

**SITE LOCATION MAP**  
SCALE: 1"=1000'  
SOURCE: GOOGLE MAPS

ZONING TABLE				
EXISTING ZONING: RP9 - RIDGE PKE BUSINESS DISTRICT				
PROPOSED USE: CAR WASH				
APPLICANT / OWNER INFORMATION				
APPLICANT:	PJ LAND DEVELOPMENT, LLC 71 CAROLYN BOULEVARD, FARMINGDALE, NY 11735			
PROPERTY OWNER:	PJ LAND DEVELOPMENT, LLC 71 CAROLYN BOULEVARD, FARMINGDALE, NY 11735			
BULK REQUIREMENTS				
ITEM	CODE	PERMITTED	EXISTING	PROPOSED
MAX. BUILDING HEIGHT	§143-262(A)	35'	N/A	< 35'
MIN. FRONT YARD	§143-262(B)	10'	N/A	67.9'
MIN. SIDE YARD	§143-262(B)	10'	N/A	45.6'
MIN. REAR YARD	§143-262(B)	10' (30' WHERE ABUTTING RESIDENTIAL ZONE)	N/A	5.6'
MIN. PARKING SETBACK	§143-262(C)	10'	0'	71.9'
MAX. IMPERVIOUS COVERAGE	§143-262(E)	50%	79.8%	63.1%
			EXISTING NON-CONFORMITY	VARIANCE REQUIRED
PARKING REQUIREMENTS				
ITEM	CODE	PERMITTED	EXISTING	PROPOSED
MIN. STALL SIZE	§123-37(O)	9' X 18'	9' X 18'	9' X 19'
MIN. TWO-WAY AISLE WIDTH	§123-37(O)	22'	23'	26.9'
LOADING REQUIREMENTS	NOT SPECIFIED	NS	0	0
MIN./MAX. STACKING	NOT SPECIFIED	NS	N/A	19
MIN. NUMBER OF STALLS	NOT SPECIFIED	NS	43	17
			EXISTING NON-CONFORMITY	VARIANCE REQUIRED

[illegible]

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1-800-242-1776  
[www.pa1call.org](http://www.pa1call.org)

PROJECT No.:	PP213264
DRAWN BY:	RG
CHECKED BY:	SU
DATE:	08/29/2022
CAD I.D.:	PP213264-X-TTLB-LDVP

PROJECT: **PRELIMINARY/FINAL**  
**LAND**  
**DEVELOPMENT**  
**DOCUMENTS**  
FOR  
TIDAL WAVE  
AUTO SPA  
STORE #:004



**PROPOSED DEVELOPMENT**  
**P.B. 50, PG. 39; UNIT 6, BLOCK 6**  
**2619 RIDGE PIKE**  
**LOWER PROVIDENCE TOWNSHIP**  
**MONTGOMERY COUNTY, PA 19403**

BOHLER //

**1515 MARKET STREET, SUITE 920  
PHILADELPHIA, PA 19102**  
Phone: (267) 402-3400  
Fax: (267) 402-3401  
***www.BohlerEngineering.com***



**SHEET TITLE:**

## ***SITE PLAN***

**SHEET NUMBER:**

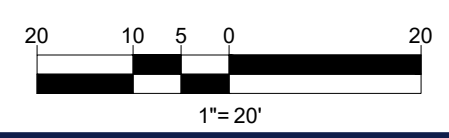
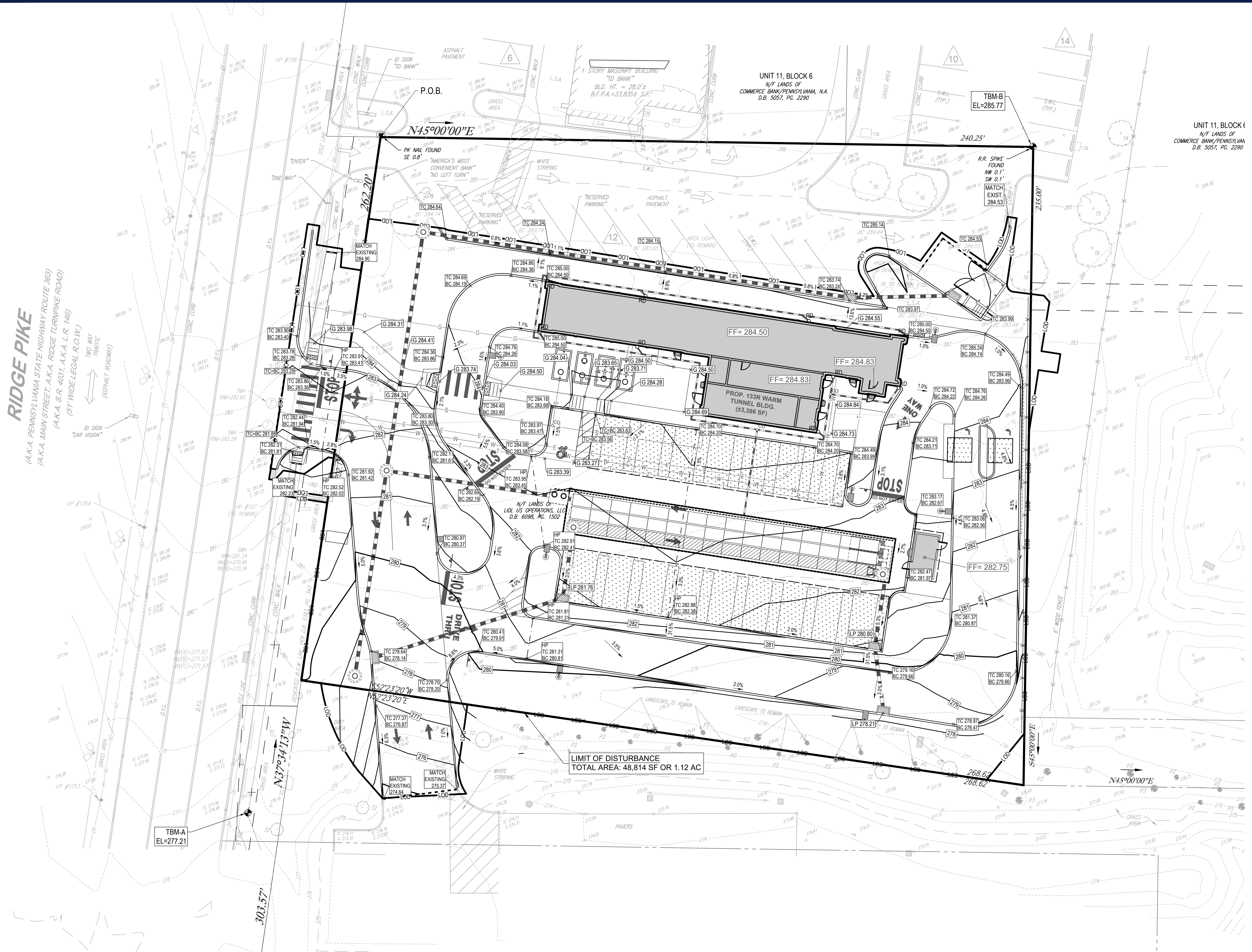
**C-301**

REVISION 3 - 01/27/2023



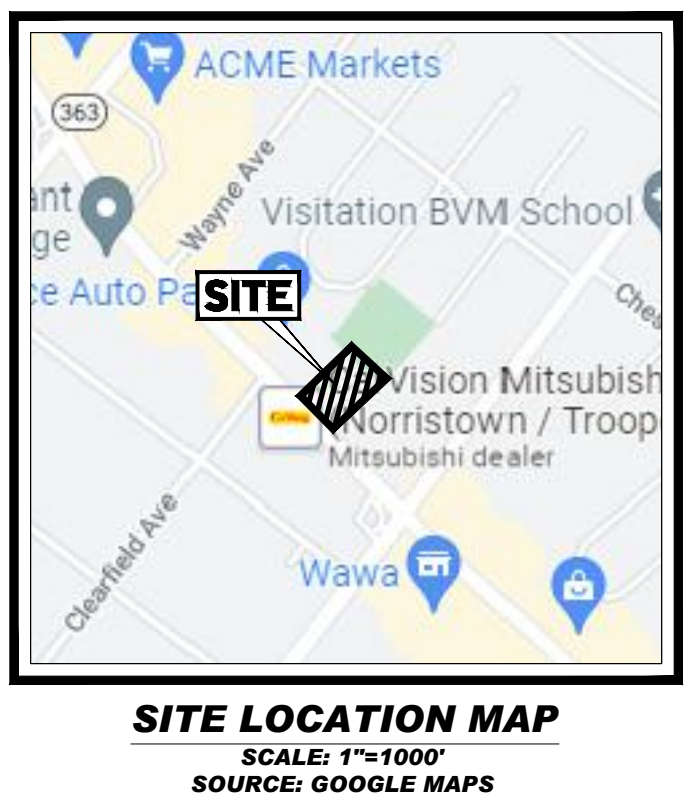
R:\11\PP213264\CADD\DRAWINGS\PLAN SET\BOH\ SITE PLANS\PP213264-LDVP-3A-----LAYOUT: C-401 GRADE

RIDGE PIKE  
(A.K.A. PENNSYLVANIA STATE HIGHWAY ROUTE 363)  
(A.K.A. MAIN STREET, A.K.A. RIDGE TURNPIKE ROAD)  
(51' WIDE LEGAL R.O.W.)  
TWO WAY TRAFFIC  
(ASPHALT ROADWAY)  
"D" SIGN  
"CAR VISION"



LEGEND	
PROPOSED	
LIMIT OF DISTURBANCE	LOD
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
CROSSWALK	
RAMP	
CANOPY	
SIGN	
BOLLARD	
AREA LIGHT	
DRAINAGE INLET	
MANHOLE	
CLEANOUT	
ELECTRIC LINE	
TELEPHONE LINE	
GAS LINE	
WATER LINE	
SANITARY SEWER	
STORM PIPE	
SPOT ELEVATION	

LEGEND	
EXISTING	
PROPERTY LINE	
R.O.W. LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
FENCE	
CONCRETE MONUMENT/ IRON PIN	
SIGN	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
ELECTRIC LINE	
TELEPHONE LINE	
GAS LINE	
WATER LINE	
SANITARY SEWER	
STORM PIPE	



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SITE CIVIL AND CONSULTING ENGINEERING

PROGRAM MANAGEMENT

LANDSCAPE ARCHITECTURE

SUSTAINABLE DESIGN

PERMITTING SERVICES

TRANSPORTATION SERVICES

REVISIONS				
REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG	SU
2	01/05/2023	PER COMPLETENESS REVIEW	RG	SU
3	01/27/2023	PER PENNDOT COMMENTS	RG	SU

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STORE #004

TIDAL WAVE

PROPOSED DEVELOPMENT  
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LOWER PROVIDENCE TOWNSHIP  
MONTGOMERY COUNTY, PA 19403

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M. KEARSE

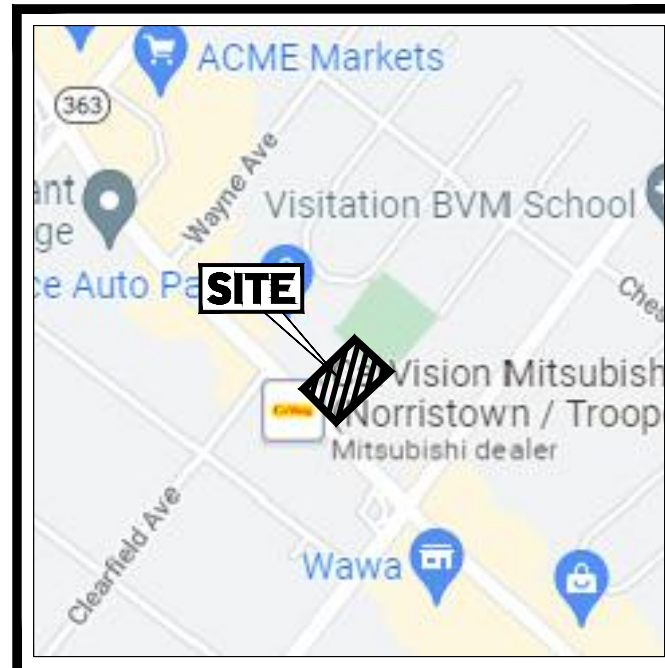
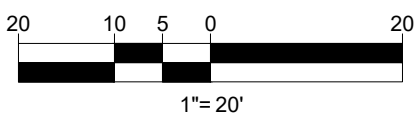
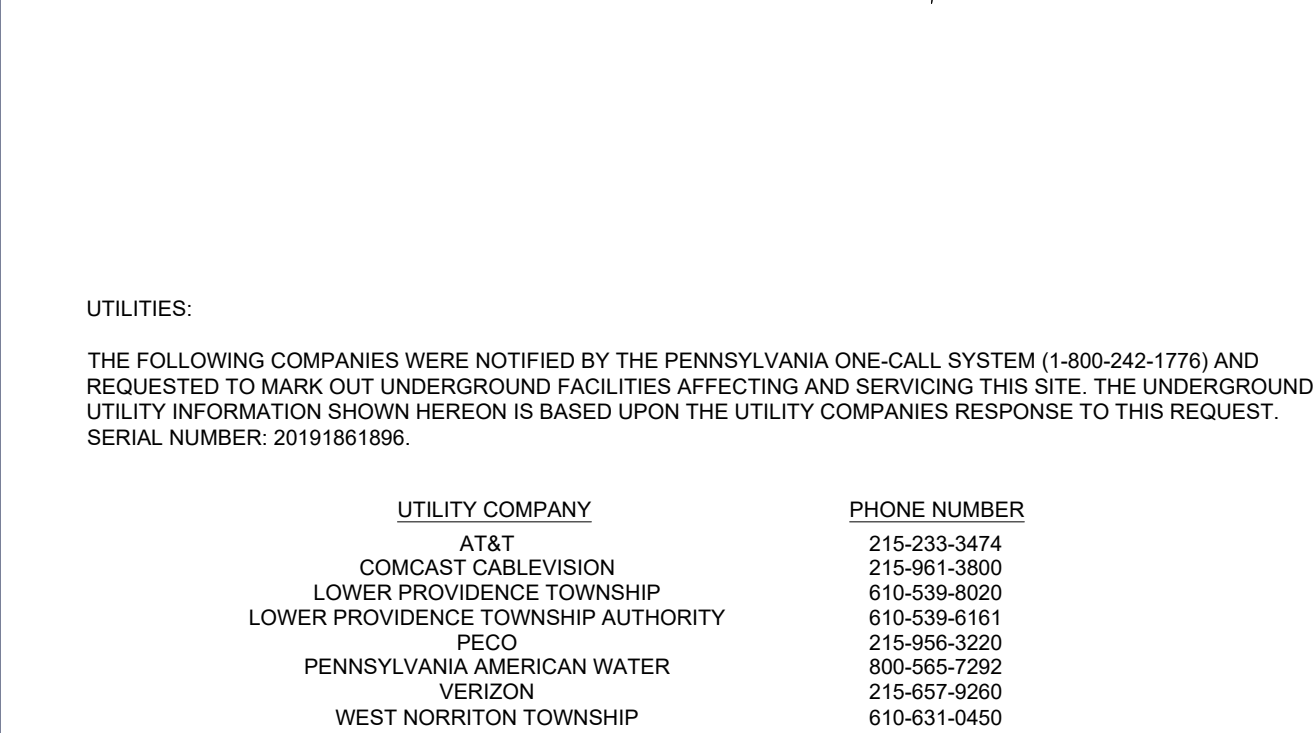
PROFESSIONAL  
MATTHEW JOHN KEARSE  
REGISTERED PROFESSIONAL ENGINEER  
No. 1000000000  
PENNSYLVANIA

SHEET TITLE:  
GRADING PLAN

SHEET NUMBER:  
C-401

REVISION 3 - 01/27/2023





**SITE LOCATION MAP**  
SCALE: 1"=1000'  
SOURCE: GOOGLE MAPS

<b>STORM STRUCTURE SCHEDULE</b>			
NAME	TYPE	GRT/IRM ELEV. (FT.)	INVERTS
IN05	STANDARD BOX	283.32'	INV INV = 279.69' (15' RCP) INV OUT = 279.50' (15' RCP)
IN06	STANDARD BOX	283.93'	INV OUT = 280.49' (15' RCP)
MH01	TYPE 4	278.72'	INV IN = 272.04' (15' RCP)
MH02	TYPE 4	281.47'	INV IN = 272.98' (15' RCP) INV IN = 274.35' (15' RCP) INV OUT = 272.80' (15' RCP)
MH03	TYPE 4	284.51'	INV IN = 277.91' (15' RCP) INV OUT = 273.87' (15' RCP)
OS01	OUTLET STRUCTURE	276.50'	INV OUT = 275.00' (15' RCP)

<b>STORM STRUCTURE SCHEDULE</b>			
NAME	TYPE	GRTIRIM ELEV. (FT.)	INVERTS
IN01	STANDARD BOX	276.34'	INV OUT = 275.89 (15" RCP)
IN02	STANDARD BOX	281.63	INV IN = 275.46 (15" RCP) INV OUT = 275.29 (15" RCP)
IN03	STANDARD BOX	276.24'	INV OUT = 275.82 (15" RCP)
IN04	STANDARD BOX	280.90'	INV IN = 275.58 (15" RCP) INV OUT = 275.41 (15" RCP)
UG8	CONNECTION TO BASIN	276.93'	INV IN = 275.17 (15" RCP)
UG8	CONNECTION TO BASIN	276.93'	INV IN = 275.17 (15" RCP)

<b>STORM SEWER PIPE SCHEDULE</b>					
FROM	TO	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE(%)
IN05	MH03	15"	RCP	159	1.00%
IN06	IN05	15"	RCP	38	2.09%
MH02	MH01	15"	RCP	76	1.00%
MH03	MH02	15"	RCP	89	1.00%
OS01	MH02	15"	RCP	61	1.00%

<b>STORM SEWER PIPE SCHEDULE</b>					
FROM	TO	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE(%)
IN01	IN02	15"	RCP	72	0.59%
IN02	UGB	15"	RCP	24	0.50%
IN03	IN04	15"	RCP	24	1.01%
IN04	UGB	15"	RCP	24	1.01%

<h1 style="text-align: center;">LEGEND</h1> <h2 style="text-align: center;">PROPOSED</h2>	
LIMIT OF DISTURBANCE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
RAMP	
SIGN	
BOLLARD	
CANOPY	
AREA LIGHT	
DRAINAGE INLET	
MANHOLE	
CLEANOUT	
ELECTRIC LINE	
TELEPHONE LINE	
GAS LINE	
WATER LINE	
SANITARY SEWER	
STORM PIPE	

<h1 style="text-align: center;">LEGEND</h1> <h2 style="text-align: center;">EXISTING</h2>	
PROPERTY LINE	
R.O.W. LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
FENCE	
CONCRETE MONUMENT/ IRON PIN	
SIGN	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
ELECTRIC LINE	
TELEPHONE LINE	
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WATER LINE	
SANITARY SEWER	
STORM PIPE	

