

OPALANIE PARK

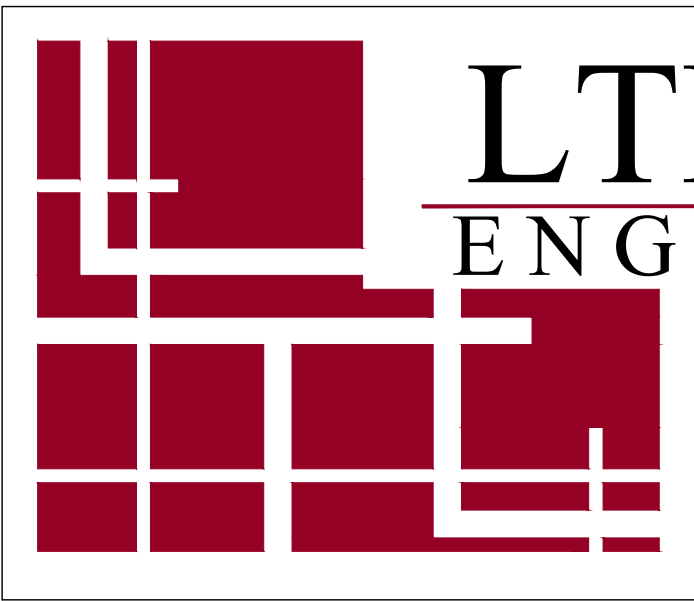
WEST VINCENT TOWNSHIP, CHESTER COUNTY

PREPARED FOR:

WEST VINCENT TOWNSHIP

729 SAINT MATTHEWS RD
CHESTER SPRINGS, PA 19425

PREPARED BY:



LTL CONSULTANTS, LTD.
ENGINEERS & CODE OFFICIALS

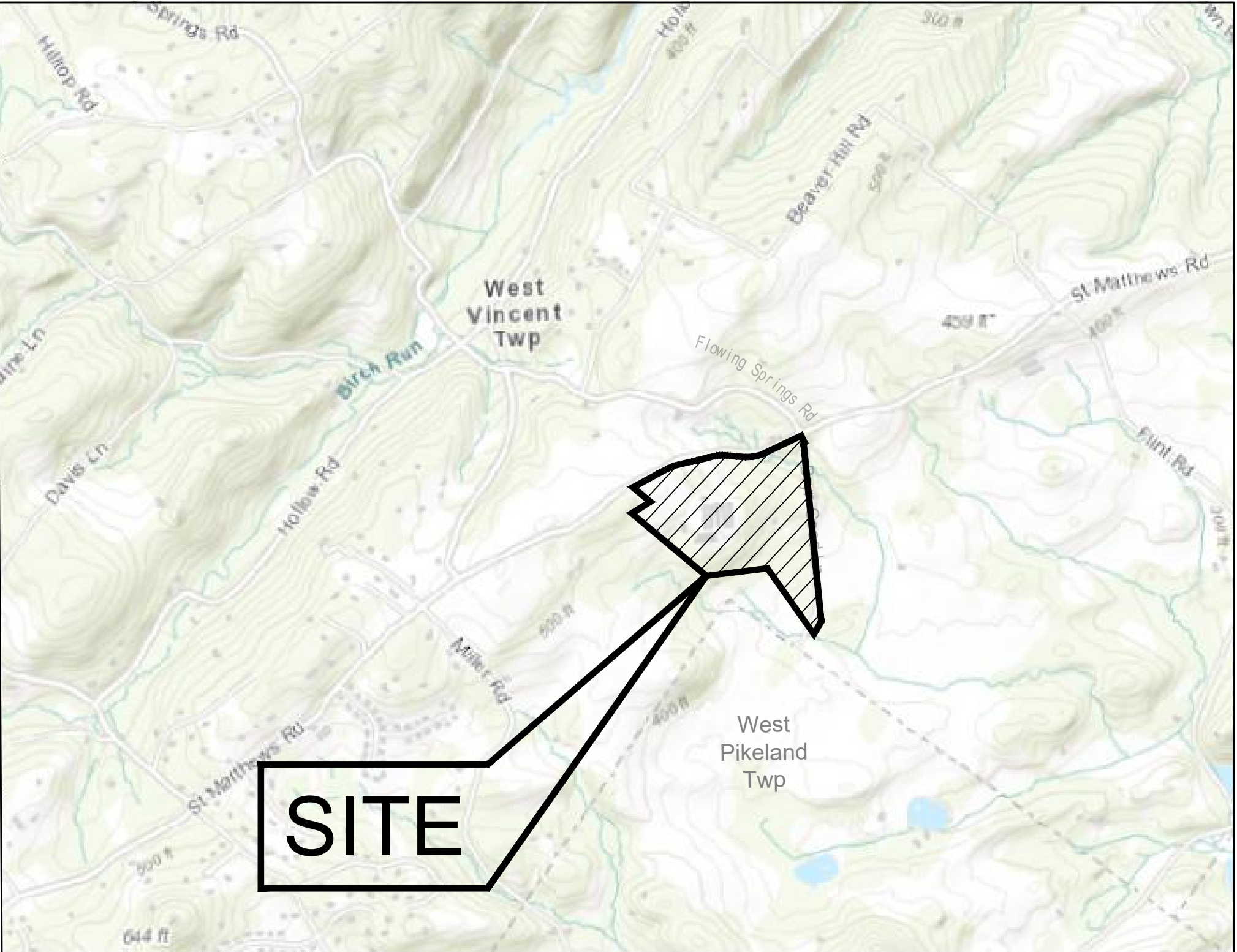
P O BOX 241
ONE TOWN CENTRE DRIVE OLEY, PA 19547

SHEET INDEX:

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 GENERAL NOTES
- 4 SITE DEVELOPMENT PLAN
- 5 ADA ACCESSIBLE GAZEBO AND PARKING
- 6 PARKING LOT
- 7 DRIVEWAY IMPROVEMENTS
- 8 ADA PICNIC AREA ACCESS
- 9 ADA PICNIC AREAS
- 10 PICNIC TABLES
- 11 ADA ACCESSIBLE TRAILS
- 12 PEDESTRIAN TRAIL IMPROVEMENTS
- 13 EQUESTRIAN TRAIL IMPROVEMENTS
- 14 SITE AMENITIES
- 15 SPLIT RAIL FENCE
- 16 SPLIT RAIL FENCE
- 17 LANDSCAPE BOULDERS
- 18 TREE PLANTING LOCATIONS
- 19 RAIN GARDEN
- 20 RAIN GARDEN DETAILS
- 21 WILDFLOWER PLANTING AREA
- 22 DRAINAGE IMPROVEMENTS
- 23 DRAINAGE PROFILE
- 24 E&S SITE PLAN
- 25 E&S SITE PLAN
- 26 E&S DETAILS
- 27 E&S DETAILS
- 28 OUTDOOR CLASSROOM
- 29 SIGN PLANTING
- 30 NATURE PLAY DESIGN LAYOUT
- 31 NATURE PLAY DETAILS
- 32 NATURE PLAY DETAILS
- 33 NATURE PLAY DETAILS



AERIAL MAP
SCALE: 1" = 1500'



USGS TOPO MAP
SCALE: 1" = 1500'



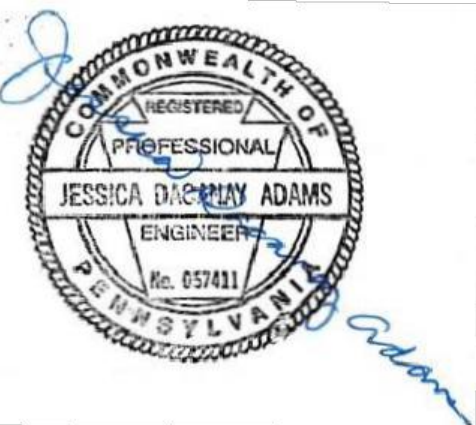
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA, CALL 811 OR
1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE
YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20223050803

UTILITIES:

WEST VINCENT TOWNSHIP
729 SAINT MATHEWS ROAD
CHESTER SPRINGS, PA 19425
CONTACT: MARK HUGHES
EMAIL: publicworks@westvincentwp.org

TRANSCO PIPELINE
(WILLIAMS COMPANIES)



SHEET NO.:
1

ISSUE FOR BID - 05/09/2025

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GENERAL NOTES

THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:

- SURVEY
BERGEZ & ASSOCIATES, INC.
358 MAIN STREET, ROYERSFORD PA, 19468
PREPARED FOR: "LTL CONSULTANTS, LTD"
PROJECT NO.: 22152
DATED: NOVEMBER 3, 2022
LAST REVISED: NOVEMBER 3, 2022

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS CONTRACTOR'S RESPONSIBILITY.

- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
- ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.
- ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
- DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.
- THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL, INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE PROJECT. THE CONTRACTOR SHALL CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
- ALL CONCRETE MUST BE AIR ENTRAINED AND HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
- THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.
- ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME LTL CONSULTANTS, LTD., AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH LTL CONSULTANTS, LTD. WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR ONE YEAR AFTER THE COMPLETION OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS LTL CONSULTANTS, LTD. AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS. ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
- LTL CONSULTANTS, LTD. WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND LTL HAS NO RESPONSIBILITY OR LIABILITY FOR SAME HEREUNDER. LTL CONSULTANTS, LTD.'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT LTL CONSULTANTS, LTD. HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. LTL CONSULTANTS, LTD. WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS WHICH ARE IDENTIFIED AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. LTL CONSULTANTS, LTD. WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- NEITHER THE PROFESSIONAL ACTIVITIES OF LTL CONSULTANTS, LTD., NOR THE PRESENCE OF LTL CONSULTANTS, LTD. AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. LTL CONSULTANTS, LTD. AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. LTL CONSULTANTS, LTD. SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE FOR JOB SITE SAFETY.

- IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS. ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH THESE NOTES HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME.
- CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.
- ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.
- ALL CONSTRUCTION AND MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.
- CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
- AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

GENERAL GRADING AND UTILITY NOTES

- LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL EXISTING UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT THE COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.
- THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
- THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
- THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
- SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN PUBLICATION 408, LATEST ADDITION (PUB 408). THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN PUB 408. . ALL EXCAVATED OR FILLED AREAS MUST BE COMPACTED AS OUTLINED IN PUB 408. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN PUB 408 AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPERS' REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY PUB 408. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN PUB 408 AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
- ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND MUST BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL.
- THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES.
- PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, UTILITY VALVES, AND SANITARY CLEANOUTS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
- DURING THE INSTALLATION OF SANITARY SEWER, STORM SEWER, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEViate FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THESE PLANS, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AT THE COMPLETION OF WORK.
- THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS LIMIT GRADES). TO PREVENT PONDING, CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, THIS SHALL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEYS FEES AND THE LIKE WHICH RESULT FROM SAME.
- STORM DRAINAGE PIPE:
 - UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M294 AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR WATERTIGHT JOINT.
 - PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR SCHEDULE 40 UNLESS INDICATED OTHERWISE.
- SANITARY SEWER MAIN MUST BE POLYVINYL CHLORIDE (PVC) SDR 35 EXCEPT WHERE INDICATED OTHERWISE. SANITARY LATERALS MUST BE PVC SCHEDULE 40 OR PVC SDR 26 UNLESS INDICATED, IN WRITING, OTHERWISE.
- STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL.

STORMWATER NOTES:

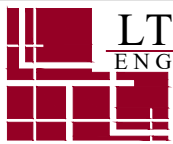
- ALL PVC PIPES SHALL BE SCHEDULE 40
- THE LAND OWNER IS THE RESPONSIBLE PARTY FOR ALL STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN SAID STRUCTURES SO AS TO AVOID ANY NEGATIVE IMPACTS THE ADJOINING PROPERTIES AND/OR THE WATERS OF THE COMMONWEALTH.
- AN UNSPECIFIED BLANKET EASEMENT, WHICH ENCOMPASSES THE ENTIRE SITE SHOWN HEREIN, WILL SERVE THE PURPOSE OF A STORMWATER MANAGEMENT EASEMENT, AIDING IN THE ACCESS, INSPECTION, MAINTENANCE, REPAIR AND RECONSTRUCTION OF SUCH FACILITIES.
- STORMWATER MANAGEMENT SYSTEM OPERATIONS & MAINTENANCE:
 - THE INDIVIDUAL LOT OWNER IS RESPONSIBLE FOR THE PROPER OPERATION, MAINTENANCE, AND REPAIR OF THE STORMWATER MANAGEMENT SYSTEM ON HIS OR HER LOT IN PERPETUITY. THE INDIVIDUAL LOT OWNER SHALL INSPECT, CLEAN, REMOVE SILT OR OTHER DEBRIS, AND OTHERWISE MAINTAIN AND REPAIR THE STRUCTURE(S), PIPE(S), OR FINISH GRADING IN PROPER WORKING ORDER. NO CHANGES SHALL BE MADE TO THE STRUCTURE(S), PIPE(S), OR FINISH GRADING WITHOUT PRIOR WRITTEN APPROVAL OF THE MUNICIPALITY.
 - IN THE EVENT THAT THE STORMWATER MANAGEMENT SYSTEM FAILS TO FUNCTION AS DESIGNED AND IS INCAPABLE OF BEING REPAIRED IN ORDER TO FUNCTION AS DESIGNED, THE INDIVIDUAL LOT OWNER SHALL BE RESPONSIBLE TO INSTALL AT HIS OR HER EXPENSE, A REPLACEMENT SYSTEM APPROVED BY AND SATISFACTORY TO THE MUNICIPALITY.
 - IN THE EVENT THE INDIVIDUAL LOT OWNER FAILS TO PROPERLY MAINTAIN AND REPAIR THE STORMWATER MANAGEMENT SYSTEM, ANY REPLACEMENT SYSTEM APPROVED BY THE MUNICIPALITY, THE MUNICIPALITY, OR ITS AGENTS OR EMPLOYEES, SHALL HAVE THE RIGHT (BUT NOT THE OBLIGATION) TO ENTER UPON THE PROPERTY OF THE LOT OWNER AND SHALL HAVE THE RIGHT (BUT NOT THE OBLIGATION) TO PERFORM THE MAINTENANCE, REPAIRS, OR RECONSTRUCTION NECESSARY IN ORDER TO RETURN THE STORMWATER MANAGEMENT SYSTEM, OR NEW OR REPLACEMENT SYSTEM TO A FULLY FUNCTIONING CONDITION. THE INDIVIDUAL LOT OWNER SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED BY THE MUNICIPALITY TO MAINTAIN, REPAIR, OR RECONSTRUCT THE STORMWATER MANAGEMENT SYSTEM. IN THE EVENT THE INDIVIDUAL LOT OWNER FAILS TO REIMBURSE THE MUNICIPALITY FOR ITS COSTS IN SO DOING, THE MUNICIPALITY MAY FILE A CIVIL ACTION AGAINST THE INDIVIDUAL LOT OWNER OR MAY FILE A MUNICIPAL LIEN AGAINST THE PROPERTY IN ORDER TO RECOVER ITS COSTS.
- INFILTRATION FACILITY PROTECTION:
 - DURING SITE CONSTRUCTION, ALL INFILTRATION PRACTICE COMPONENTS SHALL BE PROTECTED FROM COMPACTION DUE TO HEAVY EQUIPMENT OPERATION OR STORAGE OF FILL OR CONSTRUCTION MATERIAL.
 - INFILTRATION AREAS SHALL ALSO BE PROTECTED FROM SEDIMENTATION. AREAS THAT ARE ACCIDENTALLY COMPACTED OR GRADED SHALL BE REMEDIATED TO RESTORE SOIL COMPOSITION AND POROSITY.
 - ADEQUATE DOCUMENTATION TO THIS EFFECT SHALL BE SUBMITTED TO THE MUNICIPAL ENGINEER FOR REVIEW. ALL AREAS DESIGNATED FOR INFILTRATION SHALL NOT RECEIVE RUNOFF UNTIL THE CONTRIBUTORY DRAINAGE AREA HAS ACHIEVED FINAL STABILIZATION.

ADA GENERAL NOTES

- CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE CURRENT ADA STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE MUST PROVIDE TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
 - PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
 - CURB RAMPS - SLOPE MUST NOT EXCEED 1:12 (8.3%)
 - LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
 - PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), ADA RAMP MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%) FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.
 - WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS. IN WRITING, BEFORE COMMENCEMENT OF WORK, CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.
 - THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-COMFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.
- IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

WILLIAMS PIPELINE

- AN AUTHORIZED WILLIAMS REPRESENTATIVE MUST BE ON SITE PRIOR TO AND DURING ANY SURFACE-DISTURBING WORK OR EQUIPMENT CROSSINGS PERFORMED WITH THE RIGHT OF WAY. WILLIAMS REPRESENTATIVE WILL ASSIST IN DETERMINING THE LOCATION OF THE PIPELINE, THE RIGHT OF WAY WIDTH, AND EXISTING COVER OVER THE PIPELINE AND WILL REMAIN ON SITE TO MONITOR ALL ACTIVITIES WITHIN THE RIGHT OF WAY.
- A DIRECT BURIAL WARNING TAPE SHOULD BE PLACED 12" TO 18" ABOVE THE FOREIGN LINE AND EXTEND ACROSS THE ENTIRE WIDTH OF WILLIAMS RIGHT OF WAY.
- NO MACHINE EXCAVATION WILL BE PERFORMED WITHIN 24" OF WILLIAMS PIPELINES OR RELATED FACILITIES. WILLIAMS ONSITE REPRESENTATIVE MAY REQUIRE HAND DIGGING AT A DISTANCE GREATER THAN 24".
- SMOOTH EDGE BUCKET MUST BE USED WHEN USING EXCAVATOR OR BACKHOE FOR EXCAVATION.
- NO VIBRATORY EQUIPMENT IS PERMITTED WITHIN THE LIMITS OF, OR IN CLOSE PROXIMITY TO, THE WILLIAMS RIGHT OF WAY.
- THE ENCRoACHING ENTITY MUST MEET WITH A WILLIAMS REPRESENTATIVE AT LEAST THREE DAYS PRIOR TO THE COMPLETION OF THE PROJECT TO DISCUSS SITE RESTORATION.
- HDPE PLASTIC PIPE MUST BE ENCASED IN STEEL.
- NO PIPING CONNECTIONS WILL BE ALLOWED WITHIN 5' OF ANY WILLIAMS PIPELINE.
- UPON 15 DAYS OF COMPLETION, CONTRACTOR SHALL FURNISH THE ALIGNMENT AND PROFILE AS-BUILT DRAWINGS WITH A DESCRIPTION OF THE SURVEY DATA USED TO DETERMINE THE AS-BUILT LOCATION AND A STATEMENT OF ACCURACY USED TO CREATE THE DRAWING. THE DRAWING SHALL BE SUBMITTED IN BOTH AUTOCAD AND PDF FORMAT AND CONTAIN ALL DATA POINTS THAT ARE WITHIN WILLIAMS RIGHT OF WAY REPRESENTING FINAL ALIGNMENT AND PROFILE, ANY ABANDONED HOLES, TOOLS, STRINGS OF DRILL PIPE, ETC. OVERLaid ON THE PLAN AND PROFILE DRAWING.
- STATEMENT REGARDING RIGHTS
 - NOTHING CONTAINED HEREIN WILL BE CONSTRUED TO CONVEY, WAIVE, OR SUBORDINATE ANY OF WILLIAMS EXISTING RIGHTS WHATSOEVER.
 - WILLIAMS WILL BE FULLY AND COMPLETELY COMPENSATED FOR ANY DAMAGES TO ITS FACILITIES RESULTING FROM THE ACTS OF THIRD PARTIES WHO ARE WORKING IN THE VICINITY OF WILLIAMS FACILITIES WITH OR WITHOUT WILLIAMS CONSENT.
 - WILLIAMS WILL BE INDEMNIFIED FROM AND AGAINST ALL CLAIMS, LOSSES, DEMANDS, DAMAGES, CAUSES OF ACTION, SUITS, AND LIABILITY OF EVERY TYPE AND CHARACTER, INCLUDING ALL EXPENSES OF LITIGATION, COURT COSTS, AND ATTORNEYS' FEES, FOR INJURY TO OR DEATH OF ANY PERSON OR FOR DAMAGE TO ANY PROPERTY, ARISING OUT OF OR IN CONNECTION WITH THIRD PARTY WORK IN THE VICINITY OF WILLIAMS FACILITIES.




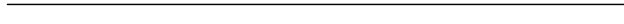
















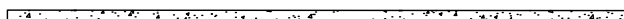








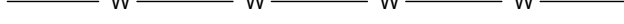


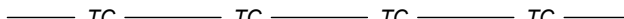







NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE:			
GENERAL NOTES			
PROJECT:			
OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY		PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: SCALE	DATE: 05/09/25
 LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS PO BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547		SHEET NO.: 2	

ISSUE FOR BID - 05/09/2025

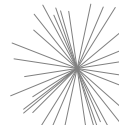
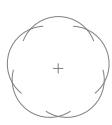
FILE NAME: F:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_PCDWG

MATCH LINE

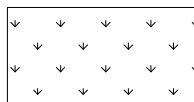
PROPOSED LINETYPE LEGEND

- | | |
|---|--|
|  | PROP. MAJOR CONTOUR |
|  | PROP. MINOR CONTOUR |
|  | PROP. CENTER LINE |
|  | PROP. CURB |
|  | PROP. DRIVEWAY |
|  | PROP. GRAVEL DRIVEWAY |
|  | PROP. EASEMENT |
|  | PROP. ELECTRIC LINE |
|  | PROP. UNDERGROUND ELECTRIC |
|  | PROP. E&S LINE |
|  | PROP. COMPOST SOCK - (SIZE AS SHOWN) |
|  | PROP. 18" SILT FENCE - (SIZE AS SHOWN) |
|  | PROP. SUPER SILT FENCE |
|  | PROP. LIMITS OF DISTURBANCE |
|  | PROP. FENCE |
|  | PROP. CONSTRUCTION FENCE |
|  | PROP. GAS LINE |
|  | PROP. GUARDRAIL |
|  | PROP. LOT LINE |
|  | PROP. PARKING MARKINGS |
|  | PROP. PHASE LINE |
|  | PROP. RIGHT-OF-WAY |
|  | PROP. SANITARY FORCE MAIN |
|  | PROP. SANITARY LATERAL |
|  | PROP. SANITARY PIPE |
|  | PROP. SIDEWALK |
|  | PROP. SIGHT TRIANGLE |
|  | PROP. SETBACK LINE |
|  | PROP. STORMWATER FLOW LINE |
|  | PROP. STORMWATER PIPE |
|  | PROP. STRUCTURE |
|  | PROP. TREE LINE |
|  | PROP. OVERHEAD UTILITY LINE |
|  | PROP. WALL LINE |
|  | PROP. WATER LATERAL |
|  | PROP. WATER LINE |
|  | POST-DRAINAGE AREA LINE |
|  | POST-DRAINAGE AREA TC |
|  | PRE-DRAINAGE AREA LINE |
|  | PRE-DRAINAGE AREA TC |

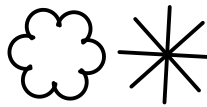
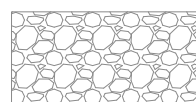
- 15-25% STEEP SLOPE ● +25% STEEP SLOPE




EX. TREES



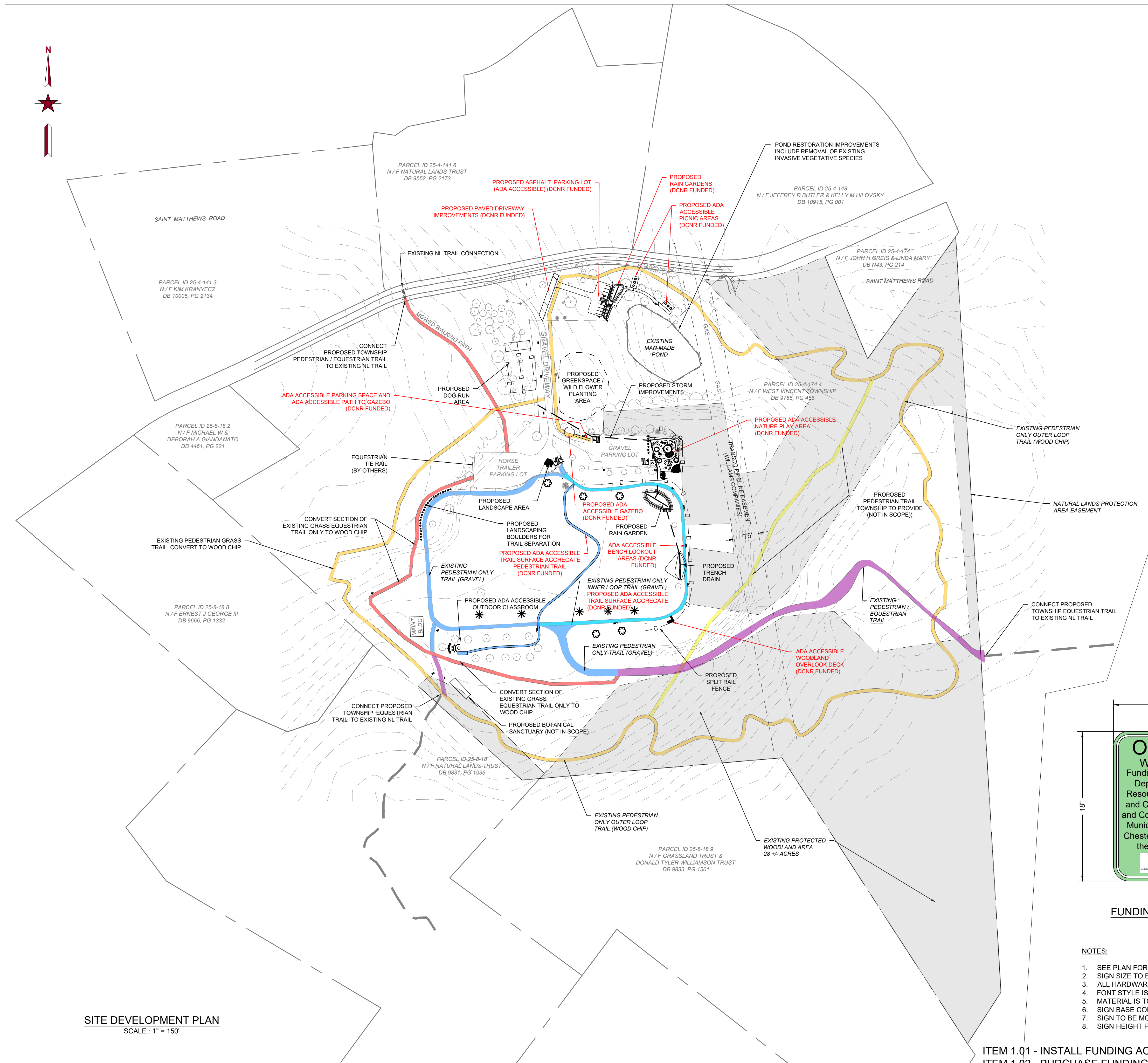
WETLANDS



PROP. TREES

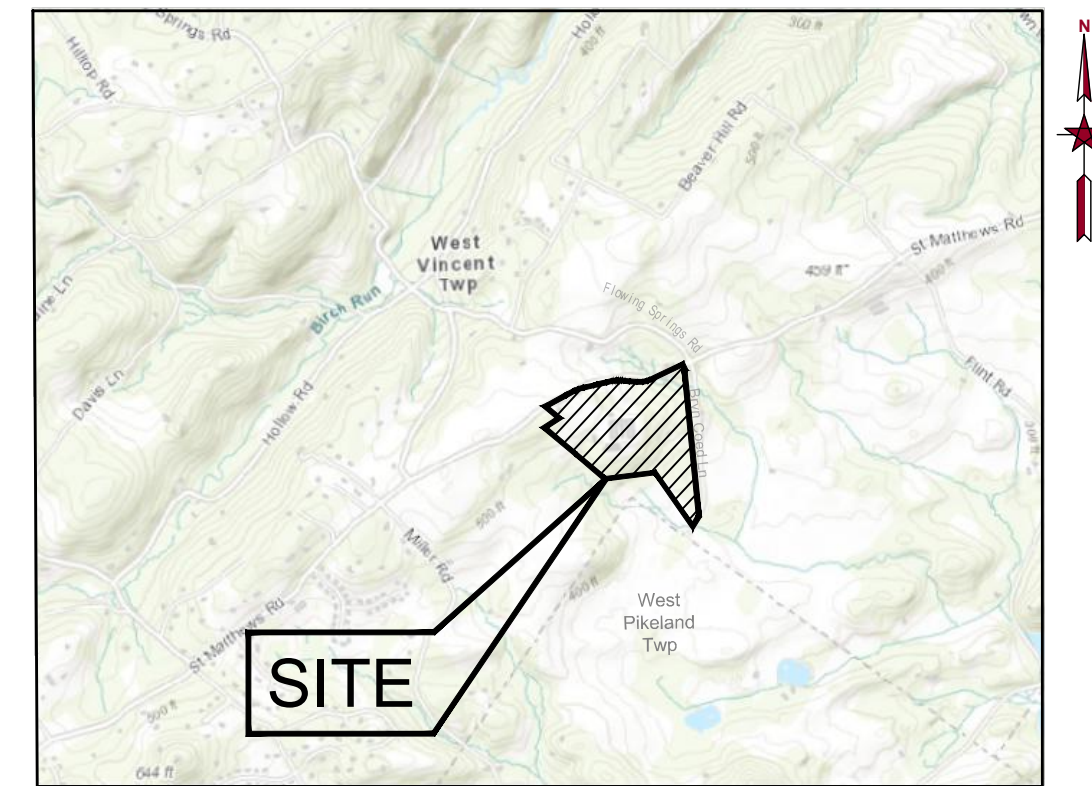
NO.	DESCRIPTION	DATE	BY		
REVISIONS					
SHEET TITLE:					
GENERAL NOTES					
PROJECT:					
PROJECT LOCATION:				PROJECT NO.:	
WEST VINCENY TOWNSHIP, CHESTER COUNTY				0272-2205	
DRAWN BY:		APPROVED BY:		DATE:	
MJB		JDA		05/09/25	
		SCALE:		SHEET NO.:	
		SCALE		3	
 LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547					





SOILS:

CaB - CALIFON LOAM, 3 TO 8% SLOPES
CpB - COKESBURY SILT LOAM, 3 TO 8% SLOPES
GdB - GLADSTONE GRAVELLY LOAM, 3 TO 8% SLOPES
GdC - GLADSTONE GRAVELLY LOAM, 8 TO 15% SLOPES
UrB - URBAN LAND, 0 TO 8% SLOPES



USGS TOPO MAP
SCALE: 1" = 3,000'

SITE DATA:

LOCATION: 1422 ST. MATTHEWS ROAD
PROPERTY IDENTIFICATION NUMBER - 2601 00616800 (UPI 25-4-174.4)

OWNER/APPLICANT/GRANTEE:
WEST VINCENT TOWNSHIP
STREET ADDRESS:
729 ST. MATTHEWS ROAD
CHESTER SPRINGS, PA 19425

SOURCE OF TITLE: DEED BOOK 9786 PAGE 456 BEING THE SAME PREMISES WHICH THE BRYN COED FARMS CO., DEDICATED UNTO WEST VINCENT TOWNSHIP IN A DEED RECORDED JULY 30, 2018 AT THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR THE COUNTY OF CHESTER, WEST CHESTER PENNSYLVANIA.

EXISTING ZONING
R-2 RESIDENTIAL DISTRICT
USE: OPEN SPACE / PARK / RECREATION
















EXISTING LOT SIZE 71.82 ACRES

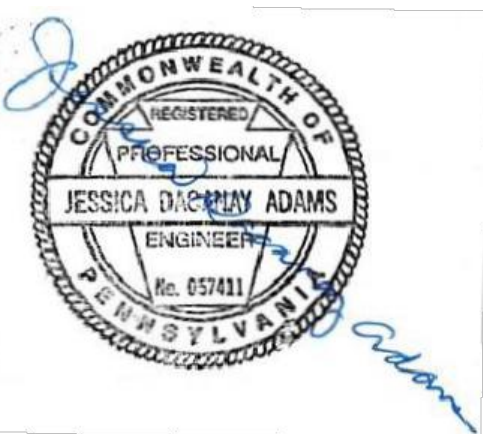
EXISTING USE - OPEN SPACE/ PARK/ RECREATION

NOTES:

1. AREA SHOWN IS WITHIN ZONE X FLOODPLAIN. SHOWN ON FIRM MAP NUMBER 42029C0050G & 42029C0095G.
2. TOPOGRAPHIC DATA IS FROM 5FT LIDAR CONTOURS. A BOUNDARY SURVEY WAS NOT PERFORMED.
3. ALL WALKING TRAILS, GAZEBOs, ETC. SHALL BE ACCESSIBLE IN ACCORDANCE WITH ADA STANDARDS.
4. NATURAL LANDS PROTECTION AREA EASEMENT WAS TAKEN FROM A PLAN PREPARED BY NAVE NEWELL TITLED 'BRYN COED FARMS' DATED 7/17/18.

LEGEND

-  NATURAL LANDS PROTECTION AREA
-  PEDESTRIAN TRAIL (0.5 mi. INNER LOOP)
-  PEDESTRIAN TRAIL (1.5 mi. OUTER LOOP)
-  PEDESTRIAN CONNECTOR TRAIL (0.5 mi.)
-  EQUESTRIAN TRAIL
-  PEDESTRIAN / EQUESTRIAN TRAIL
-  NATURAL LANDS (NL) TRAIL
-  PROPERTY BOUNDARY
-  5 FT CONTOUR
-  PROPOSED DECIDUOUS TREE
-  PROPOSED EVERGREEN TREE
-  BOLLARD
-  BIKE RACK
-  BENCH
-  INTERPRETIVE SIGNS



GRAPHIC SCALE

0' 150' 300' 450'

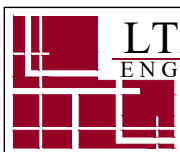
A horizontal graphic scale bar with alternating black and white segments. It is marked with '0'', '150'', '300'', and '450'' at regular intervals.

FUNDING ACKNOWLEDGEMENT SIGN
NOT TO SCALE

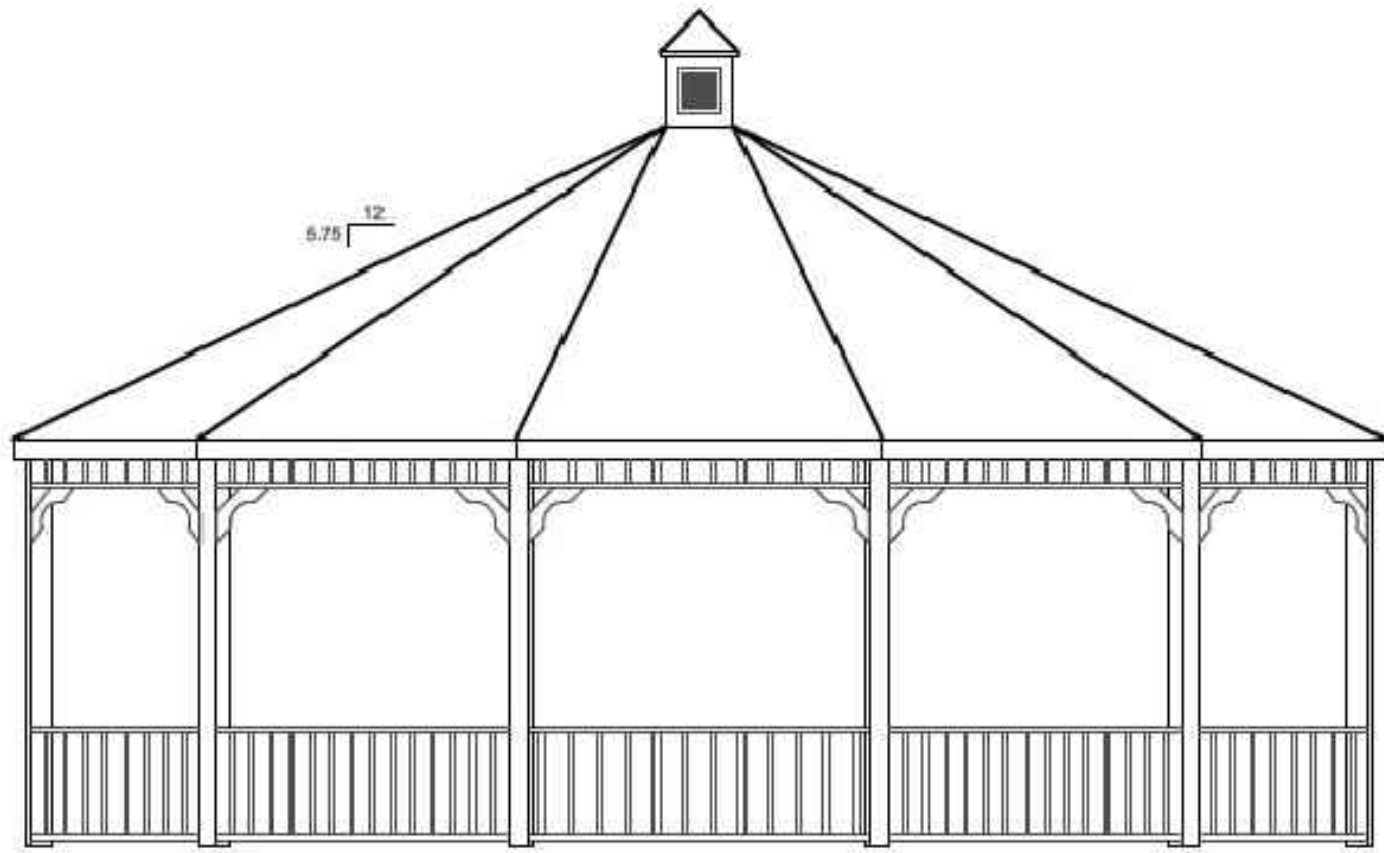
NOTES:

1. SEE PLAN FOR LOCATION.
2. SIGN SIZE TO BE 18" x 24".
3. ALL HARDWARE SHALL BE GALVANIZED STEEL.
4. FONT STYLE IS ARIAL AND SIZE AS SHOWN
5. MATERIAL IS TO BE .08" THICK ALUMINUM WITH EG VINYL OVERLAY.
6. SIGN BASE COLOR IS GREEN WITH WHITE BORDER AND WHITE TEXT.
7. SIGN TO BE MOUNTED ON TYPE B POST.
8. SIGN HEIGHT FROM GROUND TO BOTTOM OF SIGN SHALL BE 5 FEET.

