



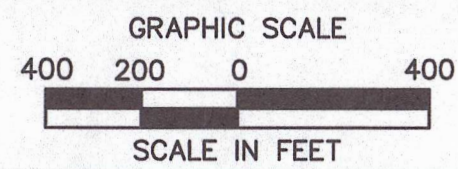
TAX PARCEL NUMBER
13-24-0799-177C

SITE
LOCATION

CEDAR RUN
(EXIST. USE: N/A; DESIG. USE: CWF, MF)

LOCATION MAP

SCALE: 1"=400'



ACT 287 LIST OF UTILITIES

THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ACT 287 OF 1974 AS AMENDED BY ACT 187 OF 1996 AND ACT 80 OF 2017 FOR NOTIFICATION OF UTILITIES BEFORE EXCAVATION IN CONTRACT AREA. THE ONE UNDERGROUND UTILITIES LOCATION CALL NUMBER IS 1-800-242-1776. DESIGN SERIAL NUMBER IS 20193172821, SUBMITTED ON 11/13/2019.

UTILITIES AND RESPONSES PROVIDED BY PA ONE CALL:

(AH) WINDSTREAM
929 MARTHAS WAY
HIAWATHA, IA 52233
CONTACT: LOCATE DESK PERSONNEL
EMAIL: locate.desk@windstream.com

(LAL) LOWER ALLEN TOWNSHIP
2233 GETTYSBURG ROAD
CAMP HILL, PA 17011
CONTACT: DANIEL FLINT
EMAIL: dflint@latwp.org

(AX) PENNSYLVANIA AMERICAN WATER
852 WESLEY DR
MECHANICSBURG, PA 17055
CONTACT: MICHAEL GENNONE
EMAIL: michael.gennone@amwater.com

(PRD) PPL ELECTRIC UTILITIES CORPORATION
503 NEW MARKET ST
WILKES BARRE, PA 18702
CONTACT: MARK SANTAYANA
EMAIL: mcsantayana@pplweb.com

(CTI) FRONTIER COMMUNICATIONS OF PA INC.
67 SOUTH MAIN STREET
SHOCKSHINNY, PA 18655
CONTACT: JOHN BUGDONOVITCH
EMAIL: john.bugdonovitch@ftr.com

(SB) COMCAST
4601 SMITH STREET
HARRISBURG, PA 17109
CONTACT: MICHAEL SWEIGARD
EMAIL: mike_sweigard@cable.comcast.com

(HC) VERIZON PENNSYLVANIA LLC
1026 HAY STREET
PITTSBURGH, PA 15221
CONTACT: DEBORAH BARUM
EMAIL: deborah.d.barum@verizon.com

(TW) CENTURY LINK
122 BALTIMORE STREET PO BOX 896
HANOVER, PA 17331
CONTACT: LEO HILBERT
EMAIL: leo.hilbert@centurylink.com

(LAI) LOWER ALLEN TOWNSHIP AUTHORITY
120 LIMEKILN ROAD
NEW CUMBERLAND, PA 17070
CONTACT: BRIAN KAUFFMAN
EMAIL: bkauffman@latwp.org

(U) UGI UTILITIES INC
1301 AIP DRIVE
MIDDLETOWN, PA 17057
CONTACT: STEPHEN BATEMAN
EMAIL: sbateman@ugl.com

PRELIMINARY / FINAL LAND DEVELOPMENT PLAN FOR 3709 HARTZDALE DRIVE 3709 HARTZDALE DRIVE LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

PREPARED FOR:

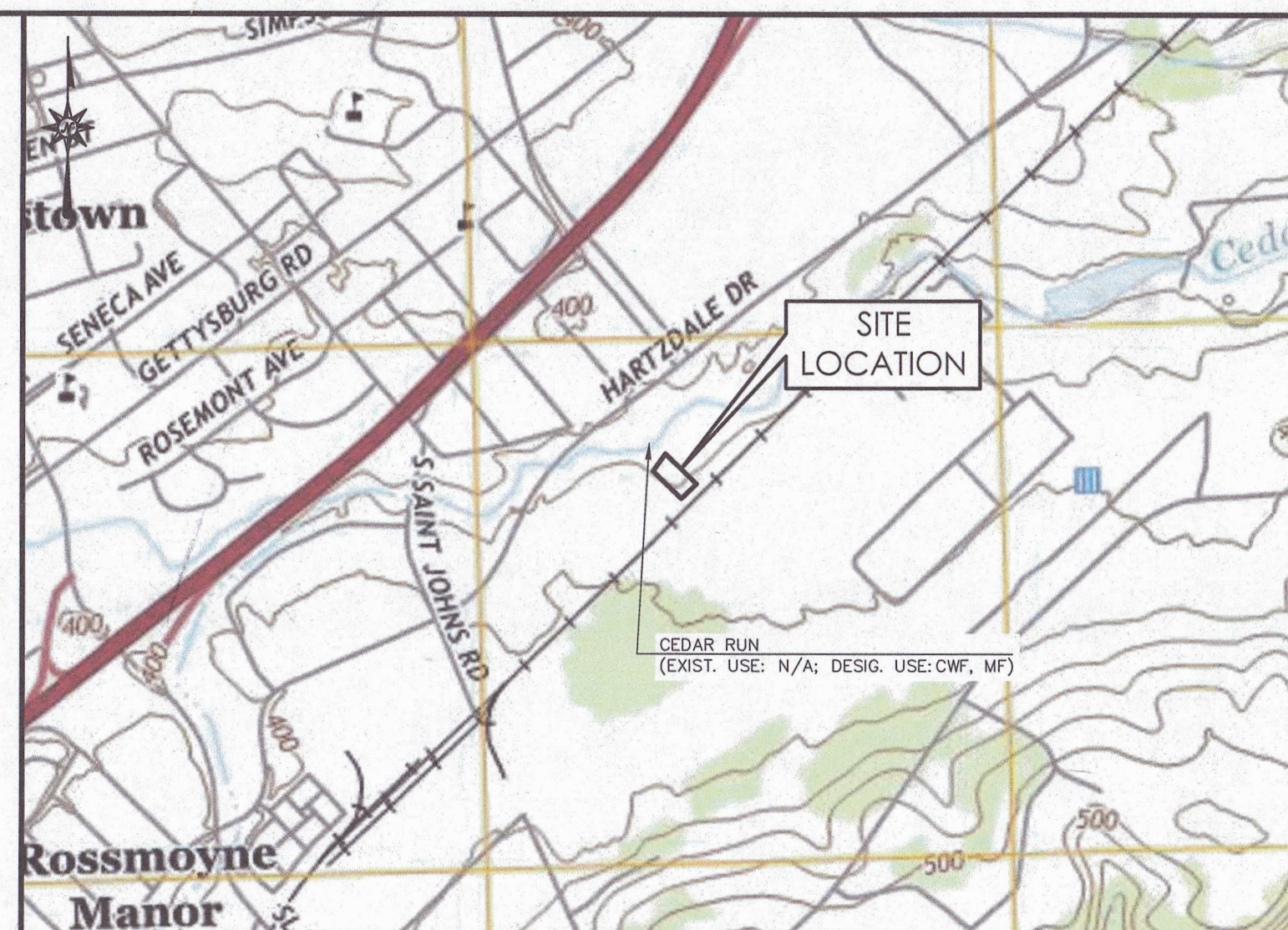
Mr. William R. Grace
d/b/a/W.R. Grace Properties

P.O. Box 301
New Cumberland, PA 17070
(717) 579-1337

PREPARED BY:

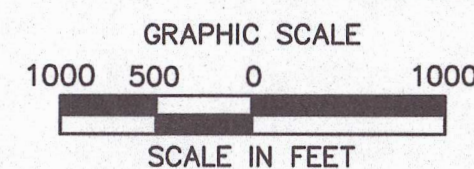
BL
Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

2601 Market Place, Suite 350
Harrisburg, PA 17110
(717) 651-9850
(717) 651-9858 Fax



VICINITY MAP

SCALE: 1"=1000'



MODIFICATIONS & WAIVERS REQUESTED

APPROVAL DATE

THE APPLICANT IS HEREBY REQUESTING THE FOLLOWING WAIVERS OF THE TOWNSHIP OF LOWER ALLEN SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND STORMWATER MANAGEMENT ORDINANCE:

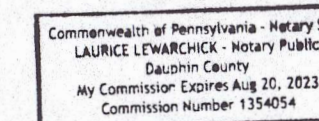
§192-30 PRELIMINARY PLAN SUBMISSION

CERTIFICATE OF OWNERSHIP, ACKNOWLEDGEMENT OF PLAN, AND OFFER OF DEDICATION

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF Cumberland SS

ON THIS, THE 21ST DAY OF October, 2021, BEFORE ME, W.R. Grace Properties THE UNDERSIGNED OFFICER, PERSONALLY APPEARED W.R. Grace KNOWN TO ME (OR SATISFACTORILY PROVEN TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT, AND ACKNOWLEDGED THAT W.R. Grace EXECUTED THE SAME FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HERETO SET MY HAND AND OFFICIAL SEAL



OWNER
William R. Grace

NOTARY
Laurence E. Dunschick

MY COMMISSION EXPIRES Aug 30, 2023.

LANDOWNERS

William R. Grace
P.O. Box 301
New Cumberland, PA 17070
(717) 579-1337

DEVELOPER / APPLICANT

Mr. William R. Grace d/b/a/W.R. Grace Properties
P.O. Box 301
New Cumberland, PA 17070
(717) 579-1337

DATES

ISSUE DATE: JULY 22, 2020
REVISIONS: DECEMBER 11, 2020
JANUARY 25, 2021
AUGUST 17, 2021

PLAN PURPOSE

THE PURPOSE OF THIS PLAN IS TO PERMIT THE CONSTRUCTION OF A ±11,970 S.F. WAREHOUSE AND ASSOCIATED SITE IMPROVEMENTS ON LANDS LOCATED IN LOWER ALLEN TOWNSHIP.

CV-1 No. 01 of 14

Sheet List Table

01	CV-1	COVER SHEET
02	GN-1	GENERAL NOTES
03	EX-1	EXISTING CONDITIONS MAP
04	DM-1	DEMOLITION PLAN
05	SP-1	SITE PLAN
06	GD-1	GRADING AND DRAINAGE PLAN
07	SU-1	SITE UTILITY PLAN
08	DN-1	DETAIL SHEET
09	DN-2	DETAIL SHEET
10	DN-3	DETAIL SHEET
11	EC-1	EROSION & SEDIMENTATION CONTROL PLAN
12	EC-2	EROSION & SEDIMENTATION CONTROL NOTES
13	EC-3	EROSION & SEDIMENTATION CONTROL DETAILS
14	EC-4	EROSION & SEDIMENTATION CONTROL DETAILS

CUMBERLAND COUNTY PLANNING DEPARTMENT REVIEW CERTIFICATION

REVIEWED THIS 5 DAY OF August, 2021 BY THE CUMBERLAND COUNTY PLANNING DEPARTMENT.

DIRECTOR Kirk Stoner

LOWER ALLEN TOWNSHIP BOARD OF COMMISSIONERS APPROVAL

APPROVED BY THE BOARD OF COMMISSIONERS, LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA.
APPROVED THE 18th DAY OF August, 2021

CONDITIONS OF APPROVAL COMPLETED THIS 1st DAY OF December, 2021

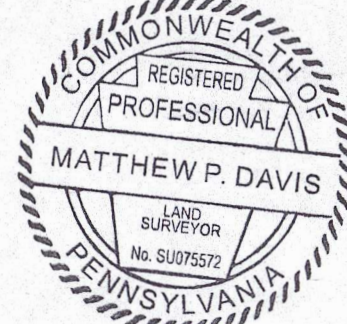
PRESIDENT David W. Velt SECRETARY Matthew P. Davis

CERTIFICATION OF ACCURACY

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

Matthew P. Davis
MATTHEW P. DAVIS, P.L.S.
P.L.S. SU-075572

10-18-2021
DATE



RECORDER OF DEEDS CERTIFICATE

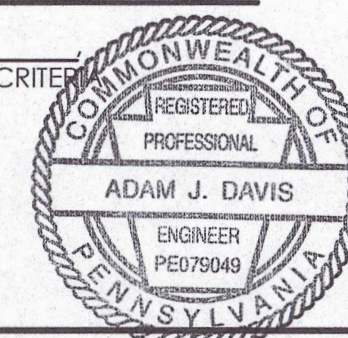
RECORDED IN THE CUMBERLAND COUNTY COURTHOUSE

RECORDED THIS 18th DAY OF February, 2022

Instrument # 202203372

LOWER ALLEN TOWNSHIP ACT 167 STORMWATER DESIGN CERTIFICATION

Adam J. Davis, DESIGN ENGINEER, ON THIS DATE October 20, 2021
HAVE REVIEWED AND HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE LOWER ALLEN TOWNSHIP ACT 167 STORMWATER MANAGEMENT ORDINANCE.

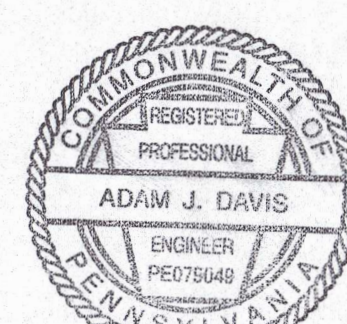


ENGINEER'S CERTIFICATION

I, ADAM J. DAVIS, P.E., A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS PLAN IS ACCURATE AND CORRECT AS INDICATED.

Adam J. Davis
ADAM J. DAVIS
REG. NO. PE 079049

10/20/21
DATE



SITE PLAN NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH LOWER ALLEN TOWNSHIP, PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PENNDOT) STANDARDS AND SPECIFICATIONS IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
2. THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL COUNTY AND TOWNSHIP CONSTRUCTION PERMITS, INCLUDING PENNDOT PERMITS AND SEWER AND WATER CONNECTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
3. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE CIVIL ENGINEER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE OWNER'S CONSTRUCTION MANAGER PRIOR TO BIDDING.
4. ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN COMPLETE DRAWING PLAN SETS FOR BIDDING AND CONSTRUCTION. PLAN SETS SHALL NOT BE DISASSEMBLED INTO PARTIAL PLAN SETS FOR USE BY CONTRACTORS AND SUBCONTRACTORS OF INDIVIDUAL TRADES. IT SHALL BE THE CONTRACTOR'S AND SUBCONTRACTOR'S RESPONSIBILITY TO OBTAIN COMPLETE PLAN SETS FOR USE IN BIDDING AND CONSTRUCTION.
5. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE SITE ENGINEER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS.
6. CONTRACTOR(S) TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK AND BE RESPONSIBLE FOR COORDINATION OF SAME. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.
7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS PER PLANS AND SPECIFICATIONS TO THE OWNER AND CIVIL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
8. THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE EROSION & SEDIMENTATION CONTROL PLAN NOTES/DETAILS.
9. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.
10. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.
11. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN OVER SCALED DIMENSIONS.
12. THE WORD "MEET" ON THIS PLAN MEANS CONTRACTOR TO MATCH AND TIE TO EXISTING SURFACE ELEVATION. THE WORD "PROVIDE" ON THE PLAN SET MEANS CONTRACTOR TO PROVIDE, FURNISH, AND INSTALL.
13. ALL NOTES AND DIMENSIONS DESIGNATED 'TYPICAL' OR 'TYP' APPLY TO ALL LIKE OR SIMILAR CONDITIONS THROUGHOUT THE PROJECT.
14. IF PLANS AND OR SPECIFICATIONS ARE IN CONFLICT, THE MOST STRINGENT SHALL APPLY.
15. THE CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND CONSTRUCTION DETAILS OF BUILDING.
16. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE OWNER AND ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
17. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES, TRAFFIC CONTROLLERS AND UNIFORMED TRAFFIC OFFICERS AS REQUIRED, ORDERED BY THE ENGINEER OR REQUIRED BY THE LOCAL GOVERNING AUTHORITIES OR AS REQUIRED BY PERMIT STIPULATIONS.
18. REFER TO DETAIL SHEETS FOR PAVEMENT, CURBING, AND SIDEWALK INFORMATION.
19. TRAFFIC CONTROL SIGNAGE SHALL CONFORM TO PENNDOT STANDARD DETAIL SHEETS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. SIGNS SHALL BE INSTALLED PLUMB WITH THE EDGE OF THE SIGN 2' OFF THE FACE OF THE CURB, AND WITH 7' VERTICAL CLEARANCE UNLESS OTHERWISE DETAILED OR NOTED.
20. THE CONTRACT LIMIT IS THE LIMIT OF DISTURBANCE LINE UNLESS OTHERWISE SPECIFIED.
21. THE CONTRACTOR SHALL ABIDE BY ALL OSHA FEDERAL STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.
22. THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING OF THE PAINT MIXTURE PRIOR TO STRIPING. ALL PAINT STRIPING SHALL HAVE A MINIMUM OF 2 COATS OF PAINT.
23. PAVEMENT MARKING KEY:
- | | | | |
|---------|-----------------------------|----------|--------------------------|
| 4" SYDL | 4" SOLID YELLOW DOUBLE LINE | 4" SRL | 4" SOLID RED LINE |
| 4" SYL | 4" SOLID YELLOW LINE | 12" SNBS | 12" SOLID WHITE STOP BAR |
| 24" SYL | 24" SOLID YELLOW LINE | 24" SNBS | 24" SOLID WHITE STOP BAR |
| 4" SWL | 4" SOLID WHITE LINE | 6" BWL | 6" BROKEN WHITE LINE |
| 24" SWL | 24" SOLID WHITE LINE | 6" AWL | 6" AUXILIARY WHITE LINE |
| 6" SWL | 6" SOLID WHITE LINE | | |
24. PARKING SPACES SHALL BE STRIPED WITH 4" SYL; HATCHED AREA SHALL BE STRIPED WITH 4" SYL AT A 45° ANGLE, 2' ON CENTER. HATCHING, SYMBOLS, AND STRIPING FOR HANDICAPPED SPACES SHALL BE PAINTED BLUE. OTHER MARKINGS SHALL BE PAINTED WHITE OR AS NOTED.
25. STOP BAR AND STOP LEGEND MARKINGS SHALL BE HOT THERMOPLASTIC TYPE IN ACCORDANCE WITH PENNDOT SPECIFICATIONS, UNLESS WHERE EPOXY RESIN PAVEMENT MARKINGS ARE INDICATED.
26. THE CONTRACTOR SHALL REMOVE CONFLICTING PAVEMENT MARKINGS BY METHOD APPROVED BY PENNDOT.
27. THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, ETC. DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE ENGINEER.
28. THE CONTRACTOR SHALL PROVIDE A TOPOGRAPHIC SIGNED AND SEALED AS-BUILT SURVEY BY A STATE LICENSED LAND SURVEYOR AND RECORD DRAWINGS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES AND STORMWATER MANAGEMENT FACILITIES) TO THE OWNER AND THE TOWNSHIP AT THE END OF CONSTRUCTION AND IN CONFORMANCE WITH THE SPECIFICATIONS.
29. THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.
30. THE CONTRACTOR SHALL COMPLY WITH CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS.
31. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, SITE ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING PROCESS.
32. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLAN IS GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.
33. THESE PLANS ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION.
34. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NATURALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLETE SUCH WORK.
35. CONSTRUCTION OCCURRING ON THIS SITE SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND CHAPTER 16 OF NFPA 1, UNIFORMED FIRE CODE.
36. NEW BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS PLACED IN A POSITION TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY PER THE NFPA CODE.
37. ANY COMPONENTS TO REMAIN OR BE PROTECTED THAT ARE DAMAGED DURING DEMOLITION AND/OR SALVAGE OPERATIONS SHALL BE REPLACED IN KIND AT THE EXPENSE OF THE CONTRACTOR.
38. ALL EXISTING AND PROPOSED EASEMENTS ON OR AFFECTING THE SITE ARE SHOWN ON THE PLANS.
39. A COPY OF THE APPROVAL FROM THE PA DEPARTMENT OF LABOR AND INDUSTRY, WHERE APPLICABLE, SHALL BE PROVIDED BEFORE A BUILDING PERMIT IS ISSUED.
40. NEITHER THE DEPARTMENT NOR ANY MUNICIPALITY TO WHICH PERMIT-ISSUING AUTHORITY HAS BEEN DELEGATED UNDER THE "STATE HIGHWAY LAW" SHALL BE LIABLE IN DAMAGES FOR ANY INJURY TO PERSONS OR PROPERTY ARISING OUT OF THE ISSUANCE OR DENIAL OF A DRIVEWAY PERMIT, OR FOR FAILURE TO REGULATE ANY DRIVEWAY. FURTHERMORE, THE TOWNSHIP SHALL NOT BE HELD LIABLE FOR DAMAGES TO PERSONS OR PROPERTY ARISING OUT OF THE ISSUANCE OR DENIAL OF A DRIVEWAY PERMIT BY THE DEPARTMENT.
41. CONTRACTOR TO ERECT AND INSTALL "BL COMPANIES" SIGN PRIOR TO CONSTRUCTION. COORDINATE LOCATION WITH TOWNSHIP AND ENGINEER. CONTRACTOR TO MAINTAIN SIGN DURING CONSTRUCTION AND RETURN SIGN TO ENGINEER AFTER COMPLETION OF SITE CONSTRUCTION.
42. NO PARKING FIRE ZONES, FIRE LANES AND/OR SIGNAGE SHALL BE ESTABLISHED AND PROPERLY DESIGNATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FIRE DISTRICT FIRE MARSHAL AND SHALL BE PROVIDED TO THE SATISFACTION TO THE TOWNSHIP/FIRE MARSHAL.
43. A FIRE DEPARTMENT ACCESS BOX (KNOX BOX) SHALL BE INSTALLED. THIS BOX WILL BE REQUIRED TO CONTAIN KEYS TO THE BUILDING, GATES, FIRE PROTECTION SYSTEM AND OTHER AREAS REQUESTED BY THE FIRE DEPARTMENT.
44. PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1945 (P.L. 1242, No. 428), AS AMENDED, A HIGHWAY OCCUPANCY PERMIT WILL BE REQUIRED BEFORE ANY IMPROVEMENTS ARE INITIATED WITHIN A STATE HIGHWAY [RIGHT-OF-WAY].

