

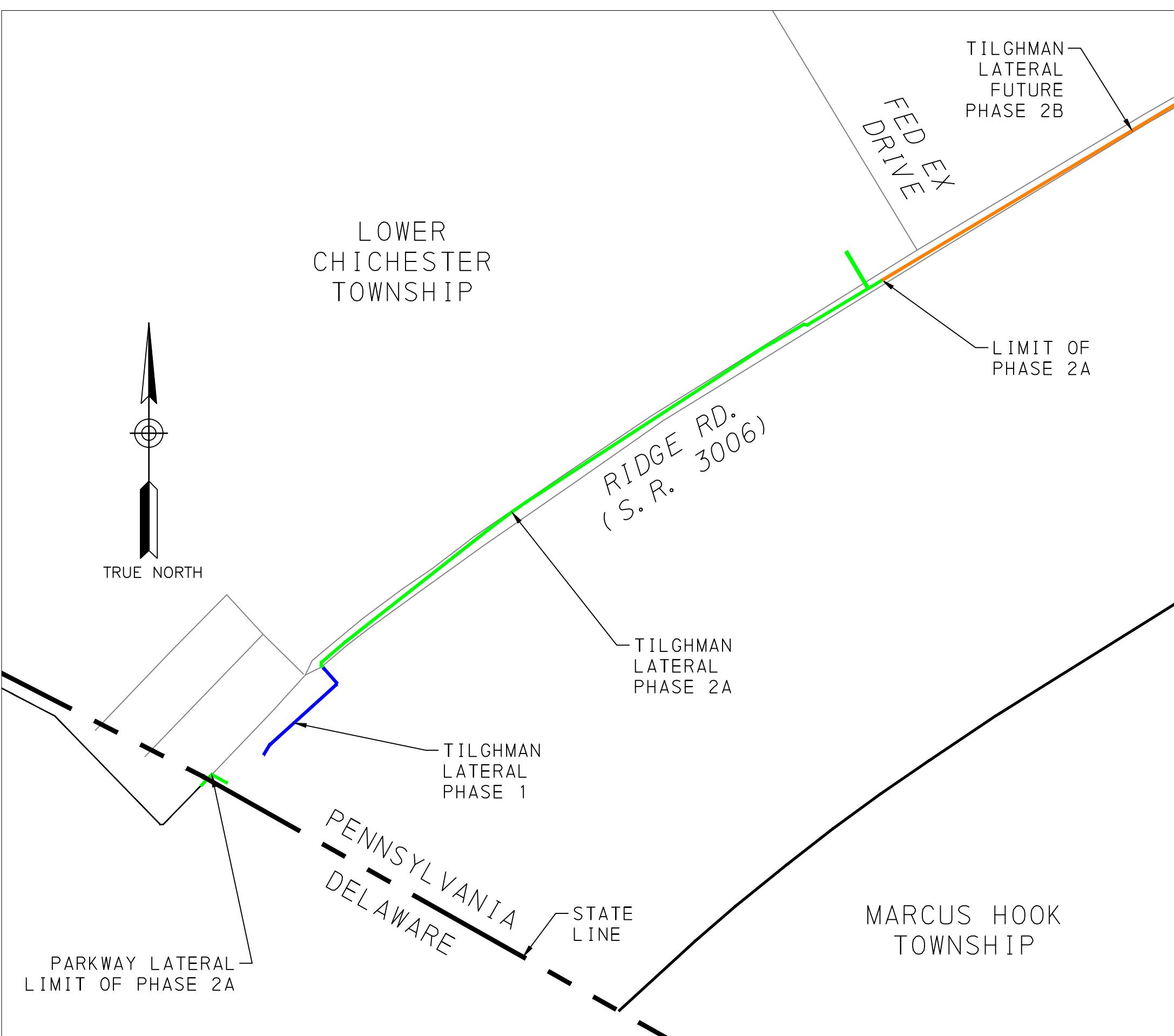
ADELPHIA GATEWAY PROJECT

TILGHMAN & PARKWAY LATERAL - PHASE 2A

E&SC & SITE RESTORATION PLANS

SITE LOCATION MAP

SCALE: 1"=250'



DRAWING INDEX	
SHEET NO.	SHEET TITLE
T-1	COVER SHEET
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LEGEND

324	EXISTING 1' CONTOUR
325	EXISTING 5' CONTOUR
X X	EXISTING TREE LINE
OE OE	EXISTING FENCE LINE
UE UE	EXISTING OVERHEAD ELECTRIC
OT OT	EXISTING UNDERGROUND ELECTRIC
OTC	EXISTING OVERHEAD ELECTRIC/TELEPHONE
UT UT	EXISTING UNDERGROUND TELEPHONE
FO FO	EXISTING UNDERGROUND FIBER
●	EXISTING UTILITY POLE
W W	EXISTING WATER LINE
G G	EXISTING GAS LINE
SS SS	EXISTING SEWER LINE
D D	EXISTING STORM LINE
—	EXISTING EASEMENT
—	LEGAL RIGHT-OF-WAY
—	COUNTY/STATE LINE
WL	EXISTING WETLAND BOUNDARY
▼ ▼	EXISTING WETLAND AREA
—	PROPOSED PIPELINE
LOD LOD LOD	LIMIT OF DISTURBANCE
—	SOIL BOUNDARY
○ We	SOIL TYPE
■	INLET PROTECTION
FS	COMPOST FILTER SOCK (12" DIA.)
○	HDD DRILL POINT
DA DA DA	DRAINAGE AREA

GENERAL NOTES:
1. THE TOPOGRAPHIC FEATURES SHOWN HEREON ARE BASED ON SURVEY DATA ACQUIRED BY STV ENGINEERING IN APRIL 2018 - 2019 FOR HGA AND NJR. ADDITIONAL SUPPLEMENTAL FIELD SURVEYS WERE CONDUCTED BY JMT DURING MARCH - APRIL 2019.

2. HORIZONTAL CONTROL IS BASED ON NAD83 VALUES.

3. VERTICAL CONTROL ESTABLISHED BASED ON NAVD88 VALUES.

4. ALL CURVE DATA IS BASED ON THE ARC DEFINITION UNLESS OTHERWISE INDICATED.

5. REFERENCE DOCUMENTS:
- ADELPHIA GATEWAY LLC, PHASE 1 POST CONSTRUCTION STORMWATER AND E&SC AND SITE RESTORATION PLANS, DATED 5/18/2020 PREPARED BY JMT

- TILGHMAN AND PARKWAY LATERAL HIGHWAY OCCUPANCY PERMIT PLANS, DATED 6/12/2019 PREPARED BY JMT

- TILGHMAN AND PARKWAY LATERAL CONSTRUCTION PLANS PREPARED BY HGA.

- UTILITY CONSTRUCTION PERMIT PLANS, TRAFFIC CONTROL PLANS, AND CONSTRUCTION DETAILS FOR ADELPHIA GATEWAY PROJECT, LLC. PROPOSED 16" PARKWAY LATERAL, DATED 12/4/2019 PREPARED BY JMT

- PREPAREDNESS, PREVENTION, CONTINGENCY PLAN DATED 5/2020 PREPARED BY NV5

- INADVERTENT RELEASE CONTINGENCY PLAN DATED 5/2020 PREPARED BY NV5

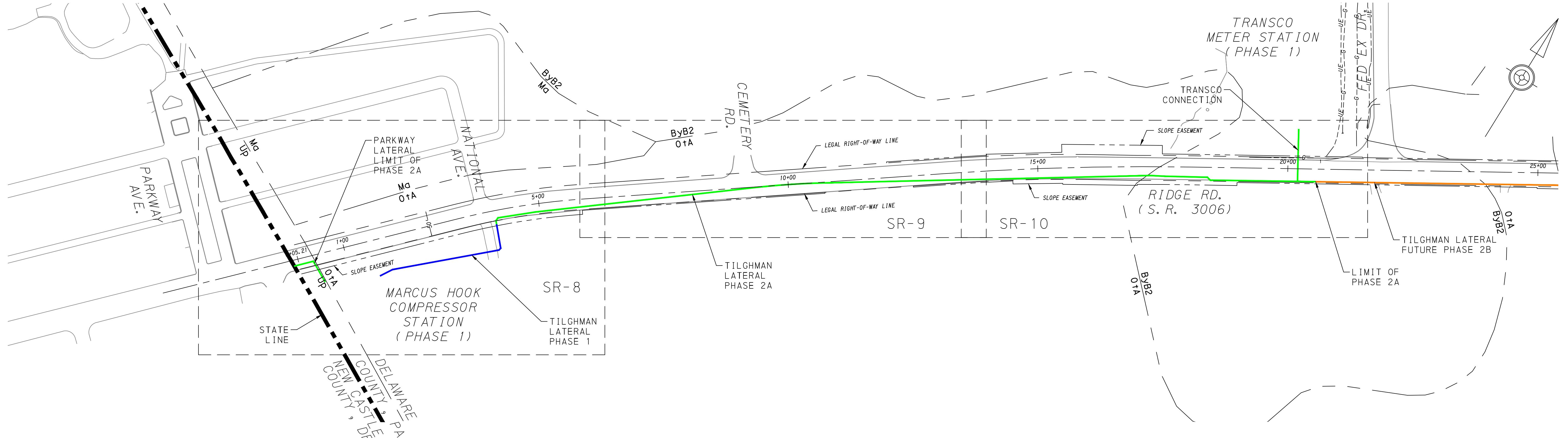
- HDD DESIGN AND CONSTRUCTABILITY REVIEW REPORT DATED 8/26/19 PREPARED BY LANEY

6. SR 3006 PREVIOUSLY KNOWN AS LR 132. THE LEGAL RIGHT-OF-WAY FOR SR 3006, FORMERLY LR 132, RIDGE ROAD IS 50 FEET IN WIDTH FROM STA. 00+05.21 TO STA. 59+75.00 AND VARIABLE IN WIDTH FROM STA. 59+75.00 TO STA. 71+00.00 AND 50 FEET IN WIDTH FROM STA. 71+00.00 TO 108+26.00 AND VARIABLE IN WIDTH FROM STA. 108+26.00 TO STA. 109+15.00 AND 80 FEET IN WIDTH FROM STA. 109+15.00 TO STA. 117+99.98 BASED ON DRAWINGS FOR CONSTRUCTION AND CONDEMNATION OF RIGHT-OF-WAY, ROUTE 132, SECTION 4, APPS. 2436, 1242 & 1249 IN DELAWARE COUNTY, APPROVED BY THE GOVERNOR ON OCTOBER 13, 1938

7. DRAINAGE EASEMENT
AN EASEMENT FOR THE CONSTRUCTION, INSPECTION, MAINTENANCE, REPAIR, RECONSTRUCTION AND ALTERATION OF HIGHWAY DRAINAGE FACILITIES. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY FLOW OF WATER. HOWEVER, NO STRUCTURE OF ANY KIND MAY BE ERECTED IN THE AREA, NOR MAY ANY PIPE OR DITCH BE CONNECTED TO THE DEPARTMENT'S PIPE OR DITCH WITHOUT ADVANCED WRITTEN APPROVAL BY THE DEPARTMENT OF TRANSPORTATION.

8. SLOPE EASEMENT
AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY, RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.

					DRAWN BY	INTL	DATE	JMT Johnson, Mirmiran & Thompson 1600 Market Street, Suite 520 Philadelphia, PA 19103 T: 267-256-0300
2	REVISED PER DEP COMMENTS	ATH	08/10/20	SMM	08/10/20	JMT JOB NO.	18-00672-005	
1	REVISED PER DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	PLOT SCALE	AS NOTED	
REV	DESCRIPTION	CHK	DATE	APP	DATE	MODEL ID		
REVISION								
SCALE AS NOTED	DRAWING NUMBER T-1	REV						



SOIL LIMITATIONS

SYMBOL	SOIL NAME	SLOPE (%)	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRIC/HYDROIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS	
ByB2	BUTLERTOWN SILT LOAM	3-8%	X	C\S		X		X	X	X	X	X	X	X					
0+A	OTHELLO SILT LOAMS	0-2%	X	C\S				X	X	X	X	X	X	X	X	X	X	X	
Up	URBAN LAND																		

SOIL RESOLUTIONS:

LOW PH: FOR SOILS WITH PH VALUES LOWER THAN 5.5, ADJUST PH BY APPLYING LIME AT RATES DETERMINED BY SOILS TESTING IN COMBINATION WITH SELECTING AND PLANTING VEGETATIVE SPECIES TOLERANT OF ACIDIC CONDITIONS.

LOW FERTILITY: INCORPORATE ADDITIONAL SOIL NUTRIENTS AT RATES DETERMINED BY SOIL TESTING IN COMBINATION WITH SELECTING AND PLANTING VEGETATIVE SPECIES TOLERANT OF LOW FERTILITY CONDITIONS.

DRY OR DROUGHTY SOILS: SELECT VEGETATIVE SPECIES TOLERANT OF DRY CONDITIONS.

HIGH WATER TABLE OR WET/HYDRIC SOILS PRONE TO FLOODING: SELECT VEGETATIVE SPECIES TOLERANT OF WET CONDITIONS. IF BUILDINGS ARE LOCATED IN SAID SOILS PROVIDE SUMP PUMPS WITH BACK FLOW PREVENTION DEVICES IN BASEMENTS. IF HIGH WATER IS ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR SHALL UTILIZE PUMP WATER FILTRATION METHODS (I.E. DIRT BAG). FOR BASIN CONSTRUCTION IN AREAS OF WET SOILS, PREFERABLY RELOCATE STORMWATER AND SEDIMENT BASINS AND FACILITIES IN SOILS MORE CONDUCIVE TO SUCH FACILITIES. IF FACILITIES CAN NOT BE RELOCATED, PROVIDE PUMP WATER SEDIMENT REMOVAL FACILITIES FOR BASIN CONSTRUCTION, LIMIT RESERVOIR DEPTHS, AND LIMIT CLEAN OUT ELEVATIONS.

ERODIBLE SOILS TYPES: FOR SOILS WITH ERODIBILITY VALUES HIGHER THAN 0.36, CONTRACTOR SHOULD INCORPORATE SOME OR ALL OF THE FOLLOWING STABILIZATION TECHNIQUES. IN PROPOSED CHANNELS, PROVIDE TEMPORARY LININGS UNTIL GRASS IS ESTABLISHED, PROVIDE PERMANENT GRASS REINFORCED LININGS THROUGH THE INSTALLATION OF SOD OR SELECT PERMANENT LININGS OTHER THAN GRASSES. DECREASE CHANNEL GRADES AND INCREASE CHANNEL WIDTHS TO HELP REDUCE EROSION.

SOILS PRONE TO INSTABILITY PIPING AND SEEPING: IF STORMWATER OR SEDIMENT BASIN/TRAPS CAN NOT BE RELOCATED TO OTHER SOILS TYPES, LIMIT EMBANKMENT SLOPE STEEPNESS, PROVIDE CLAY EMBANKMENT CORES AND IMPORT OTHER SOILS FOR CONSTRUCTION OF EMBANKMENT FACILITIES AS NECESSARY.

SOILS UNSUITABLE FOR WINTER GRADING, PRONE TO FROST ACTION, OR DIFFICULT TO COMPACT: GRADING DURING PERIODS PRONE TO FROST SHOULD BE LIMITED. CONSTRUCTION OF STRUCTURAL EMBANKMENT SHOULD BE PERFORMED DURING THE PERIOD OF MAY TO OCTOBER IF FACILITIES CAN NOT BE RELOCATED TO AN AREA WITH MORE CONDUCIVE SOILS.