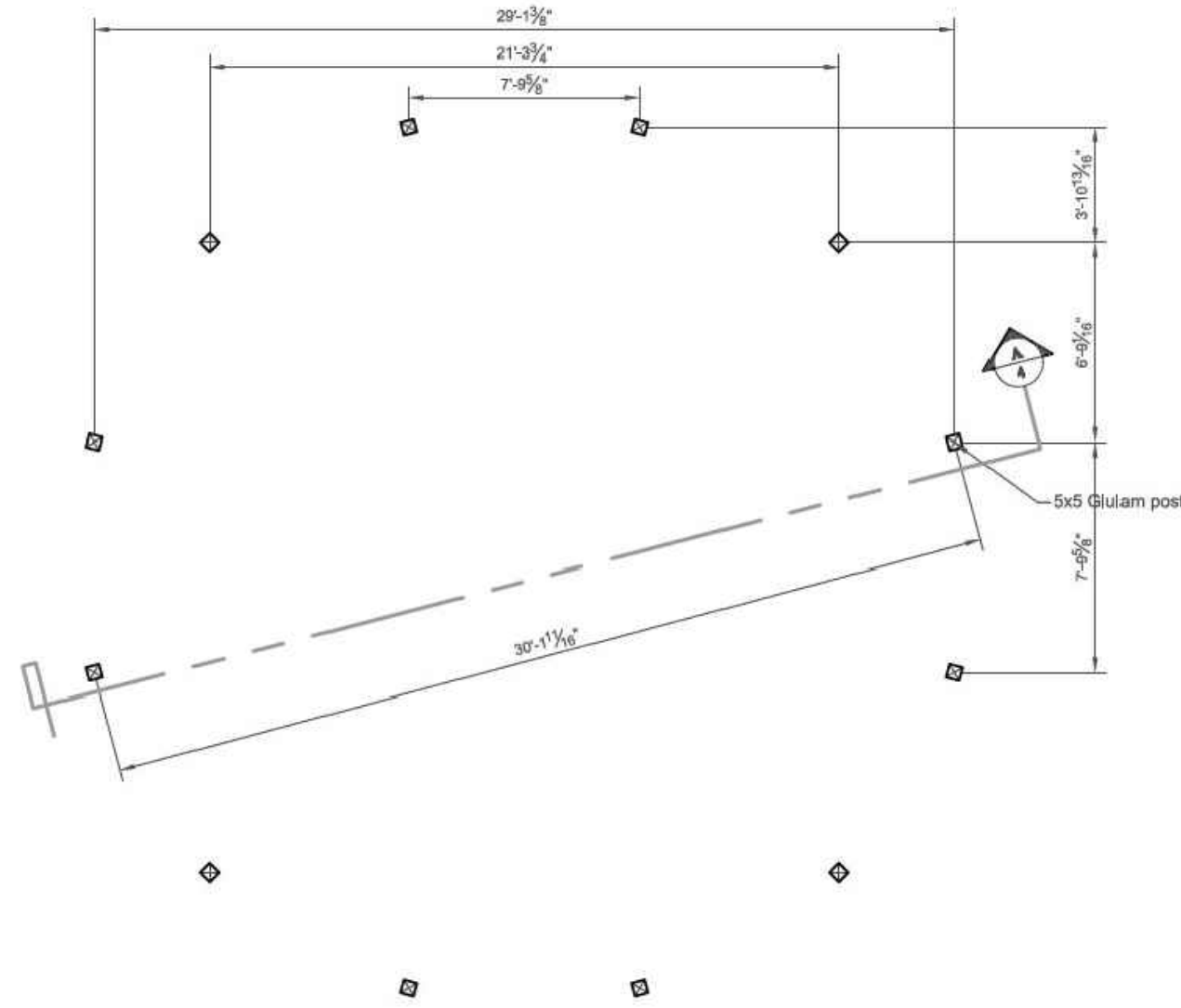
ITEM 1.01 - INSTALL FUNDING ACKNOWLEDGEMENT SIGN (DCNR FUNDED)
ITEM 1.02 - PURCHASE FUNDING ACKNOWLEDGEMENT SIGN (DCNR FUNDED)

NO.	DESCRIPTION		DATE		BY
REVISIONS					
SHEET TITLE:					
SITE DEVELOPMENT PLAN					
PROJECT:					
OPALANIE PARK					
PROJECT LOCATION:			PROJECT NO.:		
WEST VINCENT TOWNSHIP. CHESTER COUNTY			0272-2205		
DRAWN BY:	APPROVED BY:	SCALE:	DATE:		
MJB	JDA	1" = 150'	05/09/25		
 LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 381 ONE TOWN CENTRE DRIVE OLEY, PA 19457			SHEET NO.:		
			4		

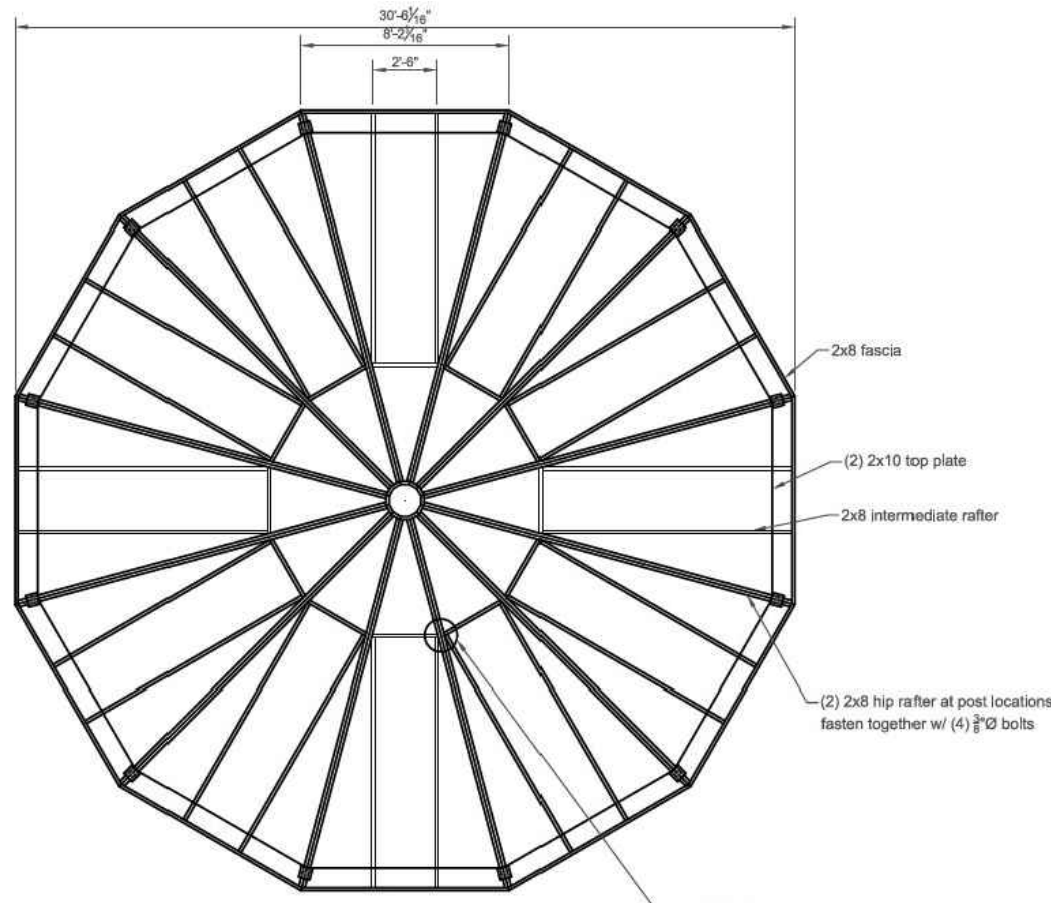
ISSUE FOR BID - 05/09/2025



FRONT ELEVATION
NOT TO SCALE



POST LAYOUT DETAIL
NOT TO SCALE

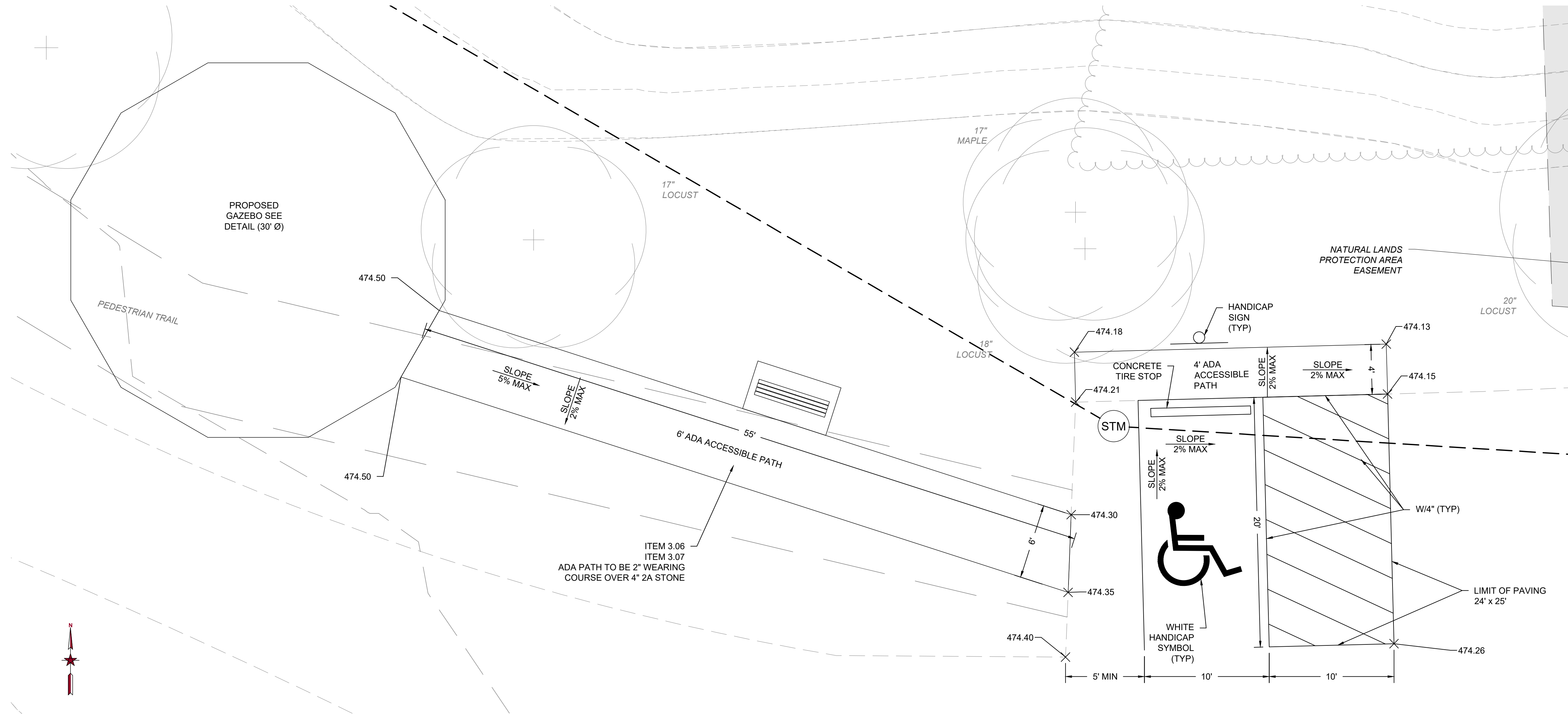


ROOF LAYOUT DETAIL
NOT TO SCALE

NOTES:

- GAZEBO TO BE A 30' DODECAGON WOOD GAZEBO OR TOWNSHIP APPROVED EQUAL. CONTACT RUSS ADKINS (COUNTRY LANE GAZEBO) AT 717-351-9250 OR EMAIL AT russ@gazebo.com FOR DETAILS.
- ROOF TO BE STANDING SEAM METAL ROOFING AND COLOR TO BE HUNTER GREEN OR TOWNSHIP APPROVED EQUAL.
- RAILINGS TO BE PRESSURE TREATED WOOD OR TOWNSHIP APPROVED EQUAL.
- CONCRETE TO BE 4,000 psi AT 28 DAYS.

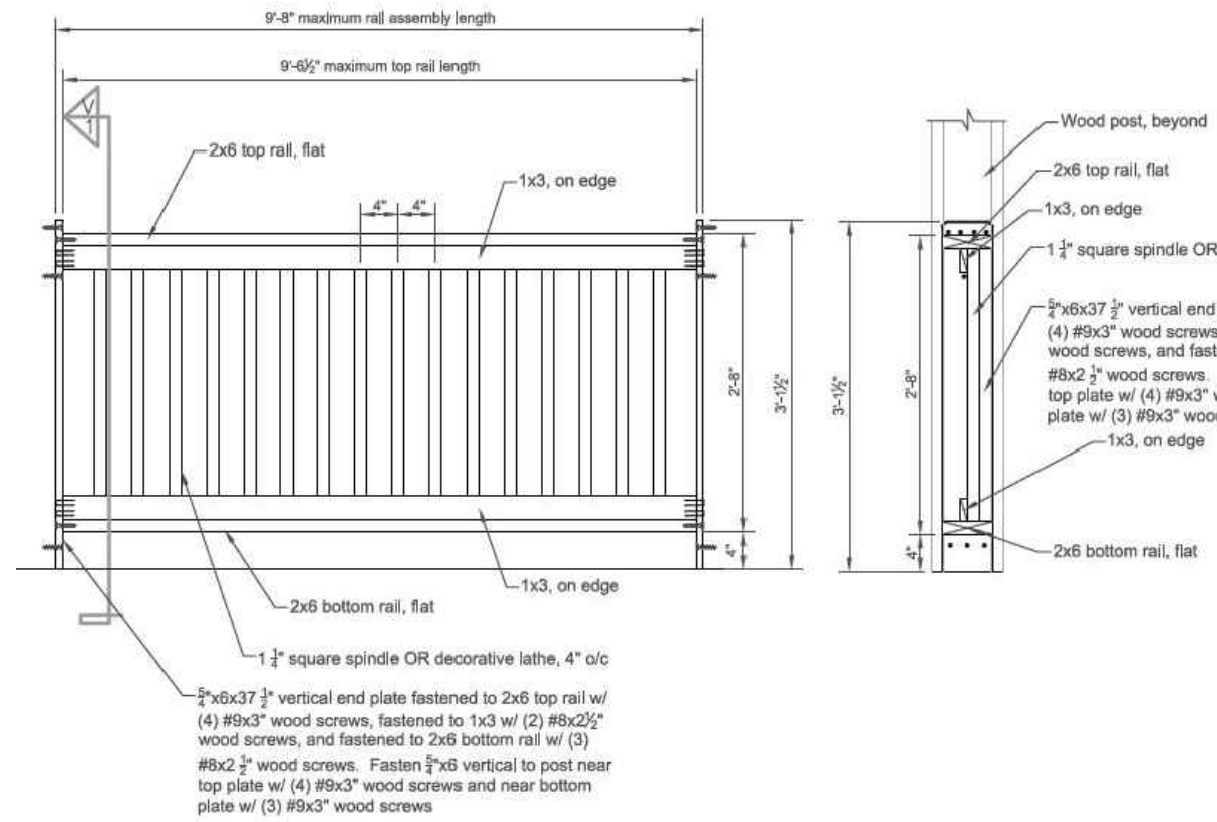
ADA ACCESSIBLE GAZEBO
SCALE: 1" = 5'



ADA ACCESSIBLE PARKING SPACES AND ADA
ACCESSIBLE PATH TO GAZEBO
SCALE: 1" = 5'

NOTES:

- COMPACT AND GRADE EXISTING STONE PARKING LOT AS NEEDED TO MEET ADA REQUIREMENTS AS SHOWN.
- ASPHALT SHALL BE 9.5 mm WEARING COURSE, 2" DEPTH.
- PAINT MARKINGS SHALL BE 4" WHITE WATERBORNE MARKINGS.
- SEE DETAILS FOR CONCRETE TIRE STOP AND HC SIGNS.
- ADA ACCESSIBLE PATH SHALL BE TRAIL SURFACE AGGREGATE OR TOWNSHIP APPROVED EQUAL.
- SEE SHEET 16 FOR ADDITIONAL ADA PARKING DETAILS INCLUDED IN ITEMS 3.01 THRU 3.05.



HANDRAIL DETAIL
NOT TO SCALE

ITEM 2.01 - ADA ACCESSIBLE GAZEBO (DCNR FUNDED)

ITEM 3.01 - 9.5mm WEARING COURSE, 2" DEPTH (DCNR FUNDED)

ITEM 3.02 - 4" WHITE PAINT (DCNR FUNDED)

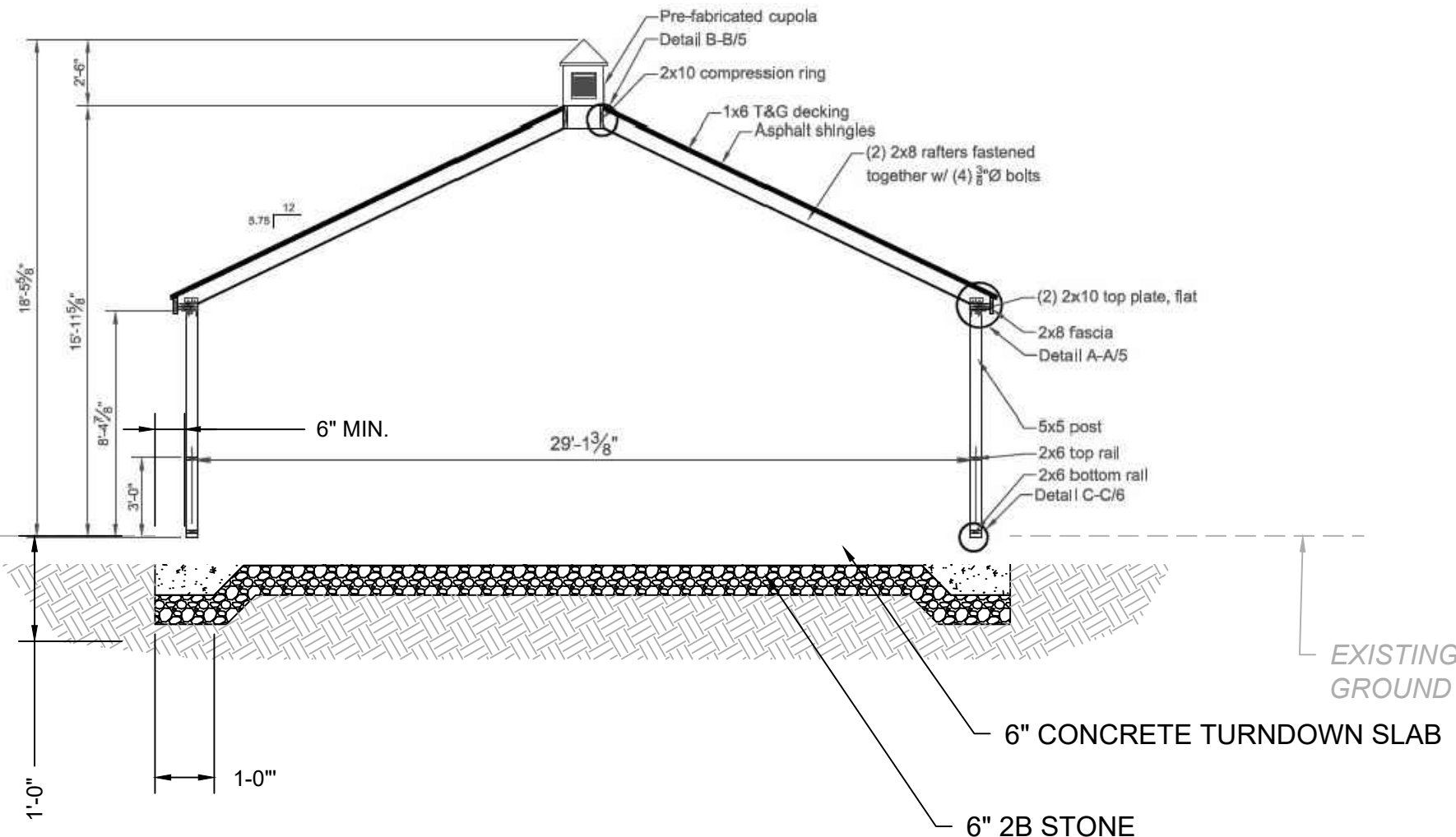
ITEM 3.03 - WHITE HANDICAP SYMBOL (DCNR FUNDED)

ITEM 3.04 - HANDICAP SIGN (DCNR FUNDED)

ITEM 3.05 - CONCRETE TIRE STOP (DCNR FUNDED)

ITEM 3.06 - 9.5mm WEARING COURSE, 2" DEPTH (DCNR FUNDED)

ITEM 3.07 - 2A STONE, 4" DEPTH (DCNR FUNDED)



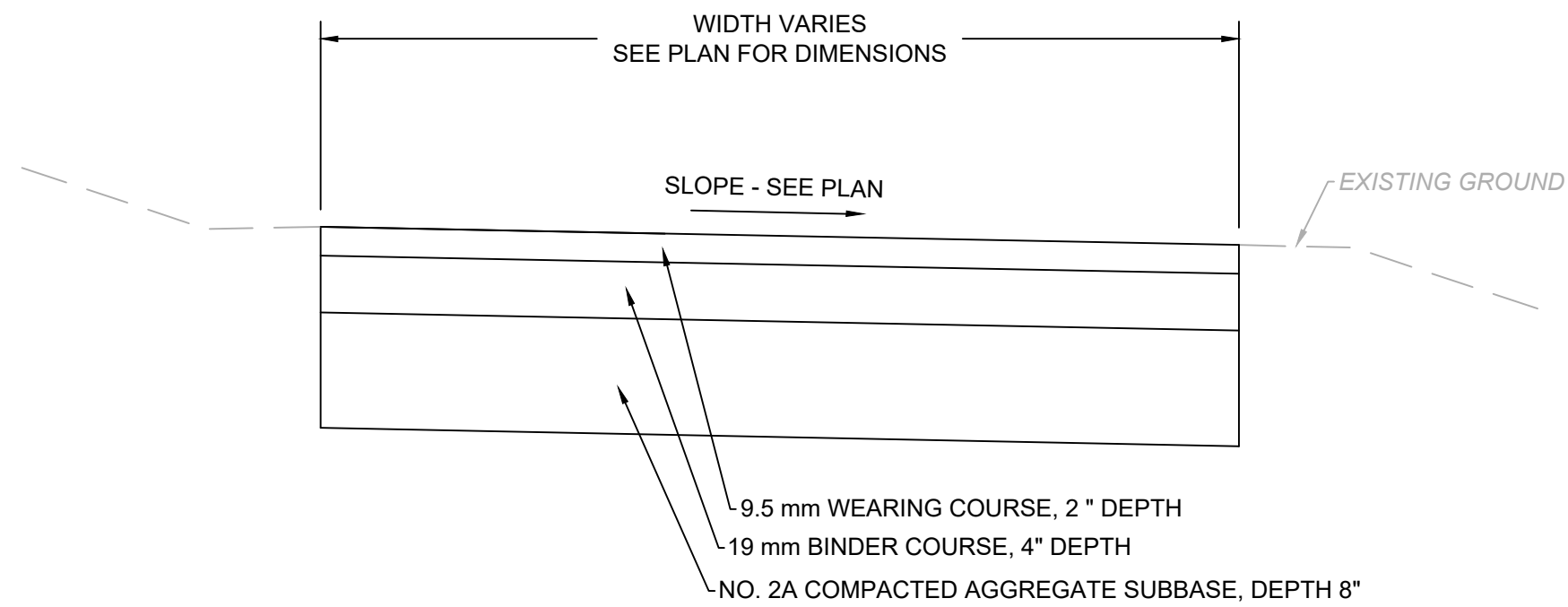
FRAMING DETAIL
NOT TO SCALE



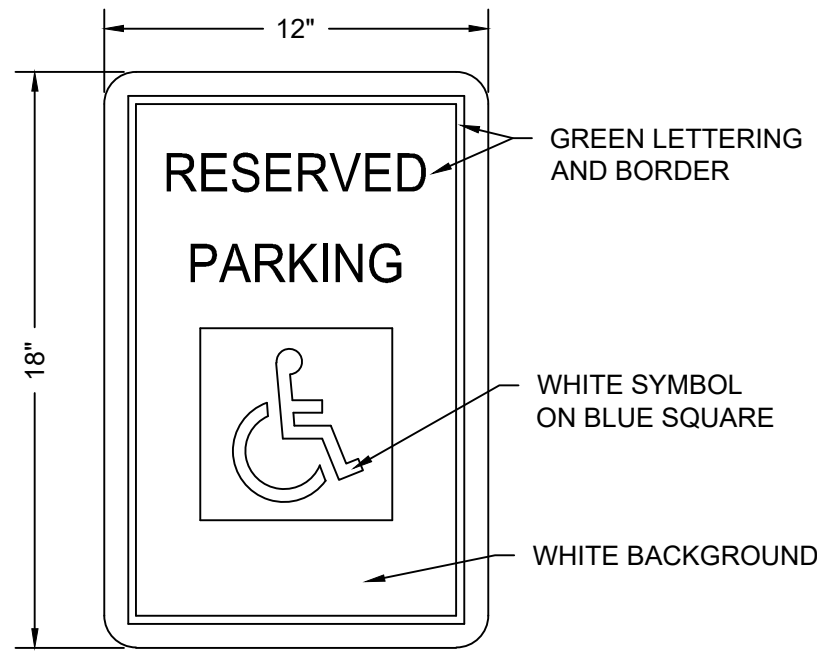
NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE: ADA ACCESSIBLE GAZEBO AND PARKING			
PROJECT: OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY		PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25
LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.: 5



PARKING LOT PLAN
SCALE: 1" = 10'

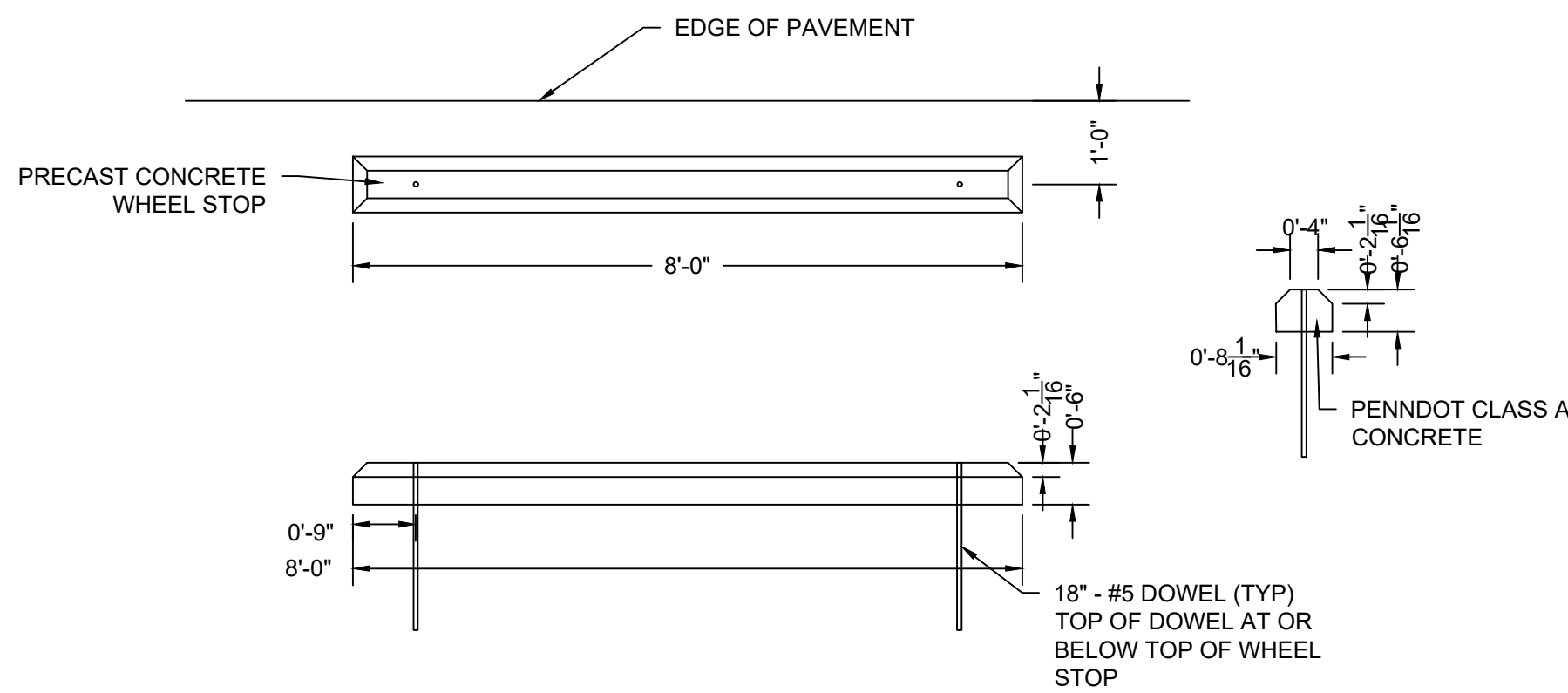


PARKING LOT DETAIL
NOT TO SCALE



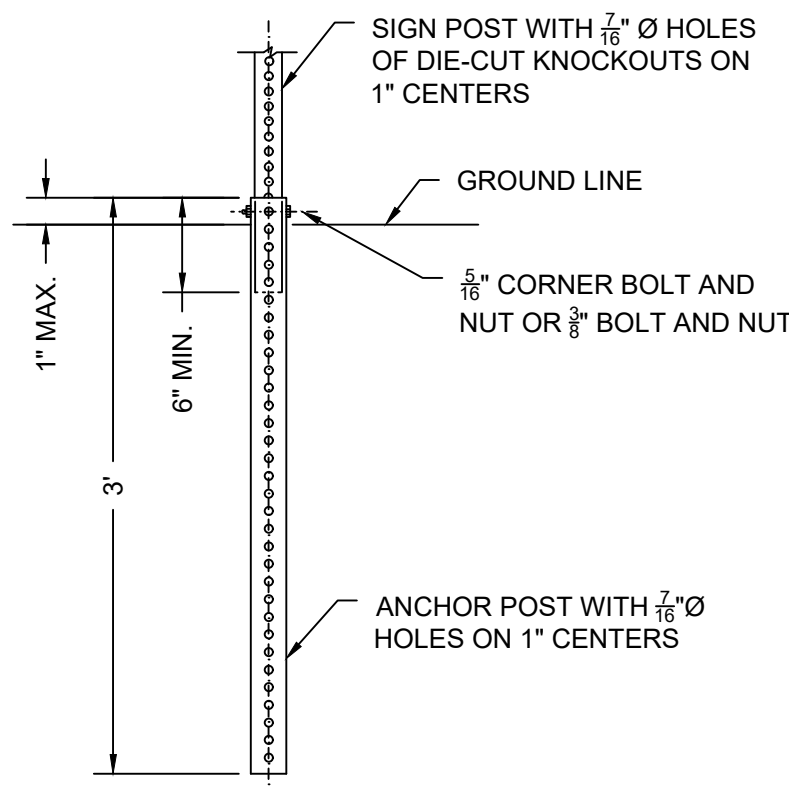
HANDICAP PARKING SIGN
NOT TO SCALE

- NOTES:
1. SIGN SHALL BE MOUNTED 5 FT FROM THE GROUND TO BOTTOM OF SIGN.
 2. SIGN TO BE MOUNTED ON TYPE B POST. SEE DETAIL.



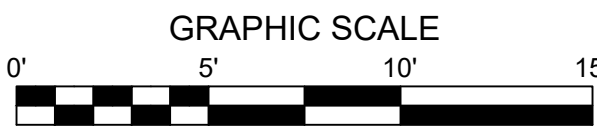
CONCRETE TIRE STOP DETAIL
NOT TO SCALE

- NOTES:
1. TIRE STOP TO BE CENTERED IN PARKING SPACE.



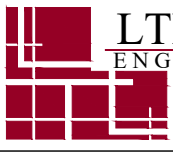
TYPE B - POST MOUNTED SIGN
NOT TO SCALE

- NOTES:
1. MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PUB. 408, LATEST EDITION.
 2. SIGN POSTS AND SPLICE SLEEVES SHALL HAVE 7/16" DIAMETER HOLES OR DIE-CUT KNOCKOUTS ON 1" CENTERS ON ALL FOUR SIDES. ANCHOR POSTS AND ANCHOR SLEEVES SHALL HAVE 7/16" DIAMETER HOLES ON 1" CENTERS ON ALL FOUR SIDES.
 3. BOLTS AND NUTS SHALL BE ASTM A 307, GRADE B.
 4. DRIVE RIVETS MAY BE USED TO FASTEN SIGN BLANKS TO THE SIGN POST.

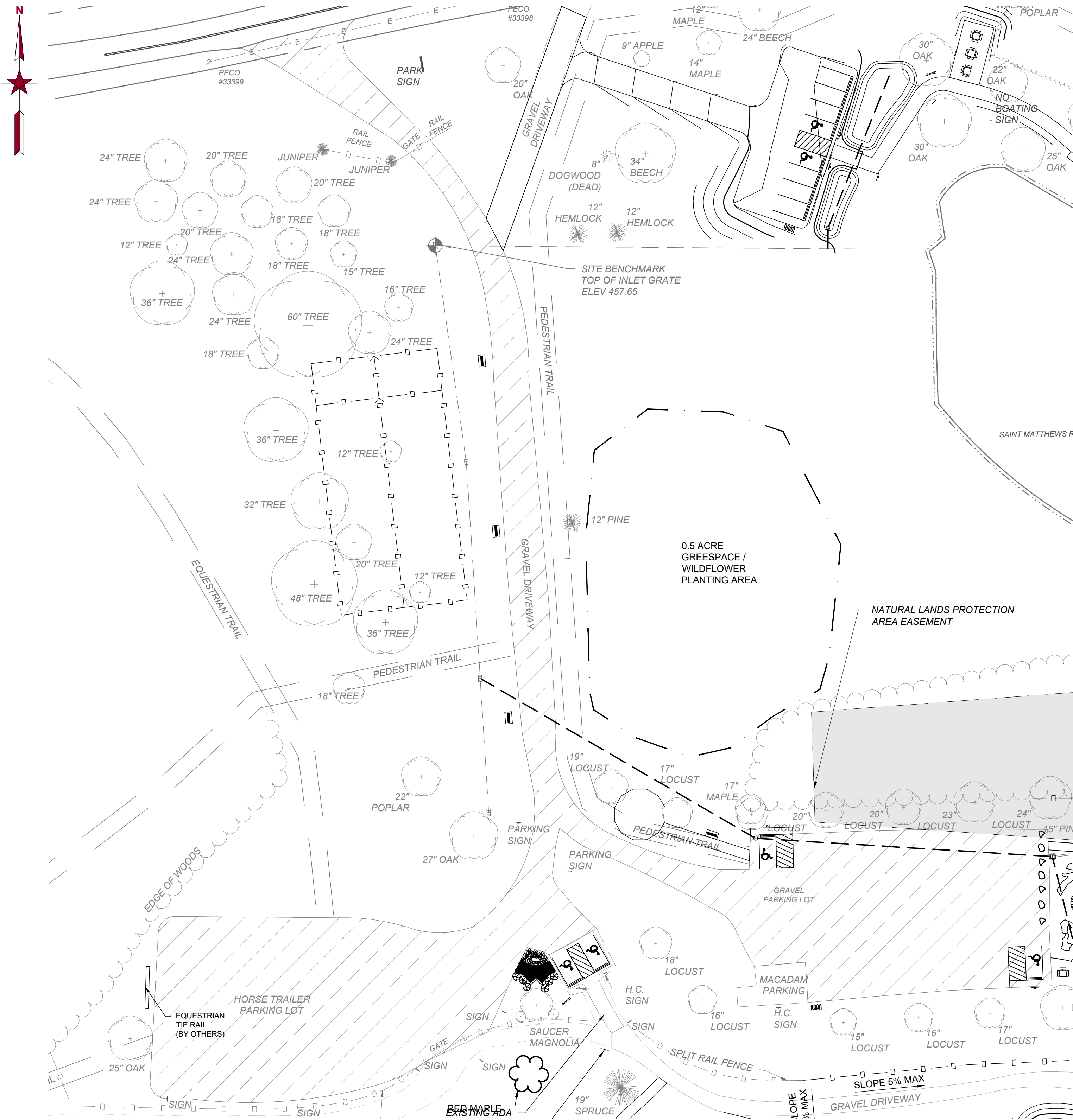


- ITEM 4.01 - GRADING AND EXCAVATION (DCNR FUNDED)
ITEM 4.02 - 9.5 mm WEARING COURSE, 2" DEPTH (DCNR FUNDED)
ITEM 4.03 - 19 mm BINDER COURSE, 4" DEPTH (DCNR FUNDED)
ITEM 4.04 - 2A STONE, 8" DEPTH (DCNR FUNDED)
ITEM 4.05 - CONCRETE TIRE STOP (DCNR FUNDED)
ITEM 4.06 - 4" WHITE PAINT (DCNR FUNDED)
ITEM 4.07 - WHITE HANDICAP SYMBOL (DCNR FUNDED)
ITEM 4.08 - HANDICAP SIGN (DCNR FUNDED)

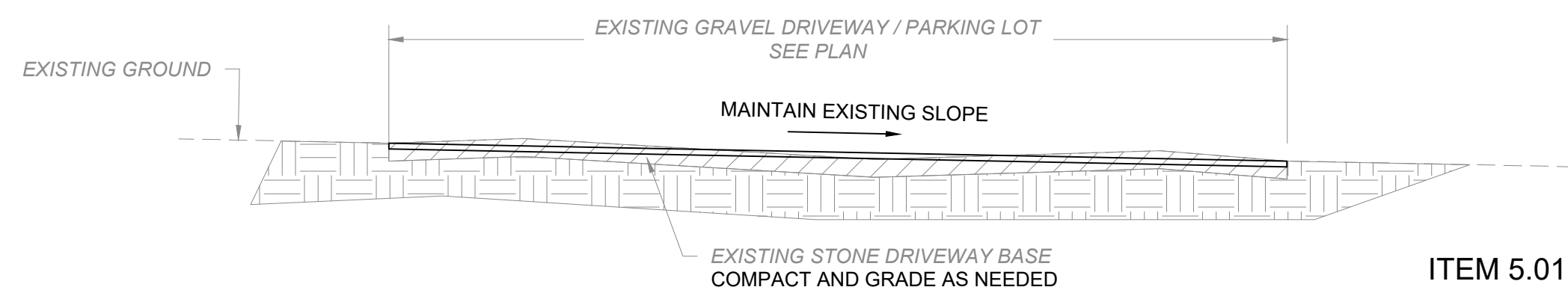


SHEET TITLE: PARKING LOT			
PROJECT: OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY		PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25
 LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.: 6

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\LANDSCAPE PARK PROJECT_1.DWG
PLOTTED: 5/9/2025 2:10 PM
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GRAVEL DRIVEWAY & PARKING LOT IMPROVEMENTS
SCALE : 1" = 40'



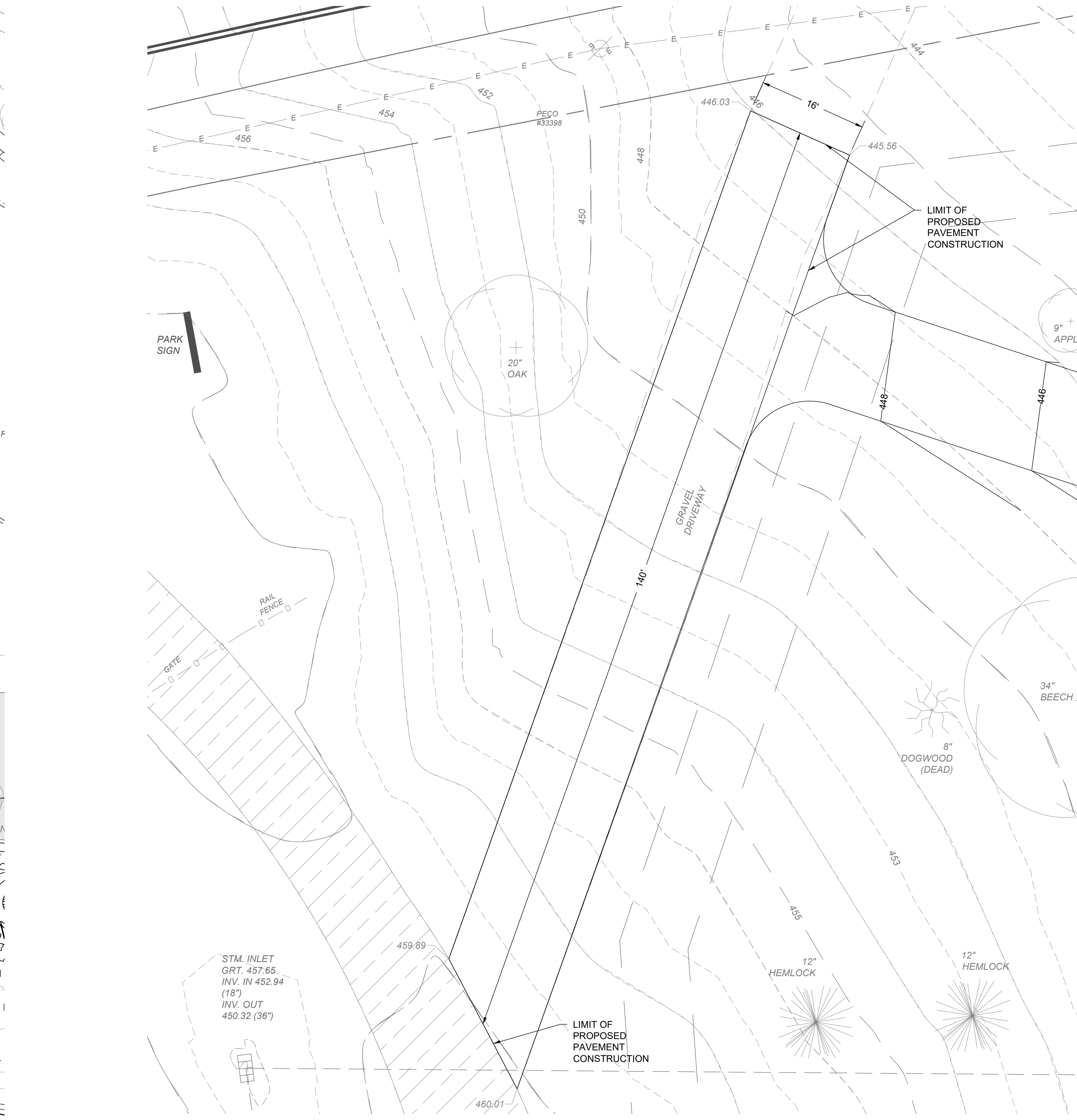
DRIVEWAY & PARKING LOT REGRADING DETAIL
NOT TO SCALE

NOTES:

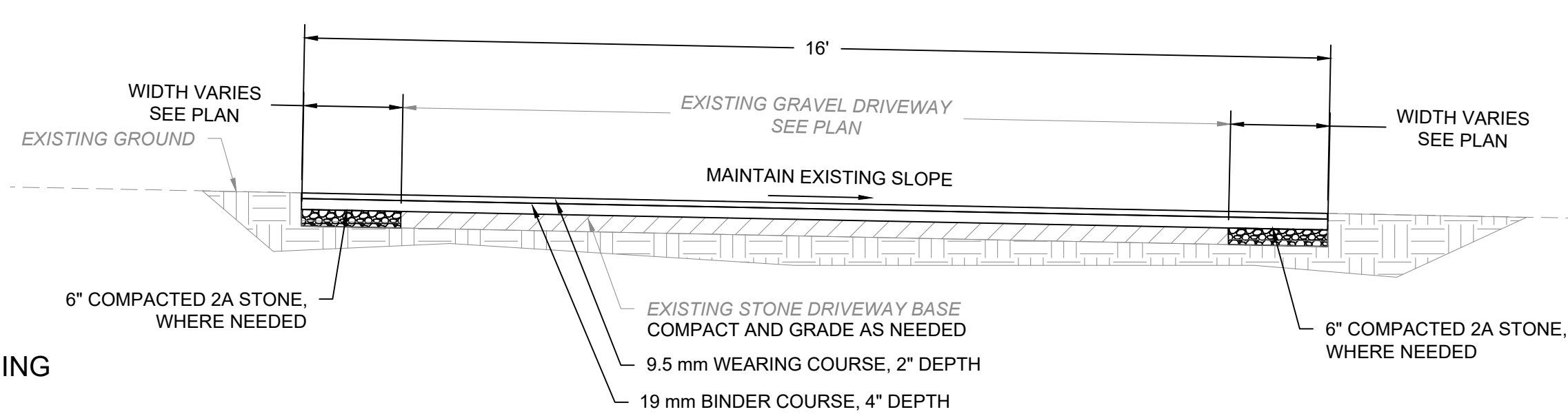
- EXISTING GRAVEL DRIVEWAY AND PARKING LOTS TO BE REGRADED AND COMPACTED. SLOPE TO FOLLOW NATURAL LAND FLOW.
- GRADING TO REMOVE HIGH SPOTS. STONE NOT TO BE REMOVED. LOW SPOTS TO FILLED AND COMPACTED WITH EXISTING MATERIAL OR 2A STONE AS NEEDED.
- GRADING TO MATCH EXISTING AREA AS SHOWN ON PLAN OR AS DIRECTED BY TOWNSHIP REPRESENTATIVE.

ITEM 5.01 - DRIVEWAY AND PARKING LOT REGRADING
ITEM 5.02 - 2A STONE

ITEM 6.01 - 9.5 mm WEARING COURSE, 2" DEPTH (DCNR FUNDED)
ITEM 6.02 - 19 mm BINDER COURSE, 4" DEPTH (DCNR FUNDED)
ITEM 6.03 - 2A STONE (DCNR FUNDED)



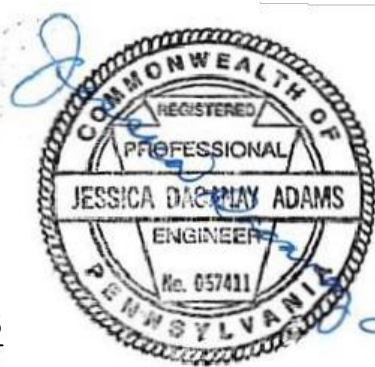
DRIVEWAY ENTRANCE IMPROVEMENTS
SCALE : 1" = 10'



DRIVEWAY ENTRANCE PAVEMENT DETAIL
NOT TO SCALE

NOTES:

- EXISTING STONE BASE TO BE GRADED AND COMPACTED. SLOPE TO FOLLOW NATURAL LAND FLOW.
- IN AREAS THAT EXTEND BEYOND THE EXISTING DRIVEWAY, EXCAVATE AND PLACE 6" OF 2A STONE AND COMPACT.



