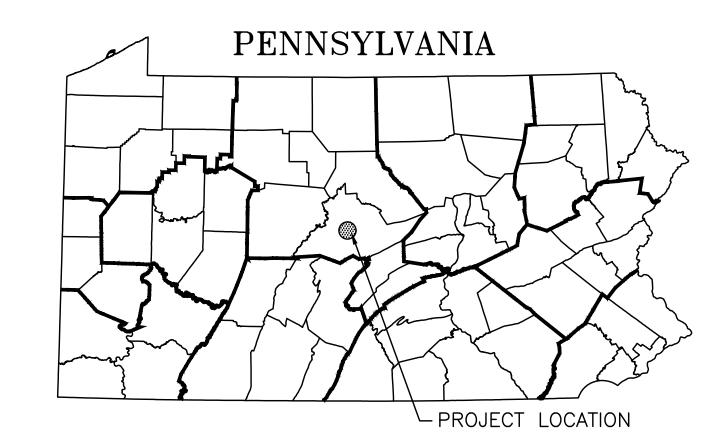
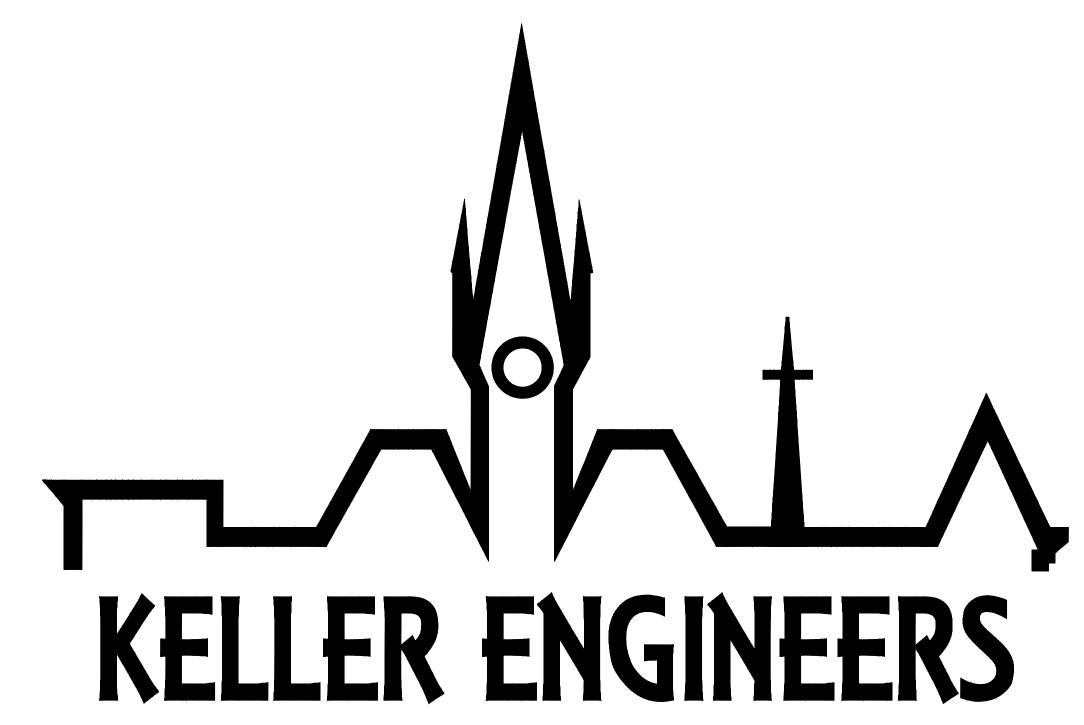
FINAL LAND DEVELOPMENT PLANS NEW PUBLIC WORKS FACILITY FOR TOWNSHIP OF FERGUSON

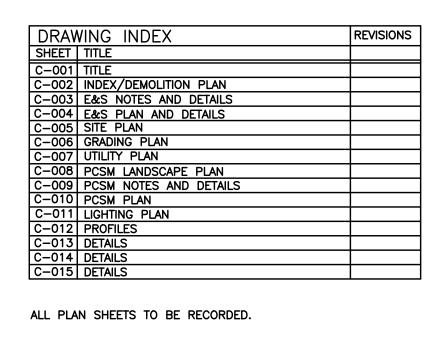


STORMWATER MANAGEMENT ORDINANCE.

FERGUSON TOWNSHIP, CENTRE COUNTY PENNSYLVANIA



HOLLIDAYSBURG • STATE COLLEGE





PENNSYLVANIA STATE UTILITY ACT LIST PENNSYLVANIA ONE CALL SERIAL # 2018-043-2291 (PRELIMINARY DESIGN) THREE DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY ALL UTILITIES OF THE PENDING CONSTRUCTION AND NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM AT

THE CONTRACTOR SHALL LOCATE, BOTH IN PLAN AND ELEVATION, ALL EXISTING UTILITIES AND SERVICES WITHIN THE AREA OF CONSTRUCTION, COMPLY WITH THE UNDERGROUND UTILITY LINE PROTECTION LAW, ACT OF 1974, P.L. 852 NO. 287, DATED DECEMBER 12, 1991.

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DATE OF ZONING APPLICATION FEBRUARY 6, 2019.



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State College, PA 16801



Description BUILDING PERMIT SUBMISSION 02-13-19 LAND DEVELOPMENT COMMENTS 04-24-19

FERGUSON PUBLIC WORKS BUILDING

FERGUSON TOWNSHIP

3137 RESEARCH DRIVE STATE COLLEGE, PA 16801

	Project Number	3809-
	Date	13 FEBRUARY 2019
	Drawn By	AJL
1	Checked By	BES

TITLE

PETER D. BUCKLAND FERGUSON TOWNSHIP ENGINEER CERTIFICATION -FIRE COMPANY APPROVAL ACKNOWLEDGEMENT STORMWATER MANAGEMENT: RECOMMENDED FOR APPROVAL MANAGEMENT PLAN IN ACCORDANCE WITH THE DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE. FERGUSON TOWNSHIP ENGINEER CERTIFICATION - LAND CERTIFICATION OF OWNERSHIP: **DEVELOPMENT PLAN:** HAVE REVIEWED AND HEREBY CERTIFY THAT THE PLAN MEETS ALL ENGINEERING DESIGN STANDARDS AND CRITERIA OF THE RECORD BOOK FERGUSON TOWNSHIP CODE OF ORDINANCES. TOWNSHIP ENGINEER NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA, THE UNDERSIGNED OFFICER PERSONALLY APPEARED: FERGUSON TOWNSHIP <u>DESIGN ENGINEER'S PLAN CERTIFICATION — LAND DEVELOPMENT PLAN:</u> THIS PLAN, THAT THE PLAN THEREOF WAS MADE AT THEIR DIRECTION, THAT THEY ALL DESIGN REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, ZONING ORDINANCE, AND OTHER APPLICABLE CHAPTERS OF THE FERGUSON TOWNSHIP CODE. PETER BUCKLAND IN WITNESS WHEREOF, I HEREUNTO SET MY HAND AND OFFICIAL SEAL. **SURVEYOR CERTIFICATION:** . A PROFESSIONAL LAND SURVEYOR IN THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THE PLAN CORRECTLY REPRESENTS THE TRACT OF LAND SHOWN. NOTARY PUBLIC

FERGUSON TOWNSHIP BOARD OF SUPERVISORS

APPROVED BY THE FERGUSON TOWNSHIP BOARD OF SUPERVISORS ON

FERGUSON TOWNSHIP PLANNING COMMISSION APPROVAL

RECOMMENDED FOR APPROVAL BY THE FERGUSON TOWNSHIP PLANNING COMMISSION

APPROVAL ACKNOWLEDGEMENT:

ACKNOWLEDGEMENT:

ANDREW H. EBERSOLE, P.L.S.

KELLER ENGINEERS

WHO ACKNOWLEDGED THAT THEY ARE THE OWNERS OF THE PROPERTY SHOWN ON ACKNOWLEDGES THE SAME TO BE THEIR ACT AND PLAN, AND DESIRES THE SAME TO

<u>DESIGN ENGINEER PLAN CERTIFICATION - STORMWATER</u>

PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP

<u>LANDOWNER ACKNOWLEDGEMENT - STORMWATER</u>

WE, FERGUSON TOWNSHIP, THE LANDOWNER, OUR HEIRS AND ASSIGNS,

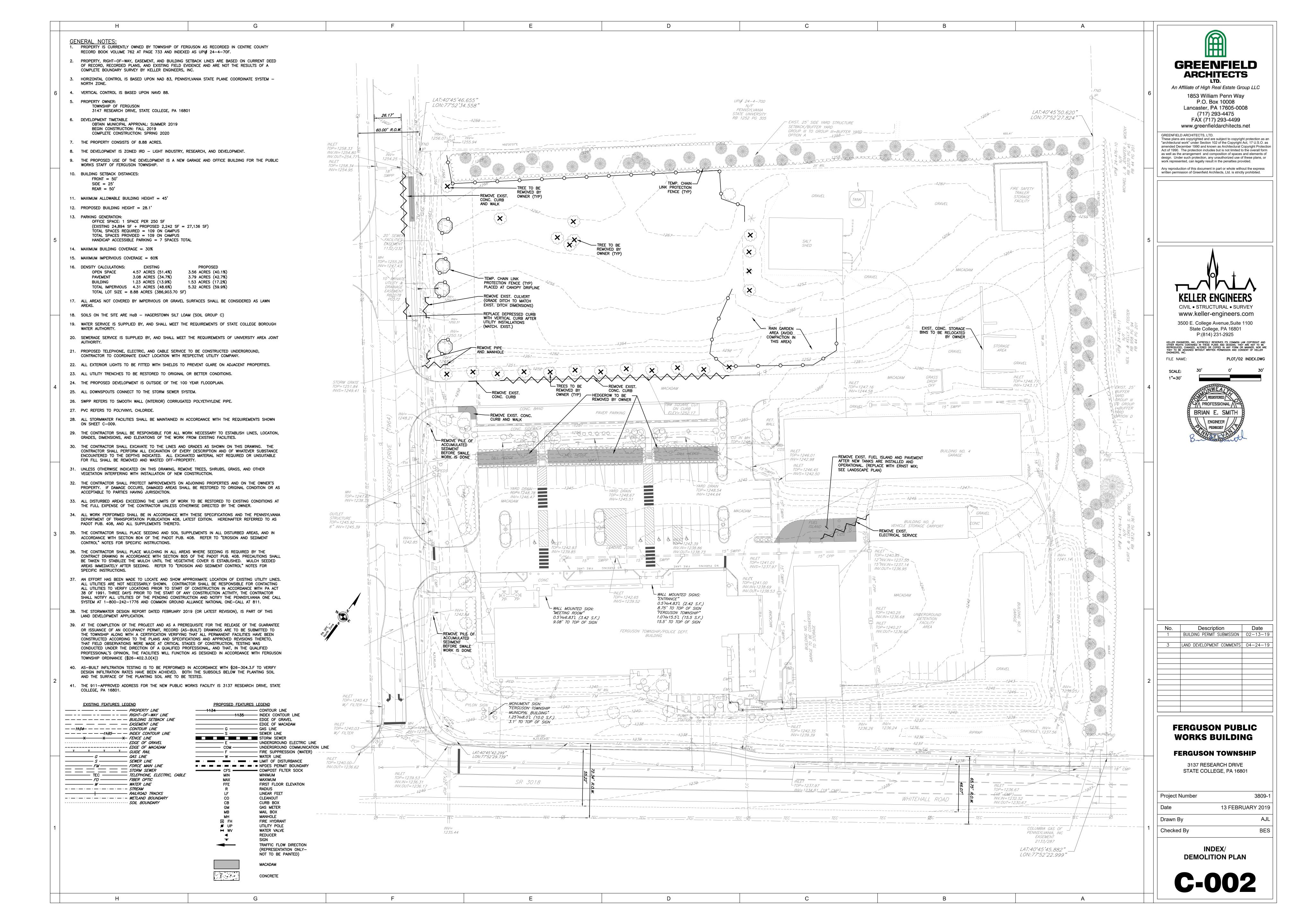
BY THE FERGUSON TOWNSHIP BOARD OF SUPERVISORS.

ACKNOWLEDGE THE STORMWATER MANAGEMENT SYSTEM TO BE A PERMANENT FACILITY

WHICH CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN

, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT

MY COMMISSION EXPIRES_



- GENERAL STORMWATER FROM THIS PROJECT WILL FLOW TO AN ON-SITE SINKHOLE IN THE WATERSHED DRAINING TO AN UNNAMED TRIBUTARY TO SLAB CABIN RUN THAT HAS A DESIGNATED USE
- ACCORDING TO PA DEP. OF CWF TOTAL SITE/NPDES ACREAGE = 9.2 ACRES / TOTAL DISTURBANCE = 4.2 ACRES THE EROSION AND SEDIMENT CONTROL PLAN NARRATIVE DATED DECEMBER 2018 IS TO BE
- CONSIDERED A PART OF THIS CONSTRUCTION SITE PLAN. 4. 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.
- CONSTRUCTION SHALL NOT COMMENCE UNTIL THE CENTRE COUNTY CONSERVATION DISTRICT HAS APPROVED THE EROSION AND SEDIMENT CONTROL PLAN. 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.
- . 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. . ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE
- DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS. . 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 PRIMARY CONTRACTOR IS RESPONSIBLE FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE CONCERNING THE USE OF OR DISPOSAL OF CLEAN FILL FROM THIS PROJECT. 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, ENVIRONMENTAL
- QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. 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 MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION 'S POLICY ENTITLED "MANAGEMENT OF FILL"
- CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED 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 PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.) 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 AND FOLLOW THE GUIDANCE AS SET FORTH IN DEP POLICY "MANAGEMENT OF
- 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, 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.
- EARTHWORK TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(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. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. 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 OR IF CONDUCTED, AS RECOMMENDED IN GEOTECHNICAL INVESTIGATION
- . ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS OR, IF CONDUCTED, IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION OF PROJECT
- 5. 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
- . FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 3. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD. . 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.
- IO. SHOULD UNANTICIPATED GEOLOGIC OR SOIL CONDITIONS BE ENCOUNTERED DURING EARTHMOVING THAT PRESENT A CONCERN ABOUT THE POTENTIAL FOR THE PRODUCTION OF POLLUTION, ALL EARTHMOVING ACTIVITIES SHALL CEASE UNTIL A QUALIFIED GEO-TECHNICAL PROFESSIONAL EVALUATES THE SITUATION.
- BMP CONSTRUCTION AND MAINTENANCE THE PRIME SITE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF BOTH TEMPORARY AND PERMANENT BMP'S FOR THE DURATION OF THE CONSTRUCTION EFFORT. THE PRIME SITE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTENANCE OF ALL BMP'S UNTIL STABILIZATION HAS OCCURRED. . UPON STABILIZATION, THE PRIME SITE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF

ALL TEMPORARY BMP'S. BEFORE ANY TEMPORARY EROSION CONTROL STRUCTURES ARE REMOVED,

A VEGETATIVE COVERAGE WITH A DENSITY OF 70% ACROSS THE DISTURBED AREAS MUST BE

- ACHIEVED.. AFTER PROJECT COMPLETION, THE OWNER WILL BE RESPONSIBLE FOR LONG-TERM MAINTENANCE OF ANY PERMANENT BMP'S 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
- PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE . A WRITTEN 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 ANY INSPECTIONS. IT IS RECOMMENDED THAT DEP'S VISUAL INSPECTION REPORT FORM (3150-FM-BWEW0083) BE

REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO

- UTILIZED AS THE LOG TO TRACK AND DOCUMENT REQUIRED MAINTENANCE ACTIVITIES INCLUDING ANY CORRECTIONS AND/OR REPAIRS TO BMP'S. . BMP MAINTENANCE WILL BE PERFORMED IN ACCORDANCE WITH THE INDIVIDUAL DEVICE SCHEDULES AS SHOWN IN THE STANDARD CONSTRUCTION DETAILS.
- THE PRIME SITE CONTRACTOR SHALL INSPECT BOTH TEMPORARY AND PERMANENT BMP'S ON THIS SCHEDULE UNTIL STABILIZATION IS ACHIEVED. AT THIS POINT, THE OWNER SHALL COMMENCE WEEKLY INSPECTIONS OF THE PERMANENT FACILITIES.
- 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 SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 8. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. . 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 10. 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. . 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 THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE. 12. CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF
- THE PROTECTIVE LINING 13. 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

RECYCLING & DISPOSAL OF WASTE MATERIALS

DRAINS, OPEN DITCHES OR SURFACE WATERS, INCLUDING WETLANDS.