SOILS SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNEL/CHAMBER FORMATION: LOCATE SEDIMENT BASINS, TRAPS AND STORMWATER MANAGEMENT DETENTION, RETENTION AND INFILTRATION FACILITIES IN AREAS DESIGNATED WITH SOILS MORE SUITABLE FOR SAID FACILITIES. IF THE FACILITIES CANNOT BE RELOCATED TO A MORE SUITABLE AREA, STANDING WATER DEPTHS AND RETENTION TIMES SHOULD BE LIMITED. IMPERMEABLE RESERVOIR LININGS SHOULD BE UTILIZED FOR WATER RETENTION FACILITIES, AND/OR STORMWATER DETENTION FACILITIES WITH EXTENSIVE HOLDING TIMES.

GEOLOGIC FORMATIONS

THERE ARE NO KNOWN GEOLOGIC FORMATIONS OR SOIL CONDITIONS IDENTIFIED AT THE SITE THAT HAVE A POTENTIAL TO CAUSE POLLUTION DURING CONSTRUCTION.



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SCALE: 1"=100'
DATE: 08/10/2020

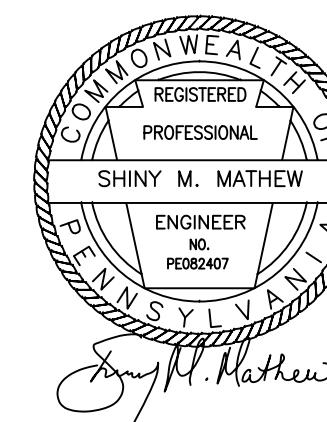
REV	DESCRIPTION	CHK	DATE	APP	DATE	DRAWN BY	INTL	DATE	JMT	TILGHMAN & PARKWAY LATERAL E&SC & SITE RESTORATION PLAN PHASE 2A INDEX MAP
2	REVISED PER DEP COMMENTS	ATH	08/10/20	SMM	08/10/20	DESIGNED BY	ATH	08/10/20		
1	REVISED PER DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	CHECKED BY	SMM	08/10/20		
	DESCRIPTION	CHK	DATE	APP	DATE	APPROVED BY	SMM	08/10/20	JMT JOB NO.	18-00672-005
									PLOT SCALE	1"=100'
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									REV	

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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 THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, 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. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE CONSERVATION DISTRICT OR BY THE PADEP 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 OF ENVIRONMENTAL PROTECTION.
10. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE RESPECTIVE COUNTY CONSERVATION AGENCY FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
11. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
12. 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 AND RETENETING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
13. 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.
14. 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.
15. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY, OR AS NEEDED THROUGHOUT THE WORKDAY, OR AS DIRECTED BY THE LOCAL MUNICIPALITY OR THE CONSERVATION DISTRICT AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
16. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
17. 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 OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.

18. ALL FILLS SHALL BE COMPAKTED AS REQUIRED TO REDUCE EROSION, SLIPPAge, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPAKTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
19. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
20. 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.
21. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
22. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
23. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
24. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEDED 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.
25. 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.
26. 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.
27. 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.
28. 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.
29. CONCRETE WASH WATER SHALL BE HANDLED PER CHAPTER 3 OF THE PA DEP EROSION AND SEDIMENT CONTROL POLLUTION CONTROL MANUAL. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATER OR GROUNDWATER SYSTEMS.
30. ANY DAMAGE THAT OCCURS IN WHOLE OR 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.
31. 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.
32. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORM WATER 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.
33. 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.
34. WASTE MATERIALS, SCRAP OR EXCESS CONSTRUCTION MATERIALS SHALL BE COLLECTED, STORED, AND DISPOSED OF IN ACCORDANCE WITH THE SOLID WASTE MANAGEMENT ACT (35 P.S. §§ 6018.101-6018.1003), THE MUNICIPAL WASTE PLANNING, RECYCLING AND WASTE REDUCTION ACT (53 P.S. §§ 4000.101-4000.1904), THE CLEAN STREAMS LAW (35 P.S. §§ 691.1-691.1001) AND RELATED RULES AND REGULATIONS. (TITLE 25, CHAPTER 105, SECTION 46d).
35. SUBSOIL EXCAVATED AS PART OF THE PROJECT AND SEDIMENT REMOVED FROM E&S BMPS WILL BE COMBINED AND USED TO BACKFILL THE TRENCH. TYPICALLY, EXCESS SOIL IS MINIMAL AND WILL EITHER BE USED TO CREATE A CROWN OVER THE TRENCH TO COUNTERACT SETTLING OR WILL BE SPREAD EVENLY ACROSS THE RIGHT-OF-WAY (R.O.W.), WHICH WILL HAVE A NEGLIGIBLE EFFECT ON THE OVERALL GRADE. ALSO, ANY EXCESS EXCAVATED MATERIALS OR MATERIALS UNSUITABLE FOR BACKFILL WILL BE DISPOSED OF IN ACCORDANCE WITH THE APPLICABLE REGULATIONS.
36. A GENERAL EROSION AND SEDIMENT CONTROL CONSTRUCTION SEQUENCE FOR EARTH DISTURBING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAS BEEN DEVELOPED AND INCLUDED IN THE PLAN DRAWINGS. IT SHOULD BE NOTED THAT CONSTRUCTION ACTIVITIES MAY OCCUR SIMULTANEOUSLY; HOWEVER, DEVIATION FROM THE SEQUENCE MUST BE APPROVED BY THE LOCAL CONSERVATION DISTRICT AND/OR REGIONAL OFFICE OF THE DEP PRIOR TO IMPLEMENTATION.
37. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE CONSTRUCTION SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
38. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN THE FOLLOWING MANNER: THE ENVIRONMENTAL INSPECTOR (EI) WILL WORK WITH THE CONTRACTOR TO MOVE THE WATER FROM THE SPRING/SEEP TO A VEGETATED AREA OF THE R.O.W. AN ENERGY DISSIPATION DEVICE WILL BE INSTALLED TO ENSURE THE FLOW DOES NOT CREATE R.O.W. EROSION. IN THE EVENT THE SURROUNDING VEGETATION IS NOT SUFFICIENT TO MANAGE THE FLOW WITHOUT CREATING AN EROSION SITUATION, THE ENVIRONMENTAL INSPECTOR (EI) WILL COORDINATE WITH THE CONTRACTOR, AND THE LOCAL CONSERVATION DISTRICT AND/OR REGIONAL OFFICE OF THE DEP TO PREVENT EROSION AND SEDIMENTATION. IF THE SPRING/SEEP DISCHARGE MUST TRAVERSE THE R.O.W., THEN CULVERTS, TIMBER MATS, OR FRENCH DRAINS WILL BE INSTALLED TO CARRY THE WATER ACROSS THE R.O.W. TO PREVENT EROSION, WHILE AT THE SAME TIME ALLOWING CONSTRUCTION IN THE AREA TO CONTINUE. ADDITIONAL BMPS WILL BE INSTALLED AROUND THE SPRING/SEEP TO PROTECT BOTH THE ON R.O.W. AND OFF R.O.W. AREAS FROM EROSION AND SEDIMENTATION. THE EI MAY REQUIRE THE CONTRACTOR TO INSTALL TIMBER MATS AT SPRING/SEEP AREAS (NON WETLANDS) TO MINIMIZE IMPACTS TO THE R.O.W. DURING SITE RESTORATION OF THE R.O.W., THE SPRING/SEEP PATH WILL BE RESTORED TO THE EXTENT POSSIBLE TO PREVENT EROSION AND SEDIMENTATION ON/OFF THE R.O.W., AND APPROPRIATE PERMANENT BMPS WILL BE INSTALLED.
39. ALL EXISTING ROADWAY DITCH AND STREAM CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL ROCKS, ACCUMULATED SEDIMENT, AND CONSTRUCTION MATERIAL/WASTES.
40. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE ROADWAY DITCH OR STREAM 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 THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
41. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H: 1V OR STEEPER. WITHIN 100 FEET OF A SURFACE WATER, AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS. TIMBER MATS IN WETLANDS WILL BE CLEANED IN SUCH A MANNER AS TO MINIMIZE (PREVENT) THE INTRODUCTION OF UPLAND SOILS INTO THE WETLAND.
42. STREET SWEEPING: REASONABLE METHODS WHICH ARE SANCTIONED BY THE DEP AS ALTERNATIVES TO INSTALLATION OF TIRE WASH STATIONS ON PUBLIC ROAD ACCESS POINTS FOR GATHERING PIPELINE PROJECTS IN HQ/EV OR SILTATION IMPAIRED WATERSHEDS INCLUDE:
 - USE OF A VACUUM TRUCK SWEEPER OR SWEEPER WITH A CATCH BIN ATTACHMENT FOR PAVED SURFACE PUBLIC ROADS;
 - FOR DIRT OR GRAVEL SURFACE PUBLIC ROADS, RIGOROUS MANUAL REMOVAL OF MUD/DIRT FROM VEHICLE/EQUIPMENT TIRES PRIOR TO EXITING CONSTRUCTION SITE; SUPPLEMENTED BY IMMEDIATE REMOVAL, BY MANUAL MEANS, OF SOIL WHICH MAY BECOME DISCHARGED ONTO PUBLIC ROADWAYS. DUST CONTROL AND/OR COMPACTION VIA ROLLING OF THE DIRT PUBLIC ROAD SURFACE WILL BE IMPLEMENTED AS NEEDED.
43. FREQUENCY OF MECHANICAL AND/OR MANUAL CONTROLS WILL BE DEPENDENT UPON CONSTRUCTION TRAFFIC INTENSITY, WEATHER CONDITIONS, AND SOIL MOISTURE CONDITIONS. AT A MINIMUM FOR PAVED ROADS, ANY DAY IN WHICH CONSTRUCTION TRAFFIC IS EXITING THE ROCK CONSTRUCTION ENTRANCE THE VACUUM TRUCK SWEEPER OR SWEEPER WITH A CATCH BIN ATTACHMENT SHALL CLEAN THE ROADWAY AT THE END OF THE WORK DAY AND PRIOR TO ANY FORECASTED RAIN EVENT. THE REQUIREMENT IS TO NOT INTRODUCE SEDIMENT LOAD FROM CONSTRUCTION TRAFFIC ONTO PUBLIC ROAD SURFACES AND INTO ROAD DITCHES WHICH WILL FLOW INTO THE HQ/EV OR SILTATION IMPAIRED WATER RESOURCES THAT ARE THE SUBJECT OF THE INCREASED PROTECTION.
44. PROJECT SITES WHICH WILL USE OR STORE FUELS, CHEMICALS, SOLVENTS, OR OTHER HAZARDOUS MATERIALS MUST HAVE A PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN ON SITE. THIS PLAN MUST BE AVAILABLE ON-SITE AND PROVIDED TO DEP UPON REQUEST.
45. A GENERAL E&S CONSTRUCTION SEQUENCE FOR EARTH DISTURBING ACTIVITIES ASSOCIATED WITH CONSTRUCTION OF A PIPELINE MODIFICATION HAS BEEN DEVELOPED AND INCLUDED IN THE PLAN SET. IT SHOULD BE NOTED THAT CONSTRUCTION ACTIVITIES MAY OCCUR SIMULTANEOUSLY; HOWEVER, DEVIATIONS FROM THE SEQUENCE MUST BE APPROVED BY THE LOCAL CONSERVATION DISTRICT AND/OR REGIONAL OFFICE OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP).
46. E&S BMP DETAILS AND CONSTRUCTION SPECIFICATIONS CAN BE FOUND ON THE TYPICAL DETAILS PROVIDED ON THE DETAIL DRAWING SHEETS.



DATE: 08/10/2020

REVISION

2	REVISED PER DEP COMMENTS	ATH	08/10/20	SMM	08/10/20	JMT JOB NO.	18-00672-005
1	REVISED PER DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	PLOT SCALE	N/A
REV	DESCRIPTION	CHK	DATE	APP	DATE	MODEL ID	

REVISION

DRAWN BY	INTL	DATE
DESIGNED BY	ATH	08/10/20
CHECKED BY	SMM	08/10/20
APPROVED BY	SMM	08/10/20



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TILGHMAN & PARKWAY LATERAL E&SC & SITE RESTORATION PLAN PHASE 2A	GENERAL NOTES
SCALE N/A	DRAWING NUMBER SR-1

46. A COPY OF THE APPROVED E&S PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
47. MAKE ALL PROPER NOTIFICATION REQUIREMENTS TO LOCAL STATE, OR FEDERAL AGENCIES PRIOR TO THE START OF CONSTRUCTION ACTIVITIES OR PRIOR TO SPECIFIC CONSTRUCTION ACTIVITIES, AS APPROPRIATE.
48. PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITY INCLUDING CLEARING AND GRUBBING, CLEARLY DELINEATE SENSITIVE AREAS INCLUDING WATERBODIES/WETLANDS, RIPARIAN FOREST BUFFER BOUNDARIES (IF ANY) , THE 50-FOOT VEGETATIVE BUFFER AT HQ WATERBODIES, THE LIMITS OF CLEARING, PIPELINE CENTERLINE WITHIN THE LIMITS OF DISTURBANCE, KNOWN CROSSINGS OF FOREIGN LINES AND UTILITIES, CONSTRUCTION ENTRANCES, TREES THAT ARE TO BE CONSERVED WITHIN THE PROJECT AREA, CULTURAL RESOURCE SITES, AND RARE SPECIES HABITAT, AS APPLICABLE. AVOIDANCE AREAS WILL BE MARKED WITH APPROPRIATE FENCING, SIGNAGE, AND/OR FLAGGING BASED ON ENVIRONMENTAL SURVEYS, LANDOWNER REQUIREMENTS, AND PERMIT CONDITIONS.
49. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCES WHERE VEHICLES WILL ENTER CONSTRUCTION AREAS FROM PUBLIC ROADS AT THE DIRECTION OF THE ENVIRONMENTAL INSPECTOR (EI) BASED ON SITE CONDITIONS AND CLEARING ACCESS NEEDS.
50. INSTALL COMPOST FILTER SOCK, SEDIMENT BARRIERS, OR OTHER COUNTY CONSERVATION DISTRICT APPROVED SEDIMENT BARRIERS/BMPS PRIOR TO CLEARING AN AREA.
51. IF TRENCH EXCAVATION CANNOT COMMENCE WITHIN FOUR (4) DAYS OF INITIAL LAND GRUBBING, TEMPORARY STABILIZATION MEASURES WILL BE IMPLEMENTED IMMEDIATELY.
52. IF WATER IS ENCOUNTERED DURING EXCAVATION, INSTALL A PUMPED WATER FILTER BAG AND COMPOST FILTER SOCKS IN PREPARATION OF DEWATERING ACTIVITIES. THE LOCATION OF THE DEWATERING DEVICE AND/OR STRUCTURE AND SECONDARY STRUCTURES WILL BE AS SHOWN ON DRAWINGS OR AS DETERMINED BY THE EI BASED UPON ACTUAL FIELD CONDITIONS. EFFORTS WILL BE MADE TO PLACE THE DEWATERING FILTERS INTO A WELL-VEGETATED UPLAND AREA GREATER THAN 50 FEET FROM ANY WETLAND OR WATERBODY; THESE AREAS WILL NOT BE CLEARED OR GRUBBED. THE ENVIRONMENTAL INSPECTOR (EI) WILL MONITOR TRENCHES HOLDING WATER AND BEGIN DEWATERING ACTIVITIES AS NEEDED SO THAT SEDIMENT LADED WATER IS NOT DISCHARGED DIRECTLY FROM THE EXCAVATED TRENCH TO RESOURCES. THE EI WILL MONITOR WEATHER REPORTS, ADVISE THE CONTRACTOR IN INSTANCES WHERE PRECIPITATION EVENTS MAY CAUSE EXCESSIVE TRENCH WATER, AND COORDINATE CREWS AS APPROPRIATE TO HANDLE TRENCH WATER.
53. BACKFILL TRENCH WITH SUITABLE EXCAVATED MATERIAL IN AREAS WHERE TOPSOIL HAS BEEN SEGREGATED, THE SUBSOIL WILL BE REPLACED FIRST, AND THE TOPSOIL WILL BE SPREAD OVER THE AREA FROM WHICH IT WAS REMOVED. FINAL GRADES SHALL BE AS CLOSE AS PRACTICABLE TO THE PRE-CONSTRUCTION CONTOURS, UNLESS PROPOSED CONTOURS ARE SHOWN ON THE PLAN.
54. IF FINAL GRADING CANNOT BE COMPLETED WITHIN TEN (10) DAYS OF BACKFILL AND PERMANENT SEEDING WITHIN FOUR (4) DAYS OF FINAL GRADING, TEMPORARY STABILIZATION MEASURES WILL BE IMPLEMENTED IMMEDIATELY.
55. THE LENGTH OF TIME TO START, COMPLETE, AND STABILIZE SHOULD NOT EXCEED 30 DAYS.
56. ALL AREA WITHIN THE TEMPORARY WORKSPACE SHALL BE RESTORED TO EXISTING CONDITIONS PER THE SITE RESTORATION SCHEDULE ON SR-4.
57. EXCAVATED MATERIAL SHALL NOT BE STOCKPILED WITHIN THE ROADWAY. EXCAVATED MATERIAL SHALL BE TRUCKED OFF AND STOCKPILED (IF NEEDED) , AT MARCUS HOOK COMPRESSOR STATION OR TRANSCO METER STATION.