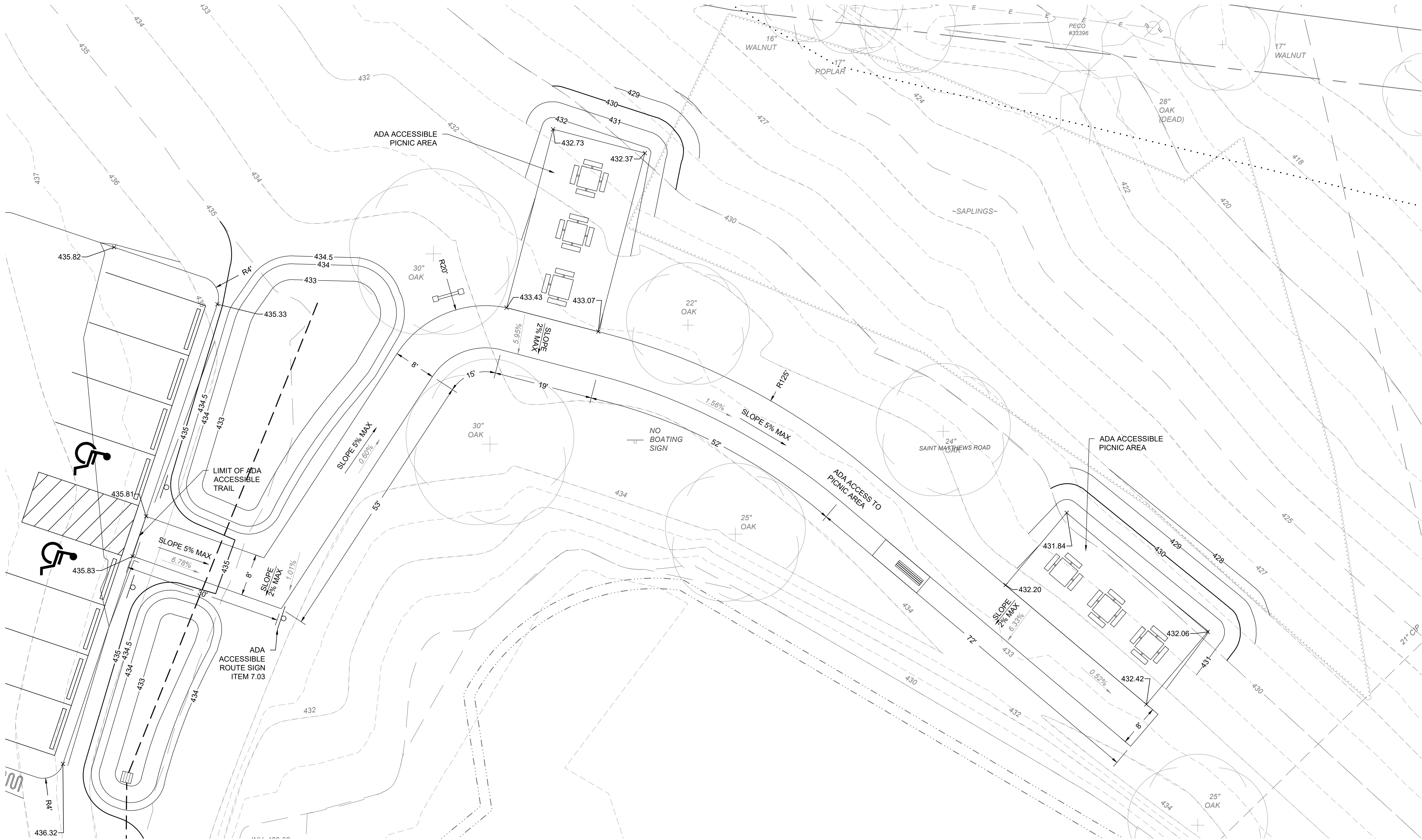
NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE: DRIVEWAY IMPROVEMENTS			
PROJECT: OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY		PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25
SHEET NO.: 7			



ISSUE FOR BID - 05/09/2025

PLOTTED: 5/9/2025 2:10 PM

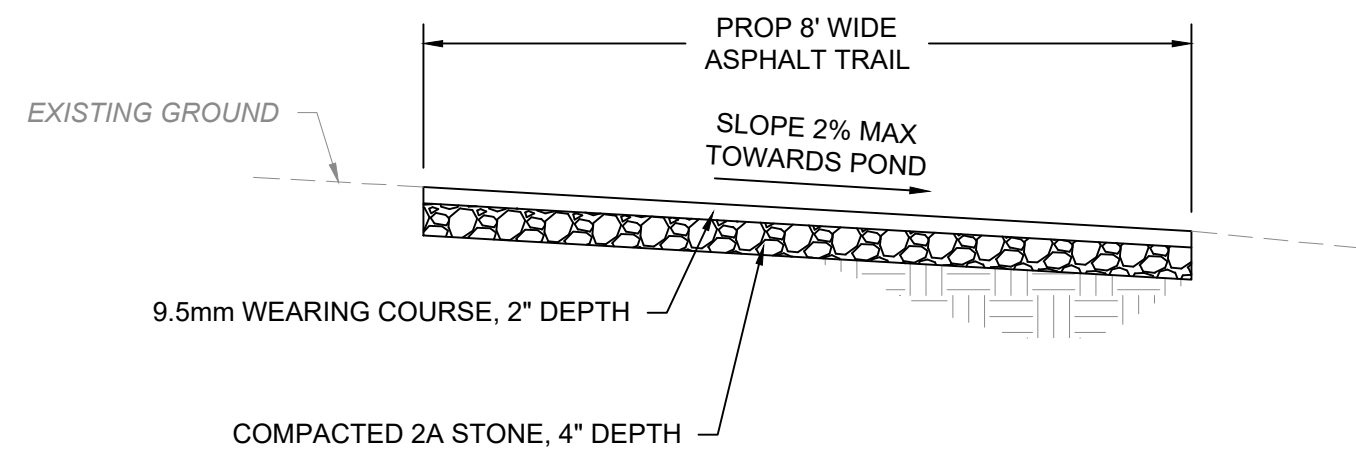
FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.DWG



ADA ACCESSIBLE PATHWAY - LARGE LEFT
NOT TO SCALE

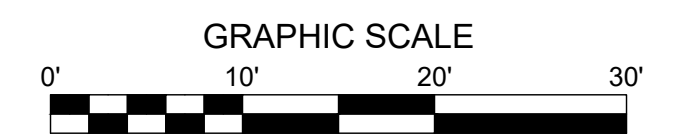
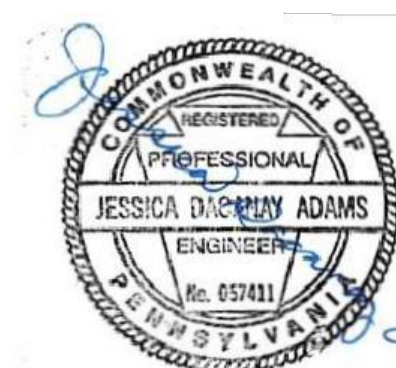
- NOTES:
1. SIGN TO BE MOUNTED ON TYPE B POST.
 2. SIGN TO BE ENGINEER GRADE REFLECTIVE ALUMINUM OR TOWNSHIP APPROVED EQUAL.

ADA COMPLIANT ACCESS TO PICNIC AREAS
SCALE : 1" = 10'



TRAIL SECTION
NOT TO SCALE

- ITEM 7.01 - 9.5 mm WEARING COURSE, 2" DEPTH (DCNR FUNDED)
ITEM 7.02 - 2A STONE, 4" DEPTH (DCNR FUNDED)
ITEM 7.03 - ADA ACCESSIBLE PATHWAY LARGE SIGN (DCNR FUNDED)

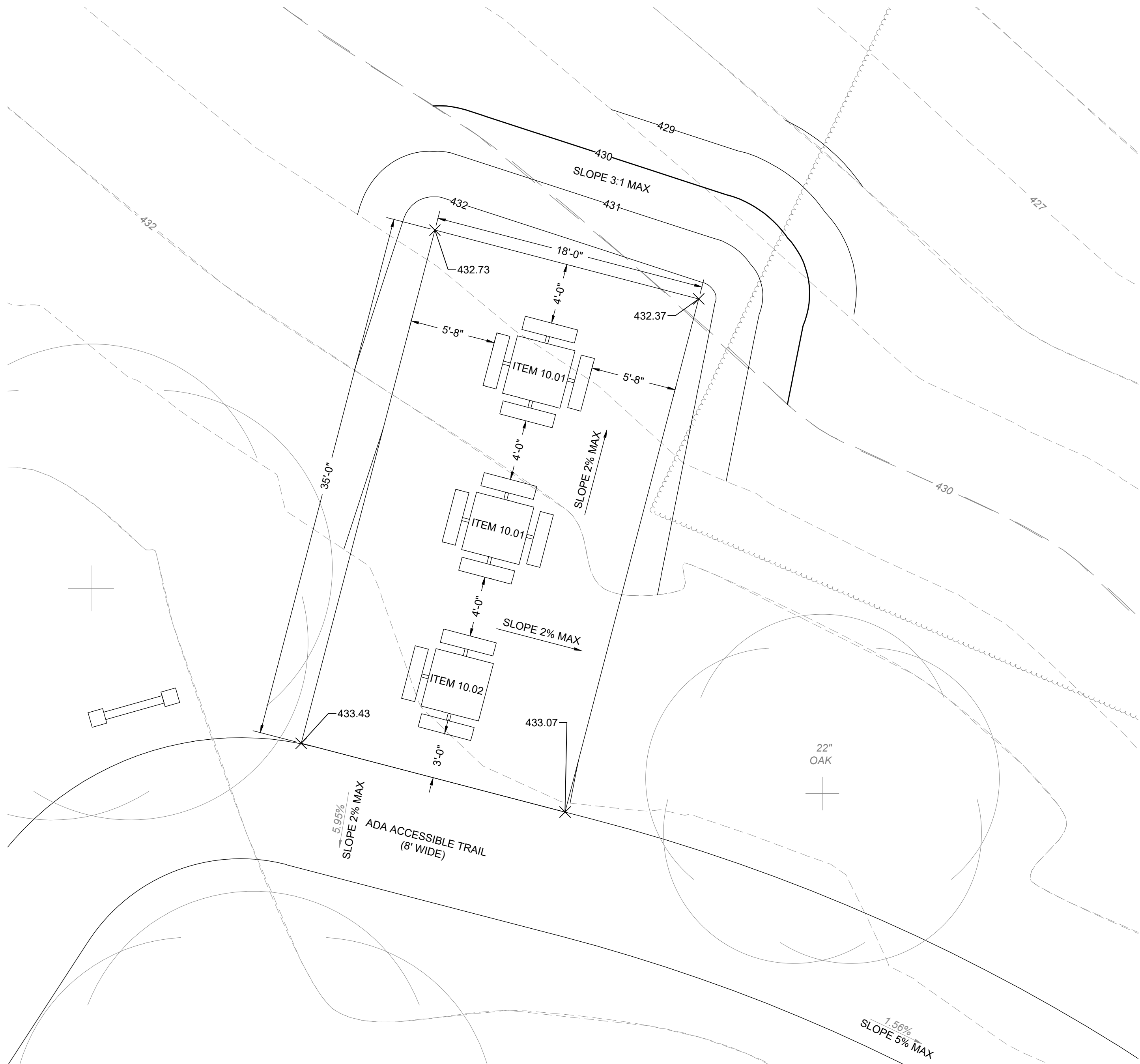


NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE: ADA PICNIC AREA ACCESS				
PROJECT: OPALANIE PARK				
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY			PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25	
LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.: 8	

ISSUE FOR BID - 05/09/2025

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG
PLOTTED: 5/9/2025 2:10 PM

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG
PLOTTED: 5/9/2025 2:10 PM



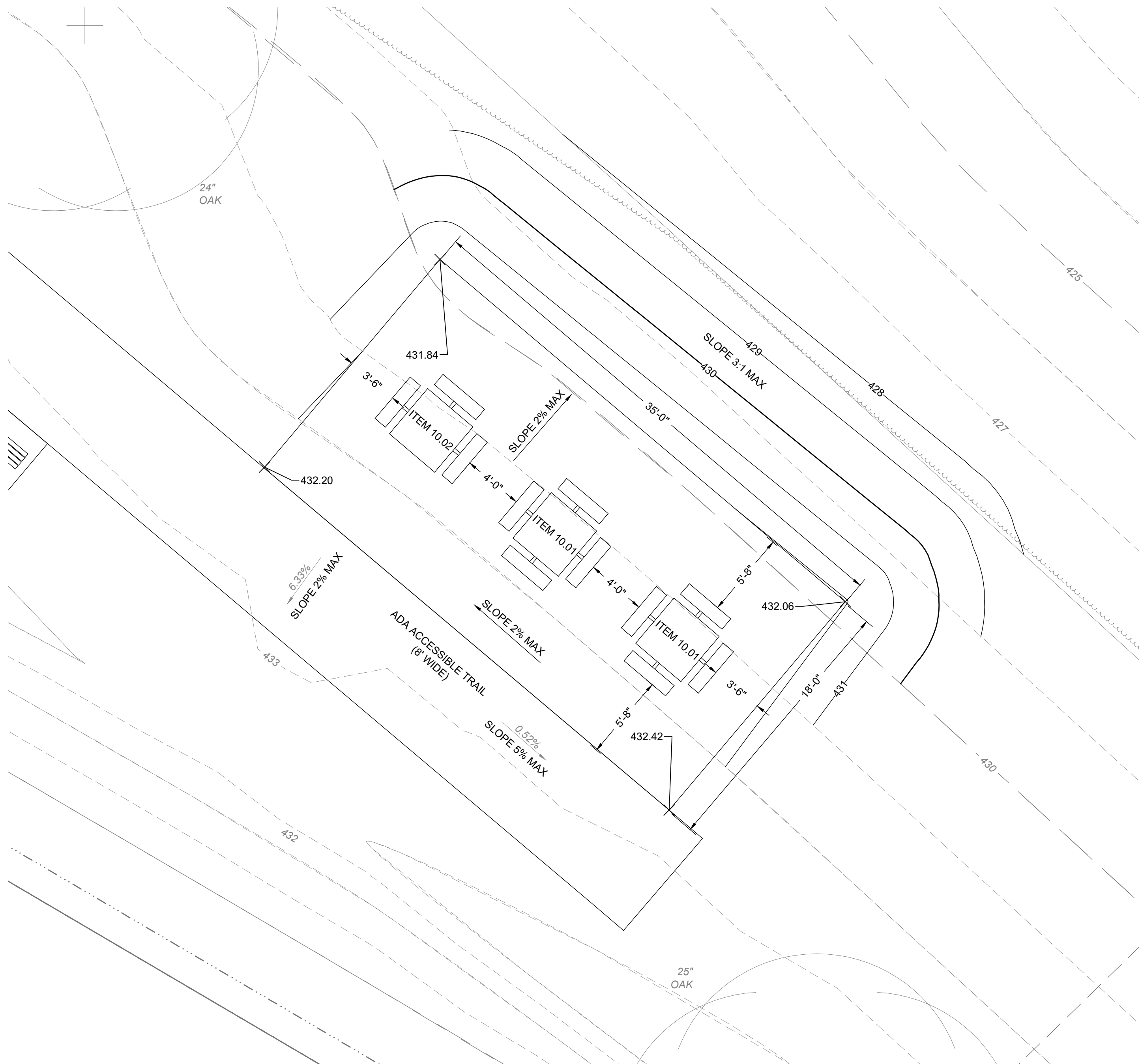
PICNIC AREA #1
SCALE : 1" = 5'

NOTES:

1. REFER TO PICNIC TABLE DETAILS FOR CONCRETE INFORMATION.
2. SLOPE OF PAD TO BE 2% MAX UNLESS OTHERWISE NOTED.
3. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
4. PROVIDE SAWCUT JOINTS EVERY 4' AND EXPANSION JOINTS AT 24' MAXIMUM INTERVALS.
5. CONCRETE SHALL BE 4000 psi at 28 DAYS, FIBER REINFORCED AND 6% AIR ENTRAINED.
6. ALL CONSTRUCTION PER PENNDOT PUB 408, LATEST EDITION.

ITEM 8.01 - PICNIC AREA 1 GRADING AND EXCAVATION (DCNR FUNDED)
ITEM 8.02 - PICNIC AREA 1 CONCRETE PAD (DCNR FUNDED)

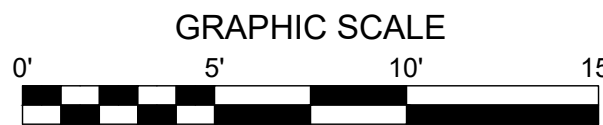
ITEM 09.01 - PICNIC AREA 2 GRADING AND EXCAVATION (DCNR FUNDED)
ITEM 09.02 - PICNIC AREA 2 CONCRETE PAD (DCNR FUNDED)



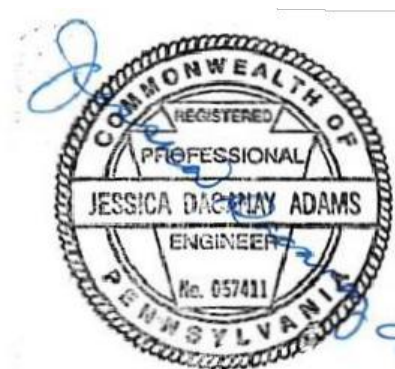
PICNIC AREA #2
SCALE : 1" = 5'

NOTES:

1. REFER TO PICNIC TABLE DETAILS FOR CONCRETE INFORMATION.
2. SLOPE OF PAD TO BE 2% MAX UNLESS OTHERWISE NOTED.
3. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
4. PROVIDE SAWCUT JOINTS EVERY 4' AND EXPANSION JOINTS AT 24' MAXIMUM INTERVALS.
5. CONCRETE SHALL BE 4000 psi at 28 DAYS, FIBER REINFORCED AND 6% AIR ENTRAINED.
6. ALL CONSTRUCTION PER PENNDOT PUB 408, LATEST EDITION.
7. CROSS SLOPE OF WALK TO BE 2% MAX. AND LONGITUDINAL SLOPE TO BE 5% MAX, UNLESS OTHERWISE NOTED.



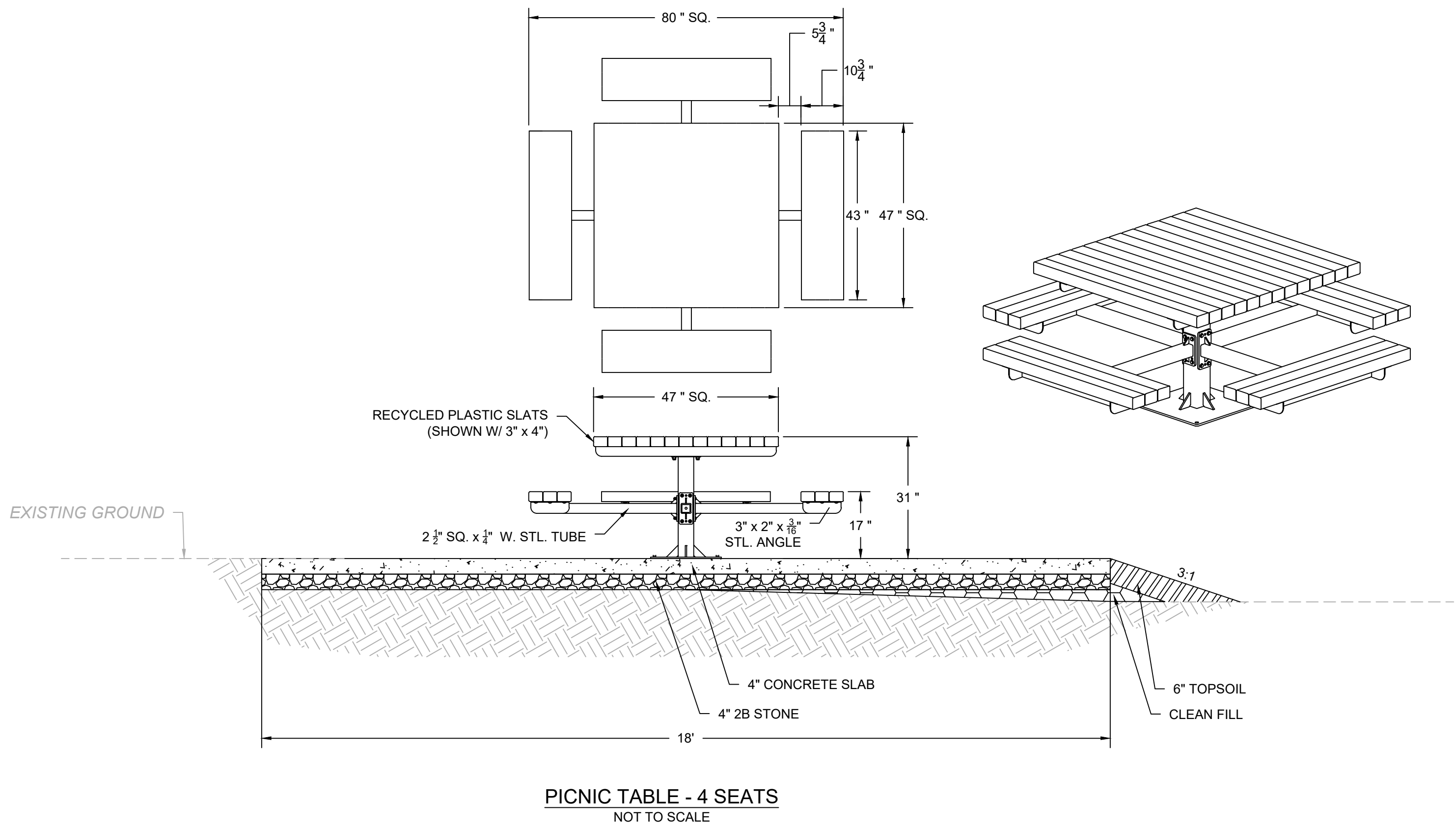
NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE:				
ADA PICNIC AREAS				
PROJECT:				
OPALANIE PARK				
PROJECT LOCATION:			PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY			0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:	
MJB	JDA	AS NOTED	05/09/25	
SHEET NO.:				9



ISSUE FOR BID - 05/09/2025

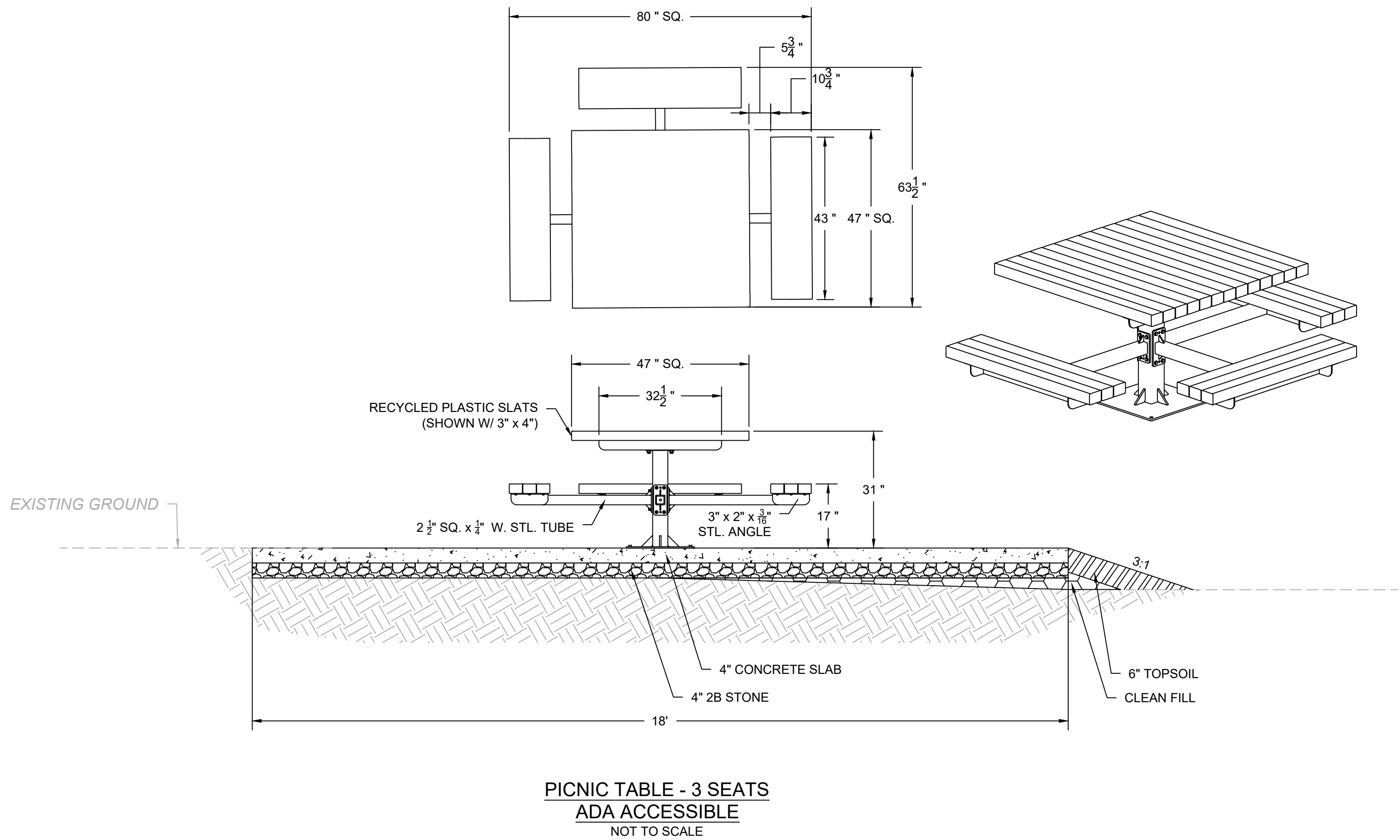
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FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_17.CDWG



NOTES:

1. TABLE TO BE DUMOR, INC. PEDESTAL TABLE 76 SERIES PL-4 OR TOWNSHIP APPROVED EQUAL.
2. SLOPE OF PAD TO BE 2% MAX UNLESS OTHERWISE NOTED.
3. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
4. PROVIDE SAWCUT JOINTS EVERY 4' AND EXPANSION JOINTS AT 24' MAXIMUM INTERVALS.
5. CONCRETE SHALL BE 4000 psi at 28 DAYS, FIBER REINFORCED AND 6% AIR ENTRAINED.
6. ALL CONSTRUCTION PER PENNDOT PUB 408, LATEST EDITION.



NOTES:

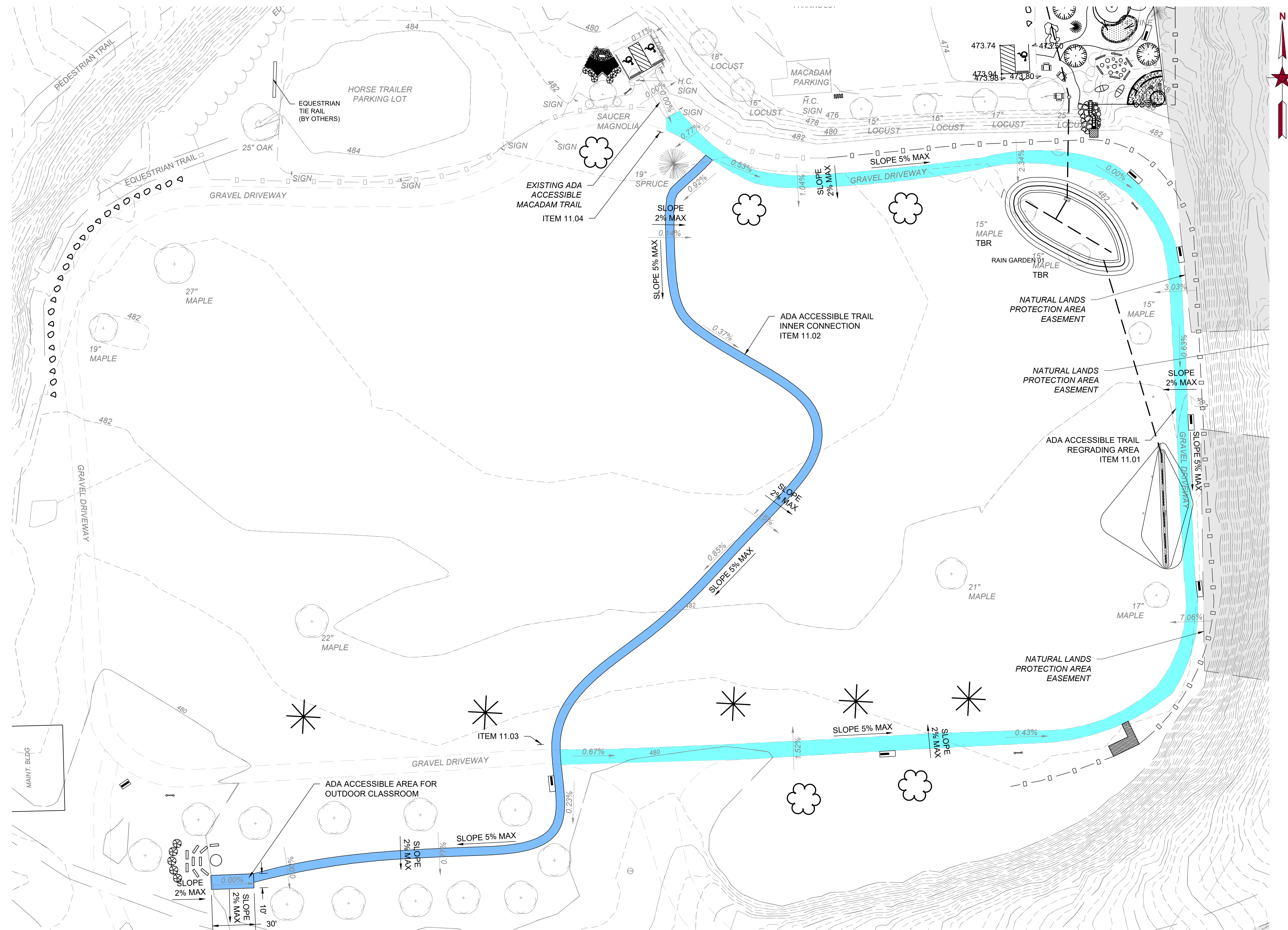
1. TABLE TO BE DUMOR, INC. PEDESTAL TABLE 76 SERIES PL-3 OR TOWNSHIP APPROVED EQUAL.
2. SLOPE OF PAD TO BE 2% MAX UNLESS OTHERWISE NOTED.
3. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
4. PROVIDE SAWCUT JOINTS EVERY 4' AND EXPANSION JOINTS AT 24' MAXIMUM INTERVALS.
5. CONCRETE SHALL BE 4000 psi at 28 DAYS, FIBER REINFORCED AND 6% AIR ENTRAINED.
6. ALL CONSTRUCTION PER PENNDOT PUB 408, LATEST EDITION.

- ITEM 10.01 - INSTALL PICNIC TABLE - 4 SEATS (DCNR FUNDED)
ITEM 10.02 - PURCHASE PICNIC TABLE - 4 SEATS (DCNR FUNDED)
ITEM 10.03 - INSTALL PICNIC TABLE - 3 SEATS ADA ACCESSIBLE (DCNR FUNDED)
ITEM 10.04 - PURCHASE PICNIC TABLE - 4 SEATS (DCNR FUNDED)

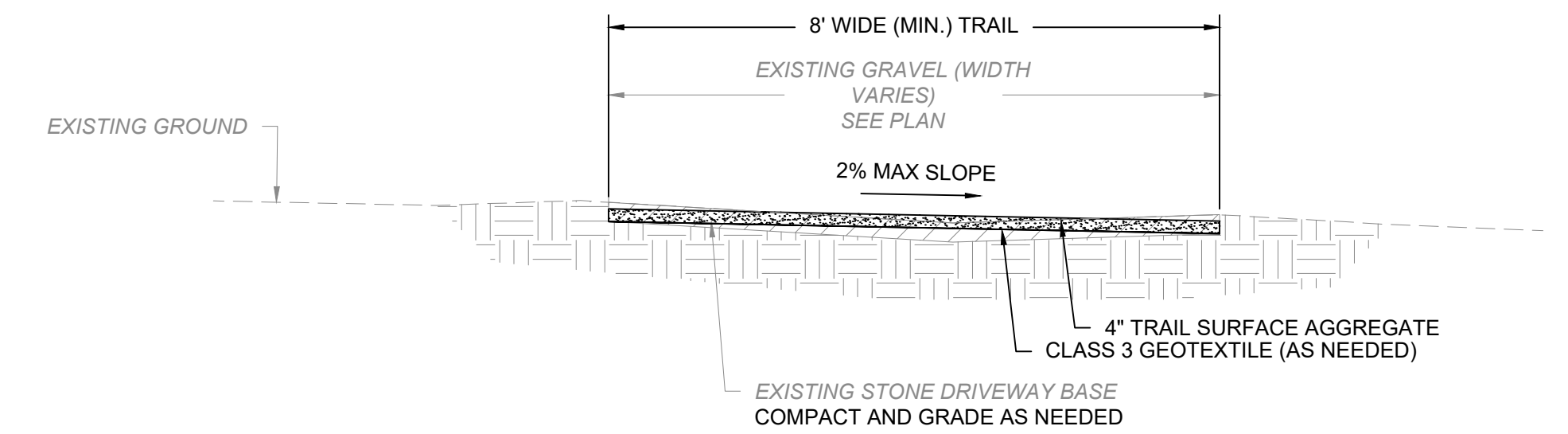


NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE:				
PICNIC TABLES				
PROJECT:				
OPALANIE PARK				
PROJECT LOCATION:			PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY			0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:	
MJB	JDA	AS NOTED	05/09/25	
SHEET NO.:				10





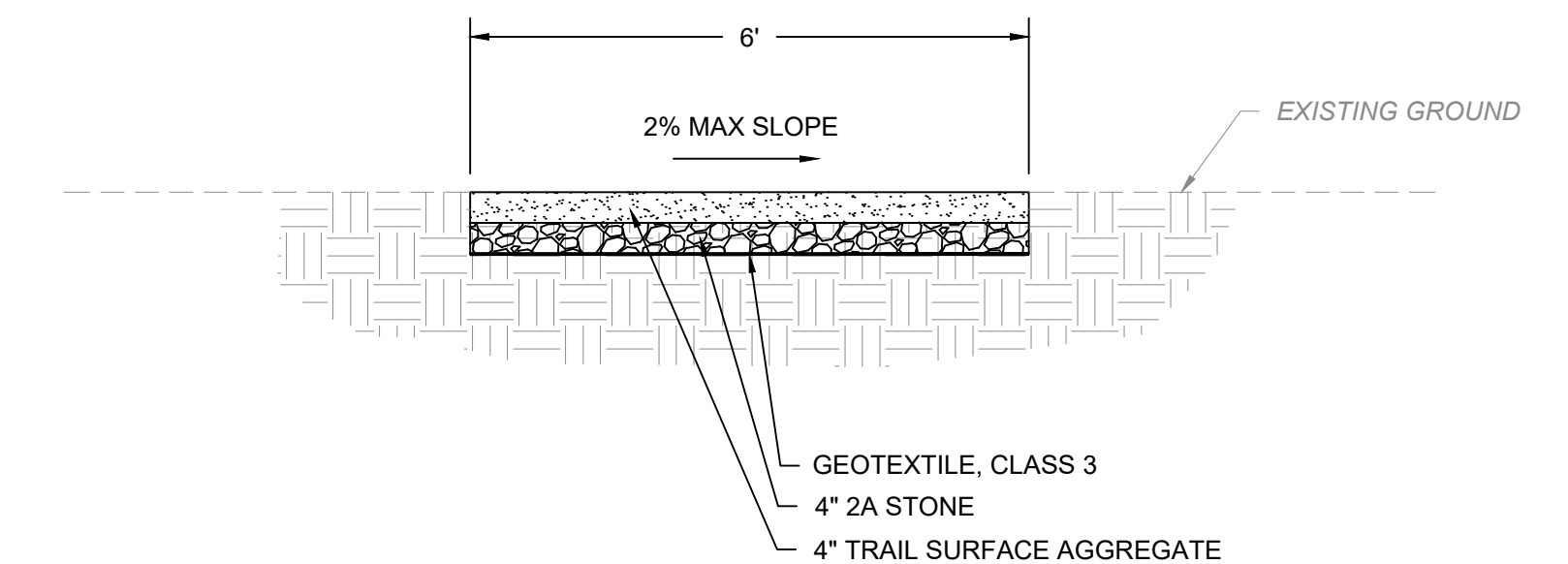
ADA ACCESSIBLE TRAILS
SCALE : 1" = 40'



ADA ACCESSIBLE TRAIL DETAIL
NOT TO SCALE

NOTES:

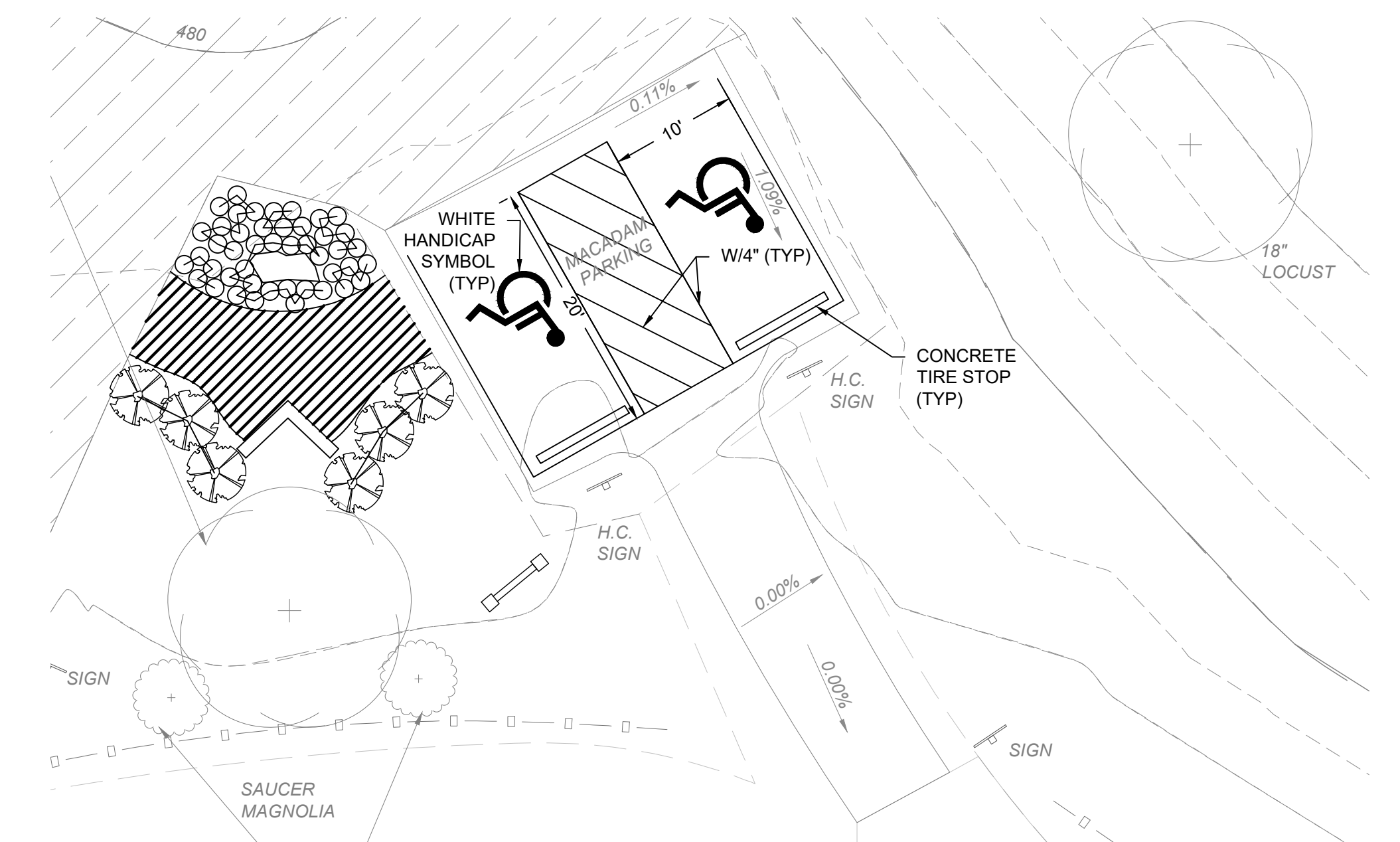
1. USE EXISTING GRAVEL DRIVEWAY FOR NEW ADA ACCESSIBLE TRAIL SURFACE AGGREGATE BASE.
2. GRADE AND COMPACT AS NECESSARY TO MEET ADA REQUIREMENTS.
3. SLOPE TO FOLLOW NATURAL LAND FLOW, BUT NOT EXCEED ADA REQUIREMENTS.
4. GRADING TO REMOVE HIGH SPOTS. STONE NOT TO BE REMOVED. LOW SPOTS TO BE FILLED AND COMPACTED WITH TRAIL SURFACE AGGREGATE.
5. GRADING TO MATCH EXISTING AREA AS SHOWN ON PLAN OR AS DIRECTED BY TOWNSHIP REPRESENTATIVE.
6. CLASS 3 GEOTEXTILE REQUIRED ONLY IN AREAS WHERE TRAIL SURFACE AGGREGATE IS NOT PLACED ON EXISTING STONE MATERIAL.



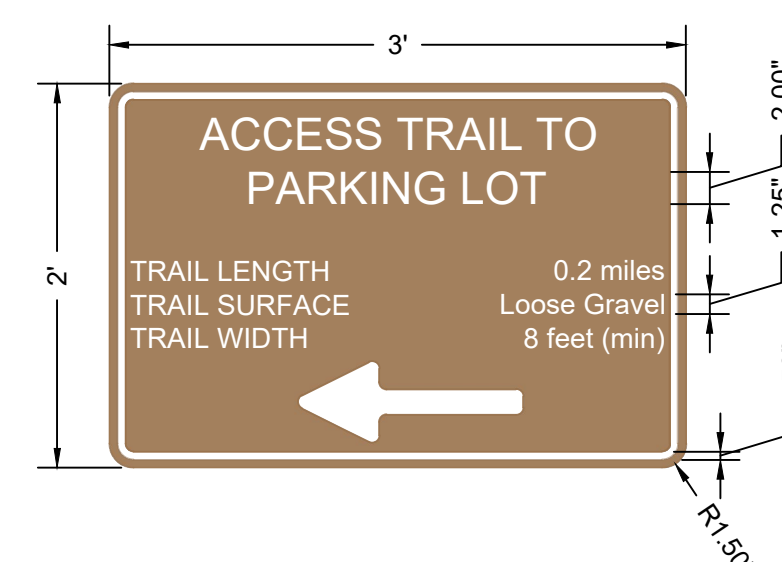
ADA ACCESSIBLE TRAIL INNER CONNECTION DETAIL
NOT TO SCALE

NOTES:

1. REMOVE TOPSOIL TO TOP OF SUBGRADE, 8" MIN.
2. TRAIL TO BE SLOPED IN DIRECTION OF NATURAL LAND FLOW BUT NOT TO EXCEED ADA REQUIREMENTS.



ADA ACCESSIBLE PARKING SPACES
SCALE : 1" = 10'



TRAIL SIGN (PARKING LOT)
NOT TO SCALE

NOTES:

1. SIGN TO BE MOUNTED ON TYPE B POST.
2. SIGN TO BE ENGINEER GRADE REFLECTIVE ALUMINUM OR TOWNSHIP APPROVED EQUAL.
3. SIGN TO BE ON BROWN BACKGROUND WITH WITH WHITE BORDER AND WHITE TEXT.



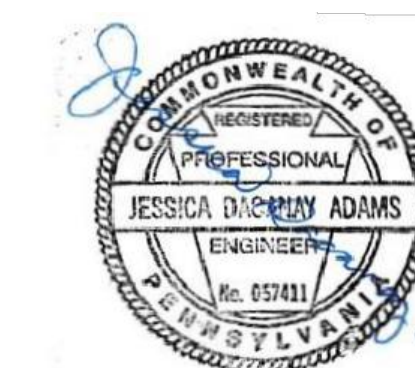
TRAIL SIGN (OUTDOOR CLASSROOM)
NOT TO SCALE

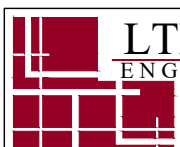
NOTES:

1. SIGN TO BE MOUNTED ON TYPE B POST.
2. SIGN TO BE ENGINEER GRADE REFLECTIVE ALUMINUM OR TOWNSHIP APPROVED EQUAL.
3. SIGN TO BE ON BROWN BACKGROUND WITH WITH WHITE BORDER AND WHITE TEXT.

