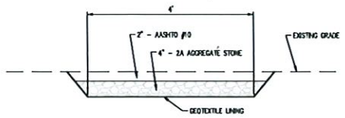


NOTES:

1. CONSTRUCT IN ACCORDANCE WITH REQUIREMENTS OF PUBL. 408, SEC. 805 FOR INLET ASSEMBLIES.
2. GRADE ADJUSTMENT SHALL BE MASONRY OR PRECAST CONCRETE CONSTRUCTION.

TYPE C INLET

NOT TO SCALE



TRAIL CROSS SECTION

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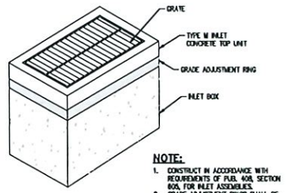
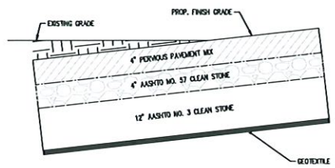


NOTE:

1. CONSTRUCT IN ACCORDANCE WITH REQUIREMENTS OF PUBL. 408, SECTION 805, FOR INLET ASSEMBLIES.
2. GRADE ADJUSTMENT RINGS SHALL BE MASONRY OR PRECAST CONCRETE CONSTRUCTION.

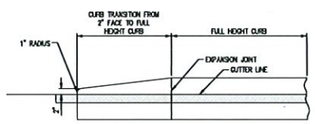
TYPE M INLET

NOT TO SCALE



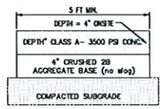
PERVIOUS PAVEMENT CROSS SECTION

NOT TO SCALE



CURB TRANSITION

NOT TO SCALE

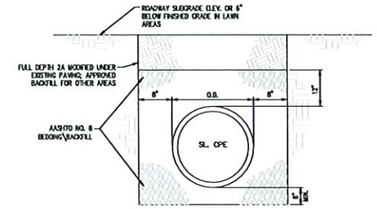


GENERAL NOTES:

1. CONSTRUCT IN SECTIONS NOT OVER 10 FEET WITH VERTICAL JOINTS FOR FULL DEPTH OF PAVEMENT. THE JOINTS SHALL BE MADE BY REMOVABLE METAL PLATES SO THAT ADJACENT BLOCKS WILL BE MADE ON DIFFERENT DAYS.
2. EXPANSION JOINTS LOCATED 30' O.C.
3. TOOLED JOINTS LOCATED 5' O.C.
4. SIDEWALK IS TO BE LIGHT BROOM FINISHED IN THE DIRECTION OF SIDEWALK WIDTH.

CONCRETE SIDEWALK DETAIL

NOT TO SCALE

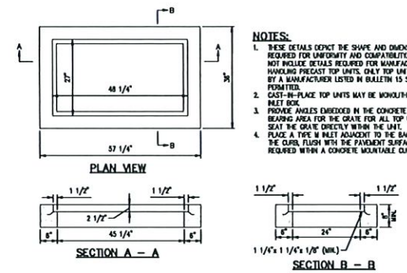


NOTE:

ALL BACKFILL MATERIAL TO BE COMPACTED IN MAX. 6" LIFTS

STORM SEWER BEDDING & BACKFILL FOR CORRUGATED POLYETHYLENE PIPE

NOT TO SCALE

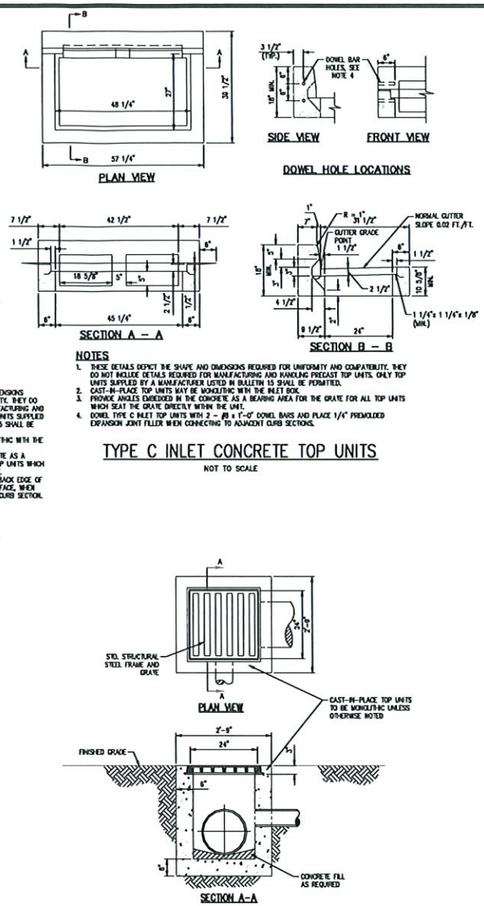


NOTES:

1. THESE DETAILS DEPICT THE SHAPE AND DIMENSIONS REQUIRED FOR UNIFORMITY AND COMPATIBILITY. THEY DO NOT INCLUDE DETAILS REQUIRED FOR MANUFACTURING AND HANDLING PRECAST TOP UNITS. ONLY TOP UNITS SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED.
2. CAST-IN-PLACE TOP UNITS MAY BE MONOLITHIC WITH THE INLET BOX.
3. PROVIDE ANGLES EMBEDDED IN THE CONCRETE AS A BEARING AREA FOR THE GRATE FOR ALL TOP UNITS WHICH SEAT THE GRATE DIRECTLY WITHIN THE UNIT.
4. PLACE A TYPE M INLET ADJACENT TO THE BACK EDGE OF THE CURB, FLUSH WITH THE PAVEMENT SURFACE, WHEN REQUIRED WITHIN A CONCRETE MOUNTABLE CURB SECTION.

TYPE M INLET CONCRETE TOP UNITS

NOT TO SCALE

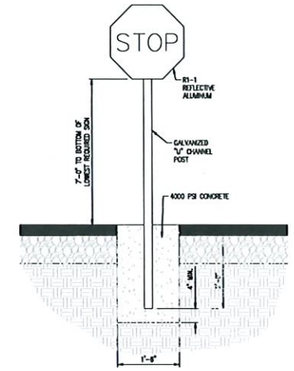


NOTES:

1. SEE SITE PLAN FOR INLET LOCATIONS, PIPE SIZES & INVERT ELEVATIONS.
2. CAST HOLES IN INLET BOXES AS REQUIRED TO MEET PLAN PIPING DESIGN.
3. INLET BOTTOM TO BE SHAPED TO CHANNEL FLOW TOWARD OUTLET PIPE.
4. PLACE INLET BOXES ON THOROUGHLY COMPACTED EARTH SUB-BASE (1/2" MIN. DEPTH) TO MEET ENGINEER'S SATISFACTION.
5. IF PRECAST INLETS ARE SELECTED BY CONTRACTOR, USE INLET BY MONARCH PRODUCTS, INC. OR APPROVED EQUAL.
6. INLET GRATES SHALL BE BICYCLE SAFE GRATES.

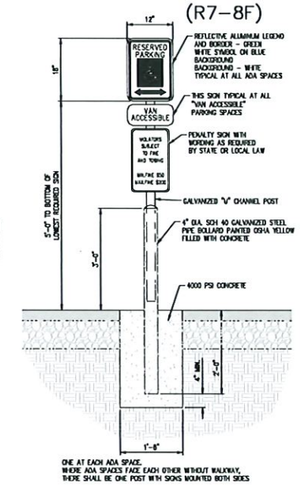
STANDARD PRECAST 2'x2' CONCRETE CATCH BASIN (YARD INLET)

