

PCSM - GENERAL BMP NOTES

- 1. A SITE INSPECTION AND APPROVAL BY THE COUNTY CONSERVATION DISTRICT IS REQUIRED PRIOR TO THE REMOVAL OR CONVERSION OF SEDIMENT BASINS AND TRAPS.
2. BOHLER ENGINEERING SHALL BE NOTIFIED OF PRE-CONSTRUCTION MEETING DATE AND BMP CONSTRUCTION SCHEDULE.
3. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED BMP BOTTOMS.
4. REFER TO THE BMP CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT BMPs.
5. REFER TO THE PCSWM PLAN AND DETAILS FOR SPECIFIC BMP CONSTRUCTION GUIDELINES.
6. AS-BUILT PLANS OF THE STORMWATER BMPs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL ENGINEER.

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

- 1. UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPs AS SPECIFIED. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, RE-GRADING AND RESEEDING AND RENETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
2. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
3. SHOULD ON-SITE EROSION OCCUR FROM THE LANDSCAPED AREAS, THE SOURCE OF EROSION SHALL BE IMMEDIATELY STABILIZED AND THE INLETS AND STORMWATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.
4. HEAVY CONSTRUCTION VEHICLES SHALL NOT BE PARKED ON OR DRIVEN OVER BMP FACILITIES AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY EQUIPMENT, INCLUDING MOWERS.
5. INSPECT INFILTRATION FACILITIES AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS. INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, SIGNS OF WATER CONTAMINATION, SPLILLS, AND SIGNS OF EROSION.
6. REMOVE ACCUMULATED SEDIMENT FROM THE FACILITIES AS REQUIRED. RESTORE ORIGINAL CROSS-SECTION IF NECESSARY. PROPERLY DISPOSE OF SEDIMENT AS SPECIFIED. FOR ABOVE-GROUND INFILTRATION FACILITIES, REMOVE AND REPLACE SANDSTONE LAYER AS NECESSARY IF FACILITY DETERIORATES TO THE POINT OF FAILURE.
7. BETHLEHEM MUSIKFEEST ASSOCIATION IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT BMPs AS DESCRIBED THEREIN.

PCSWM BMP INSPECTION AND MAINTENANCE NOTES

UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY CONTRACTOR. ALL PERMANENT MAINTENANCE PROCEDURES SHALL BE PERFORMED BY THE DESIGNATED OWNER(S). MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

STORM DRAINAGE SYSTEMS - THE STORMWATER MANAGEMENT FACILITIES INCLUDING THE INLETS, STORMWATER PIPING, SWALES, AND DETENTION BASINS ON THIS SITE SHALL BE CONSTRUCTED AND PER THE RECOMMENDATION OF THE DESIGN PROFESSIONAL ENGINEER. THE DESIGN PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE FACILITIES. THE DESIGN PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE FACILITIES. THE DESIGN PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE FACILITIES. THE DESIGN PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE FACILITIES.

6.4.5 - RAIN GARDEN (RG-1) - BASINS SHALL BE INSPECTED FOR LITTER AND SEDIMENT ACCUMULATION AT LEAST FOUR (4) TIMES PER YEAR, AS WELL AS AFTER EVERY STORM GREATER THAN ONE (1) INCH. NEEDED MAINTENANCE SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. WHEN BASIN IS COMPLETELY DRY, THE LITTER AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. THE LITTER AND SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. BASINS SHOULD BE MOVED ONCE AFTER THE FIRST GROWING SEASON, EARLY IN THE SPRING, AND THEN BE MOVED NO MORE THAN ONCE EVERY THREE (3) YEARS THEREAFTER AS PER ERNMX-127. VEGETATED AREAS SHOULD BE INSPECTED ANNUALLY FOR EROSION. VEGETATED AREAS SHOULD BE INSPECTED ANNUALLY FOR UNWANTED GROWTH WITHIN TWO (2) HOURS. VEGETATION SHOULD BE MAINTAINED AT A MINIMUM OF 95 PERCENT. IF VEGETATIVE COVER HAS BEEN REDUCED BY 10%, VEGETATION SHOULD BE REESTABLISHED.

RIP RAP APRONS - RIPRAP APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY STORM EVENT GREATER THAN 1 INCH FOR EVIDENCE OF EROSION OR CHANNELIZATION. AREAS OF EROSION OR CHANNELIZATION SHALL BE REPAIRED AND STABILIZED IMMEDIATELY. ANY STONE FOUND TO BE DISPLACED SHALL BE REPLACED IN KIND. SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY. ALL SEDIMENT/DEBRIS/SOIL REMOVED FROM THE STORMWATER MANAGEMENT SYSTEM SHALL BE DISPOSED PER LOCAL, STATE, AND FEDERAL STANDARDS. SEDIMENT ONSITE EROSION FROM THE LANDSCAPED AREAS SHOULD BE IMMEDIATELY STABILIZED AND THE INLETS, MANHOLES, AND STORMWATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.

PCSM ENVIRONMENTAL DUE DILIGENCE NOTES

- 1. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DRESSED 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).
2. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE SHALL QUALIFY AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL." ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL."
3. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERS' 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 DEPARTMENT'S POLICY "MANAGEMENT OF FILL."
4. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.
5. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN SOIL STOCKPILES AND RECYCLED.
6. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR RECYCLED IN ACCORDANCE WITH DEPS SOLID WASTE REGULATIONS (25 PA. CODE 2801 ET SEQ. 271.1 ET SEQ. AND 271.1 ET SEQ. AND ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

RAIN GARDEN CONSTRUCTION SEQUENCE

- 1. INSTALL TEMPORARY SEDIMENT CONTROL BMPs AS SHOWN ON THE PLANS.
2. COMPLETE SITE GRADING, IF APPLICABLE. CONSTRUCT CURB CUTS OR OTHER INFLOW ENTRANCE BUT PROVIDE PROTECTION SO THAT DRAINAGE IS PROHIBITED FROM ENTERING CONSTRUCTION AREA.
3. STABILIZE GRADING WITHIN THE LIMIT OF DISTURBANCE EXCEPT WITHIN THE RAIN GARDEN AREA. RAIN GARDEN BED AREAS MAY BE USED AS TEMPORARY SEDIMENT TRAPS PROVIDED THAT THE PROPOSED FINISH ELEVATION OF THE BED IS 12 INCHES LOWER THAN THE BOTTOM ELEVATION OF THE SEDIMENT TRAP.
4. EXCAVATE RAIN GARDEN TO PROPOSED INVERT DEPTH AND SCARP THE EXISTING SOIL SURFACES. DO NOT COMPACT IN-SITU SOILS. BACKFILL RAIN GARDEN WITH AMENDED SOIL AS SHOWN ON PLANS AND SPECIFICATIONS. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY.
5. PREPARE THE FINISHING SOIL PRIOR TO PLANTING VEGETATION TO LEAD IN SETTLEMENT.
6. COMPLETE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS, LEAVING SPACE FOR UPPER LAYER OF COMPOST, MULCH OR TOPSOIL AS SPECIFIED ON PLANS.
7. PLANT VEGETATION ACCORDING TO PLANTING PLAN.
8. MULCH AND INSTALL EROSION PROTECTION AT SURFACE FLOW ENTRANCES WHERE NECESSARY.

RIPARIAN FOREST BUFFER MANAGEMENT PLAN

- 1. REGARDING EXISTING OR PROPOSED RIPARIAN FOREST BUFFERS, NOTE THE FOLLOWING:
- THERE ARE NO EXISTING/PROPOSED RIPARIAN FOREST BUFFERS LOCATED WITHIN OR OUTSIDE THE LIMITS OF DISTURBANCE FOR THIS PROJECT.

RECYCLING OR DISPOSAL OF MATERIALS

- 1. THE FOLLOWING IS A LIST THAT INCLUDES, BUT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON-SITE:
- TRASH (CANS, BOTTLES, ETC.)
- YARD WASTE (LEAVES, GRASS CLIPPINGS, ETC.)
- ANTI-CHING MATERIALS
- DEBRIS COLLECTED IN INLETS
- SEDIMENT CAPTURED IN ANY PCSM BMP
2. SOLID WASTE DISPOSAL - NO SOLID MATERIALS ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS, MUST BE COLLECTED AND PLACED IN CONTAINERS. THE CONTAINERS WILL BE EMPTIED AS NECESSARY BY A CONTRACT TRASH DISPOSAL SERVICE AND Hauled AWAY FROM THE SITE.
3. COMPOSTING - MATERIALS SUCH AS YARD WASTE THAT ARE BIO-DEGRADABLE CAN BE COMPOSTED AND USED ON SITE TO RESTORE SOIL NUTRIENTS FOR THE VEGETATION.

PROOF OF RECORDING

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF NORTHAMPTON COUNTY, PENNSYLVANIA ON _____, 20____, IN MAP BOOK VOLUME _____, PAGE _____, NORTHAMPTON COUNTY RECORDER OF DEEDS

LIST OF CRITICAL STAGES

- 1. A SITE INSPECTION AND APPROVAL BY THE COUNTY CONSERVATION DISTRICT IS REQUIRED PRIOR TO THE REMOVAL OR CONVERSION OF SEDIMENT BASINS AND TRAPS.
2. BOHLER ENGINEERING SHALL BE NOTIFIED OF PRE-CONSTRUCTION MEETING DATE AND BMP CONSTRUCTION SCHEDULE.
3. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED BMP BOTTOMS.
4. REFER TO THE BMP CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT BMPs.
5. REFER TO THE PCSWM PLAN AND DETAILS FOR SPECIFIC BMP CONSTRUCTION GUIDELINES.
6. AS-BUILT PLANS OF THE STORMWATER BMPs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL ENGINEER.