45. ALL WORK SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SPECIFICATIONS AND PUBLICATION 72, ROADWAY CONSTRUCTION STANDARDS, UNLESS OTHERWISE NOTED.
46. WORK ZONE TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 213.
47. A RIGHT-OF-WAY PERMIT IS REQUIRED BEFORE STARTING ANY WORK WITHIN THE PUBLIC STREET RIGHT-OF-WAY.
48. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS. ALL PAVEMENT MARKINGS SHALL BE HOT THERMOPLASTIC.
49. ALL STORM DRAINAGE PIPE SHALL BE SMOOTH INTERIOR UNLESS OTHERWISE NOTED.
50. LOT OWNERS ARE REQUIRED TO MAINTAIN LOT GRADING AND SURFACE DRAINAGE PATTERNS AND CHARACTERISTICS IN ACCORDANCE WITH THE APPROVED PLAN.
51. MANHOLE COVERS FOR STORM MANHOLES SHALL BE CAST WITH THE WORD "STORM" FOR IDENTIFICATION PURPOSE.
52. CONSTRUCTION OF ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY AND WORK RELATED TO STORM DRAINAGE FACILITIES REQUIRES INSPECTION BY THE TOWNSHIP. PROVIDE A MINIMUM 48 HOURS NOTICE TO THE TOWNSHIP BEFORE STARTING WORK.
53. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION SITE MEETING WITH THE TOWNSHIP ENGINEER AT LEAST 48 HOURS PRIOR TO STARTING SITE CONSTRUCTION ACTIVITIES.
54. SITE DISTURBANCE IS PERMITTED TO START ONLY IF AND WHEN SUFFICIENT TIME IS AVAILABLE TO STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PADEP REQUIREMENTS AND WITH THE APPROVED PLAN.

DEMOLITION NOTES

1. CONTRACTOR SHALL SECURE ANY PERMITS, PAY ALL FEES AND PERFORM CLEARING AND GRUBBING AND DEBRIS REMOVAL PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.
2. EROSION AND SEDIMENT CONTROLS AS SHOWN ON THE EROSION AND SEDIMENTATION PLAN SHALL BE INSTALLED BY THE DEMOLITION CONTRACTOR PRIOR TO START OF DEMOLITION, AND CLEARING AND GRUBBING OPERATIONS.
3. REMOVE AND DISPOSE OF ANY DEMOLITION MATERIAL, DEBRIS AND RUBBISH REQUIRING REMOVAL FROM THE WORK AREA IN AN APPROVED OFF SITE LANDFILL, BY AN APPROVED HAULER. HAULER SHALL COMPLY WITH ALL REGULATORY REQUIREMENTS.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
5. THE CONTRACTOR SHALL PREPARE ALL MANIFEST DOCUMENTS AS REQUIRED PRIOR TO COMMENCEMENT OF DEMOLITION.
6. THE CONTRACTOR SHALL CUT AND PLUG, OR ARRANGE FOR THE APPROPRIATE UTILITY COMPANY TO CUT AND PLUG ALL SERVICE PIPING AS REQUIRED, OR AS OTHERWISE NOTED HEREON. ALL SERVICES MAY NOT BE SHOWN ON THIS PLAN. THE CONTRACTOR SHALL INVESTIGATE THE SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF SERVICE PIPING TO BE REMOVED, CUT OR PLUGGED. THE OWNER SHALL PAY ALL UTILITY CO. PROVIDER FEES FOR ABANDONMENT'S AND REMOVALS.
7. THE CONTRACTOR SHALL PROTECT ALL IRON PINS, MONUMENTS AND PROPERTY CORNERS DURING DEMOLITION ACTIVITIES. ANY CONTRACTOR DISTURBED PINS, MONUMENTS, AND OR PROPERTY CORNERS, ETC. SHALL BE RESET BY A LICENSED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
8. THE DEMOLITION CONTRACTOR SHALL STABILIZE THE SITE AND KEEP EROSION CONTROL MEASURES IN PLACE UNTIL THE COMPLETION OF HIS WORK OR UNTIL THE COMMENCEMENT OF WORK BY THE SITE CONTRACTOR, WHICHEVER OCCURS FIRST, AS REQUIRED OR DEEMED NECESSARY BY THE ENGINEER OR OWNER'S REPRESENTATIVE. THE SITE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE MAINTENANCE OF EXISTING EROSION AND SEDIMENT CONTROLS AND FOR INSTALLATION OF ANY NEW EROSION AND SEDIMENT CONTROLS AS PER THE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN, AT THAT TIME.
9. THE CONTRACTOR SHALL ADHERE TO ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN PROXIMITY OF OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT THE POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID BY THE CONTRACTOR.
10. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC CONTROLLERS AS REQUIRED OR ORDERED BY THE ENGINEER, OR REQUIRED BY THE LOCAL GOVERNING AUTHORITIES. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS AT ALL TIMES UNLESS WRITTEN APPROVAL FROM THE APPROPRIATE GOVERNING AGENCY IS GRANTED.
11. INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY, AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION THE CONTRACTOR SHALL CONTACT PENNSYLVANIA ONE CALL 72 HOURS BEFORE COMMENCEMENT OF WORK AT (800) 242-1776 AND VERIFY ALL UTILITY AND DRAINAGE LOCATIONS.
12. THE CONTRACTOR SHALL PROVIDE DISCONNECT NOTIFICATION TO ALL UTILITIES LISTED WITHIN THE PA ONE-CALL INFORMATION PROVIDED ON SHEET CV-1 AT LEAST THREE WEEKS PRIOR TO BEGINNING DEMOLITION.
13. BACKFILL AND COMPACT DEPRESSIONS, FOUNDATION HOLES AND REMOVED DRIVEWAY AREAS WITH APPROVED SOIL MATERIAL. FERTILIZE, SEED AND MULCH DISTURBED AREAS NOT SUBJECT TO FURTHER SITE CONSTRUCTION. BUILDING FOUNDATION AREA TO BE BACKFILLED IN 6" LIFTS WITH GRAVEL FILL OR SUITABLE MATERIAL, COMPACTED TO 95% MAX. DRY DENSITY (MODIFIED PROCTOR TEST), PER ASTM D1557 AT ± 2% OF OPTIMUM MOISTURE CONTENT, AS SPECIFIED IN THE PROJECT GEOTECHNICAL REPORT. EMPLOY WATERING EQUIPMENT FOR DUST CONTROL.
14. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING DEMOLITION TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE OWNER, THE LOWER ALLEN TOWNSHIP AND PENNDOT.
15. NO WORK ON THIS SITE SHALL BE INITIATED BY THE CONTRACTOR UNTIL A PRE-CONSTRUCTION MEETING WITH OWNER AND THE PROJECT ENGINEER IS PERFORMED. THE CONTRACTOR SHOULD BE AWARE OF ANY SITE INFORMATION AVAILABLE SUCH AS GEOTECHNICAL AND ENVIRONMENTAL REPORTS, AS WELL AS HAVE ONE CALL DIG MARK OUTS OF EXISTING UTILITIES COMPLETED PRIOR TO MEETING.
16. THE CONTRACTOR OR DEMOLITION CONTRACTOR SHALL INSTALL TEMPORARY SHEETING OR SHORING AS NECESSARY FOR PROTECTION DURING CONSTRUCTION AND DEMOLITION. SHEETING OR SHORING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER, LICENSED IN THIS STATE AND EVIDENCE OF SUCH SUBMITTED TO THE OWNER PRIOR TO INSTALLATION.
17. NO SALVAGE SHALL BE PERMITTED UNLESS PAID TO THE OWNER AS A CREDIT.
18. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
19. THE CONTRACTOR SHALL COMPLY WITH CFR29 PART 1926 FOR EXCAVATION, TRENCHING, AND TRENCH PROTECTION REQUIREMENTS.
20. THE CONTRACTOR SHALL NOT COMMENCE DEMOLITION OR UTILITY DISCONNECTIONS UNTIL AUTHORIZED TO DO SO BY THE OWNER.
21. CARE SHOULD BE TAKEN TO PREVENT DUST AND DEBRIS FROM LEAVING THE BOUNDARIES OF THE PROPERTY.
22. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
23. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF NEW CONSTRUCTION SHALL BE RAZED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET. ARCHITECTURAL PLANS AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS, AND FOOTINGS.
24. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.
25. UTILITY CONTACTS ARE LISTED ON SHEET CV-1.
26. ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
27. DEMOLITION CONTRACTOR SHALL COORDINATE EXISTING FACILITIES UTILITY DISCONNECTS WITH THE CONSTRUCTION REPRESENTATIVE A MINIMUM 7 DAYS PRIOR TO ANTICIPATED DEMOLITION OF STRUCTURES.
28. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS SET FOR OTHER PERTINENT INFORMATION.

GRADING AND DRAINAGE GENERAL NOTES

1. THE PRE-DEVELOPMENT CONDITION CONSISTS OF A PARTIALLY CLEARED SITE WITH ASSOCIATED PARKING. PROPOSED IMPROVEMENTS CONSISTS OF THE CONSTRUCTION OF A COMMERCIAL BUILDING, PARKING, STORMWATER MANAGEMENT FACILITIES, UTILITIES, ETC.
2. NORTH ARROW AND BEARINGS BASED ON NAD83 PA SOUTH.
3. ELEVATIONS AND CONTOURS ARE BASED ON NAD83. CONTOURS OUTSIDE OF THE LIMIT OF THE SITE TO BE DEVELOPED ARE BASED ON LIDAR CONTOURS FROM PASDA.
4. NO PORTION OF DEVELOPMENT AREA LIES WITHIN THE 100 YEAR FLOOD PLAIN, REFERENCE AS "ZONE X", AS DETERMINED BY FEDERAL EMERGENCY MANAGEMENT AGENCY AS TAKEN FROM FLOOD INSURANCE RATE MAP, PANEL 281 OF 480, MAP NUMBER 42041C0281E, AND PANEL 283 OF 480, MAP NUMBER 42041C0283E, BEARING AN EFFECTIVE DATE OF MARCH 16, 2009.
5. REFER TO SITE PLAN FOR GENERAL INFORMATION, AND DETAIL SHEETS FOR DETAILS. SEE UTILITY PLAN FOR BUILDING CONNECTION LOCATIONS AND DETAILS.
6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED THOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION.
7. THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. REFER TO EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND NOTES.
8. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING.
9. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS REQUIRED BY GOVERNMENT AND LOCAL AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS FROM THE TOWNSHIP REQUIRED TO PERFORM ALL REQUIRED WORK.
10. THE CONTRACTOR SHALL COMPACT FILL IN 6" MAXIMUM LIFTS UNDER ALL PARKING, BUILDING, AND DRIVE AREAS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 (MODIFIED PROCTOR TEST), OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
11. UNDERDRAINS SHALL BE ADDED, IF DETERMINED NECESSARY IN THE FIELD BY THE OWNER/GEOTECHNICAL ENGINEER, AFTER SUBGRADE IS ROUGH GRADED.
12. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY CUMBERLAND COUNTY CONSERVATION DISTRICT OR DEP. PRIOR TO THE START OF WORK ON THE SITE.
13. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL, SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLANDS IN ACCORDANCE WITH THE REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES FOR SOIL EROSION AND SEDIMENTATION POLLUTION CONTROL MANUAL. IN ADDITION, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED "EROSION AND SEDIMENTATION CONTROL PLAN" CONTAINED UNDER SEPARATE COVER.
14. ALL CONSTRUCTION SHALL COMPLY WITH OWNER'S SPECIFICATIONS. ALL CONSTRUCTION WITHIN A DOT RIGHT OF WAY SHALL COMPLY WITH ALL DEPARTMENT OF TRANSPORTATION STANDARDS. WHERE SPECIFICATIONS OR STANDARDS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION OR STANDARD SHALL BE SUPERIOR.
15. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT.
16. ROOF DRAINAGE SHALL BE DIRECTED AND CONNECTED AS SHOWN IN THE CIVIL ENGINEERING GRADING AND DRAINAGE PLANS, SHOWN ON PLUMBING PLANS BY THE ARCHITECT.
17. TRENCH EXCAVATIONS SHALL BE BACKFILLED DAILY AND TEMPORARY BERMS OR DIKES SHALL BE CONSTRUCTED AROUND ALL EXCAVATIONS, INCLUDING THOSE FOR UTILITY TRENCHES, BUILDING FOUNDATIONS, ETC., TO PREVENT THE ENTRY OF SURFACE WATER.

- PRODUCT NOTES:
1. GAS PIPE MATERIAL SHALL BE PER GAS COMPANY REQUIREMENTS.
2. POLY VINYL CHLORIDE PIPE (PVC) FOR STORM AND SANITARY PIPING SHALL HAVE BUILT-IN RUBBER GASKET JOINTS. PVC SHALL CONFORM TO ASTM D-3034 (SDR35) WITH COMPRESSION JOINTS AND MOLDED FITTINGS. PVC SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS; ASTM-D2321 AND MANUFACTURERS RECOMMENDED PROCEDURE.
3. ALL RCP SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-76; ALL RCP SHALL BE CLASS II UNLESS OTHERWISE SHOWN. JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-443.
4. MANHOLE SECTIONS AND CONSTRUCTION SHALL CONFORM TO ASTM C-478.
5. HIGH DENSITY POLYETHYLENE (HDPE) STORM SEWER 12" OR GREATER IN DIAMETER SHALL BE HI-Q SURE-LOK 10.8 PIPE AS MANUFACTURED BY HANCOR INC. OR APPROVED EQUAL. HDPE PIPE SHALL HAVE SMOOTH INTERIOR AND CORRUGATED EXTERIOR AND SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S. PIPE SECTIONS SHALL BE JOINED WITH BELL-AND-SPIGOT JOINT MEETING THE REQUIREMENTS OF AASHTO M294. THE BELL SHALL BE AN INTEGRAL PART OF THE PIPE AND PROVIDE A MINIMUM PULL-APART STRENGTH OF 400 POUNDS. THE JOINT SHALL BE WATERTIGHT ACCORDING TO THE REQUIREMENTS OF ASTM D3212. GASKETS SHALL BE MADE OF POLYISOPRENE MEETING THE REQUIREMENTS OF ASTM F477. ALTERNATIVE HDPE PIPE MAY BE USED IF APPROVED BY THE ENGINEER AND OWNER'S CONSTRUCTION MANAGER PRIOR TO ORDERING.
6. HIGH DENSITY POLYETHYLENE (HDPE) STORM SEWER LESS THAN 12" IN DIAMETER SHALL BE HI-Q PIPE AS MANUFACTURED BY HANCOR INC. OR APPROVED EQUAL. HDPE PIPE SHALL HAVE SMOOTH INTERIOR AND CORRUGATED EXTERIOR AND SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S. PIPE SECTIONS SHALL BE JOINED WITH COUPLING BANDS OR EXTERNAL SNAP COUPLERS COVERING AT LEAST 2 FULL CORRUGATIONS ON EACH END OF THE PIPE. SILT-TIGHT (GASKET) CONNECTIONS SHALL INCORPORATE A CLOSED SYNTHETIC EXPANDED RUBBER GASKET. MEETING THE REQUIREMENTS OF AASHTO D1058 GRADE 2A2. GASKETS SHALL BE INSTALLED ON THE CONNECTION BY THE PIPE MANUFACTURER. ALTERNATIVE HDPE PIPE MAY BE USED IF APPROVED BY THE ENGINEER AND OWNER'S CONSTRUCTION MANAGER PRIOR TO ORDERING.
7. DUCTILE IRON PIPE SHALL CONFORM TO AWWA C151 FOR CLASS 52 WITH CEMENT LINING IN ACCORDANCE WITH ANSI A 214. FOR WATER MAINS AND SERVICES 3" ID AND LARGER, JOINTS SHALL BE MADE WITH CONCRETE THRUST BLOCKS OR WITH MEGALUG RETAINER GLANDS OR WITH RODDING IN ACCORDANCE WITH PROJECT MANUAL SPECIFICATIONS AND IN ACCORDANCE WITH WATER UTILITY PROVIDER REQUIREMENTS TO EXTEND A MINIMUM OF 2 PIPE LENGTHS IN EITHER DIRECTION FROM FITTINGS AND ELBOWS (40 FT MINIMUM). ALL OTHER JOINTS SHALL BE PUSH ON WITH RUBBER GASKETS (TYTON). USE OF OTHER TYPES OF RETAINER GLANDS SHALL REQUIRE USE WITH CLASS 53 OR GREATER DUCTILE IRON PIPE. DI STORM PIPE SHALL BE PUSH ON JOINT WITH RUBBER GASKET.
8. PVC WATER MAIN PIPING SHALL CONFORM TO AWWA C900.

TOWNSHIP NOTES

1. APPLICANT AND OWNER ACKNOWLEDGE THAT CERTAIN PROPOSED SITE IMPROVEMENTS DEPICTED ON THIS PLAN, INCLUDING BUT NOT LIMITED TO ACCESSIBLE PARKING SPACES, ACCESSIBLE ROUTE TO THE BUILDING AND FREESTANDING SIGNS, THAT REQUIRE APPROVAL UNDER REGULATIONS CONTAINED IN THE PA UNIFORM CONSTRUCTION CODE AND/OR LOWER ALLEN TOWNSHIP ZONING CODE MUST BE INSTALLED IN ACCORDANCE WITH SEPARATE PERMIT APPROVALS GRANTED UNDER THOSE REGULATIONS.
2. PROPOSED DEVELOPMENT SHALL MEET PENNSYLVANIA SEWAGE PLANNING REQUIREMENTS. THE CURRENT SEWAGE PLANNING APPROVALS FOR LOWER ALLEN TOWNSHIP ARE EXPECTED TO ALLOW FOR THE PROPOSED SEWAGE DEMAND OF THE PROJECT.