NOT TO SCALE



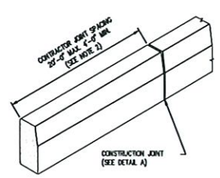
STOP SIGN DETAIL

NOT TO SCALE



ADA PARKING SIGN

NOT TO SCALE

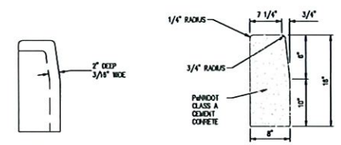


GENERAL NOTES:

1. MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PUBLICATION 408, SECTION 630.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4" PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB

CONCRETE CURB

NO TO SCALE



PRELIMINARY/FINAL LAND DEVELOPMENT

NO.	REVISIONS	DATE

DRAWN BY: CLA
SCALE: NOT TO SCALE
DATE: 7/18/2025
CHECKED BY: SJC
PROJECT NO. PA-1240
SHEET NO. DET-1

PLAN TITLE: STANDARD CONSTRUCTION DETAIL SHEET
PROJECT TITLE: MT. NEBO

MIDDLE SMITHFIELD TOWNSHIP
& SMITHFIELD TOWNSHIP
MONROE COUNTY
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SEAL

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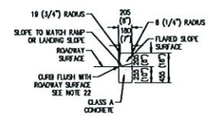
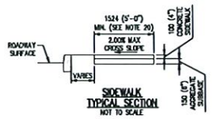


DEPRESSED CURB FOR CURB RAMPS
NOT TO SCALE

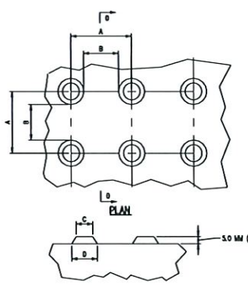


SIDEWALK TYPICAL SECTION
NOT TO SCALE

EQUIVALENT SLOPES	
PERCENT SLOPE	EQUIVALENT SLOPE
10.00%	10:1 (1:10)
8.33%	12:1 (1:12)
7.14%	14:1 (1:14)
5.00%	20:1 (1:20)
2.00%	50:1 (1:50)
1.00%	100:1 (1:100)

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 408, 630, 676 AND 694.
2. PROVIDE EXPANSION JOINT MATERIAL 13 (1/2") THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
3. CONSTRUCT CURB RAMPS WITH A MINIMUM 1220 X 1220 (4'-0" X 4'-0") CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE. SEE SHEET 7 FOR CROSSWALK DETAILS.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 205 (8") HEIGHT.
7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
8. TO AVOID CHASING GRADE INDEFINITELY WHEN TRANSITIONING THE HEIGHT OF CURB, RAMP LENGTH NOT TO EXCEED 4500 (15'-0"). ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT FEASIBLE.
9. NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS.
10. THE DETAILS DEPICT PEDESTRIAN PUSH-BUTTON POLES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PEDESTRIAN PUSH-BUTTONS. FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSH-BUTTONS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSH-BUTTON STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS.
11. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. US CUSTOMARY UNITS IN () PARENTHESES.
12. ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
13. PROVIDE DETECTABLE WARNING SURFACES (DWS) 610 (24") MINIMUM IN THE DIRECTION OF PEDESTRIAN TRAVEL ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT ROADWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
14. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESSIBLE ROUTE.
15. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE DECONSTRUCTED.
16. CONSTRUCT SIDEWALKS AT A LONGITUDINAL SLOPE NOT TO EXCEED 5.00% FOR ROADWAY PROFILE SLOPES THAT EXCEED 5.00%. CONSTRUCT PARALLEL SIDEWALKS ADJACENT TO ROADWAY AT A LONGITUDINAL SLOPE NOT TO EXCEED ROADWAY PROFILE SLOPE.
17. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 11.00%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP, LANDING OR BLENDED TRANSITION IS NOT TO EXCEED 5.00%. SEE SHEET 8 FOR DETAILS.
18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
19. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 150 (6") CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 1830 (6'-0") FOR A 12:1 (1:12) SLOPE.
20. SIDEWALK WIDTH MAY BE REDUCED TO 1220 (4'-0"), WHEN PASSING AREAS 1525 X 1525 (5'-0" X 5'-0") ARE PROVIDED EVERY 61 METERS (200').
21. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
22. CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL LANDINGS BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.
23. CHECK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING. GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 (5:3) MAXIMUM. DO NOT INSTALL CHECK WALLS THAT INTERSECT THE PEDESTRIAN ACCESS ROUTE.
24. CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSED CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).
25. FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES. SEE SHEET 7 FOR DETAILS.
26. A 1220 (4'-0") MAXIMUM DIGITAL DISPLAY LEVEL WILL BE USED TO VERIFY THE SLOPES OF CURB RAMPS AND SIDEWALKS.