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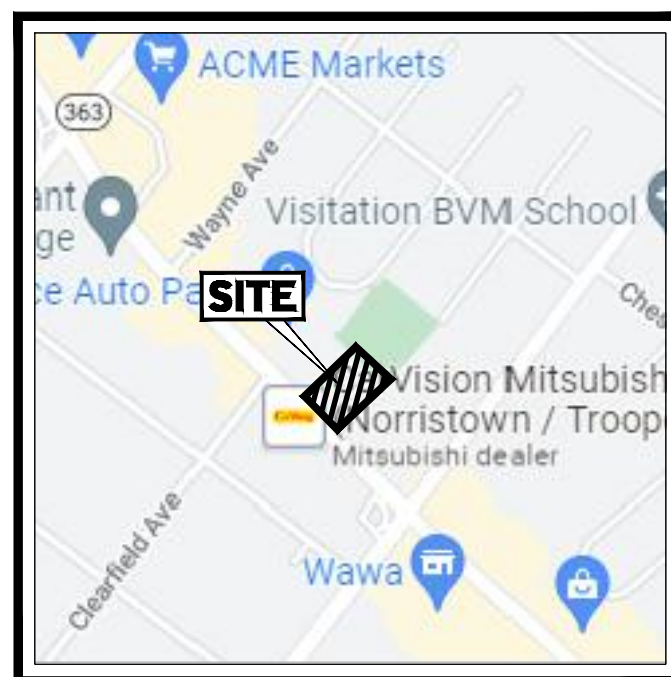
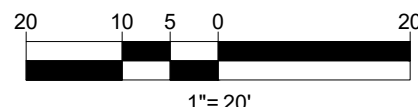
## UTILITY PLAN

SHEET NUMBER

# C-501

REVISION 3 - 01/27/2023





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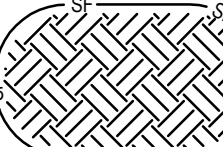
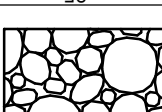
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REVISION 3 - 01/27/2023

\*AREA INCLUDES OFF-SITE DRAINAGE FROM NEIGHBORING PROPERTY

<h1 style="text-align: center;">LEGEND</h1>	
<h2 style="text-align: center;">PROPOSED</h2>	
LIMIT OF DISTURBANCE	
PROJECT SITE BOUNDARY	
COMPOST FILTER SOCK	
TREE PROTECTION FENCE	
CONCRETE WASHOUT	
TEMPORARY STOCKPILE	
ROCK CONSTRUCTION ENTRANCE	

<h1 style="text-align: center;">LEGEND</h1> <h2 style="text-align: center;">EXISTING</h2>	
PROPERTY LINE	
R O W LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
FENCE	
CONCRETE MONUMENT/ IRON PIN	
SIGN	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
ELECTRIC LINE	
TELEPHONE LINE	
GAS LINE	
WATER LINE	
SANITARY SEWER	
STORM PIPE	





### DISCHARGE PATH



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

3. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
4. 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 1-800-242-1778 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 EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 2801 ET. SECS 27.1, AND 287.1 ET. SECS. 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. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROPERTY ONTO RIDGE PIKE.
15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, RESLOPING AND REINSEMENT MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
16. A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE 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.
18. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.

19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES- 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTCLOSURES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
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, SOIL, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS 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.

THE FOLLOWING NOTES SHOULD BE ADDED TO PLAN DRAWINGS AS APPLICABLE

1. 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.
2. 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.
3. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING, ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THE PLAN UNTIL THE RESTORATION IS COMPLETE.
4. CHANNELS HAVING RIPRAP, RENO MATTRRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
5. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
6. SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
7. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.
8. 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.
9. 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 DETAILED SHEETS.
10. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM \_\_\_\_\_ LAYERED LIFTS AT \_\_\_\_\_% DENSITY.

SEEDING DATES

- A. SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN OCTOBER 15TH.
- B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND APPLICABLE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE TO PREVENT NEXT GROWING SEASON.
- 2. SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LBS) PER PURE SEED (POUNDS) PER ACRE. CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW).
- A. TEMPORARY SEEDING: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS:
  - ANNUAL RYE (40 POUNDS / ACRE PLS)
  - OR SPRING OATS (96 POUNDS / ACRE PLS)
  - OR WINTER RYE (108 POUNDS / ACRE PLS)
  - (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPPLAND" TABLE 6)
- B. PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS FOLLOWS:
  - 1. NURSE CROP (SELECT ONE)
    - ANNUAL RYE (10 POUNDS / ACRE PLS)
    - OR SPRING OATS (64 POUNDS / ACRE PLS)
    - OR WINTER RYE (66 POUNDS / ACRE PLS)
    - (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1)
  - 2. PERMANENT SEED MIX:
    - TALL FESCUE (60 POUNDS / ACRE PLS)
    - OR FINE FESCUE (35 POUNDS / ACRE PLS)
    - OR KENTUCKY BLUEGRASS (25 POUNDS / ACRE PLS) PLUS REDTOP (3 POUNDS / ACRE PLS)
    - OR PERENNIAL RYEGRASS (15 POUNDS / ACRE PLS)
    - (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #2)
- 3. PURE RYE SEED: MINIMUM PLS RATING ACCEPTED SHALL BE 85% PLS. SEED RATE MAY NEED TO BE ADJUSTED BASED ON THE PLS RATING OF THE SEED.
- A. SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT BE USED MORE THAN ONE (1) YEAR BEFORE THE LABEL DATE.
- B. DETERMINE THE PERCENT PURE SEED (PERCENT PLS) OF A LABELED SEED. MULTIPLY BY THE PERCENTAGE OF PURE SEED BY THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 (NURSE X GERMINATION / 100)
- C. DETERMINE THE ACTUAL SEED RATE. SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE, IF THE SEED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED 35% GERMINATION, 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE.
- 4. APPLICATION OF SEED: SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST RECENT EDITION).
- A. SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 - OCTOBER 15.
- B. SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOIL.
- C. SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES, UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS:
  - DRILL SEEDING
  - II. BROADCAST SEEDING (TWO DIRECTIONS)
  - III. HYDROSEEDING (TWO DIRECTIONS)
- D. ALL SEED SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED UNTIL A 70% PERENNIAL COVER IS ACHIEVED.
- 1. TEMPORARY STABILIZATION WITH STRAW:
  - STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST).
  - STRAW SHALL BE STABILIZED WITH A WOOD CHIP OR OTHER ACCEPTED MATERIALS TO HOLD THE SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
- 2. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTINGS/BLANKETS (WHERE SPECIFIED):
  - 1. MATTINGS/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN ON A MINIMUM OF 60 FEET OF POND, DITCH, OR OTHER EROSION PRONE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
  - 2. AREAS WITH MATTINGS/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER INSTALLATION.
  - 3. MATTINGS/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD CONDITION.
- E. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE AVOIDED.
- 5. IRRIGATION: NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER. A MINIMUM OF 1/2" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

1. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OR MEASURES SHALL BE INSTALLED WHERE NECESSARY OR WHERE DIRECTED BY EITHER THE TOWNSHIP OR THE COUNTY CONSERVATION DISTRICT AS CONSTRUCTION PROGRESSES.
2. THE OWNER/CONSTRUCTION MANAGER IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES. THE OWNER SHALL ASSIGN ONE INDIVIDUAL TO BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL FACILITIES AND MEASURES.
3. PROTECTION TO THE EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.
4. ANY DRY FILL HAULED OFFSITE MUST BE TAKEN TO A LOCATION WITH AN EROSION AND SEDIMENTATION CONTROL PLAN WHICH HAS BEEN REVIEWED BY THE COUNTY CONSERVATION DISTRICT FOR ADEQUACY.
5. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN TRIBUTARY AREAS OF THOSE CONTROLS.

6. STOCKPILES MUST BE STABILIZED IMMEDIATELY.
7. NO CHANGES SHALL BE MADE IN THE CONTOUR OF THE LAND. NO GRADING, EXCAVATING, REMOVAL OR DESTRUCTION OF THE TOPSOIL, TREES OR OTHER VEGETATIVE COVER OF THE LAND SHALL BE COMMENCED WITHIN A PROPOSED SUBDIVISION OR LAND DEVELOPMENT TRACT UNTIL SUCH TIME THAT A PLAN FOR SEDIMENTATION CONTROL AND MINIMIZING EROSION HAS BEEN REVIEWED AND FOUND SATISFACTORY BY THE COUNTY CONSERVATION DISTRICT AND REVIEWED AND APPROVED BY THE TOWNSHIP, OR THERE HAS BEEN A DETERMINATION BY THE TOWNSHIP, UPON RECOMMENDATION BY THE COUNTY CONSERVATION DISTRICT, THAT SUCH PLANS ARE NOT NECESSARY.
8. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE COUNTY CONSERVATION DISTRICT.
9. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
10. CONTRACTOR SHALL USE TREADED MACHINERY AND MINIMIZE SOIL COMPACTION WHEREVER POSSIBLE.

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

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

- 1) CLEAN FILL IS DEFINED AS: NONCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREGGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS THAT ARE RECYCLED OR REUSED, OR MATERIALS THAT ARE OTHERWISE IDENTIFIED AND AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).
- 2) CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FF-1A AND FF-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
- 3) ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FF-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO THE FILL MATERIALS AS CLEAN FILL. FORM FF-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FF-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
- 4) ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, AERIAL PHOTOGRAPHS, AND OTHER RECORDS. ENVIRONMENTAL DUE DILIGENCE DOES NOT INCLUDE VISUAL INSPECTION AND AUDIT. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT WILL BE CONSIDERED A REGULATED SUBSTANCE. ANALYTICAL TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH THE TESTING PROCEDURES SET FORTH IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THE REGULATIONS ARE AVAILABLE ON-LINE AT [WWW.PACODE.COM](http://WWW.PACODE.COM).

## I. GENERAL INFORMATION

- D. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE.
- E. NO SEDIMENT OR SEDIMENT LOADED WATER SHALL BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.
- F. ANY SEDIMENT TRACKS TO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY.
- G. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL BE STABILIZED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS, DURING NON-GERMINATION PERIODS. MULCH MUST BE APPLIED AT RECOMMENDED RATES. UNFINISHED STONE OR PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.
- H. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEED OR MULCHED.
- I. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD MULCH IN PLACE UNTIL PLANTING IS COMPLETED. MULCHING IS NOT REQUIRED AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES, UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL STRUCTURES FOR MALFUNCTION EVENT, AND ONLY PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY IF ANY OF THE FOLLOWING STABILIZATION ANY ESB PROBLEM OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
- J. THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT, A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SLOPE, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE PROJECT LIMITS.
- K. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE.
- L. ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH THE COUNTY'S LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION.
- M. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL MEASURES REQUIRED TO ENSURE ON-SITE AND OFF-SITE STABILIZATION IN ADJACENT TO CONSTRUCTION ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO COST TO THE OWNER.
- N. THE NOTIFICATION SHALL BE IN WRITING. THE CONTRACTOR SHOULD ADDITION STABILIZATION MEASURES BE NECESSARY. IN ACCORDANCE WITH THE NPDES AND/OR SWPPP REQUIREMENTS FOR THE PROJECT.
- II. STANDARD FOR LAND GRADING**
- A. DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADGES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT.
- A.1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DISTURBED AND CUT FILL AREAS.
- A.2. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS.
- B. INSTALLATION REQUIREMENTS
- B.1. TIMBER LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE STANDARD FOR DISPOSAL OF MATERIALS.
- B.2. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER LOGS, VEGETATIVE MATTER AND STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS.
- B.3. FILL SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
- B.4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.
- B.5. (SEE I. D.)
- B.2. ALL AREAS TO BE PERMANENTLY SEEDED SHALL ALSO RECEIVE TEMPORARY SEEDING CONCURRENTLY.
- B.3. SEEDED PREPARATION FOR TEMPORARY SEEDING
- B.3.a. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
- B.3.b. APPLY AGRICULTURAL LIME AT A RATE OF 1 TONE PER ACRE
- B.3.c. APPLY 10-10-10 FERTILIZER AT A RATE OF 500 POUNDS PER ACRE
- B.3.d. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR (4) INCHES.
- C. SEEDING. SEE SEEDING SPECIFICATIONS
- V. STANDARD FOR PERMANENT STABILIZATION**
- A. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
- A.1. SITE PREPARATION
- A.1.a. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
- A.1.b. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO BETWEEN 5.5 AND 7.5
- A.1.c. REMOVE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES
- A.1.d. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3-5 INCHES TO PROVIDE A GOOD BOND WITH THE TOPSOIL.
- A.2. APPLYING TOPSOIL
- A.2.a. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
- A.2.b. DISTURBED TO TOPSOIL SHOULD BE REDISTRIBUTED ON-SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. NO REMOVAL OF TOPSOIL IS ALLOWED UNLESS APPROVED BY THE MONTGOMERY COUNTY CONSERVATION DISTRICT.
- A.2.c. UNIFORM APPLICATION TO A DEPTH OF 6-8 INCHES (UNTESTED) IS RECOMMENDED.
- A.2.d. AREAS WITH A PH OF 5.5 OR LOWER MUST BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE.
- A.3. SEEDED PREPARATION
- A.3.a. SOIL TEST SHALL BE CONDUCTED TO ACCURATELY DETERMINE NECESSARY SOIL AMENDMENTS.
- A.3.b. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
- A.3.c. SOIL MODIFICATIONS
- A.3.c.1. APPLY 10-20-20 FERTILIZER AT A RATE OF 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
- A.3.c.2. APPLY AGRICULTURAL LIME AT A RATE OF 6 TONS PER ACRE OR 240 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
- A.3.d. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDED IS PREPARED.
- A.3.e. REMOVE FROM THE SURFACE ALL STONES ONE INCH (1") OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
- A.3.f. INSPECT SEEDED JUST PRIOR TO SEEDING. IF THE AREA HAS LET THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FERTILIZED AS ABOVE.
- A.4. SEEDING. SEE SEEDING SPECIFICATIONS
- A.4.5. SEE BED AREAS SHALL ALSO BE STABILIZED USING AN APPROVED METHOD (EG: HYDROMULCHING) AS OUTLINED IN ITEM IV.A. HEREIN.
- B. STANDARD FOR PERMANENT STABILIZATION WITH SOO**
- B.1. METHOD OF MATERIALS
- B.1.a. CULTIVATED SOO IS PREFERRED OVER NATIVE OR PASTURE SOO. SPECIFY "CERTIFIED SOO," OR OTHER HIGH QUALITY CULTIVATED SOO.
- B.1.b. SOO SHOULD BE FREE OF WEEDS AND UNDESIRABLE CROPPED SPECIES GRASSES.
- B.1.c. SOO SHOULD BE OF A MINIMUM OF 1/2" 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).
- B.1.d. SOO SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT VIGILANTLY WITH A MINIMUM OF 1/2" OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN EDGES WILL NOT BE

### III. STANDARD FOR UTILITY TRENCH EXCAVATION

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| <p>A. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.</p>  | <p>B.1f. ONLY MOIST, FRESH UNHEATED SOIL SHOULD BE USED. SOIL SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS.</p>   |
| <p>B. LIMIT DAYLY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUS BACKFILLING AND BACKFILLING TO THE TRENCH. THE TRENCH SHALL BE LEGALLY BACKFILLED OF THE TRENCH MAY BE DELAYED FOR A MAX. OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE.</p> | <p>B.2. SITE PREPARATIONS: SEE SPECIFICATION FOR SEEDING &amp; SOIL TREATMENT FOR PERMANENT OR TEMPORATIVE COVER (ITEM V.A. ABOVE).</p>   |
| <p>C. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING OR REMOVAL OF SEDIMENT FILTER BAG, SEE DETAIL) BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.</p>   | <p>B.3. SOIL PLACEMENT</p>  |
| <p>D. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION CONTROL POLLUTION CONTROL MEASURES (SODS, MULCHES) WILL BE INSTALLED.</p>  | <p>B.3.a. SOIL STRIPS SHOULD BE LAID ON THE CONTOUR, WORKING UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND NEVER UP ON STEEP SLOPES.</p>   |
| <p>E. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE IMMEDIATELY.</p>  | <p>B.3.b. USE OF LADDER OR OTHER MEANS TO FACILITATE THE USE OF SOIL STRIPS ON THE SOIL, DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOIL.</p>  |
| <p>F. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF-CONTAINED AND SEPARATE FROM GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.</p>  | <p>B.3.c. PLACE SOIL STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES ARE ALLOWED.</p>  |
| <p>G. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.</p>  | <p>B.3.d. ROLL OR RAMP SOIL IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOIL CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOIL. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS, WHICH WOULD CAUSE DRYING OF THE ROOTS.</p> |
|  | <p>B.3.d. ON SLOPES GREATER THAN 3 TO 1, SECURE SOIL TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES OR A BIODEGRADABLE FASTENER.</p>  |

#### IV. STANDARD FOR TEMPORARY STABILIZATION

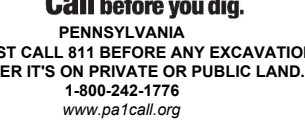
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|---|--|
| <p><b>A. STANDARD FOR TEMPORARY STABILIZATION WITH FIBERMULCH</b></p> <p><b>A.1.</b> MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING IN ADDITION, STABILIZATION WITH FIBER MULCH SHALL BE USED DURING NON-GERMINATING PERIODS.</p> <p><b>A.2.</b> PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE.</p> <p><b>A.3.</b> GRADE AS NEEDED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.</p> <p><b>A.4.</b> SELECTIVE MATERIAL TO BE REMOVED TO REHABILITATE AREAS.</p> <p><b>A.4.a.</b> UNROTTED SMALL-GRAIN UN-CHOPPED STRAW OR HAY AT 3.0 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1 AND MARCH 1) SPREAD UNIFORMLY AND ANCHORED WITH LIQUID MULCH BINDER. BINDER PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.</p> <p><b>A.4.b.</b> HYDROMULCHER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL. LIQUID MULCH BINDERS: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. PRODUCTS TO BE INSTALLED AT A RATE OF 1 TON PER ACRE (MINIMUM) OR PER MANUFACTURER'S SPECIFICATIONS.</p> | <p>PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.</p> <p><b>B.3.1.</b> IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.</p> <p><b>B.3.2.</b> FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS NEEDED.</p> |
| <p><b>B. STANDARD FOR TEMPORARY STABILIZATION WITH SEED</b></p> <p><b>B.1.</b> DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE</p>  |  |

B.3.f. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.

B.4. FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS NEEDED.