ITEM 11.01 - ADA ACCESSIBLE TRAIL (DCNR FUNDED)
ITEM 11.02 - ADA ACCESSIBLE INNER TRAIL CONNECTION (DCNR FUNDED)
ITEM 11.03 - TRAIL SIGN (PARKING LOT) (DCNR FUNDED)
ITEM 11.05 - 4" WHITE PAINT (DCNR FUNDED)
ITEM 11.06 - HANDICAP SYMBOL (DCNR FUNDED)
ITEM 11.07 - CONCRETE TIRE STOP (DCNR FUNDED)

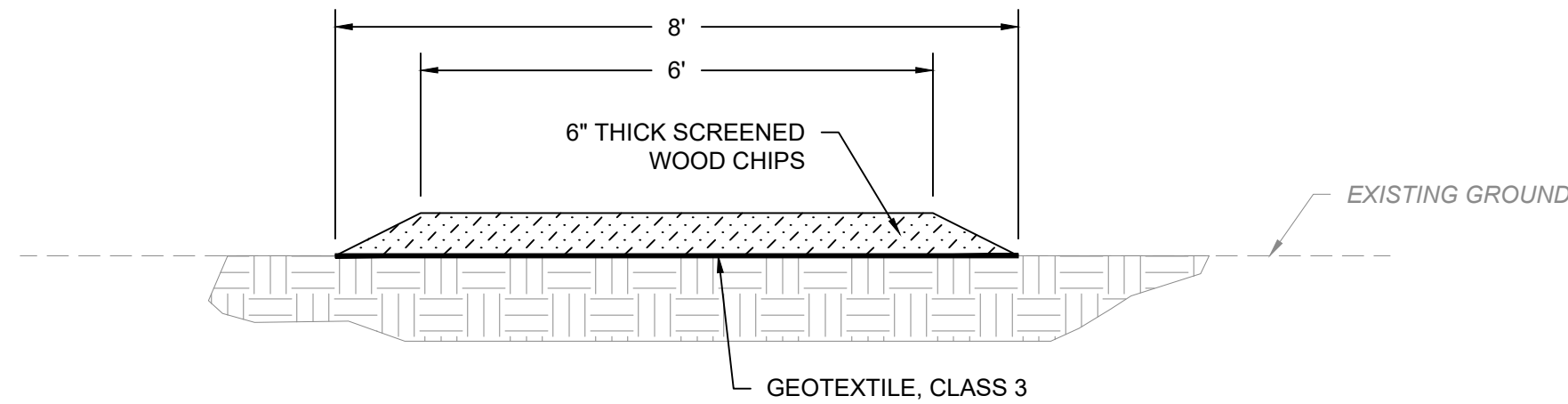
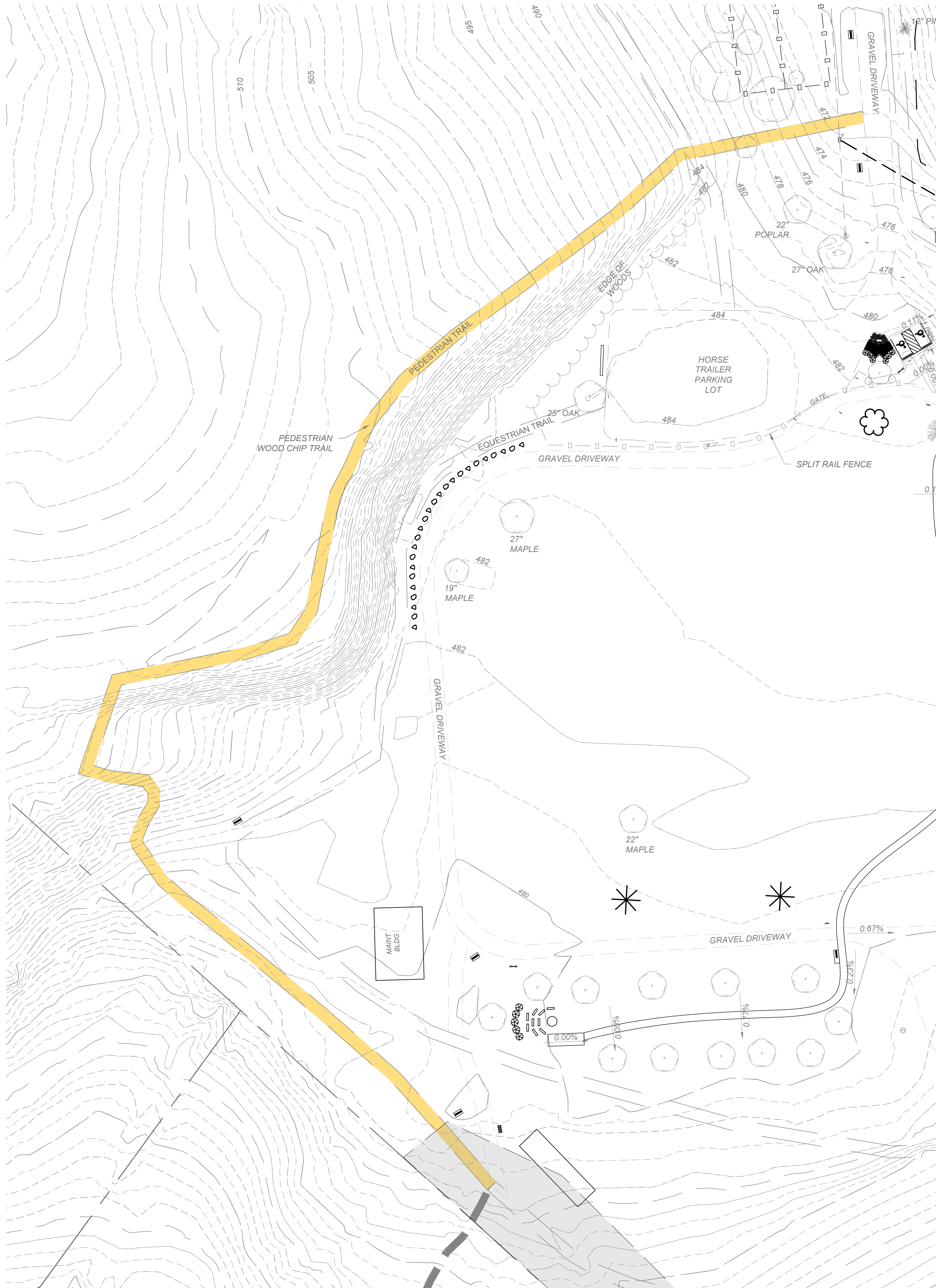
ADD ITEM 6
ITEM 11.04 - TRAIL SIGN (OUTDOOR CLASSROOM) (DCNR FUNDED)



NO.	DESCRIPTION			DATE	BY
<p style="text-align: center;">REVISIONS</p>					
<p>SHEET TITLE:</p> <p style="text-align: center;">ADA ACCESSIBLE TRAILS</p>					
<p>PROJECT:</p> <p style="text-align: center;">OPALANIE PARK</p>					
<p>PROJECT LOCATION:</p> <p style="text-align: center;">WEST VINCENT TOWNSHIP. CHESTER COUNTY</p>				<p>PROJECT NO.:</p> <p style="text-align: center;">0272-2205</p>	
<p>DRAWN BY:</p> <p style="text-align: center;">MJB</p>		<p>APPROVED BY:</p> <p style="text-align: center;">JDA</p>		<p>SCALE:</p> <p style="text-align: center;">AS NOTED</p>	
				<p>DATE:</p> <p style="text-align: center;">05/09/25</p>	
 <p style="text-align: center;">LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS PO BOX 261 ONE TOWN CENTRE DRIVE OULEY, PA 19547</p>				<p>SHEET NO.:</p> <p style="text-align: center;">11</p>	

PLOTTED: 5/9/2025 2:11 PM

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRN COED OPALANIE PARK - SECOND BID\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_PCDWG



PEDESTRIAN WOOD CHIP TRAIL DETAIL
NOT TO SCALE

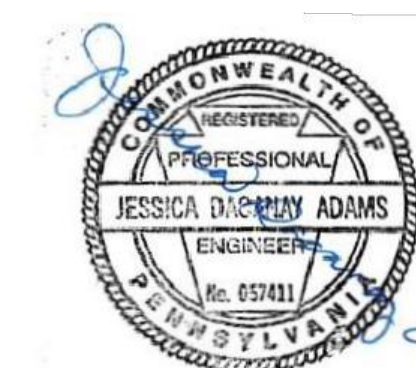
NOTES:

1. TRAIL TO BE SLOPED IN DIRECTION OF NATURAL LAND FLOW.
2. WOOD CHIPS SHOULD BE PLACED 6" THICK.
3. WOOD CHIPS SHALL BE SCREENED.

PEDESTRIAN TRAIL IMPROVEMENTS (WOOD CHIP)
SCALE : 1" = 50'

NOTES:

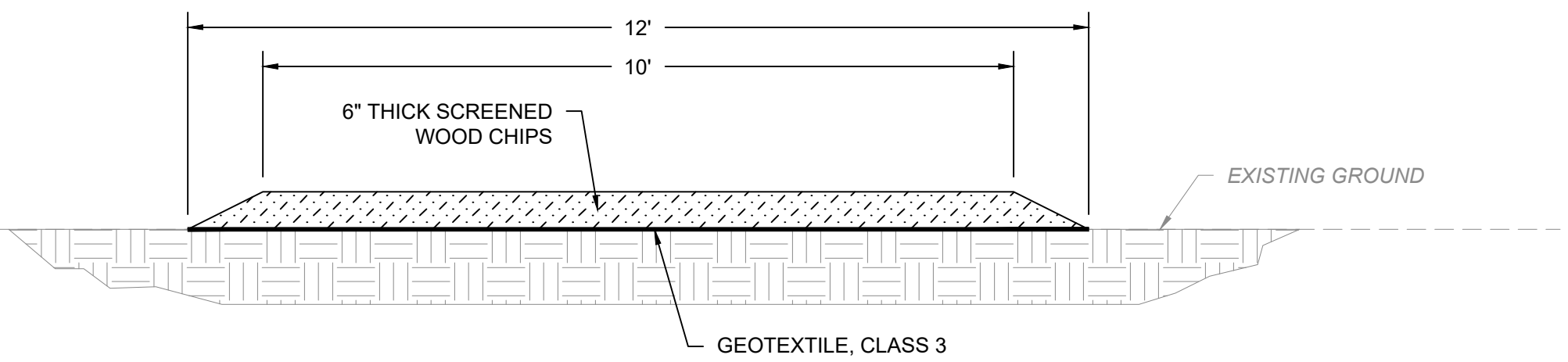
1. SEE WOOD CHIP TRAIL DETAILS.
2. TRAIL LOCATION TO BE VERIFIED BY TOWNSHIP REPRESENTATIVE.



NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE: PEDESTRIAN TRAIL IMPROVEMENTS				
PROJECT: OPALANIE PARK				
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY			PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25	
LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS PO BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.: 12	

PLOTTED: 5/9/2025 2:11 PM

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG



EQUESTRIAN WOOD CHIP TRAIL DETAIL
NOT TO SCALE

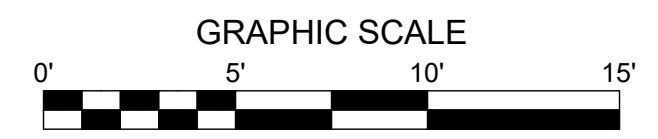
- NOTES:
1. TRAIL TO BE SLOPED IN DIRECTION OF NATURAL LAND FLOW.
 2. SCREENED WOOD CHIPS SHOULD BE PLACED 6" THICK

REMOVE INVASIVE SPECIES FROM POND

- NOTES:
1. USE AIRMAX SHORELINE DEFENSE ® EMERGENT WEED CONTROL OR TOWNSHIP APPROVED EQUAL TO TREAT / KILL POND PERIMETER WEED / INVASIVE VEGETATION GROWTH. USE AND REMOVE EMERGENT WEEDS ACCORDING TO MANUFACTURERS SPECIFICATIONS.
 2. IN CONJUNCTION WITH WEED CONTROL MEASURES REFERENCED ABOVE, IMPLEMENT TILLAGE STRATEGY TO REMOVE ROOT SYSTEMS OF PERENNIAL SPECIES. SITE / AREA TO BE DISC HARROWED EVERY TWO TO FOUR WEEKS FOR ONE TO TWO MONTHS OR UNTIL PERENNIAL SPECIES ARE COMPLETELY ERADICATED.

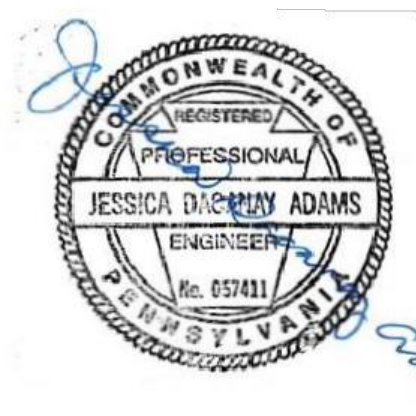
EQUESTRIAN TRAIL IMPROVEMENTS
SCALE : 1" = 60'

- NOTES:
1. SEE EQUESTRIAN WOOD CHIP TRAIL DETAILS.
 2. TRAIL LOCATION TO BE VERIFIED BY TOWNSHIP REPRESENTATIVE.



ITEM 11.09 - EQUESTRIAN TRAIL IMPROVEMENTS

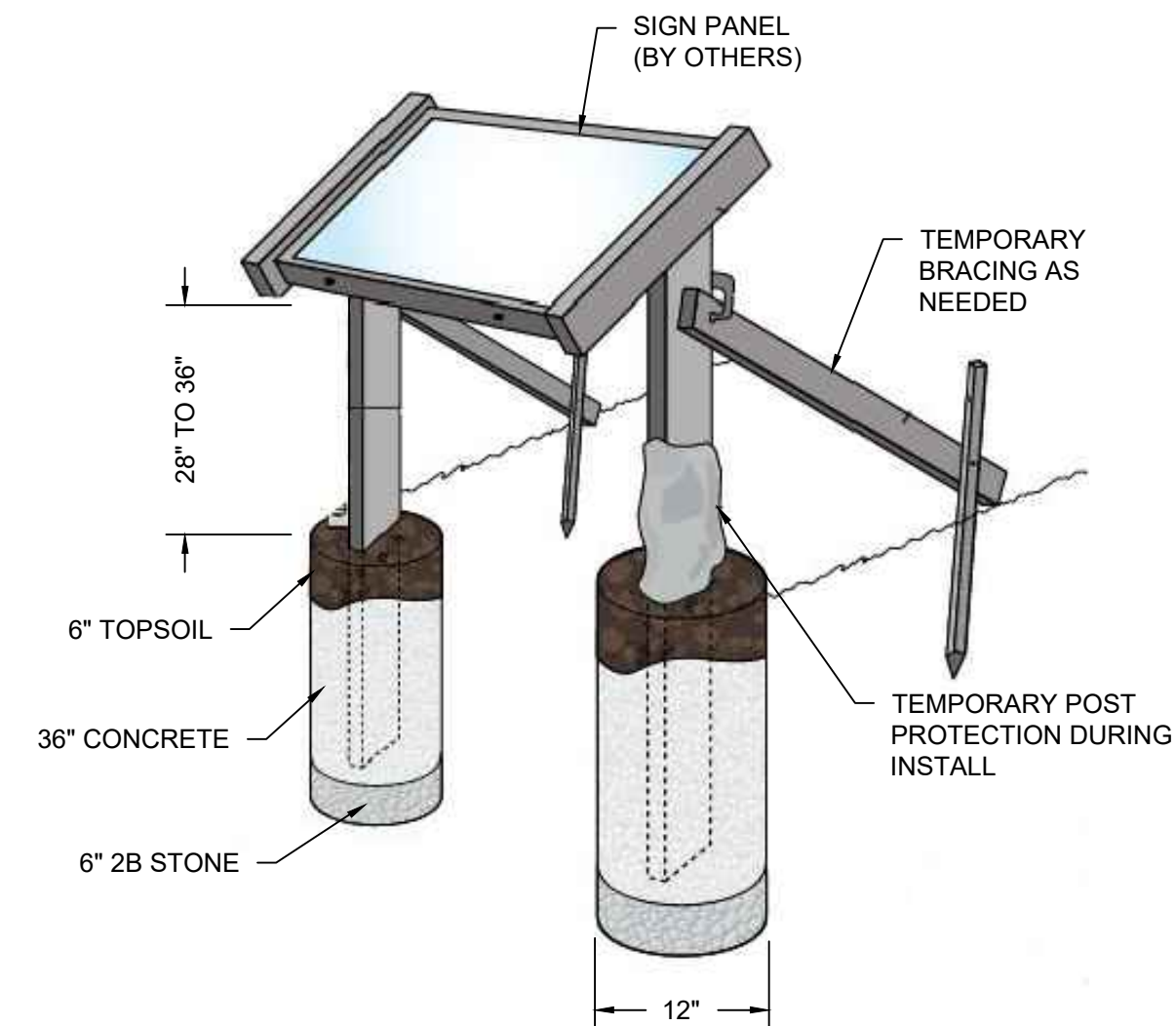
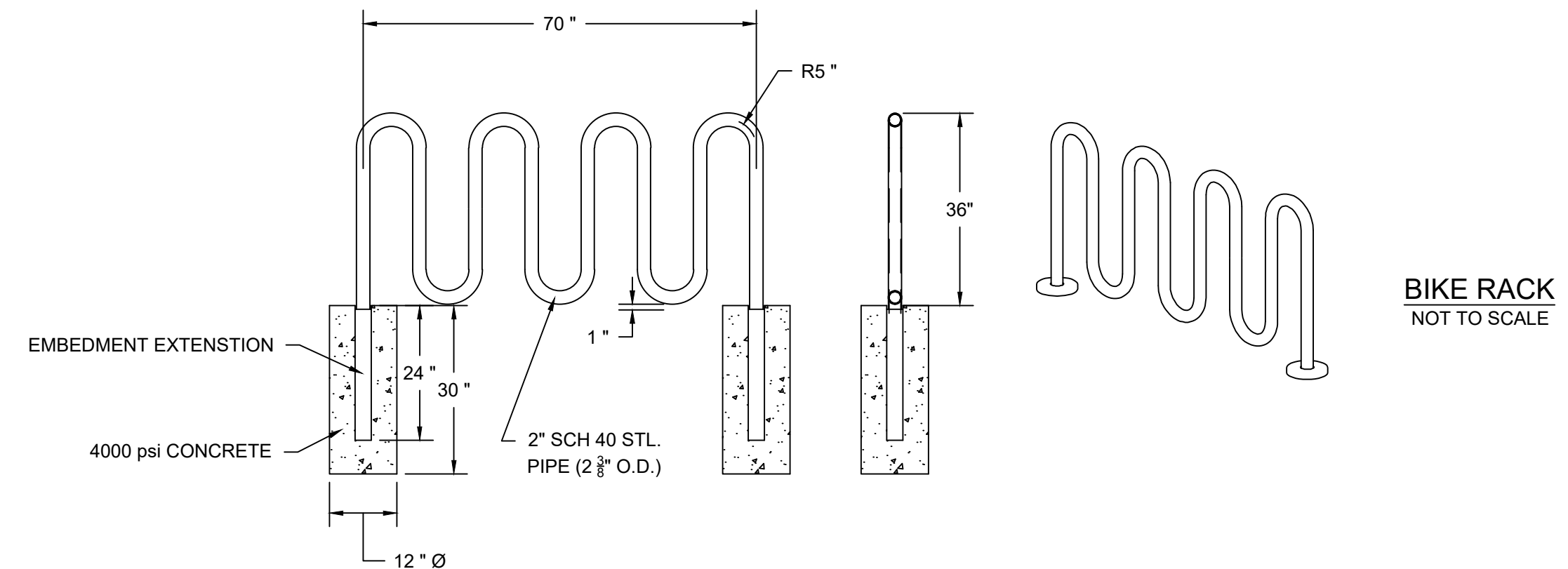
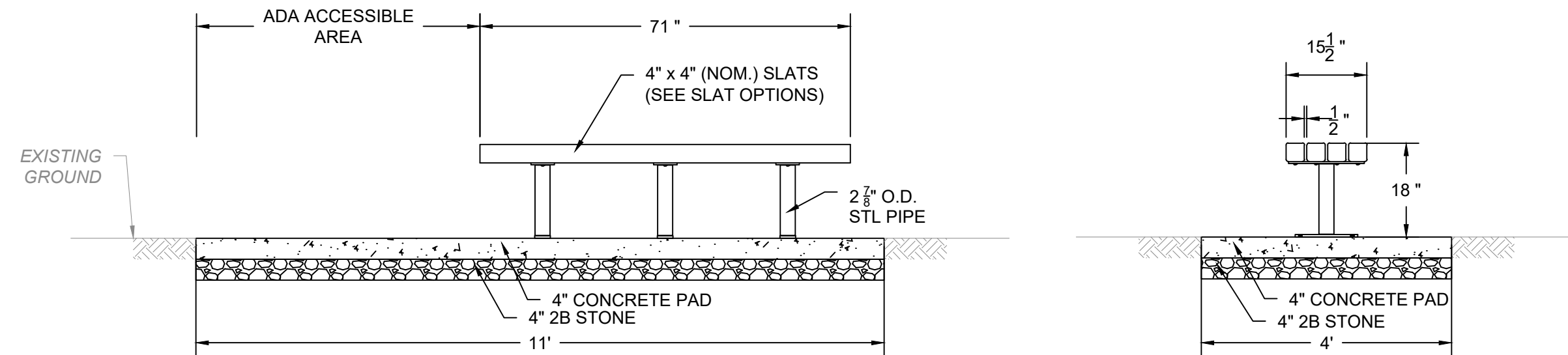
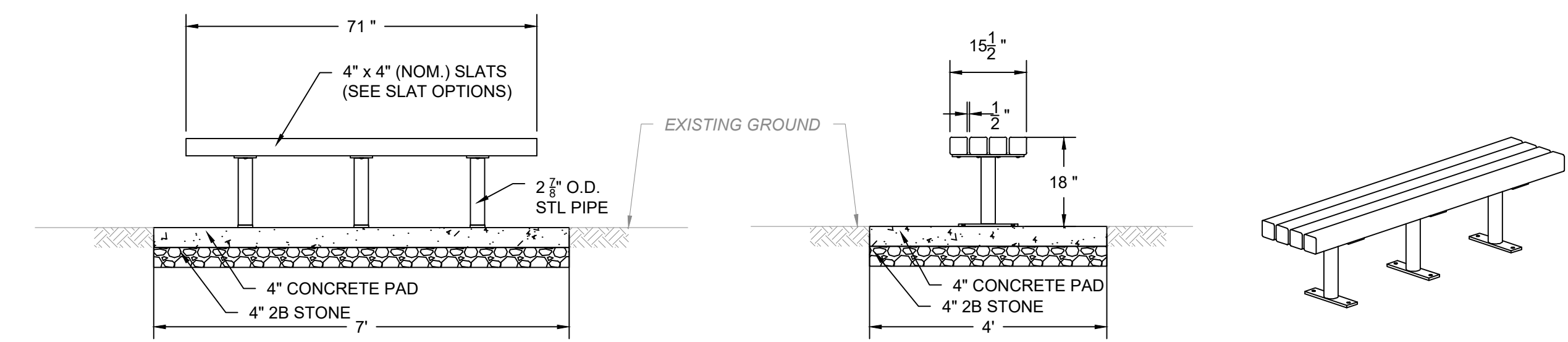
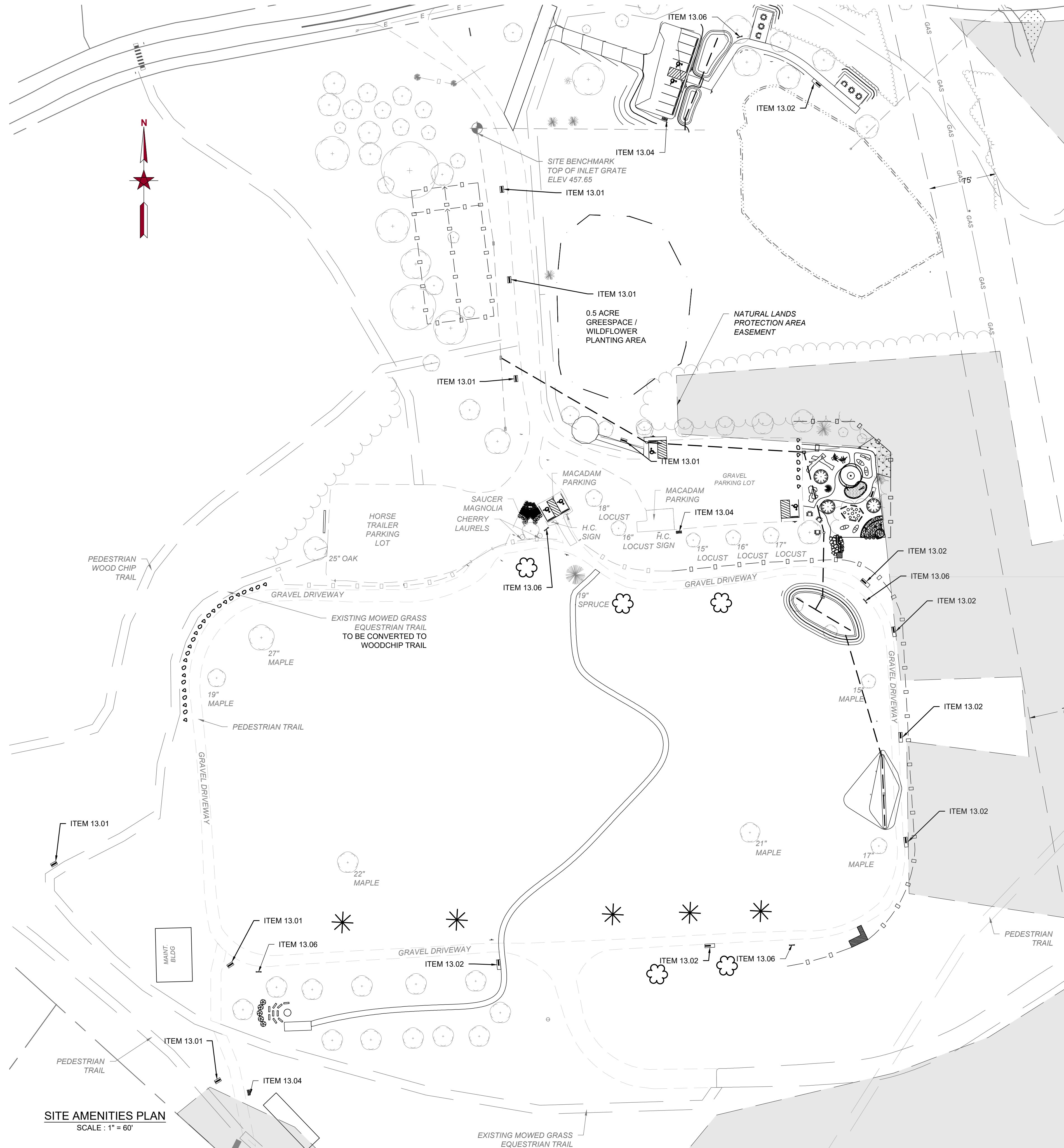
ITEM 12.01 - REMOVE INVASIVE SPECIES FROM POND



NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE: EQUESTRIAN TRAIL IMPROVEMENTS			
PROJECT: OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY		PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25
SHEET NO.: 13			



FILE NAME: P:\WEST VINCENT TOWNSHIP\BRN CODED OPALANIE PARK - SECOND BID\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG PLOTTED: 5/9/2025 2:11 PM

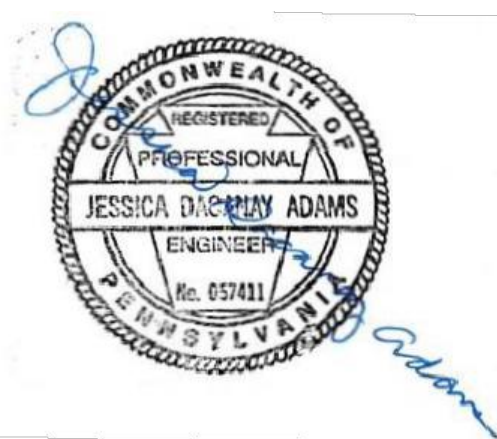


NOTES:

1. TOWNSHIP TO PURCHASE AND PROVIDE SIGN TO CONTRACTOR.
2. PANEL SIZE IS 24" X 36".
3. CONCRETE SHALL BE 4,000 psi AT 28 DAYS.
4. INSTALL SIGN PER MANUFACTURERS INSTRUCTIONS.

NOTES:

1. BENCH TO BE DUMOR, INC. 6' BENCH - 105 SERIES PL OR TOWNSHIP APPROVED EQUAL.
2. BIKE RACK DUMOR, INC. 4 HOOP BIKE RACK 130-40 OR TOWNSHIP APPROVED EQUAL.
3. SLOPE OF CONCRETE PAD TO BE 2% MAX. UNLESS OTHERWISE NOTED.
4. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
5. PROVIDE SAWCUT JOINTS EVERY 4' AND EXPANSION JOINTS AT 24' MAXIMUM INTERVALS.
6. CONCRETE SHALL BE 4000 psi AT 28 DAYS. FIBER REINFORCED AND 6% AIR ENTRAINED.
7. ALL CONSTRUCTION PER PENNDOT PUB 408, LATEST EDITION.

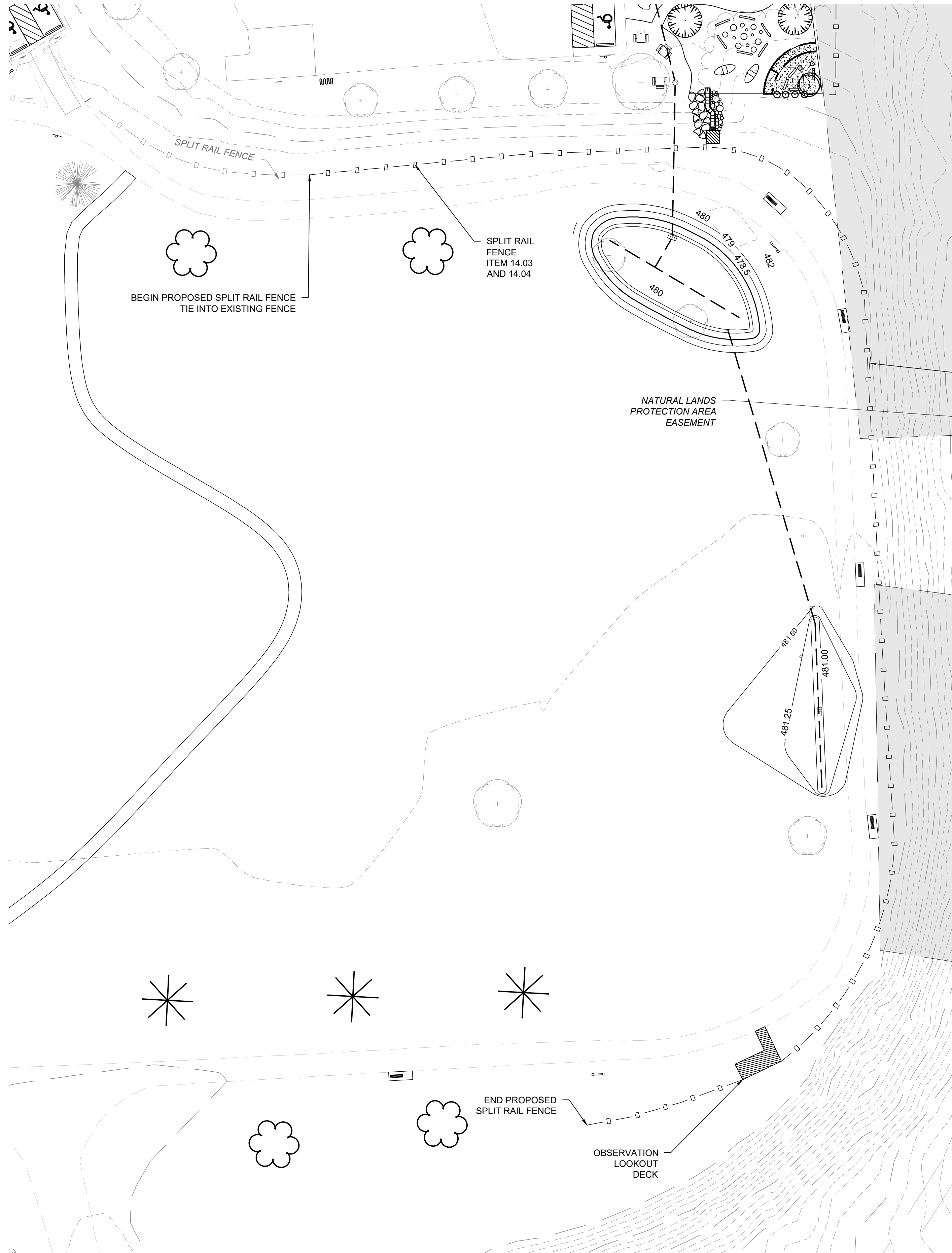


NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE:				
SITE AMENITIES				
PROJECT:				
OPALANIE PARK				
PROJECT LOCATION:			PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY			0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:	
MJB	JDA	AS NOTED	05/09/25	
ENGINEERS & CODE OFFICIALS			SHEET NO.:	
LTL CONSULTANTS, LTD.			14	
P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547				

ISSUE FOR BID - 05/09/2025

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG
PLOTTED: 5/9/2025 2:12 PM

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG
PLOTTED: 5/9/2025 2:12 PM



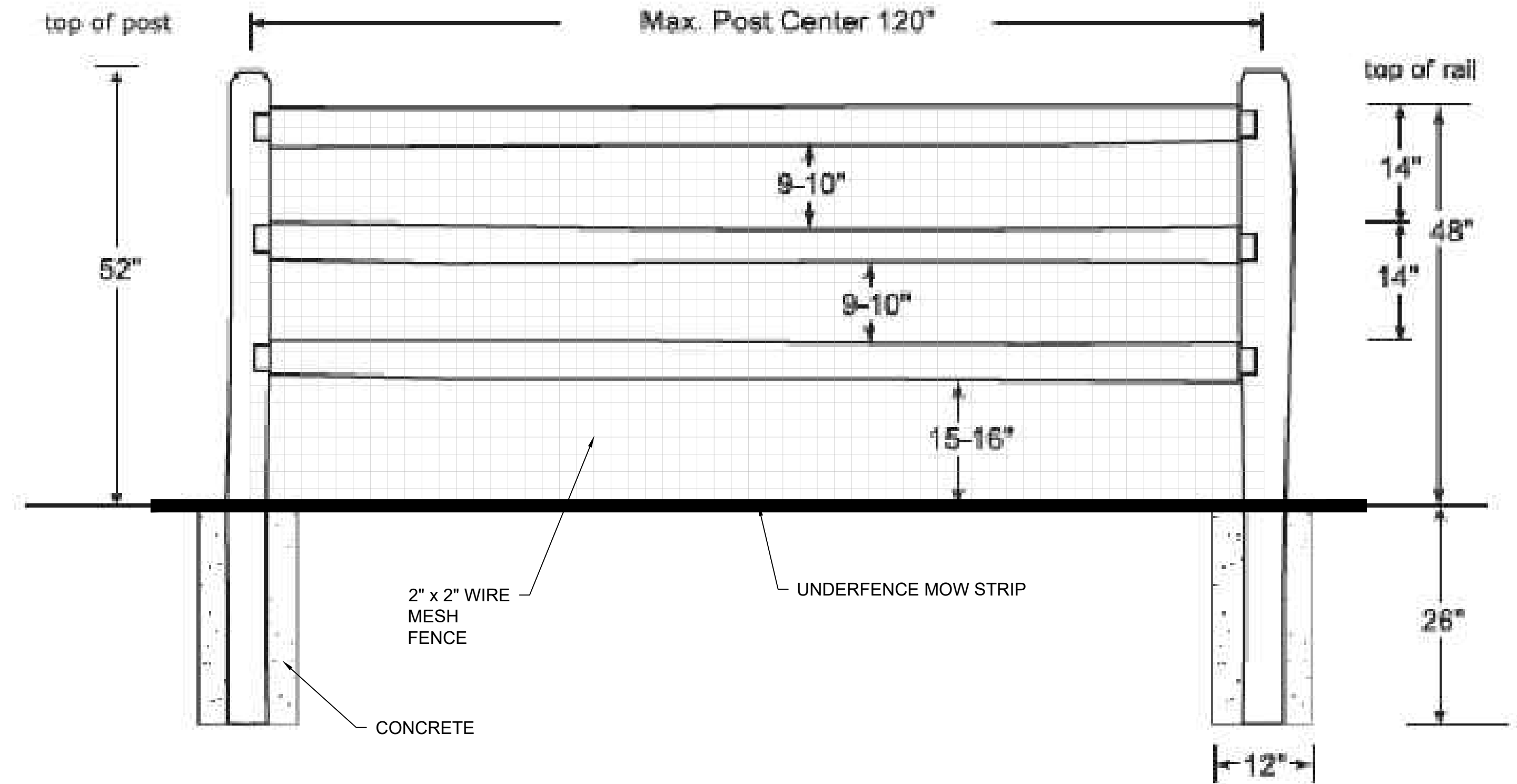
ADD ITEM 1:
ITEM 14.03 - INSTALL SPLIT RAIL FENCE AROUND GRAVEL LOOP
ITEM 14.04 - PURCHASE SPLIT RAIL FENCE FOR GRAVEL LOOP

SPLIT RAIL FENCE AROUND GRAVEL LOOP (ITEMS 14.03 AND 14.04)

SCALE : 1" = 30'

NOTES:

1. FENCE TO TIE INTO AND MATCH EXISTING FENCE.
2. POST SHALL BE PRE-CAST CONCRETE AND MATCH EXISTING.
3. CONTRACTOR TO ASSEMBLE AND INSTALL FENCE PER MANUFACTURER'S SPECIFICATIONS.
4. INSTALL 12" WIDE UNDERFENCE MOW STRIP, OR TOWNSHIP APPROVED EQUAL, ALONG ENTIRE LENGTH OF FENCE. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
5. WIRE MESH NOT REQUIRED ON THIS SECTION OF FENCING.
6. CONCRETE SHALL BE 4000 psi at 28 DAYS AND 6% AIR ENTRAINED.

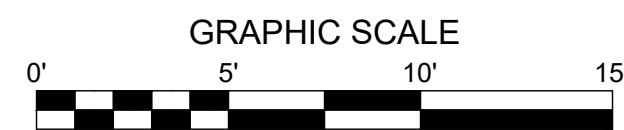


SPLIT RAIL FENCE DETAIL (ITEMS 14.01, 14.02, 14.05 AND 14.06)

NOT TO SCALE

NOTES:

1. FENCE TO BE R&S FENCE - 3-RAIL SPLIT RAIL FENCE OR TOWNSHIP APPROVED EQUAL.
2. CONTRACTOR TO ASSEMBLE AND INSTALL FENCE PER MATERIAL SUPPLIER SPECIFICATIONS.
3. INSTALL 12" WIDE UNDERFENCE MOW STRIP, OR TOWNSHIP APPROVED EQUAL, ALONG ENTIRE LENGTH OF FENCE. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
4. INSTALL 4' TALL 2" x 2" WELDED WIRE MESH FENCE, OR TOWNSHIP APPROVED EQUAL, ALONG ENTIRE LENGTH OF FENCE. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
5. CONCRETE SHALL BE 4000 psi at 28 DAYS, FIBER REINFORCED AND 6% AIR ENTRAINED.