UTILITY CONSTRUCTION NOTES

1. CONTRACTOR/OWNER IS RESPONSIBLE FOR CONTACTING THE LOCAL MUNICIPALITIES TO SECURE PERMITS AND FOR PAYMENT OF FEES FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES.
2. THE SITE UTILITY PLAN DETAILS SITE INSTALLED PIPES UP TO 5' FROM THE BUILDING FACE. REFER TO DRAWINGS BY OTHERS FOR BUILDING CONNECTIONS. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT.
3. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE SEWERS CROSS-EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE SITE ENGINEER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
4. UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY CO. AND LOWER ALLEN TOWNSHIP AUTHORITY STAFF REVIEW.
5. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY COMPANIES AND LOWER ALLEN TOWNSHIP AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY COMPANY.
6. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTION, RELOCATIONS, INSPECTIONS, AND DEMOLITION.
7. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT (UNLESS DEMOLISHED). AFTER UTILITY INSTALLATION IS COMPLETED, THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE PLANS OR AS REQUIRED BY THE PENNDOT OR LOWER ALLEN TOWNSHIP.
8. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
9. ALL UTILITIES SHALL BE CLEARED BY A MINIMUM OF 1.0'. ALL UTILITY POLES SHALL BE CLEARED BY A MINIMUM OF 2.0' OR TUNNELED IF REQUIRED.
10. SANITARY LATERAL SHALL MAINTAIN (10' MIN. HORIZONTAL 1.5' VERTICAL MIN.) SEPARATION DISTANCE FROM WATER LINES, OR ADDITIONAL PROTECTION MEASURES WILL BE REQUIRED WHERE PERMITTED.
11. RELOCATION OF UTILITY COMPANY FACILITIES SUCH AS POLES, TO BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE FACILITY OWNERS.
12. THE CONTRACTOR SHALL COMPACT THE PIPE BACKFILL IN 6" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED IN AREAS OF ROCK EXCAVATION. STORM SEWERS MAY BE PLACED PRIOR TO PLACING FILL.
13. CONTRACTOR TO PROVIDE SLEEVES UNDER FOOTINGS, PARKING AREAS, AND CURBS FOR UTILITY AND IRRIGATION CONNECTIONS.
14. CONTRACTOR SHALL COORDINATE INSTALLATION FOR ELECTRICAL SERVICES TO PYLON SIGNS AND SITE LIGHTING WITH THE BUILDING ELECTRICIAN/ELECTRICAL CONTRACTOR.
15. THE SITE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR PRE-CONSTRUCTION CONDITION OR BETTER.
16. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE INCLUDING SERVICES. CONTACT, PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE COMMENCEMENT OF WORK AT "1-800-242-1776" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.
17. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND WITH THE LOWER ALLEN TOWNSHIP AUTHORITY AND CONTRACTOR SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTION, RELOCATIONS, INSPECTIONS, AND DEMOLITION.
18. ELECTRIC, TELEPHONE, AND CABLE SERVICES FOR THE SITE SHALL BE INSTALLED UNDERGROUND. THE SITE CONTRACTOR SHALL INSTALL AND BACKFILL 2-4" PVC CONDUITS FOR TELEPHONE AND CABLE SERVICE AND 2-4" PVC CONDUITS FOR ELECTRIC SERVICE PRIMARY AND SECONDARY PER BUILDING ELECTRICAL PLANS (SCHEDULE 80 UNDER PAVEMENT, SCHEDULE 40 IN NON PAVEMENT AREAS). SERVICES MAY BE INSTALLED IN A COMMON TRENCH WITH 12" CLEAR SPACE BETWEEN. MINIMUM COVER IS 36" ON ELECTRIC CONDUITS, AND 24" ON TELEPHONE AND CABLE CONDUITS. SERVICES SHALL BE MARKED WITH MAGNETIC LOCATOR TAPE AND SHALL BE BEDDED, INSTALLED, AND BACKFILLED IN ACCORDANCE WITH ELECTRIC COMPANY, PHONE COMPANY AND CATV COMPANY STANDARDS. GALVANIZED STEEL ELECTRICAL CONDUIT SHALL BE USED AT POLE AND TRANSFORMER LOCATIONS. INSTALL HANDHOLES AS REQUIRED. INSTALL CONCRETE ENCASEMENT ON PRIMARY ELECTRIC CONDUITS IF REQUIRED BY ELECTRIC COMPANY.
19. ALL WATER LINES TO HAVE A MINIMUM COVER OF 54" AND A MAXIMUM COVER OF 60" UNLESS OTHERWISE APPROVED BY LOWER ALLEN TOWNSHIP.
20. ALL WATER MAINS, WATER SERVICES AND SANITARY SEWER LATERAL SHALL CONFORM TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OR THE APPROPRIATE LOCAL UTILITY COMPANY SPECIFICATIONS, AS WELL AS TO OTHER APPLICABLE CODES AND SPECIFICATIONS FOR POTABLE WATER SYSTEMS. ALL WATER METER VALVETS AND ACCESS COVERS IN VEHICULAR TRAFFIC AREAS SHALL BE QUALIFIED FOR H-20 LOADING.
21. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, ENGINEER, UTILITY PROVIDER AND APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION.
22. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNERS, THE PROJECT ENGINEER, UTILITY COMPANIES AND GOVERNING AUTHORITIES.
23. ANY EXISTING POTABLE WATER WELL(S) IF FOUND SHALL BE ABANDONED AND REMOVED PER THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND HEALTH CODE REQUIREMENTS.
24. MANHOLE RIMS AND CATCH BASIN GRATES SHALL BE SET TO ELEVATIONS SHOWN. SET ALL EXISTING MANHOLE RIMS AND VALVE COVERS TO BE RAISED OR LOWERED FLUSH WITH FINAL GRADE AS NECESSARY.
25. ALL SANITARY SEWER AND LATERAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOWER ALLEN TOWNSHIP AUTHORITY'S CONSTRUCTION AND MATERIAL SPECIFICATIONS.
26. UTILITY PENETRATIONS AND LOCATIONS ARE SHOWN FOR THE CONTRACTOR'S INFORMATION AND SHALL BE VERIFIED.
27. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY AND/OR THE LOCAL MUNICIPALITIES' REQUIREMENTS.
28. A ONE-FOOT MINIMUM CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELEPHONE LINES AND STORM SEWERS SHALL BE PROVIDED. A SIX-INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM AND SANITARY SEWER WITH A CONCRETE ENCASEMENT.
29. CONTRACTOR SHALL PROVIDE ALL BENDS, FITTINGS, ADAPTERS, ETC., AS REQUIRED FOR PIPE CONNECTIONS TO BUILDING STUB OUTS, INCLUDING ROOF/FOOTING DRAIN CONNECTIONS TO ROOF LEADERS AND TO STORM DRAINAGE SYSTEM.
30. EXCAVATIONS SHALL BE BACKFILLED DAILY AND TEMPORARY BERMS OR DIKES SHALL BE CONSTRUCTED AROUND ALL EXCAVATIONS, INCLUDING THOSE FOR UTILITY TRENCHES, BUILDING FOUNDATIONS, ETC., TO PREVENT THE ENTRY OF SURFACE WATER.
31. CONTRACTOR SHALL TAKE ALL SPECIAL PRECAUTIONS REQUIRED BY UTILITY COMPANIES FOR PIPE CROSSINGS OF DISSIMILAR METAL MATERIALS.
32. THE CONTRACTOR SHALL SECURE ALL NECESSARY TOWNSHIP AND PENNDOT UTILITY HOPs PRIOR TO THE COMMENCEMENT OF WORK.

Architecture
Engineering
Environmental
Land Surveying

BL

Companies

2601 Market Place, Suite 350
Harrisburg, PA 17110
(717) 651-9850
(717) 651-9858 Fax

PRELIMINARY / FINAL
LAND DEVELOPMENT PLAN

3709 HARTZDALE DRIVE
LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

Dec.
REVISED PER TOWNSHIP & COUNTY COMMENTS
12/11/2020
REVISED PER TOWNSHIP COMMENTS
01/11/2021
REVISED PER TOWNSHIP COMMENTS
04/17/2021

REVISIONS

No.

Date

Revised By

Reviewed By

Scale

Project No.

Date

CAD File:

1

12/11/2020

J.R.J.

A.J.B.

N.T.S.

1901881

07/22/2020

GN190188101

Title

GENERAL
NOTES

Sheet No.

GN-1
No.02 of 14

UNPUBLISHED - ERETRY - C:\USERS\PA\N\WORKING\TOWNSHIP\GN1901881.DWG (04/11/2021)

© 2021 BL COMPANIES, INC. THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES.

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION



LOCATION MAP
NOT TO SCALE

LEGEND

- Property Line
- Treeline
- Major Contour
- Minor Contour
- Fence
- Overhead Wires
- Underground Electric Line
- Sanitary Sewer
- Water Line
- Storm Sewer
- Handhole
- Utility Pole
- Catch Basin
- Manhole
- Sign
- Mail Box
- Existing Trees
- Existing Shrub

N/F
AMSI Investors
Deed Book 342 Page 559
Plan Book 60 Page 77 Lot#2
Tax Parcel No. 13-24-0799-178A

N/F
Capital City Properties LLC
Instrument # 201517259
Plan Book 27 Page 8 Lot#5
Tax Parcel No. 13-24-0799-177B

15' x 50'
Right Of Way
Plan Book 27 Page 6

Utility Pole
PPL 22751532339

N/F
William R. Grace
Instrument # 201925771
Plan Book 27 Page 8 Lot#4
Tax Parcel No. 13-24-0799-177C

N/F
William R. Grace
Instrument # 200911778
Plan Book 27 Page 8 Lot#3
Tax Parcel No. 13-24-0801-002

SURVEY NOTES

- THIS SURVEY WAS PERFORMED AND MAPPING PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH.
- TOPOGRAPHIC INFORMATION SHOWN ARE BASED ON A FIELD SURVEY PERFORMED BY TERRAVIZ GEOSPATIAL COMPLETED IN NOVEMBER, 2019.
- CONTOURS AND ELEVATIONS ARE BASED ON NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- BEARINGS ARE BASED ON PENNSYLVANIA STATE PLANE COORDINATES, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).
- UTILITY LOCATIONS ARE BASED ON SURFACE EVIDENCE AND LIMITED PA ONE-CALL MARKINGS EVIDENT AT THE TIME OF THE FIELD SURVEY. PA ONE-CALL SERIAL NO. 20192701538 AND 20193172821 WAS ASSIGNED ON NOVEMBER 13, 2019.
- THE SUBJECT PROPERTY DESCRIBED ON THIS SURVEY DOES NOT LIE WITHIN THE 100-YEAR FLOODPLAIN AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AND SHOWN ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR LOWER ALLEN TOWNSHIP, MAP NO. 420410263E, EFFECTIVE DATE MARCH 16, 2009.



PENNSYLVANIA ACT 287 (1974) AS AMENDED BY PENNSYLVANIA ACT 199 (2004) REQUIRES NO LESS THAN THREE (3) WORKING DAYS AND NO MORE THAN (10) WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH. PA ONE-CALL SERIAL NO. 20191683266

10/10/2021, KREITY, G:\PROJECTS\PA\1901881\DWG\01.DWG, BSA

© 2021 BL COMPANIES, INC. THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES.

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

Desc.
REVISED PER TOWNSHIP & COUNTY COMMENTS
DATE
REVISED PER TOWNSHIP COMMENTS

REVISIONS
Date
No.

Surveyed
Drawn
Reviewed
Scale
Project No.
Date

CAD File:
EX190188101

Title

EXISTING
CONDITIONS
MAP

Sheet No.

EX-1
No.03 of 14

LEGEND

- EXISTING PAVEMENT/GRAVEL TO BE REMOVED
- EXISTING FEATURE TO BE PROTECTED
- PROPERTY LINE
- UTILITY TO BE REMOVED
- Fence
- SANITARY SEWER LINE
- OVERHEAD WIRES
- UNDERGROUND ELECTRIC LINE
- Sanitary Sewer
- Water Line
- STORM SEWER LINE
- SIGN
- EXISTING TREES
- EXISTING SHRUB

N/F
AMSI Investors
Deed Book 342 Page 559
Plan Book 60 Page 77 Lot#2
Tax Parcel No. 13-24-0799-178A

REMOVE AND DISPOSE OF ENTIRE BUILDING INCLUDING BUT NOT LIMITED TO: WALLS, ROOF, SLABS, FLOORS, FOUNDATIONS, PIPES, INTERIOR FIXTURES, STAIRS, STEEL FRAMING, ETC. (ALL HAZARDOUS MATERIALS TO BE REMOVED AND DISPOSED OF ACCORDINGLY AND BY LICENSED HANDLER - SEE NOTES) COORDINATE WITH UTILITY COMPANIES FOR SPECIFICATIONS AND SCHEDULING OF DISCONNECTING AND CAPPING EXISTING BUILDING CONNECTIONS.

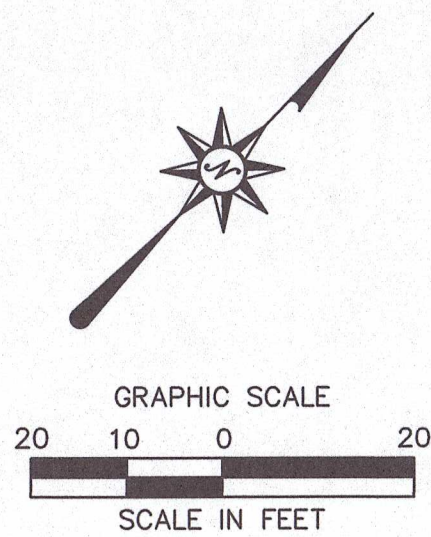
N/F
Capital City Properties LLC
Instrument # 201517259
Plan Book 27 Page 8 Lot#5
Tax Parcel No. 13-24-0799-177B

N/F
William R. Grace
Instrument # 200911778
Plan Book 27 Page 8 Lot#3
Tax Parcel No. 13-24-0801-002

N/F
William R. Grace
Instrument # 201925771
Plan Book 27 Page 8 Lot#4
Tax Parcel No. 13-24-0799-177C



PENNSYLVANIA ACT 287 (1974) AS AMENDED BY PENNSYLVANIA ACT 199 (2004) REQUIRES NO LESS THAN THREE (3) WORKING DAYS AND NO MORE THAN (10) WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH. PA ONE-CALL SERIAL NO. 20191683266



2601 Market Place, Suite 350
Harrisburg, PA 17110
(717) 651-9850
(717) 651-9858 Fax

PRELIMINARY / FINAL
LAND DEVELOPMENT PLAN
3709 HARTZDALE DRIVE
LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

DESIGNED PER TOWNSHIP & COUNTY COMMENTS
REVISED PER TOWNSHIP COMMENTS
REVISED PER TOWNSHIP COMMENTS

REVISIONS
No. 1
2
3

Designed C.J.S.
Drawn J.R.J.
Reviewed A.J.B.
Scale 1" = 20'
Project No. 1901881
Date 07/22/2020

CAD File: DM190188101

Title
DEMOLITION
PLAN

Sheet No.

DM-1
No.04 of 14

LEGEND	
	PROPERTY LINE
	BUILDING SETBACK LINE
	STANDARD DUTY BITUMINOUS PAVEMENT
	EDGE OF PAVEMENT
	PROPOSED SIGN
	MAN DOOR / GARAGE DOOR
	DECIDUOUS TREE/SHRUB
	EVERGREEN TREE/SHRUB

SITE PLAN NOTES

- THE OWNER SHALL PROVIDE ADDRESS DIRECTIONAL SIGNAGE NEXT TO THE EXISTING ADJACENT PROPERTY ADDRESS DIRECTIONAL SIGN ON HARTZDALE DRIVE.
- THE PROPOSED TENANT IS UNKNOWN AT THIS TIME. THE PARKING REQUIREMENTS/CALCULATIONS SHOWN ARE ADEQUATE FOR THE PROPOSED USE AT THIS TIME.
- THE PROPERTY OWNER IS RESPONSIBLE TO CONDUCT ANNUAL INSPECTIONS AND TO MAINTAIN THE BRIDGE IN A CONDITION SUFFICIENT TO CARRY EMERGENCY VEHICLES. A REPORT SHALL BE PROVIDED TO THE TOWNSHIP SUMMARIZING THE ANNUAL INSPECTIONS. ACCESS TO 3709 HARTZDALE DRIVE, PARCEL #13-24-0799-1770, WILL BE PROVIDED BY THE OWNER OF 3705 HARTZDALE DRIVE, PARCEL #13-24-0801-002.

OWNER

- PER A SITE VISIT ON 10/09/2020 BY A BL WETLAND SCIENTIST, THERE ARE NO WETLANDS LOCATED ON THE SUBJECT PROPERTY.
- THE SUBJECT PROPERTY DESCRIBED ON THE SURVEY DOES NOT LIE WITHIN THE 100-YEAR FLOODPLAIN AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AND SHOWN ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR LOWER ALLEN TOWNSHIP, MAP NO. 42041C0283E, EFFECTIVE DATE MARCH 16, 2009.
- THE PURPOSE OF THE EXISTING 50' ACCESS EASEMENT IS TO PROVIDE ACCESS TO THE FOLLOWING:
 - THE OWNER OF LOT #3, N/F WILLIAM R. GRACE
 - THE OWNER OF LOT #4, N/F WILLIAM R. GRACE
- PROVIDE SIGN F ON THE BOTH SIDES OF THE NORTHERN BRIDGE ACCESS.