## REVISIONS

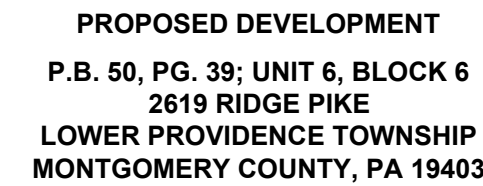
REV	DATE	COMMENT	DRAWING CHECKED
1	11/21/2022	PER COMPLETENESS REVIEW	RC
2	01/05/2023	PER COMPLETENESS REVIEW	SU
3	01/27/2023	PER PENNDOT COMMENTS	RC
			SU



PROJECT No.: PP2132  
DRAWN BY: F  
CHECKED BY: S  
DATE: 08/29/20  
CAD I.D.: PP213264-X-TTLB-LD

PROJECT: **PRELIMINARY/FINAL**

FOR  
TIDAL WAVE  
AUTO SPA  
STORE #:004



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**1515 MARKET STREET, SUITE 920  
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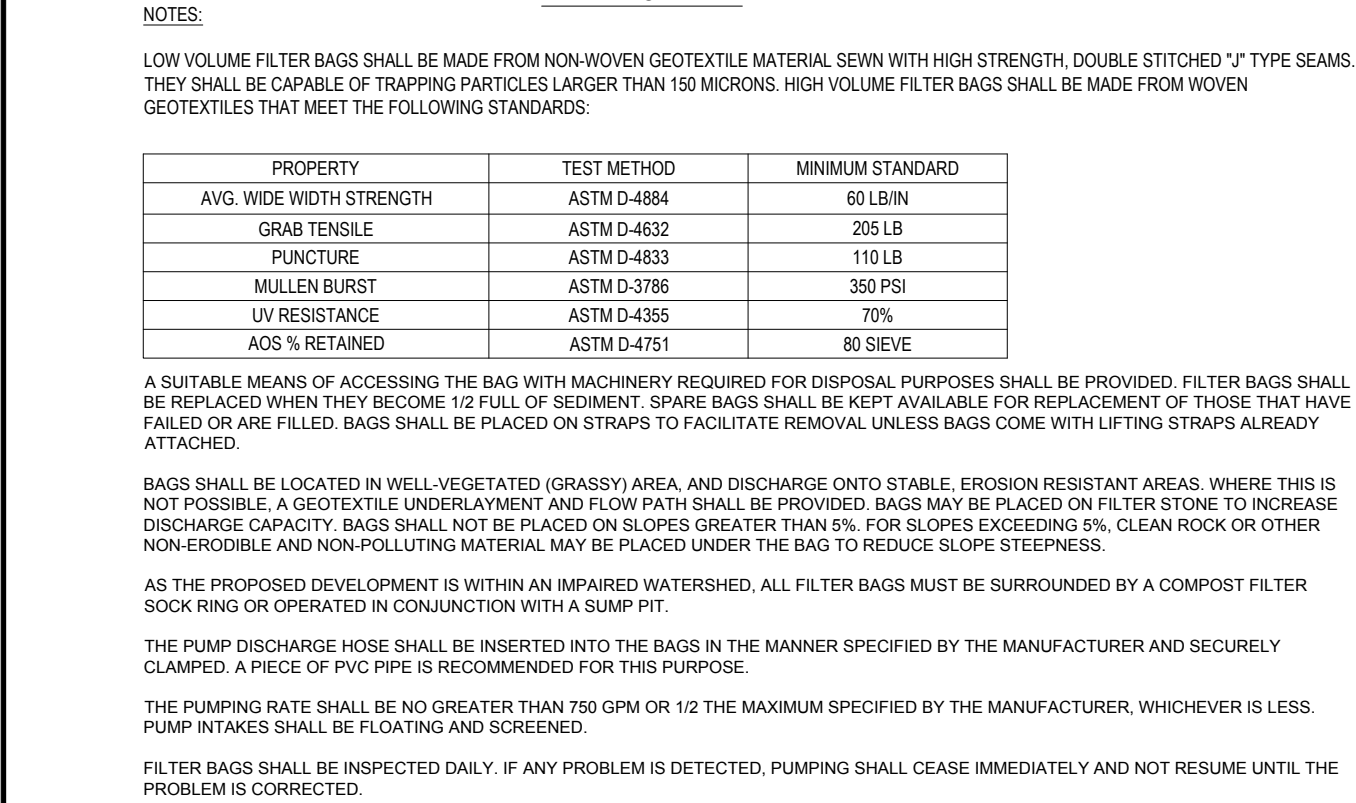
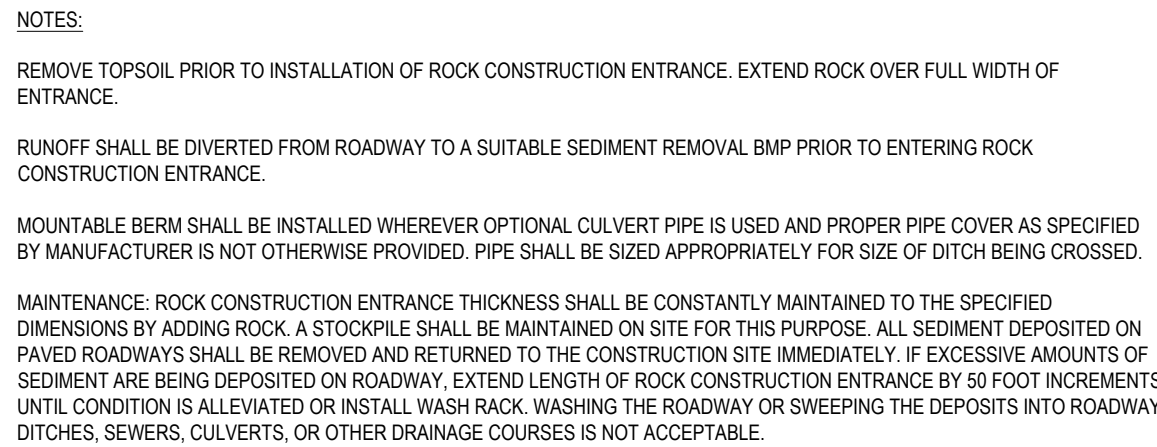
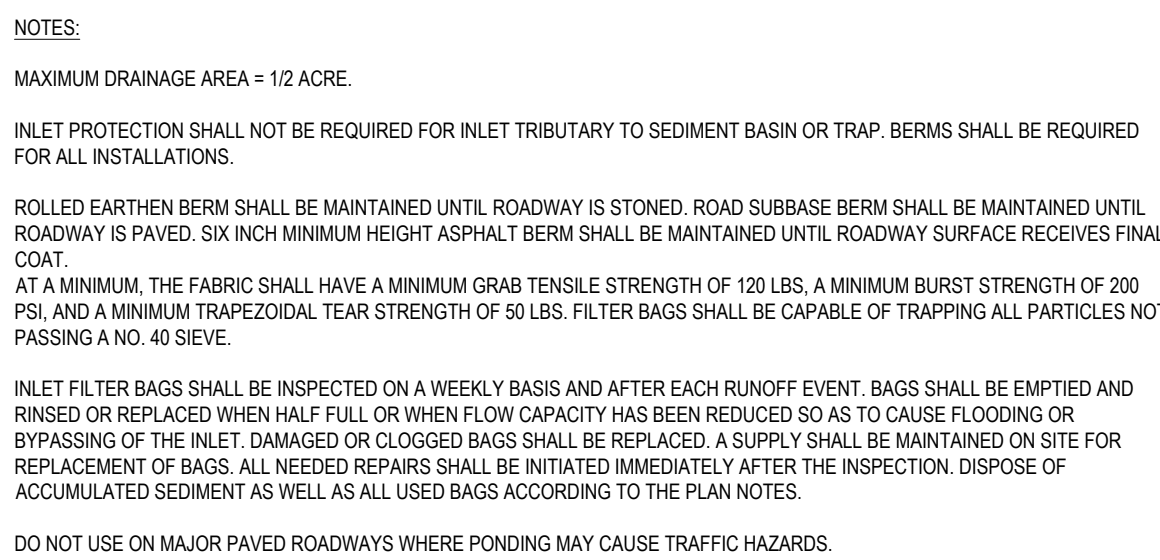
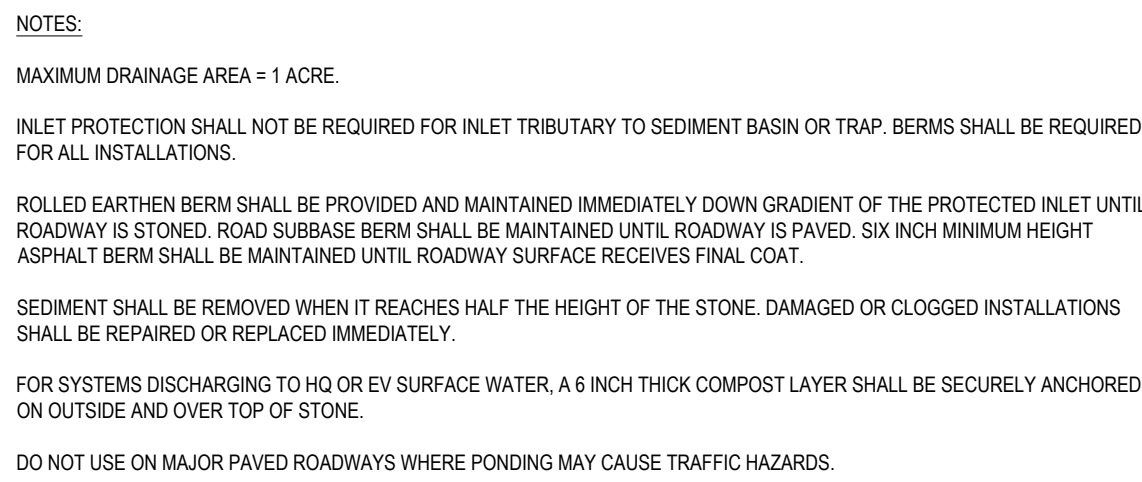


**SHEET TITLE:**  
**SOIL EROSION &  
SEDIMENT  
POLLUTION  
CONTROL DETAIL**

**C-603**

REVISION 3 - 01/27/2023



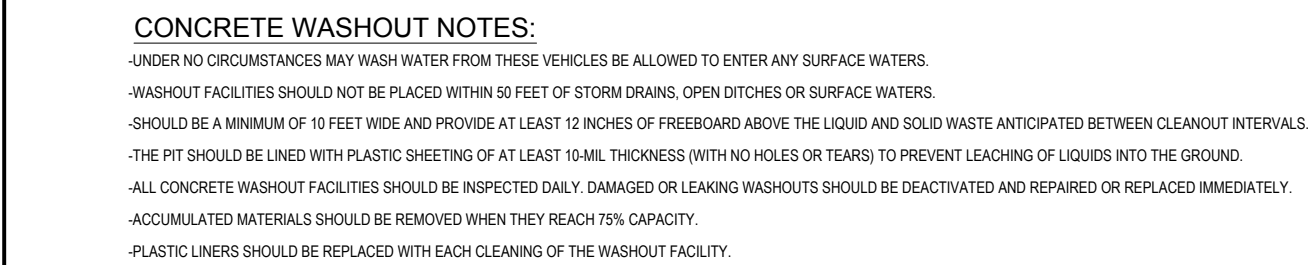
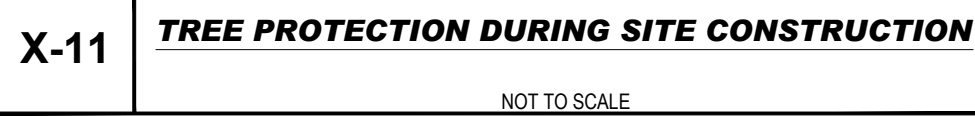
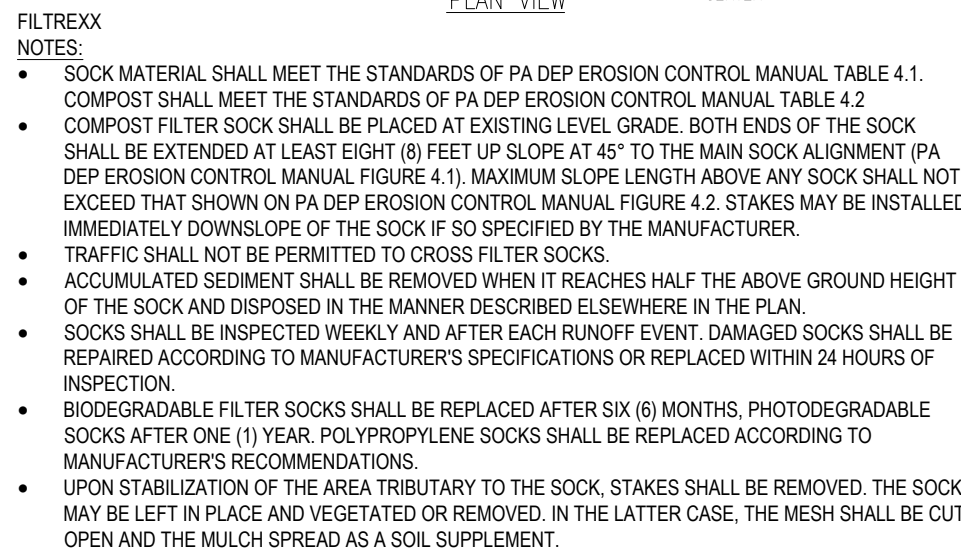
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<b>#4-15</b>	<b>STANDARD CONSTRUCTION DETAIL #4-15</b>
	<b>FILTER BAG INLET PROTECTION - TYPE C INLET</b>

NOT TO SCALE

#3-1	<p align="center"><b>STANDARD CONSTRUCTION DETAIL #3-1</b>  <b>(ABACT) ROCK CONSTRUCTION ENTRANCE</b></p> <p align="center">NOT TO SCALE</p>
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#3-16	<p align="center"><b><u>STANDARD CONSTRUCTION DETAIL #3-16 (ABACT)</u></b></p> <p align="center"><b><u>PUMPED WATER FILTER BAG</u></b></p> <p align="center">NOT TO SCALE</p>



X-13	<p><b><u>TYPICAL COMPOST SOCK WASHOUT INSTALLATION</u></b></p>	
	<p>NOT TO SCALE</p>	

PROJECT No.:	PP213264
DRAWN BY:	RG
CHECKED BY:	SU
DATE:	08/29/2022
CAD I.D.:	PP213264-X-TTLB-LDVP

**PROJECT:**  
**PRELIMINARY/FINAL**  
**LAND**  
**DEVELOPMENT**  
**DOCUMENTS**  
— FOR —  
**TIDAL WAVE**  
**AUTO SPA**  
**STORE #:004**



**PROPOSED DEVELOPMENT**  
**P.B. 50, PG. 39; UNIT 6, BLOCK 6**  
**2619 RIDGE PIKE**  
**LOWER PROVIDENCE TOWNSHIP**  
**MONTGOMERY COUNTY, PA 1940**

**BOHLER //**

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**SHEET TITLE:**

**SOIL EROSION &  
SEDIMENT  
POLLUTION  
CONTROL DETAILS**

# C-604

REVISION 3 - 01/27/2023

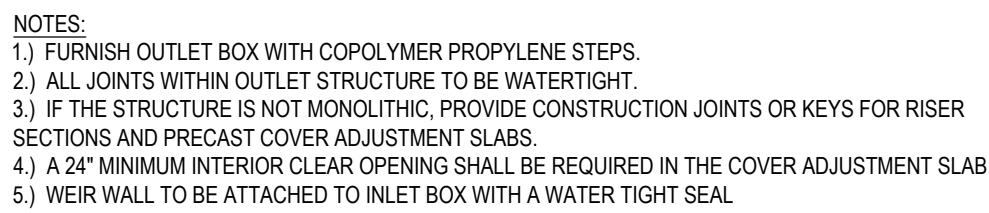










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PROJECT:  
**PRELIMINARY/FINAL**



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The seal is circular with a red border. The outer ring contains the text "COMMONWEALTH OF PENNSYLVANIA" in red. The inner circle features a red and white striped background. Overlaid on the seal is the text "M. KEARSE" in large, bold, black letters. Below this, in smaller red text, is "PROFESSIONAL ENGINEER". At the bottom of the seal, in red text, is "MATTHEW JOHN KEARSE" and "PROFESSIONAL ENGINEER LICENSE No. PE000088".

**SHEET NUMBER:**  
**C-607**

**REVISION 3 - 01/27/2023**



## SC-740 STORMTECH CHAMBER SPECIFICATIONS

- ## IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

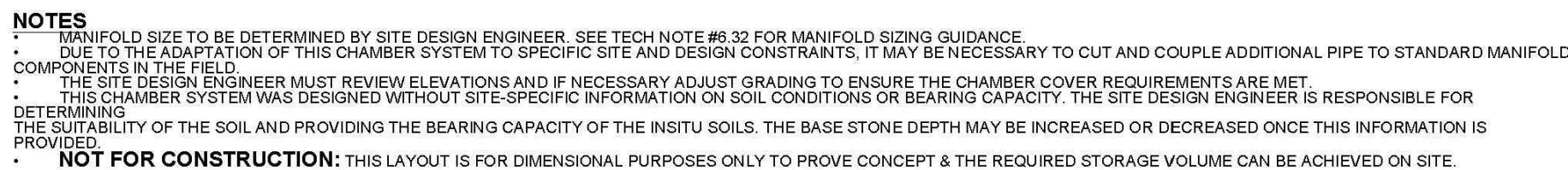
1. STORMTIECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTIECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTIECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTIECH RECOMMENDS 3 BACKFILL METHODS:
  - STONESHOOTER LOCATED OFF THE CHAMBER BED
  - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
  - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - Ø" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4"-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXITRAC MATH CUT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

## NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740D CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310SC-740DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER TILLED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310SC-740DC-780 CONSTRUCTION GUIDE".
  - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310SC-740DC-780 CONSTRUCTION GUIDE".
3. FULL 3% (900 MM) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

[illegible]

**ADS**

4540 TRUBIAN BLVD  
HILLIARD, OH 43026  
1.630.757.4715

**StormTech®**

Client: System

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0 1' 20'

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HILLIARD, OH 43026  
1.630.757.4715

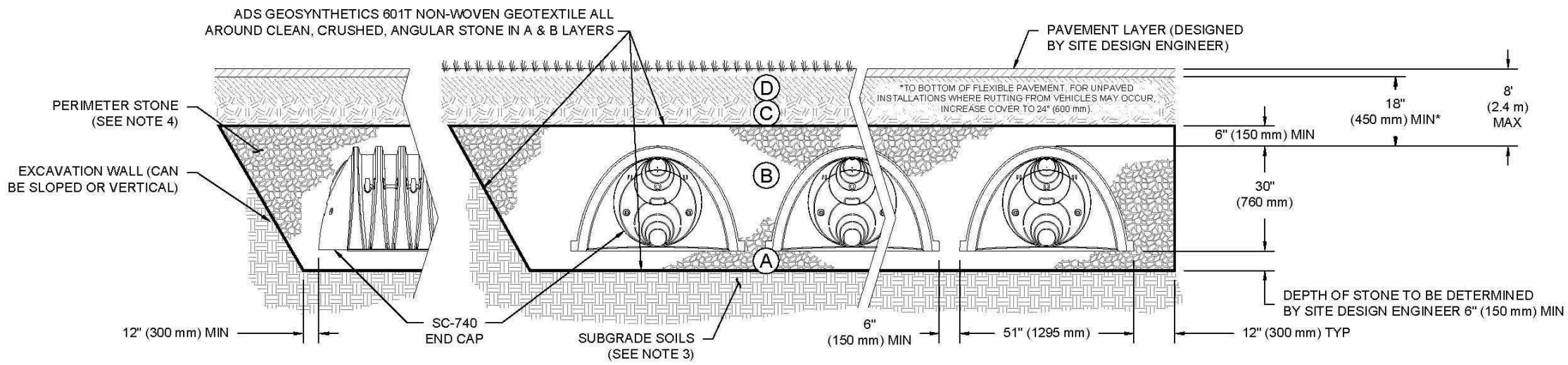
TOOPER TIDAL  
LOWER PROVIDENCE PA  
DRAWN: N/A  
CHECKER: N/A



# ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <30% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 90% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B EMBODIMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE <sup>2,3</sup>