CONTRACTOR RESPONSIBILITIES:

1. THE CONTRACTOR, ALTHOUGH UNKNOWN AT TIME OF PLAN ISSUANCE, WILL BE IDENTIFIED BY THE OWNER AT CONTRACT BID. CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, PROCEDURES, SEQUENCING, AND TECHNIQUES INVOLVED WITH ALL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING AND PRESERVING THE INTEGRITY OF ALL ENVIRONMENTAL FEATURES AND/OR ALL AREAS THAT ARE NOT SUPPOSED TO BE DISTURBED (E.G. WORK OUTSIDE OF THE LIMITS OF DISTURBANCE). PRIOR TO ANY EARTH DISTURBANCE ACTIVITIES, THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THAT CONDITIONS MATCH THOSE DEPICTED ON THE PLANS AND NOTIFYING OWNER AND/OR DESIGNATED REPRESENTATIVE OF ANY DISCREPANCIES (E.G. TOPOGRAPHY, DELINEATED WETLANDS/WATERBODIES, ACCESS ROADS, AND POINTS OF INGRESS AND EGRESS.)
2. CONTRACTOR SHALL REFER TO PADEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, TECHNICAL GUIDANCE NUMBER 363-2134-008 FOR E&S SPECIFICATIONS.
3. UTILITIES SHOWN ARE TAKEN FROM PUBLIC RECORD. THE CONTRACTOR MUST VERIFY THE EXACT LOCATION AND DEPTH. NOT ALL UTILITIES ARE SHOWN, OR HAVE BEEN VERIFIED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE ALL PUBLIC AND PRIVATE UTILITIES. NV5 ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS. ANY REQUEST FOR ADDITIONAL UNDERGROUND UTILITIES INFORMATION SHOULD BE DIRECTED TO THE RESPECTIVE UTILITY COMPANY.
4. IN THE CASE OF CONFLICT BETWEEN ANY PART OF THESE PLANS, THE SPECIFICATIONS, OR THE CONTRACT DOCUMENTS, OR IF DISCREPANCIES ARE DISCOVERED THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY BY PHONE AND IN WRITING AND SHALL REQUEST A WRITTEN DETERMINATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED. IF THE WORK PROCEEDS WITH THE KNOWLEDGE OF A DISCREPANCY AND WITHOUT A WRITTEN DETERMINATION, SUCH WORK WILL NOT BE CONSIDERED IN COMPLIANCE WITH THESE PLANS, THE SPECIFICATIONS, AND CONTRACT DOCUMENTS.
5. ALL WORK WITHIN A RIGHT OF WAY (R.O.W.) OR EASEMENT SHALL BE DONE IN ACCORDANCE WITH THE AGENCY OR ENTITY HAVING JURISDICTION OR OWNERSHIP OF THAT R.O.W. OR EASEMENT. CONTRACTOR SHALL OBTAIN ALL PERMITS, APPROVALS, INSPECTIONS, ETC. FROM THE AGENCY OR ENTITY HAVING JURISDICTION FOR THIS WORK.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO PROTECT EXISTING STRUCTURES AND FACILITIES, INCLUDING UTILITIES, NOT DESIGNATED FOR DEMOLITION OR REPLACEMENT/UPGRADE SUCH AS BUILDINGS, PIPES, INLETS, MANHOLES, CABLES/WIRES, CONDUITS, APRONS, PAVEMENTS, BRIDGES, UTILITIES, TREES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN UNDERCUT AREAS. THE CONTRACTOR(S) SHALL REPLACE OR REPAIR, AS DIRECTED BY THE OWNER OR THE ENGINEER, ANY STRUCTURES OR FACILITIES DAMAGED DURING CONSTRUCTION/THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
7. THE CONTRACTOR(S) ARE RESPONSIBLE FOR THE PROTECTION OF EXISTING TREES TO REMAIN. NO EQUIPMENT, MATERIALS, SOIL, OR OTHER DEBRIS SHALL BE STORED UNDER THE DRIP LINE OF THE TREE. IF TREES ARE DAMAGED, ITEMS ARE STORED, OR AREA UNDER THE DRIP IS DISTURBED, OTHER THAN DISTURBANCE CALLED FOR ON THE PLANS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CORRECT THE DAMAGE TO THE SATISFACTION OF THE DESIGN PROFESSIONAL.
8. THE CONTRACTOR(S) SHALL KEEP ALL PUBLIC AREAS CLEAN OF DEBRIS ON A DAILY BASIS.
9. THE CONTRACTOR(S) SHALL COMPLY WITH THE CLEAN FILL REQUIREMENTS AS NOTED ON THIS DRAWING AND PER APPLICABLE LOCAL, STATE, AND/OR FEDERAL REGULATIONS.
10. ALL MATERIALS DEMOLISHED OR REMOVED FROM THE PROJECT SITE, UNLESS IDENTIFIED TO BE SAVED OR SALVAGED, SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PER FEDERAL, STATE AND LOCAL REGULATIONS. ALL COSTS OF HAULING, DISPOSAL, AND TIPPING FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR AS PART OF THE BASE BID.
11. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND REPORT ANY DISCREPANCIES AND INTERFERENCES TO THE OWNER OR ENGINEER PRIOR TO THE START OF CONSTRUCTION.
12. PLAN MADE AS PER INSTRUCTIONS OF NEW JERSEY RESOURCES.
13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET ALL OF THE REQUIREMENTS OF FEDERAL, STATE, AND LOCAL AUTHORITIES, HEALTH DEPARTMENT, AND UTILITY COMPANIES IN ADDITION TO THE INFORMATION STATED IN THESE PLANS, THE SPECIFICATIONS, AND THE CONTRACT DOCUMENTS.
14. DO NOT SCALE DRAWINGS. ALL MEASUREMENTS SHALL BE TAKEN FROM DIMENSIONS SHOWN ON THE DRAWING. WHERE DIMENSIONS BETWEEN SMALL SCALE AND DETAIL DRAWINGS DIFFER, NOTIFY THE ENGINEER FOR CLARIFICATION. FIELD VERIFY ALL DIMENSIONS AND NOTIFY DESIGN PROFESSIONAL OF ANY DISCREPANCIES.
15. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE O.S.H.A. (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS.
16. THE CONTRACTOR(S) SHALL OBTAIN ALL PERMITS RELATING TO THIS PROJECT PRIOR TO CONSTRUCTION.
17. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE APPROPRIATE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, AND OTHER INFORMATION) TO THE VARIOUS SUBCONTRACTORS AND TRADES IN ORDER FOR THEM TO COORDINATE AND PERFORM THE WORK.
18. UPON COMPLAINT OR SITE INSPECTION, THE DEPARTMENT OR CONSERVATION DISTRICT MAY REQUIRE THAT THE PCSM PLAN BE SUBMITTED FOR REVIEW AND APPROVAL TO ENSURE COMPLIANCE WITH THIS CHAPTER. CONTRACTOR/ OWNER TO PROVIDE THE NECESSARY DOCUMENTATION FOR REVIEW.

PCSM LONG-TERM OPERATION AND MAINTENANCE REQUIREMENTS

1. THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION WHO HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM PLANS.
2. FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPS, PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEEES, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER ^{15/64} 102.7(b)(5) (RELATING TO PERMIT TERMINATION).
3. THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPS OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT.
4. A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS LOCATED ON THE PROPERTY.
5. THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS PART OF THE APPROVED PCSM PLAN.
6. THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED AS BEING RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS.

SITE RESTORATION	
ACTIVITY	FREQUENCY
PERFORM VISUAL INSPECTIONS FOR SUFFICIENT VEGETATIVE GROWTH AND COVER.	ON-GOING
MAINTAIN RECORDS OF ALL INSPECTIONS AND MAINTENANCE ACTIVITY.	
VEGETATED AREAS SHALL BE INSPECTED FOR EROSION, SCOUR AND INVASIVE PLANTS. REMOVE INVASIVE PLANTS WITH MINIMAL DISRUPTION TO THE PLANTING SOIL BED AND REMAINING VEGETATION.	MONTHLY DURING THE GROWING SEASON
BARE SPOTS AND AREAS INSUFFICIENT COVER (LESS THAN 70% VEGETATION GROWTH) SHALL BE RE-SEEDED.	
IN THE EVENT OF TRENCH SETTLING, THE AREA SHALL BE REGRADED TO MAINTAIN PRE-CONSTRUCTION DRAINAGE PATTERNS, AND RE-SEEDED.	AS NEEDED



DATE: 08/10/2020

**TILGHMAN & PARKWAY LATERAL
E&SC & SITE RESTORATION PLAN
PHASE 2A**

GENERAL NOTES

DRAWING NUMBER
SR-2

CLEAN FILL AND SITE CONTAMINATION:

- WITH THE EXCEPTION OF SITES ENROLLED IN DEP'S LAND RECYCLING AND ENVIRONMENTAL REMEDIATION STANDARDS (ACT 2) PROGRAM, ALL FILL MATERIAL EXCAVATED AND USED ON-SITE, IMPORTED TO THE SITE, AND EXPORTED FROM THE SITE, MUST MEET THE DEFINITION OF CLEAN FILL, AS DEFINED AS "UNCONTAMINATED, NON-WATER SOLUBLE, NONDECOMPOSABLE INERT SOLID MATERIALS. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED." REGULATED FILL MAY ONLY BE USED ON ACT 2 SITES, IN ACCORDANCE WITH STANDARDS ESTABLISHED BY THAT PROGRAM.
- THE PERMITTEE SHALL CONDUCT ENVIRONMENTAL DUE DILIGENCE TO VERIFY THAT FILL EXCAVATED ON-SITE THAT IS USED TO ESTABLISH FINAL GRADE, FILL IMPORTED TO THE PROJECT SITE, AND FILL EXPORTED FROM THE PROJECT SITE IS CONSIDERED CLEAN FILL, AS DEFINED AS "UNCONTAMINATED, NONWATER SOLUBLE, NONDEPOSABLE INERT SOLID MATERIAL. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED." IF DUE DILIGENCE RESULTS IN EVIDENCE OF A RELEASE, AS DEFINED IN DEP'S MANAGEMENT OF FILL POLICY (285-2182-773), THAT HAS AFFECTED THE FILL MATERIAL, THE PERMITTEE SHALL TEST THE MATERIAL TO DETERMINE WHETHER THE MATERIALS QUALIFIES AS CLEAN FILL, AND FORM FP-001 (CERTIFICATION OF CLEAN FILL) MUST BE COMPLETED, RETAINED BY THE PERMITTEE OR THE PROPERTY OWNER ON-SITE, AND BE MADE AVAILABLE TO DEP/CCD UPON REQUEST.
- IN THE EVENT THAT FILL EXCAVATED ON-SITE THAT IS USED TO ESTABLISH FINAL GRADE, FILL IMPORTED TO THE PROJECT SITE, OR FILL EXPORTED FROM THE PROJECT SITE IS FOUND TO BE REGULATED FILL DURING THE TERM OF PERMIT COVERAGE, WHERE THE UTILIZATION OF THE REGULATED FILL WILL REQUIRE A PERMIT FROM DEP'S WASTE MANAGEMENT PROGRAM, EARTH DISTURBANCE ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT THE PERMITTEE OBTAINS ALL NECESSARY PERMITS OR APPROVALS FROM DEP.
- IF THE PERMITTEE BECOMES AWARE DURING EARTH DISTURBANCE ACTIVITIES THAT SOILS IN THE AREA OF EARTH DISTURBANCE CONTAIN CONCENTRATIONS OF REGULATED SUBSTANCES EXCEEDING THE RESIDENTIAL MEDIUM-SPECIFIC CONCENTRATIONS FOR SOIL IN 25 PA. CODE CHAPTER 250, THE PERMITTEE SHALL NOTIFY DEP AND CEASE EARTH DISTURBANCE ACTIVITIES IN AREAS OF KNOWN SOIL CONTAMINATION UNTIL AUTHORIZED TO RESUME BY DEP.
- IF THE PERMITTEE ENCOUNTERS GROUNDWATER DURING EXCAVATION THAT THE PERMITTEE KNOWS OR HAS REASON TO BELIEVE IS CONTAMINATED BY ONE OR MORE POLLUTANTS AT CONCENTRATIONS EXCEEDING WATER QUALITY CRITERIA CONTAINED IN 25 PA. CODE CHAPTER 93, THE PERMITTEE SHALL NOTIFY DEP. CONTAMINATED GROUNDWATER MAY NOT BE PUMPED OR OTHERWISE DIVERTED TO SURFACE WATERS UNLESS SPECIFICALLY AUTHORIZED BY DEP.

CONSTRUCTION SEQUENCE:

- AT LEAST SEVEN (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 OFFICERS, THE E&S PLAN PREPARER AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO THE AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- STAKE OR MARK OUT THE LIMIT OF DISTURBANCE. THE AREA TO BE USED FOR THE INSTALLATION OF PIPELINE SHALL BE CLEARLY MARKED BEFORE ANY SITE WORK BEGINS TO AVOID SOIL DISTURBANCE AND COMPACTION DURING CONSTRUCTION.
- INSTALL ALL E&S CONTROL DEVICES SUCH AS: COMPOST FILTER SOCKS AND INLET PROTECTION ON EXISTING INLETS AS SHOWN ON THE PLANS AND DETAILS.
- PERFORM CLEARING AND GRUBBING AS NEEDED FOR THE PROJECT. LIMIT CLEARING AND GRUBBING TO THE AREAS OF THE PROJECT THAT ARE BEING CONSTRUCTED.
- CONSTRUCT PROPOSED PIPING AS SHOWN ON THE PIPELINE PLANS PREPARED BY OTHERS.
- CONTRACTOR SHALL MAINTAIN TRAFFIC CONTROL AS NOTED ON THE HOP PLANS. CONTRACTOR SHALL PERFORM ALL WORK WITHIN PENNDOT RIGHT-OF-WAY IN ACCORDANCE WITH PENNDOT PUBLICATION 408.
- STABILIZE DISTURBED AREAS IMMEDIATELY. CONTRACTOR SHALL ENSURE THAT ALL GRADING IS RESTORED TO EXISTING CONDITIONS. CONTRACTOR SHALL MATCH EXISTING CONTOURS AND MAINTAIN DRAINAGE FEATURES AND TOPOGRAPHY PER THE SITE. FOR VEGETATED AREAS, DECOMPACT SUBGRADE OF DISTURBED AREAS TO A DEPTH OF 12 INCHES.
- RESTORE THE DISTURBED AREAS TO THEIR EXISTING SURFACE COVER PER THE SITE RESTORATION SCHEDULE ON SR-4.
- MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES UNTIL SITE WORK IS COMPLETE AND A UNIFORM 70% VEGETATIVE COVER IS ESTABLISHED.
- REMOVE EROSION AND SEDIMENT CONTROL DEVICES ONCE SITE WORK IS COMPLETE AND A UNIFORM 70% VEGETATIVE COVER IS ESTABLISHED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.