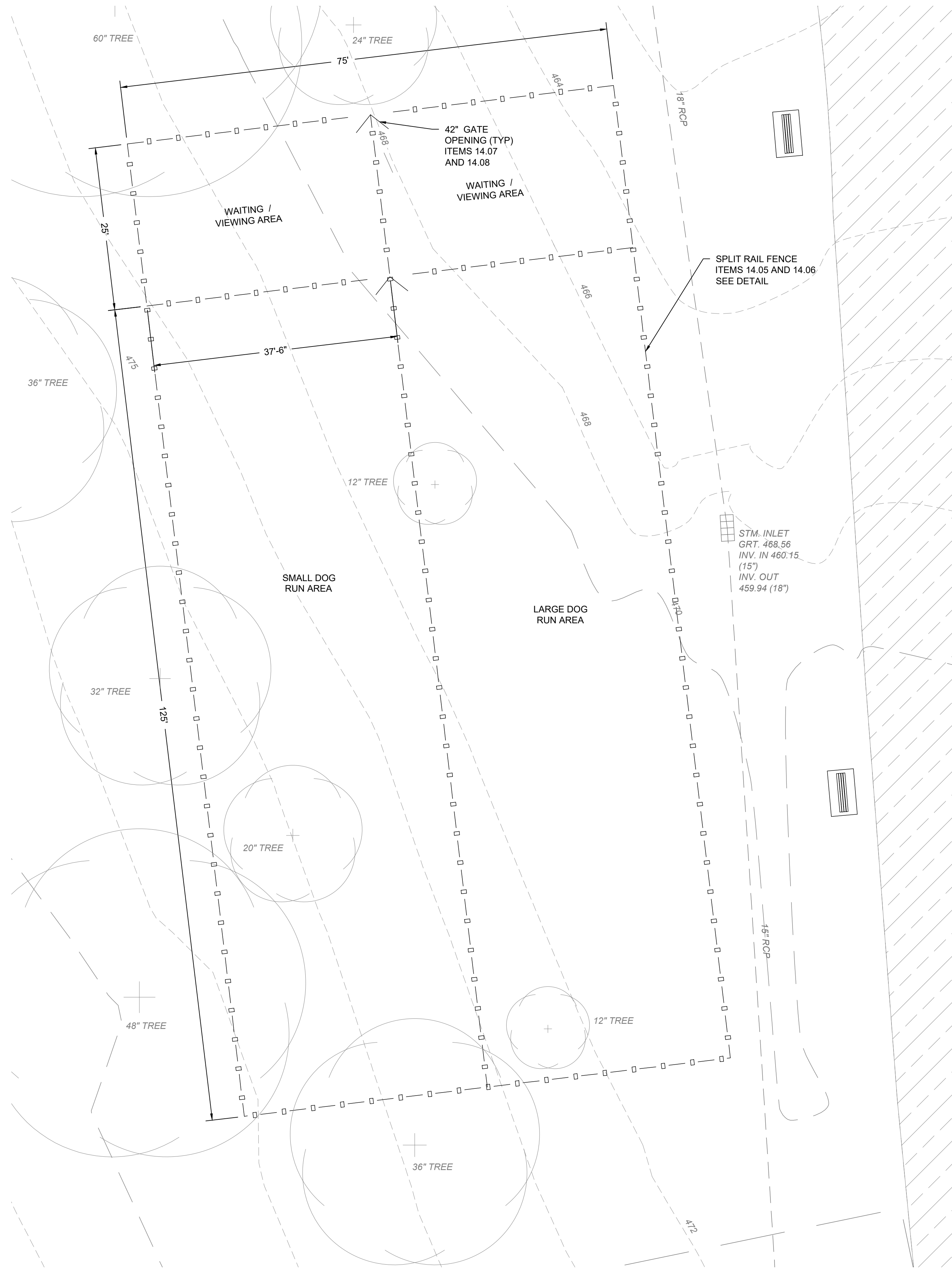


NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE:				
SPLIT RAIL FENCE				
PROJECT:				
OPALANIE PARK				
PROJECT LOCATION:			PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY			0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:	
MJB	JDA	AS NOTED	05/09/25	
LTL CONSULTANTS, LTD.			SHEET NO.:	
ENGINEERS & CODE OFFICIALS			15	
P.O. BOX 241				
ONE TOWN CENTRE DRIVE				
OLEY, PA 19547				



ISSUE FOR BID - 05/09/2025

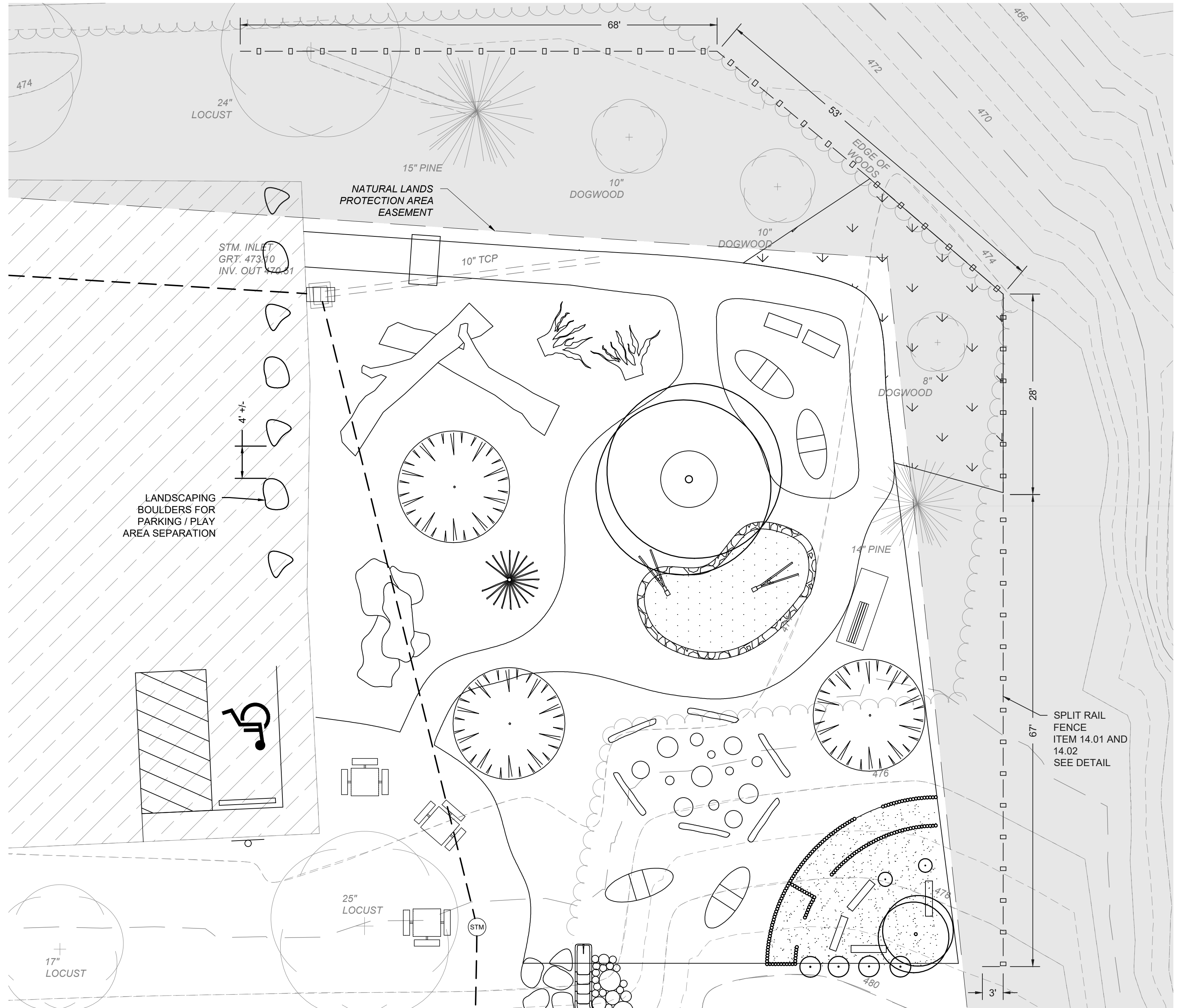
FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG
PLOTTED: 5/9/2025 2:12 PM
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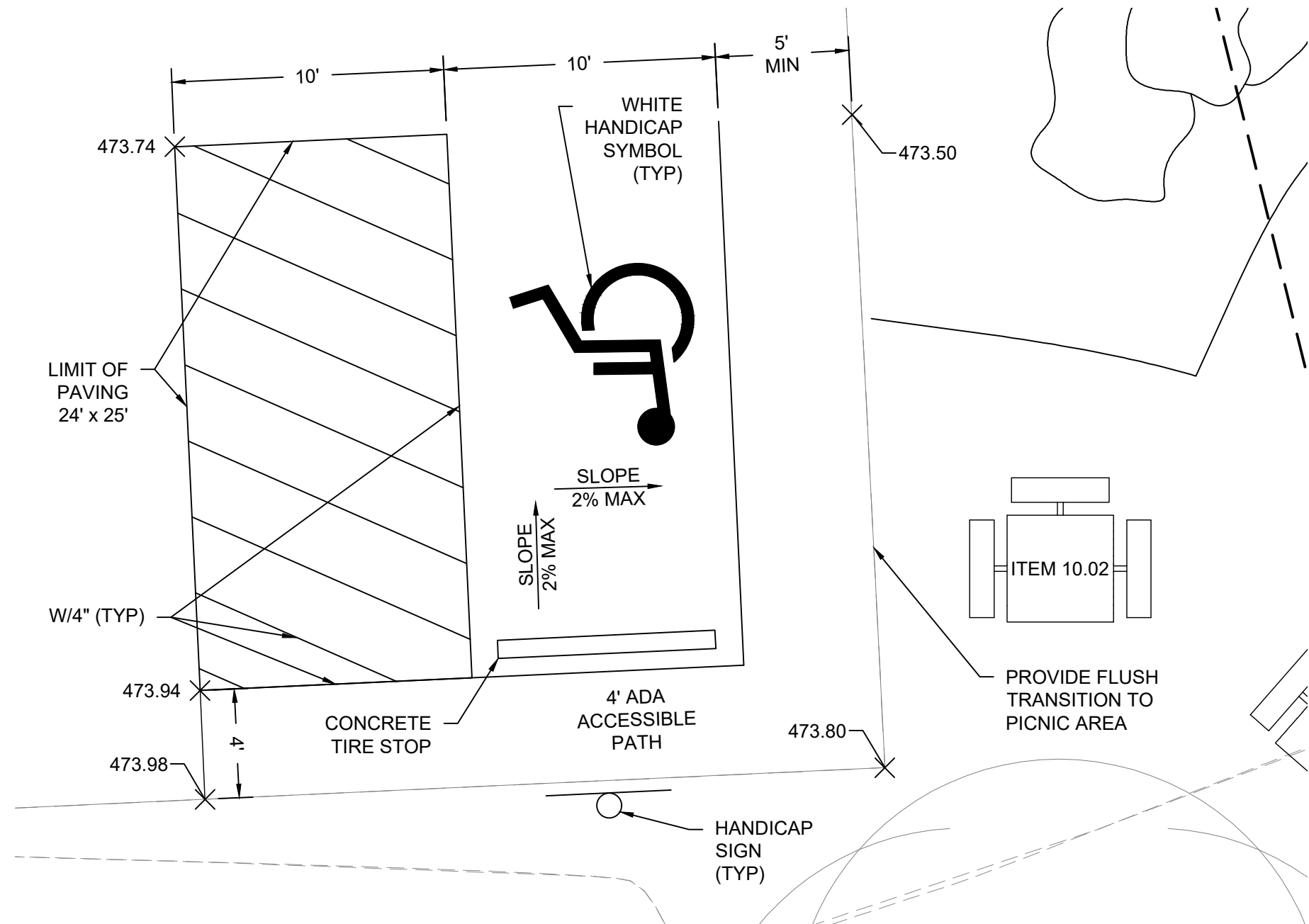
ITEM 14.01 - INSTALL SPLIT RAIL FENCE FOR PLAY AREA
ITEM 14.02 - PURCHASE SPLIT RAIL FENCE FOR PLAY AREA

ADD ITEM 2:
ITEM 14.03 - INSTALL SPLIT RAIL FENCE AROUND DOG RUN AREA
ITEM 14.04 - PURCHASE SPLIT RAIL FENCE FOR DOG RUN AREA
ITEM 14.05 - INSTALL DOG RUN GATE
ITEM 14.06 - PURCHASE DOG RUN GATE

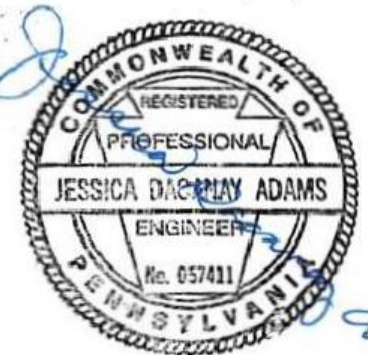
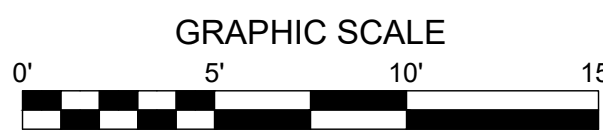
DOG RUN AREA
SCALE : 1" = 10'



PLAY AREA FENCE
SCALE : 1" = 10'



ADA PARKING SPACE DETAIL
SCALE : 1" = 5'
ITEMS 3.01, 3.02, 3.03, 3.04 AND 3.05



NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE: SPLIT RAIL FENCE			
PROJECT: OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY		PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25
LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS PO BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.: 16

ISSUE FOR BID - 05/09/2025

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\LANDSCAPE\LANDSCAPE PARK PROJECT_LFCD.DWG PLOTTED: 5/9/2025 2:12 PM



ITEM 15.02 - LANDSCAPE BOULDERS FOR PARKING AREA

LANDSCAPE BOULDERS - TRAIL SEPERATION
SCALE: 1" = 10'

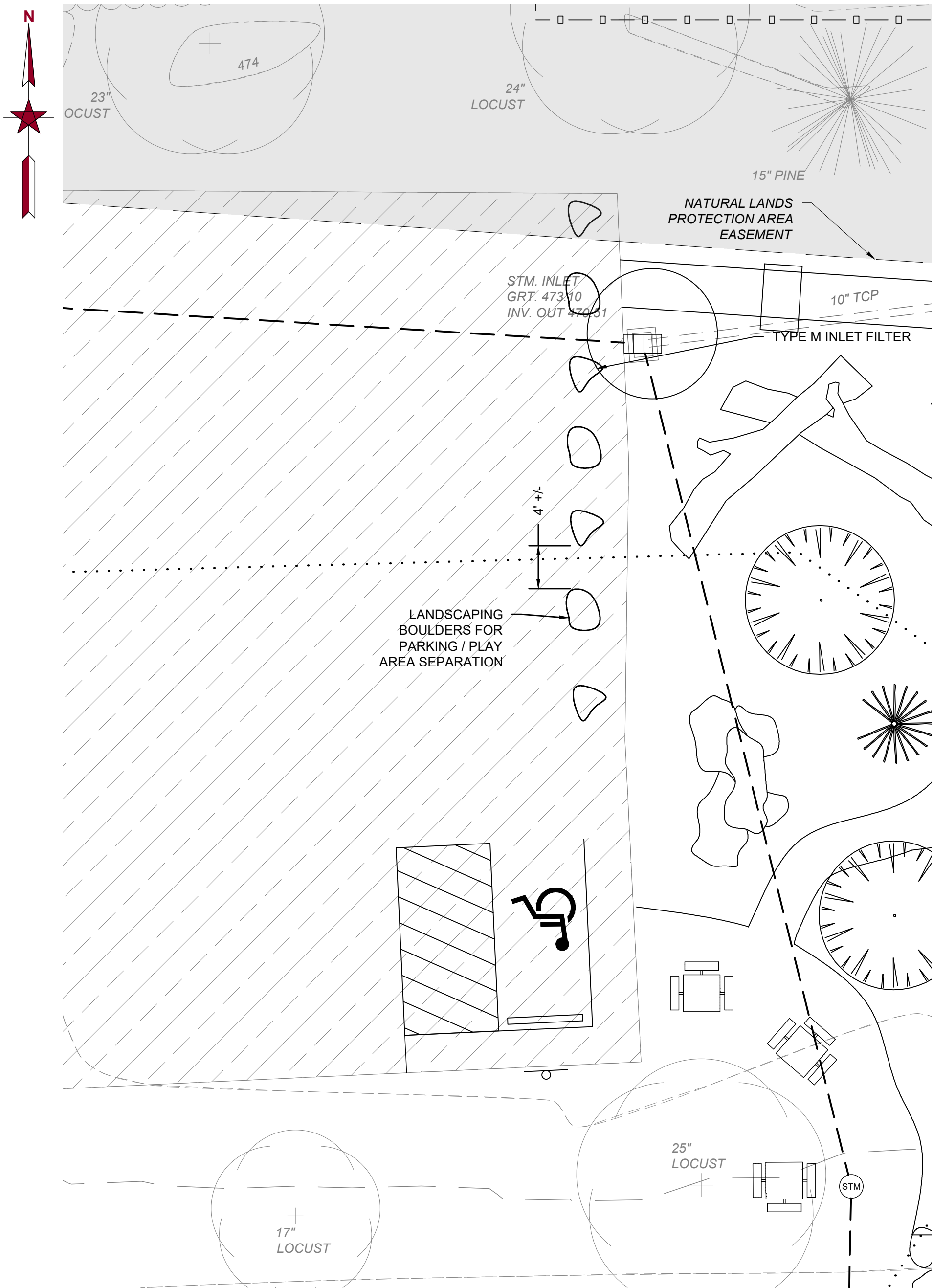
ADD ITEM 3:
ITEM 15.01 - LANDSCAPE BOULDERS FOR TRAIL SEPARATION



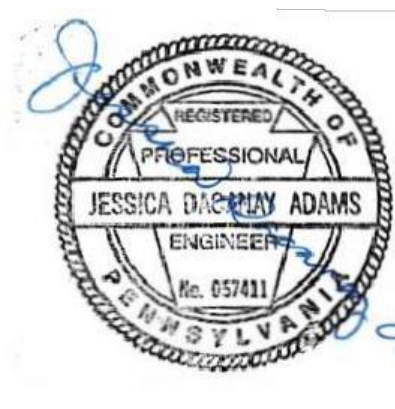
LANDSCAPING BOULDERS
NOT TO SCALE

NOTES:

- BOULDERS ARE TO BE NOMINALLY 4' LONG X 4' WIDE AND 4' TALL.
- COLOR VARIETY SHALL BE GRAY AND BROWN HUES TO MATCH EXISTING LANDSCAPE.
- CENTER BOULDERS BETWEEN TRAIL AS SHOWN. TOWNSHIP REPRESENTATIVE TO VERIFY FINAL LOCATION.



LANDSCAPE BOULDERS - PARKING AREA
SCALE: 1" = 10'



NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE:			
LANDSCAPE BOULDERS			
PROJECT:			
OPALANIE PARK			
PROJECT LOCATION:		PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY		0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:
MJB	JDA	AS NOTED	05/09/25
LTL CONSULTANTS, LTD.			SHEET NO.:
ENGINEERS & CODE OFFICIALS			17
P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			

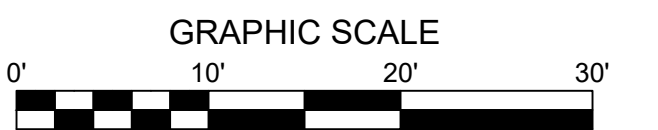
ISSUE FOR BID - 05/09/2025




1. TREES WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED SHALL BE REJECTED.
2. TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS SHALL BE REJECTED.
3. TREES WITH CENTRAL LEADER BROKEN SHALL BE REJECTED.
4. TREES THAT DO NOT DISPLAY THE NORMAL CHARACTERISTICS SHALL BE REJECTED.
5. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED. HOWEVER DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
6. STAKE TREES ONLY UPON APPROVAL FROM THE TOWNSHIP REPRESENTATIVE.
7. WRAP TREE TRUNKS ONLY UPON APPROVAL FROM THE TOWNSHIP REPRESENTATIVE.



1. ASSURE THAT THE BEARING SURFACE OF THE PROTECTIVE COVERING OF THE WIRE OR CABLE AGAINST THE TREE TRUNK IS A MINIMUM 0.5 INCH.
2. REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS TO OVERCOME THE PROBLEM THAT REQUIRED THE TREE TO BE STAKED. STAKES SHALL BE REMOVED NO LATER THAN THE END OF THE FIRST GROWING SEASON.
3. TREES NORMALLY DO NOT NEED TO BE STAKED AND STAKING CAN BE HARMFUL TO THE TREE. STAKING SHOULD BE DONE ONLY WITH THE APPROVAL OF THE TOWNSHIP REPRESENTATIVE IF IT IS EXPECTED THAT THE TREE WILL NOT BE ABLE TO SUPPORT ITSELF.
4. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL.
5. ROOT BALLS WILL VERY SANDY SOIL OR VERY WET CLAY SOILS. STAKING ADVISABLE.
6. TREES LOCATED IN A PLACE OF EXTREMELY WINDY CONDITIONS. STAKING ADVISABLE.
7. TREES LOCATED ON STEEP SLOPES (GREATER THAN 33%). STAKING ADVISABLE
8. WIRE OR CABLE SIZES SHALL BE AS FOLLOWS:
TREES UP TO 2.5 INCH CALIPER - 14 GAUGE
TREES 2.5 INCH TO 3 INCH CALIPER - 12 GAUGE
9. TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE SHALL BE LONG ENOUGH TO ACCOMMODATE 1.5 INCH CALIPER OF GROWTH AND BUFFER ALL BRANCHES FROM WIRE.
10. TUCK ANY LOOSE ENDS OF THE WIRE OR CABLE INTO THE WIRE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED.
11. INSTALL THREE GUY WIRES PER TREE, SPACED EVENLY AROUND THE TRUNK.

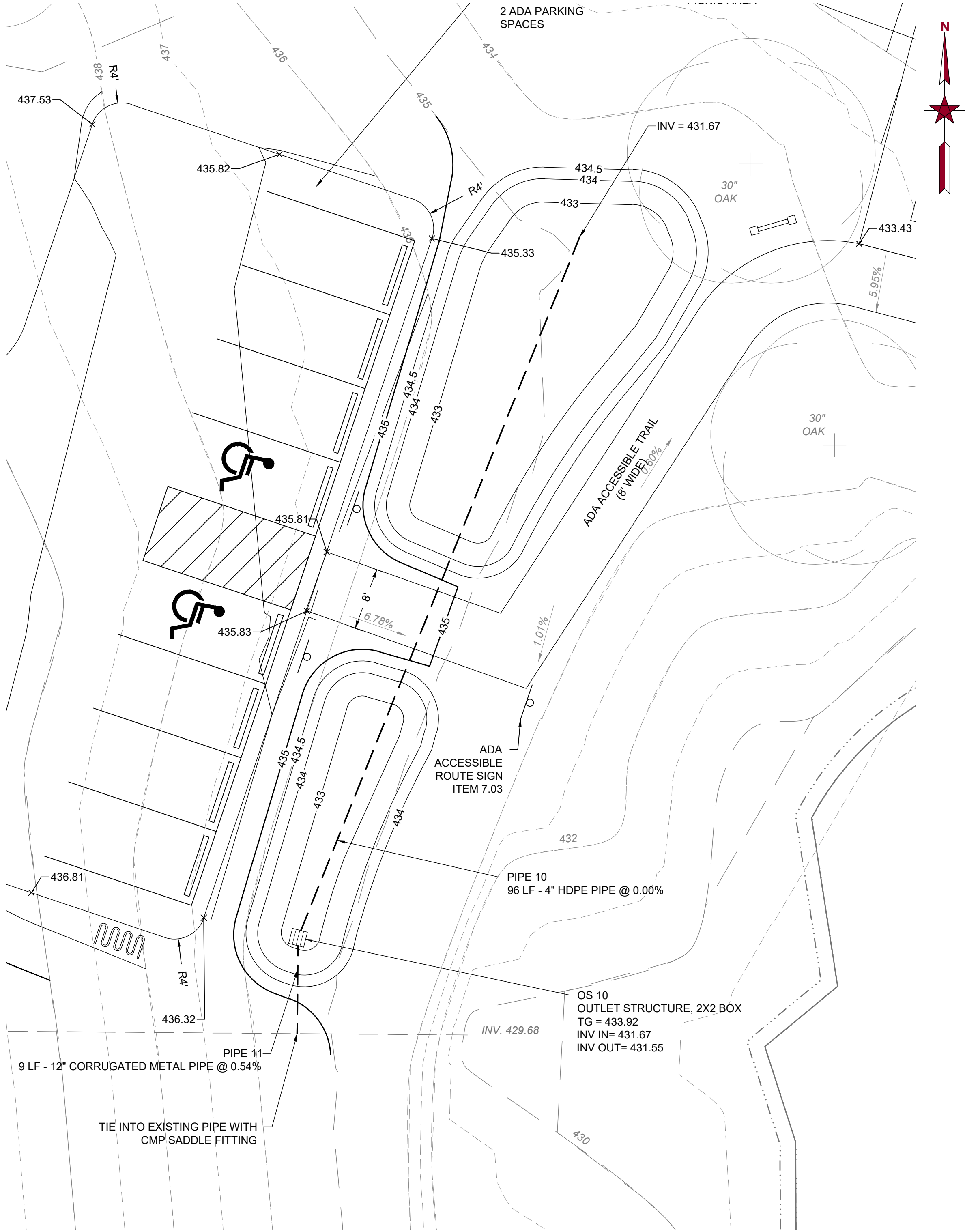


A circular professional engineer seal for the Commonwealth of Pennsylvania. The outer ring contains the text "COMMONWEALTH OF" at the top and "PENNSYLVANIA" at the bottom. Inside the ring, a banner reads "REGISTERED PROFESSIONAL ENGINEER". The name "JESSICA DIGIROLAMO ADAMS" is printed across the center. Below the name, the number "No. 057411" is visible. The seal is stamped in blue ink on a white background.

NO.	DESCRIPTION		DATE		BY
REVISIONS					
SHEET TITLE:					
TREE PLANTING LOCATIONS					
PROJECT:					
OPALANIE PARK					
PROJECT LOCATION:				PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY				0272-2205	
DRAWN BY:		APPROVED BY:		DATE:	
MJB		JDA		05/09/25	
		SCALE:			
		AS NOTED			
 LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 341 ONE, TOWN CENTRE DRIVE OLEY, PA 19447				SHEET NO.:	
				18	

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_17.DWG

PLOTTED: 5/9/2025 2:12 PM

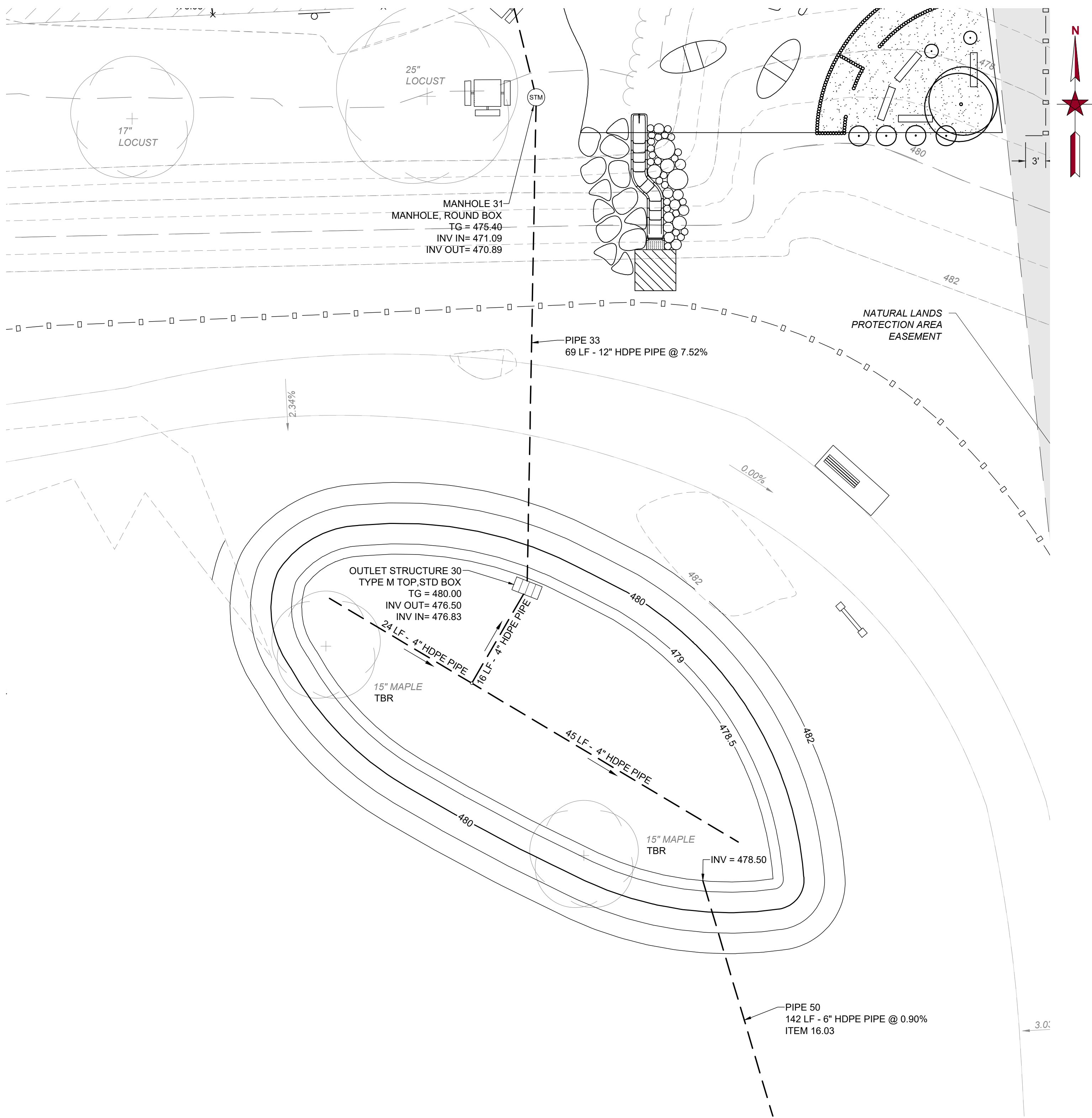


BMP #1 - PARKING LOT RAIN GARDEN
SCALE : 1" = 10'

NOTES:

1. REFER TO RAIN GARDEN DETAILS.

ITEM 16.01 - BMP #1 - PARKING LOT RAIN GARDEN (DCNR FUNDED)
ITEM 16.02 - BMP #2 - RAIN GARDEN



BMP #2 - RAIN GARDEN
SCALE : 1" = 10'

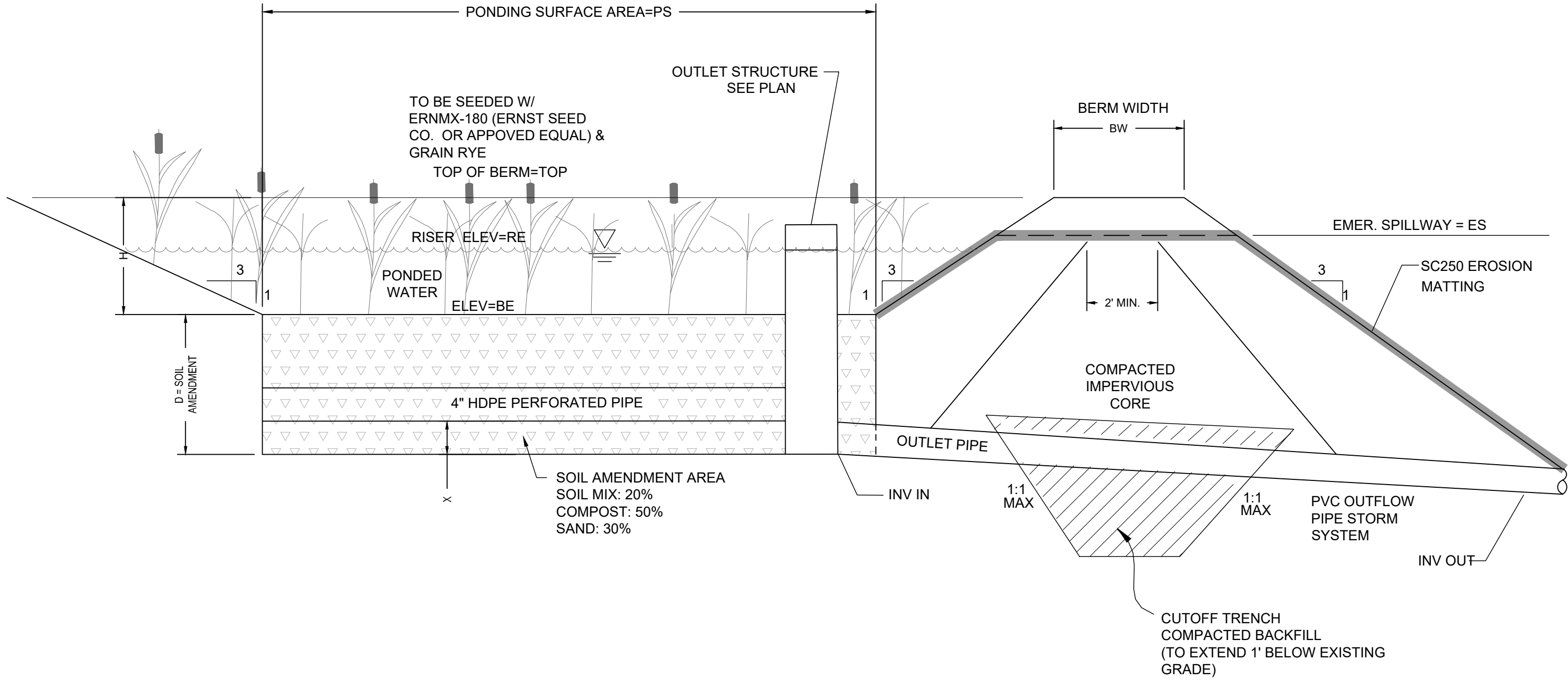
NOTES:

1. REFER TO RAIN GARDEN DETAILS.



NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE:				
RAIN GARDEN				
PROJECT:				
OPALANIE PARK				
PROJECT LOCATION:			PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY			0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:	
MJB	JDA	AS NOTED	05/09/25	
SHEET NO.:				19

ISSUE FOR BID - 05/09/2025



#	RAIN GARDEN							OUTLET STRUCTURE			
	TOP (FT)	BE (FT)	H (FT)	PS (SF)	D (FT)	BW (FT)	X (IN)	RE (FT)	OUTLET PIPE	INV IN	INV OUT
1	434.50	431.00	3.5	972	2.00	N/A	8	433.92	PIPE-11, 12" CMP PIPE	431.55	431.48
2	482.00	478.50	3.5	1,926	2.00	N/A	4	480.00	PIPE-33, 12" HDPE PIPE	476.50	471.09

RAIN GARDEN INSTALLATION SEQUENCE:

- EXCAVATE BOTTOM TO DESIRED ELEVATION AND SCARIFY THE EXISTING SOIL SURFACES. EXCAVATION FOR THE INFILTRATION FACILITY SHALL BE PERFORMED WITH EQUIPMENT THAT WILL NOT COMPACT THE BOTTOM.
- INSTALL SURROUNDING EMBANKMENTS WITH EROSION CONTROL MATTING AND INLET AND OUTLET CONTROL STRUCTURES.
- BACKFILL RAIN GARDEN WITH AMENDED SOIL AS SPECIFIED ON PLANS. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY. THE TOPS, BOTTOMS AND SIDES OF ALL SEEPAGE BEDS, TRENCHES, OR LIKE FACILITIES SHALL BE COVERED WITH DRAINAGE FABRIC. FABRIC SHALL BE NON-WOVEN FABRIC ACCEPTABLE TO THE MUNICIPAL ENGINEER.
- COMPLETE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS. LEAVING SPACE FOR UPPER LAYER OF MULCH. STORMWATER SHALL BE DISTRIBUTED THROUGHOUT THE ENTIRE SEEPAGE BED/TRENCH OR LIKE FACILITY AND PROVISIONS FOR THE COLLECTION OF DEBRIS SHALL BE PROVIDED IN ALL FACILITIES.
- PLANT VEGETATION ACCORDING TO PLANTING SCHEDULE.
- MULCH PER PLAN SPECIFICATIONS AND INSTALL EROSION PROTECTION AT SURFACE FLOW ENTRANCES AS NECESSARY.
- FOLLOW REQUIRED MAINTENANCE AND MONITORING GUIDELINES.

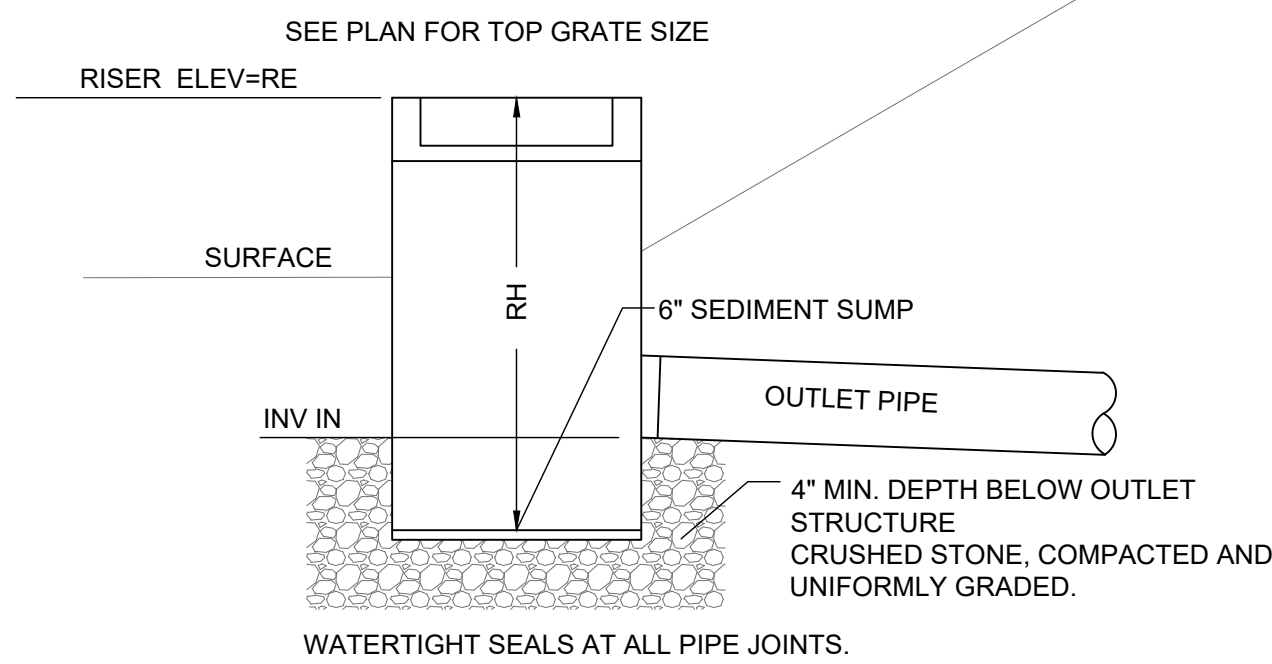
RAIN GARDEN MAINTENANCE REQUIREMENTS:

- THE OWNER IS RESPONSIBLE FOR ALL PERIODIC MAINTENANCE AND INSPECTION.
- WHILE VEGETATION IS BEING ESTABLISHED, PRUNING AND WEEDING SHALL BE REQUIRED.
 - DETRITUS WILL ALSO NEED TO BE REMOVED EVERY YEAR. PERENNIAL PLANTINGS SHALL BE CUT DOWN AT THE END OF THE GROWING SEASON.
 - MULCH SHALL BE RE-SPREAD WHEN EROSION IS EVIDENT AND BE REPLENISHED AS NEEDED. ONCE VEGETATION HAS BEEN ESTABLISHED, MULCH MAY NOT LONGER BE NECESSARY TO PROTECT GROUND COVER.
 - BIORETENTION AREAS SHALL BE INSPECTED AT LEAST TWO TIMES PER YEAR FOR SEDIMENT BUILDUP, EROSION, VEGETATIVE CONDITIONS, ETC...
 - DURING PERIODS OF EXTENDED DROUGHT, RAIN GARDEN AREAS WILL REQUIRE WATERING.
 - TREES AND SHRUBS SHALL BE INSPECTED TWICE PER YEAR TO EVALUATE HEALTH.
 - THE RAINGARDEN SHALL BE INSPECTED 72 HOURS FOLLOWING ALL RAIN EVENTS EXCEEDING 1" OF RAINFALL. IF STANDING WATER IS VISIBLE AT THAT TIME WITHIN THE RAINGARDEN, THE RAINGARDEN MUST BE EXCAVATED AND RECONSTRUCTED TO OBTAIN AN INFILTRATION RATE.

SOIL AMENDMENTS:

- MATERIAL MUST BE UNIFORM IN COMPOSITION THROUGHOUT, BE FREE OF STONES, LUMPS, LIVE PLANTS AND THEIR ROOTS, WEED SEEDS, STICKS AND OTHER EXTRANEEOUS MATERIAL.
- SAND CONTENT TO BE WASHED, SHARP SAND, ASTM C-33 OR ASTM C-144.
- TOTAL CLAY CONTENT MUST BE LESS THAN 10%.
- PHOSPHORUS INDEX: 10 TO 30; pH: 5.5 TO 7.0.
- COMPOST TO BE DOUBLE SHREDDED HARDWOOD MULCH.

RAIN GARDEN DETAIL
NOT TO SCALE



#	RE (FT)	INV IN	RH (FT)
OS-10	433.92	431.55	2.87

BMP #1 - RAIN GARDEN OUTLET STRUCTURE
NOT TO SCALE

RAIN GARDEN PLANTING SCHEDULE

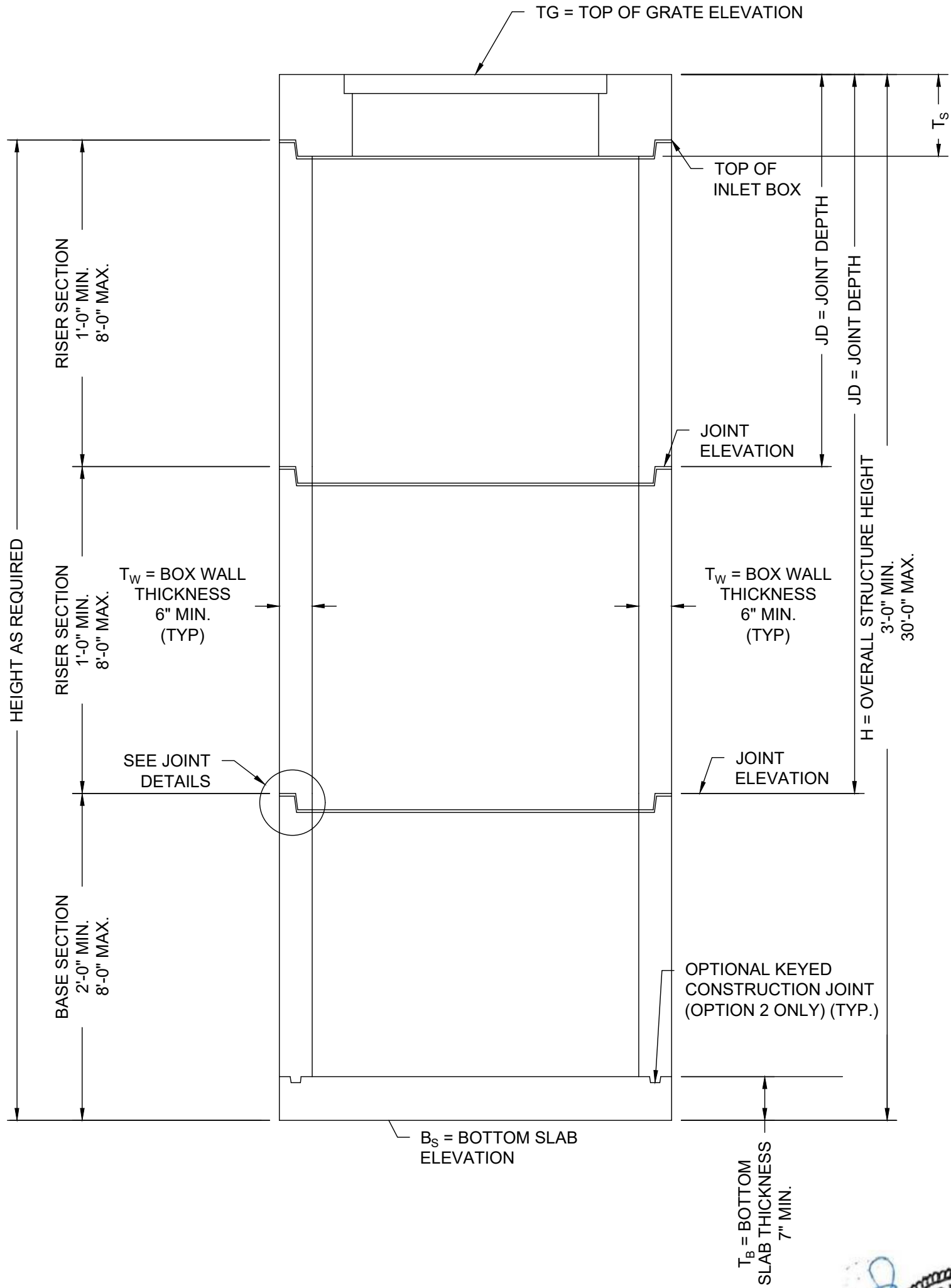
TYPE	SYMBOL		BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY		PLANTING ZONE
						RG1	RG2	
SHRUBS		WB	ILEX VERTICILLATA	WINTERBERRY	18"-24"	3	3	PONDING
		CO	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	18"-24"	3	3	PONDING
PERENNIALS		SW	PANICUM VIRGATUM	SWITCHGRASS	3" PLUG	4	4	PONDING
		TS	CAREX STRICTA	TUSsock SEDGE	3" PLUG	4	4	PONDING
TREES		AR	ACER RUBRUM	RED MAPLE	2.5 IN. MIN	2	-	MID TO HIGH
		BW	SALIX NIGRA	BLACK WILLOW	2.5 IN. MIN	1	-	PONDING

ERNST SEED CO. RAIN GARDEN MIX

SEEDING SPECIFICATIONS (ERNMX-180):

CHASMANTHIUM LATIFOLIUM	RIVER OATS	38%
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	19%
PANICUM RIGIDULUM ECHINACEA	REDTOP PANICGRASS	12%
PURPUREA	PURPLE CONEFLOWER	5%
COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	4%
RUDBECKIA HIRTA	BLACKEYED SUSAN	3%
TRADESCANTIA OHIENSIS	OHIO SPIDERWORT	3%
ASTER LAEVIS	SMOOTH BLUE ASTER	3%
LIATRIS SPICATA	MARSH BLAZING STAR	2%
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	2%
HELIOPSIS HELIANTHOIDES	OXEYE SUNFLOWER	2%
AGROSTIS PERENNANS	AUTUMN BENTGRASS	2%
BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	1%
ASCLEPIAS INCARNATA	SWAMP MILKWEED	1%
SENNA HEBECARPA	WILD SENNA	1%
SOLIDAGO JUNCEA	EARLY GOLDENROD	1%
MONARDA FISTULOSA	WILD BERGAMOT	0.8%
PHYCNANTHEMUM TENUIFOLIUM	SLENDER MOUNTAINMINT	0.2%

SEEDING RATE: 20 lb. PER ACRE OF THE ERNST MIX WITH AN ADDITIONAL 30 lbs. PER ACRE OF GRAIN RYE (AS A NURSE CROP). THE TEMPORARY SEEDING SPECIFICATION AS NOTED ON THE SOIL EROSION & SEDIMENT CONTROL PLAN SHALL NOT APPLY TO THIS AREA.