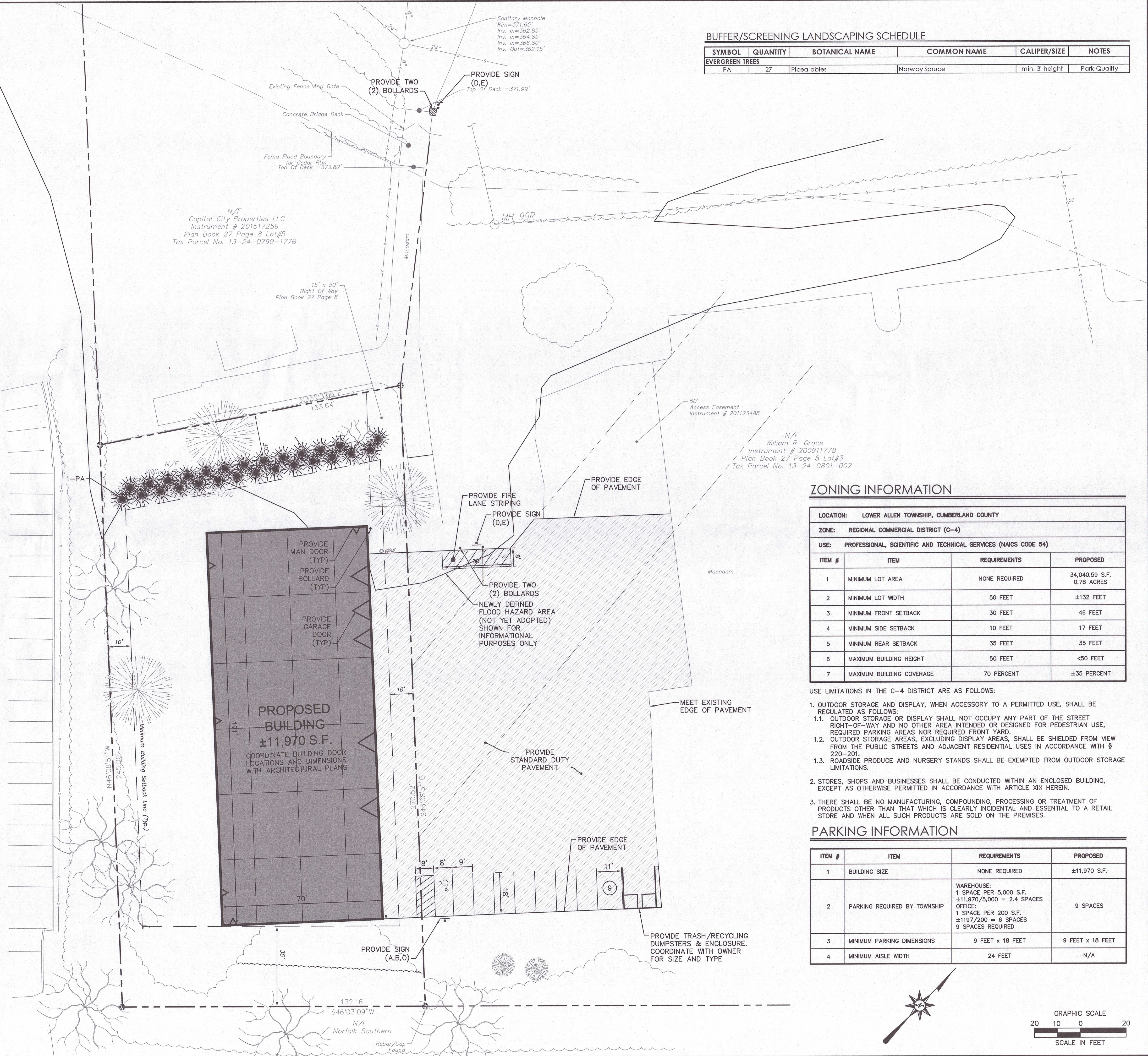
SIGN LEGEND

NO.	DOT NO./ SIGN SIZE	LEGEND	QTY.
A	R7-B 12"x18"		1
B	R7-BA 6"x12"		1
C	R7-BF 12"x18"		1
D	12"x18"		2
E	R7-4A 12"x18"		2
F	24"x24"		2

N/F
AMS Investors
Deed Book 342 Page 559
Plan Book 60 Page 77 Lot#2
Tax Parcel No. 13-24-0799-178A



PENNSYLVANIA ACT 287 (1974) AS AMENDED BY PENNSYLVANIA ACT 199 (2004) REQUIRES NO LESS THAN THREE (3) WORKING DAYS AND NO MORE THAN (10) WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH. PA ONE-CALL SERIAL NO. 20191683266



BUFFER/SCREENING LANDSCAPING SCHEDULE

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	CALIPER/SIZE	NOTES
EVERGREEN TREES					
PA	27	Picea abies	Norway Spruce	min. 3' height	Park Quality

ZONING INFORMATION

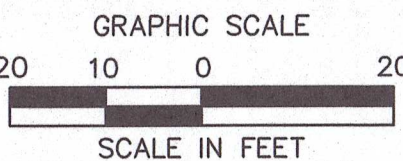
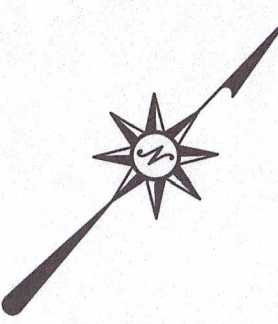
LOCATION: LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY			
ZONE: REGIONAL COMMERCIAL DISTRICT (C-4)			
USE: PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES (NAICS CODE 54)			
ITEM #	ITEM	REQUIREMENTS	PROPOSED
1	MINIMUM LOT AREA	NONE REQUIRED	34,040.59 S.F. 0.78 ACRES
2	MINIMUM LOT WIDTH	50 FEET	±132 FEET
3	MINIMUM FRONT SETBACK	30 FEET	46 FEET
4	MINIMUM SIDE SETBACK	10 FEET	17 FEET
5	MINIMUM REAR SETBACK	35 FEET	35 FEET
6	MAXIMUM BUILDING HEIGHT	50 FEET	<50 FEET
7	MAXIMUM BUILDING COVERAGE	70 PERCENT	±35 PERCENT

USE LIMITATIONS IN THE C-4 DISTRICT ARE AS FOLLOWS:

- OUTDOOR STORAGE AND DISPLAY, WHEN ACCESSORY TO A PERMITTED USE, SHALL BE REGULATED AS FOLLOWS:
 - OUTDOOR STORAGE OR DISPLAY SHALL NOT OCCUPY ANY PART OF THE STREET RIGHT-OF-WAY AND NO OTHER AREA INTENDED OR DESIGNED FOR PEDESTRIAN USE, REQUIRED PARKING AREAS NOR REQUIRED FRONT YARD.
 - OUTDOOR STORAGE AREAS, EXCLUDING DISPLAY AREAS, SHALL BE SHIELDED FROM VIEW FROM THE PUBLIC STREETS AND ADJACENT RESIDENTIAL USES IN ACCORDANCE WITH § 220-201.
 - ROADSIDE PRODUCE AND NURSERY STANDS SHALL BE EXEMPTED FROM OUTDOOR STORAGE LIMITATIONS.
- STORES, SHOPS AND BUSINESSES SHALL BE CONDUCTED WITHIN AN ENCLOSED BUILDING, EXCEPT AS OTHERWISE PERMITTED IN ACCORDANCE WITH ARTICLE XIX HEREIN.
 - THERE SHALL BE NO MANUFACTURING, COMPOUNDING, PROCESSING OR TREATMENT OF PRODUCTS OTHER THAN THAT WHICH IS CLEARLY INCIDENTAL AND ESSENTIAL TO A RETAIL STORE AND WHEN ALL SUCH PRODUCTS ARE SOLD ON THE PREMISES.

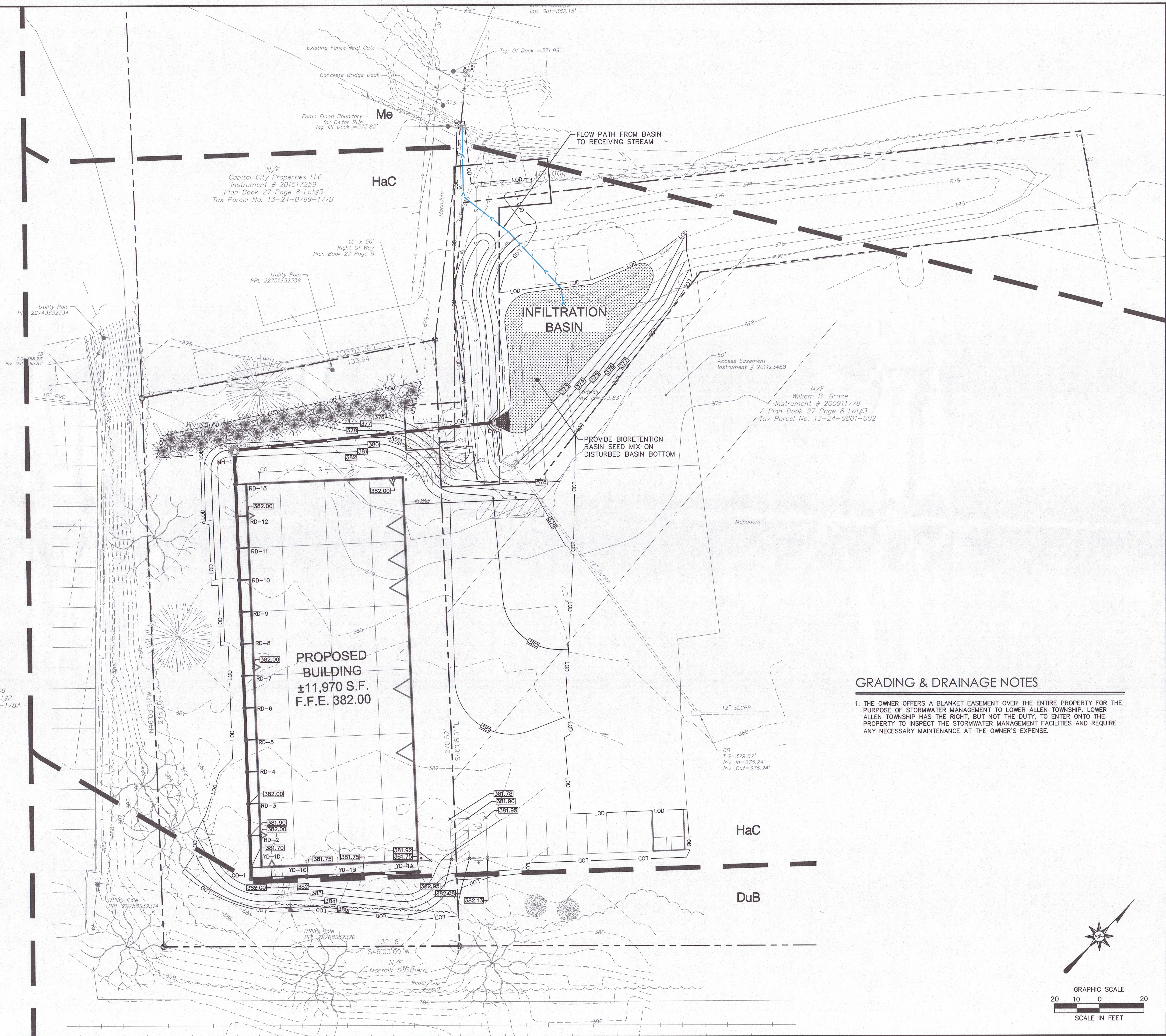
PARKING INFORMATION

ITEM #	ITEM	REQUIREMENTS	PROPOSED
1	BUILDING SIZE	NONE REQUIRED	±11,970 S.F.
2	PARKING REQUIRED BY TOWNSHIP	WAREHOUSE: 1 SPACE PER 5,000 S.F. ±11,970/5,000 = 2.4 SPACES OFFICE: 1 SPACE PER 200 S.F. ±1197/200 = 6 SPACES 9 SPACES REQUIRED	9 SPACES
3	MINIMUM PARKING DIMENSIONS	9 FEET x 18 FEET	9 FEET x 18 FEET
4	MINIMUM AISLE WIDTH	24 FEET	N/A



LEGEND

- PROPERTY LINE
- LOD LIMIT OF DISTURBANCE
- MAJOR CONTOUR
- MINOR CONTOUR
- PROPOSED 1" GRADES
- PROPOSED 5" GRADES
- SPOT ELEVATION
- STORM LINE
- BASIN SEED MIX

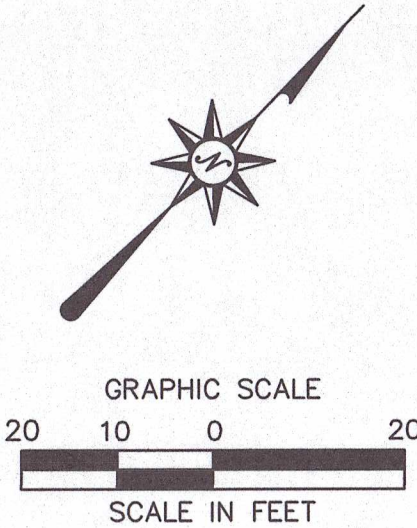


GRADING & DRAINAGE NOTES

1. THE OWNER OFFERS A BLANKET EASEMENT OVER THE ENTIRE PROPERTY FOR THE PURPOSE OF STORMWATER MANAGEMENT TO LOWER ALLEN TOWNSHIP. LOWER ALLEN TOWNSHIP HAS THE RIGHT, BUT NOT THE DUTY, TO ENTER ONTO THE PROPERTY TO INSPECT THE STORMWATER MANAGEMENT FACILITIES AND REQUIRE ANY NECESSARY MAINTENANCE AT THE OWNER'S EXPENSE.



PENNSYLVANIA ACT 287 (1974) AS AMENDED BY PENNSYLVANIA ACT 189 (2004) REQUIRES NO LESS THAN THREE (3) WORKING DAYS AND NO MORE THAN (10) WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH. PA ONE-CALL SERIAL NO. 20191683266



2601 Market Place, Suite 350
Harrisburg, PA 17110
(717) 651-9850
(717) 651-9858 Fax

PRELIMINARY / FINAL
LAND DEVELOPMENT PLAN
3709 HARTZDALE DRIVE
LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

DESIGNED PER TOWNSHIP & COUNTY COMMENTS
REVISED PER TOWNSHIP COMMENTS
REVISED PER TOWNSHIP COMMENTS

REVISIONS	No.	Date	Comments
	1	01/25/2021	
	2	06/17/2021	
	3		

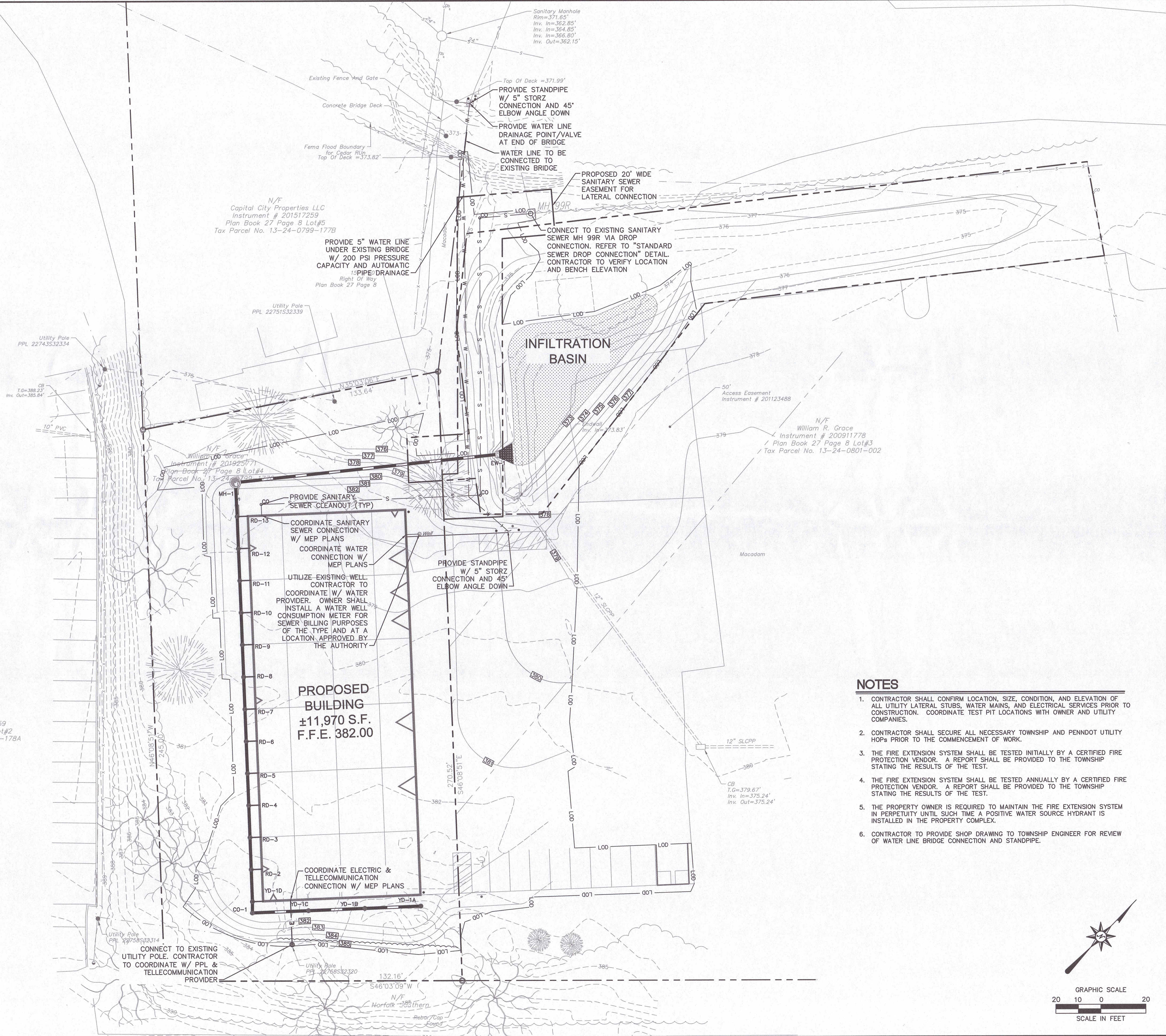
Designed C.J.S.
Drawn J.R.J.
Reviewed A.J.B.
Scale 1" = 20'
Project No. 1901881
Date 07/22/2020

CAD File: GD190188101
Title
GRADING AND DRAINAGE PLAN

Sheet No.

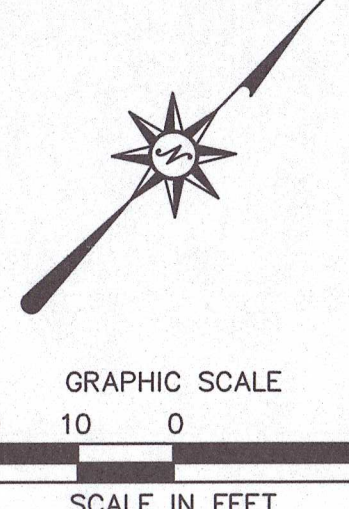
GD-1
No.06 of 14

LEGEND	
---	LOD
---	LIMIT OF DISTURBANCE
---	PROPERTY LINE
---	EASEMENT LINE
---	DOMESTIC/FIRE PROTECTION WATER LINE
---	SANITARY PIPE CENTER LINE
---	PRIMARY ELECTRIC / TELECOMMUNICATION LINE
---	GAS LINE
---	SANITARY CLEANOUT



NOTES

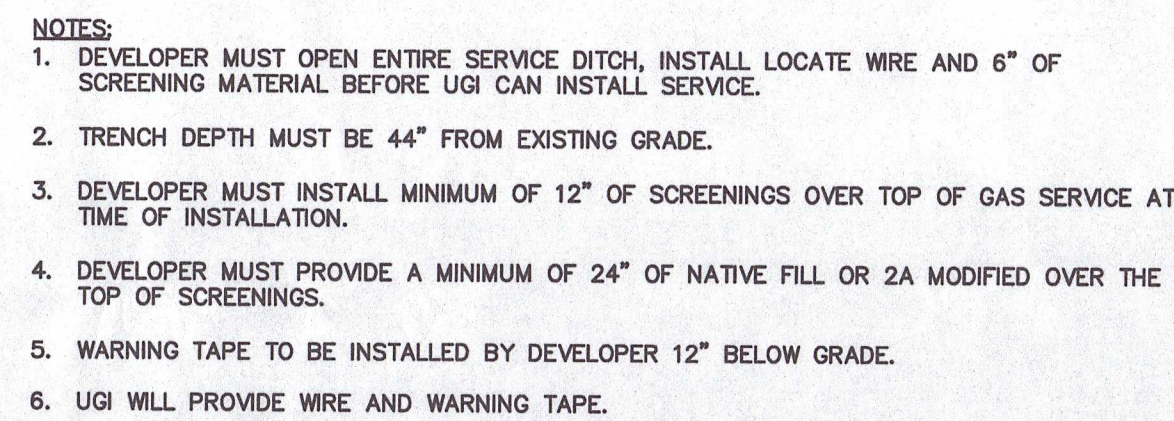
- CONTRACTOR SHALL CONFIRM LOCATION, SIZE, CONDITION, AND ELEVATION OF ALL UTILITY LATERAL STUBS, WATER MAINS, AND ELECTRICAL SERVICES PRIOR TO CONSTRUCTION. COORDINATE TEST PIT LOCATIONS WITH OWNER AND UTILITY COMPANIES.
- CONTRACTOR SHALL SECURE ALL NECESSARY TOWNSHIP AND PENNDOT UTILITY HOPS PRIOR TO THE COMMENCEMENT OF WORK.
- THE FIRE EXTENSION SYSTEM SHALL BE TESTED INITIALLY BY A CERTIFIED FIRE PROTECTION VENDOR. A REPORT SHALL BE PROVIDED TO THE TOWNSHIP STATING THE RESULTS OF THE TEST.
- THE FIRE EXTENSION SYSTEM SHALL BE TESTED ANNUALLY BY A CERTIFIED FIRE PROTECTION VENDOR. A REPORT SHALL BE PROVIDED TO THE TOWNSHIP STATING THE RESULTS OF THE TEST.
- THE PROPERTY OWNER IS REQUIRED TO MAINTAIN THE FIRE EXTENSION SYSTEM IN PERPETUITY UNTIL SUCH TIME A POSITIVE WATER SOURCE HYDRANT IS INSTALLED IN THE PROPERTY COMPLEX.
- CONTRACTOR TO PROVIDE SHOP DRAWING TO TOWNSHIP ENGINEER FOR REVIEW OF WATER LINE BRIDGE CONNECTION AND STANDPIPE.