E&S MAINTENANCE PLAN

THE ENVIRONMENTAL INSPECTOR (EI) WILL BE PRESENT DURING CONSTRUCTION ACTIVITIES TO INSPECT BMPS AT LEAST EVERY SEVEN (7) CALENDAR DAYS FOLLOWING THEIR INSTALLATION AND WITHIN 24 HOURS OF THE END OF A STORMWATER EVENT. 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 MORE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION. BMPS WILL BE MAINTAINED, AS FOLLOWS:

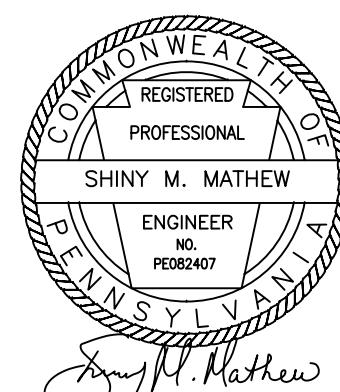
1. REGRADE OR ADD GRAVEL TO THE ACCESS ROAD IF EXCESSIVE RUTTING OR EROSION IS OBSERVED.
2. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH ONE-HALF OF THE ABOVEGROUND EIGHT OF THE BARRIER (I.E. COMPOST FILTER SOCK).
3. SECTION OF SILT BARRIER WHICH HAS BEEN UNDERMINED OR OVERTOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH ONE-THIRD THE HEIGHT OF THE ROCK FILTER OUTLET.
5. EXISTING CULVERTS ALONG ACCESS ROADS WILL BE CLEARED OUT, REPAIRED, OR REPLACED AS NECESSARY.
6. EARTH DISTURBANCE AREAS WILL BE REPAIRED WHERE SIGNS OF ACCELERATED EROSION ARE DETECTED.
7. PUMPED WATER FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME ONE-HALF FULL.
8. IF NECESSARY, REPLACEMENT OF COMPOST FILTER SOCK SHALL BE AS FOLLOWS: BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER SIX MONTHS IF PERMANENT STABILIZATION HAS NOT BEEN DETERMINED SUCCESSFUL; PHOTODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER ONE YEAR; POLYPROPYLENE COMPOST FILTER SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
9. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FEET INCREMENTS UNTIL CONDITION IS ALLEVIATED. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWER, CULVERTS, OR OTHER DRAINAGE WAYS IS NOT ACCEPTABLE.
10. A MINIMUM ROCK THICKNESS OF 8 INCHES SHALL BE MAINTAINED AT THE ROCK CONSTRUCTION ENTRANCE THROUGHOUT CONSTRUCTION. A STOCKPILE SHALL BE MAINTAINED ON THE CONSTRUCTION SITE FOR THIS PURPOSE.
11. IF THE SITE DOES NOT ACHIEVE PERMANENT STABILIZATION WITHIN THE ALLOTTED TIME FRAME FOR THE PROJECT, THEN REMEDIAL ACTION WILL BE TAKEN, SUCH AS RESEEDING. THESE AREAS SHALL BE MONITORED UNTIL PERMANENT STABILIZATION HAS BECOME ESTABLISHED.
12. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR/CONTRACTOR SHALL IMPLEMENT APPROPRIATE BMPS TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
13. SEDIMENT REMOVED FROM BMPS WILL BE REPLACED IN AN UPLAND CONSTRUCTION AREA AND SPREAD OUT. ALL WASTE OR EXCESS MATERIALS NOT SUITABLE FOR THE ON-SITE STOCKPILE SHALL BE DISPOSED OF OFF-SITE AT A PADEP OR LOCAL COUNTY CONSERVATION DISTRICT APPROVED FACILITY. MATERIALS WILL BE RE-USED OR RECYCLED IF POSSIBLE, INCLUDING TOPSOIL AND OTHER MATERIALS AS APPROPRIATE. ANY OFF-SITE STOCKPILE/SPOIL PILES SHALL BE AT A PADEP OR LOCAL COUNTY CONSERVATION DISTRICT APPROVED FACILITY WITH AN APPROVED E&S PLAN. THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THAT AN OFF-SITE FACILITY HAS APPROPRIATE PERMITS/PLANS IN PLACE AND IS APPROVED TO ACCEPT ASSOCIATED WASTES OR EXCESS MATERIALS.

STORAGE YARD/STAGING AREA CONSTRUCTION NOTES

1. PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITY INCLUDING CLEARING AND GRUBBING, CLEARLY DELINEATE SENSITIVE AREAS INCLUDING WATERBODIES/WETLANDS, RIPARIAN FOREST BUFFER BOUNDARIES (IF ANY), THE LIMITS OF CLEARING, LOCATIONS OF UTILITIES, TREES THAT ARE TO REMAIN UNDISTURBED WITHIN THE PROJECT SITE, CULTURAL RESOURCE SITES AND RARE SPECIES HABITAT, AS APPLICABLE. AVOIDANCE AREAS WILL BE MARKED WITH APPROPRIATE FENCING, SIGNAGE, AND/OR FLAGGING BASED ON ENVIRONMENTAL SURVEYS AND PERMIT CONDITIONS.
2. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCES WHERE VEHICLES ENTER CONSTRUCTION AREAS FROM PUBLIC ROADS. ACCESS POINTS TO STORAGE YARDS ARE DEPICTED ON PLAN DRAWINGS; THE EI MAY ASSIST IN RELOCATING ACCESS POINTS IF SITE CONDITIONS REQUIRE.
3. INSTALL WOOD MATTING WHERE NOTED ON THE PLANS OVER SENSITIVE AREAS, SUCH AS WETLANDS.
4. INSTALL COMPOST FILTER SOCK SEDIMENT BARRIERS AFTER THE CONSTRUCTION SITE IS ACCESSED, KEEPING ASSOCIATED CLEARING AND GRUBBING LIMITED TO ONLY THAT AMOUNT REQUIRED FOR INSTALLATION OF PERIMETER BMPS.
5. IMPLEMENT LAND CLEARING AND GRADING ONLY AFTER ALL DOWN SLOPE E&S BMPS HAVE BEEN CONSTRUCTED. SITE WILL BE GRADED FOR THE STORAGE OF PIPE, STOCKPILED SOIL, PARKING AND OTHER APPROVED CONSTRUCTION SUPPORT ACTIVITIES, AS NECESSARY. THESE GRADING EFFORTS ARE ANTICIPATED TO BE MINOR AND WILL ONLY BE TO THE EXTENT NECESSARY FOR SAFE UTILIZATION OF THE AREA. SPECIFIC AREAS TO BE GRADED WILL BE DETERMINED BASED ON THE NEEDS OF THE CONTRACTOR AT THE TIME OF USE.
6. PERFORM TOPSOIL STRIPPING AND SEGREGATION, AND GRAVEL PLACEMENT (IF NECESSARY) OR OTHER UPDATES TO THE STORAGE YARD AREA. PLACE GEOTEXTILE UNDERNEATH AREAS WHERE GRAVEL WILL BE PLACED SO GRAVEL CAN BE REMOVED WHEN YARD WILL NO LONGER BE USED.
7. UPON COMPLETION OF THE USE OF THE STORAGE YARD, RETURN SITE TO ITS PRE-CONSTRUCTION CONTOURS AND CONDITIONS, INCLUDING THE REMOVAL OF ADDED GRAVEL AREAS.
8. INSTALL STABILIZATION BMPS AND MEASURES TO ALL DISTURBED AREAS IN ACCORDANCE WITH STABILIZATION SPECIFICATION DEFINED WITHIN THIS PLAN INCLUDING: SURFACE ROUGHENING/SACRIFICATION, APPLICATION OF FERTILIZER AND LIME, PERMANENT SEEDING, MULCHING AND/OR APPLICATION OF EROSION CONTROL BLANKET.
9. TEMPORARY E&S BMPS MAY BE REMOVED AFTER THE ENTIRE DISTURBED AREA TRIBUTARY TO EACH BMP REACHES PERMANENT STABILIZATION. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. REMOVE ALL REMAINING SEDIMENT BARRIERS, ADDED GRAVEL AREAS, ROCK CONSTRUCTION ENTRANCES. IMMEDIATELY STABILIZE ANY DISTURBANCES ASSOCIATED WITH THE REMOVAL OF THE BMPS

TREE PROTECTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF TREES DURING CONSTRUCTION. CARE SHALL BE TAKEN TO PROTECT TREES BY CONTROLLING THE ACTIVITIES OCCURRING WITHIN TREE PROTECTION ZONES.
2. ALL ON-SITE WORKERS SHALL BE AWARE OF THE TREE PROTECTION MEASURES AND THE CONSEQUENT RESTRICTIONS AND REGULATIONS IMPLIED.
3. THE CONTRACTOR SHALL IDENTIFY THE "TREE PROTECTION ZONE". THE TREE PROTECTION ZONE IS THE AREA WITHIN THE DRIP LINE OF EXISTING TREES, OR WITHIN THE PERIMETER DRIPLINE OF GROUPS OF TREES, OR WITHIN TEN (10) FT. OF THE TRUNK (WHICHEVER IS GREATER), UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
4. ANY DAMAGE TO EXISTING TREES DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL MITIGATE SUCH DAMAGED TREES AT THE DIRECTION OF THE OWNER OR LOCAL AUTHORITIES, AT THE CONTRACTOR'S EXPENSE.
5. TEMPORARY WOODEN TREE GUARDS SHALL BE INSTALLED AT EACH EXISTING TREE TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION, AND A TEMPORARY SNOW FENCE BOUNDARY SHALL BE INSTALLED AT THE PERIMETER OF THE TPZ OR AS SHOWN ON THE DRAWINGS.
6. TREE GUARDS WITH WRAP FOR INDIVIDUAL TREES, AND TEMPORARY SNOW FENCE BOUNDARY SHALL BE MAINTAINED THROUGHOUT THE COURSE OF THE CONTRACT. TREE GUARDS ARE NOT TO BE REMOVED UNTIL ALL WORK AROUND EXISTING TREES IS COMPLETE. IF REQUIRED TO INSTALL PROPOSED WORK, PROTECTION SHALL BE REMOVED UNTIL THE WORK IS COMPLETE.
7. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES. BULK MATERIAL, EQUIPMENT, OR VEHICLES SHALL NOT BE STOCKPILED OR PARKED WITHIN THE TPZ TO MINIMIZE SURFACE AND SUBSURFACE ROOT AND SOIL COMPACTION. THIS APPLIES TO ALL AREAS WITHIN OR OUTSIDE THE CONTRACT LIMITS.
8. IF STOCKPILING OCCURS WITHIN THE TPZ, A STOP WORK ORDER SHALL BE ISSUED IMMEDIATELY. WORK SHALL NOT RE-COMMENCE UNTIL ALL STOCKPILED MATERIAL IS REMOVED FROM THE ZONE AND TREE REMEDIATION IS SATISFIED.
9. NO RUNOFF OR SPILLAGE OF NOXIOUS MATERIALS OR EXCESSIVE WETTING CAUSED BY CONSTRUCTION OPERATIONS SHALL OCCUR WITHIN TREE PROTECTION ZONES.
10. HEAT SOURCES, FLAMES, IGNITION SOURCES, AND SMOKING ARE PROHIBITED WITHIN OR NEAR WOODCHIP MULCH TREE PROTECTION ZONES.
11. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN REMOVING CONCRETE SIDEWALK AND BASE MATERIAL WITHIN THE DRIPLINE OF EXISTING TREES - LIFTING RATHER THAN DRAGGING PIECES OF PAVING.



DATE: 08/10/2020

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08/10/20

DESIGNED BY

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CHECKED BY

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APPROVED BY

SMM

08/10/20

PLOT SCALE

N/A

JMT JOB NO.

18-00672-005



TILGHMAN & PARKWAY LATERAL
E&SC & SITE RESTORATION PLAN
PHASE 2A
GENERAL NOTES

SCALE N/A DRAWING NUMBER SR-3 REV

SITE RESTORATION SCHEDULE

GENERAL:

1. AFTER FINAL GRADE IS ESTABLISHED, INSTALL/IMPLEMENT APPROPRIATE BMPS TO ALL DISTURBED AREAS INCLUDING, BUT NOT LIMITED TO: SURFACE ROUGHING/SCARIFICATION, PERMANENT SEEDING, AND MULCHING. SEED AND SOIL AMENDMENTS SHALL BE APPLIED AS DEFINED WITHIN THIS PLAN. WHERE REQUIRED AND AFTER SEEDING AND SOIL AMENDMENTS, INSTALL EROSION CONTROL BLANKET/FABRIC. EROSION CONTROL BLANKET/FABRIC SHALL BE APPLIED WITHIN 100 FEET OF STREAM BANKS IN HQ WATERSHEDS (UNLESS LOCATED WITHIN A WETLAND) AND ON SLOPES WHICH ARE 3H:1V OR STEEPER, AS DEPICTED ON THE PLANS. REMOVE TEMPORARY CROSSINGS OF STREAMS AND WETLANDS ONCE EQUIPMENT ACCESS ACROSS ASSOCIATED FEATURE IS NO LONGER NECESSARY.
2. THE OWNER WILL CONTINUE TO CONDUCT INSPECTIONS UNTIL THE PROJECT AREA HAS REACHED PERMANENT STABILIZATION. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM PERENNIAL 70% VEGETATIVE COVER OR OTHER 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. TEMPORARY E&S BMPS MAY BE REMOVED AFTER THE ENTIRE DISTURBED AREA TRIBUTARY TO EACH BMP REACHES PERMANENT STABILIZATION. REMOVE ALL REMAINING TEMPORARY CROSSINGS OF STREAMS AND WETLANDS. IMMEDIATELY STABILIZE ANY DISTURBANCES ASSOCIATED WITH THE REMOVAL OF THE BMPS.
3. ALL DISTURBED AREAS CONTAINING EXISTING PAVEMENT SHALL BE RESTORED PER THE PAVEMENT RESTORATION DETAILS ON SR-6.
4. ALL DISTURBED AREAS CONTAINING EXISTING GRAVEL COVER MUST BE REPLACED AND REFRESHED IN KIND WITH THE PLACEMENT OF GEOTECN FABRIC, 4" DENSE GRADE BASE TOPPED WITH 2 INCHES OF #57 STONE.
5. ALL DISTURBED AREAS CONTAINING EXISTING VEGETATIVE COVER MUST BE RESTORED WITH PERMANENT SEEDING. REFER TO PERMANENT SEED SCHEDULE AND TABLES.
6. ALL DISTURBED AREAS CONTAINING EXISTING VEGETATIVE COVER SHALL BE DECOMPACTED TO SUBGRADE TO A DEPTH OF 12 INCHES.
7. SITE RESTORATION IS A CRITICAL STAGE AND IS TO BE WITNESSED AND CERTIFIED BY A LICENSED PROFESSIONAL DURING CONSTRUCTION. THIS WILL BE A REQUIREMENT OF THE NOTICE OF TERMINATION (NOT).