POTENTIAL THERMAL IMPACTS TO SURFACE WATERS

A POTENTIAL FOR THERMAL IMPACTS EXISTS IN INSTANCES WHERE SURFACE RUNOFF IS DIRECTLY CONVEYED TO A RECEIVING STREAM WITHOUT ADEQUATE ATTENUATION OR COOLING. THE SHADING EFFECTS OF THE PROPOSED AND EXISTING LANDSCAPING IN SERIES WITH THE PROPOSED AND EXISTING STORMWATER AND SEDIMENT CONTROL SYSTEMS WILL PROVIDE THERMAL WATER QUALITY BENEFITS BY ALLOWING THE STORMWATER TO DECREASE IN TEMPERATURE PRIOR TO ENTERING THE DOWNSTREAM WATERSHED. ADDITIONAL THERMAL WATER QUALITY BENEFITS ARE ACHIEVED THROUGH THE IMPLEMENTATION OF ONE (1) ABOVE-GROUND INFILTRATION FACILITY AND SUBSTANTIAL AMOUNTS OF VEGETATION AROUND EACH OF THE BMPs. ALL OF THOSE MEASURES WILL HELP TO CONTROL RUNOFF VOLUME AND RATE AND THEREBY PROVIDE ADDITIONAL COOLING TIME, THEREBY MINIMIZING THERMAL IMPACTS TO THE RECEIVING STREAM.

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

THE SUBJECT SITE DRAINS TO THE LEHIGH RIVER, WHICH HAS A 'W' MF (WARM WATER FISHES, MIGRATORY FISHES) CHAPTER 93 CLASSIFICATION.

SEQUENCE OF BMP INSTALLATION AND REMOVAL

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS (IMMEDIATELY FOR HOVEY WATERSHEDS), OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY EROSION CONTROL MEASURES.
AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE NORTHAMPTON COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1176 FOR BURIED UTILITIES LOCATION.

BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EROSION CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE NORTHAMPTON COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

- 1. DELINEATE LIMIT OF DISTURBANCE
2. INSTALL PERIMETER COMPOST FILTER SOCKS #14, 12-15, CONSTRUCTION FENCING, AND INLET PROTECTION AT ALL PERIMETER EXISTING INLETS WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
3. INSTALL TEMPORARY BARRICADES #1 AND #2
4. INSTALL CONSTRUCTION ENTRANCE WITH WASH RACK AS DESIGNATED ON THE PLANS.
5. ESTABLISH SOIL STOCKPILES AND CONCRETE WASHOUT
6. DEMO EXISTING BUILDING AND BEGIN ROUGH GRADING
7. INSTALL PERIMETER COMPOST FILTER SOCKS #8-11 AND ADJUST CFS #14 AND 12-15 AS NECESSARY UPON FINALIZED GRADING
8. INSTALL STORM SEWER PIPE RUN A-14X2 FROM DOWNSTREAM TO UPSTREAM
9. INSTALL RAIN GARDEN RG-1. THIS STAGE IS A CRITICAL STAGE AND A LICENSE PROFESSIONAL SHALL BE ON SITE TO OVERSEE THE INSTALLATION OF THE RAIN GARDEN, INCLUDING PREPARATION OF SUBGRADE AND INSTALLATION OF OUTLET CONTROL STRUCTURE (A11) AND ASSOCIATED INLET PROTECTION.
10. INSTALL CURBING SHOWN IN THIS PHASE AND INSTALL STONE BASE COURSE IN THE DRIVEWAY AND PARKING AREAS.
11. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
12. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
13. INSTALL PLANTING SOIL AND RAIN GARDEN (RG-1) PLANTINGS. REMOVE ANY ACCUMULATED SEDIMENT. THIS STAGE IS A CRITICAL STAGE AND A LICENSE PROFESSIONAL SHALL BE ON SITE TO OVERSEE THE INSTALLATION OF THE PLANTING SOIL AND THIS STAGING.
14. UPON SITE STABILIZATION AND NOTIFICATION OF THE NORTHAMPTON COUNTY CONSERVATION DISTRICT, REMOVE EROSION AND SEDIMENT CONTROL FACILITIES. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
15. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 2801 ET SEQ. 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
16. DEMOLISH
17. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE NORTHAMPTON COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

LIMITATIONS FOR PENNSYLVANIA SOILS PERTAINING TO EARTH DISTURBANCE PROJECTS

Table with columns: SOIL NAME, CUTRANS, CLAY, CORROSIVE TO CONCRETE, DRAINAGE, EASYLY ERODIBLE, FLOODING, GROUNDWATER, HYDRAIC INCLUSIONS, LOW STRENGTH, LONG PERMEABILITY, SLOW PERCOLATION, PIPING, POOR SOIL STRUCTURE, FROST ACTION, SHRINK-SWELLING, POTENTIAL SINKHOLE, PONDING, WETNESS.

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS

- CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER TO DETERMINE SOIL LIMITATIONS AND RESOLUTIONS SPECIFIC TO THIS PROJECT.
1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL, RESTRICT OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION. ACIDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH.
RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY, SUITED AS TOPSOIL.
2. ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION.
RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROP/LAND PUBLISHED BY PENN STATE.
3. LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS NITROGEN, PHOSPHORUS, POTASSIUM, SULFUR, MAGNESIUM, CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY.
RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTIVE VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROP/LAND PUBLISHED BY PENN STATE.
4. ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10, LIMIT VEGETATIVE STABILIZATION OF CHANNELS.
RESOLUTIONS: TEMPORARY CHANNEL LININGS, PROVIDING PERMANENT CHANNEL LININGS, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR METHODS. VEGETATIVE RETARDANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.
5. WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS, HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.
RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROP/LAND PUBLISHED BY PENN STATE.
6. DRY SOIL TYPES LACK SUFFICIENT ROOT ZONE SOIL MOISTURES. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.
RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROP/LAND PUBLISHED BY PENN STATE.
7. SOIL TYPES SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNEL/CHAMBER FORMATION POSE LIMITATIONS ON LOCATING RESERVOIR AREAS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS, AND STORMWATER DETENTION BASINS.
RESOLUTIONS: LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LINING RESERVOIR AREAS WITH IMPERMEABLE LININGS, LIMITING STANDING WATER DEPTHS, LIMITING RETENTION TIMES AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
8. SOIL TYPES THAT EXHIBIT INSTABILITY IN POND EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEPING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.
RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
9. SOIL THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WINTER GRADING, OR SUSCEPTIBLE TO FROST ACTION POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.
RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
10. SUSCEPTIBILITY FOR THE DEVELOPMENT OF SINKHOLE WITHIN IDENTIFIED SOILS.
RESOLUTIONS: IN THE EVENT THAT PRESENCE OF A SINKHOLE IS DETECTED DURING THE COURSE OF WORK, CORRECTIVE MEASURES SHALL BE PERFORMED UNDER THE OBSERVATION AND GUIDANCE OF THE OWNERS' GEOTECHNICAL CONSULTANT. EXCAVATE THE LOOSE, WET SOILS SURROUNDING THE SINKHOLE TO EXPOSE THE SINKHOLE "THROAT" (THE OPENING IN THE ROCK) AND THE ADJACENT STABLE SOILS/ROCK WHERE POSSIBLE. THE EXCAVATION SHALL EXTEND A MINIMUM OF TWO FEET (2') BEYOND THE STABLE SOILS OR TO THE ROCK SURFACE, WHICHEVER IS ENCOUNTERED FIRST. FILL THE EXPOSED SINKHOLE "THROAT" WITH LEAN CONCRETE TO BLOCK THE MIGRATION OF THE UPPER LAYERS OF SOIL THROUGH THE ROCK OPENING. AFTER CONCRETE HAS CURED OVERNIGHT BACKFILL THE REMAINDER OF THE EXCAVATION WITH CLAYEY SOILS TO PROVIDE A LOW PERMEABILITY BARRIER. THE CLAYEY SOILS SHALL BE PLACED IN 8" LIFTS AND EACH LIFT COMPACTED BY REPEATED PASSES OF THE COMPACTION EQUIPMENT UNTIL STABLE. CARE SHALL BE TAKEN TO ASSURE THAT THE SOIL AT THE EDGES OF THE EXCAVATION ARE WELL COMPACTED.

ERNST SEED CO. RETENTION BASIN WILDLIFE SEED MIX SPECIFICATIONS (ERNMX-127):

Table with columns: PLANT/SEED NAME, PERCENTAGE. Includes: PANICUM CLANDESTINUM, CAREX VILPINOEA, ELYMUS VIRGINICUS, CAREX LURIDA, CAREX SCOPARIA, VERBENA HASTATA, JOBT BUSH, AGROSTIS PERENANS, ASCLEPIAS INCARNATA, SCORPUS CYPERIUS, HELENIUM AUTUMNALE, ASTER NOVAE-ANGLIAE, ASTER PUNICEUS, ASTER UMBELLATA, EUPATORIUM PERCOLATUM, LOBELIA SPHELIATICA, DEERTONGUE, FOX SEED, VIRGINIA WILD RYE, LURID SEED, BILINT BROOM SEDGE, BLUE VERNAIN, JOBT BUSH, AUTUM BENTGRASS, SWAMP MILKWEED, WOOD GRASS, COMMON SNEEZEWEED, NEW ENGLAND ASTER, PUPURSTEM ASTER, FLAT TOPPED WHITE ASTER, BONESSET, GREAT BLUE LOBELIA.