- THE PRIMARY SITE CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF WASTE FROM THIS PROJECT DURING CONSTRUCTION. CONSTRUCTION WASTES ARE THOSE THAT CAN ADVERSELY IMPACT WATER QUALITY AND INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS CONCRETE WASH-WATER AND SANITARY WASTES THE CONTRACTOR WILL INSPECT THE PROJECT AREA WEEKLY AND PROPERLY DISPOSE OF ALL CONSTRUCTION WASTE. LITTERING BY CONSTRUCTION CREWS IS DISCOURAGED: HOUSEKEEPING OF THE SITE AND THE SURROUNDING AREA IS ENCOURAGED. WHENEVER POSSIBLE, REUSABLE WASTES WILL BE
- SEPARATED FROM OTHER WASTE AND HANDLED FOR RECYCLING. . 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 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED
- CONCRETE WASHOUT A SUITABLE WASHOUT FACILITY MUST BE PROVIDED FOR THE CLEANING OF CONCRETE FROM CHUTES. MIXERS. AND HOPPERS OF THE DELIVERY VEHICLES. UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS. PROPER SIGNAGE MUST BE PROVIDED SO DRIVERS ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES. A COMPOST FILTER SOCK WASHOUT AS SHOWN ON THE TYPICAL DETAIL DRAWING OR SUITABLE ALTERNATIVE APPROVED BY THE CONSERVATION DISTRICT OR DEPARTMENT MUST BE PROVIDED ON SITE. DO NOT PLACE WASHOUT FACILITIES WITHIN 50 FEET OF STORM

SOIL LIMITATIONS AND RESOLUTIONS

SOIL NAME, SYMBOL

POOR SOURCE OF TOPSOIL, UNKNOWN SOIL CONDITIONS - APPLY ADEQUATE RATES OF LIME AND FERTILIZER FOR USE AS SOIL AMENDMENT. SOIL TESTING IS STRONGLY RECOMMENDED. IRRIGATION MAYBE NEEDED WHEN THIS SOIL IS USED FOR LANDSCAPED AREAS OR PCSM BMP'S

CORROSIVITY, LOW STRENGTH, LANDSLIDE POTENTIAL, WETNESS/DEPTH TO HIGH WATER TABLE, PIPING, FROST ACTION, SHRINK SWELL - CONDUCT GEO-TECHNICAL INVESTIGATION IF THESE SOILS WILL BE IMPACTED. SITE & STRUCTURAL BUILDING DESIGN WILL BE BASED ON RESULTS OF GEO-TECHNICAL

SLOW PERCOLATION/POORLY DRAINED, WETNESS/DEPTH TO HIGH WATER TABLE - CONDUCT INFILTRATION TESTING IF THESE SOILS ARE IMPACTED BY PCSM BMP'S

EROSION HAZARD - MINIMIZE DISTURBED AREA; IMPLEMENT STABILIZATION BMP'S IMMEDIATELY. TEMPORARY STABILIZATION MUST BE IMPLEMENTED IMMEDIATELY IN AREAS WHERE ACTIVITY HAS CEASED FOR FOUR (4) OR MORE DAYS.

- STABILIZATION STOCKPILED TOPSOIL SHALL BE UTILIZED ON ALL SURFACE AREAS TO RECEIVE PERMANENT STABILIZATION AND SUPPLEMENTED IF NEEDED. . 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.
- CUT OR FILL SLOPES WILL BE SEEDED AND MULCHED IN REGULAR VERTICAL INCREMENTS (15' MAX.) AS THE SLOPE IS BEING CONSTRUCTED. . 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.
- WITHIN FOUR(4) DAYS 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. 6. ALL FINAL SLOPES 3:1 OR STEEPER, WITHIN 50 FEET OF A SURFACE WATER, AND/OR ON ANY OTHER DISTURBED AREA SPECIFIED ON THE PLAN DRAWINGS WILL HAVE AN EROSION CONTROL
- BLANKET INSTALLED IN CONJUNCTION WITH THE PERMANENT VEGETATIVE BMP. NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKET OR EQUIVALENT SHALL BE USED FOR THIS PURPOSE. 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. B. TEMPORARY STABILIZATION WILL BE UTILIZED AS NEEDED DURING PLANNED OR UNPLANNED PROJECT SUSPENSION OR IF THE DISTURBED AREA ACHIEVES FINAL GRADE DURING AN UNFAVORABLE GROWING SEASON. DURING THE WINTER, TEMPORARY STABILIZATION CONSISTS OF MULCHING AT THE RATE OF 3 TONS/ACRE. ALL OTHER TIMES UTILIZE TEMPORARY SEED AND MULCH IN ACCORDANCE WITH THE DETAIL SHOWN IN THIS PLAN.

VEGETATIVE STABILIZATION TEMPORARY STABILIZATION - PADOT FORMULA E RATE OF APPLICATION LBS/AC

ANNUAL RYEGRASS MULCH CLEAN OAT OR WHEAT STRAW AT THE RATE OF 3 TONS/ACRE (3 BALES PER 1000 SQUARE FEET) A APPLIED WITH NON-ASPHALTIC EMULSION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION SOIL AMENDMENTS - STANDARD APPLICATION RATE

FERTILIZER 10-20-20 APPLIED AT RATE OF 500LB/AC* LIME 1 TON/ACRE* *SOIL TESTING SUGGESTED FOR PROPER RATE OF APPLICATION

**PLS = PERCENT LIVE SEED NURSE CROP: (PER PSU "EROSION CONTROL & CONSERVATION PLANTINGS ON NON-CROPLAND") ONE OF THE FOLLOWING NURSE CROPS MUST BE INCLUDED WITH ANY PERMANENT SEED MIXTURE: SEED MIX/SPECIES RATE OF APP, LBS/AC(W/90% + GERM) RATE OF APP, LBS/AC(W/< 90%

WINTER WHEAT WINTER RYE

PERMANENT STABILIZATION — PADOT FORMULA B SEED MIX/SPECIES PLS** RATE OF APPLICATION LBS/AC PERENNIAL RYEGRASS 88.2% CREEPING RED or

CHEWING FESCUE KENTUCKY BLUEGRASS MIX. 78.4% MULCH CLEAN OAT OR WHEAT STRAW AT THE RATE OF 3 TONS/ACRE (3 BALES PER 1000 SQUARE FEET) APPLIED WITH NON-ASPHALTIC EMULSION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION

SOIL AMENDMENTS - STANDARD APPLICATION RATE FERTILIZER 10-20-20 APPLIED AT RATE OF 1000 LB/AC* LIME 6 TON/ACRE*

*SOIL TESTING SUGGESTED FOR PROPER RATE OF APPLICATION

**PLS = PERCENT LIVE SEED

PERMANENT STABILIZATION CONSTRUCTED PCSM BMP ERNST SEED MIXES - SOW WHERE SHOWN ON PCSM PLAN DRAWING

MIX COMPOSITION - ERNMX-153 35.0% SCHIZACHYRIUM SCOPARIUM, 'CAMPER' (LITTLE BLUESTEM, 'CAMPER') 26.5% BOUTELOUA CURTIPENDULA, 'BUTTE' (SIDEOATS GRAMA, 'BUTTE') 14.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE) 3.5% ECHINACEA PURPUREA (PURPLE CONEFLOWER) 3.0% CHAMAECRISTA FASCICULATA, PA ECOTYPE (PARTRIDGE PEA, PA ECOTYPE) 3.0% COREOPSIS LANCEOLATA (LANCELEAF COREOPSIS) 3.0% RUDBECKIA HIRTA, COASTAL PLAIN NC ECOTYPE (BLACKEYED SUSAN, COASTAL PLAIN NC 2.0% ASCLEPIAS TUBEROSA, PA ECOTYPE (BUTTERFLY MILKWEED, PA ECOTYPE) 2.0% HELIOPSIS HELIANTHOIDES, PA ECOTYPE (OXEYE SUNFLOWER, PA ECOTYPE) 2.0% PENSTEMON DIGITALIS, PA ECOTYPE (TALL WHITE BEARDTONGUE, PA ECOTYPE) 1.0% ASTER LAEVIS. NY ECOTYPE (SMOOTH BLUE ASTER, NY ECOTYPE) 1.0% LIATRIS SPICATA, PA ECOTYPE (MARSH (DENSE) BLAZING STAR (SPIKED GAYFEATHER), PA 0.6% ASTER NOVAE-ANGLIAE (SYMPHYOTRICHUM N.), PA ECOTYPE (NEW ENGLAND ASTER, PA FCOTYPF)

0.5% BAPTISIA AUSTRALIS, SOUTHERN WV ECOTYPE (BLUE FALSE INDIGO, SOUTHERN WV ECOTYPE) 0.5% TRADESCANTIA OHIENSIS, PA ECOTYPE (OHIO SPIDERWORT, PA ECOTYPE) 0.5% ZIZIA AUREA, PA ECOTYPE (GOLDEN ALEXANDERS, PA ECOTYPE) 0.4% MONARDA FISTULOSA, FORT INDIANTOWN GAP-PA ECOTYPE (WILD BERGAMOT, FORT INDIANTOWN GAP-PA ECOTYPE)

0.4% SENNA HEBECARPA, VA & WV ECOTYPE (WILD SENNA, VA & WV ECOTYPE) 0.3% PYCNANTHEMUM TENUIFOLIUM (NARROWLEAF MOUNTAINMINT) 0.1% ASTER OBLONGIFOLIUS, PA ECOTYPE (AROMATIC ASTER, PA ECOTYPE) 0.1% ASTER PRENANTHOIDES, PA ECOTYPE (ZIGZAG ASTER, PA ECOTYPE) 0.1% BAPTISIA TINCTORIA, PA ECOTYPE (YELLOW FALSE INDIGO (HORSEFLYWEED), PA ECOTYPE) 0.1% PENSTEMON HIRSUTUS (HAIRY BEARDTONGUE) 0.1% RUDBECKIA FULGIDA VAR. FULGIDA, NORTHERN VA ECOTYPE (ORANGE CONEFLOWER, NORTHERN

VA ECOTYPE) 0.1% SENNA MARILANDICA (MARYLAND SENNA) 0.1% SOLIDAGO JUNCEA, PA ECOTYPE (EARLY GOLDENROD, PA ECOTYPE) 0.1% SOLIDAGO NEMORALIS, PA ECOTYPE (GRAY GOLDENROD, PA ECOTYPE)

1.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTY

0.5% CAREX SCOPARIA, PA ECOTYPE (BLUNT BROOM SEDGE, PA ECOTYPE)

SEED AT 20 LB PER ACRE, OR 1/2 LB PER 1,000 SQ FT MIX COMPOSITION - ERNMX-183 25.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER') 24.0% PANICUM CLANDESTINUM, 'TIOGA' (DEERTONGUE, 'TIOGA') 22.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE) 21.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE) 6.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE) 1.0% JUNCUS EFFUSUS (SOFT RUSH)

SEED AT 20 LB PER ACRE, OR 1/2 LB PER 1,000 SQ FT MIX COMPOSITION - ERNMX-180-1 45.0% SCHIZACHYRIUM SCOPARIUM, 'CAMPER' (LITTLE BLUESTEM, 'CAMPER') 20.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE) 8.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE) 7.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE) 4.5% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE) 1.0% JUNCUS EFFUSUS (SOFT RUSH)

SEED AT 15 LBS. PER ACRE WITH A COVER CROP OF GRAIN RYE SEEDED AT 30 LBS. PER ACRE.

BMP SEQUENCE OF INSTALLATION AND REMOVAL THE CONTRACTOR SHALL INVITE A REPRESENTATIVE FROM THE CENTRE COUNTY CONSERVATION DISTRICT TO ATTEND THE PRECONSTRUCTION MEETING AND PROVIDE AT LEAST 7 DAYS NOTICE OF THE PRECONSTRUCTION MEETING TO ALL INVITED ATTENDEES. PERMITTEES, CO-PERMITTEES, OPERATORS, AND LICENSED PROFESSIONALS OR DESIGNEES RESPONSIBLE FOR THE EARTH DISTURBANCE ACTIVITY, INCLUDING IMPLEMENTATION OF E&S AND PCSM PLANS AND CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN, SHALL ATTEND A PRECONSTRUCTION

- 2. UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED
- CONSERVATION DISTRICT. 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.
- PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE CENTRE COUNTY CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE FOLLOWING CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING,

THE E&SC BMP'S SPECIFIED BY THE SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN

INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&SC PLAN.

AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE

SITE SPECIFIC SEQUENCE

- 1. FIELD-MARK LIMITS OF DISTURBANCE. 2. INSTALL CONSTRUCTION FENCING AS SHOWN ON DEMOLITION DRAWING, SHEET C-002, NEEDED TO PROTECT EXISTING FEATURES, VEGETATION (TREES), AND FUTURE RAIN GARDEN LOCATION FROM IMPACTS FROM CONSTRUCTION EQUIPMENT. 3. INSTALL ROCK CONSTRUCTION ENTRANCE ACCORDING TO TYPICAL DETAIL AT INTERSECTION WITH
- RESEARCH DRIVE. STABILIZATION OF CHANNELS AND BERMS 4. INSTALLATION ALL DOWN—SLOPE PERIMETER COMPOST FILTER SOCK ACCORDING TO THE TYPICAL DETAIL AT LOCATIONS SHOWN ON CONSTRUCTION PLAN DRAWINGS. 5. E&SC BMP'S 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.

STAGE 2 SITE EARTHWORK - CLEARING, GRUBBING, AND TOPSOIL STRIPPING CAN NOW BEGIN. 1. STRIP TOPSOIL, STOCKPILE WHERE SHOWN. PROTECT WITH DOWN-SLOPE COMPOST FILTER SOCK AND APPLY TEMPORARY SEED AND MULCH.

2. GRADE SITE, CONSTRUCT BUILDING, EXTEND UTILITIES, PREPARED AREAS TO BE PAVED WITH

- AGGREGATE SUBBASE. 3. INTERIOR SITE IMPROVEMENTS, WHICH INCLUDE RELOCATION OF OUTSIDE STORAGE AREA AND FUEL ISLAND REMOVAL, CAN BE COMPLETED NOW OR ANY TIME AFTER STAGE 1 E&S BMP IMPLEMENTATION. H. WHEN FINAL GRADES ARE ACHIEVED OR IN AREAS WHEN WORK HAS CEASED FOR 4 DAYS. STABILIZATION IMPLEMENTATION MUST BEGIN IMMEDIATELY.
- 5. PERMANENT STABILIZATION A. REPLACEMENT OF TOPSOIL (4 - 6 INCHES) B. PERMANENT SEEDING 1) SOIL AMENDMENTS 2) SEED APPLICATION
- 3) MULCH AND/OR BLANKETING CRUSHED AGGREGATE SURFACES WILL BE APPLIED AS SOON AS ROAD OR PARKING LOT SURFACES HAVE BEEN GRADED. COMPLETE PAVEMENT.
- TEMPORARY STABILIZATION, SEEDING AND MULCHING, ACCORDING TO E&S PLAN DETAIL NOTES FOR ALL AREAS WHERE ACTIVITY CEASES FOR 4 DAYS OR MORE, BUT FINAL GRADES HAVE NOT YET BEEN ACHIEVED. '. 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 AN INSPECTION PRIOR TO CONVERTING E&SC BMP'S TO PCSM BMP'S OR
- STAGE 3: REMOVAL OF TEMPORARY SEDIMENT POLLUTION 1. TEMPORARY E&SC BMP'S, COMPOST FILTER SOCK AND INLET PROTECTION, CAN BE REMOVED WHEN THE AREAS DRAINING TO THESE BMP'S HAVE ACHIEVED THE REQUIRED LEVEL OF STABILIZATION - DEFINED AS THE ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR COVERED WITH AN ACCEPTABLE PERMANENT BMP SUCH AS, GRAVEL OR PAVEMENT FOR DRIVEWAYS OR SIDEWALKS. STOCKPILED TOPSOIL SHALL BE UTILIZED ON ALL SURFACE AREAS TO RECEIVE PERMANENT STABILIZATION AND SUPPLEMENTED AS

TO SCHEDULE A FINAL INSPECTION IF THE PROJECT IS COMPLETE.