STR	TG	B _s	T _s	T _B	T _w	H	BASE	RISER
OS-30	480.00	475.75	12"	7"	6"	4.25	2.50	N/A

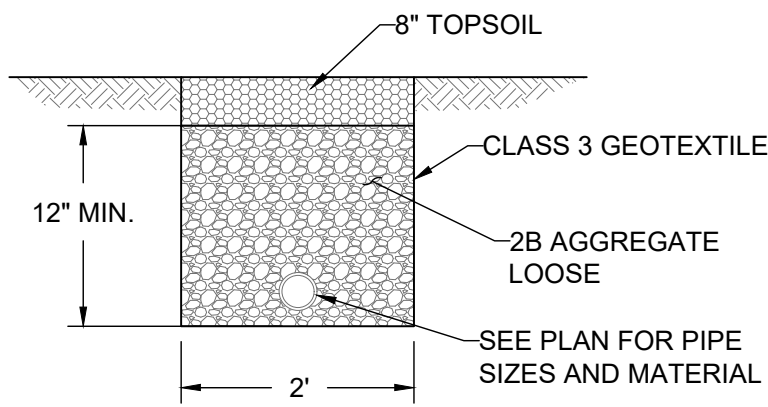
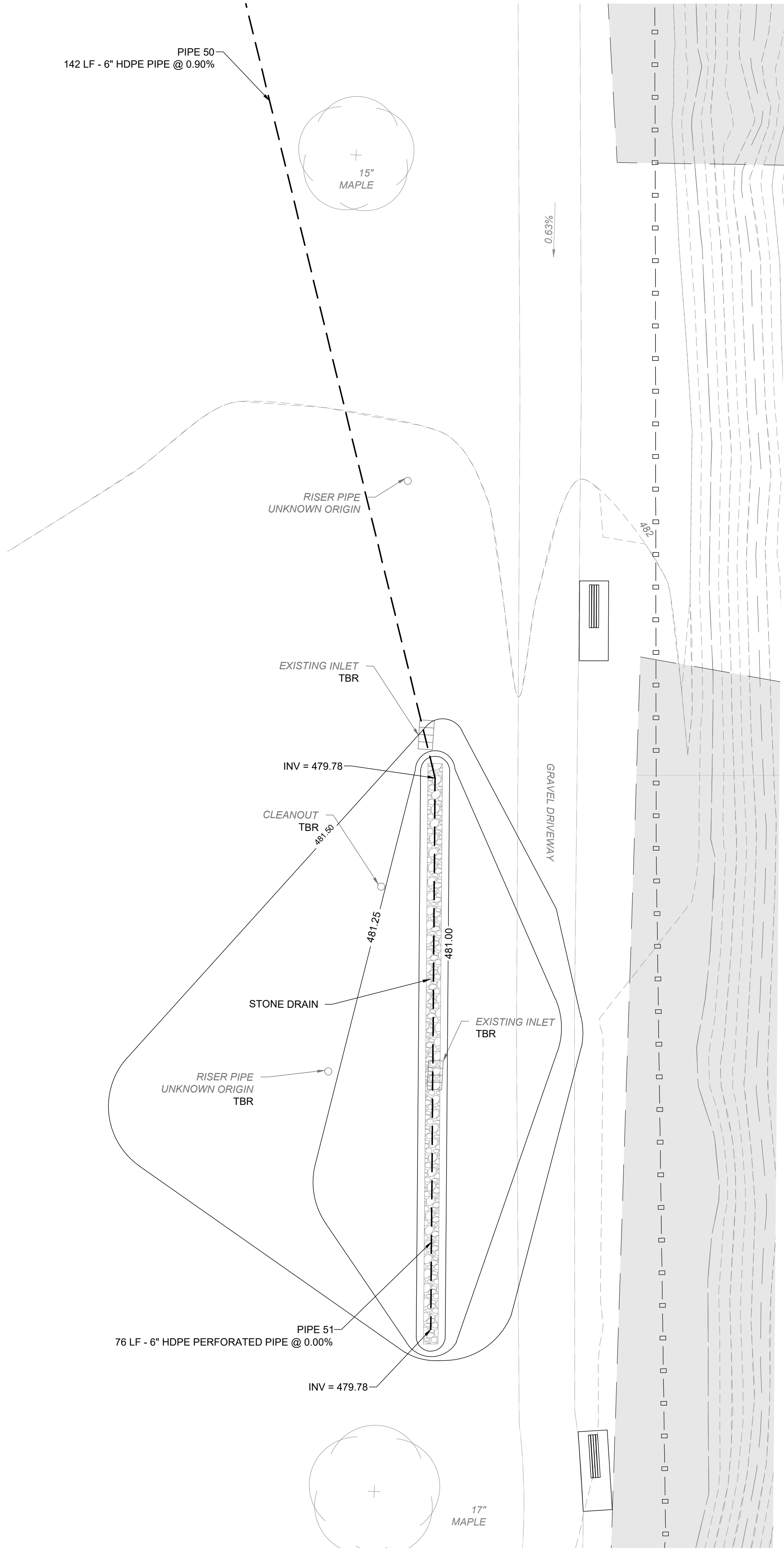
BMP #2 - OUTLET STRUCTURE DETAIL
NOT TO SCALE



NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE: RAIN GARDEN DETAILS			
PROJECT: OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY		PROJECT NO.: 0272-2205	
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: AS NOTED	DATE: 05/09/25
LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.: 20

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_TFC.DWG

PLOTTED: 5/9/2025 2:12 PM

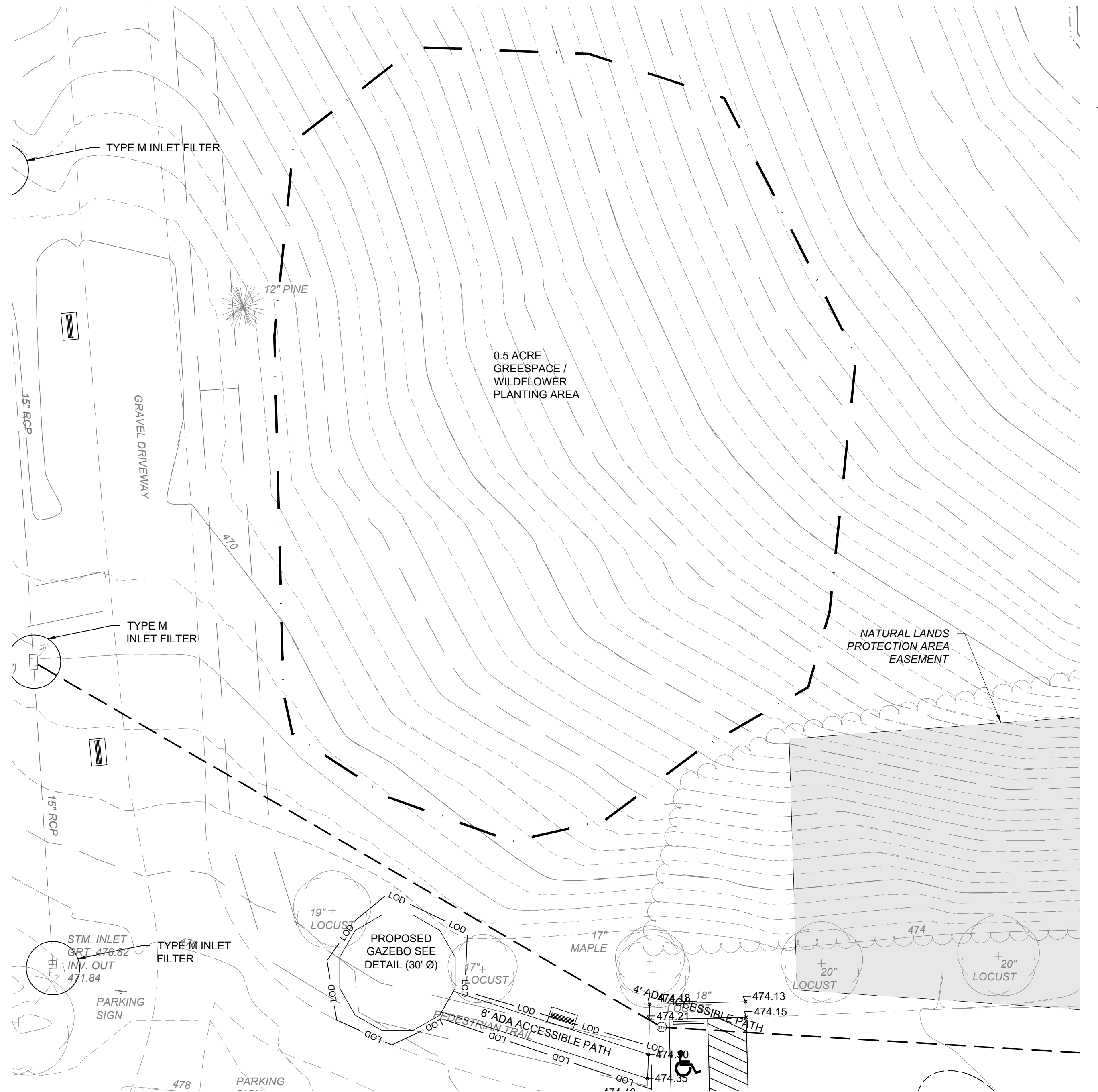
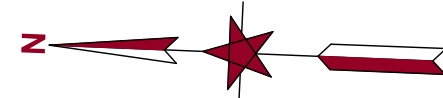


UNDERDRAIN TRENCH RESTORATION (GRASS) DETAIL
NOT TO SCALE

ITEM 16.03 - BMP #3 - INFILTRATION TRENCH

ADD ITEM 4:
ITEM 17.01 - GREENSPACE / WILDFLOWER PLANTING AREA

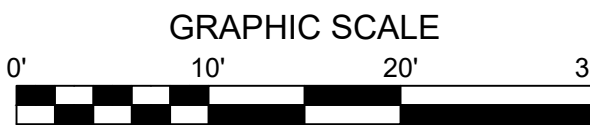
BMP #3 - INFILTRATION TRENCH
SCALE: 1" = 10'



GREENSPACE / WILDFLOWER PLANTING AREA
SCALE: 1" = 20'

NOTES:

- SEED MIX TO BE ERNST LOW-GROWING WILDFLOWER AND GRASS MIX, ERNMX-156.
- PLANT ACCORDING TO MANUFACTURER'S SPECIFICATIONS.



NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE:			
WILDFLOWER PLANTING AREA			
PROJECT:			
OPALANIE PARK			
PROJECT LOCATION:		PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY		0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:
MJB	JDA	AS NOTED	05/09/25
SHEET NO.:			21

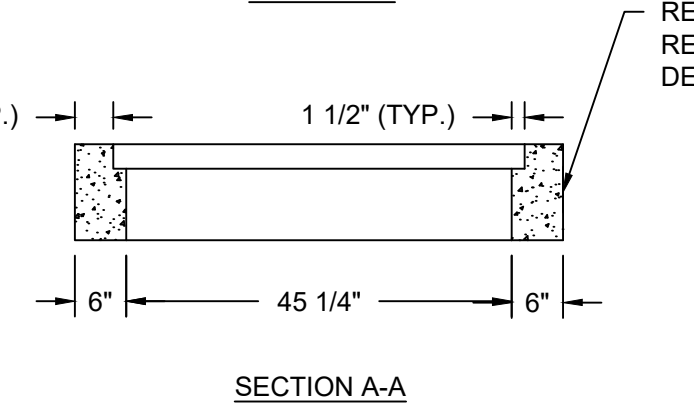
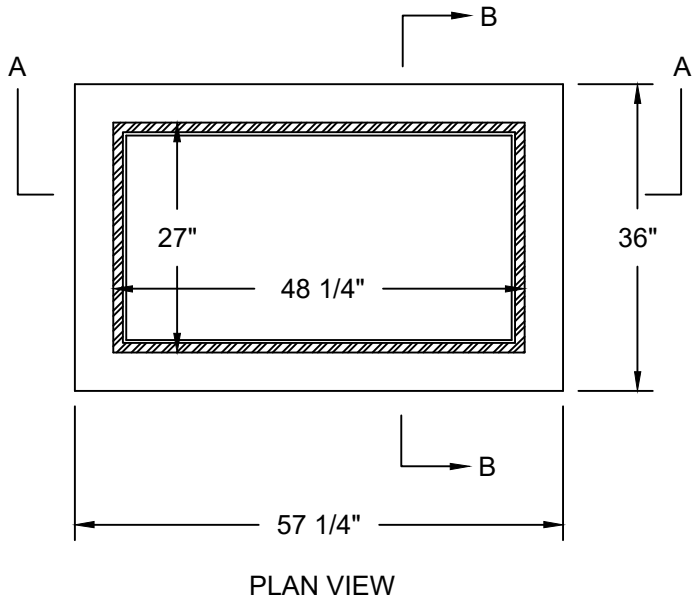
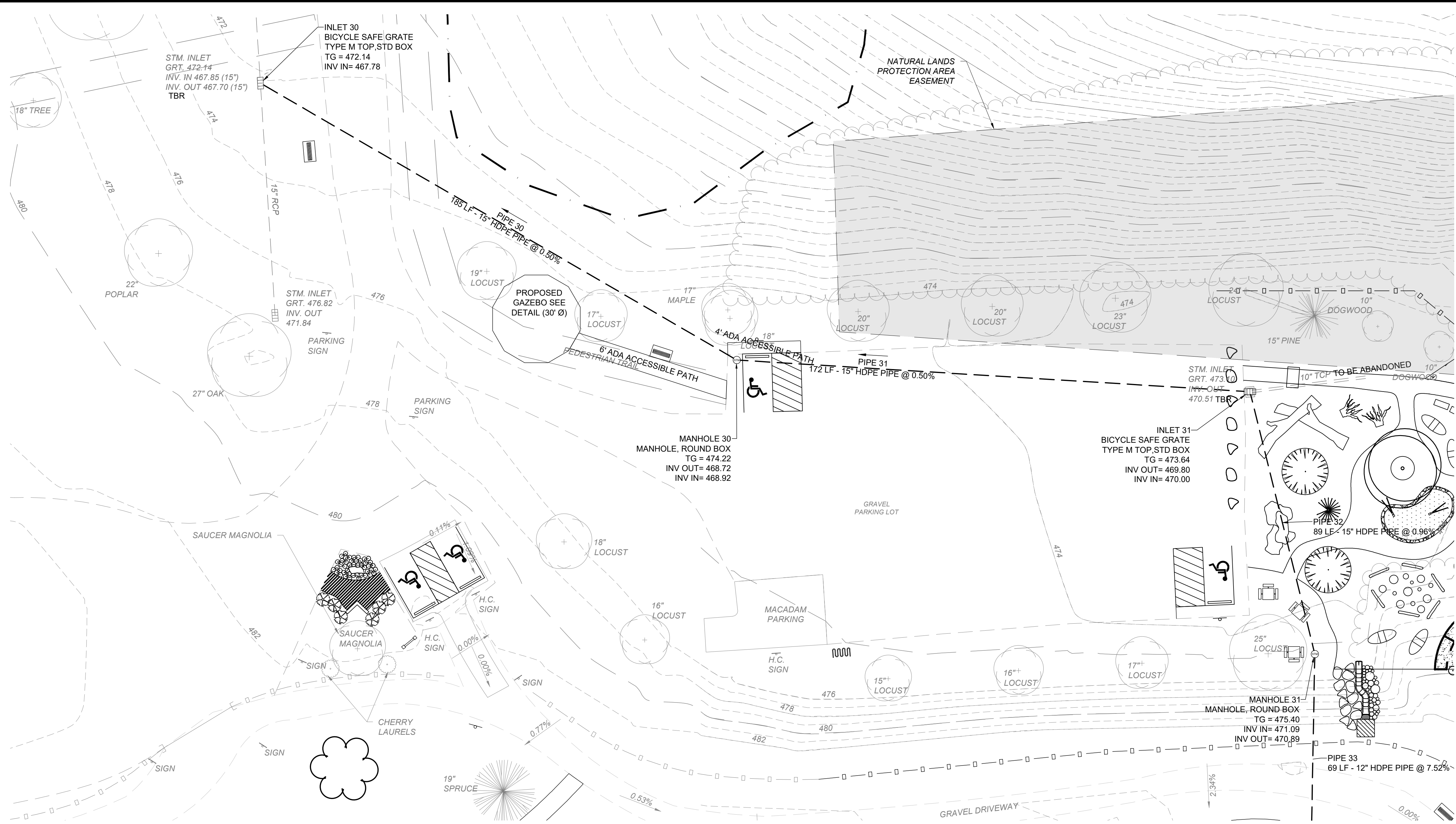
LTL CONSULTANTS, LTD.
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ONE TOWN CENTRE DRIVE OLEY, PA 19547



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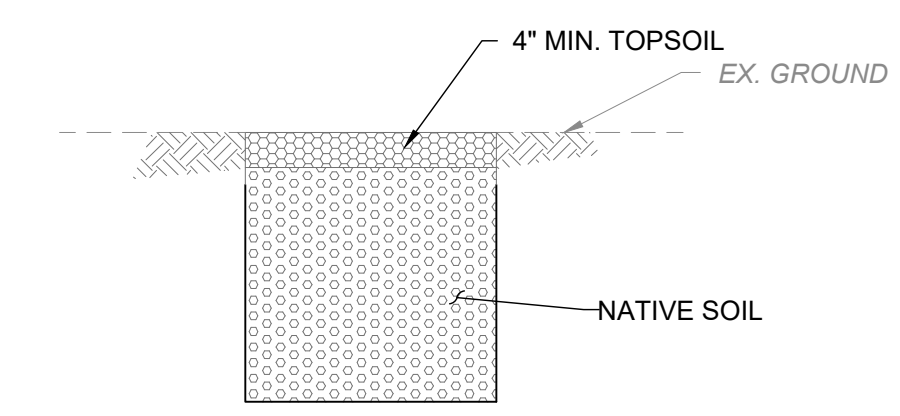
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FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT - JCD.DWG

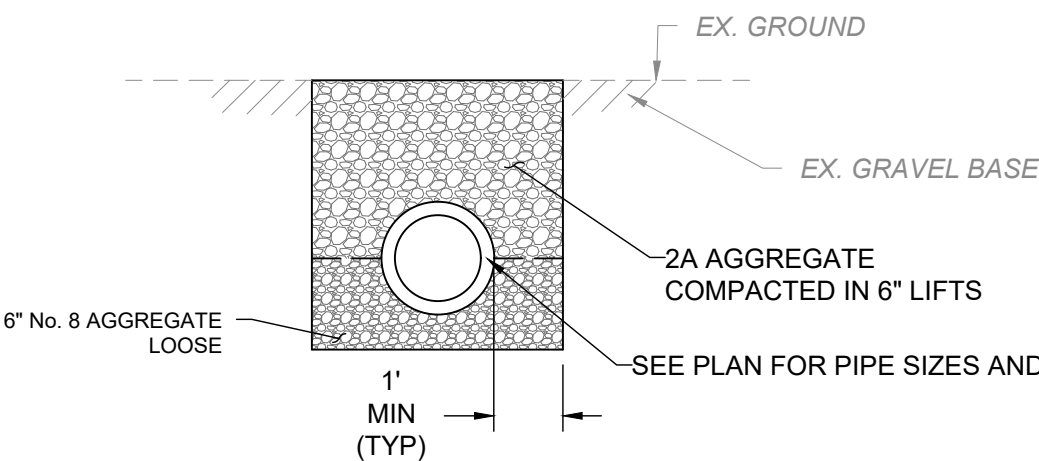


TYPE M INLET TOP
NOT TO SCALE

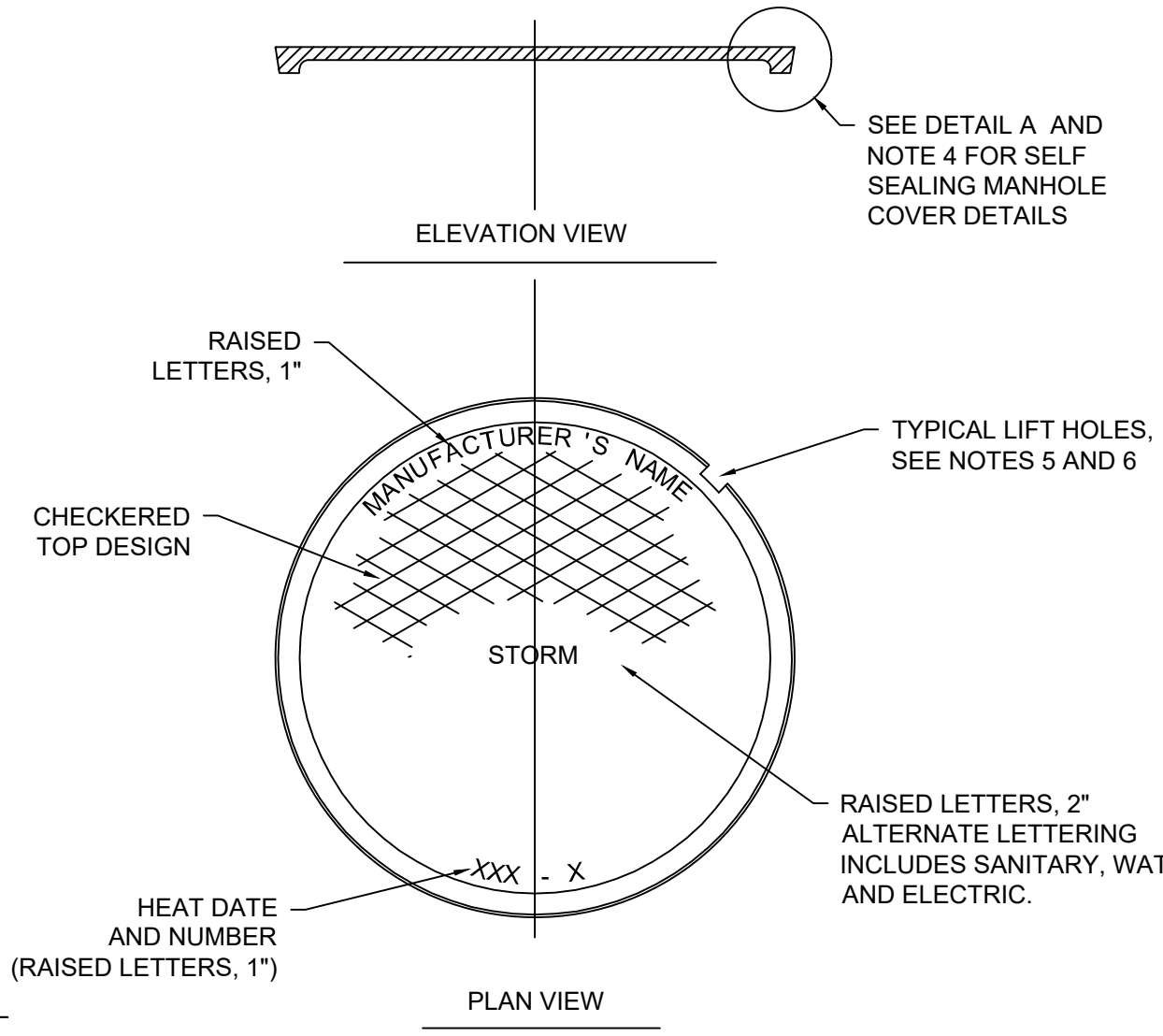
- NOTES:**
- SEE INLET GENERAL NOTES FOR ADDITIONAL INFORMATION.
 - THE REINFORCED CONCRETE STRUCTURE SHALL BE DESIGNED TO WITHSTAND AASTHO HS-20 LIVE LOAD CONDITIONS.
 - THE INLET SHALL BE CAST AROUND THE FRAME FOR A STANDARD GRATE (PER PENNDOT STANDARD DRAWING RC-45).
 - INLET TO CONFORM TO PENNDOT DRAWING RC-45, LATEST EDITION.



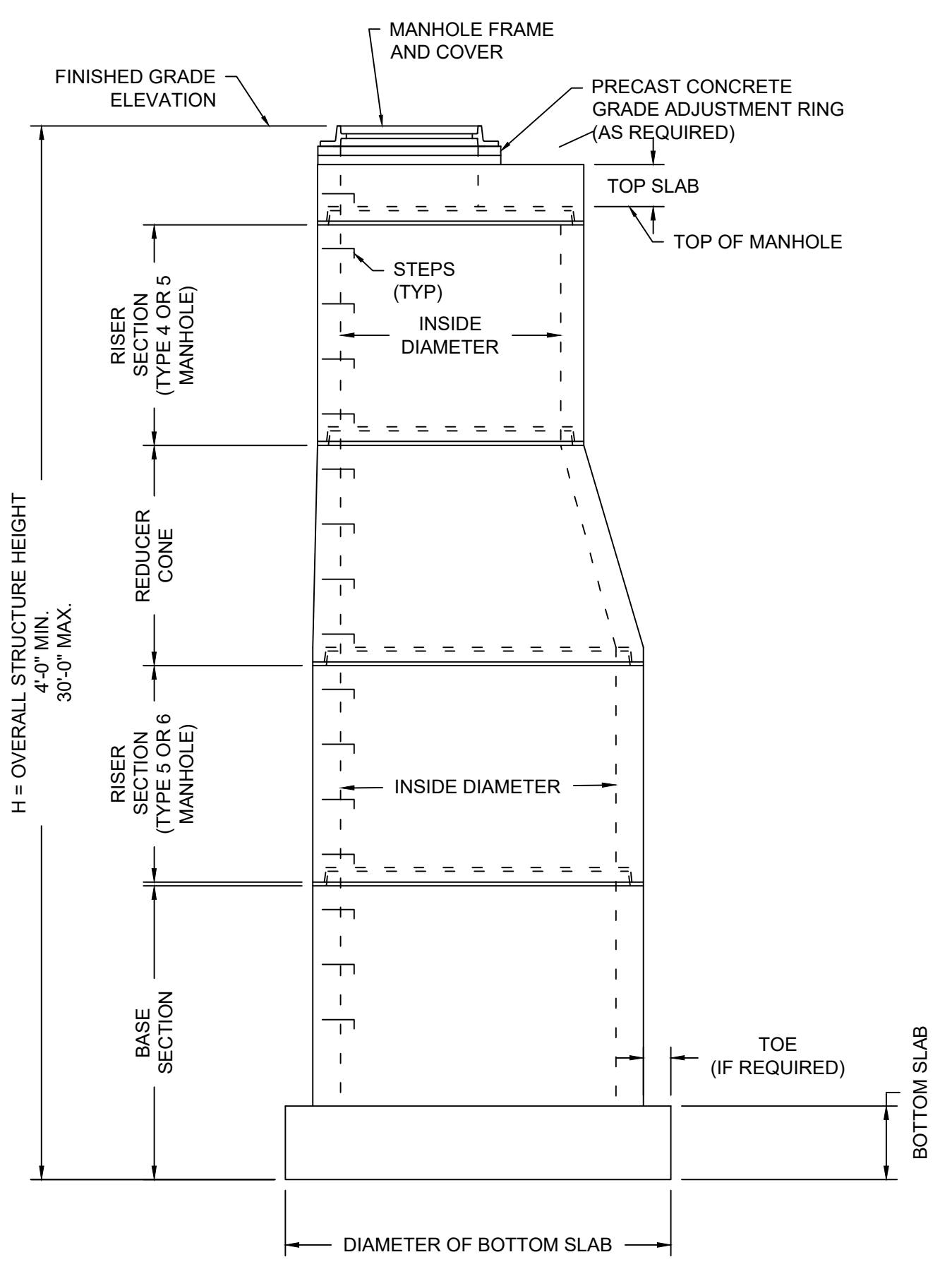
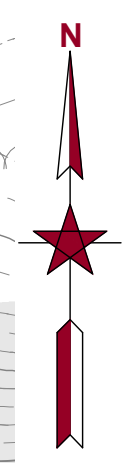
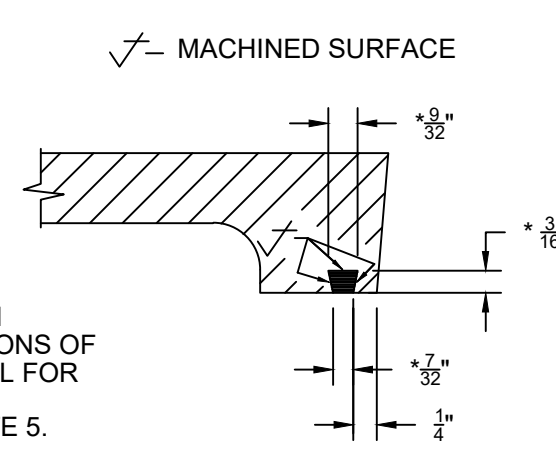
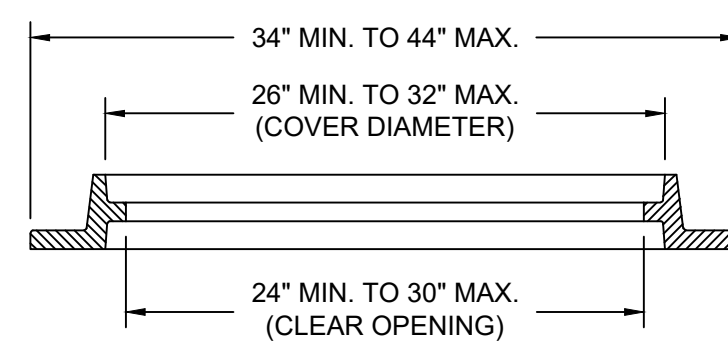
PIPE REMOVAL RESTORATION (ROADWAY) DETAIL
NOT TO SCALE



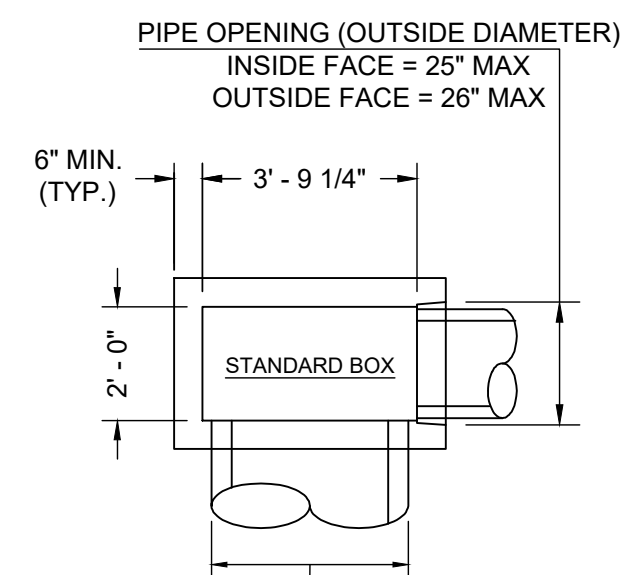
TRENCH RESTORATION (GRAVEL) DETAIL
NOT TO SCALE



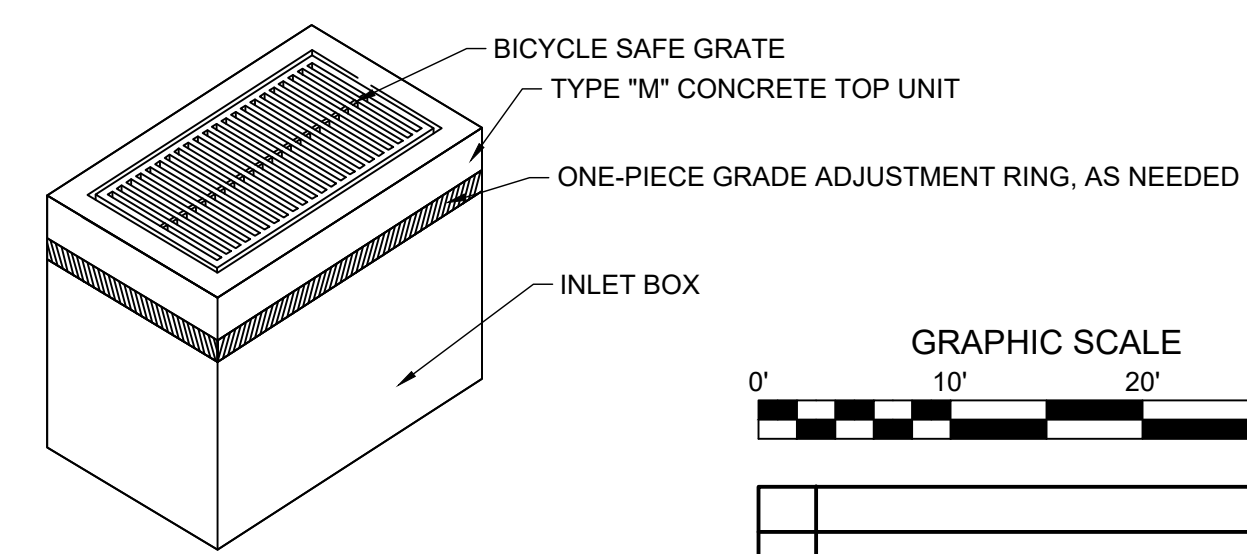
**CAST IRON MANHOLE COVER
PLATEN COVER**
NOT TO SCALE



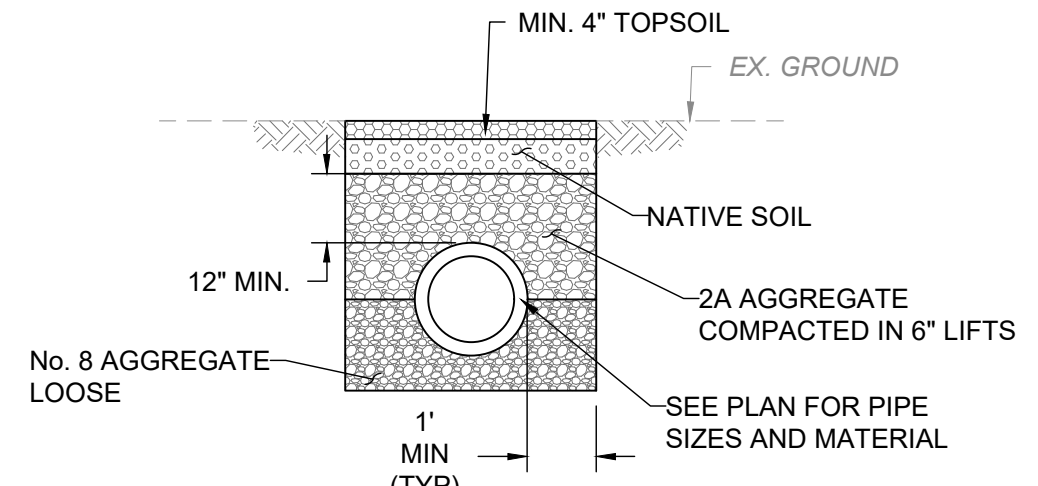
**MANHOLE ASSEMBLY WITH REDUCER CONE
(PRECAST ONLY)**
NOT TO SCALE



CONCRETE INLET BOX DETAIL
NOT TO SCALE



CONCRETE TYPE "M" INLET DETAIL
NOT TO SCALE



TRENCH RESTORATION (GRASS) DETAIL
NOT TO SCALE



NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE:			
DRAINAGE IMPROVEMENTS			
PROJECT:			
OPALANIE PARK			
PROJECT LOCATION:		PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY		0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:
MJB	JDA	AS NOTED	05/09/25
SHEET NO.:			22

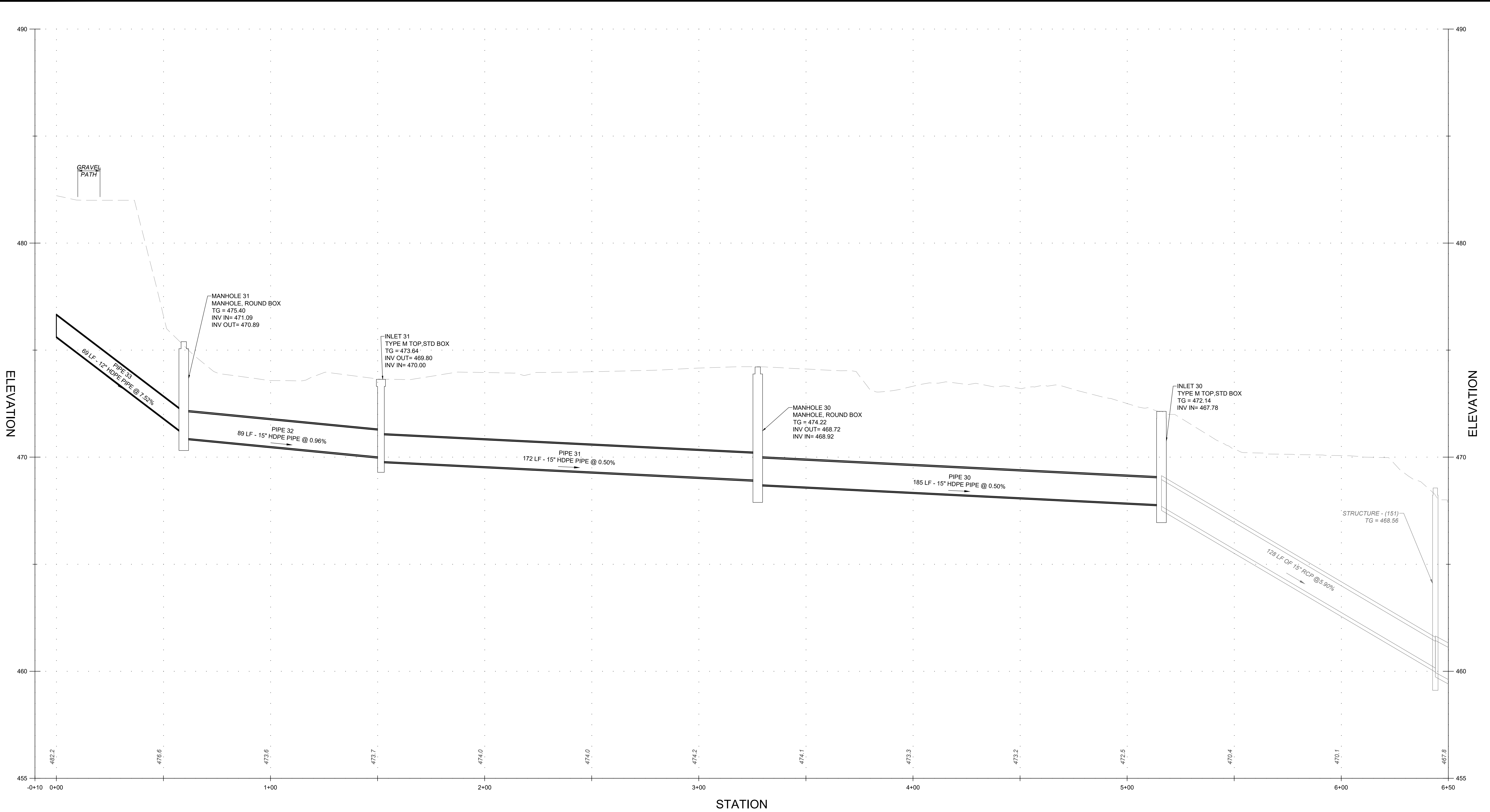


- ITEM 18.01 - TYPE M INLET
ITEM 18.02 - MANHOLE, ROUND BOX
ITEM 18.03 - 15" HDPE PIPE
ITEM 18.04 - 12" HDPE PIPE

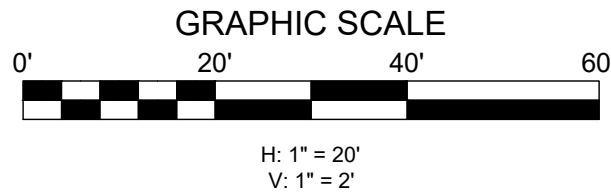
ISSUE FOR BID - 05/09/2025

PLOTTED: 9/9/2025 2:13 PM

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_TFCDWG



DRAINAGE PROFILE TO EXISTING SYSTEM



NO.	DESCRIPTION	DATE	BY
REVISIONS			



SHEET TITLE: DRAINAGE PROFILE			
PROJECT: OPALANIE PARK			
PROJECT LOCATION: WEST VINCENT TOWNSHIP, CHESTER COUNTY			PROJECT NO.: 0272-2205
DRAWN BY: MJB	APPROVED BY: JDA	SCALE: SCALE	DATE: 05/09/25
LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.: 23

ISSUE FOR BID - 05/09/2025

FILE NAME: P:\WEST VINCENT TOWNSHIP\BRYN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_PCDWG

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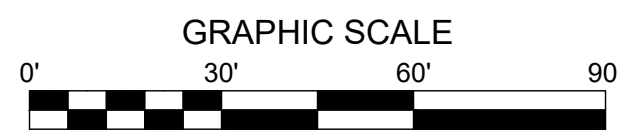



SOILS:

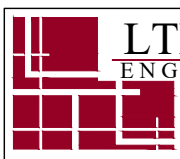
CaB - CALIFON LOAM, 3 TO 8% SLOPES
CpB - COKESBURY SILT LOAM, 3 TO 8% SLOPES
GdB - GLADSTONE GRAVELLY LOAM, 3 TO 8% SLOPES
GdC - GLADSTONE GRAVELLY LOAM, 8 TO 15% SLOPES
UrB - URBAN LAND, 0 TO 8% SLOPES

..... EX. SOIL LINE

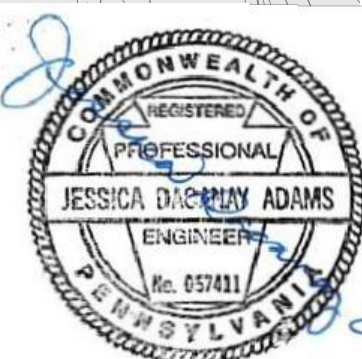
ITEM 19.01 - E&S CONTROLS



NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE:			
E&S SITE PLAN			
PROJECT:			
OPALANIE PARK			
PROJECT LOCATION:		PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY		0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:
MJB	JDA	1" = 30'	05/09/25
 LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS P.O. BOX 241 ONE TOWN CENTRE DRIVE OLEY, PA 19547			SHEET NO.:
			24

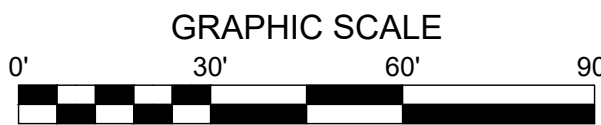
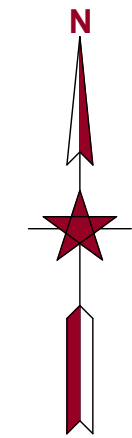
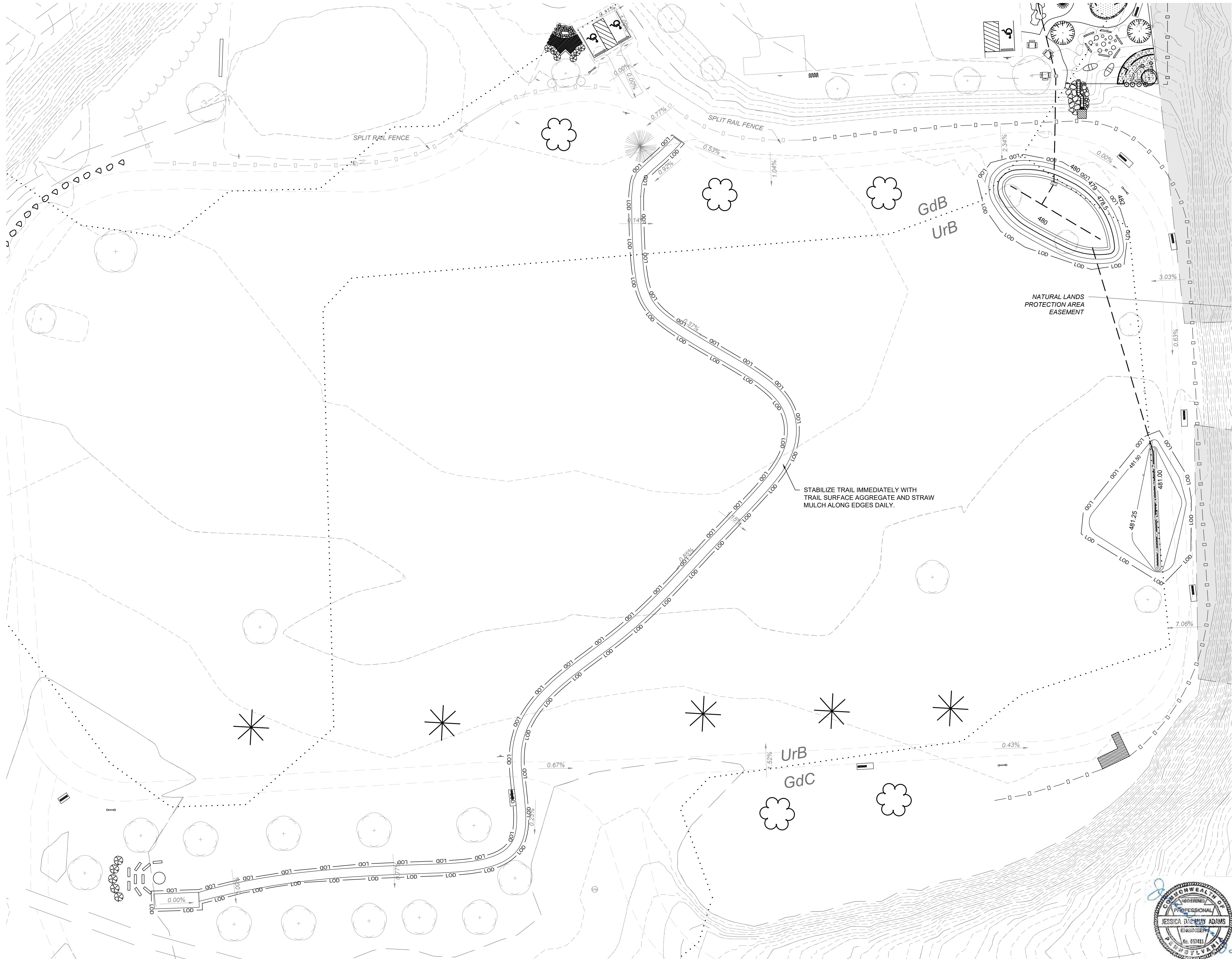


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FILE NAME: P:\WEST VINCENT TOWNSHIP\BRN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG
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FILE NAME: P:\WEST VINCENT TOWNSHIP\BRN COED (OPALANIE PARK - SECOND BID)\OPALANIE PARK DESIGN\PLANS\OPALANIE PARK PROJECT_1.PCDWG



NO.		DESCRIPTION	DATE	BY
REVISIONS				
SHEET TITLE:				
E&S SITE PLAN				
PROJECT:				
OPALANIE PARK				
PROJECT LOCATION:			PROJECT NO.:	
WEST VINCENT TOWNSHIP, CHESTER COUNTY			0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:	
MJB	JDA	1" = 20'	05/09/25	
SHEET NO.:				
25				



ISSUE FOR BID - 05/09/2025

PLOTTED: 06/09/25 2:13 PM

FILE NAME: F:\WEST VINCENT TOWNSHIP\BRVN CODED - SECOND BID\OPALANIE PARK DESIGN\PLAN\OPALANIE PARK PROJECT_T.CDDWG

STANDARD EROSION & SEDIMENT CONTROL PLAN NOTES

- 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.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- 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.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2:1V OR FLATTER.
- 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.
- 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 AT THE PROJECT SITE.
- 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.
- 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 PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND REJUTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 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, SHOVED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- 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.
- 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.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOIL, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 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.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDING 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.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 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.
- E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

PRECONSTRUCTION SEQUENCE

- AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM (POST-CONSTRUCTION STORMWATER MANAGEMENT) PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE TOWNSHIP ENGINEER TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- 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.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITINGS FROM THE TOWNSHIP ENGINEER PRIOR TO IMPLEMENTATION.
- THE LIMITS OF DISTURBANCE (LOD), STREAMS AND WETLANDS SHOULD BE MARKED PRIOR TO DISTURBANCE ACTIVITIES (I.E. SURVEY STAKES, POSTS & ROPE, CONSTRUCTION FENCE, ETC.).
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY E&S BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT PCSM MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs MUST BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS SHOULD BE DONE ONLY DURING THE GERMINATION SEASON. CHESTER COUNTY CONSERVATION DISTRICT SHOULD BE CONTACTED PRIOR TO CONVERSION OR REMOVAL OF PRIMARY E&S BMPs AND MAY REQUIRE A SITE INSPECTION.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE TOWNSHIP ENGINEER FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.