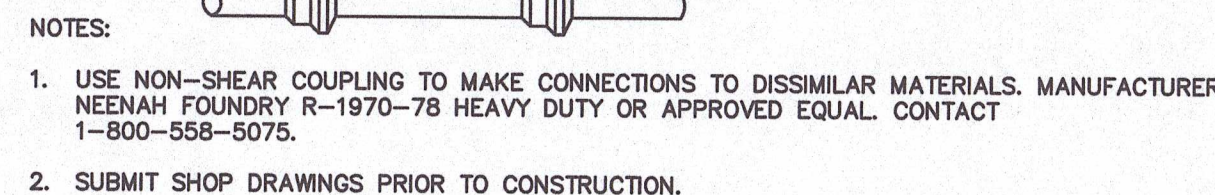
PENNSYLVANIA ACT 287 (1974) AS AMENDED BY PENNSYLVANIA ACT 199 (2004) REQUIRES NO LESS THAN THREE (3) WORKING DAYS AND NO MORE THAN (10) WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH. PA ONE-CALL SERIAL NO. 20191683266



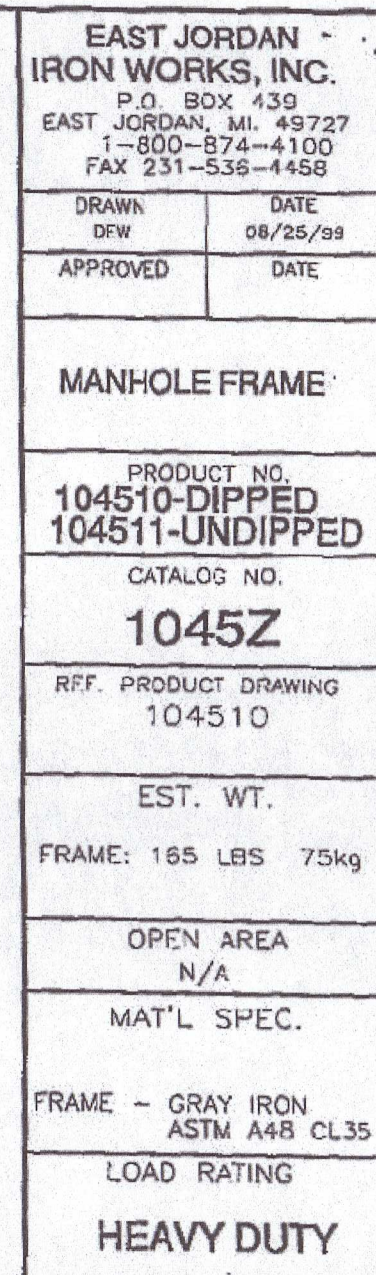
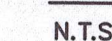
N.T.S



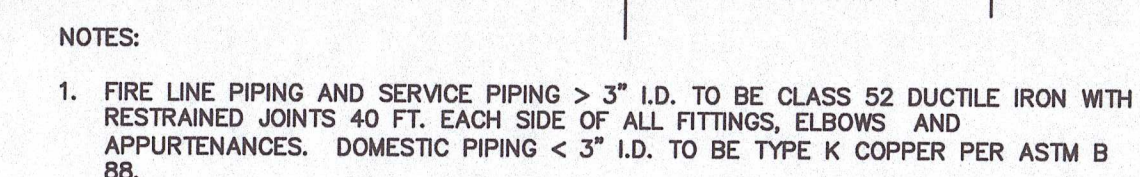
N.T.S



N.T.S



N.T.S



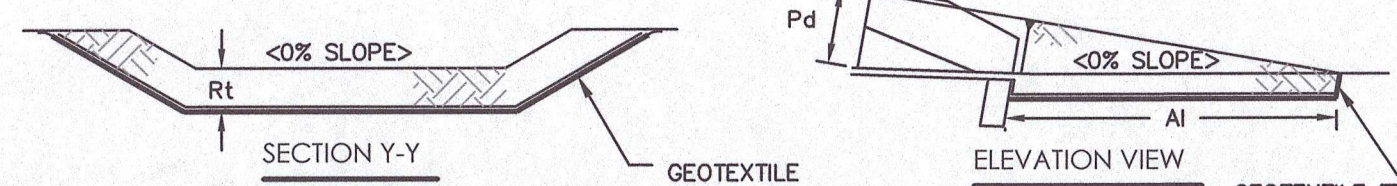
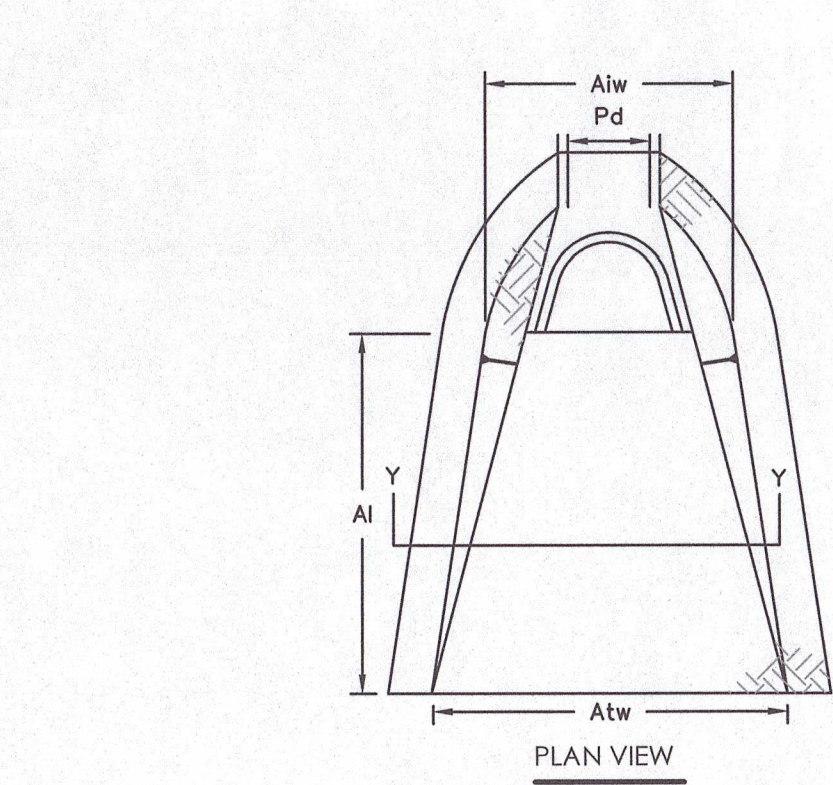
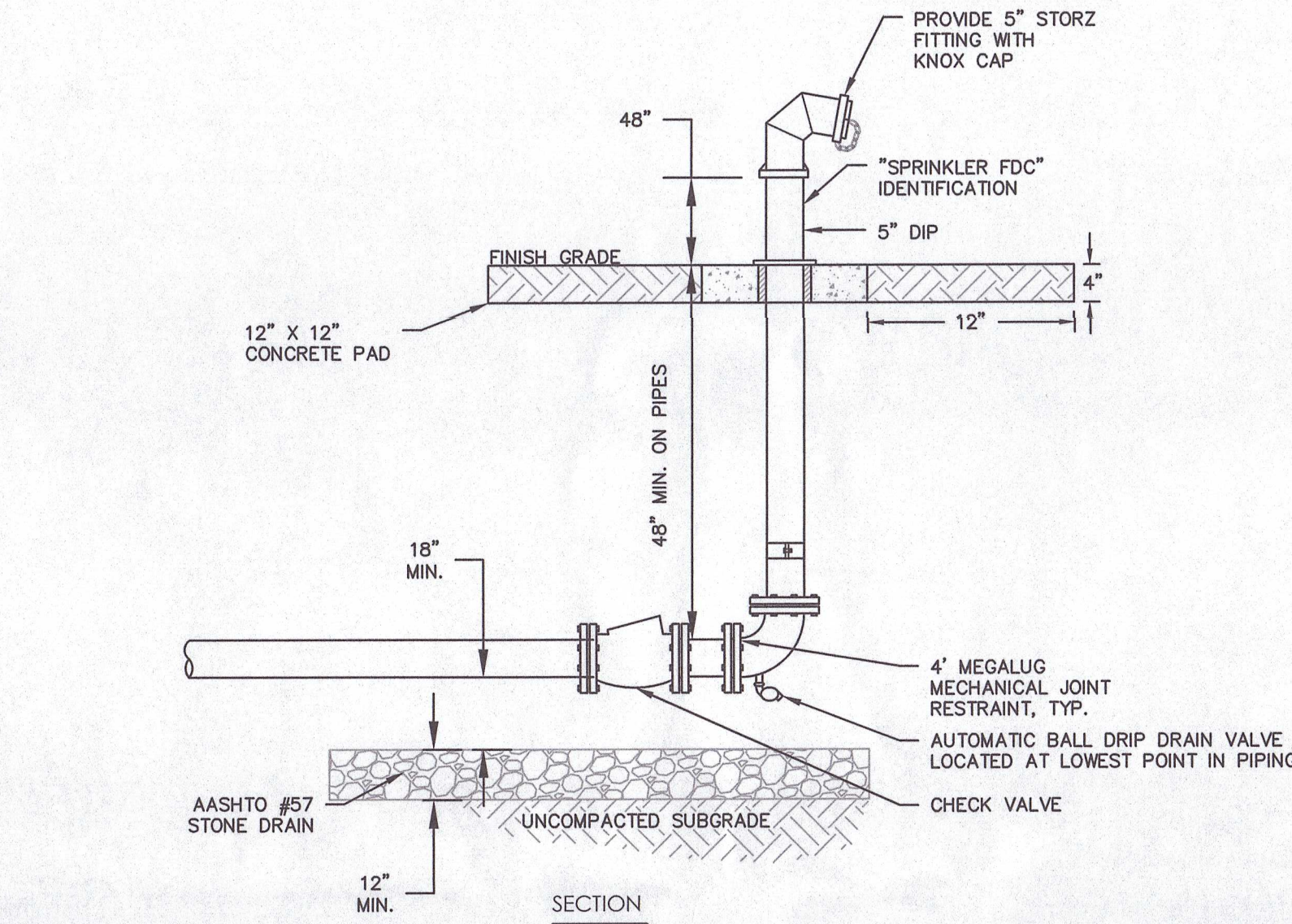
N.T.S.

10/11/2021, 4:51 PM: C:\PROJECTS\19\1901881\DWG\DWG-3

© 2021 BL COMPANIES, INC. THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES.

STANDPIPE DETAIL

N.T.S.



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP			APRON		
		SIZE (R-...)	THICK. Rt (IN)	LENGTH Al (FT)	LENGTH Al (FT)	INITIAL WIDTH Atw (FT)	TERMINAL WIDTH Atw (FT)
EW-1	12	3	9	4	4	3	4.6000

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

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

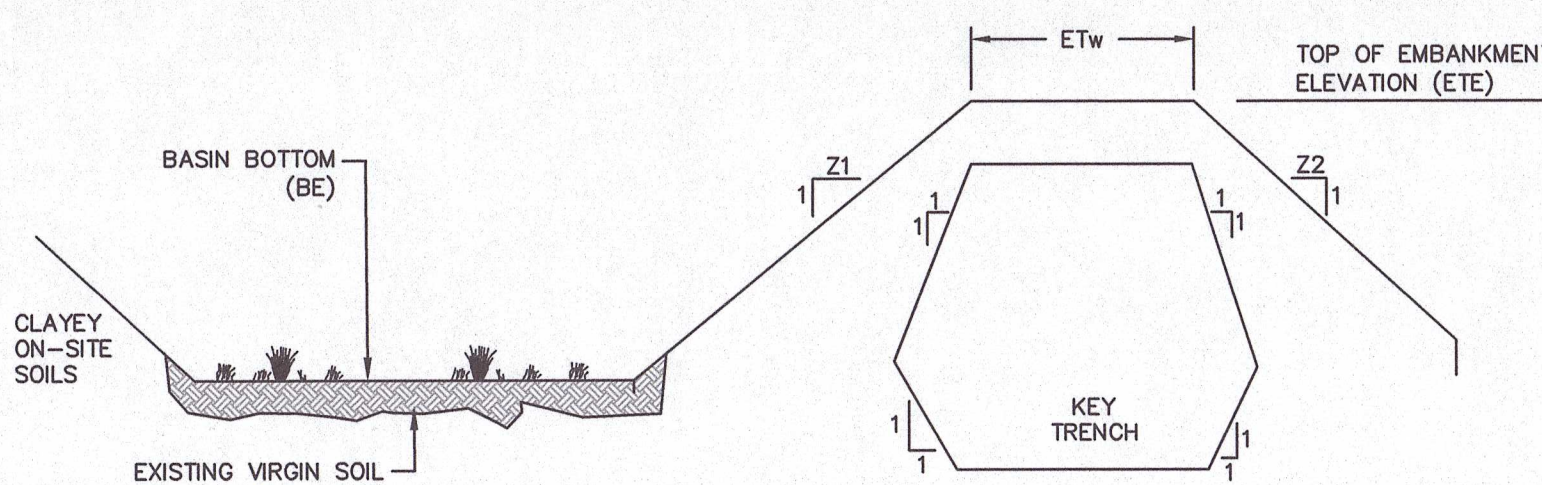
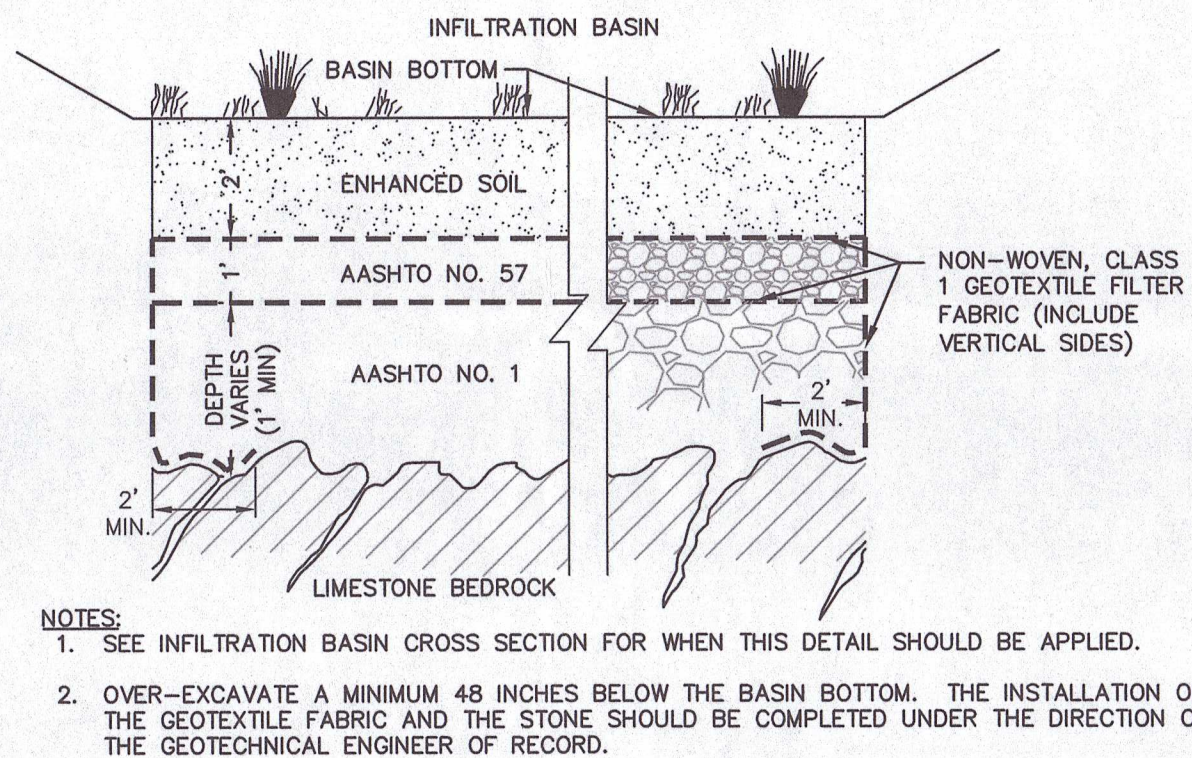
RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL DETAIL

N.T.S.

PAEC-9-1

ENGINEERED FILL MATERIAL SECTION

N.T.S.



BASIN NO.	Z1 (FT)	Z2 (FT)	EMBANKMENT				BOTTOM ELEV BE (FT)
			TOP ELEV ETE (FT)	TOP WIDTH ETW (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)	
1	3	3	377.00	8.00	2.00	4.00	373.00

NOTES:

- MAINTAIN A MINIMUM DEPTH TO BEDROCK OF 2 FEET, WHERE POSSIBLE. DURING SITE CONSTRUCTION, VIRGIN SOIL SHALL BE PROTECTED FROM COMPACTION DUE TO HEAVY EQUIPMENT OPERATION OR STORAGE OF FILL OR CONSTRUCTION MATERIAL. INFILTRATION AREAS SHALL BE PROTECTED FROM SEDIMENTATION. AREAS THAT ARE ACCIDENTALLY COMPACTED OR GRADED SHALL BE REMEDIATED TO RESTORE SOIL COMPOSITION AND POROSITY. ADEQUATE DOCUMENTATION TO THIS EFFECT SHALL BE SUBMITTED FOR REVIEW BY THE LOWER ALLEN TOWNSHIP ENGINEER. ALL AREAS DESIGNATED FOR INFILTRATION SHALL NOT RECEIVE RUNOFF UNTIL THE CONTRIBUTORY DRAINAGE AREA HAS ACHIEVED FINAL STABILIZATION.
- IF BEDROCK IS ENCOUNTERED DURING EXCAVATION TO BASIN BOTTOM, UTILIZE THE ENGINEERED FILL MATERIAL SECTION.

INFILTRATION BASIN CROSS SECTION

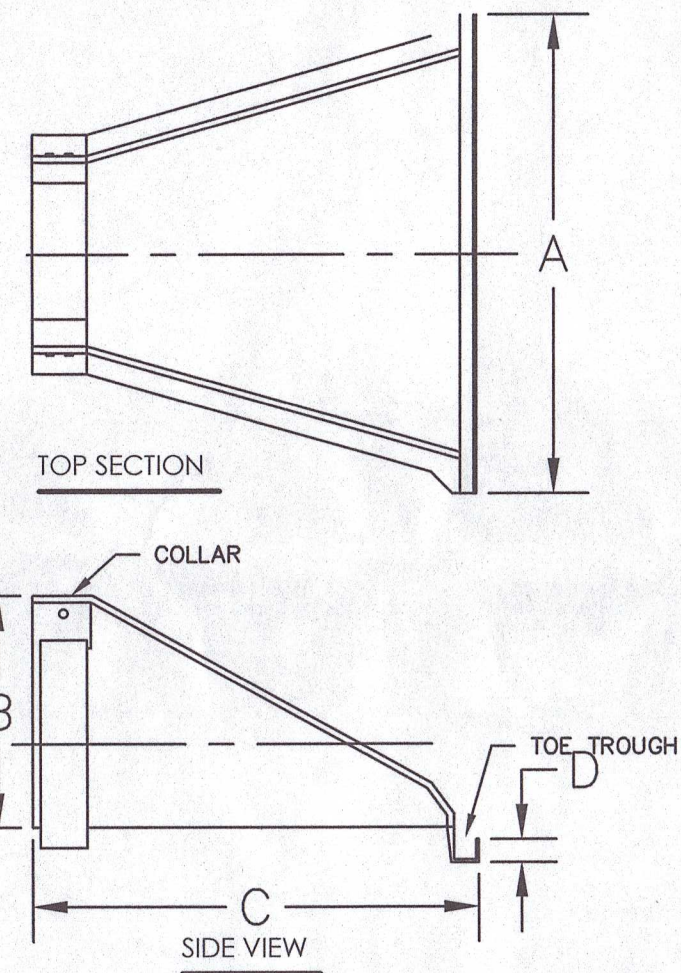
N.T.S.