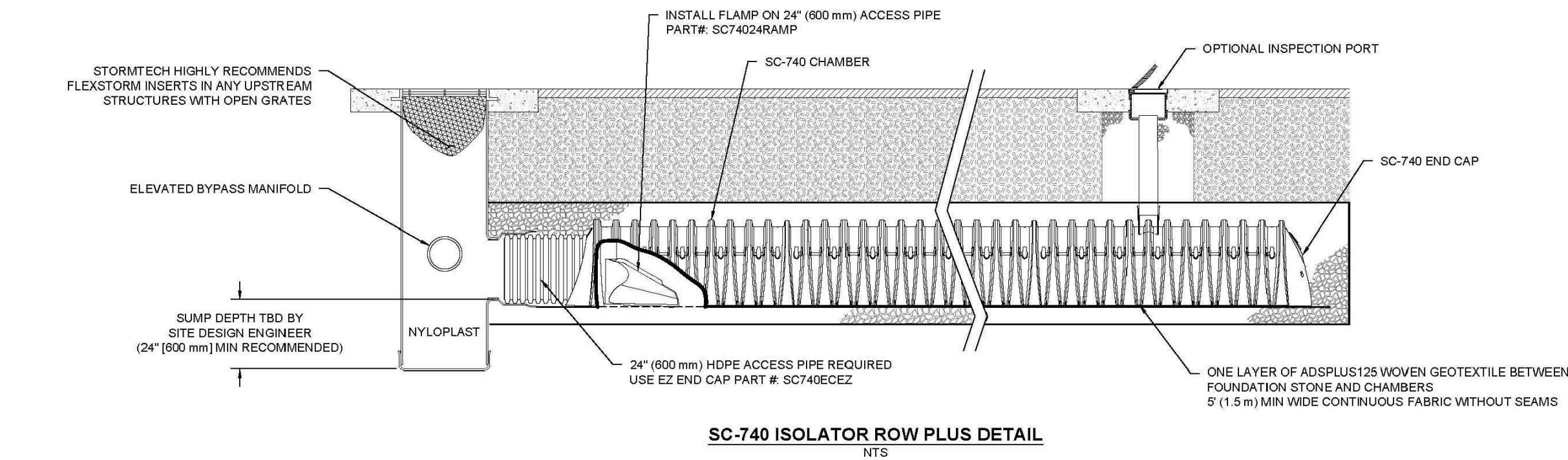
PLEASE NOTE:  
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE, "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".  
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.  
4. ONCE LAYER 'C' IS PLACED, ANY SOLI/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



## NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2037 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT<sup>2</sup>/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

TROOPER TIDAL	LOWER PROVIDENCE, PA	DATE: _____	PROJECT # _____	DESCRIPTION _____
DRAWN BY: _____	CHECKED BY: _____	DATE: _____	DATE: _____	DATE: _____
4640 TRULMAN BLVD HADDONFIELD, NJ 08033 1-800-233-4743	StormTech® Chamber System	888-892-2894   WWW.STORMTECH.COM	888-892-2894   WWW.STORMTECH.COM	888-892-2894   WWW.STORMTECH.COM
SHEET	3 OF 6			



## INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
  - REMOVE/OPEN LID ON NYLOPLAST IN LINE DRAIN
  - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - IF SEDIMENT IS AT OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
  - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

## NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

TROOPER TIDAL	LOWER PROVIDENCE, PA	DATE: _____	PROJECT # _____	DESCRIPTION _____
DRAWN BY: _____	CHECKED BY: _____	DATE: _____	DATE: _____	DATE: _____
4640 TRULMAN BLVD HADDONFIELD, NJ 08033 1-800-233-4743	StormTech® Chamber System	888-892-2894   WWW.STORMTECH.COM	888-892-2894   WWW.STORMTECH.COM	888-892-2894   WWW.STORMTECH.COM
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## REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG
2	01/05/2023	PER COMPLETENESS REVIEW	RG
3	01/27/2023	PER PENNDOT COMMENTS	SU



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DATE: 08/29/2023  
CAD I.D.: PP213264-X-TTLB-LDVP

## PRELIMINARY/FINAL

**LAND DEVELOPMENT DOCUMENTS**  
FOR  
**TIDAL WAVE AUTO SPA**  
**STORE #004**



PROPOSED DEVELOPMENT  
P.B. 50, PG. 39; UNIT 6, BLOCK 6  
2619 RIDGE PIKE  
LOWER PROVIDENCE TOWNSHIP  
MONTGOMERY COUNTY, PA 19403

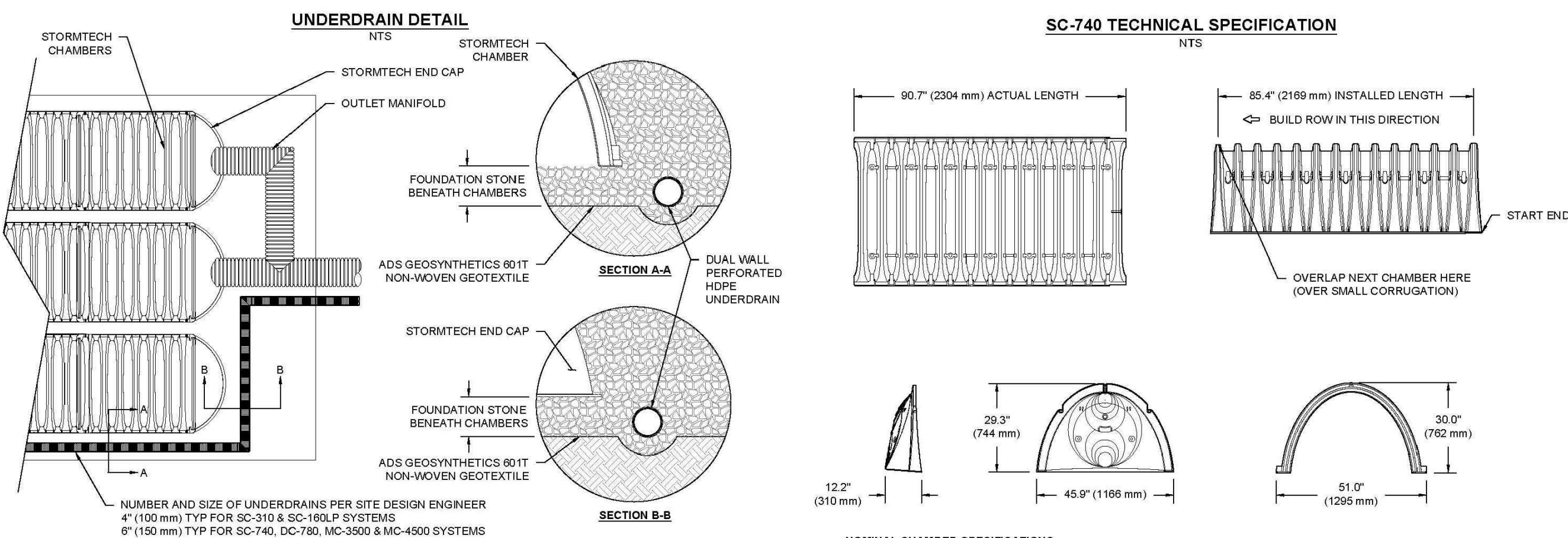
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Fax: (267) 402-3401  
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SHEET TITLE: **POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS**  
SHEET NUMBER: **C-608**

REVISION 3 - 01/27/2023



PART #	STUB	A	B	C
SC740EPE08T / SC740EPE08TPC	8" (150 mm)	10.9" (277 mm)	18.9" (470 mm)	---
SC740EPE08B / SC740EPE08BPC	8" (150 mm)	12.2" (310 mm)	18.9" (470 mm)	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	18.9" (470 mm)	0.5" (13 mm)
SC740EPE08B / SC740EPE08BPC	---	---	---	---
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.9" (368 mm)	---
SC740EPE10B / SC740EPE10BPC	---	---	---	---
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.9" (318 mm)	0.7" (18 mm)
SC740EPE12B / SC740EPE12BPC	---	---	---	---
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC	---	---	---	---
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.3" (33 mm)
SC740EPE18B / SC740EPE18BPC	---	---	---	---
SC740ECE2"	24" (600 mm)	18.9" (470 mm)	---	0.1" (3 mm)

PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"  
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"  
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"  
PRE-CORED END CAPS END WITH "PC"

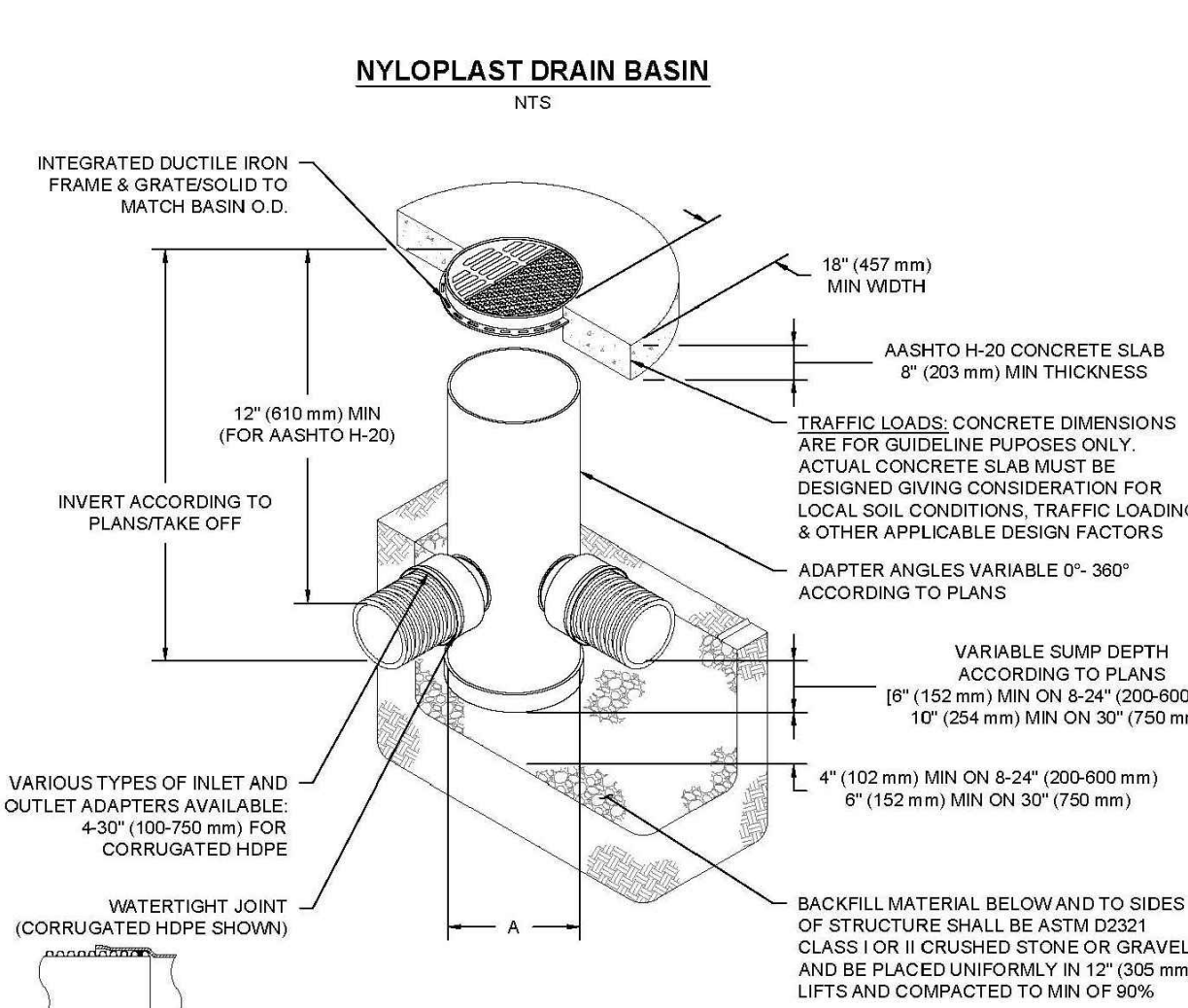
PART #	STUB	A	B	C
SC740EPE08T / SC740EPE08TPC	8" (150 mm)	10.9" (277 mm)	18.9" (470 mm)	---
SC740EPE08B / SC740EPE08BPC	8" (150 mm)	12.2" (310 mm)	18.9" (470 mm)	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	18.9" (470 mm)	0.5" (13 mm)
SC740EPE08B / SC740EPE08BPC	---	---	---	---
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.9" (368 mm)	---
SC740EPE10B / SC740EPE10BPC	---	---	---	---
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.9" (318 mm)	0.7" (18 mm)
SC740EPE12B / SC740EPE12BPC	---	---	---	---
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC	---	---	---	---
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.3" (33 mm)
SC740EPE18B / SC740EPE18BPC	---	---	---	---
SC740ECE2"	24" (600 mm)	18.9" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740ECEZ 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2894.

\*FOR THE SC740ECEZ 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

TROOPER TIDAL	LOWER PROVIDENCE, PA	DATE: _____	PROJECT # _____	DESCRIPTION _____
DRAWN BY: _____	CHECKED BY: _____	DATE: _____	DATE: _____	DATE: _____
4640 TRULMAN BLVD HADDONFIELD, NJ 08033 1-800-233-4743	StormTech® Chamber System	888-892-2894   WWW.STORMTECH.COM	888-892-2894   WWW.STORMTECH.COM	888-892-2894   WWW.STORMTECH.COM
SHEET	5 OF 6			

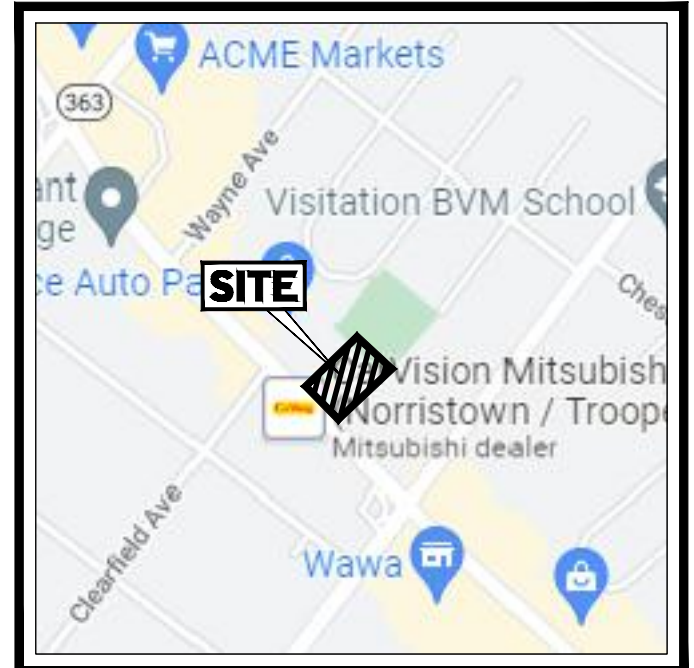
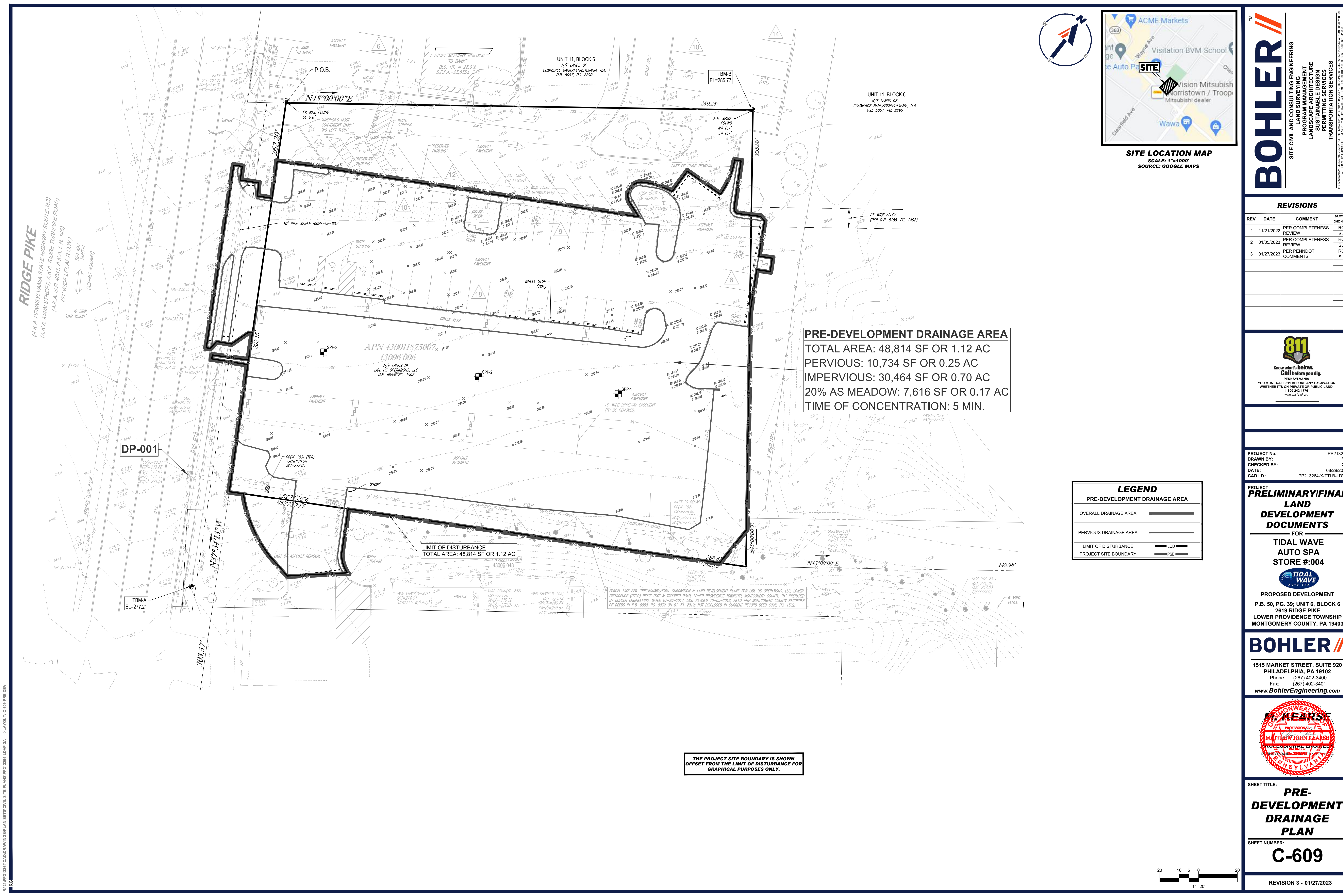