CONSTRUCTION SEQUENCE

ALL IMPROVEMENTS TO THE TRACT SHALL BE COMPLETED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE:

AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE CONTRACTOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LAND OWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, AND THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER TO AN ON-SITE PRE-CONSTRUCTION MEETING.

- THE LIMIT OF DISTURBANCE (LOD) SHALL BE MARKED WITH SURVEY STAKES, POSTS AND ROPE. CONSTRUCTION FENCE OR BY SOME OTHER ACCEPTABLE METHOD PRIOR TO DISTURBANCE ACTIVITIES.
- INSTALL ROCK CONSTRUCTION ENTRANCE.
- INSTALL THE CONCRETE WASHOUT INCLUDING FILTREX SOXX PRIOR TO STARTING ANY CONCRETE WORK.
- INSTALL INLET FILTERS FOR EXISTING INLETS.
- NORTHERN IMPROVEMENTS:**
 - INSTALL COMPOST FILTER SOCK WHERE SHOWN ON THE PLAN.
 - STRIP TOPSOIL, AND STOCKPILE WHERE SHOWN ON THE PLAN.
 - ROUGH GRADING AS REQUIRED (WITHIN LOD ONLY)
 - CONSTRUCT PICNIC AREAS; INSTALL EROSION CONTROL BLANKET AS SPECIFIED ON ALL PROPOSED 3:1 SLOPES.
 - CONSTRUCT RAIN GARDENS AND STORMWATER PIPES/LETSMANHOLES. PROVIDE INLET FILTERS FOR PROPOSED INLETS.
 - RAIN GARDENS MUST BE COMPLETED AND FULLY STABILIZED WITH VEGETATION PRIOR TO CONNECTING RAIN GARDENS TO PROPOSED/EXISTING STORM SEWER.
 - CONSTRUCT PROPOSED DRIVE AND PARKING AREA.
 - INSTALL DOG RUN FEATURES.
 - REMOVE INVASIVE SPECIES FROM EXISTING POND.
- SOUTHERN IMPROVEMENTS:**
 - INSTALL COMPOST FILTER SOCK WHERE SHOWN ON THE PLAN.
 - STRIP TOPSOIL, AND STOCKPILE WHERE SHOWN ON THE PLAN.
 - ROUGH GRADING AS REQUIRED (WITHIN LOD ONLY)
 - WORKING DOWNSTREAM TO UPSTREAM, CONSTRUCT RAIN GARDEN & UNDERDRAIN AREA, AND STORMWATER PIPES/LETSMANHOLES. PROVIDE INLET FILTERS FOR PROPOSED INLETS.
 - THE RAIN GARDEN & UNDERDRAIN AREA MUST BE COMPLETED AND FULLY STABILIZED WITH VEGETATION PRIOR TO CONNECTING RAIN GARDENS TO PROPOSED/EXISTING STORM SEWER.
 - COMPLETE TRAIL IMPROVEMENTS TO INNER LOOP. COMPLETE EQUESTRIAN AND PEDESTRIAN WOOD CHIP TRAIL. ALL TRAILS MUST BE STABILIZED WITH THE TRAIL STONE AND/OR STRAW MULCH ALONG TRAIL EDGE AT THE END OF EACH WORK DAY AS TRAIL CONSTRUCTION PROGRESSES.
 - INSTALL GAZEBO, PLAYGROUND AREA, VIEWING PLATFORM, AND OUTDOOR CLASSROOM.
 - INSTALL TRAIL BOULDERS.
 - CONSTRUCT PROPOSED ADA PARKING AREAS.
- UPON COMPLETION OF ALL PARK FEATURES, PERFORM THE MODIFICATIONS TO THE EXISTING STONE DRIVE AND EXISTING PARKING AREAS.
- AFTER ALL IMPROVEMENTS HAVE BEEN COMPLETED AND VEGETATED AREAS PERMANENTLY STABILIZED, THE EROSION CONTROL MEASURES CAN BE REMOVED AND THE AREA STABILIZED WITH THE PERMANENT SEEDING SCHEDULE. THE COMPOST FILTER SOCKS SHALL EITHER BE REMOVED AND TAKEN TO AN APPROPRIATE DISPOSAL SITE OR RANDOMLY CUT OPEN THE SOCKS AND SPREAD THE MULCH AS A SOIL SUPPLEMENT. ANY DISTURBANCE CREATED WHEN REMOVING THEM SHALL IMMEDIATELY BE PERMANENTLY SEEDED AND MULCHED.

COMPOST FILTER SOCKS (CFS)

- ROUTINE INSPECTION SHOULD BE CONDUCTED WITHIN 24 HRS OF A RUNOFF EVENT.
- SILT SOCKS SHOULD BE REGULARLY INSPECTED TO MAKE SURE THEY MAINTAIN THEIR SHAPE AND ARE PRODUCING ADEQUATE HYDRAULIC FLOWTHROUGH. IF PONDING BECOMES EXCESSIVE, ADDITIONAL SILT SOCKS MAY BE REQUIRED OR SEDIMENT REMOVAL MAY BE NECESSARY.
- IF THE SILT SOCK HAS BEEN DAMAGED, IT SHALL BE REPAIRED, OR REPLACED IF BEYOND REPAIR.
- REMOVE SEDIMENT AT THE BASE OF THE UPSLOPE SIDE OF THE SILT SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE SILT SOCK. ALTERNATIVELY, A NEW SOCK MAY BE PLACED ON TOP OF OR SLIGHTLY BEHIND THE ORIGINAL, INCREASING THE SEDIMENT STORAGE CAPACITY WITHOUT SOIL DISTURBANCE.
- REGULAR MAINTENANCE INCLUDES LIFTING THE INLET PROTECTION AND CLEANING AROUND AND UNDER THEM AS SEDIMENT COLLECTS.

PPC PLAN

PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) OF CHEMICALS, SOLVENTS, OTHER HAZARDOUS WASTE OR MATERIALS THAT HAVE THE POTENTIAL TO CAUSE ACCIDENTAL POLLUTION DURING EARTH DISTURBANCE ACTIVITIES WILL BE THE RESPONSIBILITY THE CONTRACTOR.

RECYCLING AND DISPOSAL OF BUILDING MATERIALS AND WASTES

ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE SECTION 260.1 ET SEQ., SECTION 271.1 ET SEQ., AND SECTION 287.1 ET SEQ. NO BUILDING MATERIAL OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

FILL MATERIALS

- IF THE SITE WILL NEED TO HAVE FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL IN MOST CASES RESIDE WITH THE OPERATOR.
- IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SITE LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE RESTS ON THE APPLICANT.
- IF ALL CUT AND FILL MATERIALS WILL BE USED ON THE SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE OPERATOR UNLESS THERE IS A BELIEF THAT A BELIEF THAT A RELEASE OF A REGULATED SUBSTANCE OCCURRED ON SITE.

DEFINITIONS

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 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.)

ENVIRONMENTAL DUE DILIGENCE: 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.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION

- HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
- MULCH WITH MULCH CONTROL. NETTING OR JUTE MATTING MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER.
- STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- DIVERSION CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND REJUTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED. E&SPCM P. 168
- SEDIMENT REMOVED FROM BMPs MUST BE DISPOSED OF IN LANDSCAPE AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS.

MAINTENANCE PROGRAM FOR CONTROL FACILITIES

DURING CONSTRUCTION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN AND MAINTAIN IN GOOD WORKING CONDITION ALL EROSION CONTROL DEVICES IN ACCORDANCE WITH THE FOLLOWING MAINTENANCE SCHEDULE.

- ALL BMPs SHALL BE INSPECTED ON A WEEKLY BASIS AS WELL AS AFTER EACH MEASURABLE RUNOFF EVENT. SEE NOTE D IN REFERENCE TO USING THIS MATERIAL ON SITE. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, AND REMULCHING MUST BE PERFORMED IMMEDIATELY.
- SEDIMENT REMOVED FROM THE FACILITIES MAY BE INCORPORATED BACK INTO THE EARTHWORK AS FILL OR WASTE IN THE SITE AS DIRECTED BY THE ENGINEER. MATERIAL NOT REUSED ON SITE MUST BE HAULED TO A LANDFILL APPROVED BY THE CONSERVATION DISTRICT.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAJLUE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS, AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND REJUTING MUST BE PERFORMED IMMEDIATELY.
- TOPSOIL STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER. SEDIMENT REMOVED FROM ALL E & SC FACILITIES SHALL BE PLACED ON THE TOPSOIL STOCKPILE AND SEEDED IMMEDIATELY.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREA DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS, WHICH ARE AT FINISHED GRADE, OR WHICH WILL NOT BE RE-DISTURBED WITHIN 1 YEAR, MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- IN THE EVENT OF CULLING, THE CONTRACTOR MUST ATTEMPT TO REGRADE THE AREA TO PREVENT CONCENTRATED FLOWS DURING RUNOFF EVENTS FROM CREATING FURTHER CHANNELIZATION. TEMPORARY STABILIZATION OR REDIRECTION OF THE WATER FLOW MAY BE NECESSARY TO PREVENT REOCCURRENCE OF THE GULLY.
- SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON SITE FLOWS PRIOR TO DISCHARGE, ADDITIONAL MEASURES MUST BE IMMEDIATELY STABILIZED AND THE CONTRACTOR SHALL CONTACT THE CONSERVATION DISTRICT.
- THE OWNER IS RESPONSIBLE FOR THE PERMANENT MAINTENANCE, WHICH SHALL INCLUDE THE PROPER USE AND MAINTENANCE OF THE CONTINUING CLEANING OF ALL STORM SEWER FACILITIES TO ENSURE THEY ARE FUNCTIONING AS DESIGNED.
- A COPY OF THIS NARRATIVE, AND EROSION AND SEDIMENTATION CONTROL PLANS SHALL BE ON SITE AT ALL TIMES.

GENERAL SEEDING NOTES

TEMPORARY SEEDING:

- TEMPORARY SEEDING SHALL BE DONE IN AREAS WHERE NO ACTIVE WORK WILL BE PERFORMED, ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE SEEDED AND MULCHED IMMEDIATELY.
- DURING NON-GERMINATING PERIODS, ONLY MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. AREAS MULCHED DURING THE NON-GERMINATING PERIODS, MUST BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING THE END OF THE NON-GERMINATING PERIODS.
- DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEED MIXTURE.
- DISTURBED AREAS WHICH ARE AT EITHER FINISHED GRADE OR WILL NOT BE DISTURBED AGAIN WITHIN ONE (1) YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED.
- TEMPORARY SEEDING STEPS:
 - UTILIZING THE FOLLOWING SEEDING TYPES, RATES AND TIME SCHEDULE:

SEASON	RATE	TYPE
MARCH 1 TO JUNE 15	1 LB./1000 SF	ANNUAL RYEGRASS
MAY 15 TO SEPT 15	1 LB./1000 SF	SUDAN GRASS
SEPT 15 TO OCT 15	168 LB./AC	WINTER RYE
 - APPLY HAY OR STRAW MULCH (PER PENNDOT PUBLICATION 408, SECTION 805.2) AT A RATE OF THREE (3) TONS PER ACRE.
- ALL SEED SHALL BE LABELED, DATED AND QUALITY CONSISTENT WITH PENNDOT PUBLICATION 408, SECTION 804.2.

PERMANENT SEEDING:

- DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE DISTURBED AGAIN WITHIN ONE (1) YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED.
- SEEDING SHALL BE DONE DURING PERIODS FROM APRIL 15TH TO OCTOBER 1ST, UNLESS OTHERWISE DIRECTED. IF SEEDING IS DONE AFTER OCTOBER 1ST, DORMANT SEED MUST BE USED AND DISTURBED AREAS MUST BE MULCHED.
- DISTURBED FINAL GRADED AREAS AND DRAINAGE SWALES WILL BE PERMANENTLY SEEDED AS FOLLOWS:
 - MINIMUM OF 6" OF TOPSOIL SHALL BE SPREAD OVER ALL AREAS TO BE SEEDED. TOPSOIL SHALL BE FREE OF STONES, STICKS, WASTE MATERIAL AND SIMILAR DEBRIS. FROZEN GROUND SHALL NOT BE SPREAD AS TOPSOIL AND TOPSOIL SHALL NOT BE SPREAD OVER FROZEN GROUND.
 - A SOIL ANALYSIS IS RECOMMENDED.
 - GRASS SHALL NOT BE PLANTED AFTER HEAVY RAIN OR WATERING.
 - ALL SEED USED SHALL BE LABELED IN ACCORDANCE WITH THE U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT IN EFFECT AT THE TIME OF PURCHASE. INERT MATTER SHALL NOT EXCEED 15% AND BLUE TAG CERTIFIED SEED SHALL BE SUPPLIED WHEREVER POSSIBLE.
 - SMOOTH AND FIRM SEED BED WITH CULTIPACKER OR SIMILAR EQUIPMENT PRIOR TO SEEDING. APPLY SEED UNIFORMLY BY BROADCASTING, DRILLING OR HYDRO SEEDING. COVER SEEDS WITH 1/2" OF SOIL WITH SUITABLE EQUIPMENT.
 - APPLY HAY OR STRAW MULCH (PER PENN DOT PUBLICATION 408, SECTION 805.2) AT A RATE OF THREE (3) TONS PER ACRE.

PERMANENT SEEDING FOR NORMAL, MOWED LAWN AREAS

SEASON	RATE	TYPE
MAR. 1 TO JUNE 1 AND AUG. 15 TO OCT. 1	2 LB./1000 SF	KY31 TALL FESCUE AND RED TOP
OCT. 1 TO MAR. 1 AND JUNE 1 TO AUG. 1	2 LB./1000 SF	RED TOP*

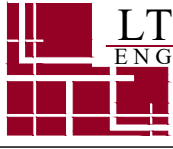
* USE DORMANT SEED, UNIFORMLY APPLIED, WORKING INTO A DEPTH OF 1/2". THE USE OF MULCH IS REQUIRED. THE USE OF NETTING OR EROSION CONTROL MATS MAY BE REQUIRED.

PERMANENT SEEDING FOR NORMAL, MOWED LAWN AREAS

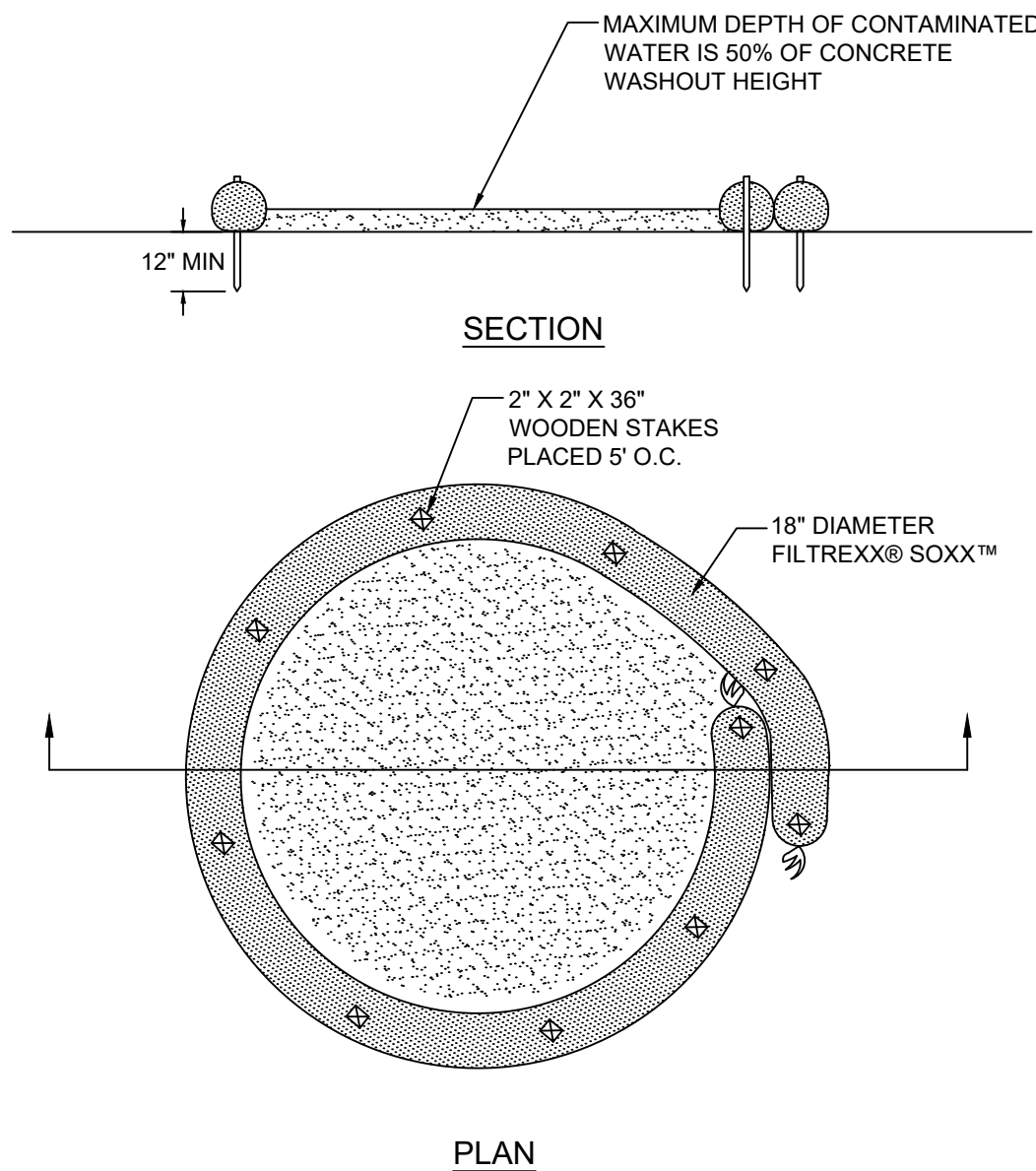
SEASON	RATE	TYPE
MAR. 1 TO JUNE 1 AND AUG. 15 TO OCT. 11	2.5 LB./1000 SF	KY31 TALL FESCUE (80%) AND RYEGRASS 20%

NOTE: SEEDING PERIODS AND SPECIFICATIONS MAY VARY DUE TO SITE CONDITIONS AND VARIANCES FROM THE TIME THIS REPORT IS WRITTEN AND APPROVED. IT MAY BE NECESSARY TO ADAPT SEED SPECIFICATION VARIETIES, AND QUALITIES, FOR SPECIAL CONDITIONS CONSULT "GUIDELINE FOR RECLAMATION OF SEVERELY DISTURBED AREAS", PENNSYLVANIA STATE UNIVERSITY.

- HYDRO SEEDING: SEED SHALL BE AS SPECIFIED ABOVE. THE MIXTURE SHALL NOT REMAIN IN A SLURRY FOR MORE THAN ONE HOUR. WOOD CELLULOSE FIBER, APPLIED AT A RATE OF 35 LBS. PER 1000 SF, MAY BE APPLIED AS PART OF THE SLURRY IN LIEU OF MULCHING. SYNTHETIC MULCH BINDER, SUCH AS CURASOL, DCA-70, TERRE-TACK OR AN APPROVED EQUAL SHALL BE USED PER THE MANUFACTURER'S INSTRUCTIONS TO ANCHOR THE MULCH.
- MULCHING: MULCHING SHALL BE APPLIED AS FOLLOWS:
 - STRAW: SHALL BE ALL DRIED AND FREE FROM UNDESIRABLE SEEDS AND COARSE MATERIAL. APPLY AT A RATE OF 115 TO 150 LBS. PER 1000 SF OR 3 TONS PER ACRE. MULCHED AREAS SHALL BE CHECKED PERIODICALLY AND IMMEDIATELY AFTER STORMS AND WIND. DAMAGED OR MISSING MULCH SHALL BE REPLACED. A TACKIFIER APPLIED AFTER STRAW IS RECOMMENDED. TACKIFIER MAY BE ASPHALT OR POLYMER SPRAY. APPLY AT A RATE RECOMMENDED BY THE MANUFACTURER WITH SUITABLE EQUIPMENT. IN LIEU OF MANUFACTURER'S RECOMMENDATIONS APPLY AT A RATE OF .04 TO .06 GALLONS PER SQUARE YARD.
 - JUTE MATTING: THE USE AND INSTALLATION OF JUTE MATTING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION AND SHALL BE SELECTED FOR THE PROPER APPLICATION AND CONDITIONS.

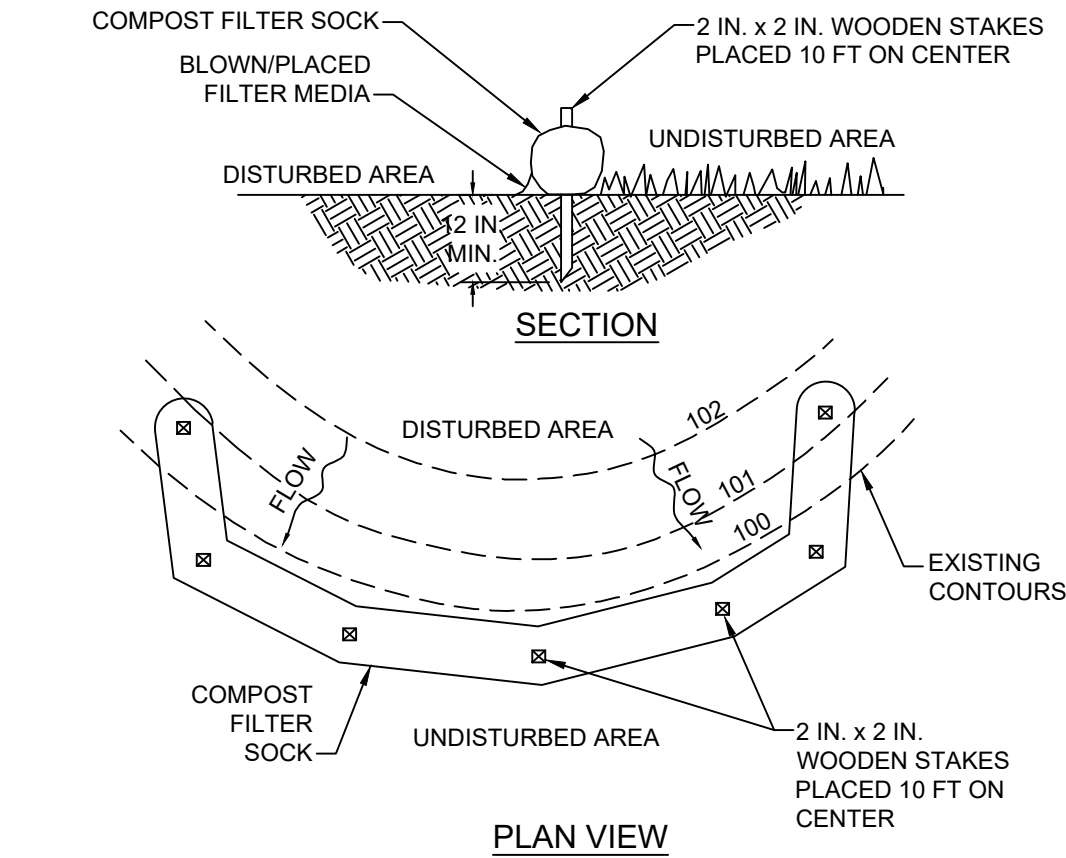
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PROJECT:			
OPALANIE PARK			
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MJB	JDA	AS NOTED	05/09/25
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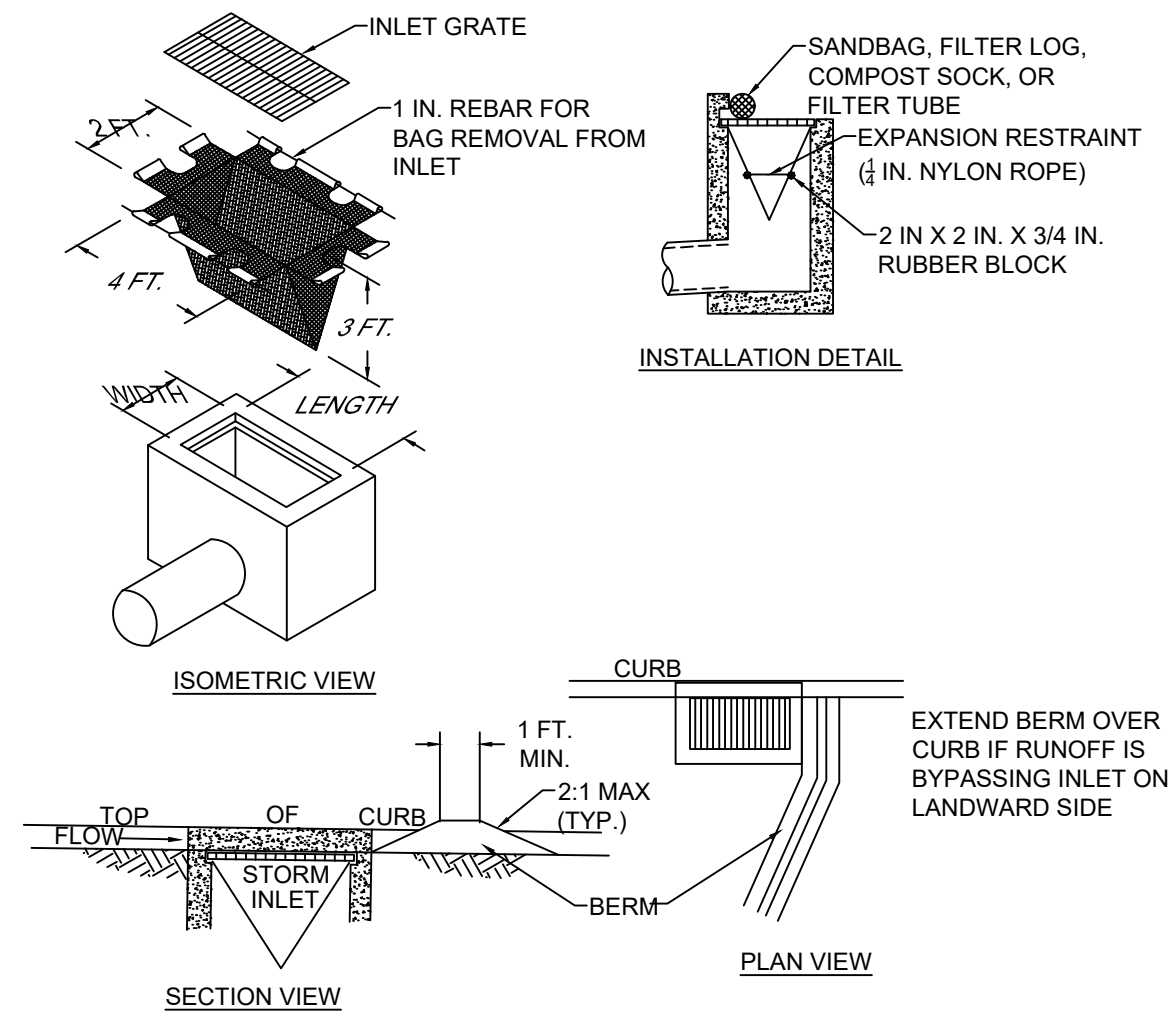
- NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
 2. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY
 3. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION

FILTREXX® CONCRETE WASHOUT
NOT TO SCALE



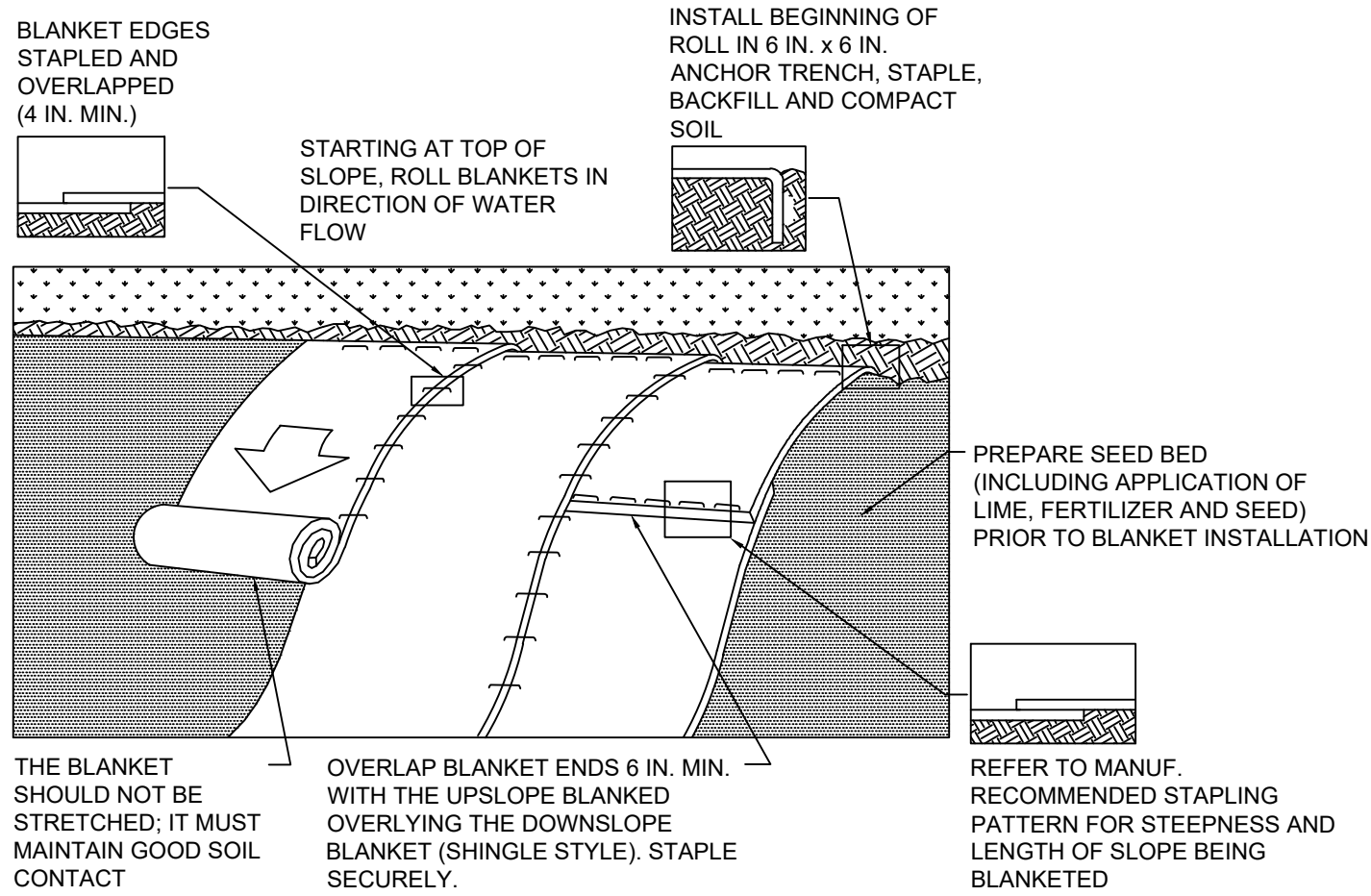
- NOTES:
- SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE 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 SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

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



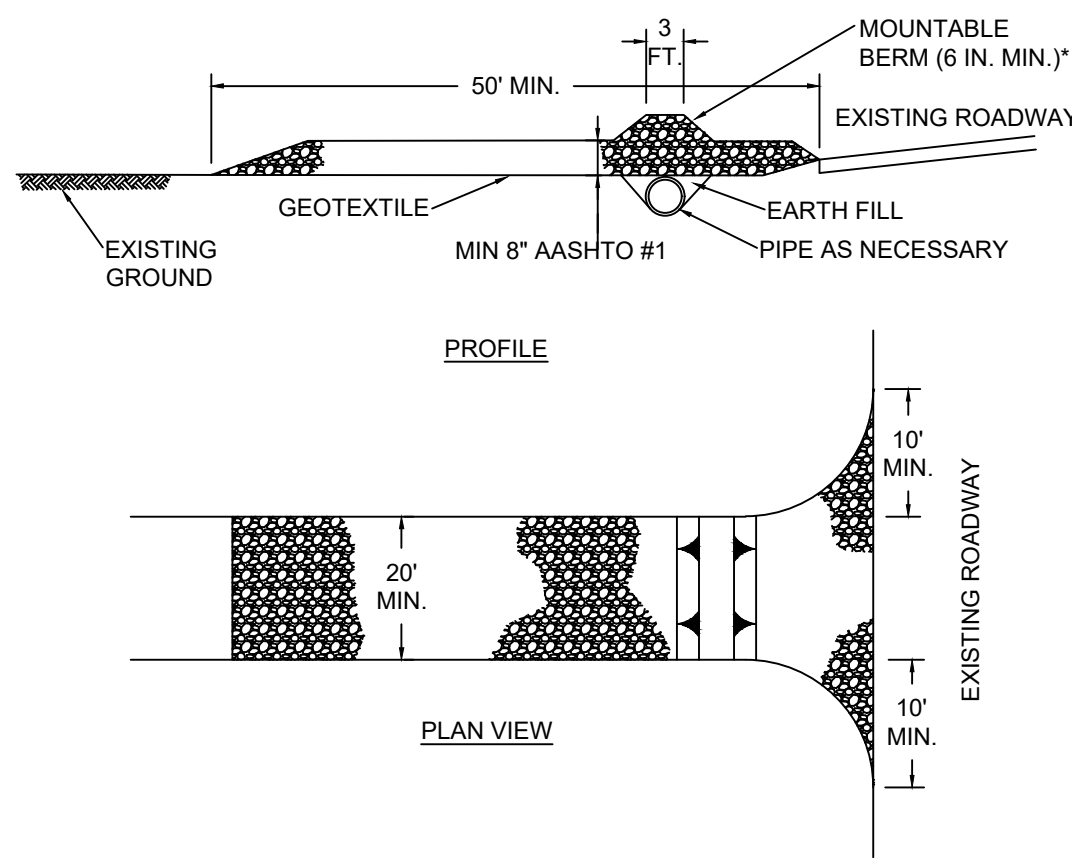
- NOTES:
- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
- ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
- 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 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET
NOT TO SCALE



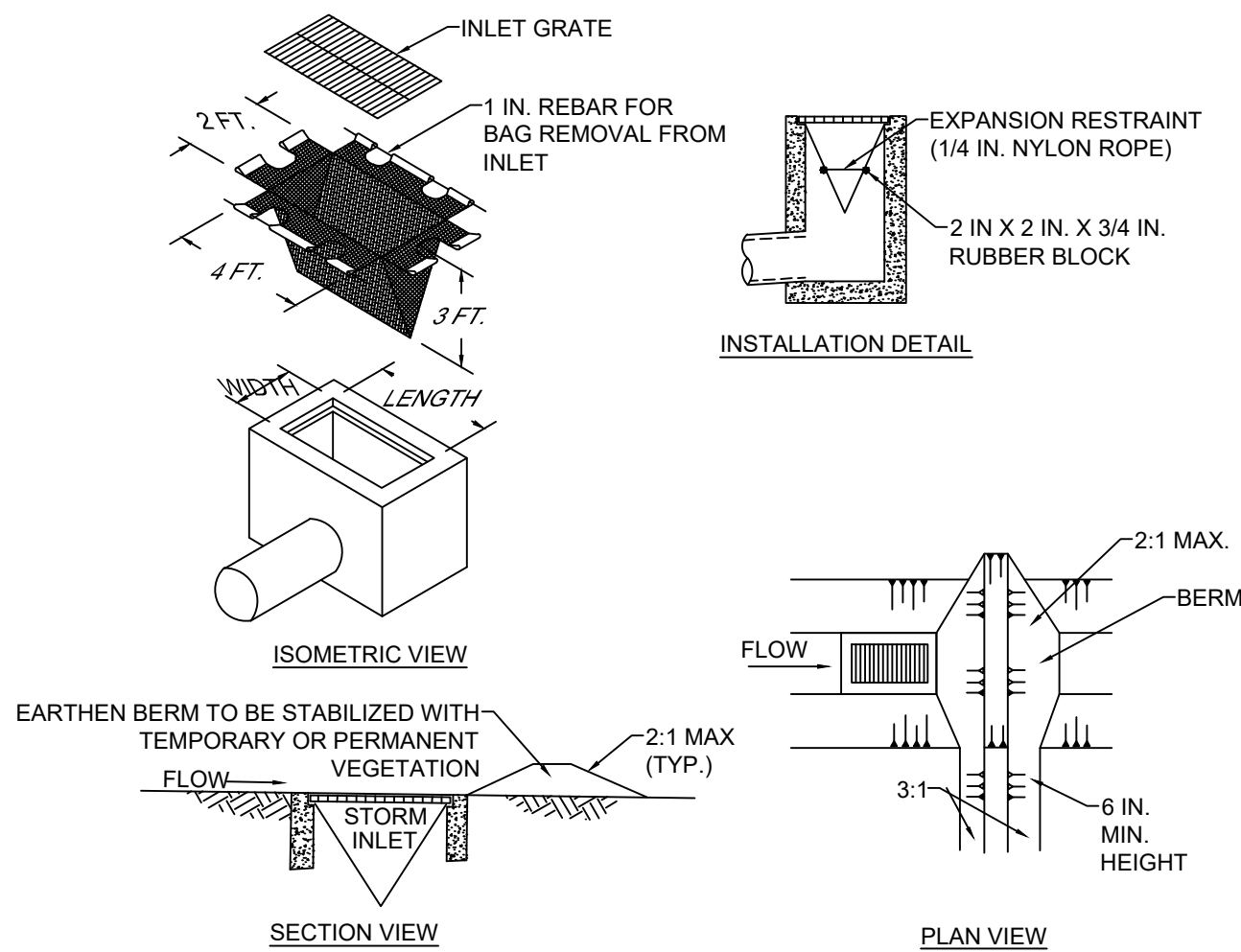
- NOTES:
- SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
- PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOUDS, STICKS, AND GRASS.
- BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
- THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION
NOT TO SCALE



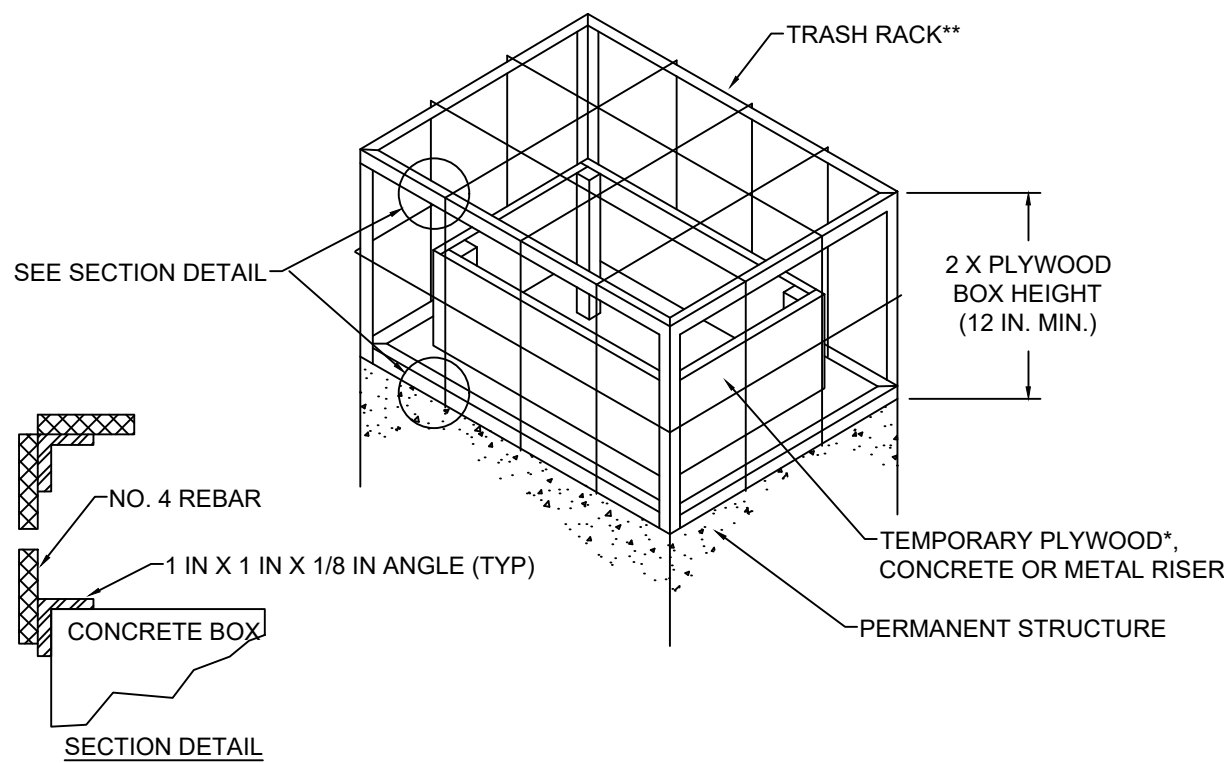
- NOTES:
- REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
- RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
- MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT 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 DRAINAGE COURSES IS NOT ACCEPTABLE.