NEEDED. PERMANENT VEGETATIVE STABILIZATION SHALL BE DEFINED AS AN ESTABLISHED UNIFORM 70% PERENNIAL VEGETATIVE COVER. 2. AREAS DISTURBED DURING THE REMOVAL OF CONTROLS MUST BE STABILIZED IMMEDIATELY.

STAGE 4: PCSM BMP CONSTRUCTION: NOTE: CRITICAL STAGE REQUIRING OVERSIGHT BY LICENSED PROFESSIONAL 1. WHEN ALL SURFACES TRIBUTARY TO THE PCSM BMP'S, RAIN GARDENS, BIO-SWALES, AND REFORESTATION/LANDSCAPE RESTORATION AREAS HAVE ACHIEVED PERMANENT VEGETATION, DEFINED

- AS THE ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR COVERED WITH AN ACCEPTABLE PERMANENT BMP; SUCH AS, PAVEMENT FOR STREETS AND SIDEWALKS, THE PCSM BMP'S CAN BE CONSTRUCTED ACCORDING TO THE FOLLOWING SEQUENCE: . IMPLEMENTATION OF REFORESTATION AND LANDSCAPE RESTORATION CAN BEGIN. 3. IN ORDER TO PROPERLY CONSTRUCT AND VEGETATIVELY STABILIZE THE PROPOSED NEW
- BIO-SWALE AND ENHANCED SWALES TO BE CONVERTED TO BIO-SWALES ALONG RESEARCH DRIVE, FLOW MUST BE DIVERTED AWAY BY INSTALLING A STACKED COMPOST FILTER SOCK BELOW THE DRIVEWAY CROSSING PIPE TO PUMP FLOW INTO THE PAVED ROAD CURB AND GUTTER. CONSTRUCTION OF THESE SWALES CAN NOW BEGIN.
- 4. EXCAVATE BMP'S (BIO SWALES & RAIN GARDENS) TO THE DEPTH NEEDED TO ADD THE SOIL PLANTING MEDIUM TO THE REQUIRED FINAL DEPTH. SCARIFY THE RAIN GARDEN FLOOR TO A MINIMUM DEPTH OF 18 INCHES AND AVOID COMPACTION OF THE BASIN FLOOR.
- 5. BACKFILL AREA WITH SOIL PLANTING MEDIUM. OVERFILLING OF SOIL IS RECOMMENDED TO ALLOW FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY. 6. COMPLETE FINAL LEVELING TO ACHIEVE PROPOSED DESIGN ELEVATIONS LEAVING SPACE FOR UPPER COMPOST LAYER.

11. ADDITIONAL SITE LANDSCAPE PLANTINGS CAN TAKE PLACE AT THIS TIME OR IN THE NEAR FUTURE.

—18" COMPACTED SOIL

AS DIRECTED

1. LOCATION AND DEPTH OF EXCAVATION TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. EXCAVATE SLOPES AS STEEP AS POSSIBLE IN ACCORDANCE WITH OSHA.

2. BEDROCK LOCATION BELOW BOTTOM OF EXCAVATION GENERALLY GREATER THAN 25 FEET.

TYPE I SINKHOLE REPAIR

7. VEGETATE BMP AS SHOWN ON THE PLANS. 8. OUTFALL DEVICES; SUCH AS, PIPES AND RISERS, CAN NOW BE INSTALLED AND BECOME 9. STABILIZE ALL SURROUNDING DISTURBED SOIL SURFACES BY SEEDING AND MULCHING. 10. UPON ACHIEVING STABILIZATION IN THE BIO-SWALES ALONG RESEARCH DRIVE, THE DIVERSION INTO

TEMPORARY SEEDING WILL BE USED AS NEEDED. TEMPORARY SEED AND MULCH (IN ACCORDANCE WITH DETAIL) WILL BE APPLIED IN ALL AREAS WHERE ACTIVITIES CEASE FOR FOUR (4) DAYS OR IF ANY DISTURBED AREA ACHIEVES FINAL GRADE DURING AN UNFAVORABLE SEEDING SEASON.

THE ROAD SIDE CURB AND GUTTER CAN BE REMOVED.

-EXISTING GROUND

CHOKE OFF R-5 ROCK

WITH AASHTO NO 57

PLACE A LAYER OF

PADOT GEOTEXTILE,

CLASS 4.

COARSE AGGREGATE AND

COMPOST FILTER SOCK-—2 IN. x 2 IN. WOODEN STAKES PLACED 10 FT ON CENTER FILTER MEDIA-UNDISTURBED AREA DISTURBED AREA DISTURBED AREA UNDISTURBED AREA PLACED 10 FT ON PLAN VIEW

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 REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE 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

> STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK NOT TO SCALE

> > PLAN VIEW

0% SLOPE

SECTION Y-Y

SECTION Z-Z

SIZE Rt AI AIW (FT) (FT) 5 3.7F

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.

STANDARD CONSTRUCTION DETAIL #9-1

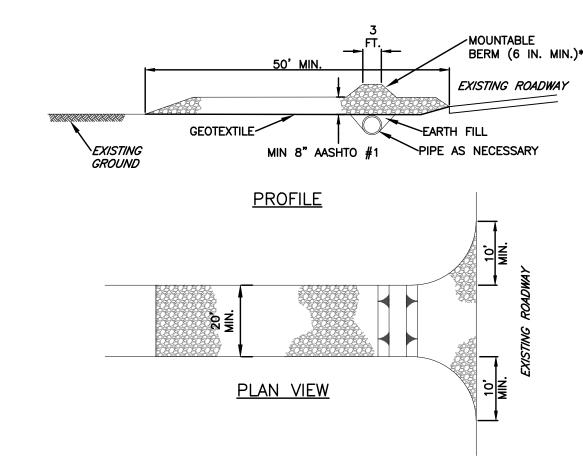
RIPRAP APRON AT PIPE OUTLET

WITH FLARED END SECTION OR ENDWALL

SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE, EXTEND ROCK OVER FULL WIDTH OF ENTRANCE. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. 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 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER

> STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE NOT TO SCALE

DRAINAGE COURSES IS NOT ACCEPTABLE.



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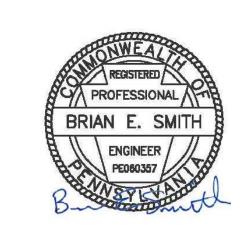
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State College, PA 16801

PLOT/03 E-S NOTES.DWG



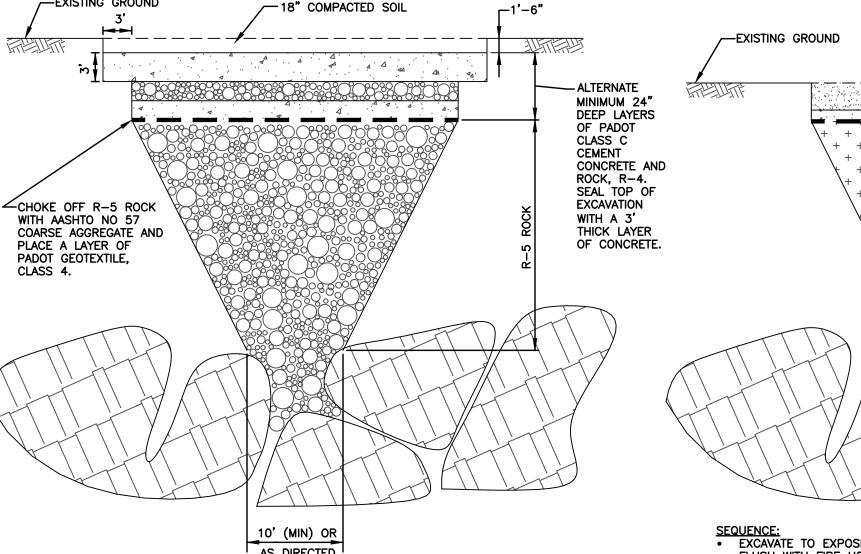
EXPANSION RESTRAINT BAG REMOVAL FROM INLET (1/4 IN. NYLON ROPE) **└**2 IN X 2 IN. X 3/4 IN. RUBBER BLOCK **INSTALLATION DETAIL** EARTHEN BERM TO BE STABILIZED WITH-TEMPORARY OR PERMANENT VEGETATION \INLET <u>SECTION VIEW</u> PLAN VIEW

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

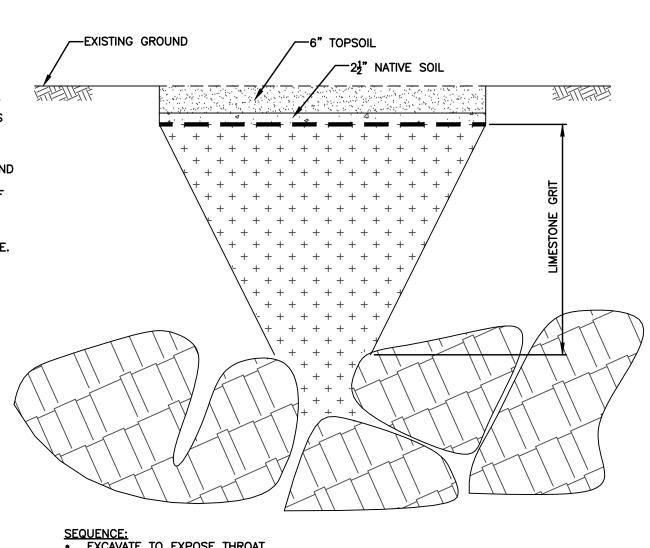
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40

NLET 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 TH INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS. STANDARD CONSTRUCTION DETAIL #4-16 FILTER BAG INLET PROTECTION — TYPE M INLET NOT TO SCALE



AS DIRECTED NOTES:
1. LOCATION AND DEPTH OF EXCAVATION TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. EXCAVATE SLOPES AS STEEP AS POSSIBLE IN ACCORDANCE WITH OSHA. 2. BEDROCK LOCATED NEAR SURFACE. TYPE II SINKHOLE REPAIR



 EXCAVATE TO EXPOSE THROAT FLUSH WITH FIRE HOSE AND LIMESTONE GRIT PER PUBLIC WORKS DIRECTOR DIRECTION • PLACE 21 COMPACTED NARRATIVE SOIL PLACE 6 TOPSOIL AND SEED

TYPE III SINKHOLE REPAIR IN DRAINAGE WAYS

Description BUILDING PERMIT SUBMISSION | 02-13-19 LAND DEVELOPMENT COMMENTS | 04-24-19

FERGUSON PUBLIC WORKS BUILDING

FERGUSON TOWNSHIP 3137 RESEARCH DRIVE

STATE COLLEGE, PA 16801

	Project Number	3809-1
	Date	13 FEBRUARY 2019
	Drawn By	AJL
1		

E&S NOTES AND DETAILS

C-003

—EXISTING GROUND

MINIMUM 24"

DEEP LAYERS OF PADOT

CONCRETE AND

ROCK, R-4.

SEAL TOP OF

THICK LAYER

OF CONCRETE.