PERMANENT SEEDING

SITE PREPARATION AND ESTABLISHMENT OF PERMANENT VEGETATION SHALL BE CONDUCTED AS FOLLOWS:

1. INSTALL ANY NECESSARY SURFACE WATER CONTROL MEASURES.
2. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENERED TO A DEPTH OF 3-5 INCHES - 6-12 INCHES ON COMPACTED SOILS TO PERMIT BONDING OF TOPSOIL. DISTRIBUTE TOPSOIL THROUGHOUT DISTURBED AREAS TO A DEPTH OF 4-6 INCHES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH MINIMUM TILLAGE.
3. HYDROSEED OR FOLLOW STEPS 3 THROUGH 6 BELOW.
4. PERFORM AGRICULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPES.
5. AGRICULTURAL LIME APPLICATION RATES CAN BE DETERMINED BY FIELD PH TESTING. TESTING MAY BE PERFORMED AT A RATE OF 1 TEST PER ACRE (MIN.). IN THE ABSENCE OF TESTING, APPLY AT 6 TONS/ACRE.
6. APPLY DRY 10-20-20 FORMULATION OF FERTILIZER AT THE RATE OF 1,000 LB/ACRE OR AT A RATE DETERMINED BY FIELD TESTING.
7. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES USING APPROPRIATE EQUIPMENT.
8. SEED MIXTURE - SEE LINE LIST FOR LANDOWNER REQUIREMENT AND PROJECT RESTORATION PLAN. IN ABSENCE OF A SPECIFIED MIXTURE, SEED MIXTURE SHALL BE IN ACCORDANCE WITH THE SEEDING TABLE PROVIDED; OR IN ACCORDANCE WITH TABLE 11.4 AND TABLE 11.5 OF THE DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (TECHNICAL GUIDANCE NO. 363-2134-008) AS APPROVED BY THE OWNER.
9. IF NOT HYDROSEEDING. APPLY MULCH.

TEMPORARY SEEDING

EXCLUDING AREAS OF ACTIVE CONSTRUCTION, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED IN DISTURBED AREAS WHERE THE SOIL WILL BE EXPOSED FOR A PERIOD GREATER THAN FOUR (4) DAYS. SEED MIXTURE FOR TEMPORARY VEGETATION SHALL CONSIST OF 100% ANNUAL RYEGRASS. SEED SHALL BE APPLIED AT THE RATE OF 40 LB/ACRE OR AS RECOMMENDED BY A LOCAL RECOGNIZED SEED SUPPLIER AS APPROVED BY THE OWNER. PRIOR TO SEEDING, APPLY 1 TON OF AGRICULTURAL GRADE LIMESTONE PER ACRE PLUS 10-10-10 FERTILIZER AT THE RATE OF 500 LB/ACRE (UNLESS APPLICATION RATES HAVE BEEN DETERMINED OTHERWISE BY FIELD PH TESTING) AND WORK INTO SOIL.

PERMANENT SEEDING TABLE (NON-LAWN AREAS)

SCIENTIFIC NAME	COMMON NAME	REQUIRED VARIETIES	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	SEED RATE (LB/1000 SF)	SEEDING RATE (LB/ACRE)
LOLIUM PERENNE	PERENNIAL RYEGRASS	A MIXTURE OF AT LEAST 2 FINE-LEAF, TURF-TYPE VARIETIES ADAPTED TO LOCAL CONDITIONS	98	90	0.8	35
FESTUCA RUBRA	RED FESCUE	"PENNLAWN"	98	85	0.8	35
LOTUS CORNICULATUS	BIRDSFOOT TREFOIL (BIRDSFOOT DEER-VETCH)	"VIKING", "EMPIRE", "LEO", OR "NORCEN" (PLUS 5X LEGUME INOCULATION RATE)	98	80	0.7	30

PLUS, DEPENDING ON THE SEASON AND AVAILABILITY, ALSO ADD ONE OF THE FOLLOWING "NURSE CROP" SPECIES:

AVENA SATIVA	OATS APRIL 1 TO SEPT 1	COMMON SEED	98	85	0.7	32
SECALE CEREALE	WINTER RYE APRIL 1 TO OCTOBER 1	"AROOOSTOCK"** OR COMMON SEED	98	85	1.3	56
SECALE CEREALE	WINTER RYE OCTOBER 1 TO APRIL 1	"AROOOSTOCK"** OR COMMON SEED	98	85	2.6	112

* IF THE ABOVE SEEDING DATES CANNOT BE OBSERVED, USE ONE OF THE APPROPRIATE TEMPORARY SEEDING MIXTURE SPECIES IDENTIFIED IN TABLE 11.4 OF THE PADEP E&S MANUAL.

** "AROOOSTOCK" VARIETY OF WINTER RYE IS RECOMMENDED FOR LATE SEEDING WHERE WINTERS ARE COLD.

SCIENTIFIC NAME	COMMON NAME	REQUIRED VARIETIES	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	SEED RATE (LB/1000 SF)	SEEDING RATE (LB/ACRE)
LOLIUM PERENNE	PYRENNIAL RYEGRASS	A MIXTURE OF AT LEAST 2 FINE-LEAF, TURF-TYPE VARIETIES ADAPTED TO LOCAL CONDITIONS	98	90	0.9	42
FESTUCA RUBRA	RED FESCUE	"PENNLAWN"	98	85	1.4	65
POA PRATENSIS	KENTUCKY BLUEGRASS MIXTURE	A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT	97	80	2.3	107

* PERMANENT SEEDING (MRC BASIN AT MARCUS HOOK COMPRESSOR STATION): ERNST SEED RAIN GARDEN MIX, ERNX-180, OR APPROVED EQUAL. SEEDING RATE: 20 LB/ACRE WITH A COVER CROP OF GRAIN RYE AT 30 LB/ACRE.

TOTAL: 4.6 214

CHAPTER 102 COMPLIANCE CHART

CODE	SUBSECTION	DOCUMENTATION	
		PLANS	NARRATIVE
102.8.b	GENERAL PCSM PLANNING AND DESIGN		
1	SR-7 TO SR-9	PCSM NARRATIVE, SECTION II, VI	
2	SR-7 TO SR-9, NOTE SR-4 & SR-6 PROVIDES DETAILS REGARDING THE SITE RESTORATION OPERATIONS.	PCSM NARRATIVE, SECTION II, VI	
3			
4			
5	SR-7 TO SR-9	PCSM NARRATIVE, SECTION II, VI	
6			
7			
8	SR-7 TO SR-9, NOTE SR-4 & SR-6 PROVIDES DETAILS REGARDING THE SITE RESTORATION OPERATIONS.	PCSM NARRATIVE SECTION II, VI	
102.8.c	CONSISTENCY WITH E&S PLAN		
		ADELPHIA GATEWAY PROJECT, TILGHMAN AND PARKWAY LATERALS, PHASE 2A- SITE RESTORATION/EROSION AND SEDIMENT CONTROL PLANS, 9 SHEETS TOTAL.	
102.8.e	PCSM PLAN PREPARER REQUIREMENTS		
			PCSM NARRATIVE, SECTION I
102.8.f	PCSM PLAN CONTENT		
1	SR-7 TO SR-9		
2	I-1, SR-7 TO SR-9	PCSM NARRATIVE SECTION III	
3		PCSM NARRATIVE, SECTION IV	
4		PCSM NARRATIVE, SECTION VI	
5	SR-7 TO SR-9	PCSM NARRATIVE, SECTION V	
6	SR-4	PCSM NARRATIVE, SECTION VI	
7	SR-3	PCSM NARRATIVE, SECTION XI	
8		N/A	
9	SR-7 TO SR-9		
10	SR-2	PCSM NARRATIVE, SECTION XVI	
11	SR-3		
12	I-1	PCSM NARRATIVE, SECTION VII	
13		PCSM NARRATIVE, SECTION VIII	
14		PCSM NARRATIVE, SECTION IX	
15			
102.8.h	PCSM IMPLEMENTATION FOR SPECIAL PROTECTION WATERS		
1			
2	SR-5, SR-7 TO SR-9	PCSM NARRATIVE, SECTION X	
3			
102.8.i	COMPLAINT OR SITE INSPECTION		
		SR-2	
102.8.l	FINAL CERTIFICATION		
1	SR-2		
2	SR-2		
102.8.m	PCSM LONG-TERM OPERATION AND MAINTENANCE REQUIREMENTS		
1	SR-2	PCSM NARRATIVE, SECTION XII	
2	SR-2	PCSM NARRATIVE, SECTION XII	
3	N/A	N/A	
4	SR-2	PCSM NARRATIVE, SECTION XII	
5	SR-2	PCSM NARRATIVE, SECTION XII	
102.8.n	REGULATED ACTIVITIES THAT REQUIRE SITE RESTORATION OR RECLAMATION, AND SMALL EARTH DISTURBANCE ACTIVITIES.		
		SR-7 to SR-9, SEE ABOVE FOR NOTED SUBSECTIONS	



DATE: 08/10/2020

2	REVISED PER DEP COMMENTS	ATH	08/10/20	SMM	08/10/20	JMT JOB NO.	18-00672-005
1	REVISED PER DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	PLOT SCALE	N/A
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	REVISION						



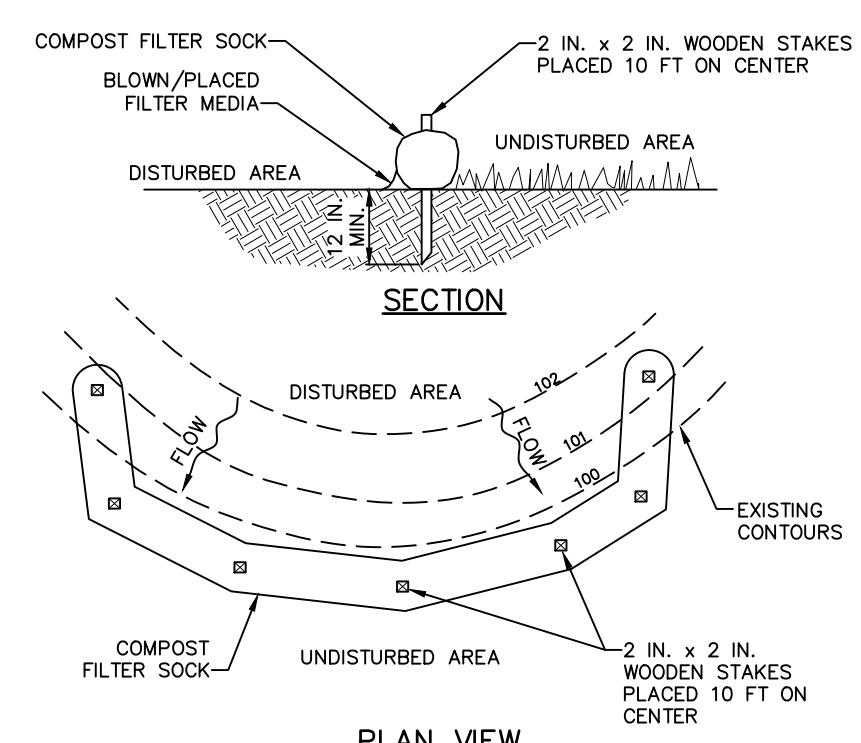
TILGHMAN & PARKWAY LATERAL E&SC & SITE RESTORATION PLAN PHASE 2A
GENERAL NOTES

SCALE N/A DRAWING NUMBER SR-4 REV

COMPOST FILTER SOCK

NOT TO SCALE

(SHEET 1 OF 3)



NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAVED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTOGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOST FILTER SOCK

NOT TO SCALE

(SHEET 3 OF 3)

ORGANIC MATTER CONTENT	80%–100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5–8.0
MOISTURE CONTENT	35%–55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAX

REF: FIGURE 4.2 MAXIMUM PERMISSIBLE SLOPE LENGTH ABOVE COMPOST FILTER SOCKS, PADEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, 2012

MAXIMUM SLOPE LENGTHS FOR COMPOST FILTER SOCK				
% SLOPE	12" DIAMETER	18" DIAMETER	24" DIAMETER	32" DIAMETER
2 (OR LESS)	510	700	1000	1300
5	270	340	500	650
10	150	250	300	400
15	100	200	250	350
20	70	150	200	250
25	50	100	150	180
30	40	90	100	125
35	40	70	90	100
40	30	60	70	90
45	30	40	60	80
50	20	30	40	50

NOTES:
COMPOST SHALL BE WELL DECOMPOSED, WEED-FREE ORGANIC MATTER DERIVED FROM AGRICULTURAL, FOOD, STUMP GRINDINGS, AND YARD OR WOOD/BARK MATTER SOURCES. THE COMPOST SHOULD BE AEROBICALLY COMPOSTED. THE COMPOST SHOULD POSSESS NO OBJECTIONABLE ODORS AND SHOULD BE REASONABLY FREE (< 1% BY DRY WEIGHT) OF MAN-MADE FOREIGN MATTER. THE COMPOST PRODUCT SHOULD NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT IS DERIVED, WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS ARE NOT ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

THE PHYSICAL PARAMETERS OF THE COMPOST SHOULD COMPLY WITH THE STANDARDS IN TABLE 4.2. THE STANDARDS CONTAINED IN PENNDOT PUBLICATION 408 ARE AN ACCEPTABLE ALTERNATIVE.

FILTER BAG INLET PROTECTION TYPE C INLET

NOT TO SCALE

NOT TO SCALE

(SHEET 1 OF 3)



DATE: 08/10/2020

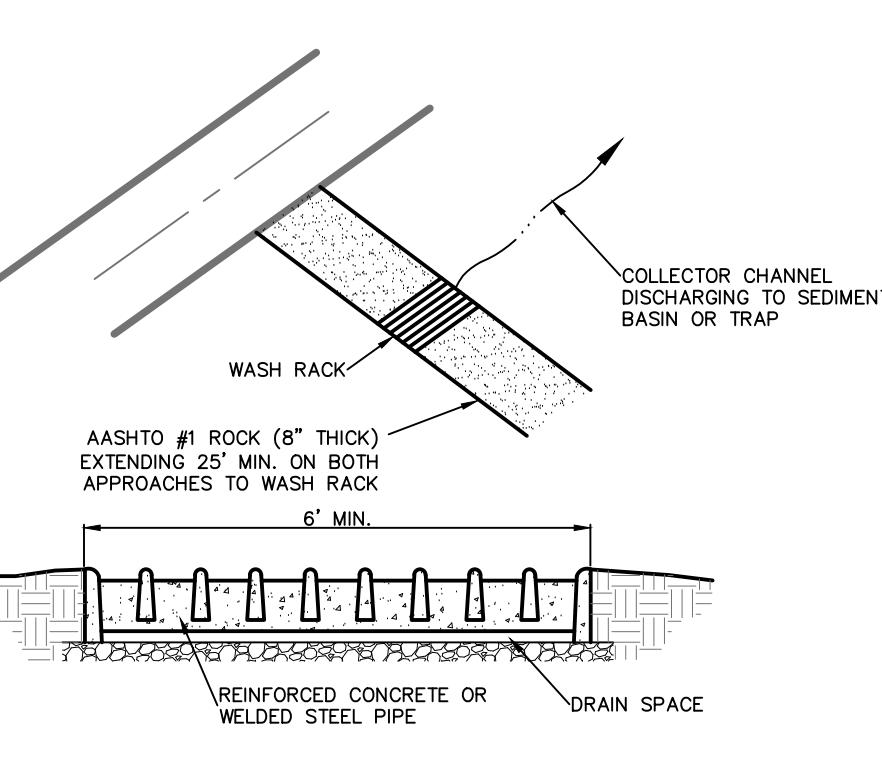
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1	REVISED PER DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	PLOT SCALE	AS NOTED
REV	DESCRIPTION	CHK	DATE	APP	DATE	MODEL ID	