## NOTES

- 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212
- FOR CORRUGATED HOPE ADS & HANCOR DUAL WALL & SDR 35 PVC
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION: [WWW.NYLOPLAST-US.COM](http://WWW.NYLOPLAST-US.COM)
- TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS
6" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20





SITE LOCATION MAP  
SCALE: 1"=1000'  
SOURCE: GOOGLE MAPS

**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG	RG
2	01/05/2023	PER COMPLETENESS REVIEW	RG	RG
3	01/27/2023	PER PENNDOT COMMENTS	RG	SU

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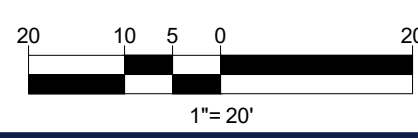
PROJECT No.: PP213264  
DRAWN BY: RG  
CHECKED BY: SU  
DATE: 08/29/2022  
CAD ID: PP213264-X-TTLB-LDVP

PROJECT: **PRELIMINARY/FINAL**  
**LAND DEVELOPMENT DOCUMENTS**  
FOR  
**TIDAL WAVE AUTO SPA**  
**STORE #004**  
**TIDAL WAVE**  
PROPOSED DEVELOPMENT  
P.B. 50, PG. 39; UNIT 6, BLOCK 6  
2619 RIDGE PIKE  
LOWER PROVIDENCE TOWNSHIP  
MONTGOMERY COUNTY, PA 19403

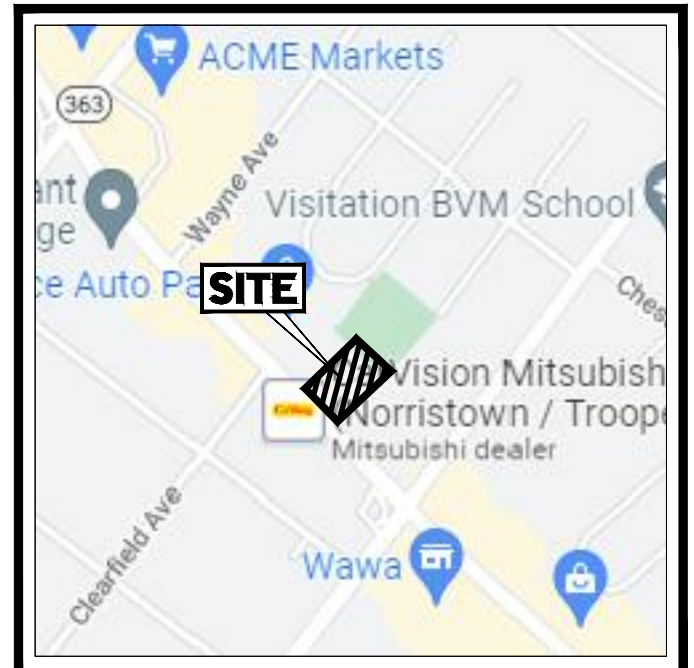
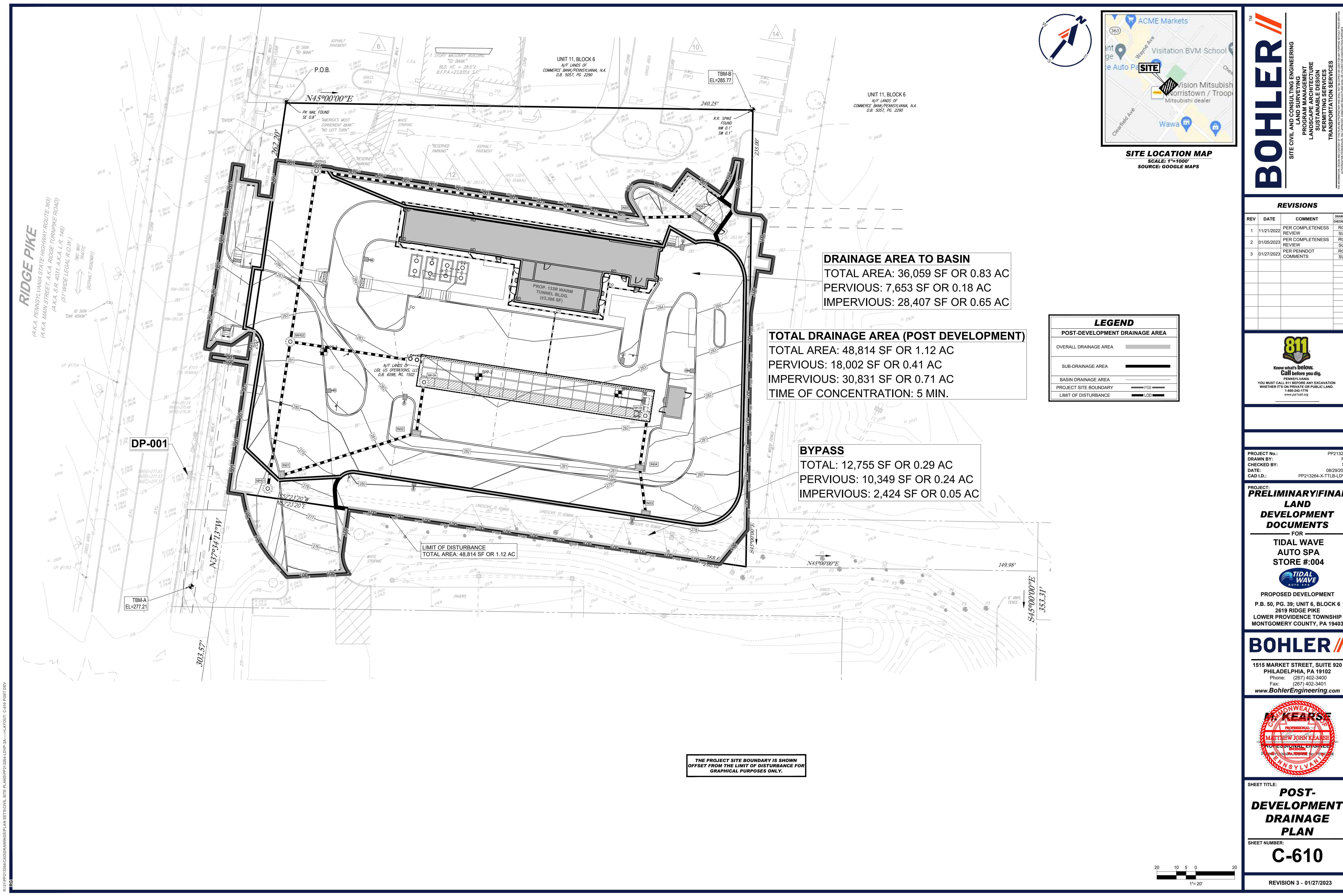
**BOHLER**  
1515 MARKET STREET, SUITE 920  
PHILADELPHIA, PA 19102  
Phone: (267) 402-3400  
Fax: (267) 402-3401  
www.BohlerEngineering.com



SHEET TITLE: **PRE-DEVELOPMENT DRAINAGE PLAN**  
SHEET NUMBER: **C-609**  
REVISION 3 - 01/27/2023







SITE LOCATION MAP  
SCALE: 1"=1000'  
SOURCE: GOOGLE MAPS

**DRAINAGE AREA TO BASIN**  
TOTAL AREA: 36,059 SF OR 0.83 AC  
PERVIOUS: 7,653 SF OR 0.18 AC  
IMPERVIOUS: 28,407 SF OR 0.65 AC

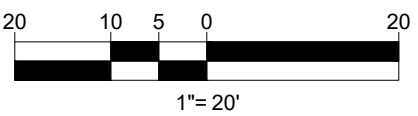
**TOTAL DRAINAGE AREA (POST DEVELOPMENT)**  
TOTAL AREA: 48,814 SF OR 1.12 AC  
PERVIOUS: 18,002 SF OR 0.41 AC  
IMPERVIOUS: 30,831 SF OR 0.71 AC  
TIME OF CONCENTRATION: 5 MIN.

**BYPASS**  
TOTAL: 12,755 SF OR 0.29 AC  
PERVIOUS: 10,349 SF OR 0.24 AC  
IMPERVIOUS: 2,424 SF OR 0.05 AC

LEGEND	
POST-DEVELOPMENT DRAINAGE AREA	
OVERALL DRAINAGE AREA	
SUB-DRAINAGE AREA	
BASIN DRAINAGE AREA	
PROJECT SITE BOUNDARY	PSB
LIMIT OF DISTURBANCE	LDD

LIMIT OF DISTURBANCE  
TOTAL AREA: 48,814 SF OR 1.12 AC

THE PROJECT SITE BOUNDARY IS SHOWN  
OFFSET FROM THE LIMIT OF DISTURBANCE FOR  
GRAPHICAL PURPOSES ONLY.



BOHLER

SITE CIVIL AND CONSULTING ENGINEERING  
PROJECT MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

REVISIONS				
REV	DATE	COMMENT	DRAWN BY	
1	11/21/2022	PER COMPLETENESS REVIEW	RG	SU
2	01/05/2023	PER COMPLETENESS REVIEW	RG	SU
3	01/27/2023	PER PENNDOT COMMENTS	RG	SU

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PROJECT No.: PP213264  
DRAWN BY: RG  
CHECKED BY: SU  
DATE: 08/29/2022  
CAD ID: PP213264-X-TTLB-LDVP

PRELIMINARY/FINAL  
LAND  
DEVELOPMENT  
DOCUMENTS

FOR  
TIDAL WAVE  
AUTO SPA  
STORE #004

TIDAL WAVE

PROPOSED DEVELOPMENT  
P.B. 50, PG. 39; UNIT 6, BLOCK 6  
2619 RIDGE PIKE  
LOWER PROVIDENCE TOWNSHIP  
MONTGOMERY COUNTY, PA 19403

BOHLER

1515 MARKET STREET, SUITE 920  
PHILADELPHIA, PA 19102  
Phone: (267) 402-3400  
Fax: (267) 402-3401  
www.BohlerEngineering.com

M. KEARSE

PROFESSIONAL  
MATTHEW JOHN KEARSE  
REGISTERED PROFESSIONAL ENGINEER  
No. 000000000  
PENNSYLVANIA

SHEET TITLE:  
POST-  
DEVELOPMENT  
DRAINAGE  
PLAN

SHEET NUMBER:  
C-610

REVISION 3 - 01/27/2023



R:\11\PP213264\CADD\DRAWINGS\PLAN SET\BOH\ SITE PLANS\PP213264-LDVP-3A.dwg---LAYOUT: C-611 INLET DA

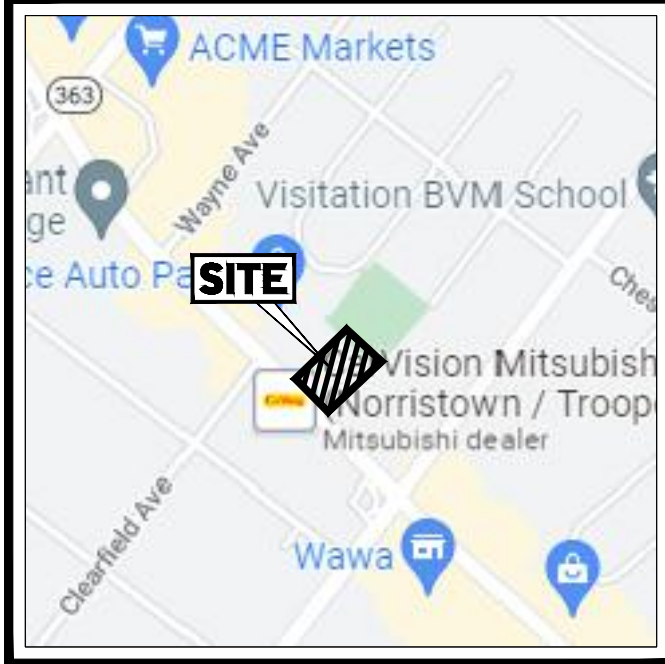
RIDGE PIKE  
(A.K.A. PENNSYLVANIA STATE HIGHWAY ROUTE 363)  
(A.K.A. MAIN STREET, A.K.A. RIDGE TURNPIKE ROAD)  
(51' WIDE LEGAL R.O.W.)



**LEGEND**

INLET DRAINAGE AREA

DRAINAGE AREA TO INLET



SITE LOCATION MAP  
SCALE: 1"=1000'  
SOURCE: GOOGLE MAPS

REVISIONS				
REV	DATE	COMMENT	DRAWN BY	
1	11/21/2022	PER COMPLETENESS REVIEW	RG	SU
2	01/05/2023	PER COMPLETENESS REVIEW	RG	SU
3	01/27/2023	PER PENNDOT COMMENTS	RG	SU

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PROJECT No.: PP213264  
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CAD ID: PP213264-X-TTLB-LDVP

PROJECT:  
**PRELIMINARY/FINAL**  
**LAND**  
**DEVELOPMENT**  
**DOCUMENTS**  
FOR  
**TIDAL WAVE**  
**AUTO SPA**  
**STORE #004**

PROPOSED DEVELOPMENT  
P.B. 50, PG. 39; UNIT 6, BLOCK 6  
2619 RIDGE PIKE  
LOWER PROVIDENCE TOWNSHIP  
MONTGOMERY COUNTY, PA 19403

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SHEET TITLE:  
**INLET**  
**DRAINAGE**  
**AREAS PLAN**

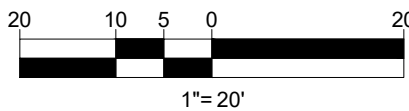
SHEET NUMBER:  
**C-611**

REVISION 3 - 01/27/2023

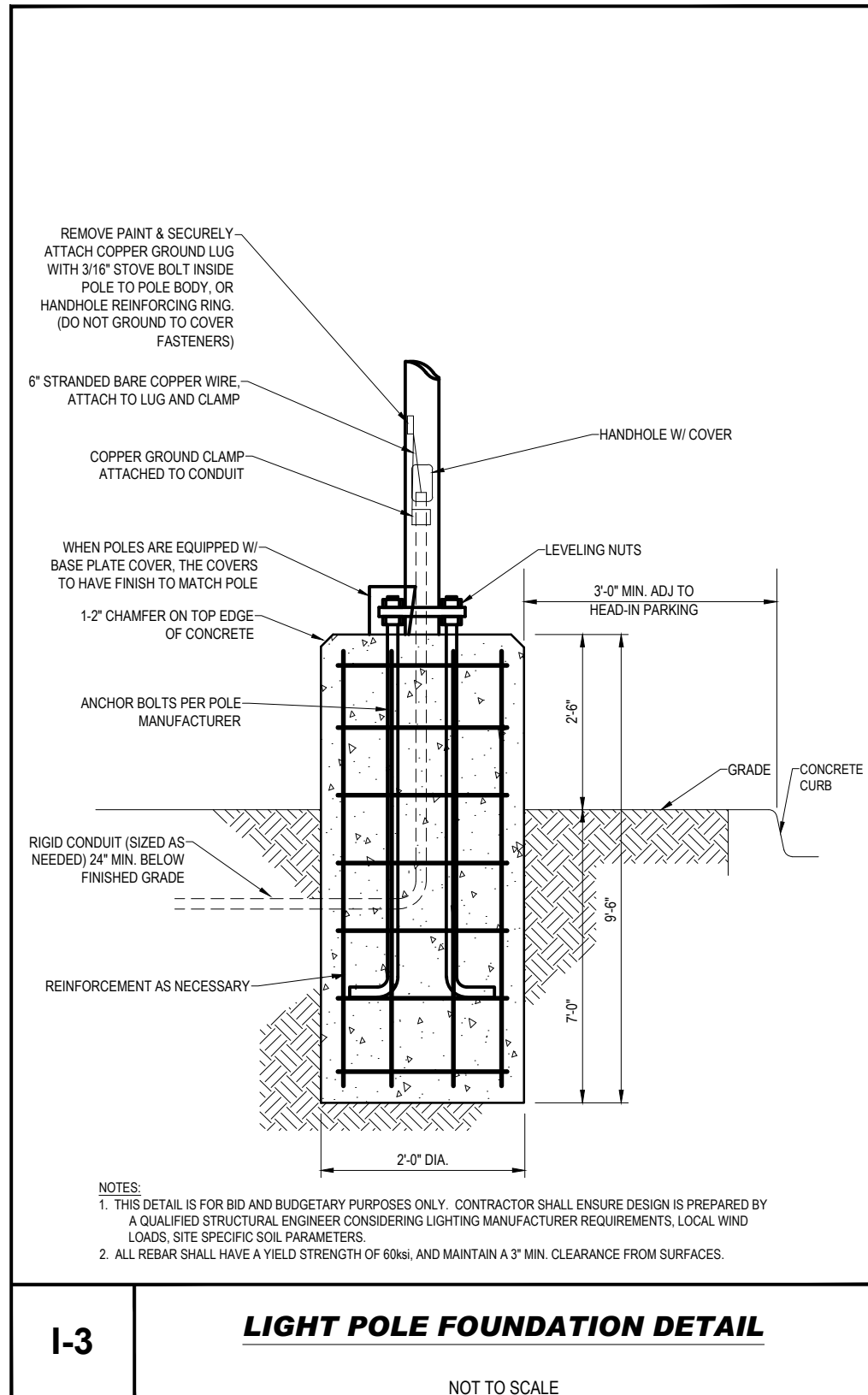
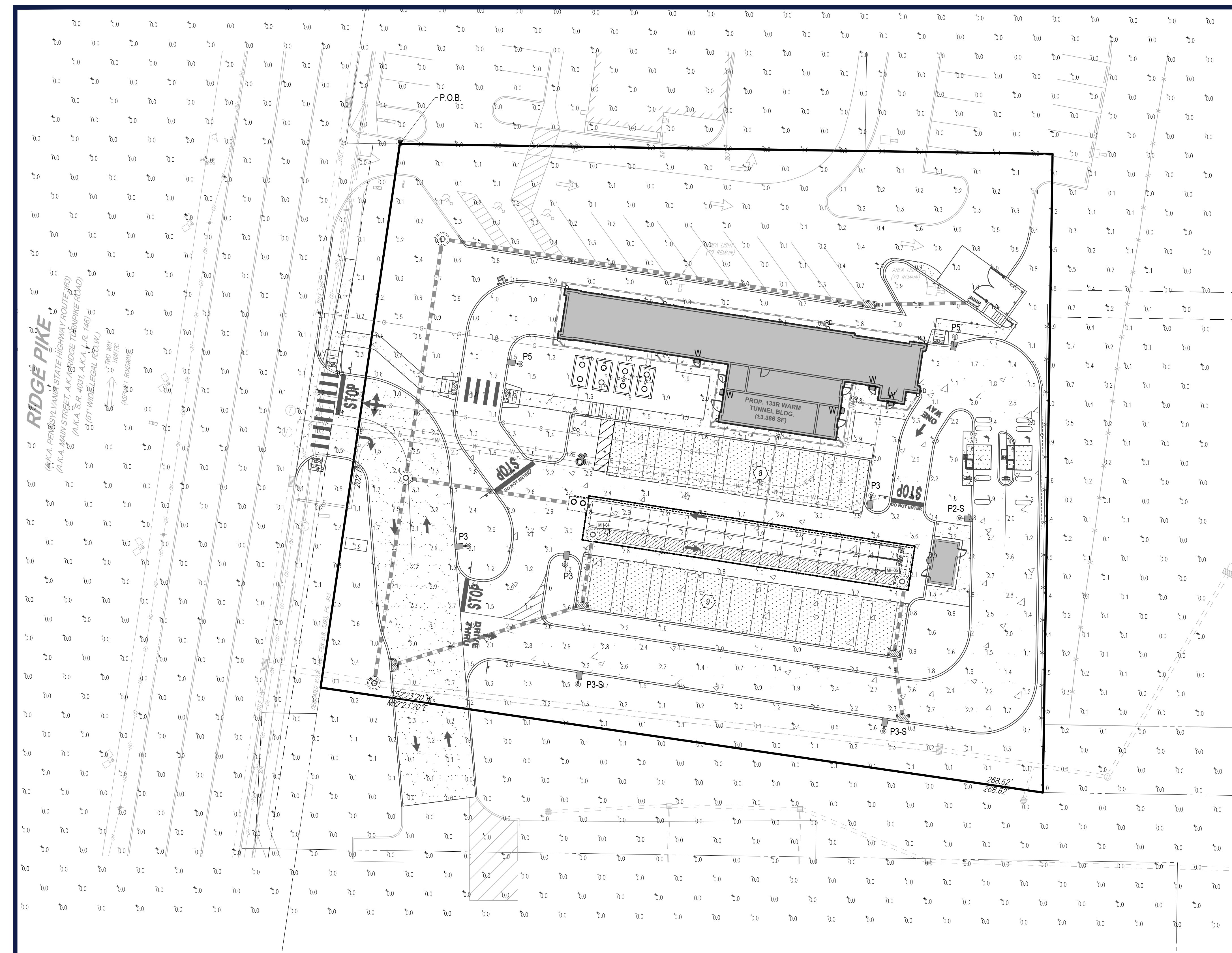
INLET DRAINAGE AREAS