OPERATION & MAINTENANCE PROGRAM FOR BMPs

- THE PURPOSE OF THESE INSTRUCTIONS IS TO IDENTIFY THE OWNERSHIP AND MAINTENANCE ACTIVITIES ASSOCIATED WITH THE PROPOSED BMPs. THE AFOREMENTIONED FACILITIES SHALL BE THE RESPONSIBILITY OF THE PERMIT APPLICANT (PERMITEE).
- ALL PCSM BMPs WILL BE INSPECTED ACCORDING TO THE SCHEDULES LISTED BELOW. A WRITTEN REPORT MUST BE COMPLETED DOCUMENTING EACH INSPECTION AND ANY REPAIR, REPLACEMENT OR MAINTENANCE ACTIVITY.
- SOIL, TRASH, DEBRIS OR OTHER MATERIALS REMOVED FROM PCSM BMPs SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO WASTES, UNUSED BUILDING MATERIALS OR OTHER MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- ALL DAMAGED OR NON-FUNCTIONAL BMPs SHALL BE REPAIRED IMMEDIATELY. ANY PCSM BMPs THAT CANNOT BE REPAIRED MUST BE REPLACED AS SOON AS PRACTICABLE.
- THE ENTITY CONDUCTING THE INSPECTION SHALL BE REQUIRED TO SUBMIT A REPORT TO THE MUNICIPALITY ANNUALLY.
- THE PERMIT APPLICANT SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF PERMANENT STORMWATER FACILITIES LOCATED ON THE SUBJECT PROPERTY. PERMANENT MAINTENANCE OF THE STORM SYSTEM AFTER ACCEPTANCE WILL PRIMARILY CONSIST OF ROUTINE CLEANING OF ACCUMULATED SEDIMENT AND DEBRIS BY FACILITY STAFF OR PRIVATE CONTRACTORS. THE SPECIFIC MAINTENANCE STEPS AND SCHEDULE ARE AS FOLLOWS:

INFILTRATION BASIN	
OPERATION & MAINTENANCE PROCEDURES	
ACTIVITY	SCHEDULE
DECOMPACT OR OTHERWISE AERATE THE BASIN BOTTOM TO A MINIMUM DEPTH OF 8". SEED WITH PLANTING MIX SHOWN ON APPROVED PLANS. QUALIFIED PROFESSIONAL OR THEIR DESIGNEE SHALL ENSURE THAT DESIGN INFILTRATION RATE IS BEING ACHIEVED. BASIN 1: 0.50 TO 10.00 IN/HR	AT CONSTRUCTION OF PERMANENT FACILITY
FIRST GROWING SEASON: WHENEVER VEGETATION REACHES A HEIGHT OF 18-24", TRIM TO A HEIGHT OF 8". HAND PULL PROBLEM WEEDS. SECOND GROWING SEASON: PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2", TRIM ALL VEGETATION DOWN TO 2". HAND PULL PROBLEM WEEDS.	FIRST AND SECOND GROWING SEASONS, AND AS NEEDED
REMOVE LITTER AND DEBRIS. INSPECT FOR SEDIMENT BUILDUP, EROSION, AND VEGETATIVE CONDITIONS. STABILIZE ERODED BANKS. REPAIR UNDERCUT AND ERODED AREAS AT INFLOW AND OUTFLOW STRUCTURES, AND RESEED AS NECESSARY TO ENSURE STABILIZATION. CONTACT QUALIFIED PROFESSIONAL IF SIGNIFICANT SEDIMENT BUILDUP (I.E. POND VOLUME HAS BEEN REDUCED BY 10%) OR EROSION HAS OCCURRED.	TWICE PER YEAR
INSPECT FACILITY FOR SIGNS OF WEEDS OR DAMAGE TO STRUCTURES. NOTE ERODED AREAS. IF DEAD OR DYING GRASS ON THE BOTTOM IS OBSERVED, CHECK TO ENSURE THAT WATER IS PERCOLATING WITHIN THE DESIGN DEWATERING TIME (SEE BELOW).	TWICE PER YEAR
IF AFTER A 2-YEAR STORM EVENT, WATER HAS NOT INFILTRATED WITHIN THE DESIGN DEWATERING TIME (SEE BELOW), WAIT UNTIL AFTER THE NEXT 2-YEAR STORM EVENT TO SEE IF DESIGN DEWATERING TIME HAS BEEN ACHIEVED. IF THE BASIN IS STILL NOT DEWATERING APPROPRIATELY, CONTACT A QUALIFIED PROFESSIONAL TO EVALUATE THE BMP AND CORRECT THE DETERMINED MALFUNCTION TO ACHIEVE DEWATERING TIMES AS FOLLOWS: BASIN 1: 24-72 HOURS	TWICE PER YEAR FOR FIRST THREE YEARS
1. VEGETATION ALONG THE SURFACE OF THE BASIN BOTTOM SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE. 2. VEGETATIVE COVER SHALL BE MAINTAINED AT A MINIMUM OF 95%. 3. VEHICLES SHOULD NOT BE PARKED OR DRIVEN ON BASIN BOTTOM, AVOID COMPACTION. 4. DURING PERIODS OF EXTENDED DROUGHT, INFILTRATION BASIN MAY REQUIRE WATERING.	

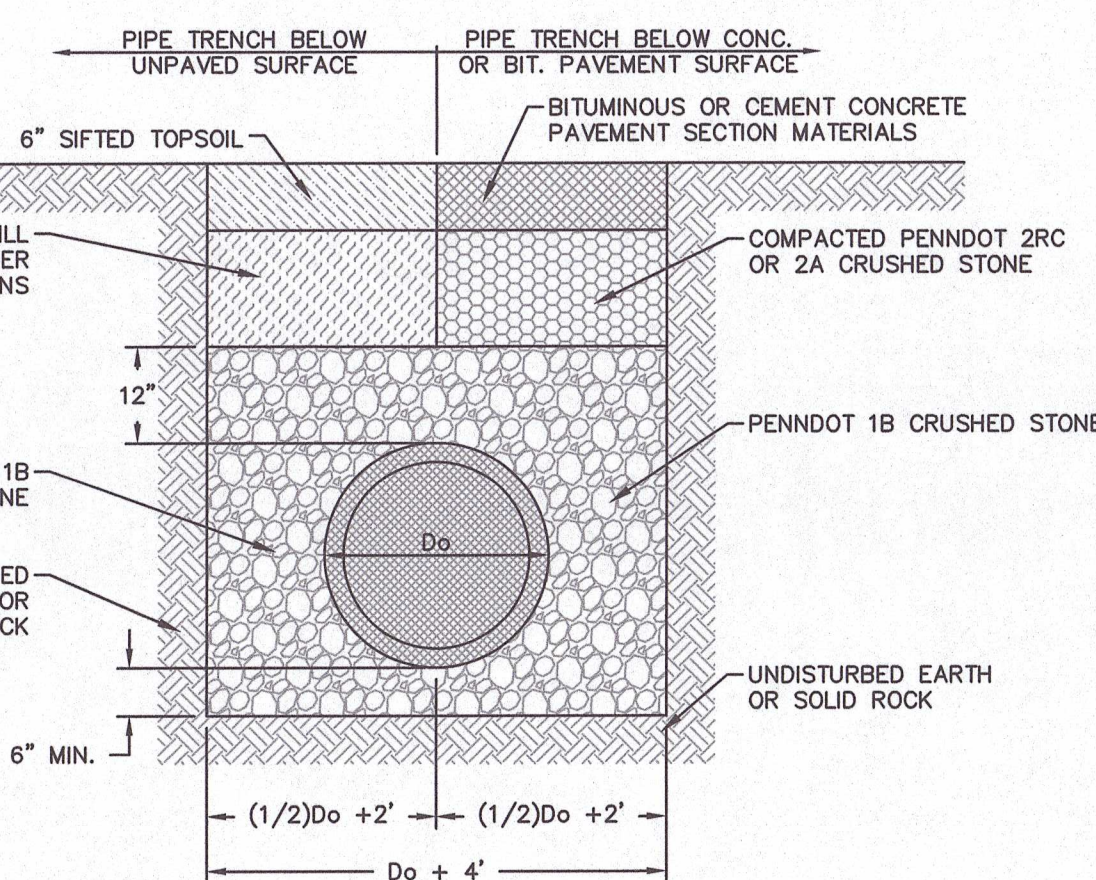
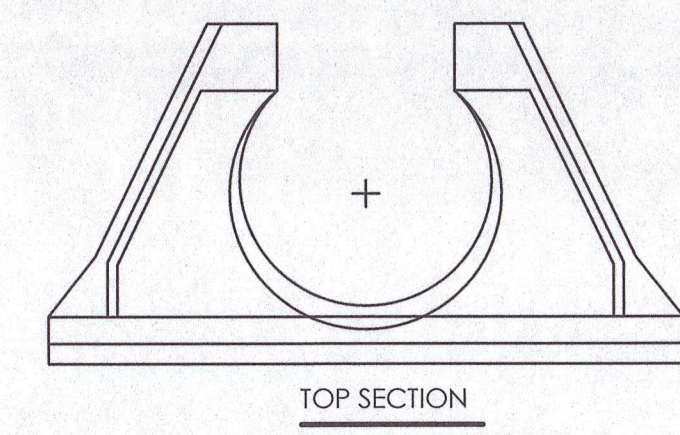
STORMWATER COLLECTION/CONVEYANCE	
OPERATION & MAINTENANCE PROCEDURES	
ACTIVITY	SCHEDULE
INLETS & CATCH BASINS SHOULD BE CLEANED OF DEBRIS. REPAIRS SHOULD BE MADE AS SOON AS PROBLEMS ARISE.	CLEAN ONCE PER YEAR & REPAIR AS NEEDED
INSPECT OUTFALL STRUCTURES QUARTERLY DURING 1ST YEAR & ONCE PER YEAR THEREAFTER	QUARTERLY & ONCE PER YEAR
COLLECTION/CONVEYANCE SYSTEMS SHOULD BE INSPECTED TWICE PER YEAR MINIMUM.	TWICE PER YEAR
GENERAL MAINTENANCE NOTES: 1. VACTOR TRUCKS MAY BE AN EFFICIENT CLEANING MECHANISM. 2. CATCH BASINS SHOULD BE CLEANED BEFORE HALF FULL.	



HDPE FLARED END DETAIL

N.T.S.

DIMENSION	PIPE DIAMETER					
	10"/12"	15"	18"	24"	30"	36"
A	42"	41"	49"	59.5"	88"	88"
B	14.5"	19"	22"	28"	36"	43"
C	33"	34"	43"	48"	63.5"	66.5"
D	6"	6"	6"	6"	6"	6"



STORM PIPE TRENCH SECTION

N.T.S.

LEGEND

- PROPERTY LINE
- LOD LIMITS OF DISTURBANCE
- PROPOSED 1' GRADES
- PROPOSED 5' GRADES
- STORM LINE
- YARD DRAIN / CLEANOUT
- SF COMPOST FILTER SOCK
- ROCK CONSTRUCTION ENTRANCE
- IP FILTER BAG INLET PROTECTION
- STONE & CONCRETE BLOCK INLET PROTECTION
- SOIL BOUNDARY
- HaB SOIL LABEL
- EROSION CONTROL BLANKET (NAG S75)
- BASIN SEED MIX
- COMPOST FILTER SOCK I.D.
- X TEMP. CONSTRUCTION FENCE

COMPOST FILTER SOCK TABLE

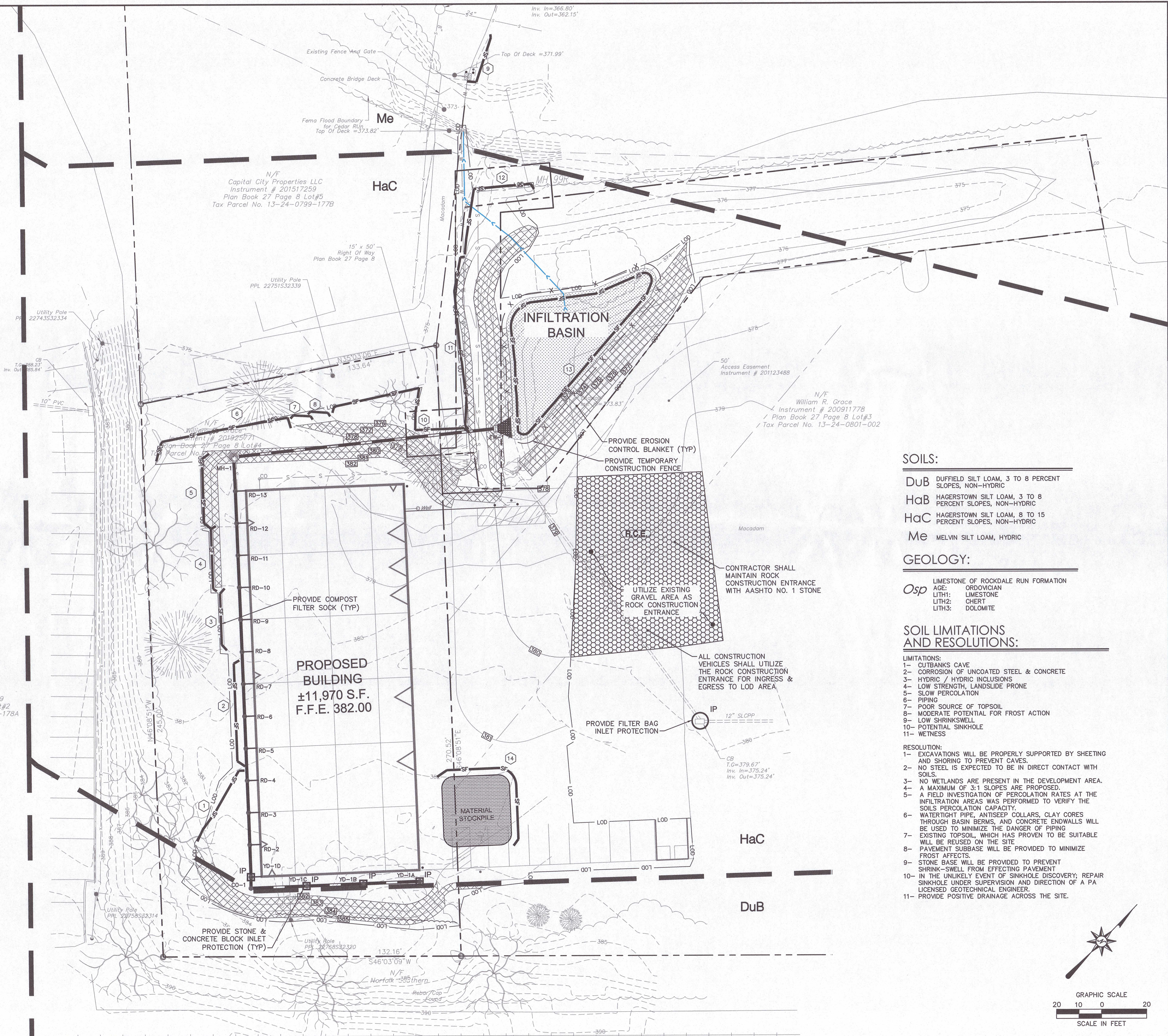
SOCK NO.	Dia. In.	LOCATION
1	12	southwest of building
2	12	southwest of building
3	12	west of building
4	12	west of building
5	12	west of building
6	12	northwest of building
7	12	northwest of building
8	12	northwest of building
9	12	below northern standpipe
10	12	north of building
11	12	west of basin
12	12	west of basin
13	12	bottom of basin
14	12	below material stockpile

LIMIT OF DISTURBANCE

THE PROPOSED 3709 HARTZDALE DRIVE PROJECT LIMIT OF DISTURBANCE IS 0.99 ACRES.



PENNSYLVANIA ACT 287 (1974) AS AMENDED BY PENNSYLVANIA ACT 199 (2004) REQUIRES NO LESS THAN THREE (3) WORKING DAYS AND NO MORE THAN (10) WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH. PA ONE-CALL SERIAL NO. 20191683266



SOILS:

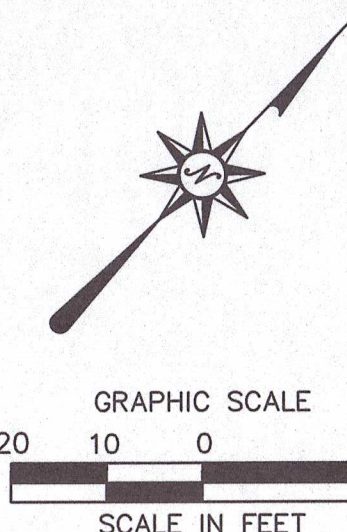
- DuB BUFFIELD SILT LOAM, 3 TO 8 PERCENT SLOPES, NON-HYDRIC
- HaB HAGERSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES, NON-HYDRIC
- HaC HAGERSTOWN SILT LOAM, 8 TO 15 PERCENT SLOPES, NON-HYDRIC
- Me MELVIN SILT LOAM, HYDRIC

GEOLOGY:

- Osp LIMESTONE OF ROCKDALE RUN FORMATION
- AGE: ORDOVICIAN
- LITH1: LIMESTONE
- LITH2: CHERT
- LITH3: DOLOMITE

SOIL LIMITATIONS AND RESOLUTIONS:

- LIMITATIONS:
- 1- CUTBANKS CAVE
 - 2- CORROSION OF UNCOATED STEEL & CONCRETE
 - 3- HYDRIC / HYDRIC INCLUSIONS
 - 4- LOW STRENGTH, LANDSLIDE PRONE
 - 5- SLOW PERCOLATION
 - 6- PIPING
 - 7- POOR SOURCE OF TOPSOIL
 - 8- MODERATE POTENTIAL FOR FROST ACTION
 - 9- LOW SHRINKSWELL
 - 10- POTENTIAL SINKHOLE
 - 11- WETNESS
- RESOLUTION:
- 1- EXCAVATIONS WILL BE PROPERLY SUPPORTED BY SHEETING AND SHORING TO PREVENT CAVES.
 - 2- NO STEEL IS EXPECTED TO BE IN DIRECT CONTACT WITH SOILS.
 - 3- NO WETLANDS ARE PRESENT IN THE DEVELOPMENT AREA.
 - 4- A MAXIMUM OF 3:1 SLOPES ARE PROPOSED.
 - 5- A FIELD INVESTIGATION OF PERCOLATION RATES AT THE INFILTRATION AREAS WAS PERFORMED TO VERIFY THE SOILS PERCOLATION CAPACITY.
 - 6- WATERTIGHT PIPE, ANTISEEP COLLARS, CLAY CORES THROUGH BASIN BERMS, AND CONCRETE ENDWALLS WILL BE USED TO MINIMIZE THE DANGER OF PIPING EXISTING TOPSOIL, WHICH HAS PROVEN TO BE SUITABLE WILL BE REUSED ON THE SITE
 - 7- PAVEMENT SUBBASE WILL BE PROVIDED TO MINIMIZE FROST AFFECTS.
 - 8- STONE BASE WILL BE PROVIDED TO PREVENT SHRINK-SWELL FROM EFFECTING PAVEMENT.
 - 9- IN THE UNLIKELY EVENT OF SINKHOLE DISCOVERY; REPAIR SINKHOLE UNDER SUPERVISION AND DIRECTION OF A PA LICENSED GEOTECHNICAL ENGINEER.
 - 11- PROVIDE POSITIVE DRAINAGE ACROSS THE SITE.



2601 Market Place, Suite 350
Harrisburg, PA 17110
(717) 651-9850
(717) 651-9858 Fax

PRELIMINARY / FINAL
LAND DEVELOPMENT PLAN
3709 HARTZDALE DRIVE
LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

DESIGNED PER TOWNSHIP & COUNTY COMMENTS
REVISED PER TOWNSHIP COMMENTS
REVISED PER TOWNSHIP COMMENTS

REVISIONS
No. 1
2
3

Designed C.J.S.
Drawn J.R.J.
Reviewed A.J.B.
Scale 1" = 20'
Project No. 1901881
Date 07/22/2020

CAD File: EC190188101-LD
Title
EROSION & SEDIMENTATION CONTROL PLAN

Sheet No.