PLAN

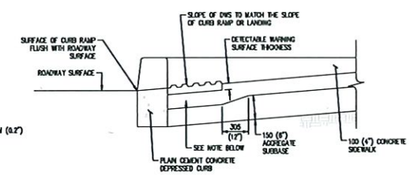
SECTION D-D

TRUNCATED DOME DIMENSIONS		
DIM	MIN mm (inch)	MAX mm (inch)
A	41 (1.6")	61 (2.4")
B	17 (0.65")	37 (1.5")
C	13	13
D	23 (0.9")	36 (1.4")

(13) THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

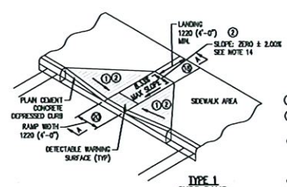
(14) PLACE ADJACENT DWS TILES WITH MANUFACTURED SURFACE TO MANUFACTURED SURFACE. CUT TILES ALONG THE PERIMETER ONLY.

(15) LOCATE ONE CORNER OF THE DWS AT THE BACK OF CURB. NO OTHER POINT ON THE LEADING EDGE OF THE DWS MAY BE MORE THAN 1525 (60") AWAY FROM THE BACK OF CURB.



NOTE:
CONSTRUCTION NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING SURFACE.

DETECTABLE WARNING SURFACE EMBEDDING DETAIL
NOT TO SCALE



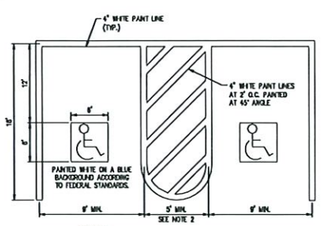
TYPE 1 CURB RAMP
NOT TO SCALE

(1) SIDE FLARES 10.00% MAX SLOPE.

(2) IF THE LANDING IS INDICATED TO BE LESS THAN 1220 (4'-0") CONSTRUCT SIDE FLARES 8.33% MAX. SLOPE.

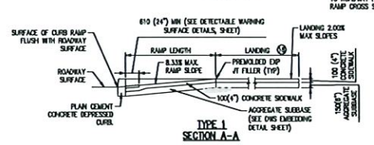
(6) CURB RAMPS REQUIRED A 1220 (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATION AND DIMENSIONS.

(20) CONSTRUCT DEPRESSED CURB SLOPE TO MATCH ROADWAY PROFILE AND HAVE A FLUSH CONNECTION. DO NOT EXCEED 3.00% PER 305 (1'-0") CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING FROM LEVEL LANDING TO ROADWAY PROFILE. A TECHNICALLY FEASIBLE FORM IS REQUIRED WHEN RAMP CROSS SLOPE EXCEEDS 2.00%



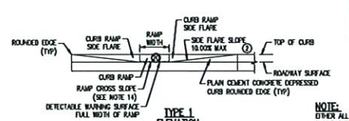
NOTES:
1. SEE SITE PLAN FOR ACCESSIBLE SPACE LOCATION AND DIMENSIONS.
2. PAINTED BLAND SHALL BE 8'-0" WIDE FOR VAN ACCESSIBLE SPACES.
3. APPLY 2 COATS OF PAINT ON ALL SURFACES.