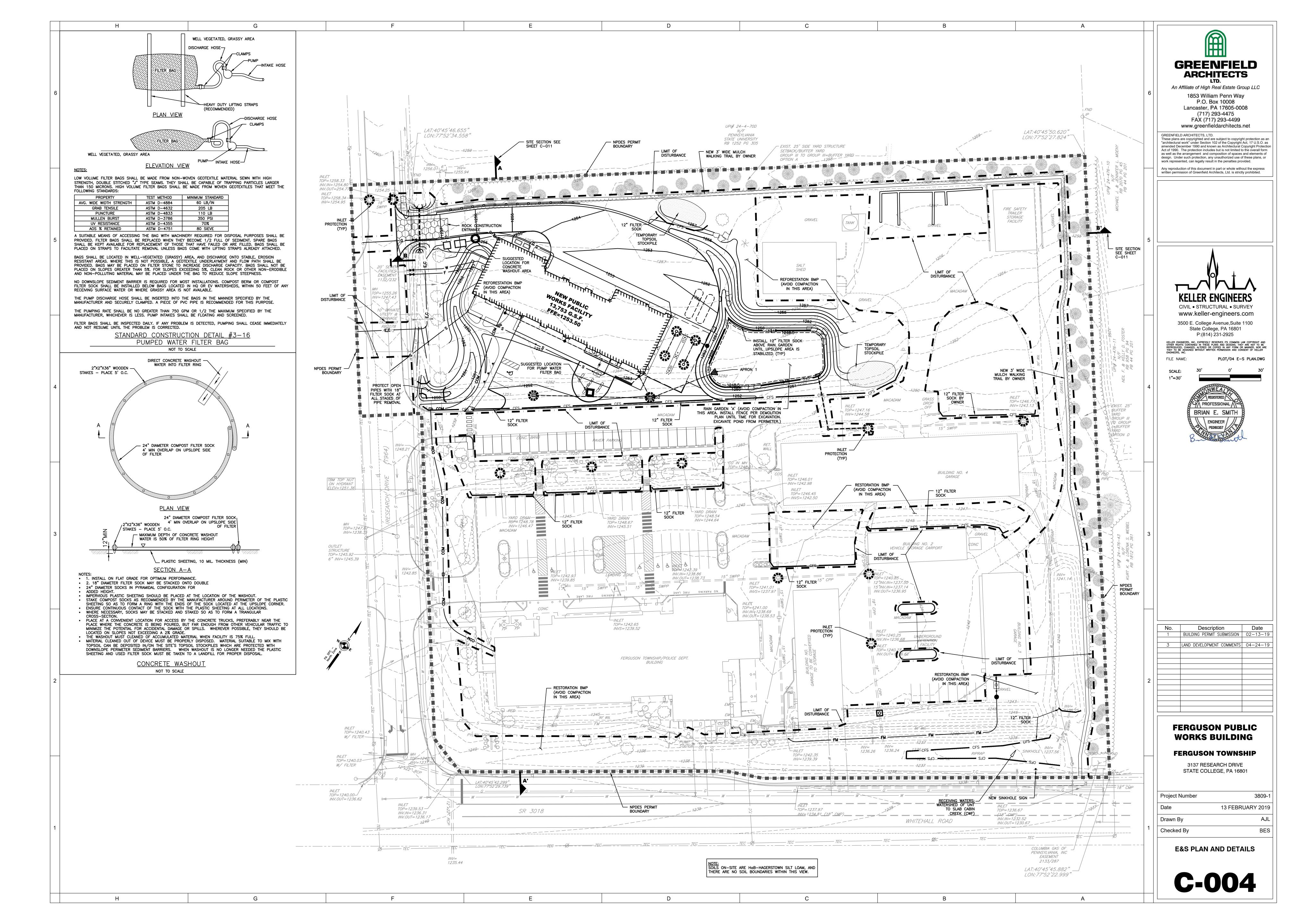
EXCAVATION

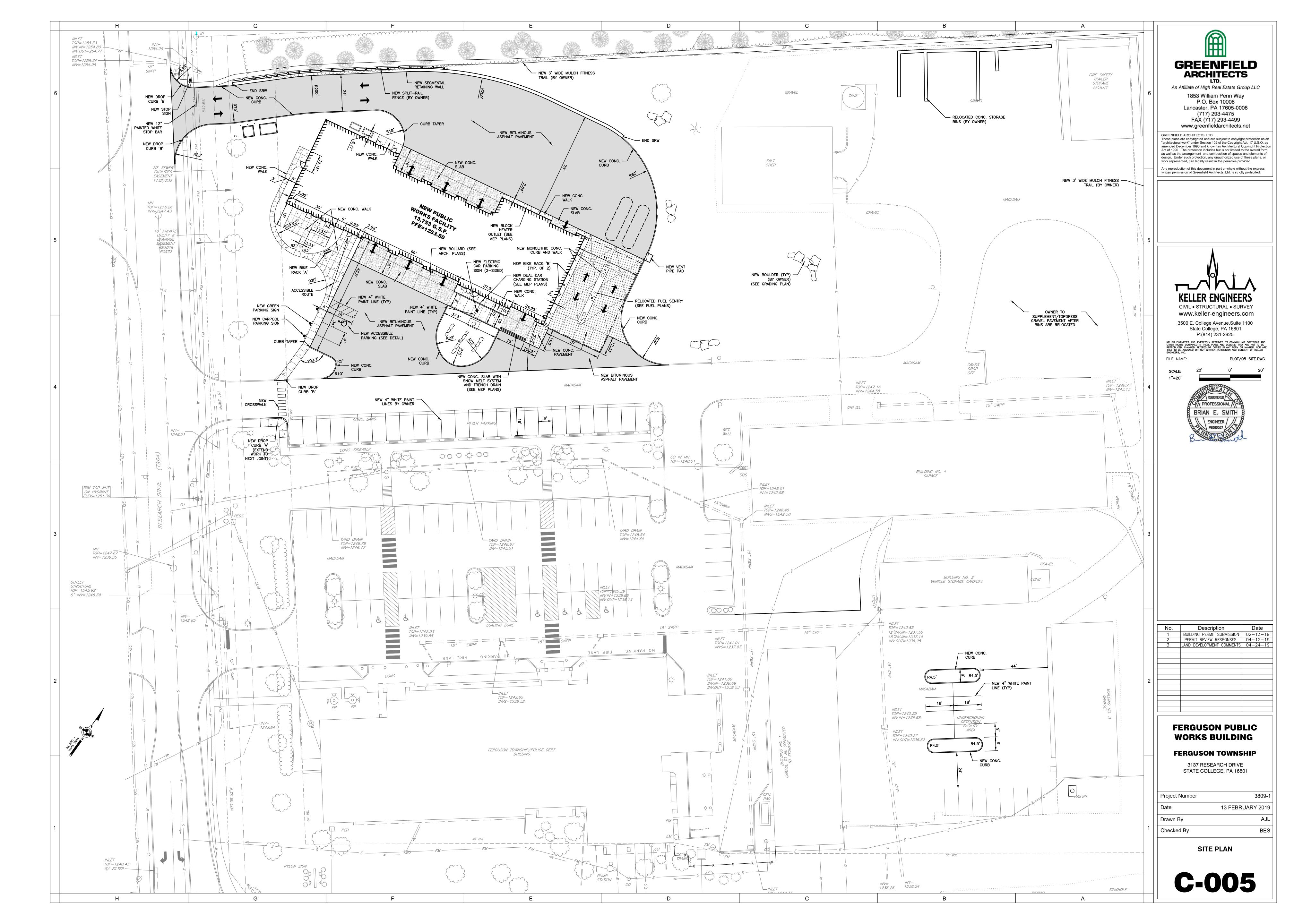
WITH A 3'

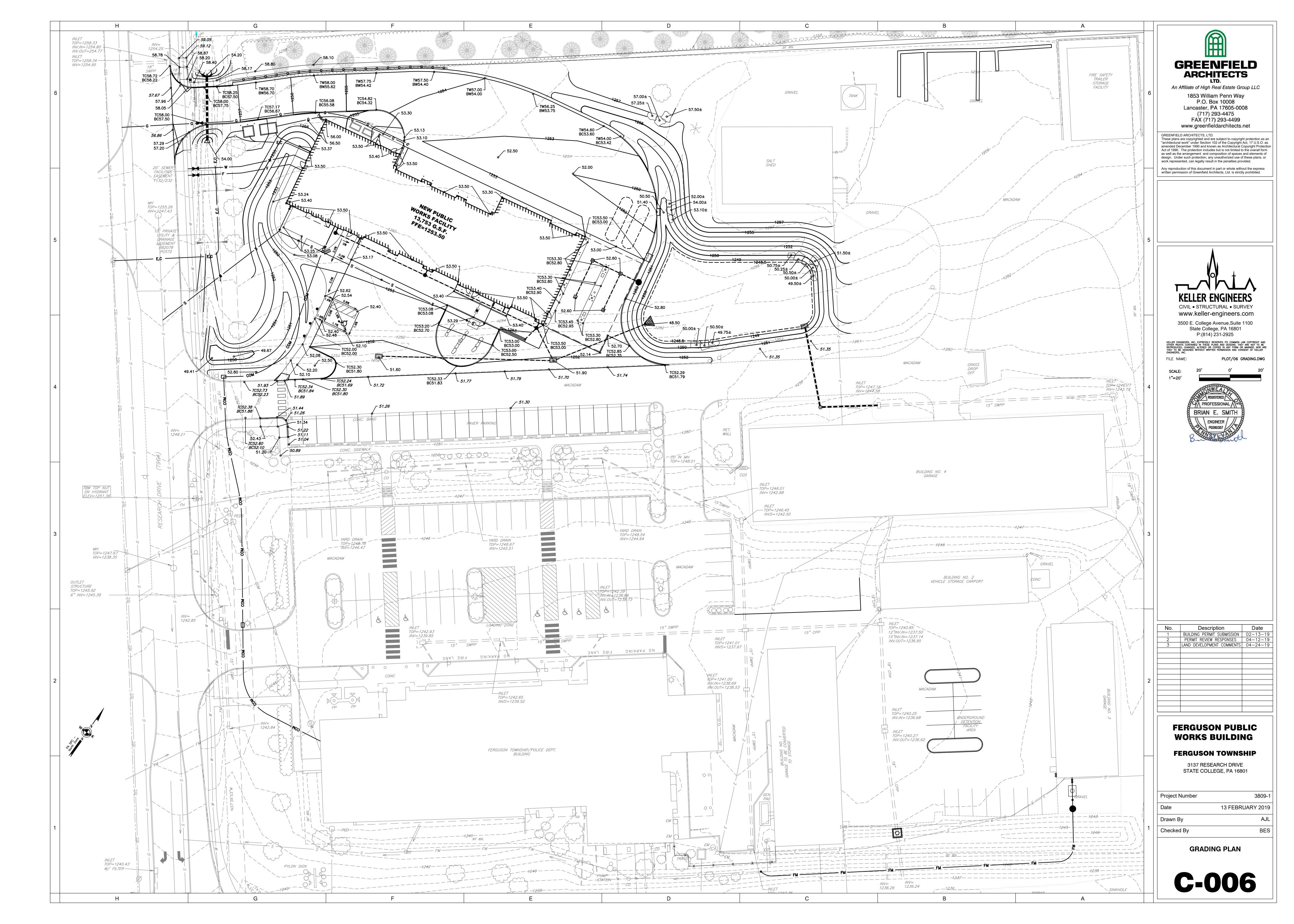
CLASS C

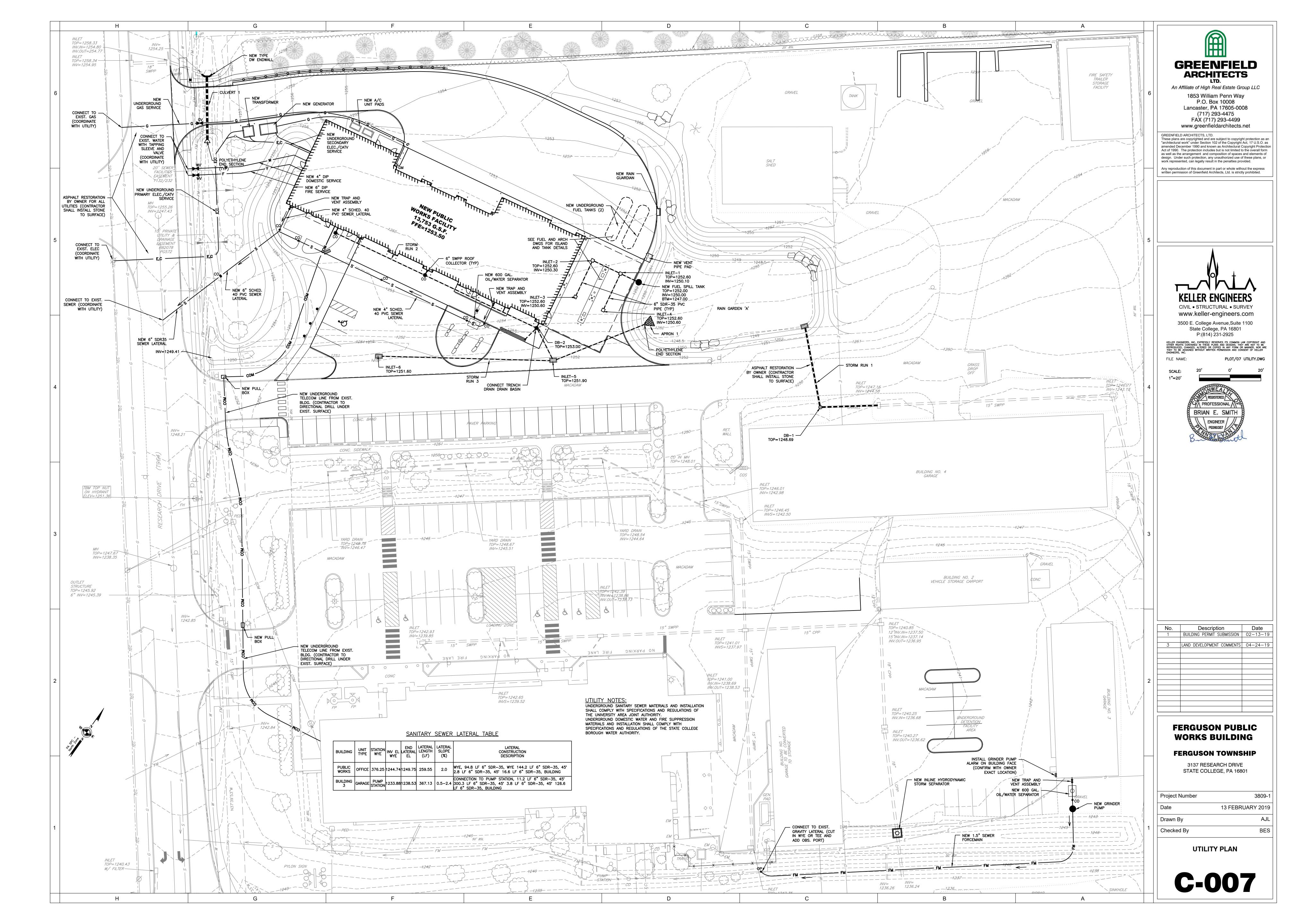
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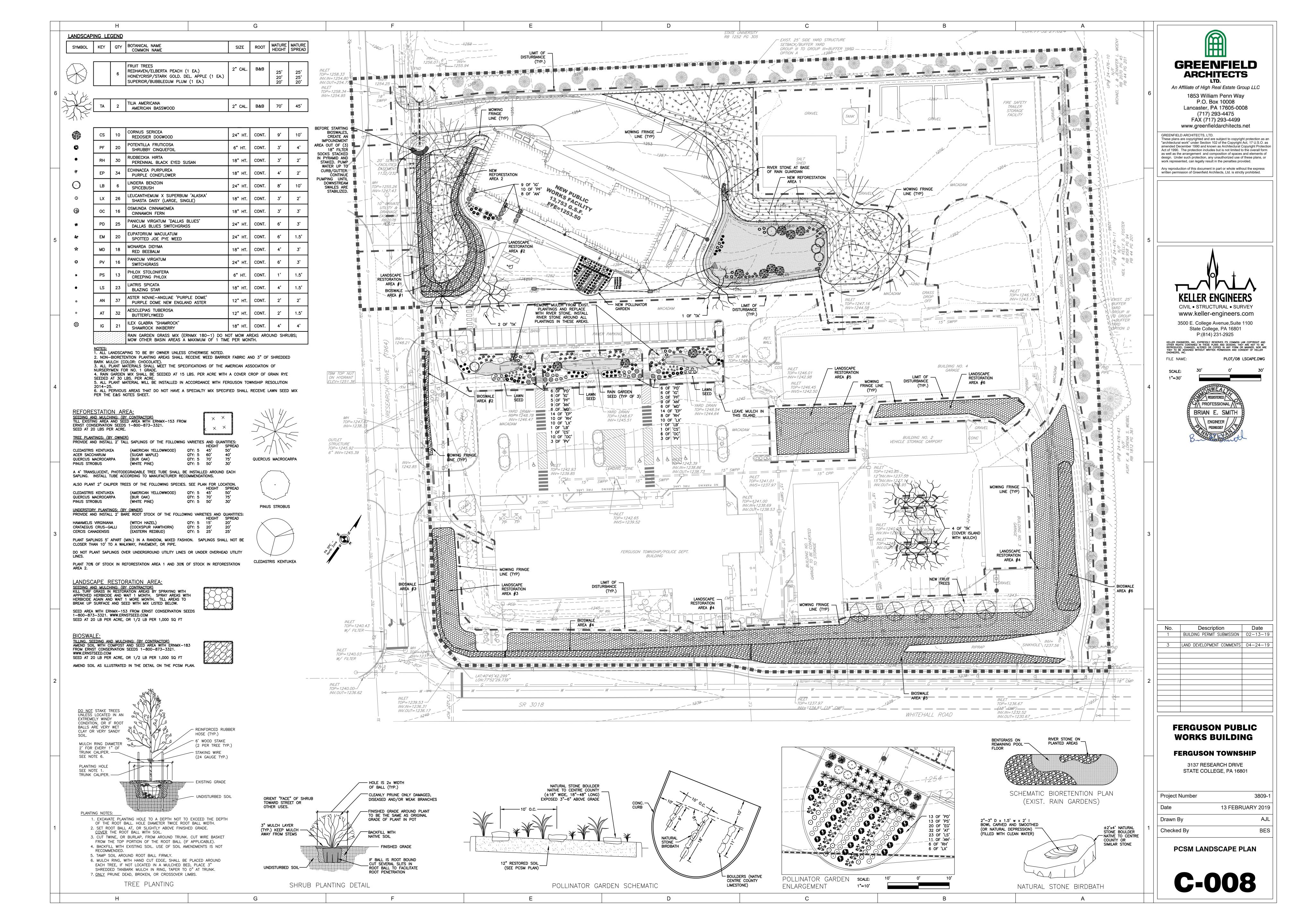
Checked By











LAND USE PAST: AGRICULTURE

RECEIVING WATERS: SLAB CABIN RUN, CWF, MF

I. <u>TEMPORARY OPERATION & MAINTENANCE DURING CONSTRUCTION — CONTRACTOR</u>
A. RESPONSIBLE PARTY: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF ALL PERMANENT STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES DETAILED HEREIN UNTIL COMPLETION OF CONSTRUCTION, RELEASE OF CO-PERMITTEE STATUS AND OBLIGATION, AND DURING THE WARRANTY PERIOD B. INSPECTION SCHEDULE: THE CONTRACTOR SHALL INSPECT THE STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES ON A WEEKLY BASIS AND AFTER EACH SIGNIFICANT RAINFALL EVENT UNTIL COMPLETION OF CONSTRUCTION. AFTER CONSTRUCTION COMPLETION ROUTINE INSPECTION IS TO BE CONDUCTED AS PER