Johnson, Mirmiran & Thompson
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DETAILS	SCALE AS NOTED	DRAWING NUMBER SR-5	REV
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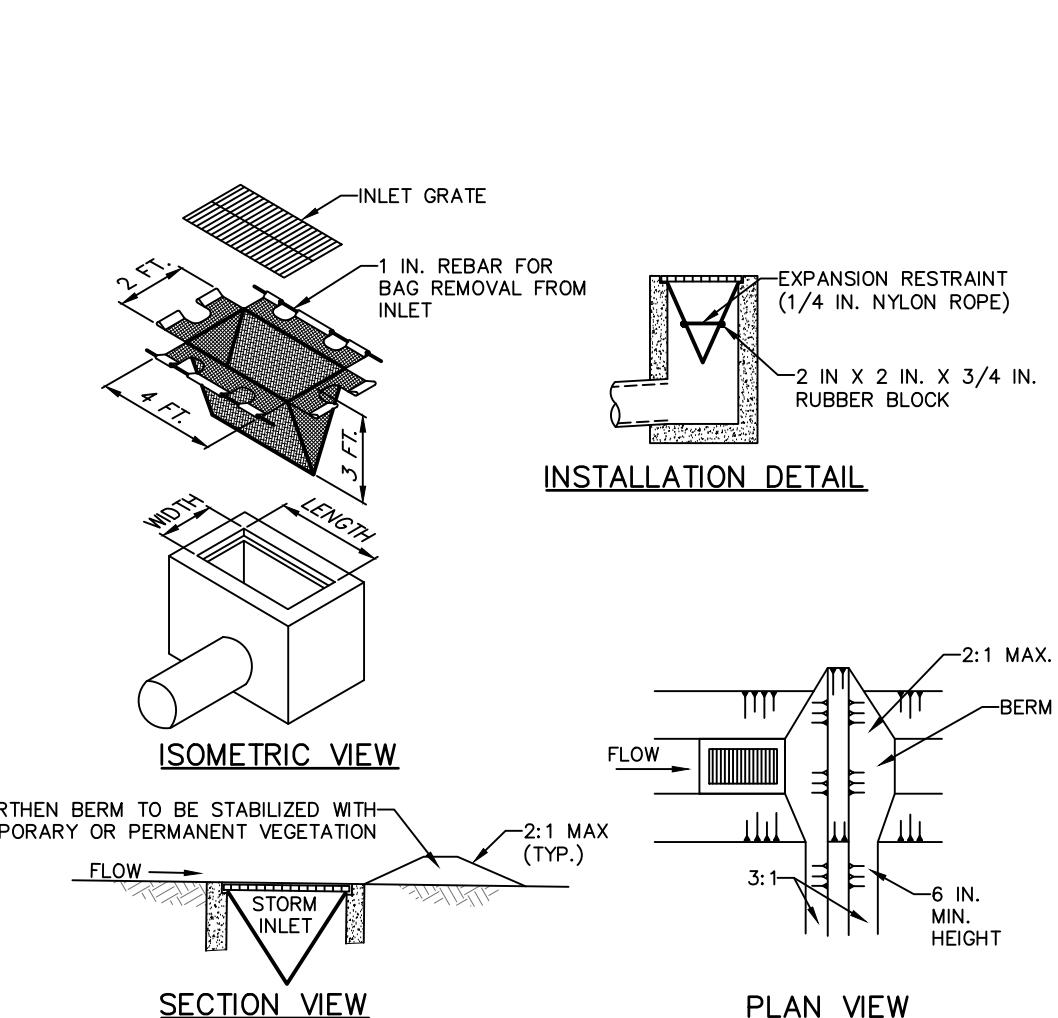


NOTES:
WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAVED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ON SITES WHERE ROCK CONSTRUCTION ENTRANCE ARE PROPOSED ACROSS WETLAND AREAS, CONTRACTOR TO INSTALL WOOD MATS BENEATH ROCK CONSTRUCTION ENTRANCES TO MINIMIZE IMPACT TO WETLAND AREAS. AFTER REMOVING THE ROCK CONSTRUCTION ENTRANCE AND WOODEN MATS, CONTRACTOR TO RESTORE WETLAND AREAS.

ROCK CONSTRUCTION ACCESS WITH WASH RACK

NOT TO SCALE



NOTES:
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SCREEN.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

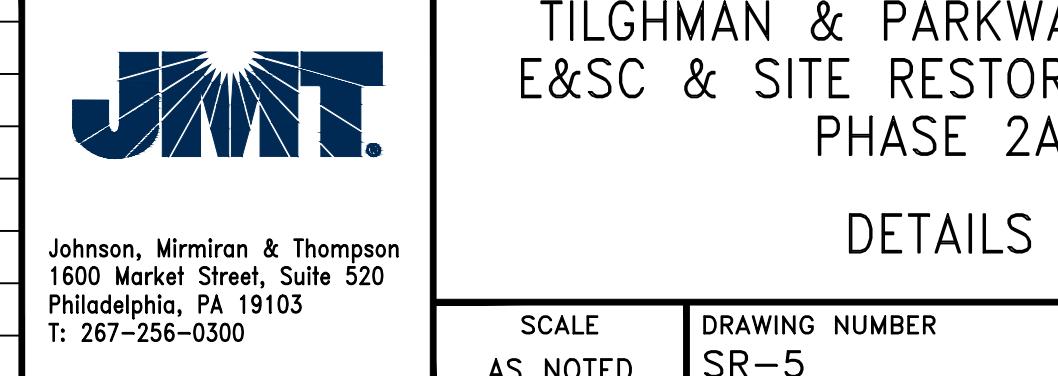
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION TYPE M INLET