SEEDING RATE: 20 LBS PER ACRE OF THE ERNST MIX
NURSE CROP: THE ERNST SEED MIX MUST BE ACCOMPANIED BY ONE OF THE FOLLOWING TEMPORARY SEED SPECIFICATIONS APPROPRIATE FOR THE TIME OF YEAR:
- ANNUAL RYE (10 LBS PER ACRE)
- OR SPRING OATS (84 LBS PER ACRE)
- OR WINTER RYE (56 LBS PER ACRE)

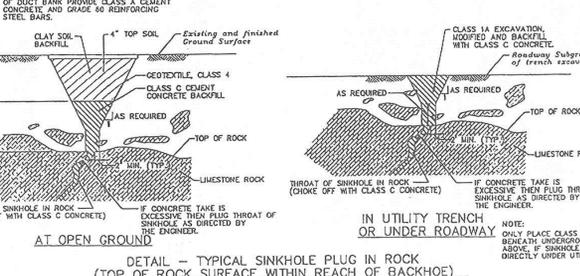
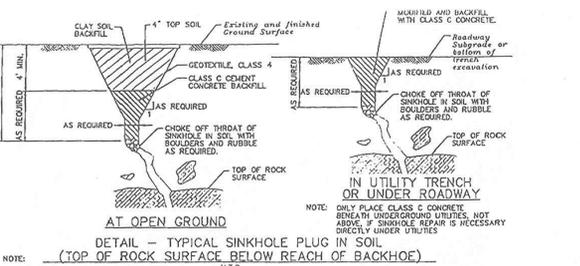
- NOTES:
1) THE FORMULATION NOTED ABOVE IS REPRESENTATIVE OF THE ERNST SEED SPECIFICATION. THE MOST CURRENT FORMULATION AS SPECIFIED BY THE ERNST COMPANY AT THE TIME OF PLANTING SHALL BE USED.
2) SEED SHOULD BE APPLIED USING DRILL SEEDING OR BROADCAST SEEDING METHODS ONLY. THE CONTRACTOR MUST ENSURE DIRECT SEED-TO-SOIL CONTACT. HYDROSEEDING IS NOT PERMITTED WITH THIS SEED MIX. IT WILL PROHIBIT GERMINATION.
3) THE ENTIRE FACILITY SHALL BE STABILIZED WITH A NORTH AMERICAN GREEN SC150 STRAW & COCOON BLANKET (OR APPROVED EQUAL). THE BLANKET SHOULD BE INSTALLED ON TOP OF THE SEED IN ACCORDANCE WITH THE MANUFACTURER SPECIFICATIONS.
4) THE SEED MIX WILL NEED DAILY SUPPLEMENTAL WATERING UNTIL IT HAS GERMINATED AND REACHED AN AVERAGE HEIGHT OF AT 12"±.
5) THE SEEDING AREA SHALL BE MOVED ONCE AFTER THE FIRST GROWING SEASON, EARLY IN THE SPRING, AND THEN BE MOVED NO MORE THAN ONCE EVERY THREE YEARS THEREAFTER EARLY IN SPRING ONLY.

PERMIT TERMINATION

- (a) UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER §102.22(a)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPs IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§102.4 AND 102.8 RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS, AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.
(b) THE NOTICE OF TERMINATION MUST INCLUDE: THE FACILITY NAME, ADDRESS AND LOCATION.
(1) THE OPERATOR NAME AND ADDRESS.
(2) THE PERMIT NUMBER.
(1) THE REASON FOR PERMIT TERMINATION.
(2) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs IN ACCORDANCE WITH § 102.8(M) AND PROOF OF COMPLIANCE WITH § 102.8(M)(2).
(c) WHEN THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL PCSM BMPs IN ACCORDANCE WITH THE PERMITTER'S SPECIFICATIONS FOR LOCATIONS OCCURRING ON THE PROJECT SITE. THE DEPARTMENT OR CONSERVATION DISTRICT WILL CONDUCT A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION WITHIN 30 DAYS.

PREVENTIVE MEASURES AGAINST INDUCING SINKHOLES (GEOLOGIC FORMATIONS RESOLUTION)

- THE FOLLOWING GENERAL CONSTRUCTION CONSIDERATIONS ARE PROVIDED TO MINIMIZE THE POTENTIAL FOR DEVELOPMENT OF SINKHOLES AT THE SITE BOTH DURING AND FOLLOWING CONSTRUCTION.
- SURFACE WATER SHOULD NOT BE ALLOWED TO COLLECT OR POOL IN LOW LYING AREAS OF THE SITE AND SHOULD BE DIRECTED TO APPROPRIATE STORMWATER CHANNELS. EXPEDITIOUS BACKFILLING OR GRADING OF LOW LYING AREAS WILL ALSO HELP MINIMIZE THE POTENTIAL FOR THE DEVELOPMENT OF SINKHOLES.
- THE BASES OF FOUNDATION EXCAVATIONS SHOULD BE REVIEWED FOR UNUSUALLY SOFT OR WET SOIL CONDITIONS. ANY UNSTABLE AREAS ENCOUNTERED SHOULD BE FURTHER EXCAVATED AND REVIEWED BY KLEINFELDER TO DETERMINE THE EXTENT OF ANY SOLUTION ACTIVITY SO THAT REMEDIAL MEASURES CAN BE DESIGNED AND IMPLEMENTED.
- THE EXTENT OF EXCAVATIONS SHOULD BE KEPT TO A MINIMUM AND THE INFILX OF SURFACE WATER INTO EXCAVATIONS SHOULD BE MINIMIZED.
- POSITIVE DRAINAGE AWAY FROM THE PROPOSED STRUCTURES SHOULD ALWAYS BE MAINTAINED. ROOF DRAINS SHOULD ALSO BE DIRECTED AWAY FROM THE STRUCTURES AND INTO DESIGNATED, STORM SEWER CONNECTIONS.
- STORM SEWER CONVEYANCE LINES SHOULD BE CONSTRUCTED WITH WATERTIGHT JOINTS.
- UNPAVED AREAS, SWALES, AND/OR SURFACE/SUBSURFACE STORMWATER MANAGEMENT FACILITIES SHOULD BE AVOIDED IMMEDIATELY ADJACENT TO FOUNDATION AREAS.
- EXTERIOR BACKFILL AROUND FOUNDATIONS SHOULD CONSIST OF FINE-GRAINED, ON-SITE SOILS, (I.E. CLAY) TO LIMIT STORMWATER INFILTRATION IN FOUNDATION AREAS.



PLANTING SOIL SPECIFICATIONS FOR INFILTRATION, BIOFILTRATION AND M.R.C. FACILITIES

FOR MOST BIO-RETENTION, BIO-FILTRATION AND BIO-FILTRATION FACILITIES, PLANTING SOIL SHALL BE A MANUFACTURED SOIL COMPRISED OF A CLEAN TOPSOIL, SUPPLEMENTED WITH ORGANIC MATERIAL AND COURSE SAND. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A PLANTING SOIL THAT MEETS THE "TARGET TEST RESULTS OF COMPLETED PLANTING SOIL" INCLUDING THE USE OF COMPOST THAT ALSO MEETS THE INDEPENDENT REQUIREMENTS NOTED HEREIN. THE CONTRACTOR SHALL PROVIDE ALL SUBMITTALS OUTLINED BELOW TO THE PROJECT ENGINEER PRIOR TO INSTALLATION.

TARGET TEST RESULTS OF COMPLETED PLANTING SOIL: THE COMPLETED PLANTING SOIL SHALL MEET, AT A MINIMUM, THE FOLLOWING SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO SUPPLEMENT THE ABOVE TARGET TEST BLEND AS NECESSARY TO ACHIEVE THIS GOAL:
- SAND: 60-80% BY WEIGHT
- SILT: 25% MAXIMUM BY WEIGHT
- CLAY: 10% MAXIMUM BY WEIGHT
- ORGANIC MATTER: 5-7% (DRY WEIGHT BASIS)
- CATIONIC CONDUCTIVITY (ASTM F1181) AT 75% PROCTOR (ASTM D6998): 2-6 mH/cm
- SOLUBLE SALT CONTENT (ELECTRICAL CONDUCTIVITY 1 SOIL : 2 WATER) MAXIMUM 3 mmhos/cm

TARGET TEST RESULTS OF COMPOST USED IN COMPLETED SOIL: COMPOST USED IN THE COMPLETED SOIL MUST BE SOURCED FROM A FACILITY PARTICIPATING IN THE US COMPOSTING COUNCIL'S (USCC) SECAL SEAF TESTING ASSURANCE (STA) PROGRAM. COMPOST MUST COMPLY WITH THE FOLLOWING:
- PH: 6.0-8.0
- SOLUBLE SALT CONTENT (ELECTRICAL CONDUCTIVITY 1 SOIL : 2 WATER) MAXIMUM 5 MMH/CM, EXCEPT FOR RE-PROCESSED MUSHROOM COMPOST WHICH SHALL BE PERMITTED TO A MAXIMUM OF 10 MMH/CM
- MOISTURE CONTENT: 30-60% (DRY WEIGHT BASIS)
- PARTICLE SIZE: 98% PASSES THROUGH 1" SCREEN
- MATURITY (BIOMASS): SEED EMERGENCE AND SEEDING VIGOR, PERCENT RELATIVE TO POSITIVE CONTROL, SHALL BOTH BE A MINIMUM OF 80%
- PHYSICAL CONTAMINANTS (WETS): <0.5% (DRY WEIGHT BASIS)
- CHEMICAL CONTAMINANTS: MEETS OR EXCEEDS US EPA CLASS A STANDARD, 40 CFR §503.13, TABLE 3
- BIOLOGICAL CONTAMINANTS: FEED COLIFORM BACTERIA OR SALMONELLA, MEETS OR EXCEEDS US EPA CLASS A STANDARD, 40 CFR §503.2(A)

SUBMITTALS: LAB TESTS MUST BE DATED WITHIN 6 MONTHS PRIOR TO DELIVERY TO THE WORK SITE. SUBMITTALS SHALL BE PROVIDED 3 MONTHS PRIOR TO INSTALLATION TO PREVENT DELAYS IN CONSTRUCTION. IN SUMMARY, THE CONTRACTOR MUST PROVIDE A SUBMITTAL PACKAGE CONTAINING THE FOLLOWING AS A MINIMUM:
- 10 ON-SITE SOILS ARE TO BE USED IN THE FINISHED BLEND.
- 1 REPRESENTATIVE SAMPLE SHALL BE COLLECTED FROM BORROW SOILS AND SHALL BE TESTED FOR SUITABILITY AS A TOPSOIL BASE PRIOR TO USING IN THE COMPLETED BLEND. TEST RESULTS SHOULD BE IN COMPLIANCE WITH PENNSYLVANIA EPA'S CLEAN FILL REQUIREMENTS AND THAT THE TEXTURE IS A LOAM, SANDY LOAM OR CLAY LOAM TOPSOIL.
- 2 A MOCK-UP BLEND SAMPLE MUST BE CREATED USING THE TESTED ON-SITE SOILS FOR THE PURPOSE OF TESTING AND CONFIRMATION OF FEASIBILITY TO MEET THE COMPLETED PLANTING SOIL REQUIREMENTS NOTED ABOVE. THE MOCK-UP MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO FINAL BLENDING AND INSTALLATION.
- 3 SOIL TEST RESULTS OF THE COMPLETED SOIL BY AN INDEPENDENT SOIL TESTING LABORATORY MEETING OR EXCEEDING SPECIFICATIONS NOTED HEREIN (SEE SPECIFICATIONS OUTLINED IN "TEST RESULTS OF FINISHED PLANTING SOIL" ABOVE)
- 4 COMPOST TEST RESULTS PREPARED BY AN INDEPENDENT SOIL TESTING LABORATORY MEETING OR EXCEEDING SPECIFICATIONS NOTED HEREIN
- 5 A USCC STA CERTIFICATE SHALL BE PROVIDED FOR THE COMPOST SUPPLIER.