THE SPECIFIC BMP: 1. RAIN GARDEN/BIO-RETENTION: ANNUALLY AND AFTER SIGNIFICANT RUNOFF EVENTS 2. REFORESTATION/RESTORATION AREAS: ANNUALLY AND AFTER SIGNIFICANT RUNOFF EVENTS

3. BIOSWALE: ANNUALLY AND WITHIN 48 HOURS AFTER SIGNIFICANT RAINFALL EVENTS. 4. RAIN GUARDIAN OR EQUAL: QUARTERLY FOR THE FIRST YEAR TO DETERMINE EXACT INSPECTION SCHEDULE AND WITHIN 48 HOURS AFTER SIGNIFICANT RAINFALL EVENTS 5. STORMCEPTER OR EQUAL: QUARTERLY FOR THE FIRST YEAR TO DETERMINE EXACT INSPECTION SCHEDULE AND WITHIN 48 HOURS AFTER SIGNIFICANT RAINFALL

C. INSPECTION & MAINTENANCE RECORDS AND NOTIFICATIONS: 1. REGULAR MAINTENANCE IS NEEDED INITIALLY AFTER CONSTRUCTION, AND CONTINUING INSPECTION AND MAINTENANCE IS REQUIRED TO ASSURE PROPER OPERATION OF ALL BMP'S. 2. THE CONTRACTOR MUST MAINTAIN A WRITTEN REPORT ON THE PROJECT SITE DOCUMENTING EACH INSPECTION AND ALL REPAIR OR REPLACEMENTS AND MAINTENANCE ACTIVITIES DURING THE WARRANTY PERIOD. . SHOULD ROUTINE INSPECTION REVEAL THAT A PCSM BMP IS NOT FUNCTIONING AS DESIGNED, IMMEDIATE ACTION TO CORRECT THE PROBLEM SHALL B TAKEN. STRUCTURAL FAILURES SUCH AS, BROKEN OR CLOGGED PIPES CAN BE RESOLVED BY REPLACING AND REPAIRING THE BMP TO THE ORIGINAL

DESIGN. SHOULD A PCSM BMP CONSTRUCTED TO THE ORIGINAL DESIGN SPECIFICATIONS FAIL TO FUNCTION, A STORMWATER DESIGN ENGINEER/PROFESSIONA

MUST IMMEDIATELY BE CONTACTED TO EVALUATE THE PROBLEM AND RECOMMEND CORRECTIONS. ANY MODIFICATION PROPOSED TO ADDRESS THE PROBLEM

MUST BE SUBMITTED TO THE CENTRE COUNTY CONSERVATION DISTRICT AND/OR DEP FOR REVIEW AND APPROVAL PRIOR TO INITIATING IMPLEMENTATION OF CORRECTIVE ACTIONS. 4. IN ACCORDANCE WITH PERMIT CONDITIONS, WHERE PCSM BMP'S ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION OR ANY OTHER TIME THE PERMITTEE BECOMES AWARE OF ANY INCIDENT CAUSING OR THREATENING POLLUTION AS DESCRIBED IN TITLE 25 PA CODE § 91.33, AS REQUIRED IN TITLE 25 PA CODE § 92A.41(B), THE PERMITTEE AND CO-PERMITTEE SHALL WITHIN 24 HOURS CONTACT THE DEPARTMENT OR AUTHORIZED COUNTY CONSERVATION DISTRICT BY PHONE OR PERSONAL CONTACT, FOLLOWED BY SUBMISSION OF A WRITTEN REPORT WITHIN FIVE (5) DAYS OF THE INITIAL

D. BMP OPERATION & MAINTENANCE: 1. RAIN GARDEN/BIO-RETENTION: INSPECT INLETS AND PIPES LEADING TO THE BASIN: REMOVE ACCUMULATED DEBRIS AND SEDIMENT AS REQUIRED TO MAINTAIN SYSTEM CAPACITY. CLEAN ALL COLLECTION AND CONVEYANCE FACILITIES PRIOR TO OWNER ACCEPTANCE.

 INSPECT THE BASIN VEGETATION AND RE-SEED ANY OBSERVED BARE SPOTS. EVIDENCE OF EROSION MUST BE IMMEDIATELY REPAIRED. ACCUMULATED SEDIMENT OR DEBRIS MUST BE REMOVED AND PROPERLY DISPOSED OF AS NECESSARY TO MAINTAIN FUNCTIONALITY OF SYSTEM.

 INSPECT THE OUTLET STRUCTURES FOR EROSION, DAMAGE, AND STABILITY. REPAIR AS NEEDED. MOW AND TRIM VEGETATION ANNUALLY TO ENSURE SAFETY, AESTHETICS, PROPER OPERATION, AND TO SUPPRESS INVASIVE VEGETATION AND WEEDS. MOW ONLY WHEN DRY TO AVOID RUTTING. MORE FREQUENT MOWING CAN OCCUR IF DESIRED BY OWNER FOR AESTHETICS. CLIPPINGS TO BE REMOVED AND PROPERLY DISPOSED OF. SHOULD THE BASIN STILL HAVE PONDED WATER 3 DAYS AFTER A PRECIPITATION OR THAWING EVENT, FURTHER INVESTIGATION MUST BE CONDUCTED TO

2. REFORESTATION/RESTORATION AREAS: EVIDENCE OF EROSION, ACCUMULATED DEBRIS/SEDIMENT, AND FAILURE TO ESTABLISH A GOOD STAND OF VEGETATION MUST BE IMMEDIATELY ADDRESSED. EVIDENCE OF EROSION MUST BE IMMEDIATELY REPAIRED.

 INSPECT AND CLEAN OUT DEBRIS/NESTS/DETRITUS FROM THE TREE TUBES. ENSURE TREE TUBES ARE IN CONTACT WITH SOIL. • REMOVE INVASIVE SPECIES VIA STRING TRIMMER DOWN TO BARE SOIL (REPEAT AS NECESSARY UNTIL INVASIVE PLANT IS ELIMINATED). USE HERBICIDE FOR INVASIVE SPECIES REMOVAL ONLY WHEN NECESSARY.

BIOSWALE: INSPECT AND CORRECT

 EVIDENCE OF EROSION DAMAGED OR DYING VEGETATION REMOVE ACCULULATED DEBRIS

PRESENCE OF STANDING WATER MAY REQUIRE REPAIR TO RESTORE DESIGN GRADES.

• ONCE VEGETATION IS ESTABLISHED, MOWING SHOULD BE LIMITED TO 1 TIME PER YEAR, IF AT ALL

INSPECT FOR CLOGGED OUTFALL DEVICES, UNDERDRAINS, PIPES, OR SPILLWAYS AND REPAIR AS NEEDED

 MOW VEGETATION ONCE AS DETERMINED BY ARBORIST AND TRIM AS NEEDED WITH REMOVAL OF ALL MOWED AND TRIMMED MATERIAL TO ENSURE SAFETY, AESTHETICS, PROPER OPERATION, AND TO SUPPRESS INVASIVE VEGETATION AND WEEDS. MOW ONLY WHEN DRY TO AVOID RUTTING. INSPECT FOR UNIFORMITY IN CROSS—SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED

 INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED RESEED BARE AREAS; INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION CHANNELS ARE FORMING FOR SWALES WITH CHECK DAMS, INSPECT AND CORRECT CHECK DAMS WHEN SIGNS OF ALTERED WATER FLOW (CHANNELIZATION, OBSTRUCTIONS, EROSION, ETC.) ARE IDENTIFIED

 WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY IF ABSOLUTELY NECESSARY REMOVE HÓRIZONTAL GRATE AND VERTICAL SCREEN. VACUUM OR SCOOP OUT DEBRIS AND CLEAN OFF VERTICAL SCREEN WITH BROOM OR HOSE.

DISPOSE OF WASTE PROPERLY ABOVE NOTES ARE A GUIDE. UNIT IS TO BE MAINTAINED ACCORDING TO SPECIFIC MANUFACTURER GUIDELINES 5. STORMCEPTOR, OR EQUAL:

 CONDUCT INSPECTIONS FROM THE SURFACE WITHOUT ENTERING THE UNIT PERFORM MAINTENANCE ONCE THE STORED VOLUME REACHES 15% OF THE TOTAL IN THE LOWER CHAMBER, OR IMMEDIATELY IN THE EVENT OF A SPILL VACUUM OR REMOVE TRAPPED CONTENTS AND DISPOSE OF MATERIALS IN ACCORDANCE WITH ALL APPLICABLE LAWS ABOVE NOTES ARE A GUIDE. UNIT IS TO BE MAINTAINED ACCORDING TO SPECIFIC MANUFACTURER GUIDELINES.

6. SINKHOLE REPAIR: IF A SINKHOLE DEVELOPS WITHIN THE STORMWATER MANAGEMENT BASIN OR THE GENERAL PROJECT VICINITY, OR IF A SINKHOLE DEVELOPS DOWNSTREAM OF THE PROJECT AREA DUE TO FAILURE OF ON-SITE STORMWATER MANAGEMENT FACILITIES AND/OR IMPROPER MAINTENANCE OF SUCH FACILITIES, THE CONTRACTOR SHALL SECURE THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO MAKE REQUIRED SINKHOLE REPAIRS. THE CONSERVATION DISTRICT AND TOWNSHIP ARE TO BE IMMEDIATELY NOTIFIED OF THE PRESENCE OF ANY SINKHOLE FORMATION.

II. <u>PERMANENT OPERATION & MAINTENANCE AFTER CONSTRUCTION — OWNER:</u>
A. RESPONSIBLE PARTY: AFTER THE WARRANTY EXPIRES, THE OWNER SHALL BE RESPONSIBLE FOR LONG—TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT FACILITIES ENUMERATED HEREIN FOR THE LIFE OF THE BEST MANAGEMENT PRACTICE. B. COVENANT APPURTENANT: THE OWNER RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES DETAILED HEREIN IS HEREBY COVENANTED APPURTENANT TO THE UNDERLYING PROPERTY

C. INSPECTION SCHEDULE: THE OWNER SHALL INSPECT THE STORMWATER MANAGEMENT FACILITIES AS PER THE SPECIFIC BMP: 1. RAIN GARDEN/BIO-RETENTION: ANNUALLY AND AFTER SIGNIFICANT RUNOFF EVENTS

2. REFORESTATION/RESTORATION AREAS: ANNUALLY AND AFTER SIGNIFICANT RUNOFF EVENTS 3. BIOSWALE: ANNUALLY AND WITHIN 48 HOURS AFTER SIGNIFICANT RAINFALL EVENTS.

4. RAIN GUARDIAN OR EQUAL: UNLESS REQUIRED MORE FREQUENTLY, CONDUCT INSPECTIONS ANNUALLY AND WITHIN 48 HOURS AFTER SIGNIFICANT RAINFALL 5. STORMCEPTER OR EQUAL: UNLESS REQUIRED MORE FREQUENTLY, CONDUCT INSPECTIONS ANNUALLY AND WITHIN 48 HOURS AFTER SIGNIFICANT RAINFALL D. INSPECTION & MAINTENANCE RECORDS AND NOTIFICATIONS:

CONTINUING INSPECTION AND MAINTENANCE IS REQUIRED TO ASSURE PROPER OPERATION OF ALL BMP'S. 2. THE OWNER MUST MAINTAIN A WRITTEN REPORT ON THE PROJECT SITE DOCUMENTING EACH INSPECTION AND ALL REPAIR OR REPLACEMENTS AND MAINTENANCE ACTIVITIES ASSOCIATED WITH THE PERMANENT STORMWATER MANAGEMENT FACILITIES HEREIN AT THE PROJECT SITE. SHOULD ROUTINE INSPECTION REVEAL THAT A PCSM BMP IS NOT FUNCTIONING AS DESIGNED, IMMEDIATE ACTION TO CORRECT THE PROBLEM SHALL BE TAKEN. STRUCTURAL FAILURES SUCH AS, BROKEN OR CLOGGED PIPES CAN BE RESOLVED BY REPLACING AND REPAIRING THE BMP TO THE ORIGINAL DESIGN. SHOULD A PCSM BMP CONSTRUCTED TO THE ORIGINAL DESIGN SPECIFICATIONS FAIL TO FUNCTION, A STORMWATER DESIGN ENGINEER/PROFESSIONAL MUST IMMEDIATELY BE CONTACTED TO EVALUATE THE PROBLEM AND RECOMMEND CORRECTIONS. ANY MODIFICATION PROPOSED TO ADDRESS THE PROBLEM

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INSPECT THE BASIN VEGETATION AND RE-SEED ANY OBSERVED BARE SPOTS.

 EVIDENCE OF EROSION MUST BE IMMEDIATELY REPAIRED. ACCUMULATED SEDIMENT OR DEBRIS MUST BE REMOVED AND PROPERLY DISPOSED OF AS NECESSARY TO MAINTAIN FUNCTIONALITY OF SYSTEM. INSPECT THE OUTLET STRUCTURES FOR EROSION, DAMAGE, AND STABILITY. REPAIR AS NEEDED. MOW AND TRIM VEGETATION ANNUALLY TO ENSURE SAFETY, AESTHETICS, PROPER OPERATION, AND TO SUPPRESS INVASIVE VEGETATION AND WEEDS.

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 ENSURE TREE TUBES ARE IN CONTACT WITH SOIL. • REMOVE INVASIVE SPECIES VIA STRING TRIMMER DOWN TO BARE SOIL (REPEAT AS NECESSARY UNTIL INVASIVE PLANT IS ELIMINATED). USE HERBICIDE FOR INVASIVE SPECIES REMOVAL ONLY WHEN NECESSARY. • ONCE VEGETATION IS ESTABLISHED, MOWING SHOULD BE LIMITED TO 1 TIME PER YEAR, IF AT ALL

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 INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED RESEED BARE AREAS: INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION CHANNELS ARE FORMING

 FOR SWALES WITH CHECK DAMS, INSPECT AND CORRECT CHECK DAMS WHEN SIGNS OF ALTERED WATER FLOW (CHANNELIZATION, OBSTRUCTIONS, EROSION, ETC.) ARE IDENTIFIED

CONSERVATION DISTRICT IS TO BE IMMEDIATELY NOTIFIED OF THE PRESENCE OF ANY SINKHOLE FORMATION.

WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY IF ABSOLUTELY NECESSARY

 REMOVE HORIZONTAL GRATE AND VERTICAL SCREEN. VACUUM OR SCOOP OUT DEBRIS AND CLEAN OFF VERTICAL SCREEN WITH BROOM OR HOSE. DISPOSE OF WASTE PROPERLY ABOVE NOTES ARE A GUIDE. UNIT IS TO BE MAINTAINED ACCORDING TO SPECIFIC MANUFACTURER GUIDELINES.