ACCESSIBLE PARKING SPACE
NOT TO SCALE



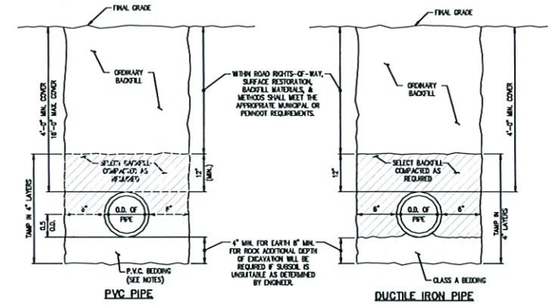
TYPE 1 SECTION A-A

EQUIVALENT SLOPES	
PERCENT SLOPE	EQUIVALENT SLOPE
10.00%	10:1 (1:10)
8.33%	12:1 (1:12)
7.14%	14:1 (1:14)
5.00%	20:1 (1:20)
2.00%	50:1 (1:50)
1.00%	100:1 (1:100)



TYPE 1 ELEVATION
NOT TO SCALE

NOTE:
OTHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

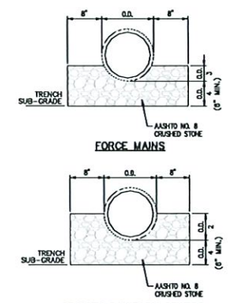


PVC PIPE

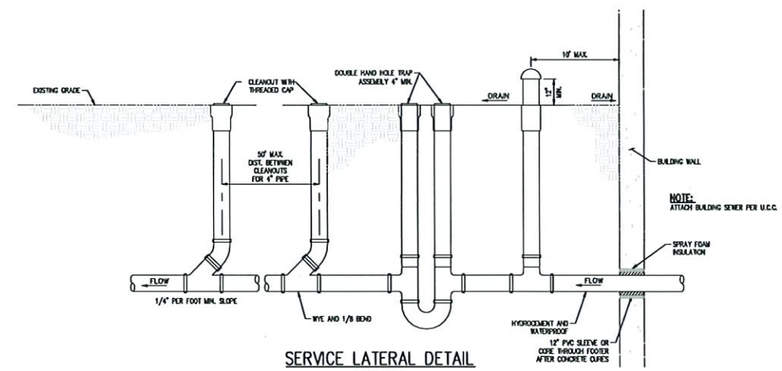
DUCTILE IRON PIPE

NOTES:
1. ALL BACKFILL MATERIAL IS SUBJECT TO AUTHORITY APPROVAL.
2. CLASS A BEDDING: APPROVED NATIVE SOIL, COARSE SAND, GRAVEL, OR CRUSHED STONE, HAVING A MAXIMUM STONE SIZE OF 1 1/2-INCH.
3. SELECT BACKFILL: CLEAN DRY EARTH WITH A MAXIMUM STONE SIZE 2-INCHES.
4. ORDINARY BACKFILL: CLEAN DRY EARTH WITH A MAXIMUM STONE SIZE 8-INCHES.
5. P.V.C. BEDDING SHALL BE PENNDOT 2A WASHED STONE FOR TRENCHES ABOVE THE GROUNDWATER TABLE AND PENNDOT 2B STONE FOR TRENCHES BELOW THE GROUNDWATER TABLE.
6. HYDRO HAMMERS CAN BE USED AT DISTANCES GREATER THAN 3' ABOVE THE TOP OF THE PIPE IF THE SOIL DENSITY HAS BEEN PREVIOUSLY COMPACTED TO A MINIMUM 90% STANDARD PROCTOR.