PROTECTION AND INSTALLATION: WHERE FEASIBLE, IT IS PREFERABLE THAT THE PLANTING SOIL IS INSTALLED USING EQUIPMENT THAT CAN PLACE THE MATERIAL WITHOUT ENTERING THE LIMITS OF THE BMP FACILITY. HOWEVER, IF IT IS NECESSARY TO ENTER THE FACILITY, ALL EQUIPMENT UTILIZED TO INSTALL OR GRADE SOILS SHALL BE WIDE-TRACK OR BALLOON TIRES RATED WITH AN AVERAGE GROUND PRESSURE LESS THAN 10 psi. THE SUBSOIL SHALL BE SCARIFIED 3-4" IN DEPTH PRIOR TO PLACEMENT OF PLANTING SOIL. SOIL SHALL BE INSTALLED IN 4" LIFTS AND COMPACTED TO 90-95% PROCTOR (ASTM D1557) WITH AN EXCEPTION, SOIL SHOULD NOT BE COMPACTED HIGHER THAN 75% PROCTOR (250 psi). ONCE THE SOILS HAVE BEEN FULLY PLACED, THE ENTIRE AREA SHALL BE MARKED AND OFF-LIMITS TO MACHINERY.

GUIDANCE FOR BLENDING OF PLANTING SOIL: A PRE-BLENDED IMPORT SOIL IS PREFERRED. HOWEVER, THE CONTRACTOR MAY USE AVAILABLE ON-SITE SOILS IN THE MIX PROVIDED THAT THEY ARE TESTED AND MEET THE PENNSYLVANIA EPA'S CLEAN FILL REQUIREMENTS, AND THAT THE PHYSICAL TEST RESULTS CLASSIFY THE SOIL AS A LOAM, SANDY LOAM OR CLAY LOAM. THE FOLLOWING IS LISTED UNDER THE SECTION TITLED "TEST RESULTS OF FINISHED PLANTING SOIL" ABOVE:
- 20-35% TOPSOIL BASE (LOAM, SANDY LOAM OR CLAY LOAM) BY VOLUME
- 30-70% COURSE SAND (ASTM C-33 CONCRETE SAND) BY VOLUME
- 20-30% COMPOST (USCC STA CERTIFIED) BY VOLUME (NO MORE THAN 30% BY VOLUME)

BEFORE TESTING AND AMENDING TO ACHIEVE THE TARGET TEST RESULTS OF THE FINISHED PLANTING SOIL, THIS SOIL SHOULD BE SCREENED AND BLENDED THOROUGHLY. NOTE THAT THESE ARE BY-VOLUME MEASUREMENTS TO ASSIST WITH IN-FIELD BLENDING, WHEREAS THE TARGET TEST RESULTS ARE GENERALLY BY WEIGHT MEASUREMENTS.

A PRE-BLENDED IMPORT SOIL IS PREFERRED. HOWEVER, THE CONTRACTOR MAY USE AVAILABLE ON-SITE SOILS IN THE MIX PROVIDED THAT THEY ARE TESTED AND MEET THE PENNSYLVANIA EPA'S CLEAN FILL REQUIREMENTS, AND THAT THE PHYSICAL TEST RESULTS CLASSIFY THE SOIL AS A LOAM, SANDY LOAM OR CLAY LOAM.



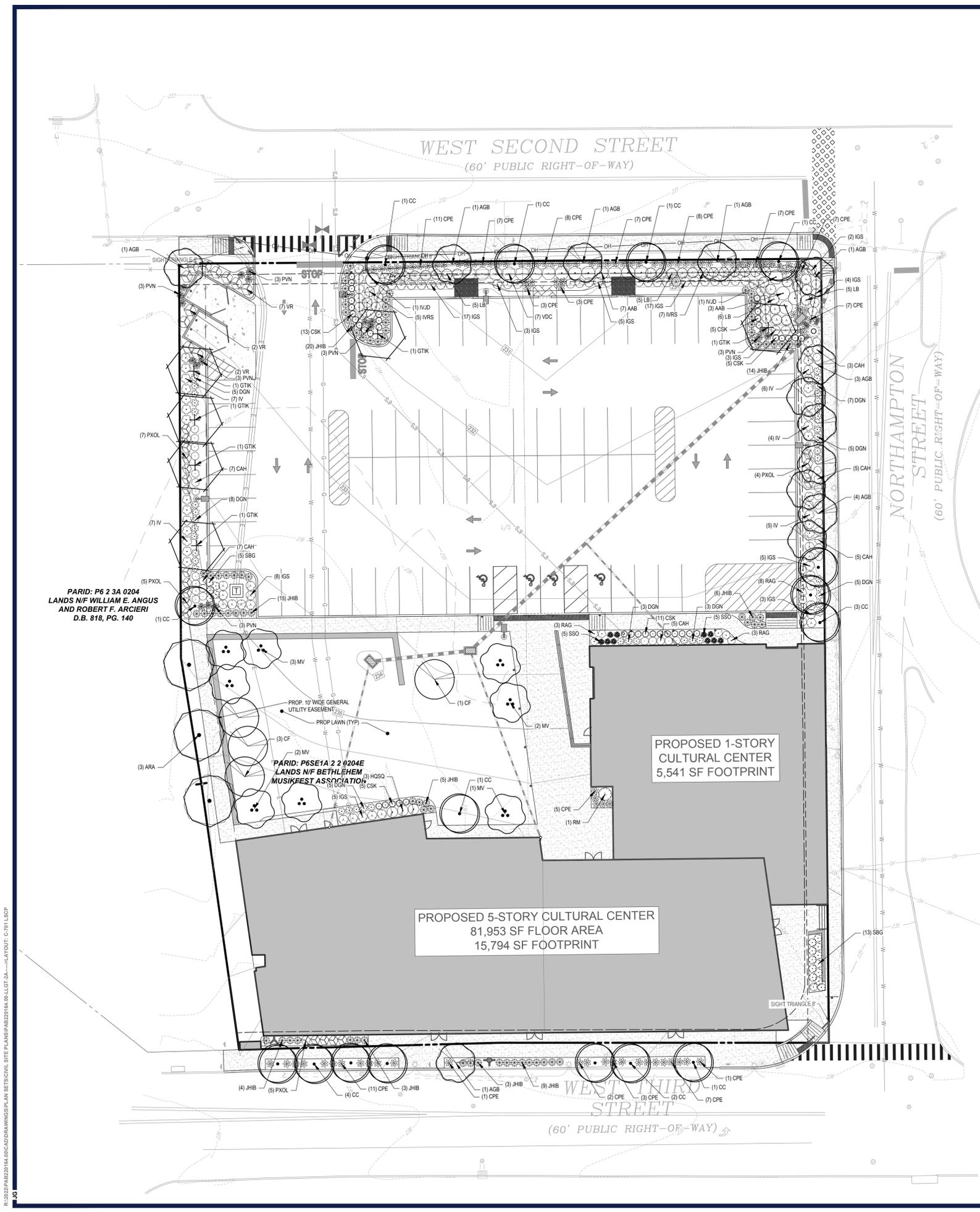
REVISIONS

Table with columns: REV, DATE, COMMENT, DRAWN BY. Row 1: 1, 04/14/2023, REV PER NPDES, TCK, JDK.



NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT



PLANT SCHEDULE					
CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
ARA	3	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	2.5' CAL	B&B
GTK	6	GLEDITSIA TRICANTHOS INERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEY LOCUST	2.5' CAL	B&B
ORNAMENTAL TREES					
QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
AGB	13	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2.5' CAL	B&B
CC	16	CERCIS CANADENSIS	EASTERN REDBUD	2.5' CAL	B&B
CF	4	CORNUS FLORIDA	EASTERN DOGWOOD	2.5' CAL	B&B
MF	8	MAGNOLIA VIRGINIANA	SWEET BAY	10' HT.	B&B
SHRUBS					
QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
AAB	10	ARONIA ARBUTIFOLIA 'BRILLANTISSIMA'	BRIGHT RED CHOKEBERRY	3-4'	B&B
CAH	32	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET (DWARF)	24-30"	CONTAINER
CSK	39	CORNUS SERICEA 'VEL SEY'	HELSEY DOGWOOD	15-18"	CONTAINER
DGN	41	DEUTZEA GRACILIS 'NIKKO'	SLENDER DEUTZIA	18-24"	CONTAINER
HOSQ	3	HYDRANGEA QUERCIFOLIA 'SNOW QUEEN'	SNOW QUEEN OAKLEAF HYDRANGEA	24-30"	CONTAINER
IGS	72	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	30-42"	CONTAINER
IV	29	ITEA VIRGINICA 'HENRY'S GARNET'	HENRY'S GARNET SHEETSPIRE	30-42"	CONTAINER
IVD	2	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	30-36"	CONTAINER
IVRS	12	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	18-24"	CONTAINER
JHB	79	JUNIPERUS HORIZONTALIS 'MONBER'	ICEE BLUE JUNIPER	15-18" SPDR	CONTAINER
LB	21	LINDERA BENZON	SPICEBUSH	30-36"	CONTAINER
PXOL	21	PRUNUS LAUROCERASUS 'OTTO LUYKEN'	OTTO LUYKEN CHERRY LAUREL	30-42"	CONTAINER
RAC	14	RHUS AROMATICA 'GRO LOW'	GRO LOW FRAGRANT SUMAC	15-18"	CONTAINER
RM	1	RHOODODENDRON MAXIMUM	ROSE BAY RHOODODENDRON	4-5'	B&B
SB	18	SPIRAEA X BUMALDA 'GOLDFLAME'	GOLDFLAME SPIREA	15-18"	CONTAINER
VDC	7	VIURNUM DENTATUM 'CHRISTOM'	BLUE MUFFIN VIURNUM	3-4'	B&B
VR	11	VIURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIURNUM	3-4'	B&B
GRASSES					
QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
CPE	96	CAREX PENNSYLVANICA	PENNSYLVANIA SEDGE	1 GAL	CONTAINER
PNV	18	PANICUM VIRGATUM 'NORTH WIND'	NORTHWIND SWITCH GRASS	1 GAL	CONTAINER
SSO	10	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	STANDING OVATION LITTLE BLUESTEM GRASS	1 GAL	CONTAINER