EC-1
No. 11 of 14

STANDARD E&S NOTES

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THESE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

CUMBERLAND COUNTY CONSERVATION DISTRICT
310 ALLEN ROAD, ROOM 301
CARLSLE, PA 17013
P: 717.240.7812

2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION, THE E&S PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.

5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.

7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.

8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.

9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT.

10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 2601. ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.

13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.

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

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

16. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.

17. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.

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

19. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHENEVER POSSIBLE PRIOR TO SEEDING.

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

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

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

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

24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.

27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.

28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION, CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

29. E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.

31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.

32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.

33. FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
33. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

34. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.

35. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTION LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.

36. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/BASIN OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.

37. SEDIMENT BASINS AND/OR TRAPS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.

38. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.

39. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

40. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.

41. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS.
- MULCHING
- MULCHES SHOULD BE APPLIED AT THE RATES SHOWN IN TABLE 11.6
- STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL – ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.
- POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON WINDY DAYS. A 24-HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45° ARE TYPICALLY REQUIRED. APPLICATION SHOULD GENERALLY BE HEAVIEST AT EDGES OF SEEDED AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ONTO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE.
- SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES.
- MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%. WOOD FIBER HYDROMULCH MAY BE APPLIED ON STEEPER SLOPES PROVIDED A TACKIFIER IS USED. THE APPLICATION RATE FOR ANY HYDROMULCH SHOULD BE 2,000 LB/ACRE AT A MINIMUM.
- | TABLE 11.6 | | | | |
|-------------------------|-------------------------|-------------------|-------------------|--|
| MULCH APPLICATION RATES | | | | |
| MULCH TYPE | APPLICATION RATE (MIN.) | | | NOTES |
| | PER ACRE | PER 1,000 SQ. FT. | PER 1,000 SQ. YD. | |
| 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 CHIPS | 4-6 TONS | 185-275 LB. | 1,650-2,500 LB. | MAY PREVENT GERMINATION OF GRASSES AND LEGUMES |
| HYDROMULCH | 1 TON | 47 LB. | 415 LB. | SEE LIMITATIONS ABOVE |
- SOILS
- DuB

DUFFIELD SILT LOAM, 3 TO 8 PERCENT SLOPES, NON-HYDRIC

HaB

HAGERSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES, NON-HYDRIC

HaC

HAGERSTOWN SILT LOAM, 8 TO 15 PERCENT SLOPES, NON-HYDRIC

Me

MELVIN SILT LOAM, HYDRIC
- SOIL LIMITATIONS AND RESOLUTIONS
- LIMITATIONS:

•

CUTBANKS CAVE

•

CORROSION OF UNCOATED STEEL AND CONCRETE

•

DROUGHTY

•

EASILY ERODIBLE

•

SEASONAL HIGH WATER TABLE

•

HYDRIC/HYDRIC INCLUSIONS

•

LOW STRENGTH OR LANDSLIDE PRONE

•

SLOW PERCOLATION

•

PIPING

•

POOR SOURCE OF TOPSOIL

•

MODERATE POTENTIAL FOR FROST ACTION

•

LOW SHRINK-SWELL

•

POTENTIAL SINKHOLES

RESOLUTIONS:

•

EXCAVATION WILL BE PROPERLY SUPPORTED BY SHEETING AND SHORING TO PREVENT CAVES

•

NO UNPROTECTED STEEL IS EXPECTED TO BE IN DIRECT CONTACT WITH SOILS.

•

NO WETLANDS ARE PRESENT IN THE DEVELOPMENT AREA.

•

PROVIDE POSITIVE DRAINAGE ACROSS THE SITE.

•

STONE BASE WILL BE PROVIDED TO PREVENT SHRINK-SWELL FROM EFFECTING FINISHED SURFACES.

•

EROSION CONTROL MATTING AND IMMEDIATE STABILIZATION WILL BE USED ON ALL STEEP SLOPES TO LIMIT EROSION.

•

SINKHOLES WILL BE STABILIZED AS INDICATED ON THE PLAN.

•

SATISFACTORY SOIL AND FILL COMPACTION SPECIFICATIONS ARE INCLUDED ON THE PLAN TO ADDRESS THE CLAYEY SUBSOIL, SHRINK/SWELL POTENTIAL, AND COMPACTION LIMITATIONS.
- TEMPORARY SEEDING FOR SOIL STABILIZATION
- | 1. SEEDING MIXTURE TYPE I (TOPSOIL STOCKPILES) SPECIES: | ANNUAL RYEGRASS (70%)
PERENNIAL RYEGRASS (30%) | |
|---|---|----------|
| | 95%
4LBS./MSF | 10-10-10 |
| % PURE LIVE SEED:
APPLICATION RATE:
FERTILIZER TYPE:
FERT. APPLICATION RATE:
LIMING RATE:
MULCH TYPE:
MULCH RATE:
ANCHOR MATERIAL:
ANCHORING METHOD:
ANCHORING RATE OF APPLICATION:
SEEDING DATE: | 12.5 LBS/1,000 SF
40 LBS/1,000 SF
STRAW
140 LBS/1,000 SF
EC3000 COPOLYMER TACKIFIER
SLURRY, MIX AND SPRAY
3 LBS/ACRE
AS REQUIRED | |
- SEED MIXTURES
- CONFORMING TO THE PENNSYLVANIA SEED ACT OF 1965 (ACT NO. 187) AND AMENDMENTS, AND REGULATIONS OF THE PENNSYLVANIA DEPARTMENT OF AGRICULTURE, BUREAU OF PLANT INDUSTRY. HAVE THE PENNSYLVANIA DEPARTMENT OF AGRICULTURE, BUREAU OF PLANT INDUSTRY, CONDUCT PURITY AND GERMINATION ANALYSIS, FOLLOWING THE CURRENT RULES FOR TESTING SEEDS, OF THE ASSOCIATION OF OFFICIAL SEED ANALYSIS.
- USE KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS, CREEPING RED FESCUE, CHEWINGS FESCUE, HARD FESCUE, AND BIRDSFOOT TREFOIL SEED.
- USE SEED, PRETESTED BY THE PENNSYLVANIA DEPARTMENT OF AGRICULTURE, IN 10-POUND (NET) WATERPROOF CONTAINERS, WITH A TAG ATTACHED TO EACH BAG.
- USE A PREMIXED SEED WITH AN INSPECTION TAG, STAMPED, DATED, AND SIGNED BY THE DEPARTMENT OF AGRICULTURE INSPECTOR SEWN OR STAPLED TO THE OUTSIDE OF EACH BAG. DO NOT USE SEED FROM CONTAINERS THAT ARE NOT SEALED OR THAT HAVE BEEN STORED WITH HERBICIDES.
- DO NOT USE SEED, UNLESS IT HAS BEEN INSPECTED AND SAMPLED, AS SPECIFIED, OR SAMPLED BY INDIVIDUAL SPECIES AND LOT NUMBER, AND MIXED, ON THE PROJECT, UNDER DEPARTMENT SUPERVISION. DO NOT USE SEED WHICH HAS A TEST DATE OLDER THAN NINE MONTHS.
- PERMANENT SEED MIXTURES:
- %

PURE LIVE SEED: VARIES WITH SEEDING MIXTURE - MINIMUM 95%
ANCHOR MATERIAL: EC3000 COPOLYMER TACKIFIER
ANCHORING METHOD: SLURRY, MIX AND SPRAY
ANCHORING RATE OF APPLICATION: 3 LBS/ACRE
SEEDING DATES: MARCH 15-MAY 30 AND AUGUST 15-OCTOBER 15
- BASIN PLANTING SEED MIX
- | Retention Basin Floor Mix - Low Maintenance (ERNMX-126)* | |
|--|--|
| Seeding Rate | 20-40 lb per acre |
| Mix Type | Uplands & Meadows |
| Species List | 20.0% Puccinellia distans, 'Fults' (Alkaligrass, 'Fults') |
| | 19.0% Panicum clandestinum, 'Tigra' (Deertongue, 'Tigra') |
| | 18.0% Agrostis stolonifera (Creeping Bentgrass) |
| | 18.0% Elymus virginicus, PA Ecotype (Virginia Wildrye, PA Ecotype) |
| | 15.0% Poa palustris (Fowl Bluegrass) |
| | 5.0% Carex villosoidea, PA Ecotype (Fox Sedge, PA Ecotype) |
| | 3.0% Juncus effusus (Soft Rush) |
| | 2.0% Carex scoparia, PA Ecotype (Blunt Broom Sedge, PA Ecotype) |
- *OR APPROVED EQUAL
- ERNMX-126 IS PROVIDED BY:
- ERNST SEEDS
8884 MERCER PIKE, MEADVILLE, PA 16335
800-875-3321
HTTPS://WWW.ERNSTSEED.COM/
- MULCHING
- MULCHES SHOULD BE APPLIED AT THE RATES SHOWN IN TABLE 11.6
- STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL – ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.
- POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON WINDY DAYS. A 24-HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45° ARE TYPICALLY REQUIRED. APPLICATION SHOULD GENERALLY BE HEAVIEST AT EDGES OF SEEDED AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ONTO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE.
- SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES.
- MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%. WOOD FIBER HYDROMULCH MAY BE APPLIED ON STEEPER SLOPES PROVIDED A TACKIFIER IS USED. THE APPLICATION RATE FOR ANY HYDROMULCH SHOULD BE 2,000 LB/ACRE AT A MINIMUM.
- | TABLE 11.6 | | | | |
|-------------------------|-------------------------|-------------------|-------------------|--|
| MULCH APPLICATION RATES | | | | |
| MULCH TYPE | APPLICATION RATE (MIN.) | | | NOTES |
| | PER ACRE | PER 1,000 SQ. FT. | PER 1,000 SQ. YD. | |
| 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 CHIPS | 4-6 TONS | 185-275 LB. | 1,650-2,500 LB. | MAY PREVENT GERMINATION OF GRASSES AND LEGUMES |
| HYDROMULCH | 1 TON | 47 LB. | 415 LB. | SEE LIMITATIONS ABOVE |
- LIME AND FERTILIZER APPLICATION RATES
- | TABLE 11.6 | | | | |
|---|------------------------------------|-------------------|-------------------|---|
| SOIL AMENDMENT APPLICATION RATE EQUIVALENTS | | | | |
| SOIL AMENDMENT | PERMANENT SEEDING APPLICATION RATE | | | NOTES |
| | PER ACRE | PER 1,000 SQ. FT. | PER 1,000 SQ. YD. | |
| AGRICULTURAL LIME | 6 TONS | 240 LB. | 2,480 LB. | OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS |
| 10-20-20 FERTILIZER | 1,000 LB. | 25 LB. | 210 LB. | OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS |
| TEMPORARY SEEDING APPLICATION RATE | | | | |
| AGRICULTURAL LIME | 1 TON | 40 LB. | 410 LB. | TYPICALLY NOT REQUIRED FOR TOPSOIL STOCKPILES |
| 10-20-20 FERTILIZER | 500 LB. | 12.5 LB. | 100. LB. | TYPICALLY NOT REQUIRED FOR TOPSOIL STOCKPILES |
- *ADAPTED FROM PENN STATE, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND"
NOTE: A COMPOST BLANKET WHICH MEETS THE STANDARDS OF THIS CHAPTER MAY BE SUBSTITUTED FOR THE SOIL AMENDMENT SHOWN IN TABLE 11.2
- MAINTENANCE PROGRAM
- THE FOLLOWING INSPECTION AND MAINTENANCE PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS AND STABILIZATION MEASURES:
1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED ONCE EVERY SEVEN DAYS AND AFTER EACH RUNOFF EVENT (0.25"). A WRITTEN REPORT MUST ALSO BE COMPLETED DOCUMENTING EACH INSPECTION AND ANY REPAIR, REPLACEMENT OR MAINTENANCE ACTIVITY.

2. ALL TEMPORARY SEDIMENT CONTROLS SHALL BE CLEANED AND REMOVED AT THE END OF CONSTRUCTION FOLLOWING STABILIZATION OF UPLAND AREAS. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. 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.

3. PERIMETER BMPs WILL BE INSPECTED FOR DEPTH OF SEDIMENT, DAMAGE, ETC., TO ENSURE THE MEASURE IS IN PROPER WORKING ORDER, AND THAT ANY POSTS/WOOD STAKES ARE SECURELY IN THE GROUND.

4. TEMPORARY AND PERMANENT SEEDING, AND OTHER STABILIZATION MEASURES, WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

5. DISTURBED AREAS AND MATERIALS STORAGE AREAS WILL BE INSPECTED FOR EVIDENCE OF OR POTENTIAL FOR POLLUTANTS ENTERING THE STORMWATER.

6. ANY MUD TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AFTER EVERY WORKDAY.

7. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BMPs ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO THE CONSERVATION DISTRICT, COMPLETE WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, RE-GRADING, AND RE-STABILIZATION SHALL BE PERFORMED IMMEDIATELY.

8. ANY DEBRIS ACCUMULATED AT SILT BARRIERS WILL BE REMOVED AND PROPERLY DISPOSED IN A RESPONSIBLE MANNER. BARRIERS SHALL BE CHECKED AND REALIGNED OR RESET AS REQUIRED. ANY DEBRIS OR SOLID WASTE MATERIAL ACCUMULATED FROM CONSTRUCTION ACTIVITIES SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED LANDFILL. CONSTRUCTION WASTE SHALL NOT BE BURIED ON THE SUBJECT SITE.

9. VEGETATIVE STABILIZATION WILL BE PERIODICALLY INSPECTED FOR PROPER GROWTH. ANY AREAS NOT RESPONDING WILL BE PROMPTLY RESEDED. AREAS THAT SHOW SIGNS OF EROSION PRIOR TO STABILIZATION SHALL BE GRADED, RESEDED, AND RE-MULCHED AS SOON AS POSSIBLE.

10. MISCELLANEOUS ADJUSTMENTS AND CORRECTIONS SHALL BE MADE TO ANY EROSION CONTROL STRUCTURE AS DEEMED NECESSARY BY THE ENGINEER, MUNICIPAL OFFICIAL, OR COUNTY REPRESENTATIVE IN ORDER TO CORRECT UNFORESEEN PROBLEMS CAUSED BY STORMS PRIOR TO STABILIZATION.

11. COMPOST FILTER SOCKS: SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH HALF THE EFFECTIVE HEIGHT OF THE SILT SOCK.

12. ROCK CONSTRUCTION ENTRANCE WITH WASH RACK: ROCK CONSTRUCTION ENTRANCES SHOULD BE MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK WHEN NECESSARY AT THE END OF EACH WORKDAY. A STOCKPILE OF ROCK MATERIAL SHOULD BE MAINTAINED ON SITE FOR THIS PURPOSE.

13. BASINS: BASIN WILL BE INSPECTED FOR DEPTH OF SEDIMENT, ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE. CLOGGED OR DAMAGED SPILLWAY OR SKIMMER SHALL BE IMMEDIATELY RESTORED TO DESIGN SPECIFICATIONS.

14. INLET PROTECTION: 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.

15. ROCK FILTERS: SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE FILTERS.

16. CONCRETE WASHOUT FACILITY: ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

17. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BMPs TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

18. 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.

19. A COPY OF THE APPROVED EROSION AND SEDIMENT POLLUTION CONTROL PLAN(S) WILL BE AVAILABLE ON THE SITE AT ALL TIMES.

20. WHEN ANY EROSION CONTROL MEASURES ARE INSTALLED, THE MAINTENANCE AND INSPECTION PROCEDURES ABOVE SHALL BEGIN. THE CONTRACTOR SHOULD BE AWARE THAT THE INSPECTION FORMS BECOME AN INTEGRAL PART OF THE ES&P PLAN AND SHALL BE MADE READILY AVAILABLE TO THE GOVERNMENT INSPECTION OFFICIALS, THE PROJECT OWNER'S ENGINEER, AND THE PROJECT OWNER FOR REVIEW UPON REQUEST DURING VISITS TO THE PROJECT SITE.

21. TYPICAL CONSTRUCTION WASTES ARE ANTICIPATED I.E. CONCRETE, ASPHALT, REBAR, LUMBER, BUILDING MATERIALS, ETC. THE CONTRACTOR SHALL DISPOSE OF WASTE MATERIALS OBTAINED FROM DEMOLITION ACTIVITIES IN A LEGAL MANNER, AND SHALL RECYCLE AS MUCH OF THE WASTE MATERIAL AS POSSIBLE, IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CONTRACT SPECIFICATIONS. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 2601. ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS, WASTES, OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

UTILITY TRENCH WORK NOTES

1. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH SO AS TO ALLOW THE TRENCH TO INTERCEPT ALL SILT LADEN RUNOFF.

2. CONTRACTOR SHALL ONLY EXCAVATE AS MUCH UTILITY TRENCH WORK AS CAN BE COMPLETED, BACKFILLED AND STABILIZED IN ONE DAY SO AS TO LIMIT THE AMOUNT OF OPEN, DISTURBED TRENCHING.

HYDRAULICALLY APPLIED EROSION CONTROL BLANKET

1. FOR SLOPES UP TO 3H:1V THE BONDED FIBER MATRIX (BFM) SHOULD BE APPLIED AT A RATE OF 3,000 LB/ACRE. STEEPER SLOPES MAY NEED AS MUCH AS 4,000 LB/ACRE.