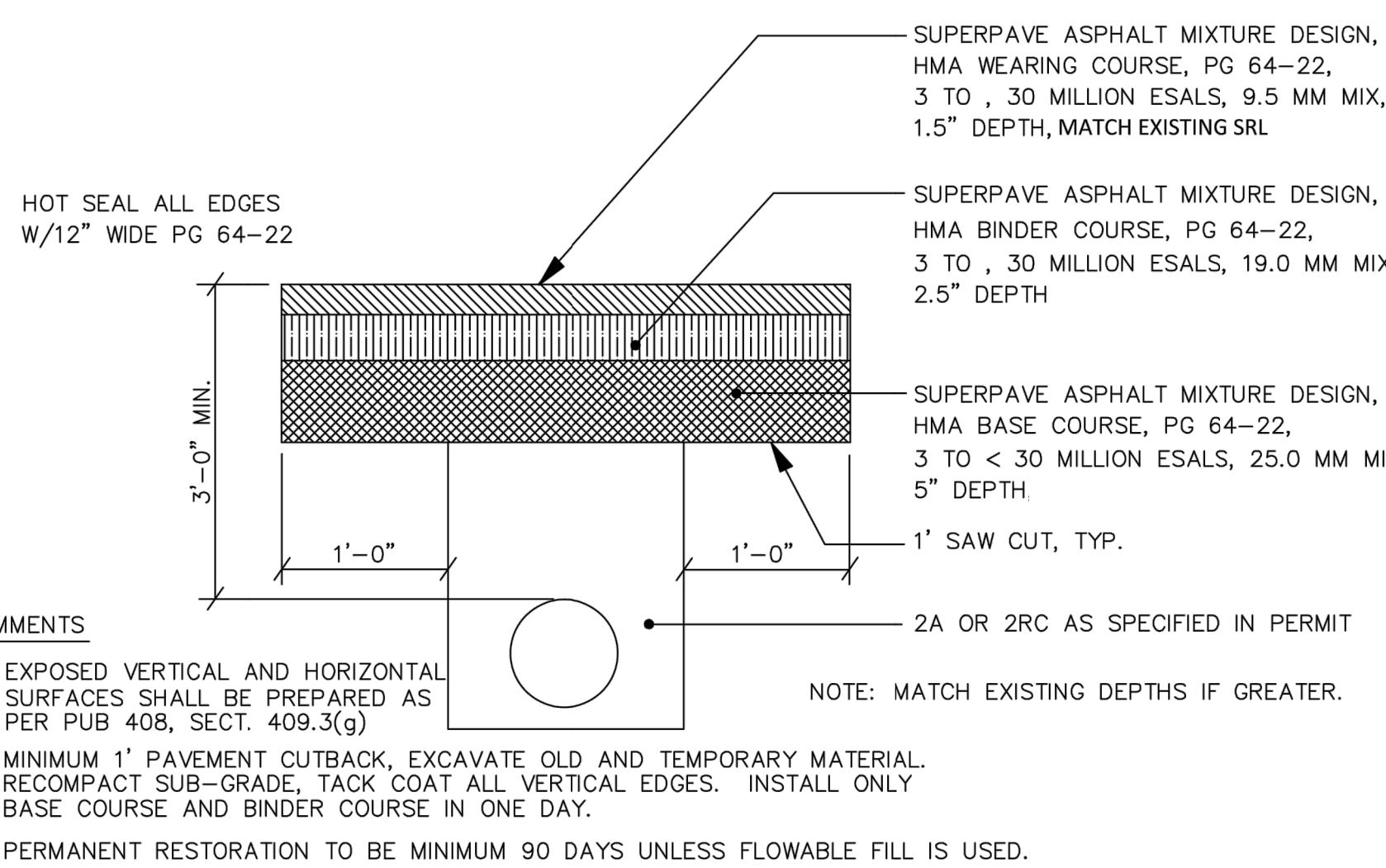
NOT TO SCALE



TILGHMAN & PARKWAY LATERAL
E&SC & SITE RESTORATION PLAN
PHASE 2A

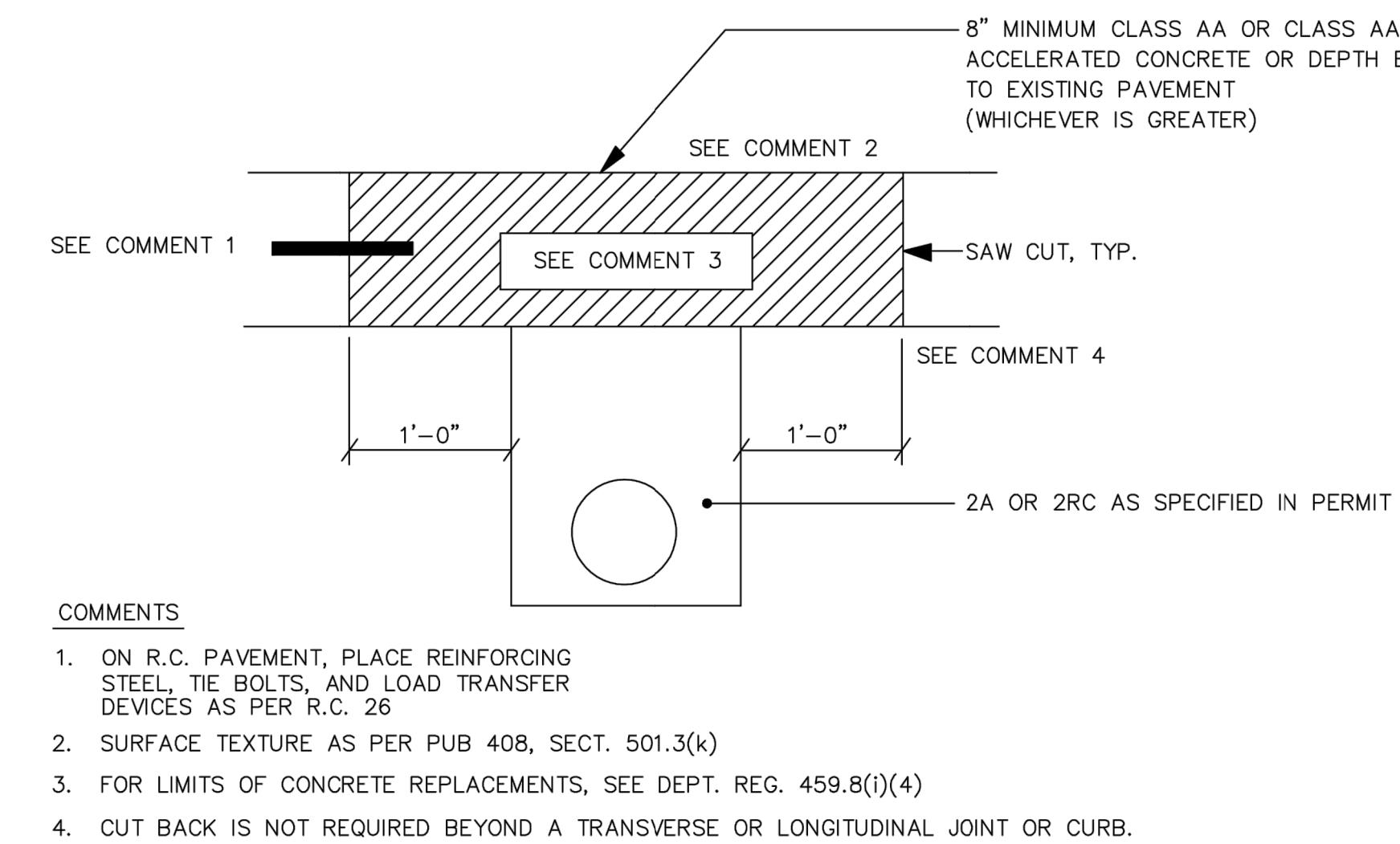
DETAILS

REV



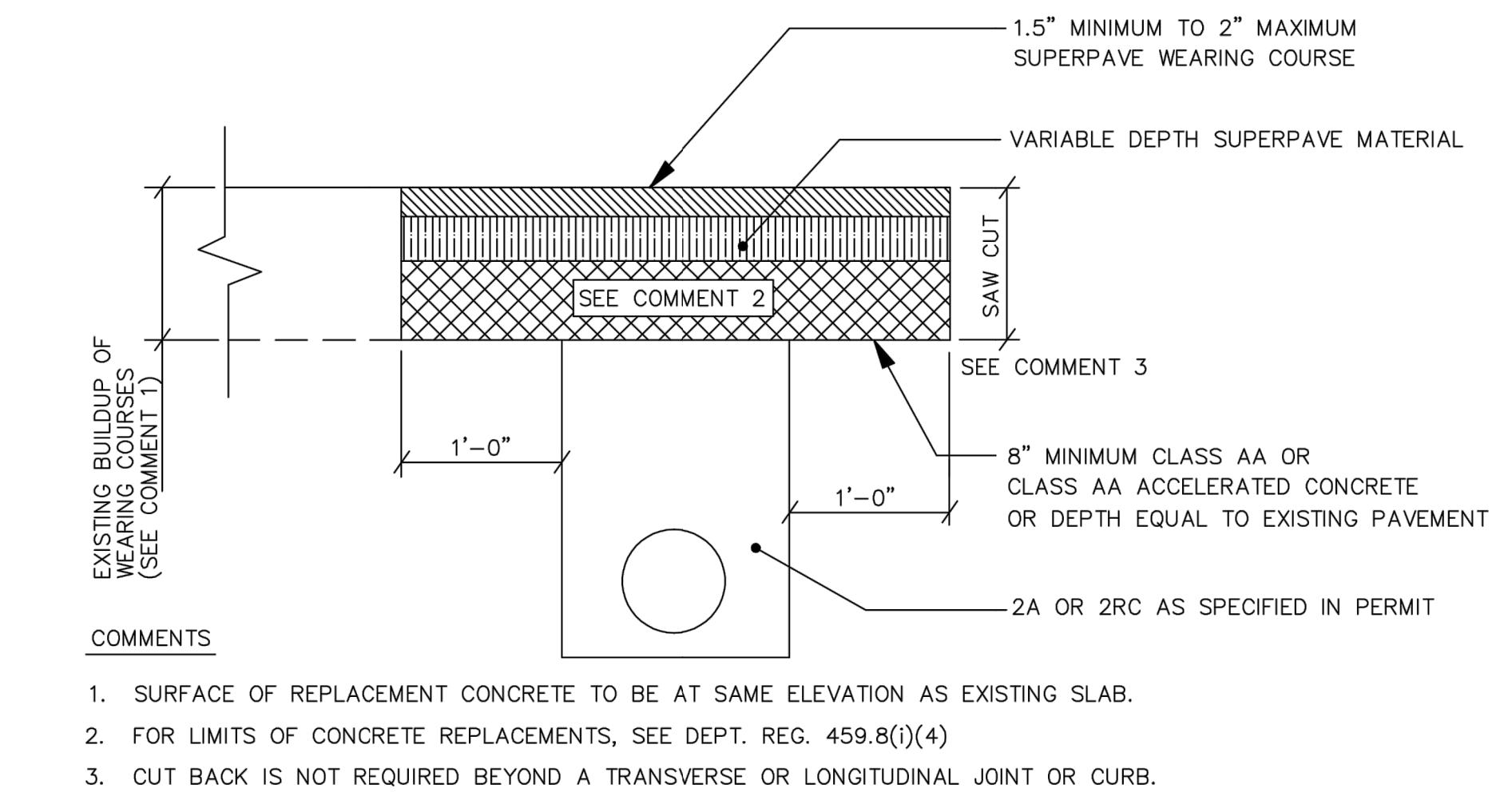
FLEXIBLE PAVEMENT RESTORATION

FIGURE 7-3
NOT TO SCALE



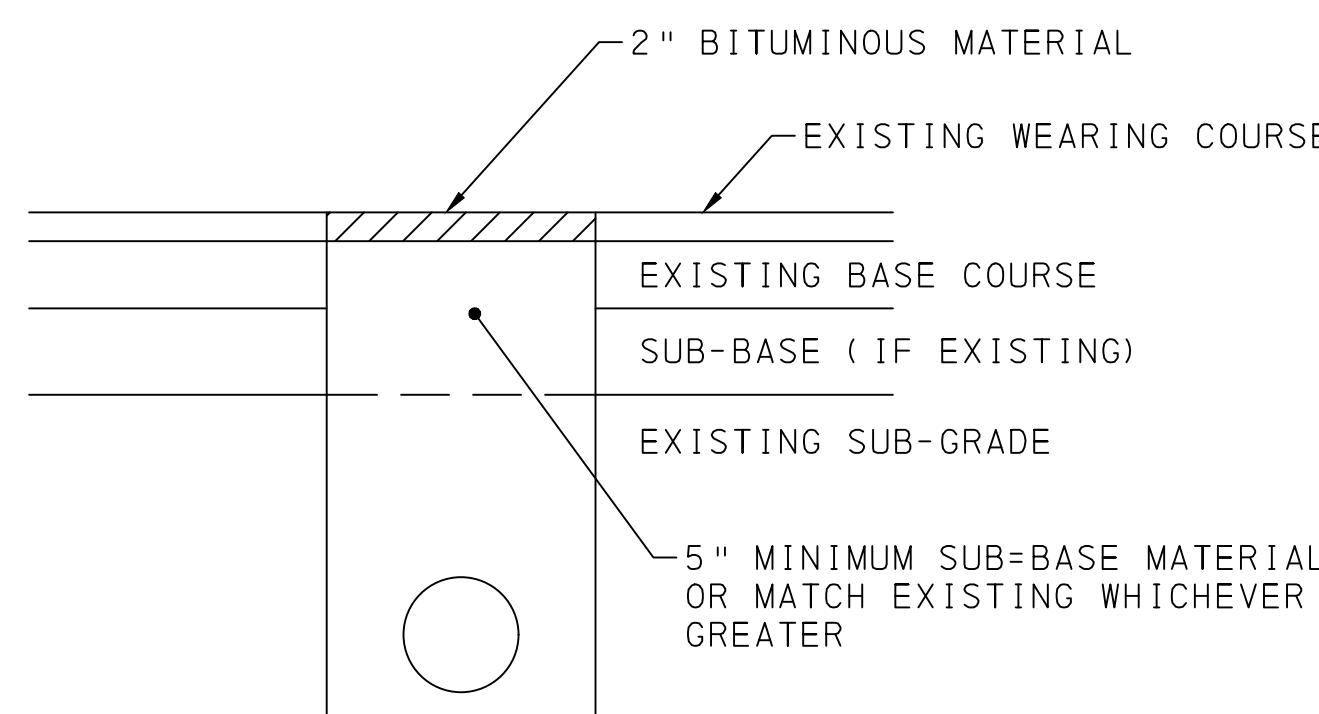
RIGID PAVEMENT RESTORATION

FIGURE 7-4
NOT TO SCALE



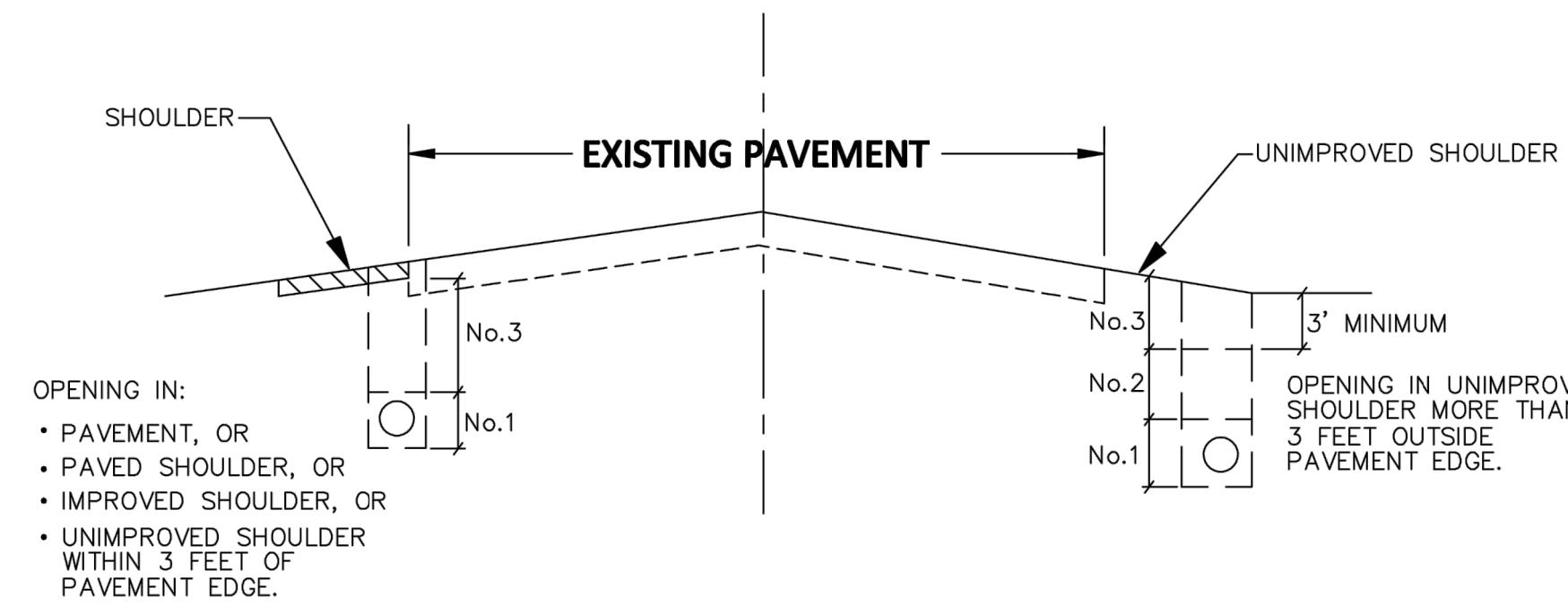
RIGID PAVEMENT RESTORATION

(BITUMINOUS OVERLAY OR PLAIN CEMENT BASE COURSE)
FIGURE 7-5
NOT TO SCALE



TEMPORARY PAVEMENT RESTORATION

FIGURE 7-6
NOT TO SCALE



No.1 PLACE FINE AGGREGATE OR GRANULAR MATERIAL UP TO 1 FOOT OVER TOP OF THE FACILITY, AND COMPACT IN 4" LOOSE LIFTS.

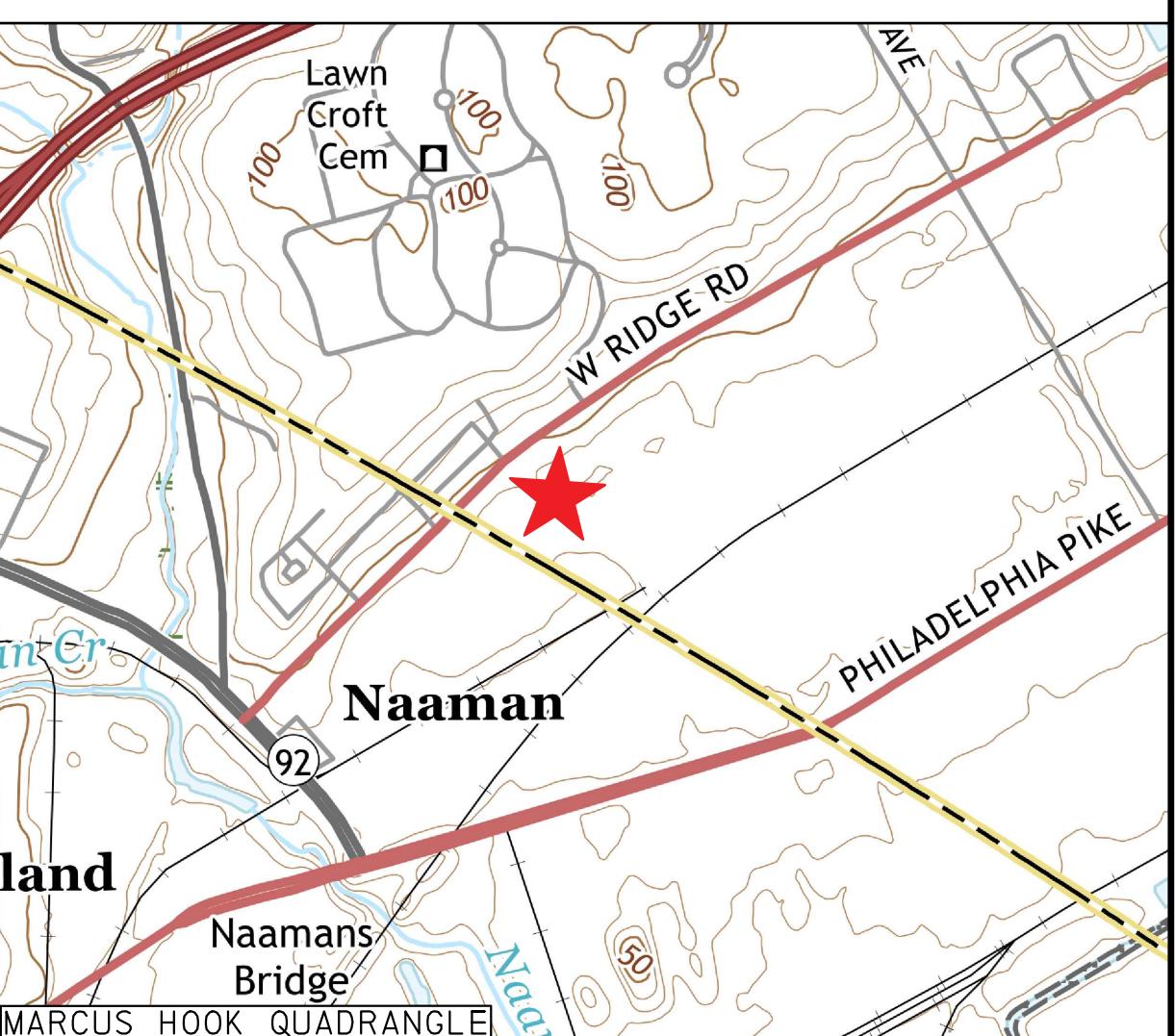
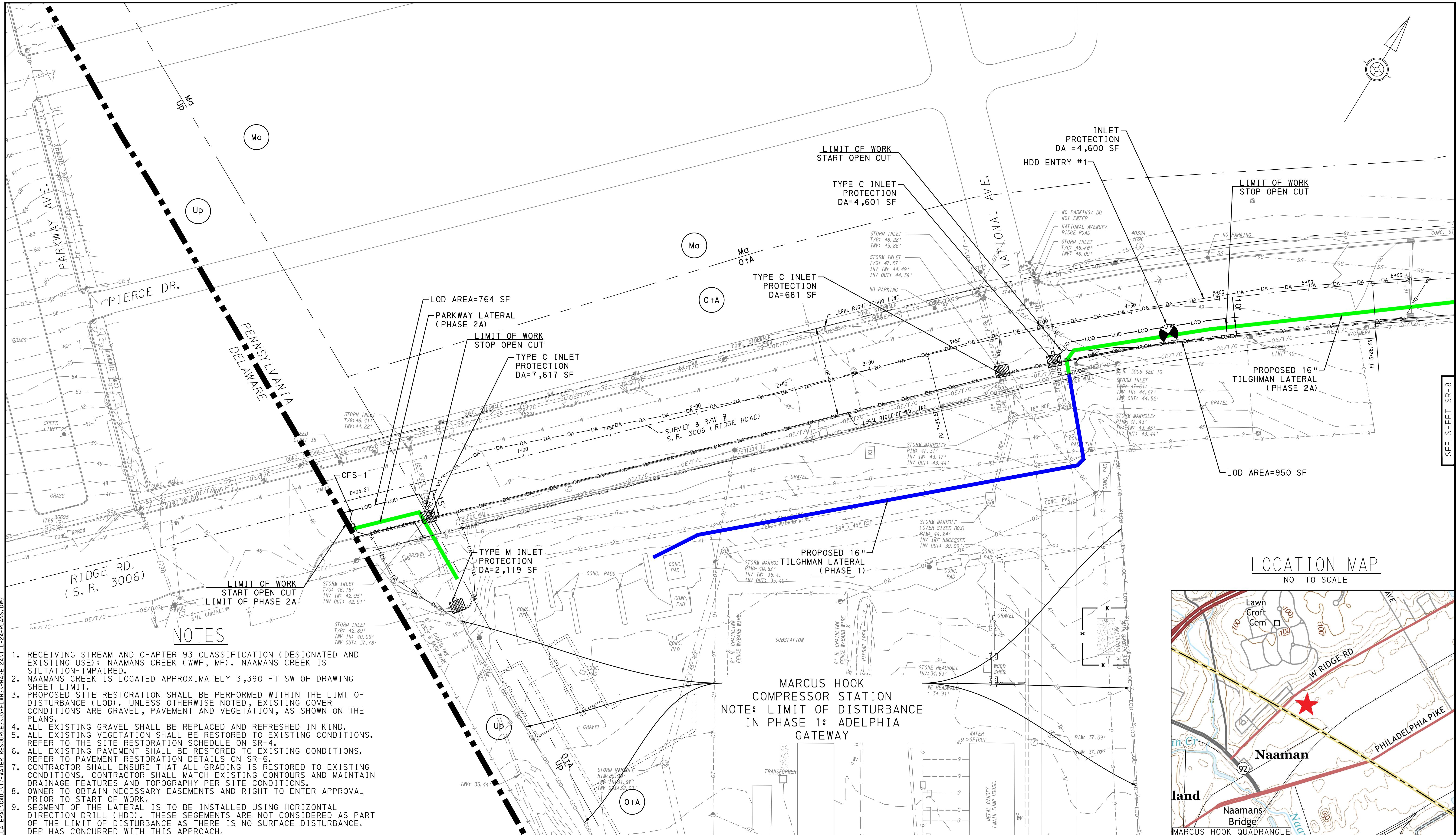
No.2 PERMIT MAY AUTHORIZE RETAINED SUITABLE MATERIAL, IN LIEU OF #3 BELOW, AND COMPACT IN ACCORDANCE WITH DEPARTMENT REGULATIONS 459.8(g).

No.3 PLACE SELECT GRANULAR MATERIAL (2RC) UNLESS COARSE AGGREGATE MATERIAL IS SPECIFIED IN PERMIT, AND COMPACT (IN 4" LOOSE LIFTS WITH MECHANICAL TAMPER OR 8" LOOSE LIFTS IF VIBRATORY COMPACTION EQUIPMENT IS USED) TO 100% OF THE DETERMINED DRY WEIGHT DENSITY.

NOTE: For openings behind curb or outside shoulder, suitable material will normally be authorized full depth.