INLET	TOTAL AREA	PERVIOUS AREA	IMPERVIOUS AREA
INLET 01	10,801 SF	3,782 SF	7,019 SF
INLET 02	6,150 SF	1,868 SF	4,282 SF
INLET 03	9,065 SF	1,921 SF	7,144 SF
INLET 04	6,866 SF	395 SF	6,471 SF
INLET 05	32,563 SF*	5,012 SF	27,551 SF
INLET 06	12,536 SF*	2,707 SF	9,829 SF

\*AREA INCLUDES OFF-SITE DRAINAGE FROM NEIGHBORING PROPERTY







GENERAL LIGHTING NOTES

- THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE ELECTRICAL CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY, THE ELECTRICAL CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
- THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE PLANS, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL AGENCY AND GOVERNMENTAL REGULATIONS.
- THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER. ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOT-CANDLES (FC).
- THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND RE-LAMPING ACCORDING TO MANUFACTURER RECOMMENDATIONS. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN. UPON COMPLETION AND OWNER'S ACCEPTANCE OF THE WORK, THE ABOVE RESPONSIBILITIES BECOMES SOLELY THE OWNERS.
- THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, POWER SYSTEM, CONDUITS, WIRING AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, MECHANICAL ENGINEERS AND/OR ELECTRICAL CONTRACTORS RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES.
- THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES TO THE ENGINEER OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED.
- UPON OWNERS ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.
- THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-08 TESTING. THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE PROJECT ENGINEER (BOHLER) FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.

LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUM. LUMENS	LLF	DESCRIPTION	POLE
P2-S	1	20'-0" AFG	SINGLE	9502	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE 2 WITH BACKLIGHT SHIELD, ZERO UP-LIGHT (RAR1-160L-70-9K7-2-x-x-ASQ-BLT-BC)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
P3	3	20'-0" AFG	SINGLE	9559	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE 3, ZERO UP-LIGHT (RAR1-160L-70-9K7-3-x-x-ASQ-BLT)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
P3-S	2	20'-0" AFG	SINGLE	6598	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE 3 WITH BACKLIGHT SHIELD, ZERO UP-LIGHT (RAR1-160L-70-9K7-3-x-x-ASQ-BLT-BC)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
P5	2	20'-0" AFG	SINGLE	9610	0.900	CURRENT LIGHTING, RATIO SERIES LED AREA/SITE LIGHTER, TYPE SQW, ZERO UP-LIGHT (RAR1-160L-70-9K7-SQW-x-x-ASQ-BLT)	CURRENT LIGHTING, STRAIGHT SQUARE STEEL POLE, 17'-6" LENGTH (SSS-B-17.5-40-A-1-B3-BLT)
W4	5	15'-0" AFF	SINGLE	3679	0.900	CURRENT LIGHTING, RATIO SERIES LED WALLPACK, TYPE 4W, ZERO UP-LIGHT (RWL1-48L-25-9K7-4W-x-BLT-PC)	-----

CALCULATION SUMMARY

LABEL	CALC TYPE	Units	AVG	MAX	Min	AVG MIN	MAX MIN
ALL POINTS	ILLUMINANCE	Fc	0.40	4.0	0.0	N.A.	N.A.
DRIVE THRU	ILLUMINANCE	Fc	1.88	4.0	0.5	3.76	8.00
PARKING	ILLUMINANCE	Fc	2.22	3.6	0.8	2.78	4.50



SITE LOCATION MAP  
SCALE: 1"=1000'  
SOURCE: GOOGLE MAPS

REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	11/21/2022	PER COMPLETENESS REVIEW	RG
2	01/05/2023	PER COMPLETENESS REVIEW	SU
3	01/27/2023	PER PENNDOT COMMENTS	RG



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PROJECT No.: PP213264  
DRAWN BY: RG  
CHECKED BY: SU  
DATE: 08/29/2022  
CAD I.D.: PP213264-X-TTLB-LDVP

PROJECT:  
**PRELIMINARY/FINAL**  
**LAND**  
**DEVELOPMENT**  
**DOCUMENTS**  
FOR  
**TIDAL WAVE**  
**AUTO SPA**  
**STORE #004**



PROPOSED DEVELOPMENT  
P.B. 50, PG. 39; UNIT 6, BLOCK 6  
2619 RIDGE PIKE  
LOWER PROVIDENCE TOWNSHIP  
MONTGOMERY COUNTY, PA 19403

**BOHLER**

1515 MARKET STREET, SUITE 920  
PHILADELPHIA, PA 19102

Phone: (267) 402-3400  
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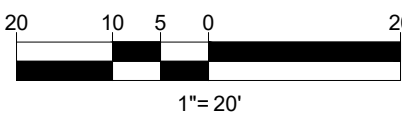
SHEET TITLE:

**LIGHTING PLAN**

SHEET NUMBER:

**C-701**

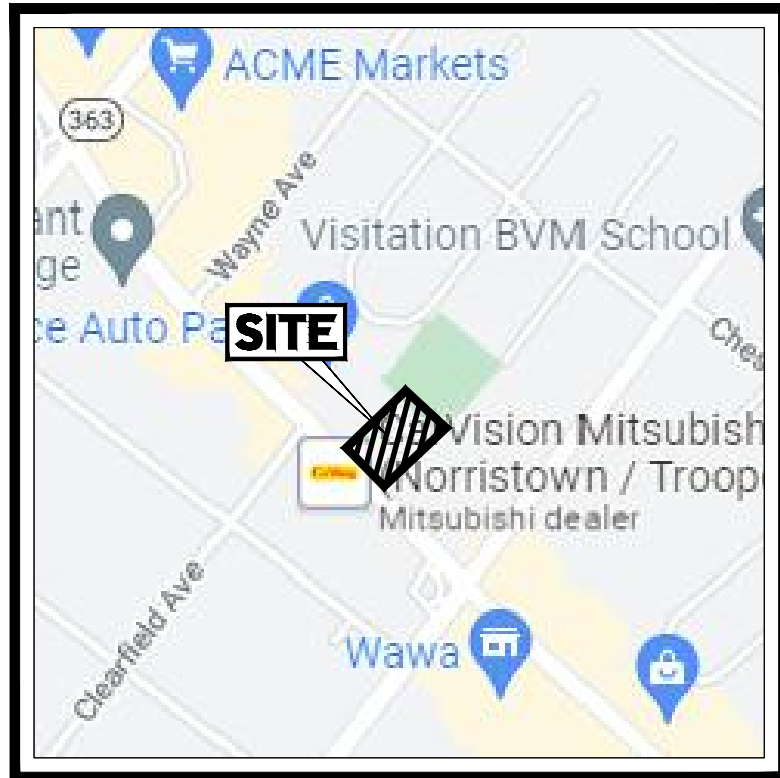
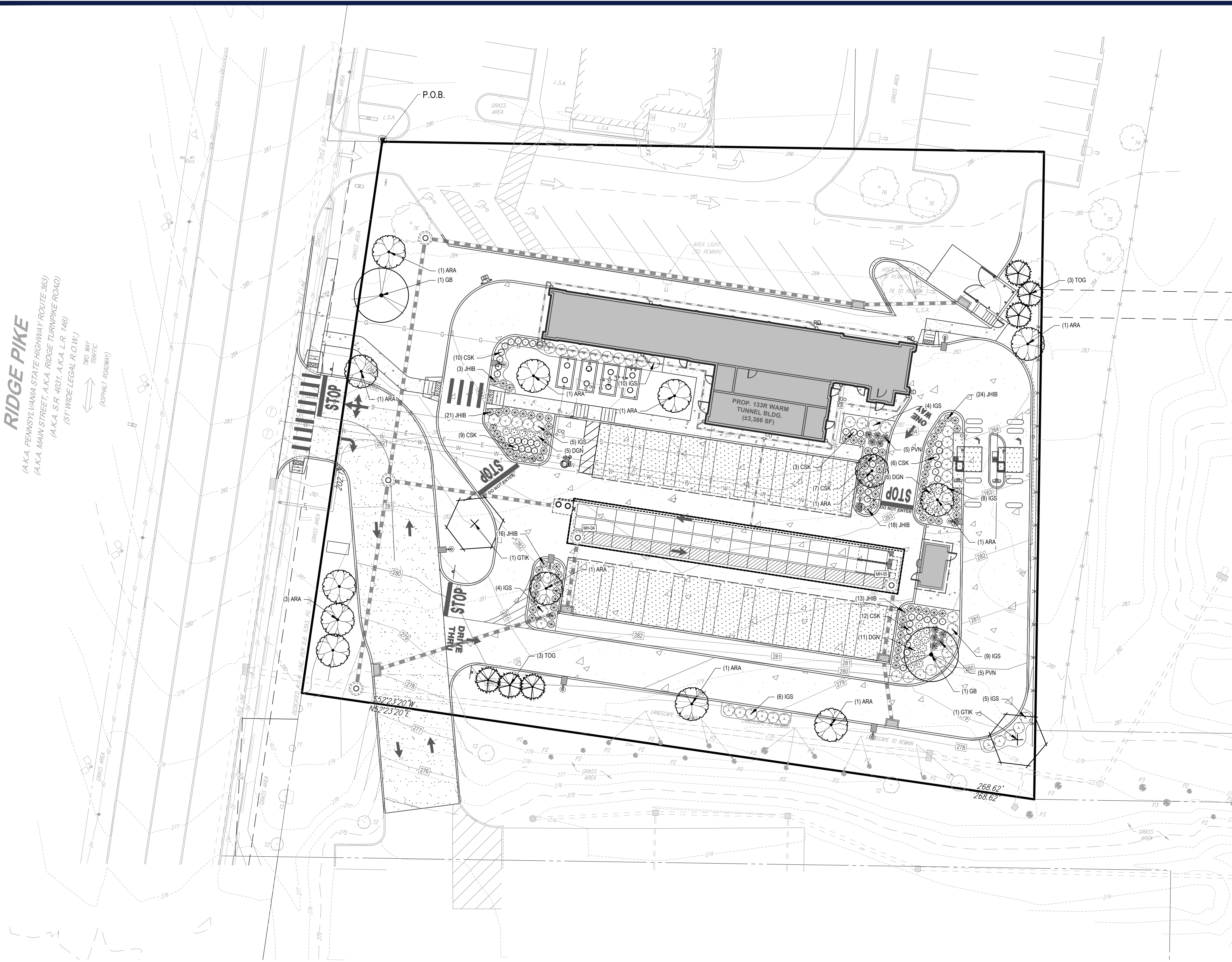
REVISION 3 - 01/27/2023





R:\11\PP213264\CADD\DRAWINGS\PLAN SET\BOHLE SITE PLANS\PP213264-LLOT-3A-----LAYOUT: C-702.LSC

RIDGE PIKE  
(A.K.A. PENNSYLVANIA STATE HIGHWAY ROUTE 363)  
(A.K.A. MAIN STREET A.K.A. RIDGE TURNPIKE ROAD)  
(A.K.A. SR 4031, A.K.A. L.R. 146)  
(51' WIDE LEGAL R.O.W.)  
TWO WAY TRAFFIC  
(ASPHALT ROADWAY)



SITE LOCATION MAP  
SCALE: 1"=1000'  
SOURCE: GOOGLE MAPS

#### COMPLIANCE CHART

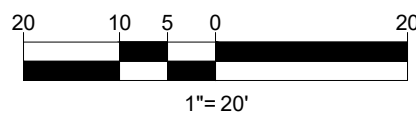
SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
ZONING: 143.262 DIMENSIONAL REGULATIONS FOR ALL USES.	E.(3) A MINIMUM OF ONE THREE-INCH CALIPER TOWNSHIP-QUALIFIED STREET TREE AS REQUIRED IN THE LOWER PROVIDENCE TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, HAVING A MINIMUM OF SIX FEET HIGH PLANTED ON THE BACK SIDE OF THE PUBLIC SIDEWALK FOR EVERY 25 FEET OF THE PROPERTY LOT FRONTAGE WIDTH.	TOTAL LENGTH ALONG RIDGE PIKE = 165 ± LF (EXCLUDING DRIVEWAY WIDTH) REQUIRED: 165 / 25 = 6.6 OR 7 STREET TREES PROVIDED: 1 GB, 5 ARA, PLUS ONE EXISTING TREE TO REMAIN TO MEET THIS REQUIREMENT. (7 TREES)	COMPLIES
SALDO: 123-37 PARKING AND LOADING AREAS	4. LANDSCAPING DESIGN STANDARDS. THE FOLLOWING STANDARDS APPLY TO ALL PARKING LOT LANDSCAPING: (1) THESE TREES SHALL BE PLANTED IN THE PLANTING STRIPS A MINIMUM OF 30 FEET AND A MAXIMUM OF 40 FEET APART. EACH LANDSCAPED ISLAND SHALL CONTAIN AT LEAST ONE CANOPY TREE. (2) THE MINIMUM SIZE OF TREES WHEN PLANTED SHALL BE BETWEEN FIVE FEET TO EIGHT FEET IN HEIGHT AND A CALIPER OF 2 1/2 INCHES FOR SHADE TREES AND EIGHT FEET IN HEIGHT FOR EVERGREENS	REQUIRED: 1 CANOPY TREE PER ISLAND PROVIDED: A CANOPY TREE HAS BEEN PROVIDED IN EACH ISLAND, WHERE FEASIBLE. WHERE TREES CONFLICT WITH UNDERGROUND UTILITIES, THE REQUIRED TREE HAS BEEN PLANTED IN CLOSE PROXIMITY.	COMPLIES
123-50 LANDSCAPING	A.(3) THE MINIMUM NUMBER OF TREES AND SHRUBS REQUIRED SHALL BE AS FOLLOWS: (a) ONE SHADE TREE AND ONE EVERGREEN TREE PER 5,000 SQUARE FEET OF PAVED AREA USED AS PARKING, LOADING AND DRIVEWAYS. (b) ONE FLOWERING OR EVERGREEN SHRUB PER 1,500 SQUARE FEET OF PAVED AREA USED AS PARKING, LOADING AND DRIVEWAYS. (c) GROUND COVER PLANTS, GROWING TO LESS THAN ONE FOOT IN HEIGHT, SHALL NOT COUNT TOWARD THE MINIMUM REQUIRED NUMBER OF PLANTS.	TOTAL PAVED AREA = 22,205 ± SF REQUIRED: 22,205 / 5,000 = 4.44 OR 5 SHADE TREES 22,205 / 1,500 = 14.80 OR 15 SHRUBS PROVIDED: 4 ARA, 1 GB (5 SHADE TREES); 5 TOG (5 EVERGREEN TREES); 15 IGS (15 SHRUBS)	COMPLIES
	B.(2) ALONG PROPERTY LINES ABUTTING SIMILAR MULTIFAMILY OR NONRESIDENTIAL DISTRICTS OR DEVELOPMENTS, THE MINIMUM NUMBER OF TREES AND SHRUBS SHALL BE AS FOLLOWS: (a) ONE SHADE TREE PER 100 FEET OF PROPERTY LINE. (b) ONE EVERGREEN TREE AND ONE FLOWERING TREE OR THREE FLOWERING OR EVERGREEN SHRUBS PER 150 FEET OF PROPERTY LINE.	LENGTH ALONG NORTHWEST PROPERTY LINE = 240 ± LF REQUIRED: 240 / 100 = 2.4 OR 3 TREES (240 / 150) x 3 = 4.80 OR 5 SHRUBS PROVIDED: NONE (EXISTING NON-CONFORMITY) LENGTH ALONG NORTHEAST PROPERTY LINE = 235 ± LF REQUIRED: 235 / 100 = 2.35 OR 3 TREES (235 / 150) x 3 = 4.68 OR 5 SHRUBS PROVIDED: 5 IGS (5 SHRUBS); 1 ARA, 1 GTIK, PLUS ONE EXISTING SHADE TREE TO REMAIN TO MEET THIS REQUIREMENT. (3 TREES)	EXISTING NON-CONFORMITY COMPLIES
	LENGTH ALONG SOUTHEAST PROPERTY LINE = 268 ± LF REQUIRED: 268 / 100 = 2.68 OR 3 TREES (268 / 150) x 3 = 5.36 OR 6 SHRUBS PROVIDED: 6 IGS (6 SHRUBS); 2 ARA, PLUS ONE EXISTING SHADE TREE TO REMAIN TO MEET THIS REQUIREMENT. (3 TREES)	LENGTH ALONG SOUTHEAST PROPERTY LINE = 268 ± LF REQUIRED: 268 / 100 = 2.68 OR 3 TREES (268 / 150) x 3 = 5.36 OR 6 SHRUBS PROVIDED: 6 IGS (6 SHRUBS); 2 ARA, PLUS ONE EXISTING SHADE TREE TO REMAIN TO MEET THIS REQUIREMENT. (3 TREES)	COMPLIES
123-52 SHADE TREES	SHADE TREES SHALL BE PLANTED ALONG BOTH SIDES OF ALL NEW OR EXISTING STREETS AT INTERVALS OF NO LESS THAN 40 FEET AND NO MORE THAN 50 FEET, EXCEPT WHERE TREE MASSES HAVE BEEN PRESERVED WHERE SHADE TREES WOULD OTHERWISE BE LOCATED. TREES SHALL BE PLACED BACK OF THE RIGHT-OF-WAY LINE OF STREET, SO AS NOT TO INTERFERE WITH THE INSTALLATION AND MAINTENANCE OF SIDEWALKS, DRAINAGE FACILITIES AND/OR UTILITIES AND SHALL BE OF TWO-INCH CALIPER, BALLED AND BURLAPPED, AND GUARANTEED FOR 18 MONTHS AFTER PLANTING. SPECIES SELECTION SHALL BE AT THE DISCRETION OF THE BOARD OF SUPERVISORS OR AS RECOMMENDED BY THE PLANNING COMMISSION. THE TYPES OF SHADE TREES SHALL BE SUCH THAT WHEN GROWN TO FULL MATURITY THE TREES SHALL NOT IMPIDE THE UTILIZATION OF SOLAR ENERGY BY NEIGHBORING STRUCTURES.	PLANT MATERIAL PROVIDED FOR ZONING 143.262 E.(3), ABOVE.	COMPLIES

#### GENERAL NOTES:

- THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
- ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C., UNLESS OTHERWISE STATED ON THIS PLAN.
- SHRUBS PLANTED ALONG HEAD IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
- IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM.
- PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER ENGINEERING AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
- WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE: RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.