COMPLIANCE CHART			
SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
1349.08 PLANTING	(6) ALL OPEN SPACE, PARKING, AND LOADING AREAS SHALL BE LANDSCAPED WITH TREES, SHRUBS, AND/OR FLOWER BEDS WHICH WILL RECEIVE THE FOLLOWING CREDITS TOWARDS LANDSCAPE AREA REQUIREMENTS: LARGE TREES: FOR EXAMPLE RED OAK (QUERCUS BOREALIS), TULIP POPLAR (LIRIODENDRON TULIPIFERA), AND GREEN ASH (FRAXINUS LANCEOLATE) - TWO HUNDRED (200) SQUARE FEET CREDIT. MEDIUM TREES: FOR EXAMPLE RED MAPLE (ACER RUBRUM), EUROPEAN WHITE BIRCH (BETULA ALBA), AND BRADFORD CALLERY PEAR (PYRUS CALLERIANA BRADFORD) - ONE HUNDRED FIFTY (150) SQUARE FEET CREDIT. SMALL TREES AND EVERGREEN TREES: FOR EXAMPLE FLOWERING DOGWOOD (CORNUS FLORIDA), KWAZAN CHERRY (PRUNUS SERRULATA KWAZAN), AND WHITE PINE (PINUS STROBUS) - ONE HUNDRED (100) SQUARE FEET CREDIT. SHRUBS AND FLOWER BEDS - ONLY THAT AREA WHICH IS OCCUPIED BY SUCH PLANTINGS SHALL BE CREDITED. (11) LANDSCAPED OFF-STREET PARKING AND LOADING AREAS SHALL HAVE A MINIMUM OF TEN (10%) PERCENT OF THE AREA REPRESENTED BY APPROVED PLANTINGS. THESE PLANTINGS SHALL BE IN ADDITION TO ANY BUFFER PLANTINGS WHICH MAY BE NECESSARY.	TOTAL OFF-STREET PARKING & LOADING AREA = 26,593 ± SF REQUIRED (10%): 2,659.3 ± SF LANDSCAPE AREA PROVIDED: 1,011.7 ± SF (3.8%) LANDSCAPE AREA	WAIVER
ZONING: 1311.04 BUILDING AND SITE LAYOUTS AND SETBACKS	(c) SEE CITY SIDEWALKS REQUIREMENTS AND CITY STREET TREE REQUIREMENTS IN SEPARATE ORDINANCES. AN AVERAGE OF AT LEAST ONE STREET TREE SHALL BE PLANTED FOR EACH 30 FEET OF STREET LENGTH, UNLESS EXISTING TREES WILL BE PRESERVED TO SERVE THE SAME PURPOSE. THE SPACING OF SUCH TREES MAY VARY TO PROVIDE FOR DRIVEWAYS, GROWTH HABIT, SIGHT DISTANCE AND OTHER FEATURES, PROVIDED THE AVERAGE SEPARATION OF TREES IS MET.	TOTAL LENGTH ALONG WEST SECOND STREET = 218 ± LF (EXCLUDING DRIVE AISLE WIDTH) REQUIRED: 218 (3) 30' = 7.3 OR 8 STREET TREES PROVIDED: 4 AGB, 4 CC (8 SMALL STREET TREES) TOTAL LENGTH ALONG NORTHAMPTON STREET = 319 ± LF REQUIRED: 319 (3) 30' = 10.6 OR 11 STREET TREES PROVIDED: 9 AGB, 2 CC (11 SMALL STREET TREES)	COMPLIES
1311.08 PARKING AND DRIVEWAYS	(6) PARKING AREAS SHOULD BE WELL-SCREENED FROM ARTERIAL AND COLLECTOR STREETS BY A LANDSCAPING OF AT LEAST 4 FEET IN HEIGHT. ANY WALL OR FENCE SHALL BE ON THE INSIDE OF A ROW OF SHRUBS OR TREES UNLESS OTHERWISE APPROVED BY THE CITY. WHERE REAR PARKING IS NOT POSSIBLE, THEN PARKING SHALL BE PROVIDED TO THE SIDE OF A BUILDING, WHERE A DRIVEWAY EXISTS TO ENTER FROM THE FRONT TO ACCESS A GARAGE, THE GARAGE SHALL BE SETBACK FURTHER FROM THE STREET THAN THE HOUSE, AND THE DRIVEWAY SHOULD BE AS NARROW AS PRACTICAL THROUGH THE FRONT YARD.	THE PARKING AREA HAS BEEN SCREENED FROM STREETS WITH LANDSCAPING.	COMPLIES
1318.23 BUFFER YARDS	BUFFER YARDS ARE REQUIRED ALONG REAR AND SIDE LOT LINES IN ALL PRIMARILY NON-RESIDENTIAL DISTRICTS (SUCH AS THE CM, INDUSTRIAL REDEVELOPMENT, COMMERCIAL AND INDUSTRIAL DISTRICTS), ALONG THE DISTRICT BOUNDARIES BETWEEN A NEW OR EXPANDED NON-RESIDENTIAL USE AND ANY RESIDENTIAL AND INSTITUTIONAL DISTRICTS THAT DIRECTLY ABUTS THE NON-RESIDENTIAL DISTRICT OR IS ONLY SEPARATED FROM THE NON-RESIDENTIAL DISTRICT BY AN ORDAINED ALLEY OR LOCAL STREET.	NOT ADJACENT TO RESIDENTIAL. NOT APPLICABLE.	NOT APPLICABLE
1318.28 TREE CONSERVATION	(i) IN ADDITION, AN 8 FEET MINIMUM WIDTH BUFFER STRIP ALONG A PUBLIC STREET SHALL BE REQUIRED WHERE NEW PARKING SPACES FOR 10 OR MORE VEHICLES ARE PROPOSED TO BE ADJACENT TO AND VISIBLE FROM A PUBLIC STREET. SUCH BUFFER STRIP SHALL INCLUDE PLANTS WITH AN ANTICIPATED MATURE HEIGHT OF AT LEAST 4 FEET AND DECIDUOUS SHADE TREES. THE CITY MAY REQUIRE SUCH BUFFER TO BE DESIGNED SO THAT IT IS POSSIBLE TO HAVE VIEWS AT EYE LEVEL INTO THE PARKING AREA FOR SECURITY REASONS.	THE PARKING SPACES HAVE BEEN SCREENED FROM THE STREETS WITH LANDSCAPING.	COMPLIES
1318.28 TREE CONSERVATION	(6) WHERE ANY EXISTING HEALTHY TREE(S) THAT HAS A TRUNK DIAMETER OF 8 INCHES OR GREATER (MEASURED 4.5 FEET ABOVE THE GROUND LEVEL) ARE REMOVED FROM A SITE AS PART OF OR IN PREPARATION FOR A DEVELOPMENT PROJECT, 1 NEW TREE SHALL BE PLANTED FOR EACH SUCH TREE THAT IS REMOVED. THE NEW TREES SHALL HAVE A MINIMUM TRUNK DIAMETER OF 2.5 INCHES MEASURED 6 INCHES ABOVE THE GROUND LEVEL AND SHALL MEET THE CITY SPECIES REQUIREMENTS THAT WOULD APPLY TO STREET TREES, UNLESS OTHER SPECIES ARE APPROVED BY THE CITY FORESTER IF THERE IS MUTUAL CONSENT BY THE APPLICANT AND THE CITY, SOME OR ALL OF THE REPLACEMENT TREES MAY BE PLANTED ON CITY OWNED LAND AS AN IN LIEU OF REQUIREMENT.	TOTAL NUMBER OF TREES 8" AND GREATER TO BE REMOVED = 18 REQUIRED: 18 x 1 = 18 TREES PROVIDED: 3 ARA, 2 CC, 4 CF, 1 GTK, 8 MV (18 TREES)	COMPLIES
1319.02 (j) STREET TREES AND PARKING LOT TREES	(1) STREET TREES MEETING REQUIREMENTS OF THE CITY SHALL BE REQUIRED ON EACH SIDE OF EVERY PUBLIC AND PRIVATE STREET. A MINIMUM AVERAGE OF ONE STREET TREE SHALL BE REQUIRED FOR EACH 30 FEET OF PUBLIC OR PRIVATE STREET LENGTH, UNLESS EXISTING TREES WILL BE PRESERVED TO SERVE THE SAME PURPOSE OR UNLESS THE CITY ALLOWS AN AVERAGE OF ONE TREE FOR EVERY 50 FEET FOR TREES WITH LARGER CANOPIES. (2) IN ADDITION, A MINIMUM AVERAGE OF ONE DECIDUOUS SHADE TREE SHALL BE REQUIRED FOR EVERY 15 SURFACE PARKING SPACES. SUCH DECIDUOUS TREES SHALL MEET THE STREET TREES REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. NO MORE THAN 50 CONSECUTIVE SURFACE PARKING SPACES SHALL BE LOCATED IN A STRAIGHT ROW (NOT INCLUDING ADJACENT SPACES ACCESSED FROM A DIFFERENT AISLE) WITHOUT BEING SEPARATED BY A LANDSCAPED ISLAND WITH A DECIDUOUS TREE.	SEE SECTION 1311.04(c) ABOVE. TOTAL SURFACE PARKING SPACES = 75 REQUIRED: 75 (15) = 5 SHADE TREES PROVIDED: 5 GTK (5 SHADE TREES)	COMPLIES