TYPICAL TRENCH FOR PVC PIPE & DUCTILE IRON PIPE
NOT TO SCALE



BEDDING DETAILS
NOT TO SCALE



SERVICE LATERAL DETAIL
NOT TO SCALE

PRELIMINARY/FINAL LAND DEVELOPMENT

NO.	REVISIONS	DATE

SEAL:

DRAWN BY: CLA
CHECKED BY: SJC
SCALE: NOT TO SCALE
DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. DET-2

PLAN TITLE: STANDARD CONSTRUCTION DETAIL SHEET
PROJECT TITLE: MT. NEBO II APARTMENTS

MIDDLE SMITHFIELD TOWNSHIP
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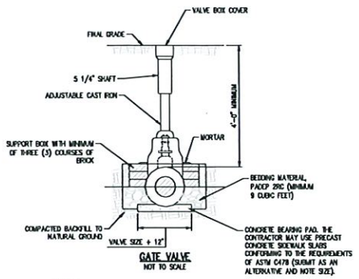
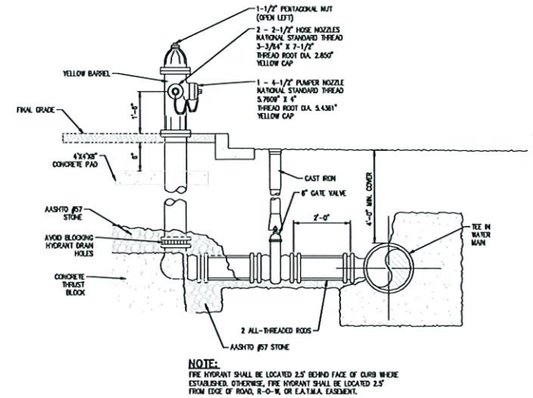


GATE VALVE
NOT TO SCALE

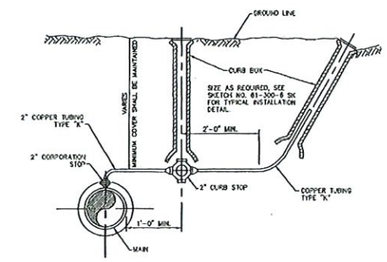
NOTE:
1. VALVES 8" OR SMALLER SHALL BE RODDED TO A FITTING WITH 2 ALL-THREAD RODS, 12" VALVES WITH 4 ALL-THREAD RODS.
2. ROD DIAMETER SHALL BE EQUAL TO THAT OF THE GLAND BOLTS. RODS SHALL BE GIVEN ONE COAT OF BITUMASTIC PAINT.

TYPICAL VALVE BOX DETAIL
NOT TO SCALE

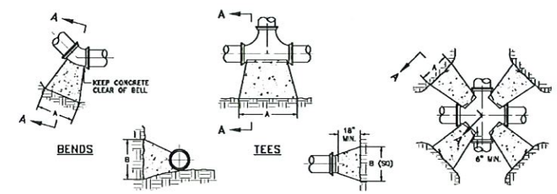


NOTE:
FIRE HYDRANT SHALL BE LOCATED 2.5' BEHIND FACE OF CURB WHERE ESTABLISHED. OTHERWISE, FIRE HYDRANT SHALL BE LOCATED 2.5' FROM EDGE OF ROAD, R-O-W, OR E.A.T.M.A. EASEMENT.

FIRE HYDRANT DETAIL
NOT TO SCALE



TYPICAL AIR BLOW-OFF DEAIL
NOT TO SCALE



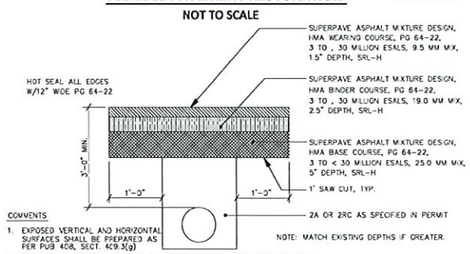
REQUIRED BEARING AREA ON UNDISTURBED SOIL AND TYPICAL DIMENSIONS															
SIZE	CROSSES/90° BENDS			45° BENDS			11-1/4° BENDS			22-1/2° BENDS			TEES & PLUGS		
	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"
6"	4.0	32"	18"	2.2	18"	16"	0.6	5"	18"	1.1	9"	18"	2.8	23"	18"
8"	7.0	42"	24"	3.8	23"	24"	1.0	6"	24"	2.0	12"	24"	5.0	30"	24"
10"	11.0	53"	30"	6.3	30"	30"	1.6	8"	30"	3.1	15"	30"	8.0	38"	30"
12"	16.1	64"	36"	10.0	40"	36"	2.2	9"	36"	4.4	18"	36"	11.3	45"	36"
14"	21.6	74"	42"	12.5	43"	42"	3.0	10"	42"	6.0	21"	42"	15.5	53"	42"
16"	28.3	85"	48"	17.7	53"	48"	4.0	12"	48"	7.7	23"	48"	20.1	60"	48"