2. A BFM SHOULD ONLY BE USED WHEN NO RAIN IS FORECAST FOR AT LEAST 48 HOURS FOLLOWING THE APPLICATION

3. BFM SHOULD NOT BE APPLIED BETWEEN SEPTEMBER 30 AND APRIL 1.

4. IN ALL USES, MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.

LIME AND FERTILIZER APPLICATION RATES

TABLE 11.2	
------------	--

SEQUENCE OF CONSTRUCTION

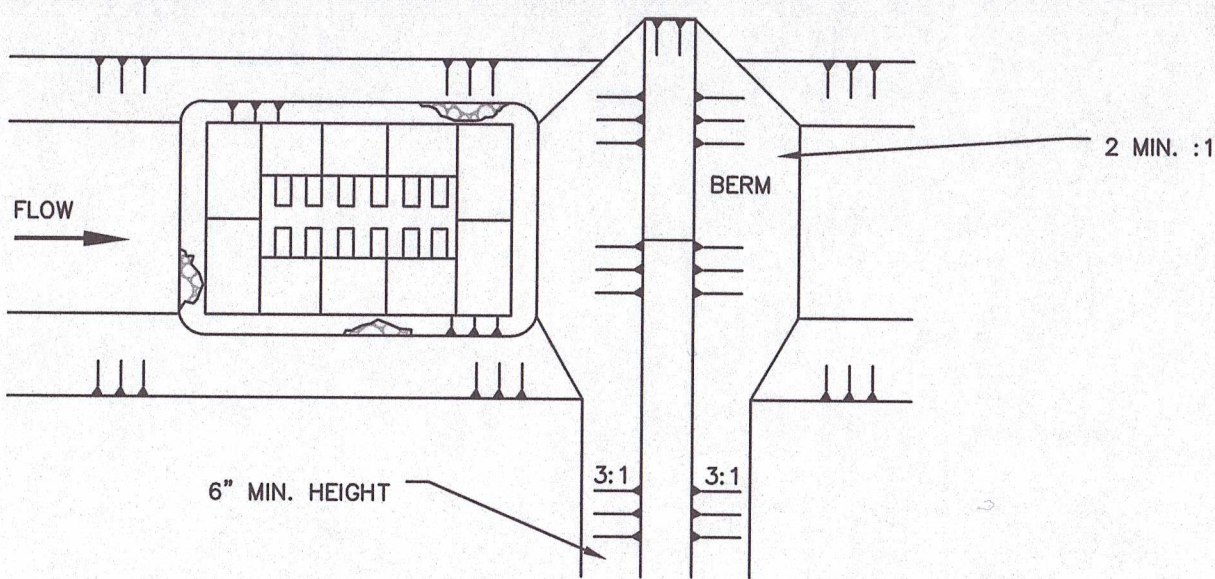
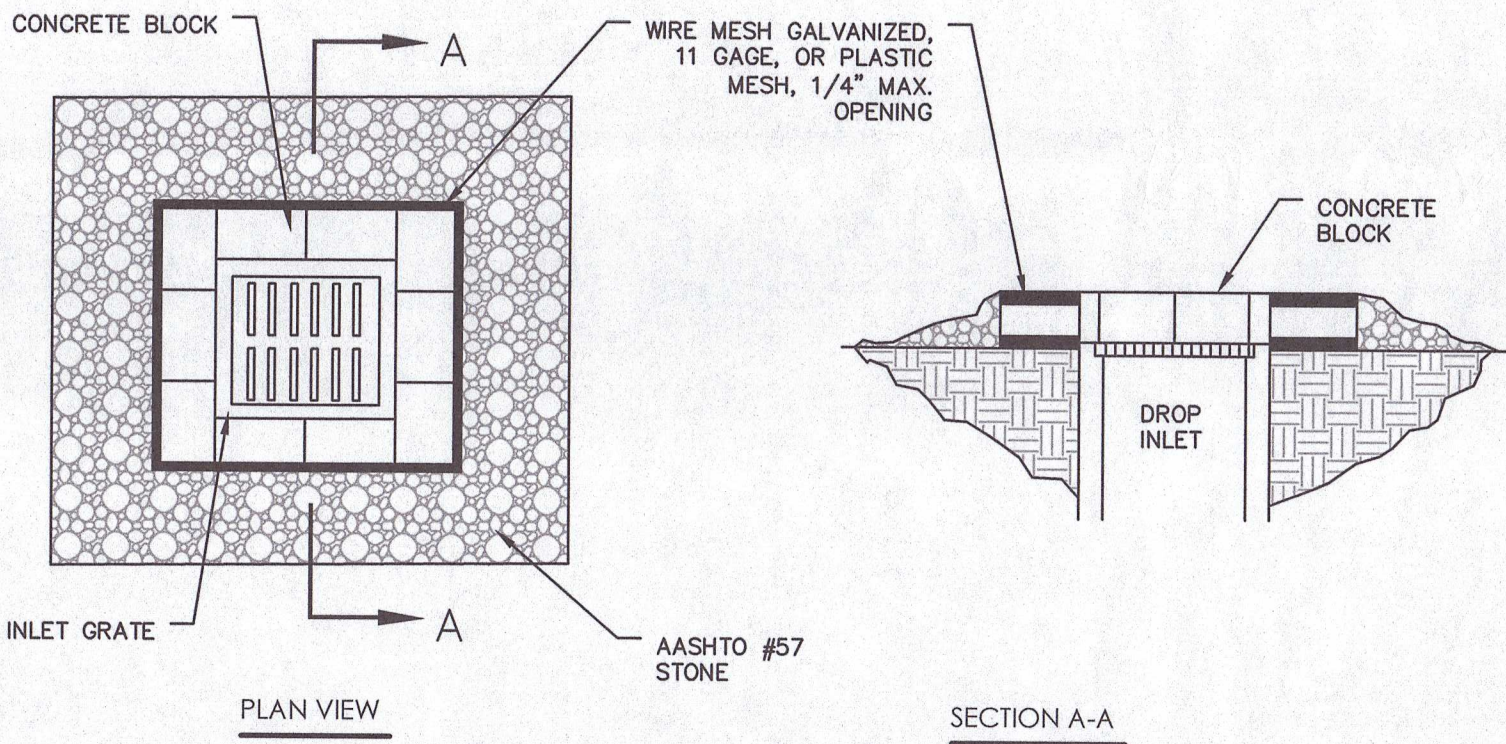
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND A REPRESENTATIVE OF THE CUMBERLAND COUNTY CONSERVATION DISTRICT (CCCD) TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- CONTACT THE CCCD A MINIMUM OF THREE (3) DAYS PRIOR TO EARTH MOVING ACTIVITIES.
- AT LEAST 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 THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTHMOVING ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CONSTRUCTION SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE THE NEXT STAGE IS STARTED.
- ALL PUMPING OF SEDIMENT LOADED WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT FACILITY, OVER UNDISTURBED VEGETATED AREAS.
- CONTRACTOR SHALL FIELD MARK ALL WATER OF THE COMMONWEALTH, INCLUDING STREAM BUFFERS, WETLAND BOUNDARIES, SPRING SEEPS, AND FLOODWAYS PRIOR TO EARTH DISTURBANCE.
- CONTRACTOR SHALL FIELD MARK THE LIMIT OF DISTURBANCE WITH TEMPORARY CONSTRUCTION FENCE OR OTHER MEASURES APPROVED BY CCCD AND THE ENGINEER PRIOR TO EARTH DISTURBANCE.
- ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE CHAPTER 260, §§260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- INSPECT THE SITE AND REPAIR ALL EXISTING SINKHOLES DISCOVERED (COORDINATE WITH GEOTECHNICAL ENGINEER). RUNOFF SHOULD NOT BE PERMITTED TO DIRECTLY ENTER ANY SINKHOLE DURING CONSTRUCTION. BERMS AND/OR SWALES SHALL BE CONSTRUCTED AND MAINTAINED AROUND ALL SINKHOLES TO PREVENT SURFACE WATER FROM ENTERING AND/OR ACCUMULATION AROUND ANY SINKHOLE UNTIL IT HAS BEEN STABILIZED AND THE OVERLYING CONSTRUCTION IS COMPLETE.
- FOR CRITICAL STAGE ITEMS, NOTIFY OWNER/LICENSED PROFESSIONAL PRIOR TO IMPLEMENTATION OF STEP IN ACCORDANCE WITH PADEP REGULATIONS. UNDERLINED ITEMS INDICATE CRITICAL STAGES OF PCSM CONSTRUCTION.
1. INSTALL AND MAINTAIN THE ROCK CONSTRUCTION ENTRANCE. INSTALL TEMPORARY COMPOST FILTER SOCKS AND INLET PROTECTION (ON EXISTING INLETS) WHERE INDICATED ON THE PLAN. ALL VEHICLES ENTERING THE SITE SHALL DO SO VIA THE CONSTRUCTION ENTRANCE. TRACKING OF MUD ONTO PUBLIC ROADS IS NOT ALLOWABLE.
 2. INSTALL TEMPORARY CONSTRUCTION FENCE AROUND BASIN AREAS AS SHOWN ON PLAN. GRADE THE AREAS WITH TRACKED EQUIPMENT ONLY. RELIEVE ANY BASIN AREAS THAT BECOME COMPACTED DURING GRADING BY RIPPING USING A SOLID-SHANK RIPPER TO A DEPTH OF 20 INCHES. TOPSOIL STOCKPILE AREAS SHOULD BE DECOMPACTED AFTER REMOVAL OF THE SOIL.

3. DEMOLISH ONSITE STRUCTURES AND CLEAR DEVELOPMENT AREAS.
4. STRIP TOPSOIL WITHIN THE AREA OF PROPOSED IMPROVEMENTS AND STOCKPILE AT THE TEMPORARY AREAS PROVIDED. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET, AND SIDE SLOPES MUST ALSO BE 2:1 OR FLATTER. SEED WITH A TEMPORARY COVER, AND MULCH. SURROUND WITH FILTER SOCKS. BEGIN FILLING AREAS AS NEEDED TO ACHIEVE GRADES AS SHOWN ON THE PLAN. REINSTALL TEMPORARY CONSTRUCTION FENCE IN AREAS WHERE PAVEMENT REMOVAL/DEMOLITION/TOPSOIL REMOVAL OVERLAPS PROPOSED BASIN FOOTPRINTS. CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS REQUIRES TEMPORARY STABILIZATION.
5. EXCAVATE, FILL AND ROUGH GRADE THE SITE TO THE PROPOSED ELEVATIONS AS SHOWN ON THE GRADING/UTILITIES PLAN. DO NOT GRADE INFILTRATION AREAS AT THIS TIME.
6. INSTALL THE PROPOSED SANITARY SEWER, WATER LINE, AND ALL OTHER UTILITIES AS SHOWN ON THE PLAN. TRENCHES MUST BE BACKFILLED AT THE COMPLETION OF EACH DAY.
7. CONSTRUCT DRIVEWAYS AND UTILITY SERVICE CONNECTIONS.
8. INSTALL/MODIFY INFILTRATION BASIN. (SEE BMP SEQUENCE OF CONSTRUCTION.)
9. INSTALL STORM SEWER INLETS, PIPES, AND ENDWALLS BEGINNING AT THE DOWNSTREAM CONNECTIONS AND WORKING UPSTREAM. TRENCHES MUST BE BACKFILLED AT THE COMPLETION OF EACH DAY. ALL STORM SEWER CONSTRUCTION INCLUDES TRENCHING, BACKFILLING, APPLYING FINAL STABILIZATION, AND PIPE OUTLET PROTECTION. INSTALL INLET PROTECTION.
10. REMOVE ROCK CONSTRUCTION ENTRANCE. PAVE ROADWAYS WITH PERMANENT ASPHALT BASE COURSE AS SOON AS PRACTICAL TO PREVENT EROSION. PAVE ROADWAYS WITH PERMANENT ASPHALT WEARING COURSE.
11. FINISH GRADING. PLACE REMAINING TOPSOIL, APPLY SEEDING AND LANDSCAPING.
12. ONCE ALL AREAS ARE STABILIZED WITH VEGETATION OR PAVEMENT, FLUSH ALL ACCUMULATED SEDIMENT IN PIPES AND INLETS. CLEAN OUT SEDIMENT AND DEBRIS FROM STORMWATER COLLECTION AND CONVEYANCE SYSTEM.
13. CONTACT CCCD FOR FINAL INSPECTION AND APPROVAL OF STABILIZATION. REMOVE ALL REMAINING SOIL EROSION AND SEDIMENT CONTROL MEASURES (SILT SOCK, INLET PROTECTION, ETC.), ONLY AFTER SITE IS COMPLETELY STABILIZED (WITH APPROVAL OF THE CUMBERLAND COUNTY CONSERVATION DISTRICT). IMMEDIATELY SEED AND STABILIZE ANY AREAS DISTURBED DURING REMOVAL OF BMPs.

- STABILIZATION - CURRENT REGULATIONS STATE:
- A. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION.
 - B. EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED AND MAINTAINED UNTIL THE PERMANENT STABILIZATION IS COMPLETED.
 - C. FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREAS SHALL BE COVERED WITH ONE OF THE FOLLOWING:
 - A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION.
 - AN ACCEPTABLE BMP THAT PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.

INFILTRATION BASIN

- BMP SEQUENCE OF CONSTRUCTION
1. ALL AREAS DESIGNATED FOR INFILTRATION SHALL NOT RECEIVE RUNOFF UNTIL THE CONTRIBUTORY DRAINAGE AREA HAS ACHIEVED FINAL STABILIZATION.
 2. REMOVE EXISTING FENCE FOR ACCESS, AS NECESSARY.
 3. EXCAVATE INFILTRATION BASIN. OVEREXCAVATE 24 INCHES AND DECOMPACT SUBGRADE A MINIMUM 8 INCHES ONLY IF THE SOIL IS COMPACTED OR THE LIMITING ZONE IS REACHED; TO RESTORE SOIL COMPOSITION AND POROSITY AS A RESULT OF UNPERMITTED COMPACTION OF BASIN FOOTPRINT, DECOMPACT TO A DEPTH OF 28 INCHES MIN. AT NO ADDITIONAL COST TO THE OWNER. MAINTAIN A MINIMUM DEPTH TO BEDROCK OF 2 FEET. IF 2 FEET CANNOT BE MAINTAINED, UTILIZE ENGINEERED FILL MATERIAL SECTION. DURING SITE CONSTRUCTION, VIRGIN SOIL SHALL BE PROTECTED FROM COMPACTION BY HEAVY EQUIPMENT OPERATION OR STORAGE OF FILL OR CONSTRUCTION MATERIAL.
 4. A QUALIFIED PROFESSIONAL SHALL TEST THE INFILTRATION RATES OF THE BASINS TO ENSURE THAT THE DESIGN INFILTRATION RATE IS BEING ACHIEVED.
 - BASIN: 0.50 TO 10.00 IN./HR
 5. INSTALL/MODIFY EXISTING OUTLET CONTROL STRUCTURE CONFIGURATION AS NEEDED PER PLANS AND DETAILS.
 6. INSTALL COMPOST FILTER SOCK AT BOTTOM OF BASIN. SOILS IMPACTED BY SEDIMENTATION SHALL BE REMOVED (MINIMUM DEPTH OF 12 INCHES) AND REPLACED WITH ENGINEERED SOIL TO BASIN BOTTOM ELEVATION. ANY REMEDIATION WORK REQUIRED AS A RESULT OF UNAUTHORIZED COMPACTION OR SEDIMENTATION SHALL BE AT THE CONTRACTOR'S EXPENSE.
 7. SEED AND STABILIZE SOIL IN BASIN WITH BASIN PLANTING MIX.
 8. ONCE ALL UPSTREAM AREAS ARE STABILIZED, REMOVE TEMPORARY COMPOST FILTER SOCK WITHIN BASIN.



MAXIMUM DRAINAGE AREA = 1 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT LOCATED AT A LOW POINT.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

TOP OF BLOCK SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.

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

FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6 INCH THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE. COMPOST MUST MEET THE STANDARDS IN TABLE 4.2.

STONE AND CONCRETE BLOCK
INLET PROTECTION - TYPE M INLET DETAIL

N.T.S

PADEP-4-18



Specification Sheet
EroNet™ S75® Erosion Control Blanket

DESCRIPTION

The short-term single net erosion control blanket shall be a machine-produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a lightweight photodegradable polypropylene netting having an approximate 0.50 x 0.50 in. (1.27 x 1.27 cm) mesh. The blanket shall be sewn together on 150 inch (3.81 cm) centers with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

The S75 shall meet Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17

Material Content		
Matrix	100% Straw Fiber	0.5 lbs/sq yd (0.27 kg/sq m)
Netting	Top side only, lightweight photodegradable	1.5 lb/1000 sq ft (0.73 kg/100 sq m)
Thread	Degradable	

Standard Roll Sizes		
Width	6.67 ft (2.03 m)	8.0 ft (2.4 m)
Length	108 ft (32.92 m)	112 ft (34.14 m)
Weight ± 10%	40 lbs (18.14 kg)	50 lbs (22.68 kg)
Area	80 sq yd (66.9 sm)	100 sq yd (83.61 sm)



Western Green
4609 E. Boonville-New Harmony Rd.
Evansville, IN 47725
nagreen.com
800-772-2040

©2009, North American Green is a registered trademark. North American Green, Certain products and/or applications described or illustrated herein are protected under one or more U.S. patents. Other U.S. patents are pending, and certain foreign patents and patent applications may also exist. Trademarks rights also apply as indicated herein. Final determination of the validity of any information or material for the use, understood, and its manner of use, is the sole responsibility of the user. Printed in the U.S.A.

EC_RMAX_MPD05_S75_118

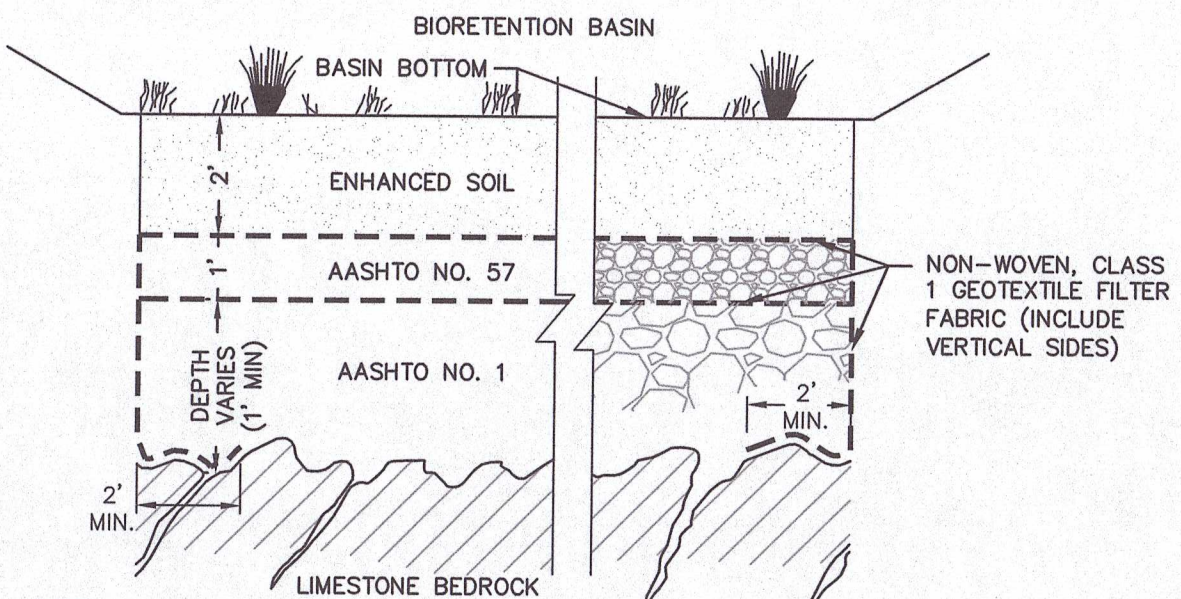


Index Property	Test Method	Typical
Thickness	ASTM D6525	0.50 in. (12.7 mm)
Resiliency	ECTC Guidelines	78.8%
Water Absorbency	ASTM D1117	301%
Mass/Unit Area	ASTM D6475	9.76 oz/sy (332 g/sq m)
Swell	ECTC Guidelines	15%
Smolder Resistance	ECTC Guidelines	Yes
Stiffness	ASTM D1388	6.31 oz-in
Light Penetration	ASTM D6567	6.0%
Tensile Strength - MD	ASTM D6818	122.4 lbs/ft (1.81 kN/m)
Elongation - MD	ASTM D6818	36.1%
Tensile Strength - TD	ASTM D6818	79.2 lbs/ft (1.17 kN/m)
Elongation - TD	ASTM D6818	26.8%
Biomass Improvement	ASTM D7322	301%

Design Permissible Shear Stress	
Unvegetated Shear Stress	1.55 psf (74 Pa)
Unvegetated Velocity	5.00 fps (1.52 m/s)

Slope Design Data: C Factors	
Slope Gradients (S)	
Slope Length (L)	≤ 3:1 3:1 - 2:1 ≥ 2:1
≤ 20 ft (6 m)	0.029 N/A N/A
20-50 ft	0.11 N/A N/A
≥ 50 ft (15.2 m)	0.19 N/A N/A
NTPRP Large-Scale Slope Testing ASTM D6459 - C-factor = 0.012	

Roughness Coefficients - Unveg.	
Flow Depth	Manning's n
≤ 0.50 ft (0.15 m)	0.055
0.50 - 2.0 ft	0.055-0.021
≥ 2.0 ft (0.60 m)	0.021



- NOTES:
1. SEE INFILTRATION BASIN CROSS SECTION FOR WHEN THIS DETAIL SHOULD BE APPLIED.
 2. OVER-EXCAVATE A MINIMUM 48 INCHES BELOW THE BASIN BOTTOM. THE INSTALLATION OF THE GEOTEXTILE FABRIC AND THE STONE SHOULD BE COMPLETED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER OF RECORD.

ENGINEERED FILL MATERIAL SECTION

N.T.S



2601 Market Place, Suite 350
Harrisburg, PA 17110
(717) 651-9850
(717) 651-9858 Fax

PRELIMINARY / FINAL
LAND DEVELOPMENT PLAN
3709 HARTSDALE DRIVE
LOWER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

REVISIONS	Desc.	Date
No.	REVISED PER TOWNSHIP & COUNTY COMMENTS	12/11/2020
1	REVISED PER TOWNSHIP COMMENTS	01/25/2021
2	REVISED PER TOWNSHIP COMMENTS	08/17/2021

Designed C.J.S.
Drawn J.R.J.
Reviewed A.J.B.
Scale 1" = 20'
Project No. 1901881
Date 07/22/2020
CAD File: EC190188102-LD

Title
EC190188102-LD
- EC-4

Sheet No.

EC-4
No. of 14