- GENERAL NOTES:**
- THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
 - ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C., UNLESS OTHERWISE STATED ON THIS PLAN.
 - SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
 - IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCTS MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM.
 - PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
 - WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.
- CITY OF BETHLEHEM SPECIFIC NOTES:**
- NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBANCE IS ALLOWED IN THE TREE PROTECTION ZONE UNLESS INDICATED ON THE PLAN.
 - BARRICADES MUST BE INSTALLED PRIOR TO ANY DESTRUCTION AND/OR CONSTRUCTION ACTIVITY.
 - THE ROOT PROTECTION ZONE SHALL BE THE AREA ENCOMPASSED BY A CIRCLE WITH A RADIUS EXTENDING 1.25 FT. FROM THE TRUNK OF THE TREE FOR EVERY INCH DBH (DIAMETER AT BREAST HEIGHT) OF THE TREE.
 - VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO PENALTY PER CITY ORDINANCE.
 - ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY ORDINANCE. NO PRUNING, ROOT PRUNING OF ROOTS OVER ONE INCH IN DIAMETER, AND/OR TREE REMOVAL IS TO BE PERFORMED WITHOUT A PERMIT AND WORK MUST BE PERFORMED BY A CITY LICENSED TREE CONTRACTOR.
 - ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
 - STREET AND PARKING LOT TREES SHALL BE A MINIMUM OF 14' IN HEIGHT AND HAVE A SINGLE STRAIGHT TRUNK WITH THE FIRST LATERAL BRANCH AT 7' ABOVE THE ROOT BALL. TREES WITH AN UPRIGHT BRANCHING HABIT, SUCH AS ZELKOVA, MAY HAVE THE FIRST LATERAL BRANCH AT 6' ABOVE THE ROOT BALL.
 - ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE OF THE CITY OF BETHLEHEM.

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PROJECT No.: PAB220164
DRAWN BY: TCK
CHECKED BY: MMIC
DATE: 03/21/2023
CAD LD.: PAB220164-00-LLGT-2A

PROJECT: PRELIMINARY/FINAL
LAND DEVELOPMENT PLANS
FOR

ARTSQUEST

PROPOSED ARTSQUEST
SOUTH BETHLEHEM
CULTURAL ARTSCENTER
25 WEST THIRD STREET
NORTHAMPTON COUNTY
CITY OF BETHLEHEM, PA
BLOCK: 2 LOT: 2

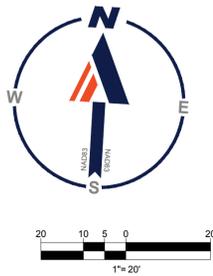
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74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

D.T. NORTH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA022729

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
C-701

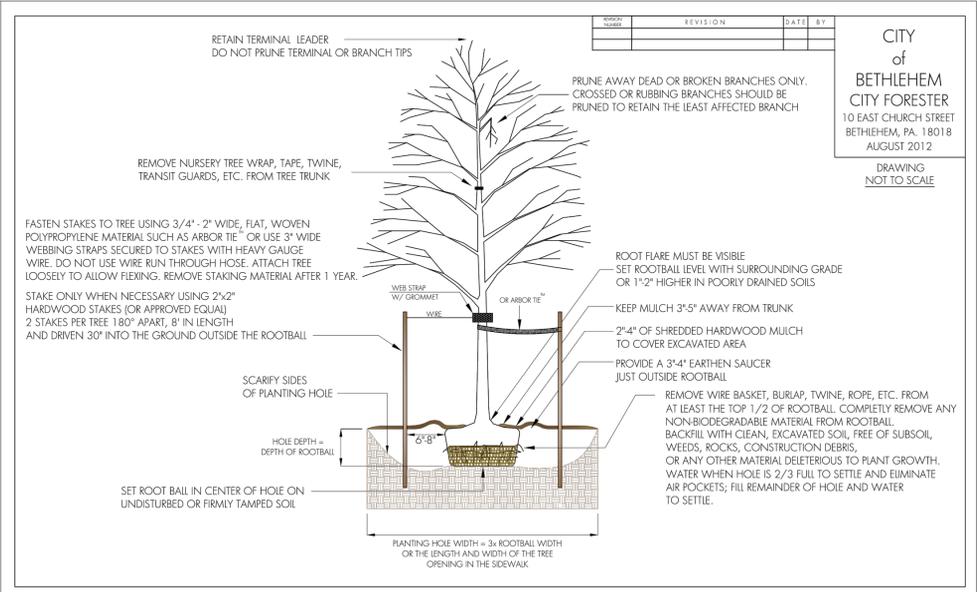
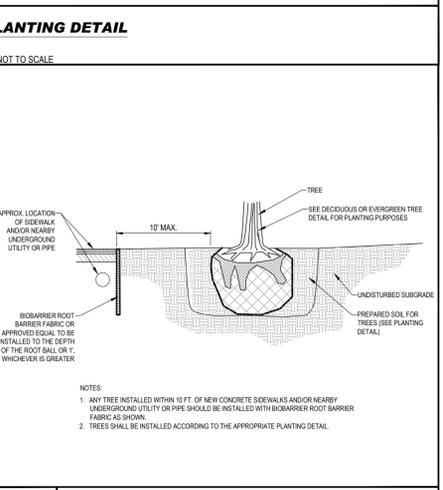
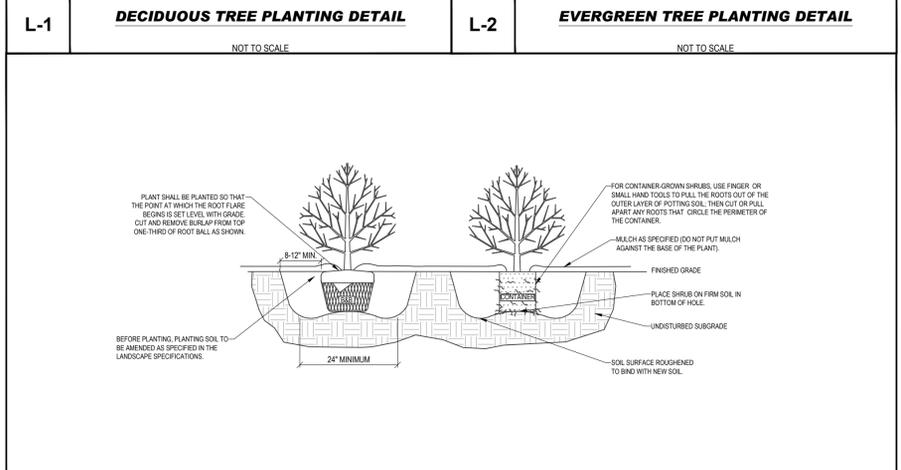
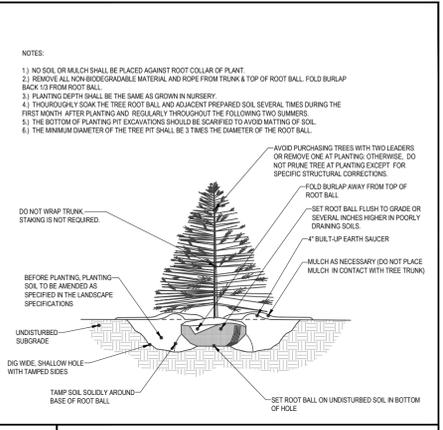
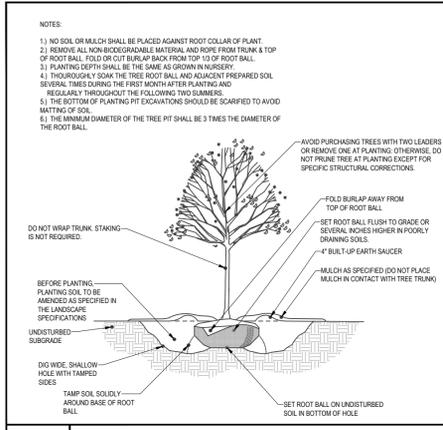
REVISION 2 - 06/19/2023



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LANDSCAPE SPECIFICATIONS:

- 1. SCOPE OF WORK:**
 THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SOODING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.
- 2. MATERIALS:**
 A. GENERAL: ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
 B. TOPSOIL: NATURAL, FLECK-FREE, LOAMY SALT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 6.5 TO 7.8, BE FREE OF DEBRIS, ROCKS LARGER THAN ONE (1") INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLOTS.
 C. LAWN/LAWN AREAS SHALL BE SEEDDED OR SOODED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO THE BELOW.
 1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW GROUND SEED.
 2. SOIL SHALL BE STRONGLY ROOTED, WEED AND DISEASE FREE WITH UNIFORM THICKNESS. SOIL INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD IN PLACE.
 D. MULCH: ALL PLANTING BEDS SHALL BE MULCHED WITH A 7" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.
 E. FERTILIZER:
 1. FERTILIZER SHALL BE DELIVERED TO THE SITE AS SPECIFIED IN THE ORIGINAL STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
 2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 10% PHOSPHORUS AND 10% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
 F. PLANT MATERIAL:
 1. ALL PLANTS SHALL MEET ALL CLASSES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1) LATEST EDITION AS PUBLISHED BY AMERICAN HOFT FORMERS, THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
 2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIALS.
 3. PLANTS SHALL BE LEGALLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
 4. TREES WITH ABRASSION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/2" WHICH HAVE NOT BEEN COMPLETELY CALLEDUS, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
 5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH WELL DEVELOPED BRANCHES, FOLIATED, VIGOROUS, ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
 6. CALIPER MEASUREMENTS OF CALIPER GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR (4) INCH (4") CALIPER. FOR CALIPER 6" OR INCHES (6") ABOVE THE GRADING EXCEEDED FOUR INCHES (4") IN CALIPER, THE CALIPER SHALL BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
 7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB AND NOT TO THE LONGEST BRANCH.
 8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.
- 3. GENERAL WORK PROCEDURES:**
 A. CONTRACTOR TO UTILIZE NORMAL AND INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
 B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.
 C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
 D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.
 E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
 F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.
 G. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.
 H. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. BIRK BECKMANN OF PLANT MATERIAL SHALL BE REPLACED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED DEAD OR DYING IF MORE THAN 25% OF ITS BRANCHES ARE DEAD.
 I. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
 J. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGHOUT WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF PRODEED OR BARE AREAS.
 K. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
- 4. SITE PREPARATIONS:**
 A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
 B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE REPLACED AROUND THE REMAINDER OF THE ROOTS. CUTS TO TRUNKS SHALL BE MADE AT AN ANGLE OF 45 DEGREES TO PREVENT WATER DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
 C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
 D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.
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 G. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.
 H. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. BIRK BECKMANN OF PLANT MATERIAL SHALL BE REPLACED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED DEAD OR DYING IF MORE THAN 25% OF ITS BRANCHES ARE DEAD.
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 K. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.



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PROJECT No.:	PAB220164
DRAWN BY:	TCK
CHECKED BY:	MMIC
DATE:	03/21/2023
DATE:	PAB220164.00-LLG-2A

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS FOR

ARTSQUEST

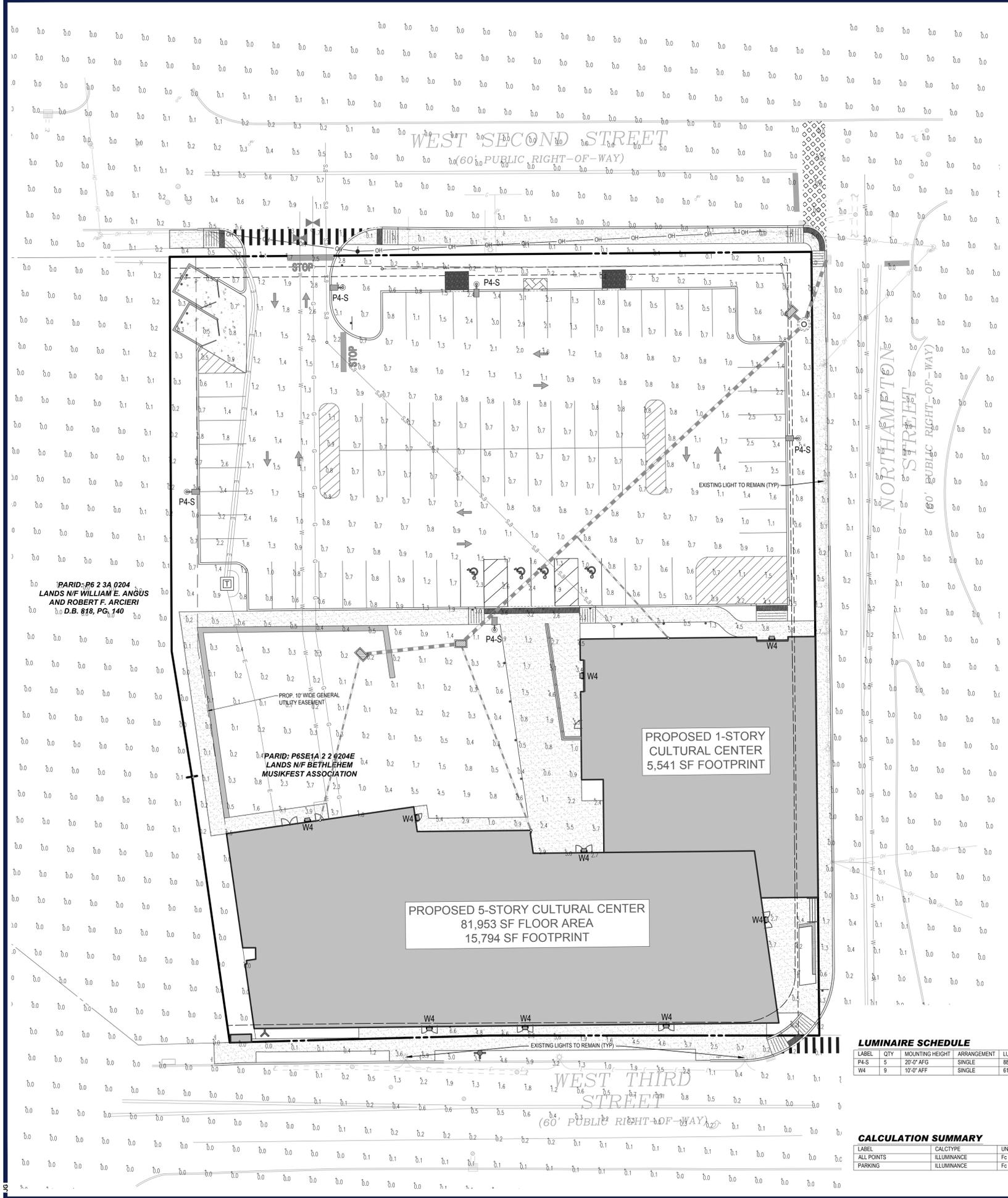
PROPOSED ARTSQUEST SOUTH BETHLEHEM CULTURAL ARTS CENTER 25 WEST THIRD STREET NORTHAMPTON COUNTY CITY OF BETHLEHEM, PA BLOCK: 2 LOT: 2

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 74 W BROAD STREET, SUITE 500
 BETHLEHEM, PA 18018
 Phone: (610) 709-9971
 Fax: (610) 709-9971
 www.BohlerEngineering.com

D.T. NORTH
 REGISTERED LANDSCAPE ARCHITECT
 PENNSYLVANIA LICENSE No. LA022729

LANDSCAPE DETAILS

SHEET NUMBER:
C-702



LIGHTING COMPLIANCE

ZONING:
1318.25 LIGHTING CONTROL.
(b) HEIGHT OF LIGHTS: NO LUMINAIRE, SPOTLIGHT, WALLPACK OR OTHER LIGHT SOURCE SHALL BE PLACED AT A HEIGHT EXCEEDING 20 FEET ABOVE THE AVERAGE SURROUNDING GROUND LEVEL. THE MAXIMUM HEIGHT LIMIT IN ANY INDUSTRIAL ZONE MAY BE INCREASED TO 30 FEET UNLESS THE LIGHT SOURCE IS WITHIN 200' OF A RESIDENTIALLY ZONED LOT. THIS LIMITATION SHALL NOT APPLY TO: a) LIGHTS NEEDED FOR AIR SAFETY; b) LIGHTS INTENDED SOLELY TO ILLUMINATE AN ARCHITECTURAL FEATURE OF A BUILDING OR AN AMERICAN FLAG; c) LIGHTING OF OUTDOOR PUBLIC RECREATION FACILITIES; d) LIGHTS THAT ARE PART OF A PERMITTED SIGN; (e) OR LIGHTS WITHIN AN OPEN AIR PARKING STRUCTURE. SEE ALSO SECTION 1319.02(f). [COMPLIES]

(c) DIFFUSED ALL LIGHT SOURCES, INCLUDING SIGNS BUT NOT INCLUDING LED LIGHTING, SHALL BE PROPERLY DIFFUSED AS NEEDED WITH A TRANSLUCENT OR SIMILAR COVER TO PREVENT EXPOSED BULBS FROM BEING DIRECTLY VISIBLE FROM STREETS, PUBLIC SIDEWALKS, DWELLINGS OR ADJACENT LOTS. [COMPLIES]

(d) SHIELDING ALL LIGHT SOURCES, INCLUDING SIGNS, SHALL BE SHIELDED AROUND THE LIGHT SOURCE AND CAREFULLY DIRECTED AND PLACED TO PREVENT THE LIGHTING FROM CREATING A NUISANCE IN ADJACENT DWELLINGS, AND TO PREVENT THE LIGHTING FROM SHINING INTO THE EYES OF PASSING MOTORISTS. [COMPLIES]

(f) SPILLOVER: EXTERIOR LIGHTING ON AN INSTITUTIONAL, COMMERCIAL, INDUSTRIAL OR RESIDENTIAL PROPERTY SHALL NOT CAUSE A SPILLOVER OF LIGHT ONTO A PRINCIPALLY RESIDENTIAL LOT IN A RESIDENTIAL DISTRICT THAT EXCEEDS 0.1 HORIZONTAL FOOT-CANDLE MEASURED LINE OF SIGHT INSIDE THE RESIDENTIAL LOT LINE. [NOT APPLICABLE]