* SURFACE AREA OF BEARING SOIL IS PROVIDED FOR 200 PSI MAXIMUM PRESSURE (INCLUDING SURGE) AND 2000 PSF SOIL BEARING. IF PRESSURE IS HIGHER OR SOIL BEARING IS POTENTIALLY LOWER, CONSULT THE ENGINEER FOR ADJUSTMENTS.

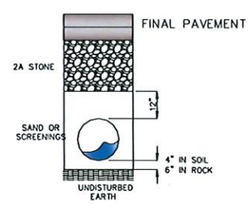
NOTES:
1. COVER OVER TOP OF PIPE SHALL BE BELOW THE FROST LINE OR 30" MINIMUM, 72" MAXIMUM ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON THE SAID PLANS.
2. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
3. NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES.
4. THRUST BLOCKING MUST FIT WITHIN THE EASEMENT.
5. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED BASED ON 150 PSI STATIC PRESSURE, PLUS 50 PSI WATER HAMMER AND 2000 PSF SOIL BEARING.
6. POLYETHYLENE ENCASEMENT IS REQUIRED ON ALL D.I. PIPE AND FITTINGS.
7. THRUST BLOCKING SHALL BE PERFORMED SUCH THAT PIPE JOINTS AND BOLTS ARE ACCESSIBLE.
8. SUFFICIENT CLEARANCE SHALL BE ALLOWED BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
9. ALL ANCHOR BOLTS SHALL BE STAINLESS STEEL, MINIMUM 3/4" DIAMETER.
10. ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL BE WRAPPED IN POLYWRAP. CONTRACTOR SHALL ENSURE THAT POLYWRAP EXTENDS FAR ENOUGH BEYOND THE FITTING TO ENCLOSE ALL BOLTS WITHIN THE POLYWRAP.
11. THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
12. PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN. 3000 PSI CONCRETE.
13. FOR UNSTABLE SOIL CONDITIONS, CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS.
14. FOR MAIN SIZES GREATER THAN 16", SEE ENGINEER FOR THRUST BLOCK DIMENSIONS.

THRUST BLOCK DETAILS
NOT TO SCALE

FLEXIBLE PAVEMENT RESTORATION — FIGURE 7-3
NOT TO SCALE



COMMENTS
1. EXPOSED VERTICAL AND HORIZONTAL SURFACES SHALL BE PREPARED AS PER PUB 408, SECT. 409.3(g)
2. MINIMUM 1' PAVEMENT CUTBACK, EXCAVATE OLD AND TEMPORARY MATERIAL, RECOMPACT SUB-GRADE, TACK COAT ALL VERTICAL EDGES. INSTALL ONLY BASE COURSE AND BINDER COURSE IN ONE DAY.
3. PERMANENT RESTORATION TO BE MINIMUM 90 DAYS UNLESS FLOWABLE FILL IS USED.



WATER MAIN TRENCH IN PAVED AREA DETAIL
NOT TO SCALE

PRELIMINARY/FINAL LAND DEVELOPMENT

NO.	REVISIONS	DATE

DRAWN BY: CLA | CHECKED BY: SJC
SCALE: 1"=100' | DATE: 04/18/2025
PROJECT NO. PA-1240
SHEET NO. DET-3

SEAL:

PLAN TITLE: STANDARD CONSTRUCTION DETAIL SHEET
PROJECT TITLE: MT. NEBO II APARTMENTS

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