#### PLANT SCHEDULE

CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
ARA	13	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	2.5" CAL.	B&B
GB	2	GINKGO BILOBA 'PRINCETON SENTRY' (MALE ONLY)	PRINCETON SENTRY GINKGO TREE	2.5" CAL.	B&B
GTIK	2	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLLE'	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
TOG	6	THUJA OCCIDENTALIS 'GREEN GIANT'	GREEN GIANT ARBORVITAE	6"	B&B
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CSK	47	CORNUS SERICEA 'KELSEY'	KELSEY DOGWOOD	15-18"	CONTAINER
DGN	22	DEUTZIA GRACILIS 'NKKO'	SLENDER DEUTZIA	18-24"	CONTAINER
IGS	51	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	30" MIN.	CONTAINER
JHIB	95	JUNIPERUS HORIZONTALIS 'MONBER'	ICEE BLUE JUNIPER	15-18" SPRD	CONTAINER
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
PVN	10	PANICUM VIRGATUM 'NORTH WIND'	NORTHWIND SWITCH GRASS	1 GAL.	CONTAINER



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1	11/21/2022	PER COMPLETENESS REVIEW	RG	SU
2	01/05/2023	PER COMPLETENESS REVIEW	RG	SU
3	01/27/2023	PER PENNDOT COMMENTS	RG	SU



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CHECKED BY: SU  
DATE: 08/29/2022  
CAD ID: PP213264-X-TTLB-LDVP

PROJECT:  
**PRELIMINARY/FINAL  
LAND  
DEVELOPMENT  
DOCUMENTS**

FOR  
**TIDAL WAVE  
AUTO SPA  
STORE #004**



PROPOSED DEVELOPMENT  
P.B. 50, PG. 39; UNIT 6, BLOCK 6  
2619 RIDGE PIKE  
LOWER PROVIDENCE TOWNSHIP  
MONTGOMERY COUNTY, PA 19403

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SHEET TITLE:

**LANDSCAPE  
PLAN**

SHEET NUMBER:

**C-702**

REVISION 3 - 01/27/2023



A. TOSPLING	
<p>1. CONTRACTOR SHALL PROVIDE A SIX (6) INCH THICK MINIMUM LAYER OF TOSPLOR, OR AS DIRECTED BY THE LOCAL JURISDICTION OR CLIENT. IN ALL PLANTING AND LAND AREAS, TOSPLOR SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.</p> <p>2. ON SITE TOSPLOR MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOSPLOR FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.</p> <p>3. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOSPLOR, TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.</p>	<p><b>13. CLEANUP</b></p> <p>4. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.</p> <p>5. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.</p>

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DETAILS**

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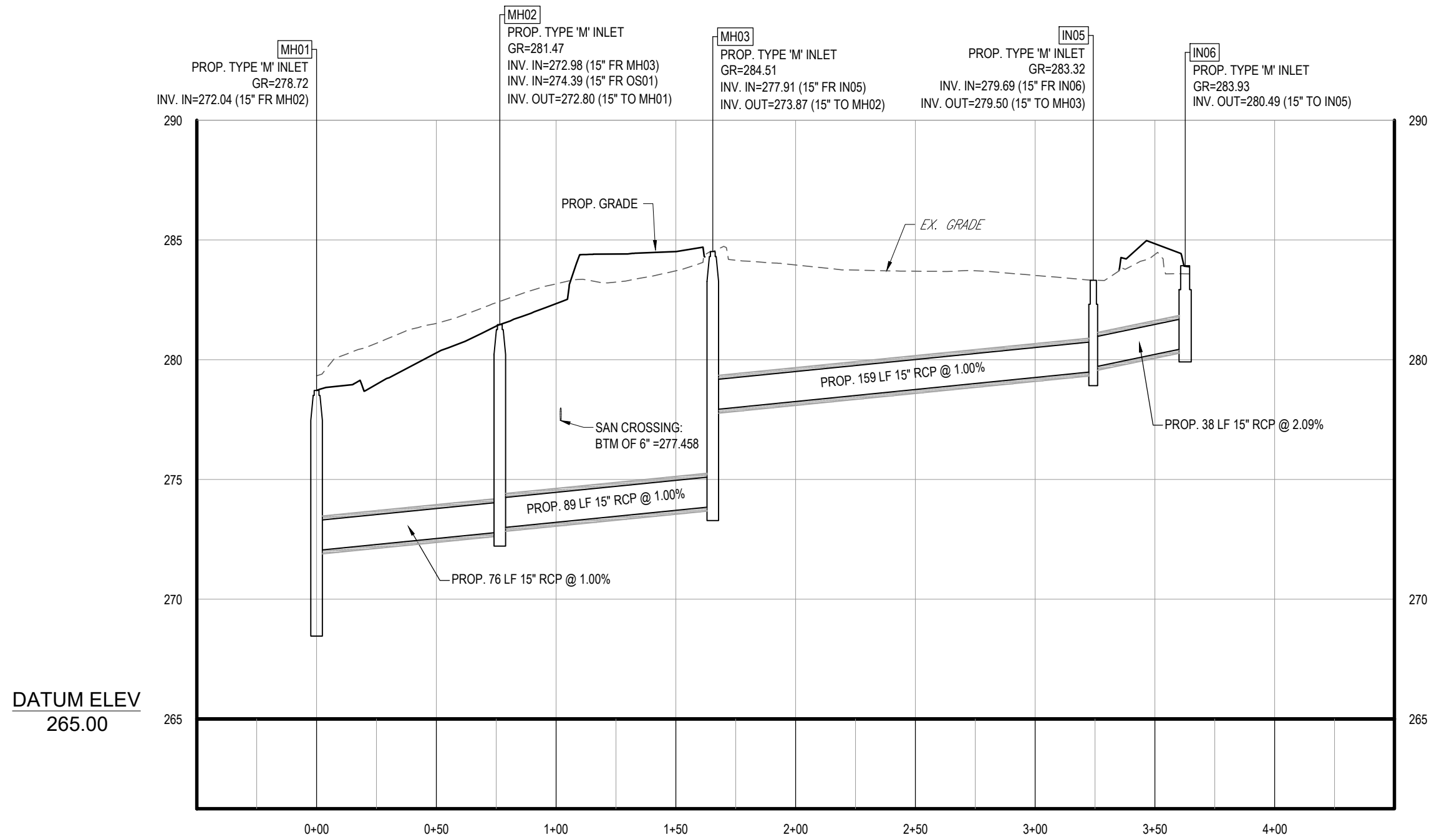
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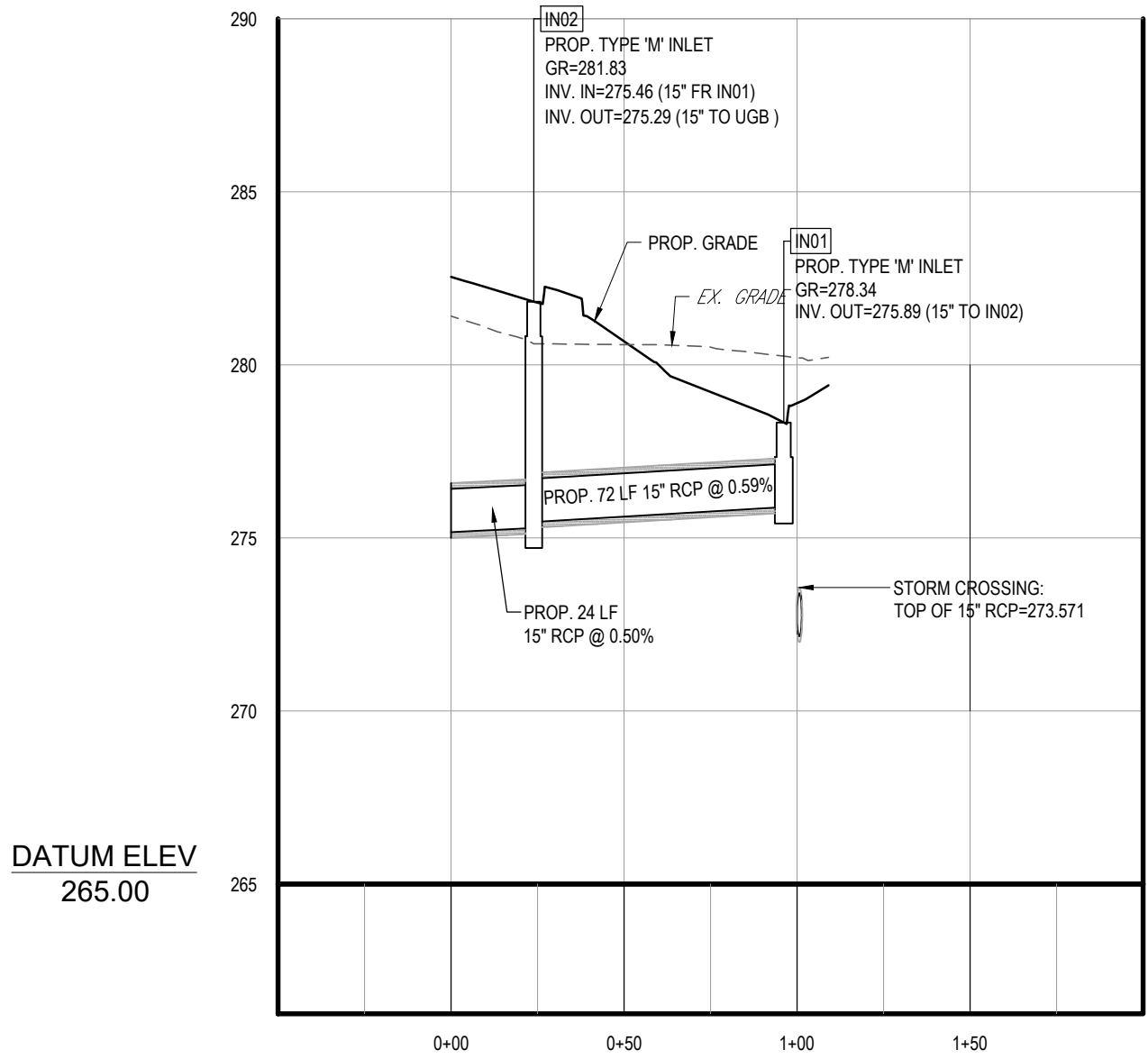
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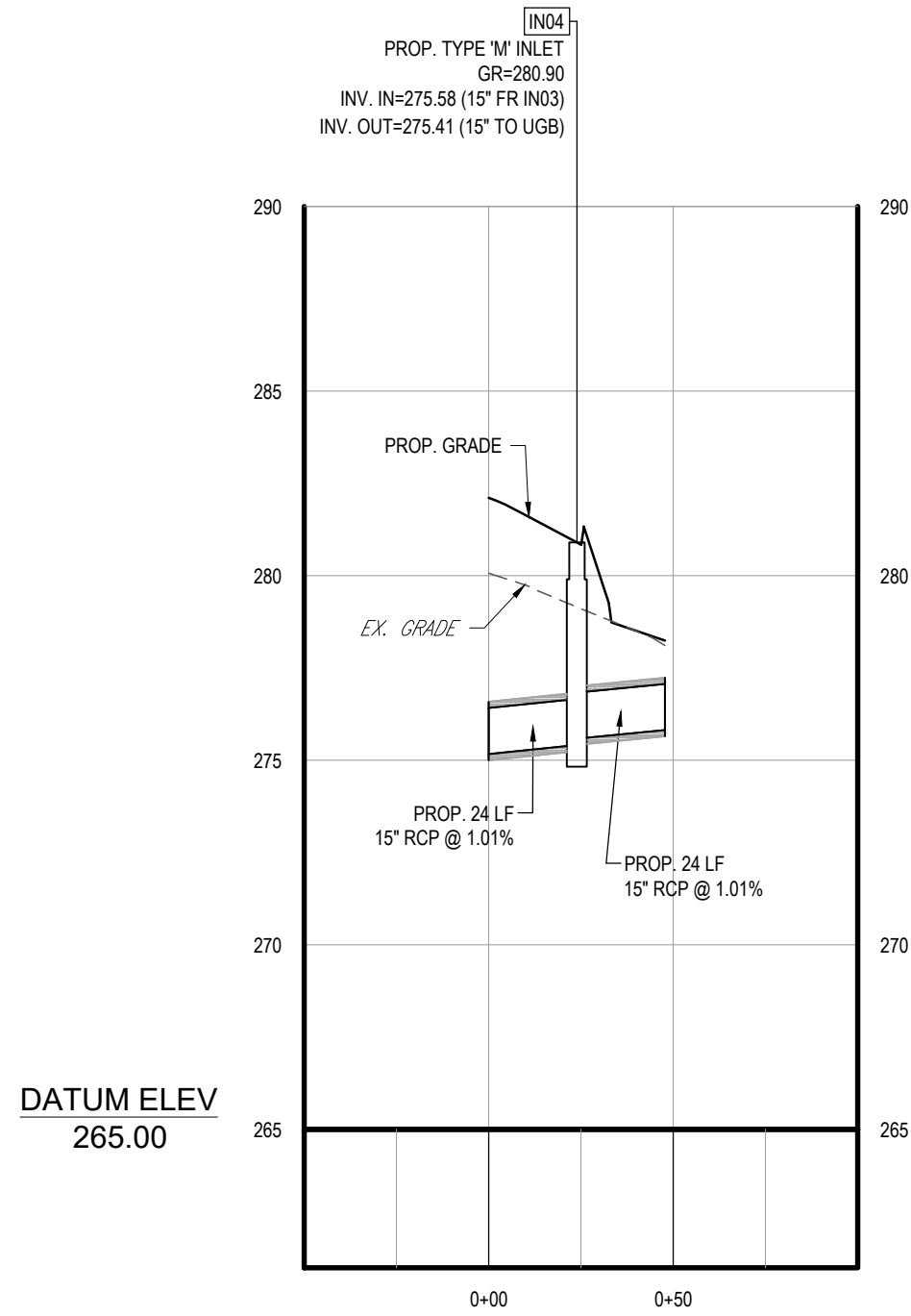
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SCALE: 1"= 50' HORIZONTAL  
1"= 5' VERTICAL