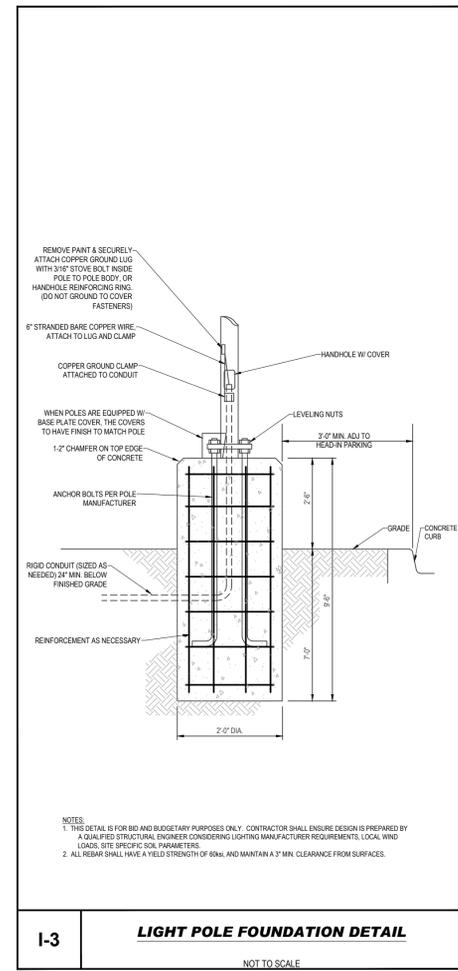
(g) LIGHTING OF HORIZONTAL SURFACES SUCH AS PARKING AREAS, OUTDOOR STORAGE AND OUTDOOR SALES AREAS: LIGHTING FIXTURES SHALL BE AIMED DOWNWARD AND SHALL INCLUDE FULL CUT-OFF MEASURES AS NEEDED TO PROPERLY DIRECT THE LIGHT AND TO MEET THE MAXIMUM SPILLOVER REQUIREMENTS OF SUBSECTION (f) AND TO PREVENT GLARE ONTO STREETS. [COMPLIES]

1311.05 DESIGN REQUIREMENTS
(b) NEW PARKING LOT LIGHTS INSTALLED BY A DEVELOPER SHALL HAVE A MAXIMUM TOTAL HEIGHT OF 20 FEET AND USE A DECORATIVE DESIGN APPROVED BY THE CITY. LIGHT FIXTURES ON PRIVATE PROPERTY ARE ENCOURAGED TO USE DESIGNS THAT ARE SIMILAR TO ANY DECORATIVE FIXTURES USED ON THE ADJACENT STREET. [COMPLIES]

1319.02 GENERAL REGULATIONS APPLYING TO REQUIRED OFF-STREET PARKING FACILITIES
(i) LIGHTING POLES ARE STRONGLY ENCOURAGED TO HAVE A MAXIMUM HEIGHT OF 20 FEET. SEE SECTION 1318.25. [COMPLIES]

GENERAL LIGHTING NOTES

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



LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUM. LUMENS	LLF	DESCRIPTION	POLE
P4-S	5	20'-0\"/> <td>SINGLE</td> <td>8802</td> <td>0.900</td> <td>GARCCO BY SIGNIFY, PUREFORM LED MEDIUM AREA LIGHT, TYPE 4 WITH HOUSE-SIDE SHELD, ZERO UP-LIGHT (P26-48L-500-NW-G2-AR-4x-HIS)</td> <td>GARCCO BY SIGNIFY, STRAIGHT ROUND STEEL POLE, 17'-6\"/> </td>	SINGLE	8802	0.900	GARCCO BY SIGNIFY, PUREFORM LED MEDIUM AREA LIGHT, TYPE 4 WITH HOUSE-SIDE SHELD, ZERO UP-LIGHT (P26-48L-500-NW-G2-AR-4x-HIS)	GARCCO BY SIGNIFY, STRAIGHT ROUND STEEL POLE, 17'-6\"/>
W4	9	10'-0\"/> <td>SINGLE</td> <td>6169</td> <td>0.900</td> <td>GARCCO BY SIGNIFY, PUREFORM LED WALL SCONCE, TYPE 4, ZERO UP-LIGHT (PWS-196L-1150-NW-G2-4x)</td> <td></td>	SINGLE	6169	0.900	GARCCO BY SIGNIFY, PUREFORM LED WALL SCONCE, TYPE 4, ZERO UP-LIGHT (PWS-196L-1150-NW-G2-4x)	

CALCULATION SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVGMIN	MAXMIN
ALL POINTS	ILLUMINANCE	Fc	0.40	6.6	0.0	N.A.	N.A.
PARKING	ILLUMINANCE	Fc	1.17	4.3	0.5	2.34	8.60

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REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	04/14/2023	REV PER NPDES	TCK
2	06/19/2023	REV PER CITY COMMENTS	JDK

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PROJECT No.: PAB220164
DRAWN BY: TCK
CHECKED BY: MMC
DATE: 03/21/2023
CAD LID: PAB220164.00-LLT-2A

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS FOR

ARTSQUEST
PROPOSED ARTSQUEST SOUTH BETHLEHEM CULTURAL ARTSCENTER
25 WEST THIRD STREET NORTHAMPTON COUNTY CITY OF BETHLEHEM, PA BLOCK: 2 LOT: 2

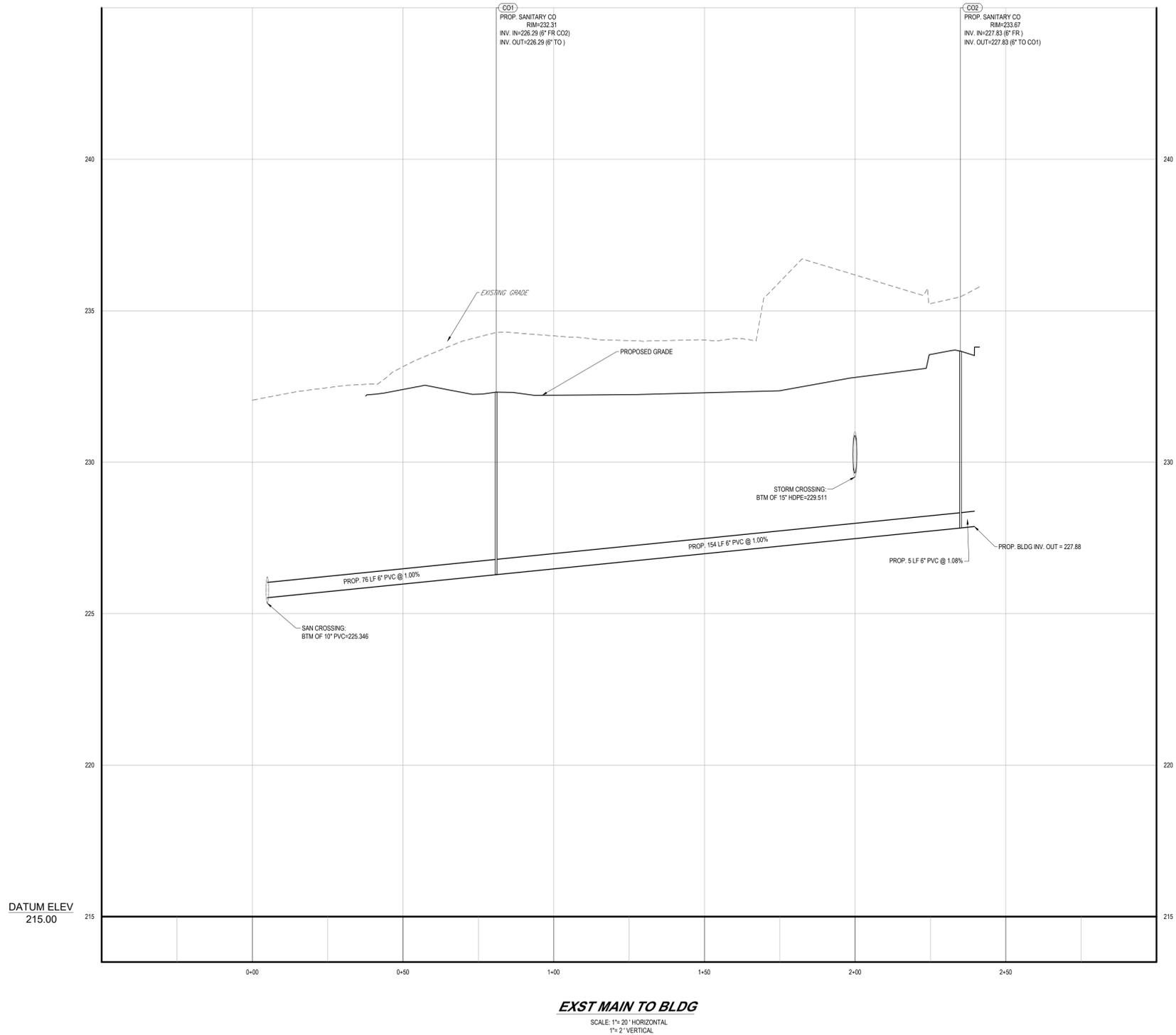
BOHLER
74 W BROAD STREET, SUITE 500 BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

D.T. NORTH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA0202729

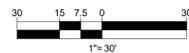
SHEET TITLE: LIGHTING PLAN
SHEET NUMBER: C-703
REVISION 2 - 06/19/2023

R:\2023\20164\00\CADD\DRAWINGS\PLAN SET\TRICH\SITE PLANS\PAR220164-00-LLT-2A.dwg - LAYOUT, C-703.LIGHT

R:\2022\PA220164.00\CADD\DRAWINGS\PLAN SET\TITLE\SITE PLANS\PA220164.00-PROF-2A.dwg - LAYOUT, C-802 SAN PROFILES



EXIST MAIN TO BLDG
SCALE: 1"= 20' HORIZONTAL
1"= 2' VERTICAL



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REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
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PROJECT No.: PAB220164
 DRAWN BY: TCK
 CHECKED BY: MMC
 DATE: 03/21/2023
 CAD ID: PAB220164.00-PROF-2A

PROJECT:
PRELIMINARY/FINAL LAND DEVELOPMENT PLANS
 FOR

ARTSQUEST

PROPOSED ARTSQUEST
 SOUTH BETHLEHEM
 CULTURAL ARTSCENTER
 25 WEST THIRD STREET
 NORTHAMPTON COUNTY
 CITY OF BETHLEHEM, PA
 BLOCK: 2 LOT: 2

BOHLER
 74 W BROAD STREET, SUITE 500
 BETHLEHEM, PA 18018
 Phone: (610) 709-9971
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SHEET TITLE:
PROFILE PLAN

SHEET NUMBER:
C-802

REVISION 2 - 06/19/2023