TYPICAL BACKFILL SECTION

FIGURE 7-7
NOT TO SCALE



12.5 0 25

SCALE: 1"=25'

50		
2		REVISED PER
1		REVISED PER
REV		DES

DEP COMMENTS	ATH	08/10/20	SMM	08/10/20	JM
DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	PL
DESCRIPTION	CHK	DATE	APP	DATE	ME

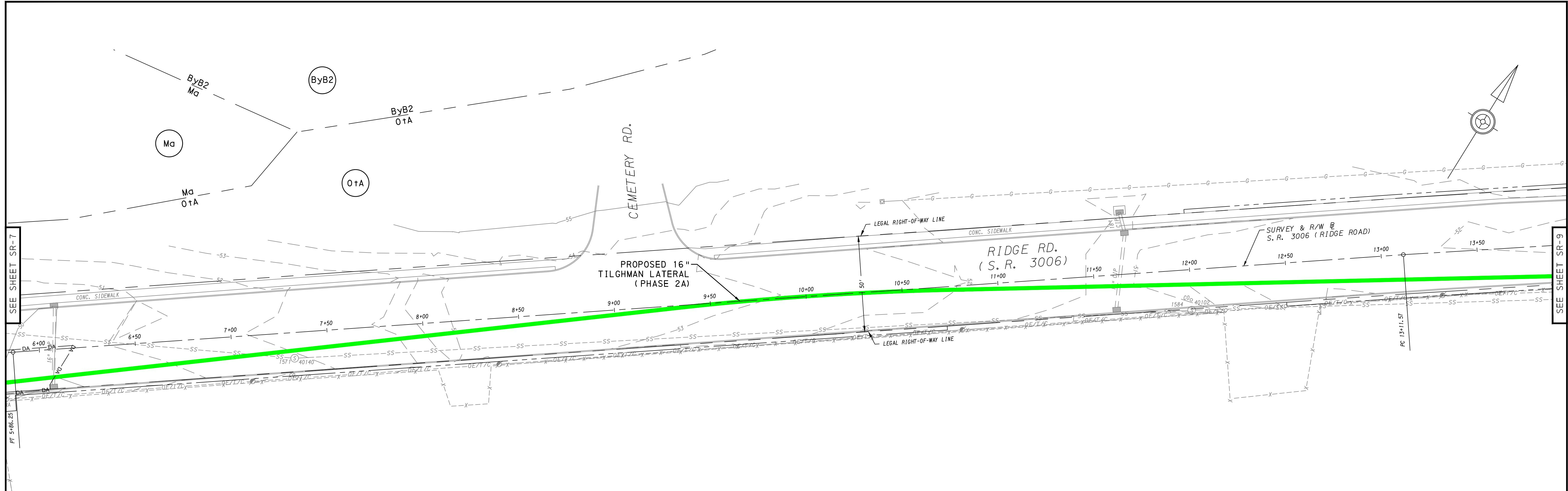
DRAWN BY	INTL	DATE
DESIGNED BY	ATH	08/10/20
CHECKED BY	SMM	08/10/20
APPROVED BY	SMM	08/10/20
MT JOB NO.	18-00672-005	
LOT SCALE	1"=25'	
ODEL ID		



TILGHMAN & PARKWAY LATERAL E&SC & SITE RESTORATION PLAN PHASE 2A

PLAN

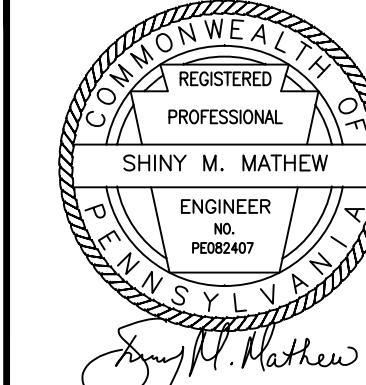
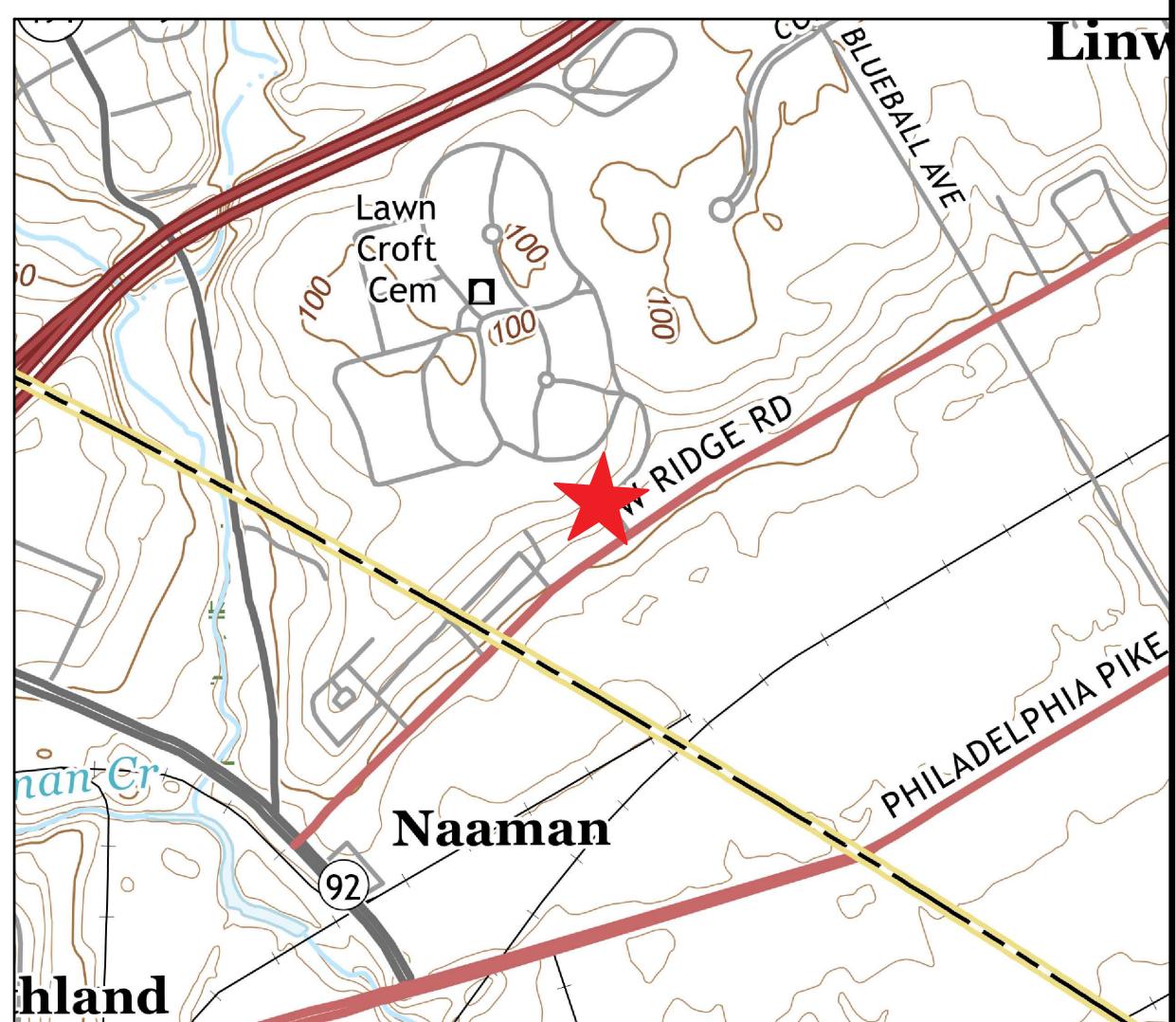
SCALE	DRAWING NUMBER	REV
1:2000	GP-7	



NOTES

1. RECEIVING STREAM AND CHAPTER 93 CLASSIFICATION (DESIGNATED AND EXISTING USE): NAAMANS CREEK (WWF, MF). NAAMANS CREEK IS SILTATION-IMPAIRED.
2. NAAMANS CREEK IS LOCATED APPROXIMATELY 3,550 FT SW OF DRAWING SHEET LIMIT.
3. PROPOSED SITE RESTORATION SHALL BE PERFORMED WITHIN THE LIMIT OF DISTURBANCE (LOD). UNLESS OTHERWISE NOTED, EXISTING COVER CONDITIONS ARE GRAVEL, PAVEMENT AND VEGETATION, AS SHOWN ON THE PLANS.
4. ALL EXISTING GRAVEL SHALL BE REPLACED AND REFRESHED IN KIND.
5. ALL EXISTING VEGETATION SHALL BE RESTORED TO EXISTING CONDITIONS. REFER TO THE SITE RESTORATION SCHEDULE ON SR-4.
6. ALL EXISTING PAVEMENT SHALL BE RESTORED TO EXISTING CONDITIONS. REFER TO PAVEMENT RESTORATION DETAILS ON SR-6.
7. CONTRACTOR SHALL ENSURE THAT ALL GRADING IS RESTORED TO EXISTING CONDITIONS. CONTRACTOR SHALL MATCH EXISTING CONTOURS AND MAINTAIN DRAINAGE FEATURES AND TOPOGRAPHY PER SITE CONDITIONS.
8. OWNER TO OBTAIN NECESSARY EASEMENTS AND RIGHT TO ENTER APPROVAL PRIOR TO START OF WORK.
9. SEGMENT OF THE LATERAL IS TO BE INSTALLED USING HORIZONTAL DIRECTION DRILL (HDD). THESE SEGMENTS ARE NOT CONSIDERED AS PART OF THE LIMIT OF DISTURBANCE AS THERE IS NO SURFACE DISTURBANCE. DEP HAS CONCURRED WITH THIS APPROACH.

LOCATION MAP
NOT TO SCALE



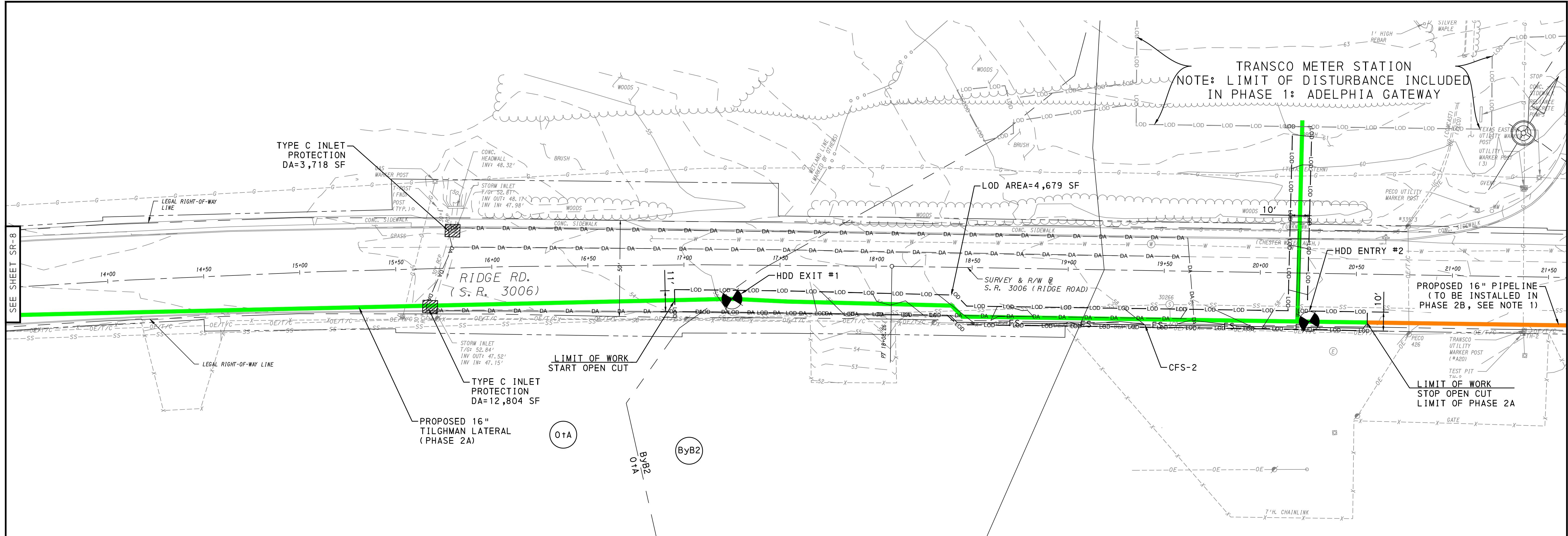
12.5 0 25 50
SCALE: 1"=25'
DATE: 08/10/2020

REV	DESCRIPTION	CHK	DATE	APP	DATE	MODEL ID
2	REVISED PER DEP COMMENTS	ATH	08/10/20	SMM	08/10/20	JMT JOB NO. 18-00672-005
1	REVISED PER DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	PLOT SCALE 1"=25'

REVISION

JMT
Johnson, Mirmiran & Thompson
1600 Market Street, Suite 520
Philadelphia, PA 19103
T: 267-256-0300

TILGHMAN & PARKWAY LATERAL
E&SC & SITE RESTORATION PLAN
PHASE 2A
PLAN
SCALE 1"=25'
DRAWING NUMBER SR-8
REV

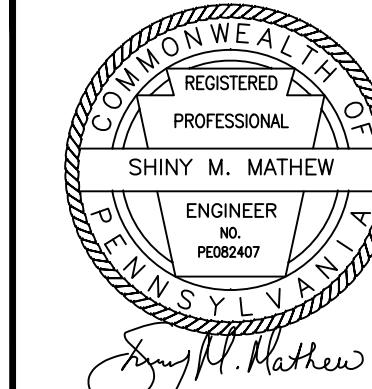


NOTES

1. TILGHMAN LATERAL PHASE 2B WILL BE SUBMITTED AS A PERMIT AMENDMENT AT A LATER DATE.
2. RECEIVING STREAM AND CHAPTER 93 CLASSIFICATION (DESIGNATED AND EXISTING USE): NAAMANS CREEK (WWF, MF). NAAMANS CREEK IS SILTATION-IMPAIRED.
3. NAAMANS CREEK IS LOCATED APPROXIMATELY 3,790 FT SW OF DRAWING SHEET LIMIT.
4. PROPOSED SITE RESTORATION SHALL BE PERFORMED WITHIN THE LIMIT OF DISTURBANCE (LOD). UNLESS OTHERWISE NOTED, EXISTING COVER CONDITIONS ARE GRAVEL, PAVEMENT AND VEGETATION, AS SHOWN ON THE PLANS.
5. ALL EXISTING GRAVEL SHALL BE REPLACED AND REFRESHED IN KIND.
6. ALL EXISTING VEGETATION SHALL BE RESTORED TO EXISTING CONDITIONS. REFER TO THE SITE RESTORATION SCHEDULE ON SR-4.
7. ALL EXISTING PAVEMENT SHALL BE RESTORED TO EXISTING CONDITIONS. REFER TO PAVEMENT RESTORATION DETAILS ON SR-6.
8. CONTRACTOR SHALL ENSURE THAT ALL GRADING IS RESTORED TO EXISTING CONDITIONS. CONTRACTOR SHALL MATCH EXISTING CONTOURS AND MAINTAIN DRAINAGE FEATURES AND TOPOGRAPHY PER SITE CONDITIONS.
9. OWNER TO OBTAIN NECESSARY EASEMENTS AND RIGHT TO ENTER APPROVAL PRIOR TO START OF WORK.
10. SEGMENT OF THE LATERAL IS TO BE INSTALLED USING HORIZONTAL DIRECTION DRILL (HDD). THESE SEGMENTS ARE NOT CONSIDERED AS PART OF THE LIMIT OF DISTURBANCE AS THERE IS NO SURFACE DISTURBANCE. DEP HAS CONCURRED WITH THIS APPROACH.

LOCATION MAP

NOT TO SCALE



12.5 0 25 50
SCALE: 1"=25'
DATE: 08/10/2020

REVISION

2	REVISED PER DEP COMMENTS	ATH	08/10/20	SMM	08/10/20	JMT JOB NO.	18-00672-005
1	REVISED PER DEP COMMENTS	ATH	06/19/20	SMM	06/19/20	PLOT SCALE	1"=25'
REV	DESCRIPTION	CHK	DATE	APP	DATE	MODEL ID	

JMT
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TILGHMAN & PARKWAY LATERAL E&SC & SITE RESTORATION PLAN PHASE 2A

PLAN

SCALE 1"=25'
DRAWING NUMBER SR-9
REV