 CONDUCT INSPECTIONS FROM THE SURFACE WITHOUT ENTERING THE UNIT PERFORM MAINTENANCE ONCE THE STORED VOLUME REACHES 15% OF THE TOTAL IN THE LOWER CHAMBER, OR IMMEDIATELY IN THE EVENT OF A SPILL

 VACUUM OR REMOVE TRAPPED CONTENTS AND DISPOSE OF MATERIALS IN ACCORDANCE WITH ALL APPLICABLE LAWS ABOVE NOTES ARE A GUIDE. UNIT IS TO BE MAINTAINED ACCORDING TO SPECIFIC MANUFACTURER GUIDELINES 6. SINKHOLE REPAIR: IF A SINKHOLE DEVELOPS WITHIN THE STORMWATER MANAGEMENT BASIN OR THE GENERAL PROJECT VICINITY, OR IF A SINKHOLE DEVELOPS DOWNSTREAM OF THE PROJECT AREA DUE TO FAILURE OF ON-SITE STORMWATER MANAGEMENT FACILITIES AND/OR IMPROPER MAINTENANCE OF

SUCH FACILITIES, THE OWNER SHALL SECURE THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO MAKE REQUIRED SINKHOLE REPAIRS. THE

RESTORATION OR FRINGE REFORESTATION MOWED 1X PER MONTH MOWED 1X PER TURF GRASS MOWED WEEKLY MAX. APPROX. YFAR MAX. APPROX. 2"-3" HT. 6"-8" HT. HEIGHT VARIES WIDTH VARIES 2'-3' WIDE WIDTH VARIES

> SIZE DISTRIBUTION, AS DETERMINED B PIPETTE METHOD IN COMPLIANCE WITH ASTM F-1632. SAND=20%-50%. SILT=75%-90%, CLAY=LESS THAN 5%. SOIL RESTORATION DETAIL

GEOLOGY - NITTANY FORMATION - DOLOMITE ANY PROPOSED INFILTRATION BMP'S WILL BE PROTECTED FROM COMPACTION UNTIL SITE STABILIZATION IS ACHIEVED AS SHOWN ON THE CONSTRUCTION DRAWINGS

SEQUENCE OF INSTALLATION OF PCSM BMP'S RECYCLING & DISPOSAL OF WASTE MATERIALS

• UPON COMPLETION OF CONSTRUCTION THE OWNER IS RESPONSIBLE TO ASSURE WASTES THAT RESULT FROM NORMAL MAINTENANCE OF THE PCSM BMP'S ARE PROPERLY DISPOSED. LITTER AND TRASH THAT COULD ACCUMULATE IN DRAINAGE FACILITIES MUST BE REMOVED DURING MAINTENANCE AND PROPERLY DISPOSED ACCORDING TO DEP REGULATORY REQUIREMENTS, SEE BELOW. DEAD OR DYING VEGETATION OR GRASS CLIPPINGS MUST BE DISPOSED AT AN APPROVED YARD WASTE RECYCLING FACILITY. ACCUMULATED SEDIMENT THAT IS REMOVED DURING REPAIR AND MAINTENANCE MUST BE PLACED IN AN UPLAND LOCATION OR REMOVED FROM THE PROPERTY AND IMMEDIATELY STABILIZED WITH SEED AND MULCH.

 ALL 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 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

NOTE: CRITICAL STAGE REQUIRING OVERSIGHT BY LICENSED PROFESSIONAL. IMPLEMENTATION OF SPECIFIC PCSM BMP'S MUST FOLLOW THE CONSTRUCTION DETAILS AND NOTES OUTLINED ON THE PCSM AND PCSM/LANDSCAPE DRAWINGS INCLUDED FOR THIS PROJECT. WHEN ALL SURFACES TRIBUTARY TO THE PCSM BMP'S, RAIN GARDENS, BIO-SWALES, AND REFORESTATION/LANDSCAPE RESTORATION AREAS HAVE ACHIEVED PERMANENT VEGETATION, DEFINED AS THE ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR COVERED WITH AN ACCEPTABLE PERMANENT BMP; SUCH AS, PAVEMENT FOR STREETS AND SIDEWALKS, THE PCSM BMP'S CAN BE CONSTRUCTED ACCORDING TO THE

IMPLEMENTATION OF REFORESTATION AND LANDSCAPE RESTORATION CAN BEGIN IN ORDER TO PROPERLY CONSTRUCT AND VEGETATIVELY STABILIZE THE PROPOSED NEW BIO-SWALE AND ENHANCED SWALES TO BE CONVERTED TO BIO-SWALES ALONG RESEARCH DRIVE, FLOW MUST BE DIVERTED AWAY BY INSTALLING A STACKED COMPOST FILTER SOCK BELOW THE DRIVEWAY CROSSING PIPE TO PUMP FLOW INTO THE PAVED ROAD CURB AND GUTTER. CONSTRUCTION OF THESE SWALES CAN NOW BEGIN.

EXCAVATE BMP'S (BIO SWALES & RAIN GARDENS) TO THE DEPTH NEEDED TO ADD THE SOIL PLANTING MEDIUM TO THE REQUIRED FINAL DEPTH. SCARIFY

THE RAIN GARDEN FLOOR TO A MINIMUM DEPTH OF 18 INCHES AND AVOID COMPACTION OF THE BASIN FLOOR. BACKFILL AREA WITH SOIL PLANTING MEDIUM. OVERFILLING OF SOIL IS RECOMMENDED TO ALLOW FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF

COMPLETE FINAL LEVELING TO ACHIEVE PROPOSED DESIGN ELEVATIONS LEAVING SPACE FOR UPPER COMPOST LAYER. VEGETATE BMP AS SHOWN ON THE PLANS. OUTFALL DEVICES; SUCH AS, PIPES AND RISERS, CAN NOW BE INSTALLED AND BECOME OPERATIONAL.

STABILIZE ALL SURROUNDING DISTURBED SOIL SURFACES BY SEEDING AND MULCHING. 10. UPON ACHIEVING STABILIZATION IN THE BIO-SWALES ALONG RESEARCH DRIVE, THE DIVERSION INTO THE ROAD SIDE CURB AND GUTTER CAN BE REMOVED. 11. ADDITIONAL SITE LANDSCAPE PLANTINGS CAN TAKE PLACE AT THIS TIME OR IN THE NEAR FUTURE.

PCSM BMP CONSTRUCTION NOTES:

LIGHT TRACTOR.

NOTE: LICENSED PROFESSIONAL MUST OVERSEE IMPLEMENTATION OF ALL THE FOLLOWING STRUCTURAL BMP'S

RAIN GARDEN/BIO-RETENTION/BIOSWALE 1. CONSTRUCTION EQUIPMENT MUST NOT TRAVEL THROUGH THE PROPOSED RAIN GARDEN LOCATION DURING TOPSOIL STRIPPING AND SITE GRADING TO AVOID COMPACTION OF THIS FUTURE PCSM BMP. SUB GRADE PREPARATION — EXISTING SUB-GRADE IN BIO-RETENTION AREAS SHALL NOT BE COMPACTED OR SUBJECTED TO EXCESSIVE TRAFFIC FROM

INITIAL EXCAVATION CAN BE PERFORMED DURING ROUGH SITE GRADING, BUT SHALL NOT BE CARRIED TO WITHIN ONE (1) FOOT OF THE FINAL BOTTOM ELEVATION. FINAL EXCAVATION SHOULD NOT TAKE PLACE UNTIL ALL DISTURBED SURFACE WITHIN THE DRAINAGE AREA TO THE BIO-RETENTION AREA HAS

WHERE EROSION OF SUB GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING IN THE GRADED BOTTOM, THIS MATERIAL MUST BE REMOVED WITH LIGHT WEIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF SIX (6) INCHES WITH A YORK RAKE OR BY A

5. UPON INITIAL COMPLETION OF CONSTRUCTION. INSPECT BASIN WEEKLY AND AFTER RUNOFF EVENTS. EVIDENCE OF EROSION, ACCUMULATED DEBRIS/SEDIMENT, AND FAILURE TO ESTABLISH A GOOD STAND OF VEGETATION IN THE BASIN MUST BE IMMEDIATELY ADDRESSED.

THE BIO-RETENTION SOIL PLANTING MIX SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES EXCLUDING MULCH - MUST NOT CONTAIN ARBITRARY FILL MATERIALS. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIO-RETENTION AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. SEE BIORETENTION ("RAIN GARDEN") DETAIL FOR MORE DETAILED SPECIFICATIONS FOR THE SOIL PLANTING MEDIA.

INSTALLATION OF VEGETATION: 1. SOIL PLANTING MIX SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB-GRADE PREPARATION/BED INSTALLATION

INSTALL PLANTING SOIL MIX IN 12-INCH MAXIMUM LIFTS AND LIGHTLY COMPACT (TAMP WITH BACKHOE BUCKET OR BY HAND). KEEP EQUIPMENT MOVEMENT OVER PLANTING SOIL TO A MINIMUM — DO NOT OVER COMPACT. INSTALL PLANTING SOIL TO GRADES INDICATED ON THE CONSTRUCTION DRAWINGS. 3. PLANT TREES AND SHRUBS ACCORDING TO SUPPLIERS RECOMMENDATIONS AND ONLY FROM MID-MARCH THROUGH THE END OF JUNE OR FROM

MID-SEPTEMBER THROUGH MID-NOVEMBER. PROVIDE MINIMAL MULCH AROUND PLANTINGS. 4. APPLY SEED MIX TO RAIN GARDEN FLOOR AND SIDE WALLS PER MANUFACTURER'S RECOMMENDATIONS. PROTECT BIO-RETENTION/RAIN GARDENS FROM SEDIMENT AT ALL TIMES DURING CONSTRUCTION. HAY BALES, DIVERSION BERMS, AND/OR OTHER

APPROPRIATE MEASURES SHALL BE USED AT THE TOE OF SLOPES THAT ARE ADJACENT TO THE BIO-RETENTION/RAIN GARDEN TO PREVENT SEDIMENT FROM WASHING INTO THESE AREAS DURING SITE DEVELOPMENT. WATER VEGETATION AT THE END OF EACH DAY FOR TWO WEEKS AFTER PLANTING IS COMPLETED.

CONTRACTOR SHOULD PROVIDE A ONE-YEAR 80% CARE AND REPLACEMENT WARRANTY FOR ALL PLANTING BEGINNING AFTER INSTALLATION OF ALL PLANTS. LANDSCAPE RESTORATION

LANDSCAPE RESTORATION IS PROPOSED TO CONVERT PREDEVELOPMENT IMPERVIOUS SURFACES OR MOWED LAWN INTO MEADOW BY RE-VEGETATING WITH APPROPRIATE NATIVE SPECIES. PREPARE THE SITE BY ELIMINATING ALL EXISTING VEGETATION AND WEEDS BY APPROPRIATE USE OF HERBICIDE OR REPEATED TILLAGE TO DESTROY ROOTS. VEGETATE THE SITE WITH PLANTS SPECIES AS SHOWN ON THE LANDSCAPE PLAN, PLANTING CAN TAKE PLACE FROM SPRING THAW THROUGH JUNE 30 OR FROM SEPTEMBER 1 THROUGH SOIL FREEZE-UP ("DORMANT SEEDING"). PLANTING IN JULY & AUGUST IS GENERALLY NOT RECOMMENDED DUE TO THE FREQUENCY OF DROUGHT DURING THIS TIME. SEÈDING CAN BE ACCOMPLISHED BY A VARIETY OF METHODS: NO-TILL SEEDER FOR MULTI-ACRE PLANTING;

REFORESTATION IS PROPOSED TO CONVERT/RESTORE DISTURBED AREAS BACK TO FUTURE FOREST WITH APPROPORIATE NATIVE SPECIES. PREPARE THE SITE BY ELIMINATING ALL EXISTING VEGETATION AND WEEDS BY APPROPRIATE USE OF HERBICIDE OR REPEATED TILLAGE TO DESTROY ROOTS. INSTALL 12" MINIMUM OF RESTORED SOIL ON THE AREA,.

BROADCAST SEEDER; HAND BROADCAST FOR SMALL AREAS OF ONE ACRE OR LESS. SEED QUALITY IS CRITICAL AND A SEED MIX SHOULD BE USED WITH

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INSTALL TREE SEEDLINGS PER NURSERY RECOMMENDATIONS. INSTALL PHOTODEGRADABLE TREE TUBE AROUND TREE SEEDLINGS PER MANUFACTURER RECOMMENDATIONS. OWNER TO PLANT TREES PRIOR TO SEEDING BY CONTRACTOR. 5. IN YEAR ONE (1) WEEDS MUST BE CAREFULLY CONTROLLED BY MOWING BACK WHEN THEY REACH 12-INCHES IN HEIGHT. WEEDS SHOULD NOT BE

SPRAYED WITH HERBICIDES SINCE THIS CAN KILL DESIRABLE PLANTS, INSUFFICIENT PLANT COVER MAY REQUIRE RE-SEEDING.

I ROTOTILL OR RIP THE SUBGRADE, NSTALL CHECK DAMS, REMOVE ROCKS, PLACE THE AMENDED SOIL.

AFTER SOIL REMOVAL, THE UNDERLYING SOIL IN SWALE/BASIN AREAS SHALL BE REPLACED AS SHOWN IN THE TYPICAL DETAIL IN ACCORDANCE WITH THE FOLLOWING: SOIL AMENDMENT MEDIA SHALL CONSIST OF COMPOST AND/OR SAND AND SHALL BE MIXED/ADDED IN A RATIO OF 1 PART SOIL TO 1 PART AMENDMENT. ON SITE SOILS WITH AN ORGANIC CONTENT OF AT LEAST 5 PERCENT CAN BE PROPERLY STOCKPILED (TO MAINTAIN ORGANIC CONTENT) AND REUSED.

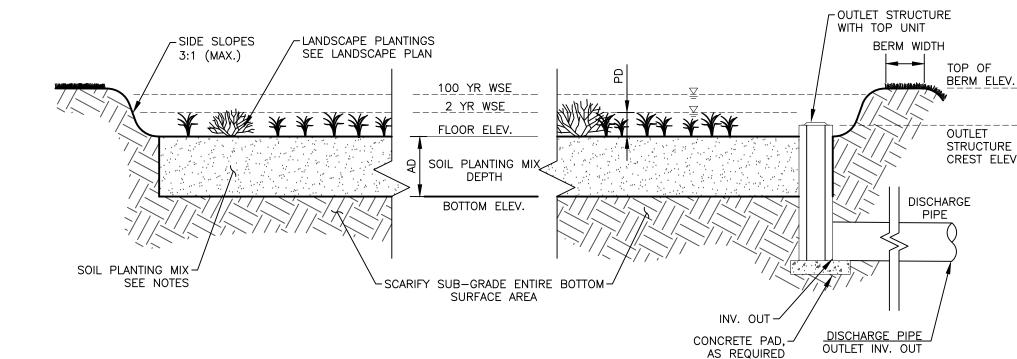
PROCEDURE FOR REPLACING SOIL SHALL BE: CREATE UPSTREAM IMPOUNDMENT AREA WITH PUMPING, EXCAVATE EXISTING SOIL TO DEPTH SHOWN ON DETAIL

SEEDING, MULCHING AND ANY PLANNED LANDSCAPING CAN NOW BE IMPLEMENTED. ONCE STABILIZATION IS ACHIEVED, THE UPSTREAM IMPOUNDMENT AND PUMPING CAN BE REMOVED/TERMINATED. RESTORE SURFACE VEGETATION WITH SPECIALTY SEED MIX.

A MINIMUM PERCENTAGE OF NON-SEED PLANT PARTS.