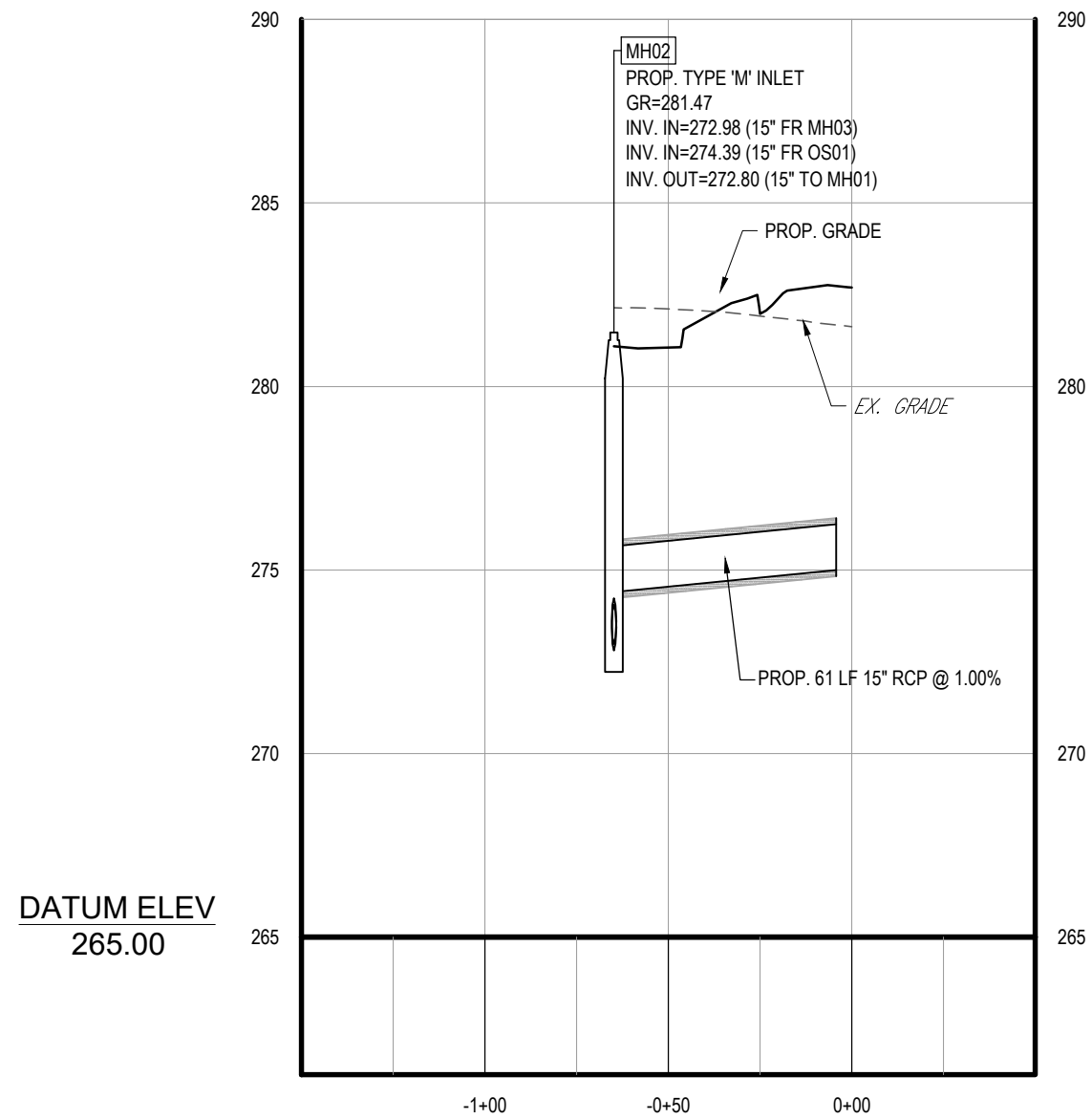
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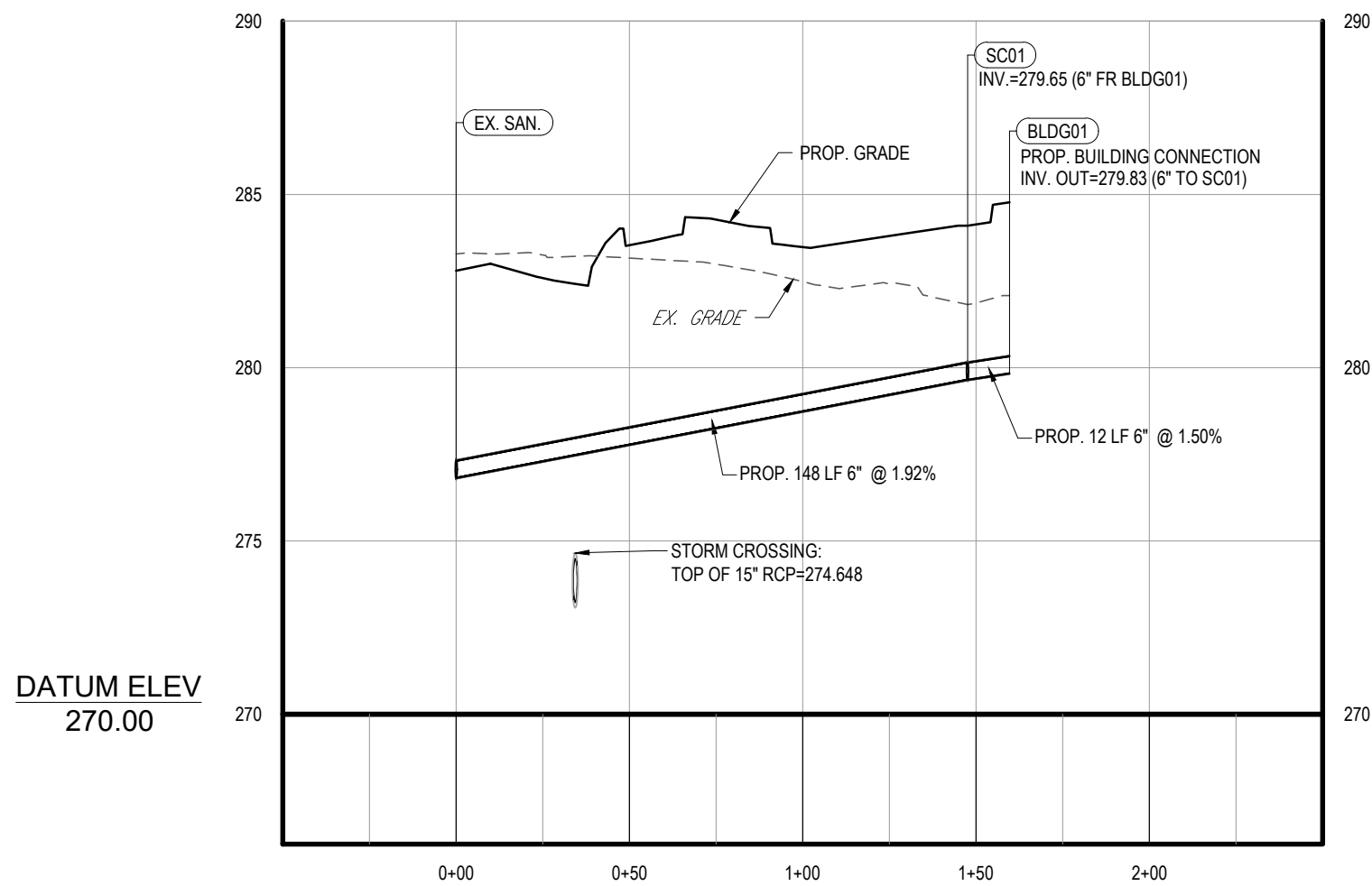
**STORM PROFILE: UGBC02 TO IN03**

SCALE: 1"= 50' HORIZONTAL  
1"= 5' VERTICAL



**STORM PROFILE: OS01 TO MH02**

SCALE: 1"= 50' HORIZONTAL  
1"= 5' VERTICAL



**SANITARY PROFILE: BUILDING TO EX. SANITARY**

SCALE: 1"= 50' HORIZONTAL  
1"= 5' VERTICAL

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STORE #004

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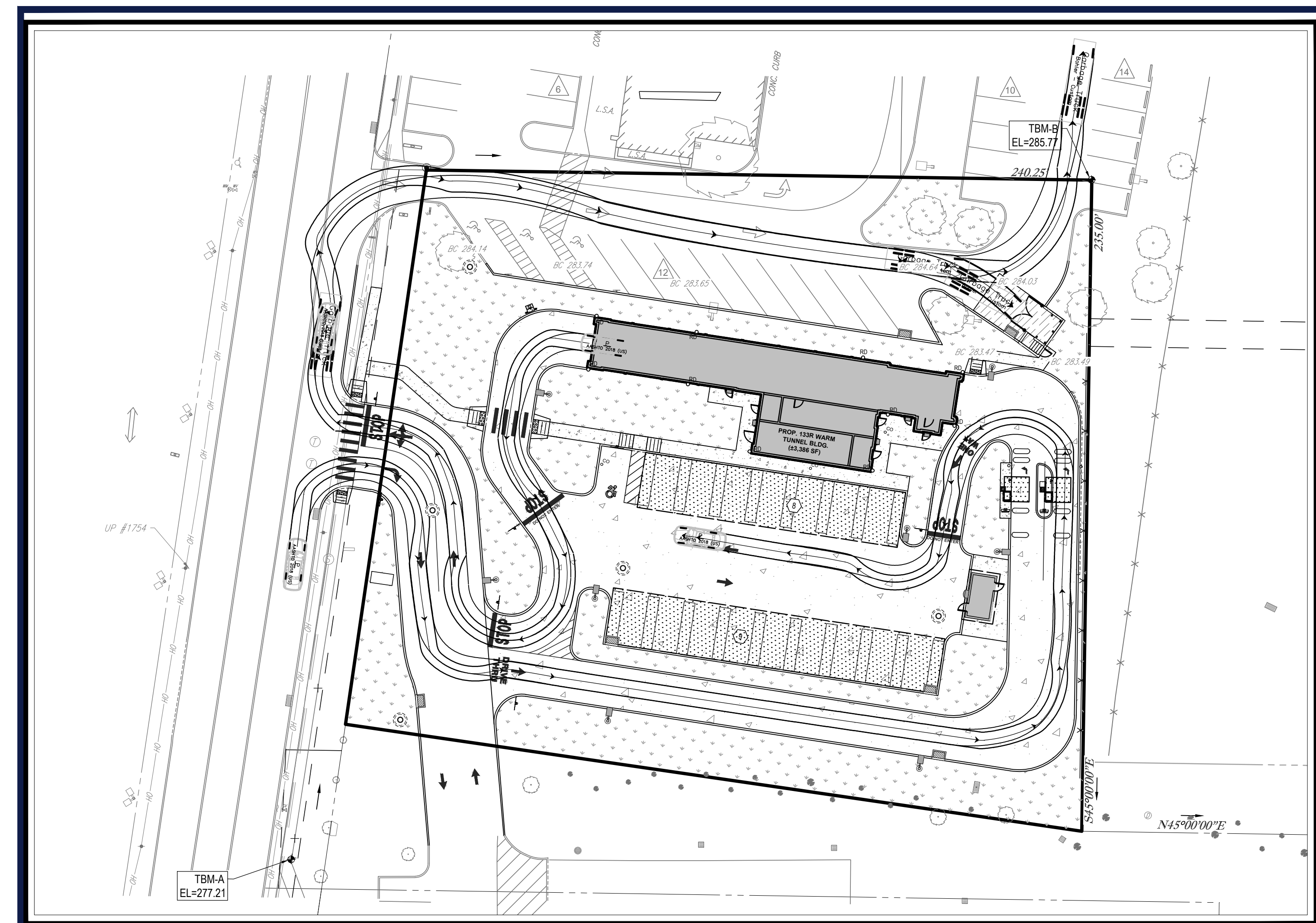
STORM & SANITARY PROFILE PLAN

SHEET NUMBER:

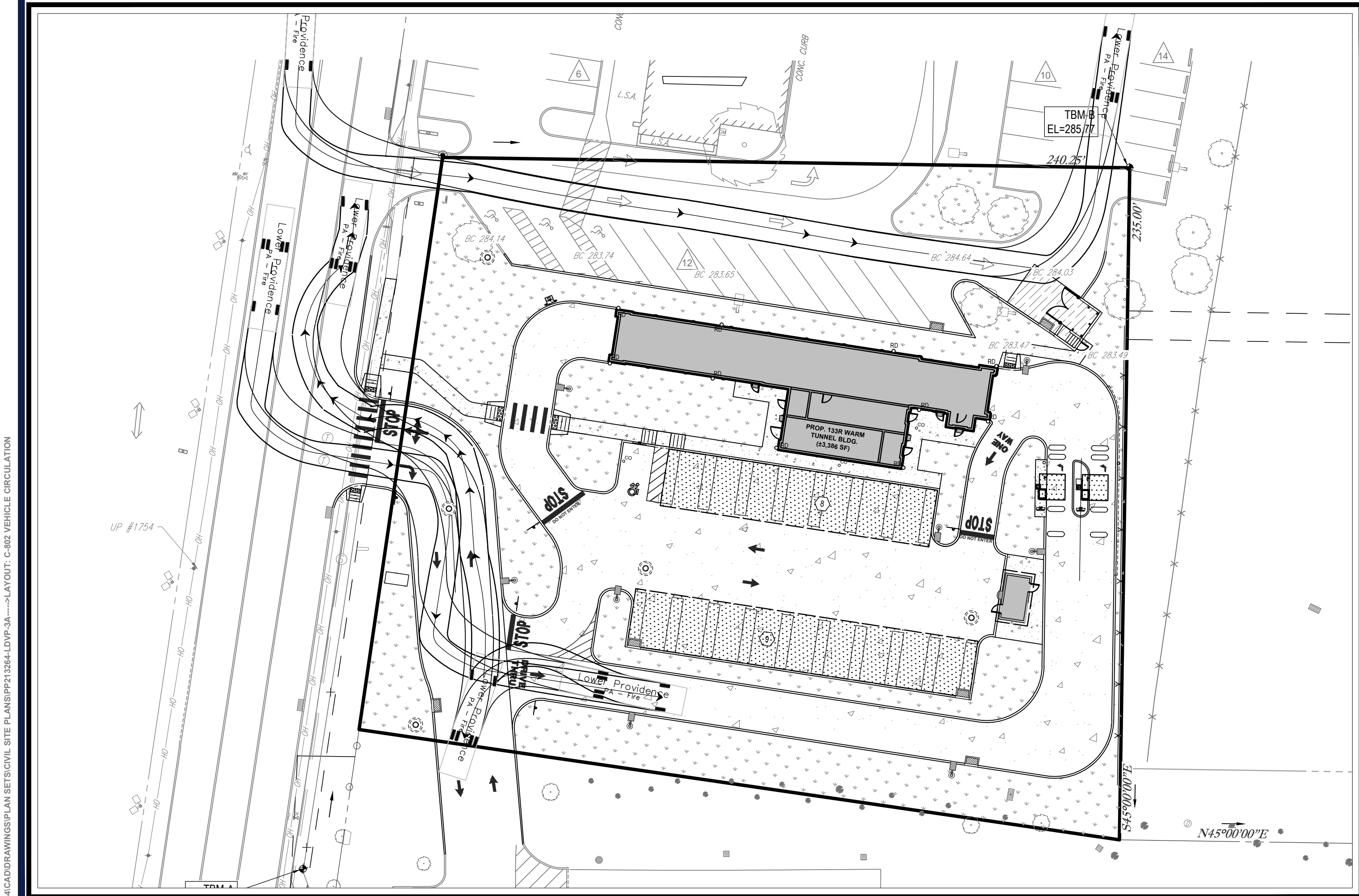
C-801

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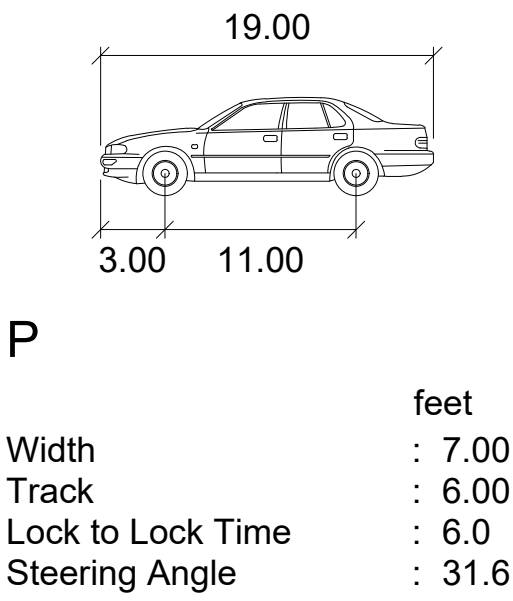




PASSENGER CAR/TRASH TRUCK  
CIRCULATION

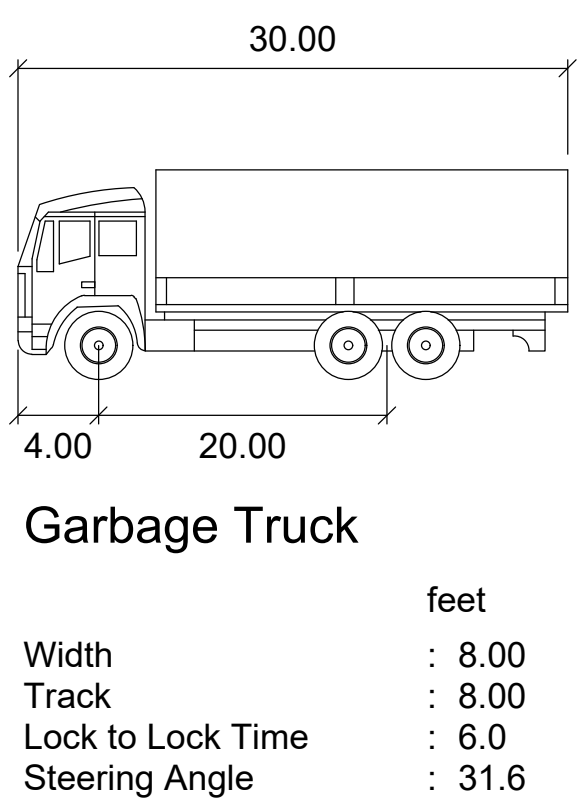


FIRE TRUCK CIRCULATION



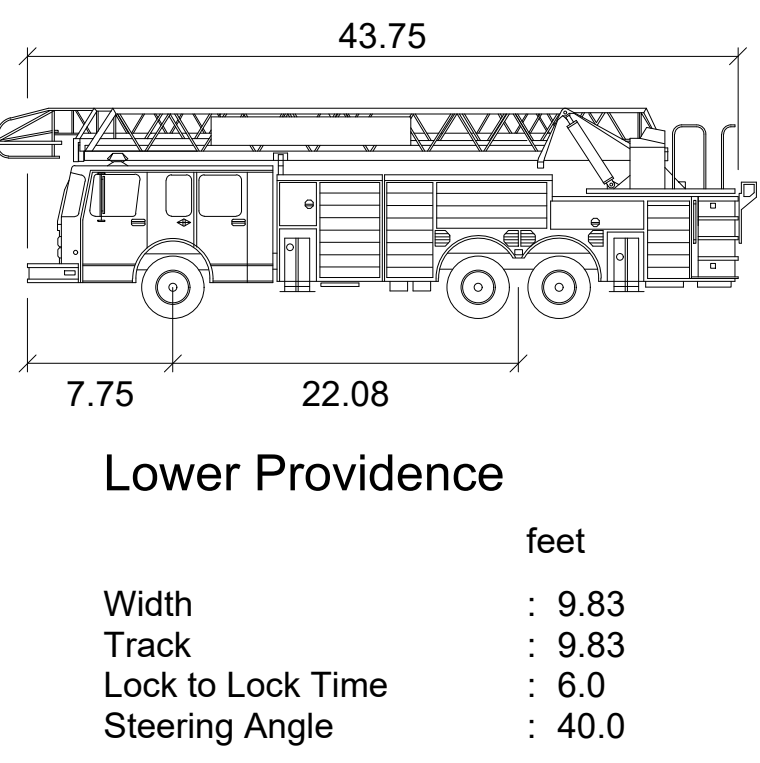
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Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6



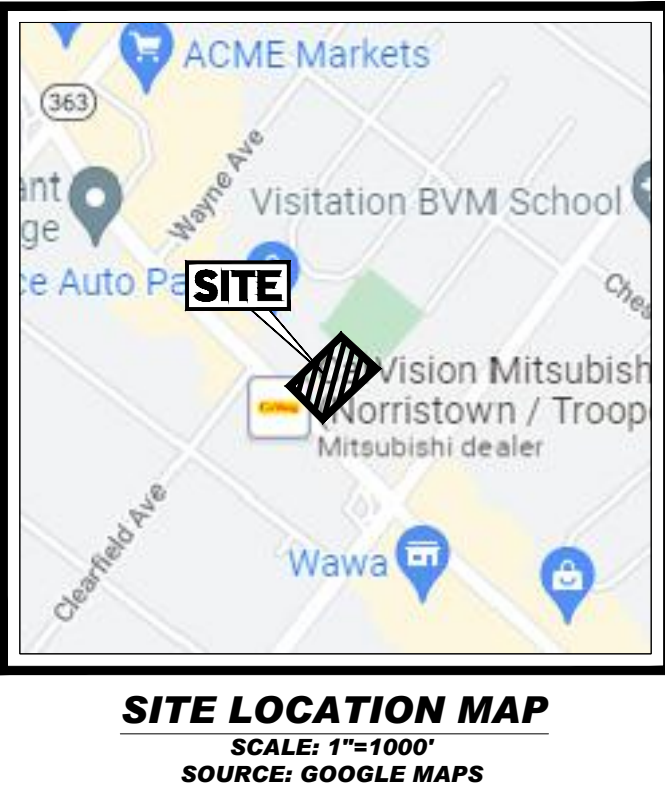
Garbage Truck

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Lock to Lock Time	: 6.0
Steering Angle	: 31.6



Lower Providence

Width	: 9.83
Track	: 9.83
Lock to Lock Time	: 6.0
Steering Angle	: 40.0



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MATTHEW JOHN KEARSE  
REGISTERED PROFESSIONAL ENGINEER  
No. 1000000000  
PENNSYLVANIA

SHEET TITLE:  
VEHICLE  
CIRCULATION  
PLAN

SHEET NUMBER:  
C-802

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