UPON COMPLETION OF THE PROJECT AND SUBMISSION OF THE REQUIRED NOTICE OF TERMINATION (NOT) THE RECORD DRAWINGS SHALL INCLUDE THE FOLLOWING EXECUTED CERTIFICATION, WITH THE PROFESSIONAL'S SEAL:

, DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. \ 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF. THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

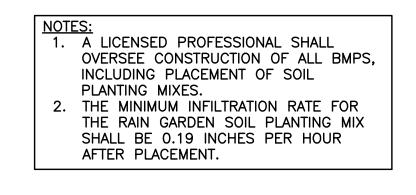


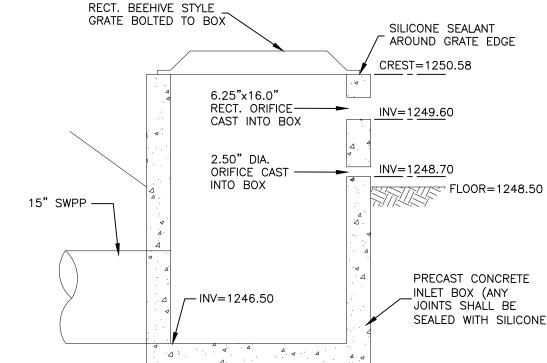
SOIL PLANTING MIX NOTES:

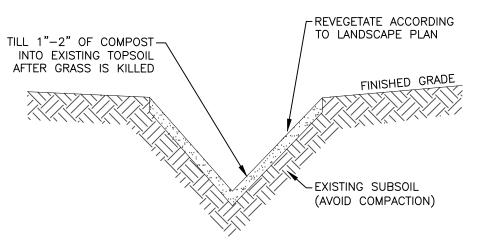
BIORETENTION AREA	Α
TOP OF BERM	1251.50
BERM TOP WIDTH	5'
PONDING DEPTH (PD)	2' MAX.
SOIL PLANTING MIX DEPTH (AD)	2.0'
STONE DEPTH (SD)	0
OUTLET STRUCTURE TOP UNIT	GRATE
OUTLET STRUCTURE TYPE	TYPE M INLET
OUTLET STRUCTURE CREST ELEV.	1250.58
100 YR WATER SURFACE ELEV.	1250.67
2 YR WATER SURFACE ELEV.	1249.60
FLOOR ELEV.	1248.50
BOTTOM ELEV.	1246.50
UNDERDRAIN PIPE	N/A
INV. IN - UNDERDRAIN PIPE	N/A
INV. OUT - DISCHARGE PIPE	1246.50
DISCHARGE PIPE OUTLET INV.	1244.58
EMERG. SPILLWAY CREST (RISER)	N/A
EMERG. SPILLWAY LINING	N/A

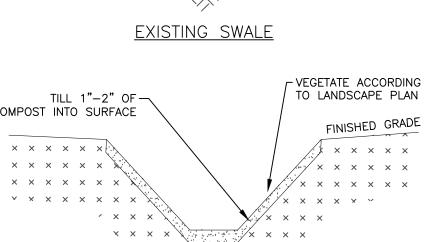
1. SOIL PLANTING MIX TO GENERALLY CONSIST OF: A. 20% GOOD QUALITY TOPSOIL. UNSATISFACTORY TOPSOIL MATERIALS ARE DEFINED AS THOSE CONTAINING HIGH CLAY COMPOSITION, TRASH, DEBRIS, ROCKS, OR FROZEN MATERIAL. GOOD QUALITY TOPSOIL MAY OR MAY NOT BE AVAILABLE ON SITE. MAXIMUM CLAY CONTENT ALLOWED IS 5%. B. 30% GOOD QUALITY COMPOST. THE PURPOSE OF THE COMPOST COMPONEN IS TO INCREASE ORGANIC CONTENT OF THE SOIL PLANTING MIX MIXTURE TO PROMOTE PLANT MATERIAL GROWTH UPON THE BASIN BOTTOM. DO NOT USE BIO-SOLID COMPOST MIXTURE SOURCES; DO NOT USE COMPOST SOURCES WITH HIGH CLAY CONTENT OR PARTICULATES. C.50% CLEAN WASHED SAND. THE PURPOSE OF THE SAND COMPONENT IS TO LOOSEN THE OVERALL SOIL PLANTING MIX MIX TO PROMOTE INFILTRATION. D. CLAY CONTENT OF THE BIO-RETENTION SOIL PLANTING MIX MUST BE LESS THAN 10% E. THE PH OF THE BIO-RETENTION SOIL PLANTING MIX SHOULD BE BETWEEN 5.5 AND 7.5. F. LIME ANTI-FLOCCULATION AGENT AS DIRECTED BY PROJECT SOIL SCIENTIST G. A 3" LAYER OF 1/4" CLEAN WASHED ANTI-SKID MATERIAL MAY BE PLACED ON THE BOTTOMOF THE RAINGARDEN IN LIEU OF THE GEOTECHNICAL FABRIC. 2. FINAL SOIL PLANTING MIX MIXTURE COMPONENTS AND COMPOSITION SHALL BE DETERMINED BY PROJECT SOIL SCIENTIST BASED ON ON-SITE TEST MIXTURE PREPARATION AND INFILTRATION TESTING. 3. PROCURE, MIX, STORE, AND PLACE SOIL PLANTING MIX IN ACCORDANCE WITH POST CONSTRUCTION STORMWATER MANAGEMENT PLAN. 4. PLACE SOIL PLANTING MIX LOOSE IN 8" LIFTS ON BASIN SUBGRADE, STARTING AT LOWEST END OF BASIN. DO NOT PLACE SOIL PLANTING MIX IN STANDING WATER. DO NOT COMPACT. AVOID RUNNING EQUIPMENT ON COMPLETED BASIN

BIORETENTION ("RAIN GARDEN") WITH RISER OUTLET STRUCTURE

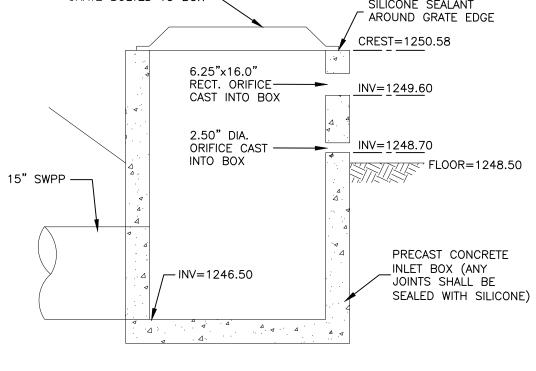




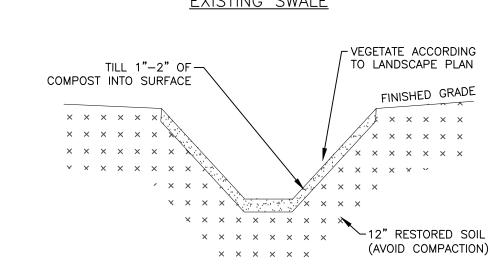


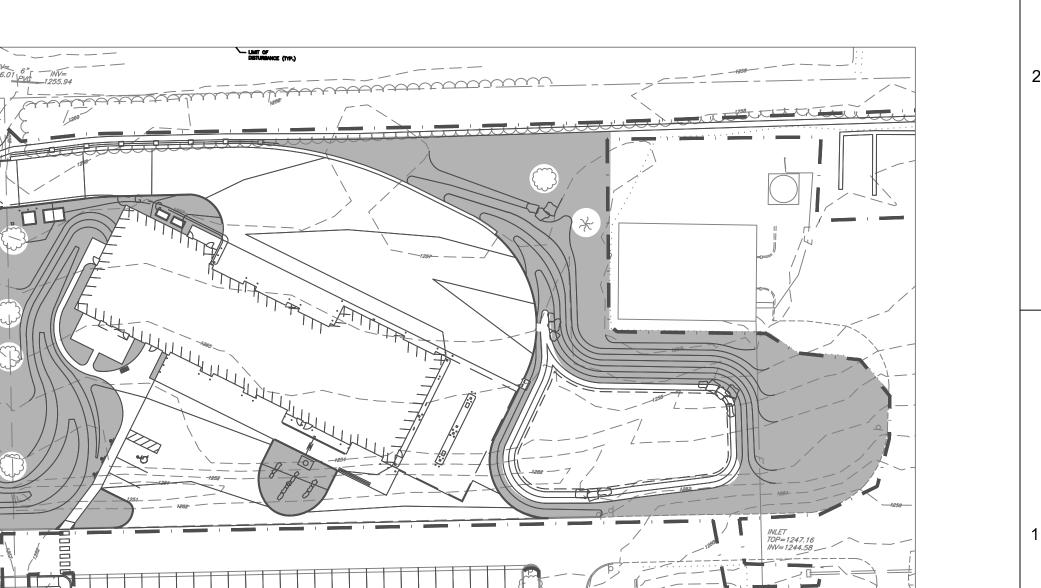


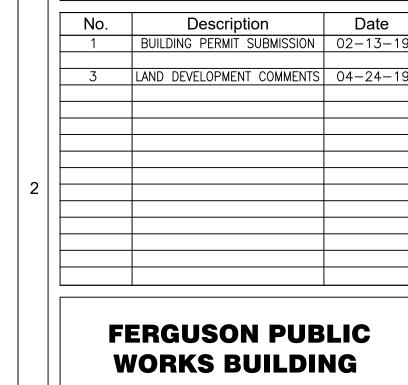
 \times \times \times \times \times <u>Proposed swale</u> BIOSWALE DETAIL



OUTLET STRUCTURE RAIN GARDEN 'A'







GREENFIELD

ARCHITECTS

An Affiliate of High Real Estate Group LLC

1853 William Penn Way

P.O. Box 10008

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www.greenfieldarchitects.net

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ONWEAL

REGISTERED /

PROFESSIONAL

PE080357

BRIAN E. SMITH

ENGINEER /

SCALE:

1"=40'

PLOT/09-10 PCSM.DWG

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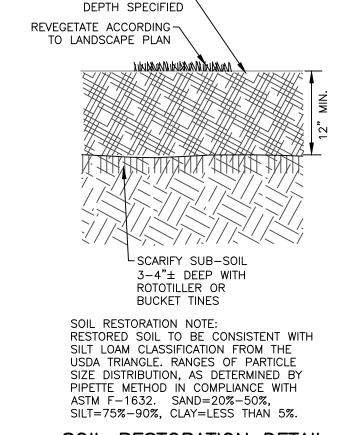
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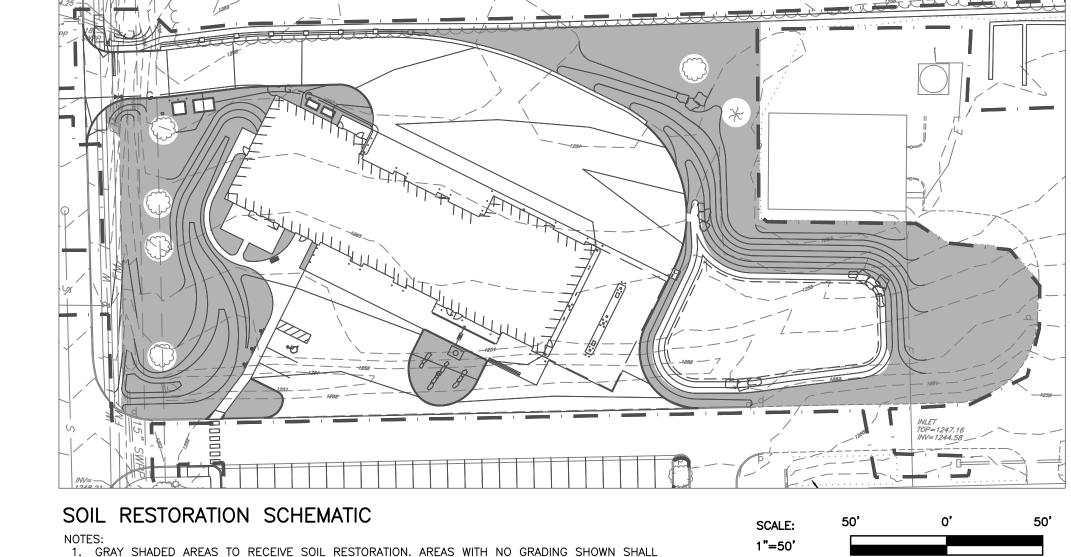
	Project Number	3809-1
	Date	13 FEBRUARY 2019
1	Drawn By	AJL
	Checked By	BES

PCSM NOTES AND DETAILS

C-009



REPLACE SOIL TO

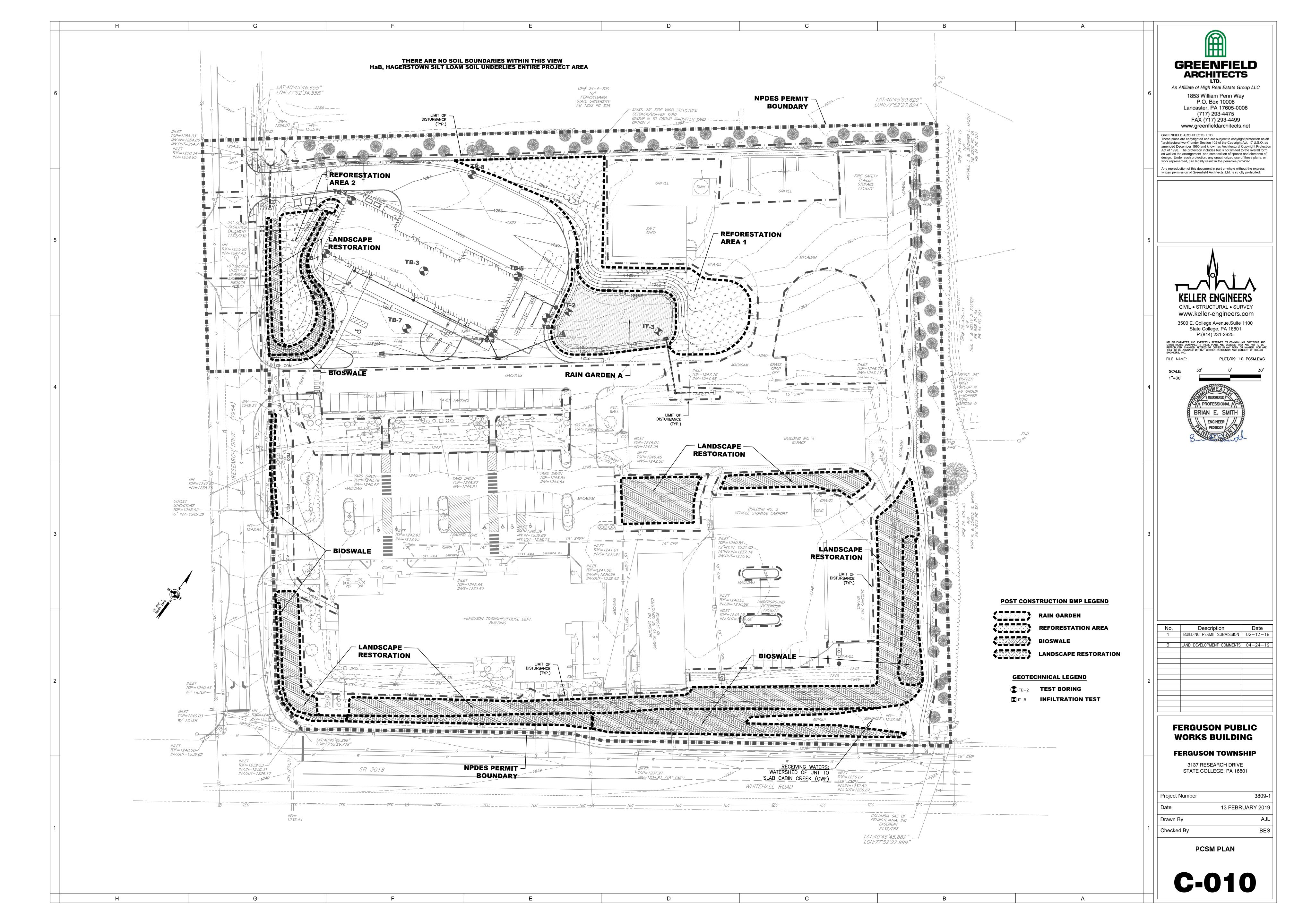


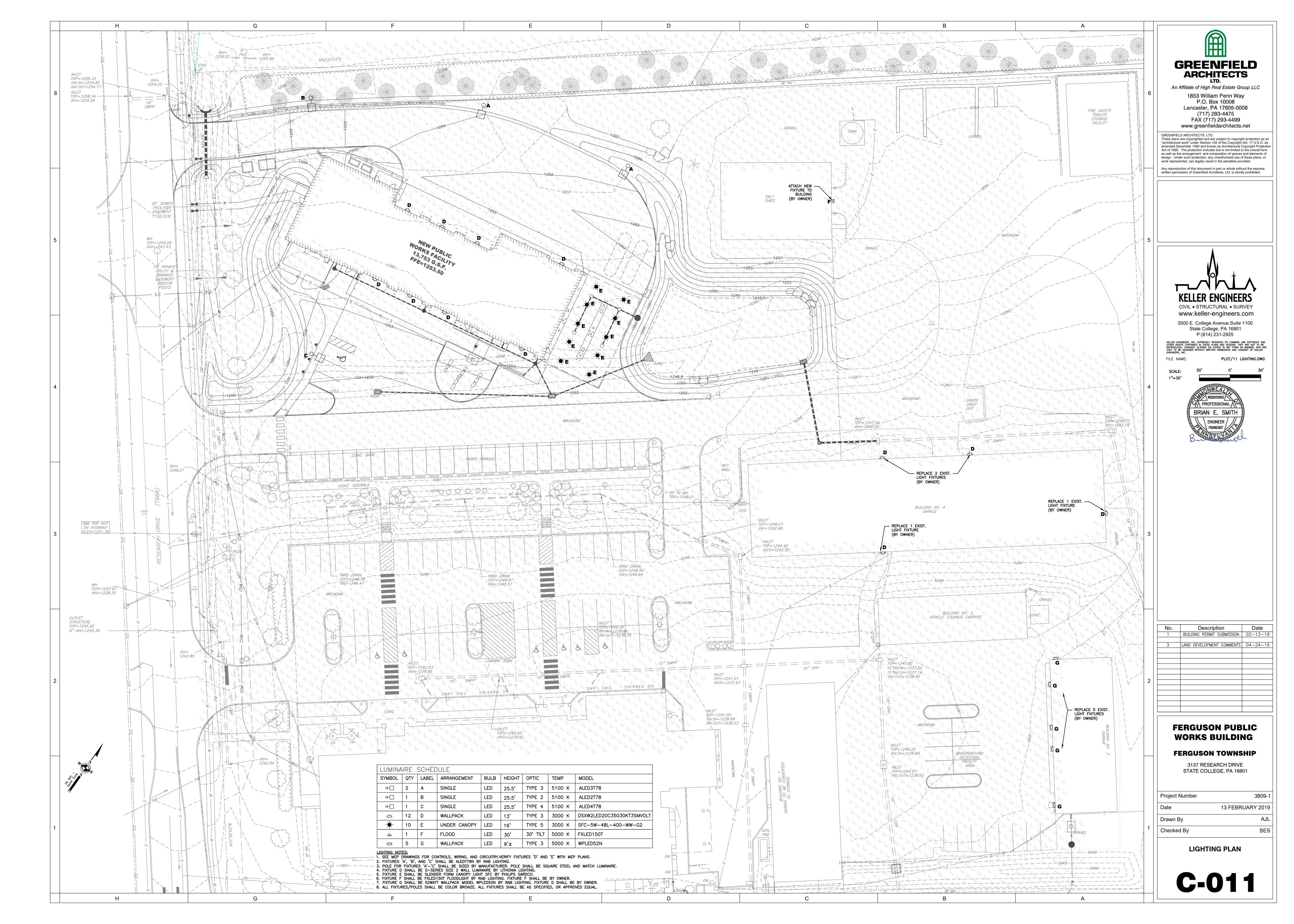
MOWING SCHEMATIC

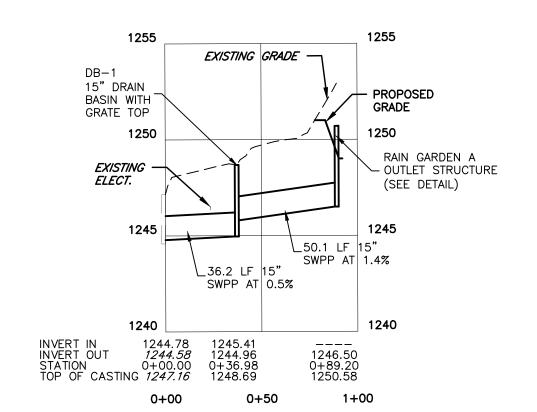
USED MEETS THE SPECIFIED CRITERIA IN THE DETAIL. 3. DO NOT EXCAVATE SOIL WITHIN THE DRIPLINE OF EXISTING TREES.

CONTRACTOR MUST PROVIDE SOIL TESTS (MINIMUM OF 2) ILLUSTRATING THAT THE SOIL TO BE

BE EXCAVATED TO THE 12" DEPTH AND AMENDED ACCORDING TO THE DETAIL.







STORM RUN 1

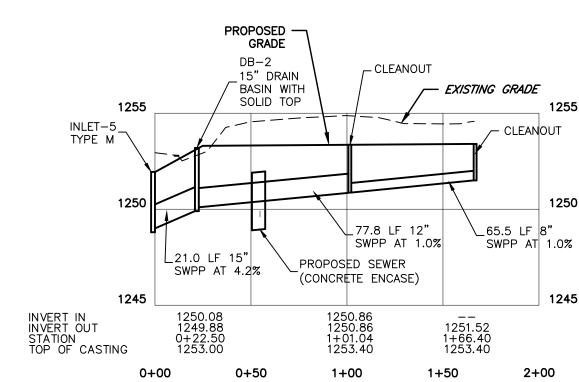
PROPOSED -

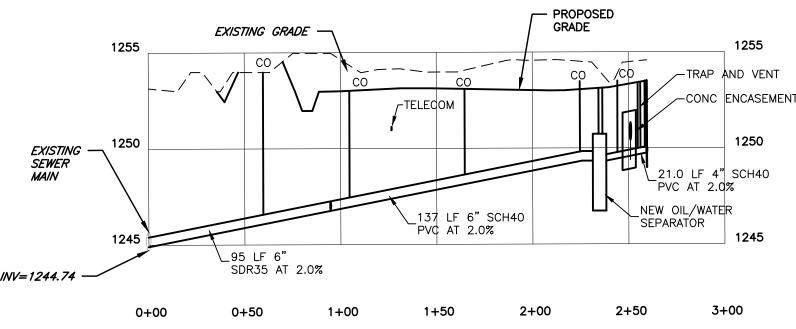
EXISTING — GRADE

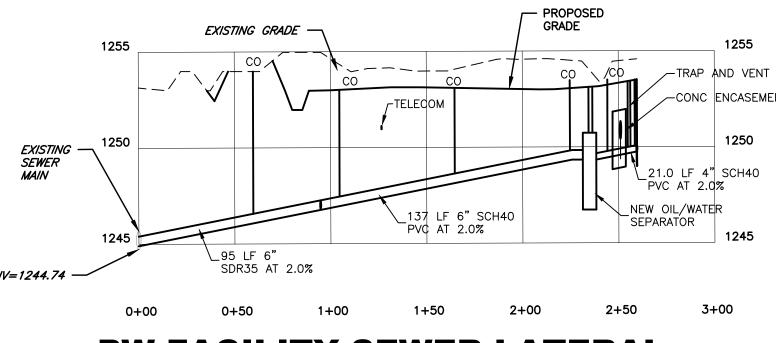
1254.00 --0+00.00

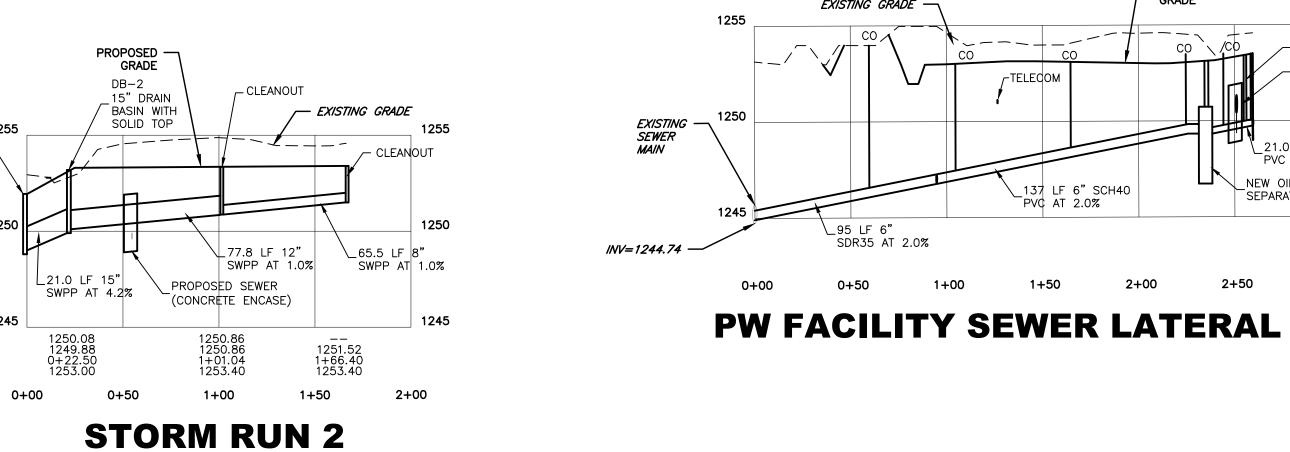
CULVERT 1

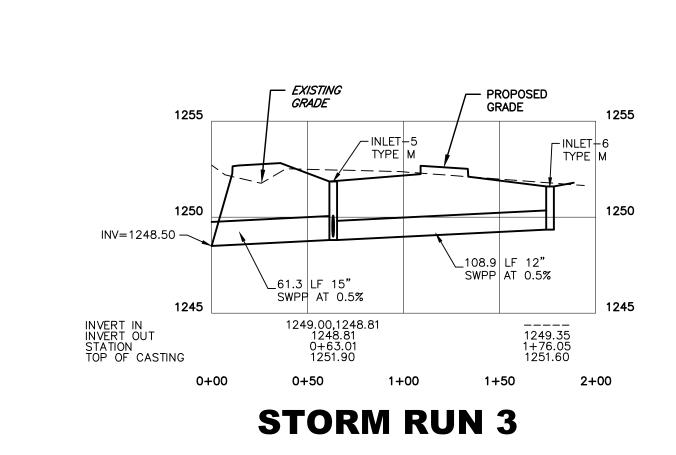
SWPP AT 0.5%



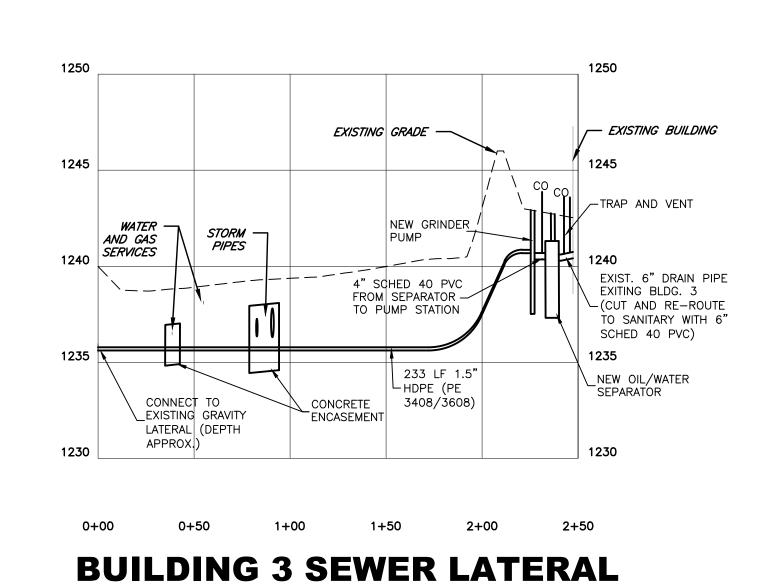


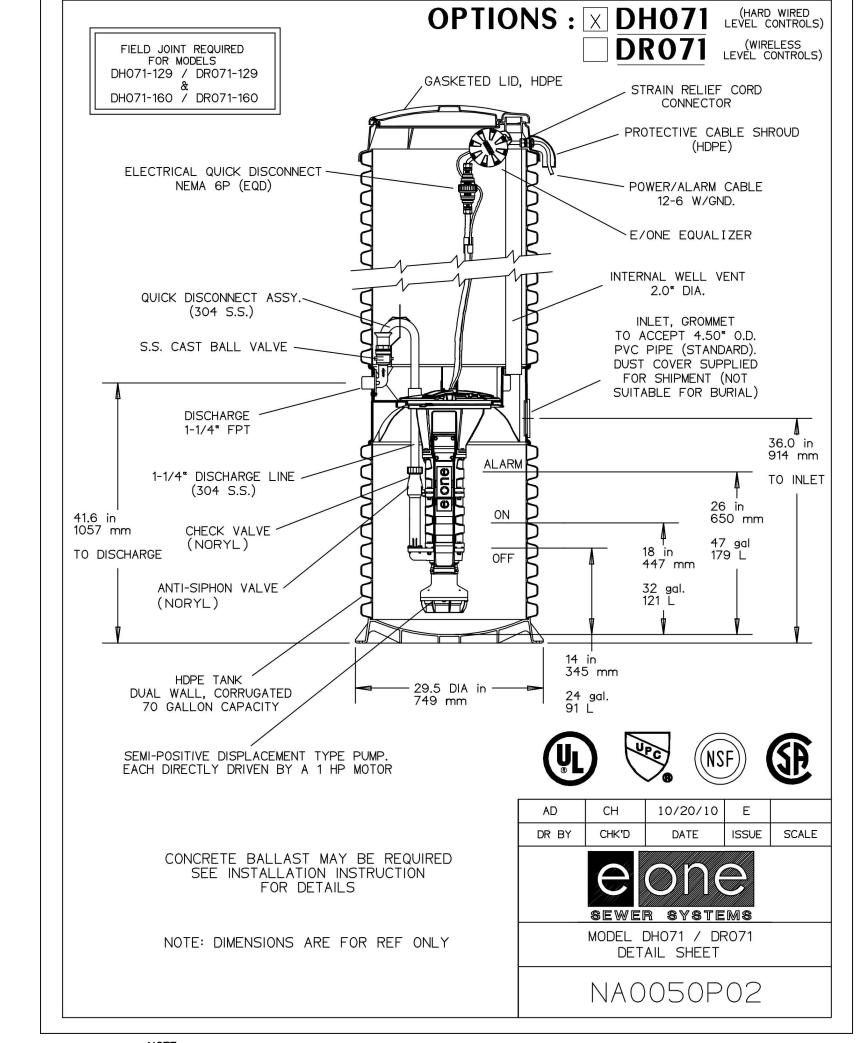






0' 50' HORIZONTAL



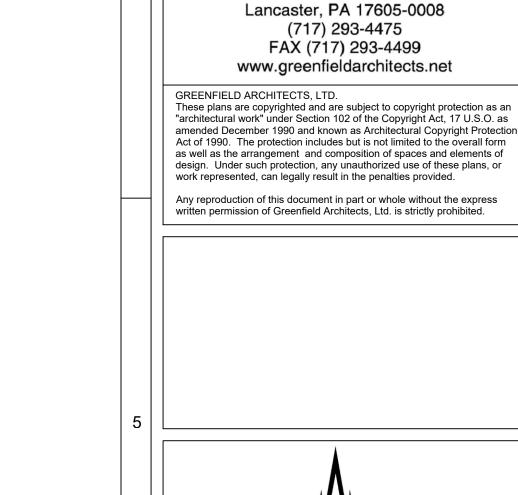


NOTE:

1. PRODUCT TO BE MODEL DH071 BY E-ONE SEWER SYSTEMS, WWW.EONE.COM, OR APPROVED EQUAL.

2. INSTALL PER MANUFACTURER INSTRUCTIONS.

3. CONTRACTOR TO PROVIDE LICENSED ELECTRICIAN TO SUPPLY ELECTRICAL SERVICE TO PUMP FROM 4. CONTRACTOR TO FOLLOW ALL APPLICABLE CODES. CONTRACTOR TO FOLLOW UAJA SPECIFICATIONS FOR LOW PRESSURE SEWER SYSTEMS (SECTION 33 31 00). uaja.com/collection/standard-specifications/ GRINDER PUMP



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GREENFIELD

ARCHITECTS

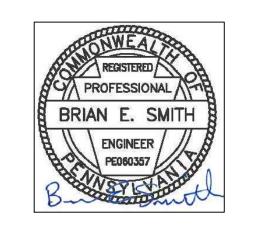
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	No.	No. Description	
	1	BUILDING PERMIT SUBMISSION	02-13-19
	3	LAND DEVELOPMENT COMMENTS	04-24-19
1			

FERGUSON PUBLIC **WORKS BUILDING**

FERGUSON TOWNSHIP

3137 RESEARCH DRIVE STATE COLLEGE, PA 16801

Project Number		3809-1
	Date	13 FEBRUARY 2019
	Drawn By	AJL
1	Checked By	BES

PROFILES

C-012