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



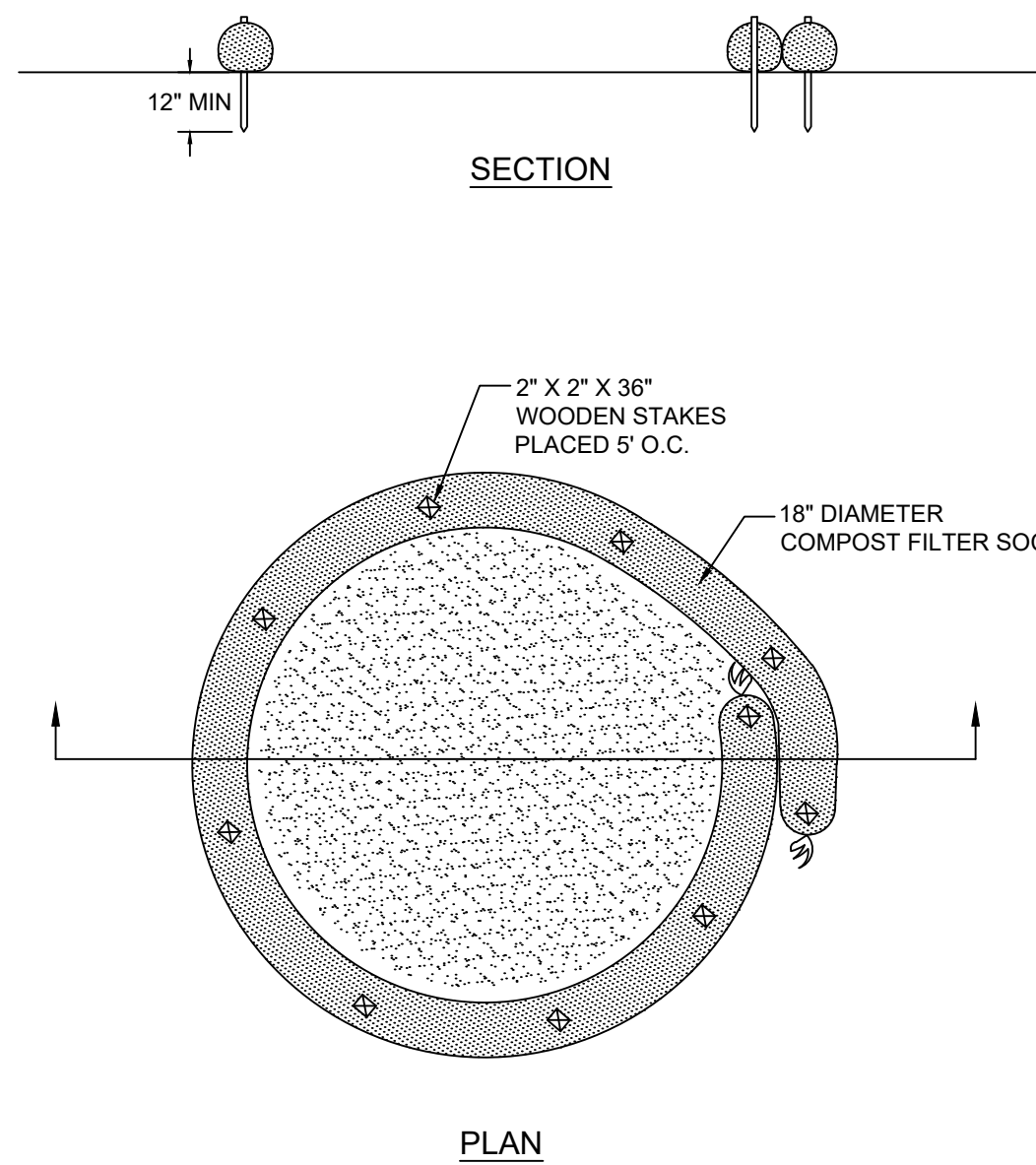
- NOTES:
- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
- ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
- AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET
NOT TO SCALE



- NOTES:
- * 3/4 IN. PRESSURE TREATED PLYWOOD BOX WITH 2 IN. X 2 IN. PRESSURE TREATED CORNER SUPPORTS, SET INTO 1-1/2 IN. GRATE OFFSETS. CAULK ALL SEAMS TO FORM WATERTIGHT SEALS.
- ** TRASH RACK COMPOSED OF 1 IN. X 1 IN. X 1/8 IN. L (TYP.) AND #4 BARS (TYP.) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS; #4 BARS SPACED AT HALF THE DIAMETER OF THE BARREL MAX.
- BOX SHALL BE BOLTED, STRAPPED, OR OTHERWISE SECURED TO THE PERMANENT RISER.
- TOP OF TEMPORARY RISER EXTENSION SHALL BE AT LEAST AS HIGH AS SEDIMENT BASIN TEMPORARY RISER AND SHALL BE 6 IN. (MINIMUM) BELOW CREST OF EMERGENCY SPILLWAY.
- ALL JOINTS SHALL BE WATER TIGHT.
- CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

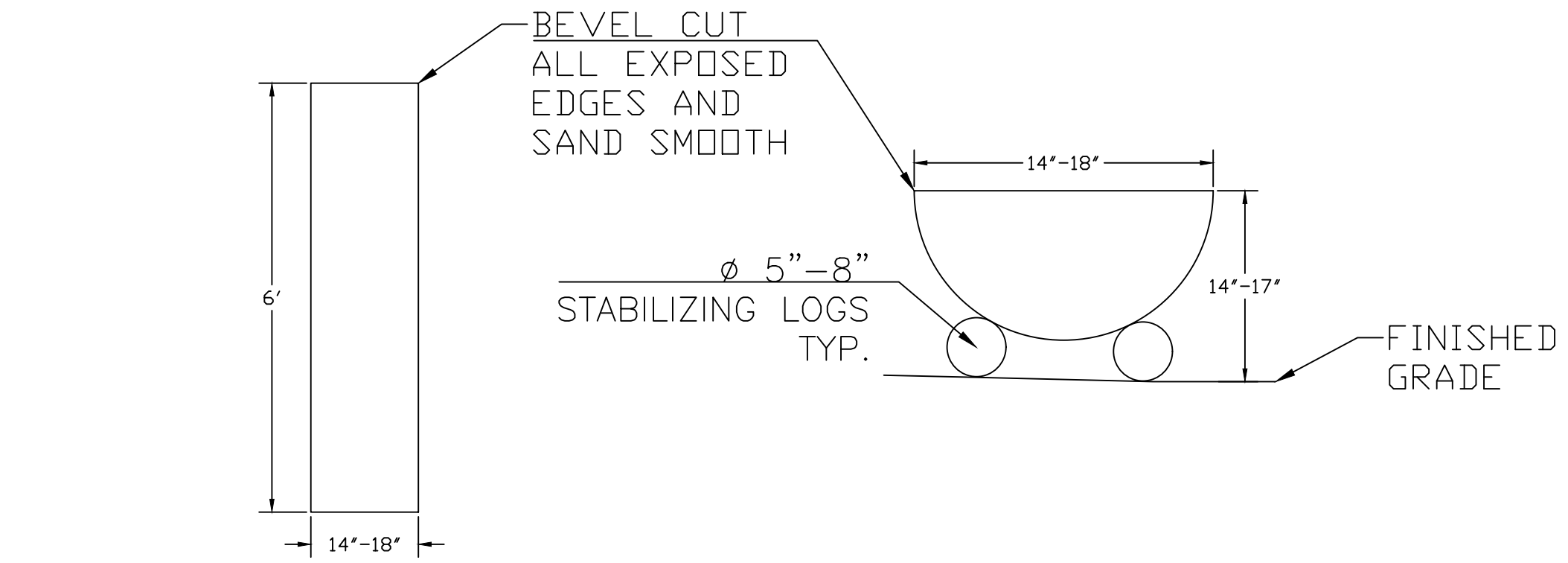
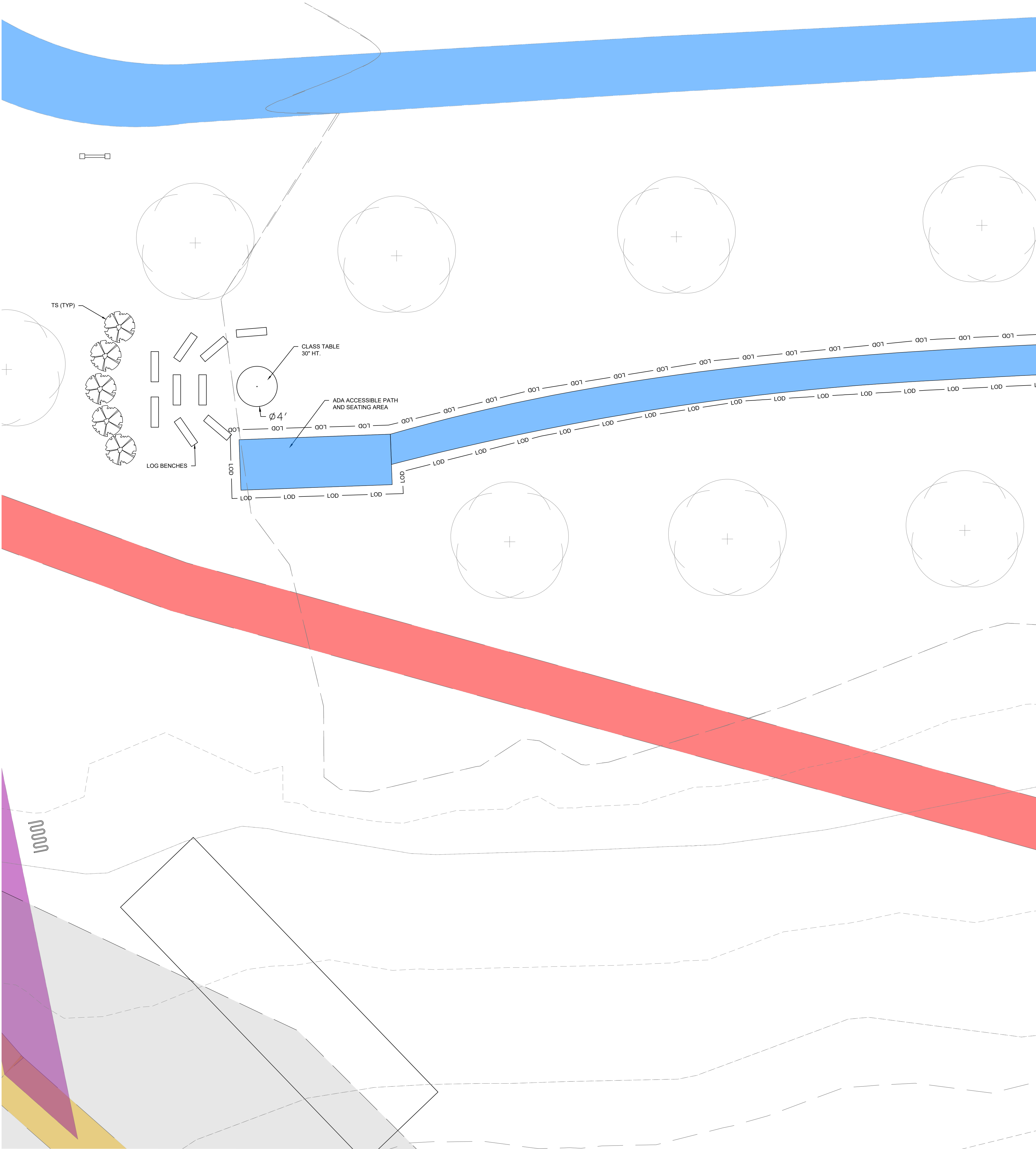
STANDARD CONSTRUCTION DETAIL #7-10
TEMPORARY RISER EXTENSION AND
TRASH RACK FOR PERMANENT STRUCTURE
NOT TO SCALE



- NOTES:
1. INSTALL COMPOST FILTER SOCK.
 2. INSTALL GEOTEXTILE FABRIC.
 3. SEED AND MULCH AREA ONCE SOIL HAS BEEN EXPORTED OFF SITE.

TEMPORARY SOIL STOCKPILE
NOT TO SCALE

NO.	DESCRIPTION	DATE	BY
REVISIONS			
SHEET TITLE:			
E&S DETAILS			
PROJECT:			
OPALANIE PARK			
PROJECT LOCATION:		PROJECT NO.:	
WEST VINCENT TOWNSHIP. CHESTER COUNTY		0272-2205	
DRAWN BY:	APPROVED BY:	SCALE:	DATE:
MJB	JDA	AS NOTED	05/09/25
SHEET NO.:			27



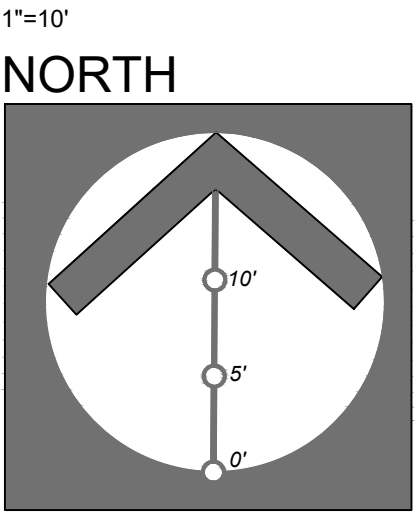
PLAN VIEW

SECTION VIEW

LOG BENCHES

NOT TO SCALE

PLANT SCHEDULE					
TREES					
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
TS	5	Thuja (standishii x plicata) 'Green Giant'	Green Giant Arborvitae	7'	Evergreen, Native

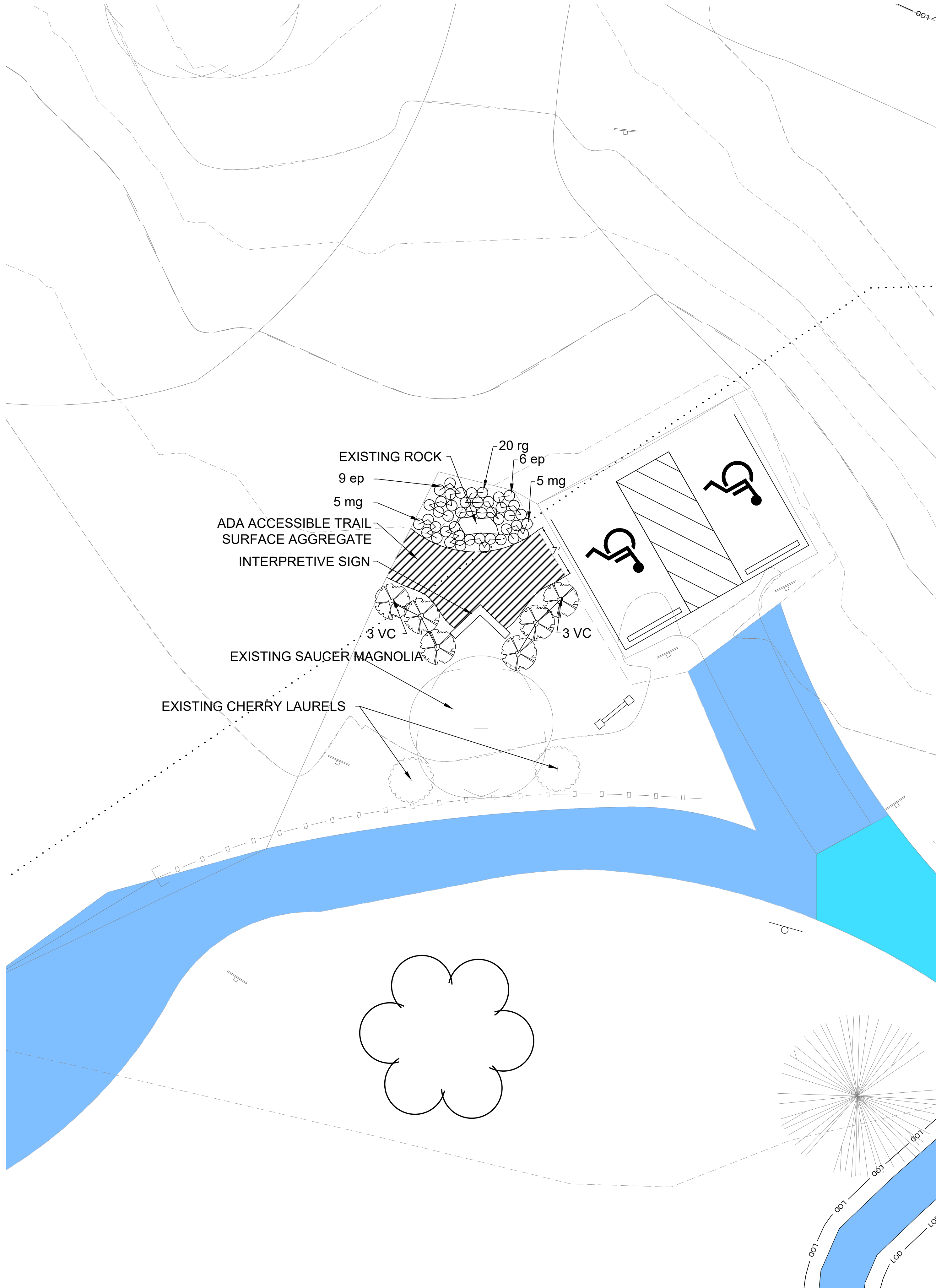


REVISIONS	
DATE	NOTES



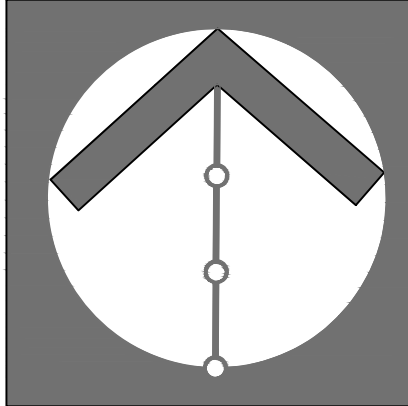
SHEET NAME: OUTDOOR CLASSROOM	SHEET NO.: 28
Landscape Plan FOR OPALANIE PARK 1422 St Matthews Rd, Chester Springs, PA 19425	
PREPARED BY: THEURKAUF DESIGN & PLANNING, LLC 1350 ELBOW LANE CHESTER SPRINGS, PA 19425 P: 484-888-5574	DATE: 1-6-25

ADD ITEM 6:
ITEM 23.01 - GREEN GIANT ARBORVITAE
ITEM 23.02 - COMPACTED FINES PATH
ITEM 23.03 - WOOD BENCHES
ITEM 23.04 - WOOD TABLE



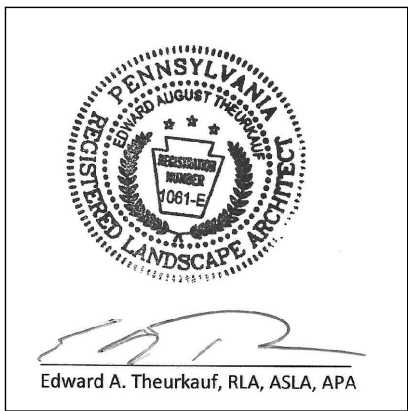
PLANT SCHEDULE					
SHRUBS					
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
VC	6	<i>Viburnum cassinoides</i>	Blue Haw	3 ft. ht.	Native, flowering
PERENNIALS					
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
rg	20	<i>Rudbeckia fulgida</i> 'Goldstrum'	Black Eyed Susan	12"-15"	Native
ep	15	<i>Echinacea purpurea</i>	Purple Coneflower	12"-15"	Native
mg	10	<i>Monarda didyma</i> 'Grand Marshall'	Bee Balm	12"-15"	Native

NORTH



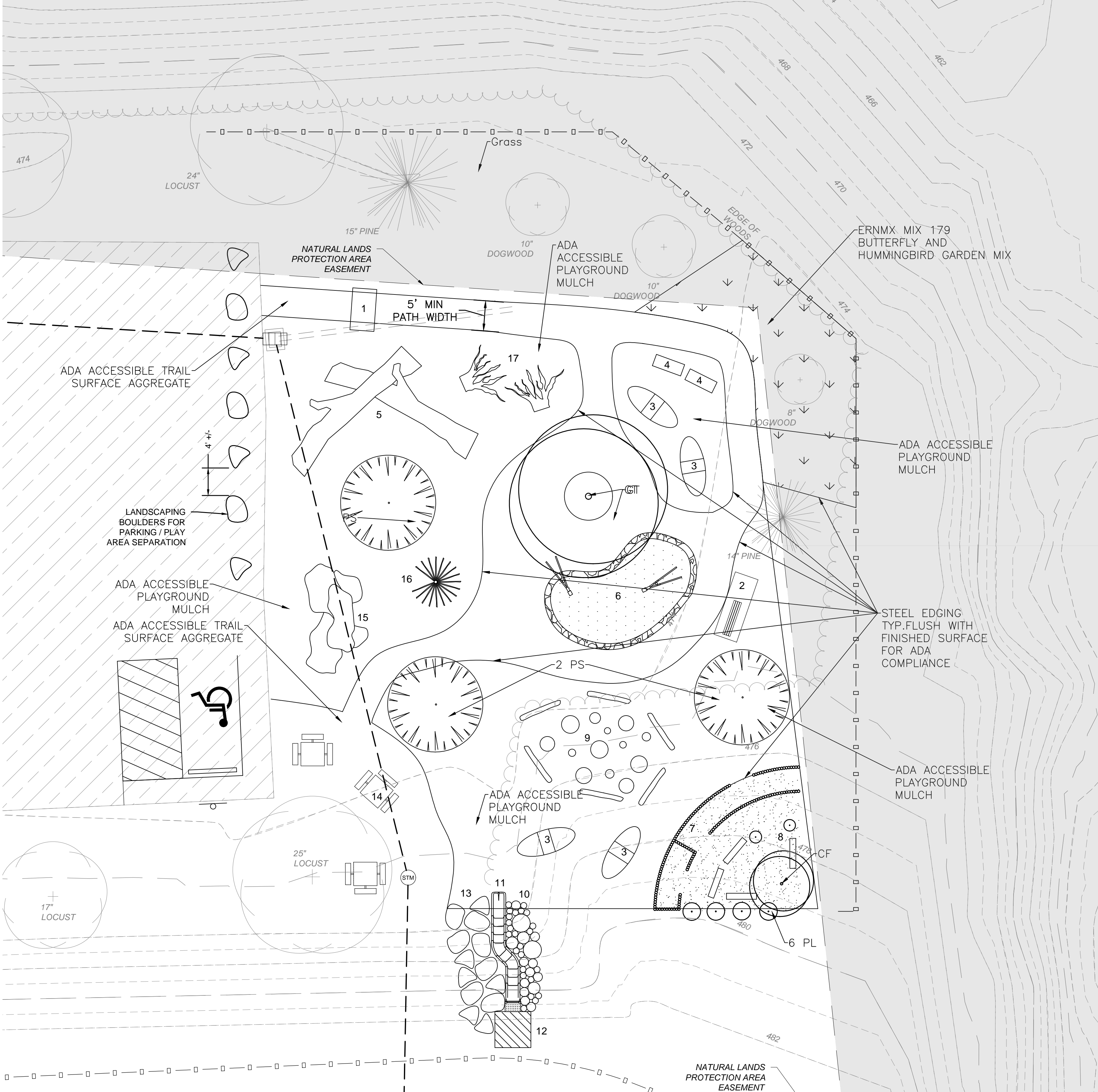
REVISIONS	
DATE	NOTES

SEAL



SHEET NAME:	SHEET NO.:
SIGN PLANTING	29
Landscape Plan FOR OPALANIE PARK 1422 St Matthews Rd, Chester Springs, PA 19425	
PREPARED BY: THEURKAUF DESIGN & PLANNING, LLC 1350 ELBOW LANE CHESTER SPRINGS, PA 19425 P: 484-888-5574	DATE: 1-6-25

ISSUE FOR BID - 05/09/2025

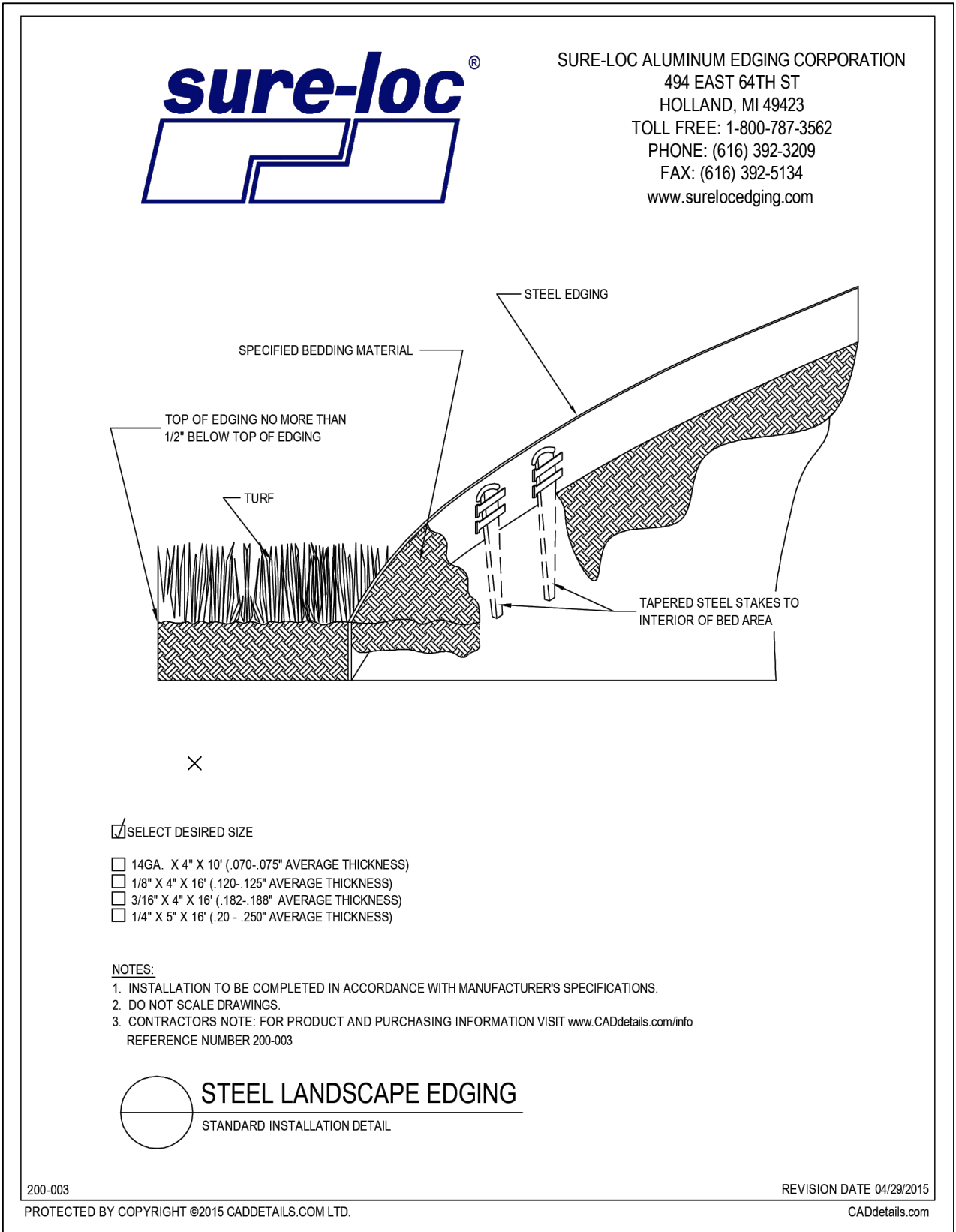
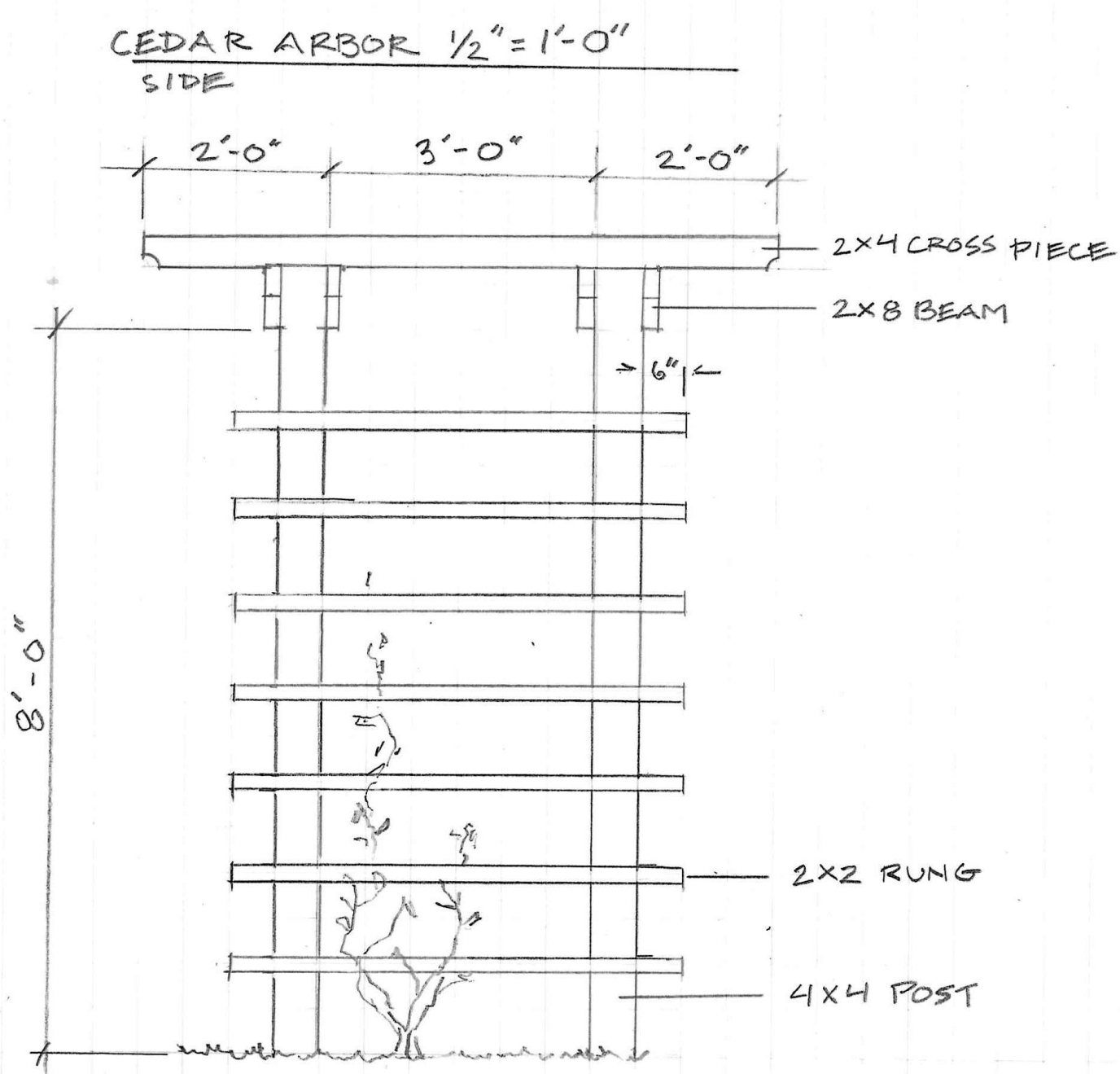
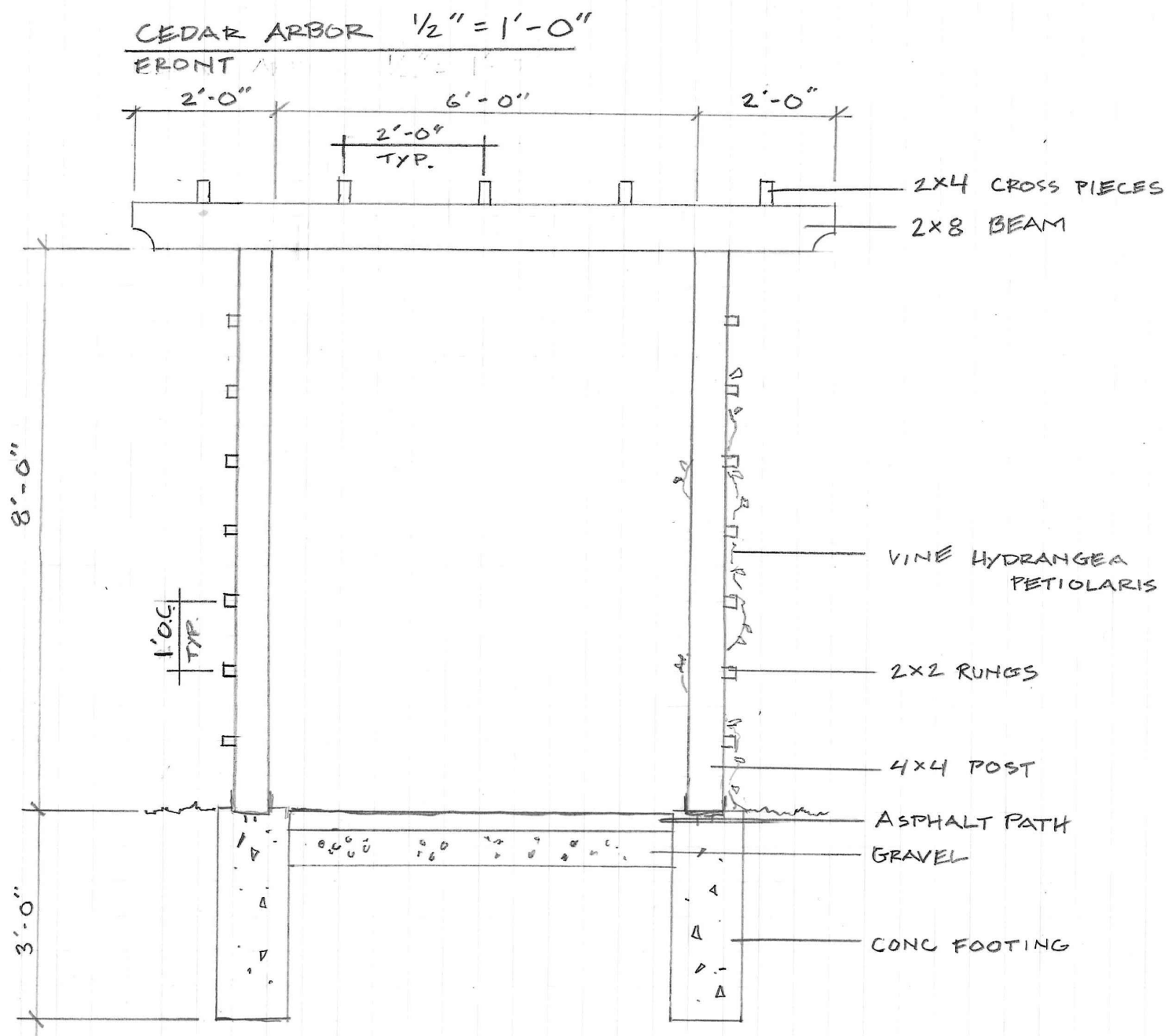
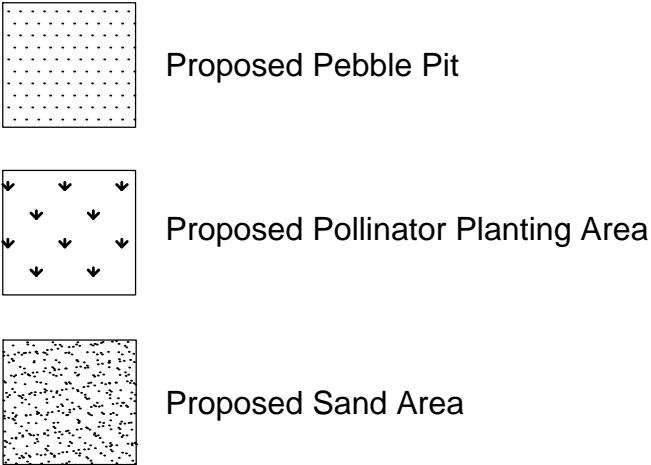
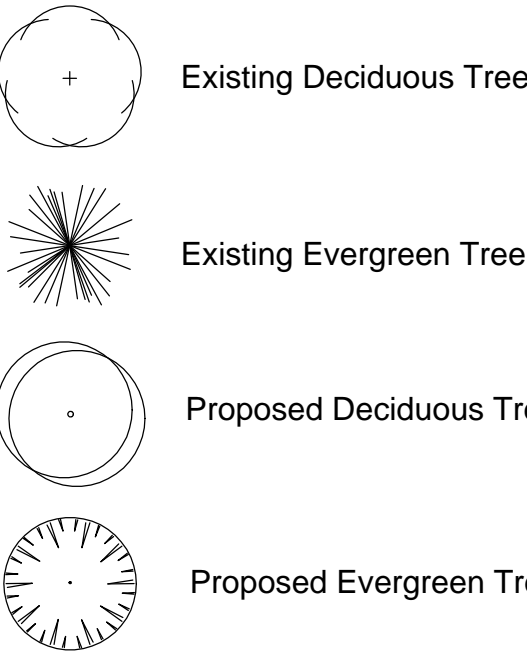


Nature Play Elements Key

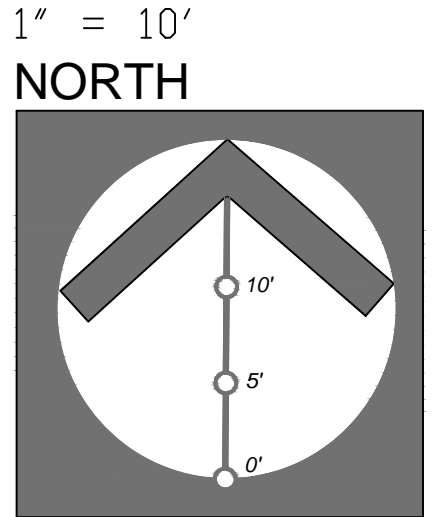
- 1) Cedar Arbor (ADA)
- 2) Bench area (ADA)
- 3) Tunnel Mounds
- 4) Sound features (ADA) *
 - Musical Fence
 - Pebble Harp
- 5) Play Trees
- 6) Pebble pit with diggers* (ADA)
- 7) Maze
- 8) Calming area with log benches
- 9) Hopping and balance logs

- 10) Step up logs up to slide
- 11) Slide
- 12) Observation deck above slide
- 13) Climbing boulders up to slide
- 14) Picnic tables (ADA)
- 15) Climbing rocks
- 16) Tree Limb Lodge
- 17) Root tangles

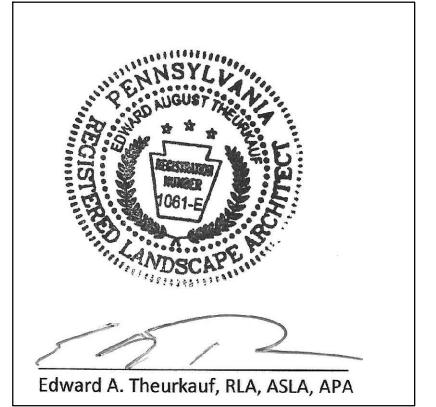
* We recommend the sound features from naturalplaygroundsstore.com or approved equivalents.



- ITEM 21.01 - EDGING
- ITEM 21.06 - HONEY LOCUST
- ITEM 21.07 - WHITE PINE
- ITEM 21.08 - FLOWERING DOGWOOD
- ITEM 21.09 - EMERALD SENTINEL RED CEDAR
- ITEM 21.10 - COMPACTED FINES PATH



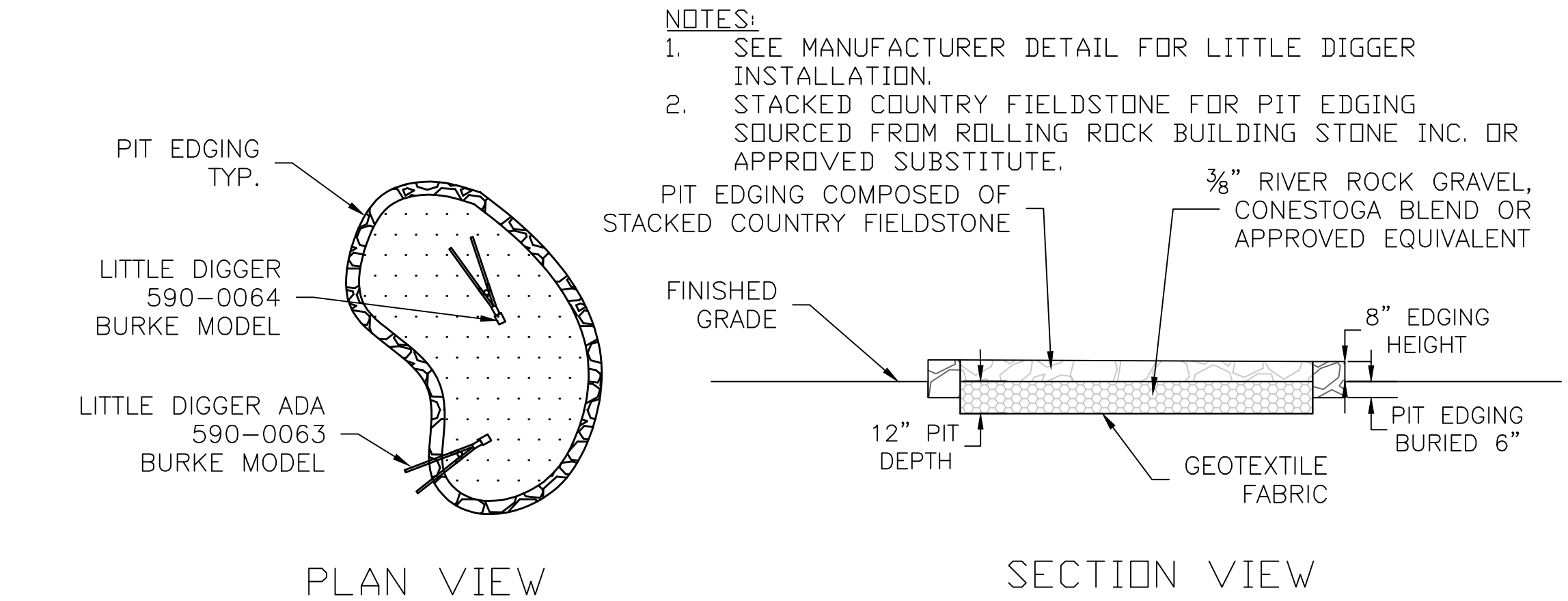
SEAL



REVISIONS	
DATE	NOTES

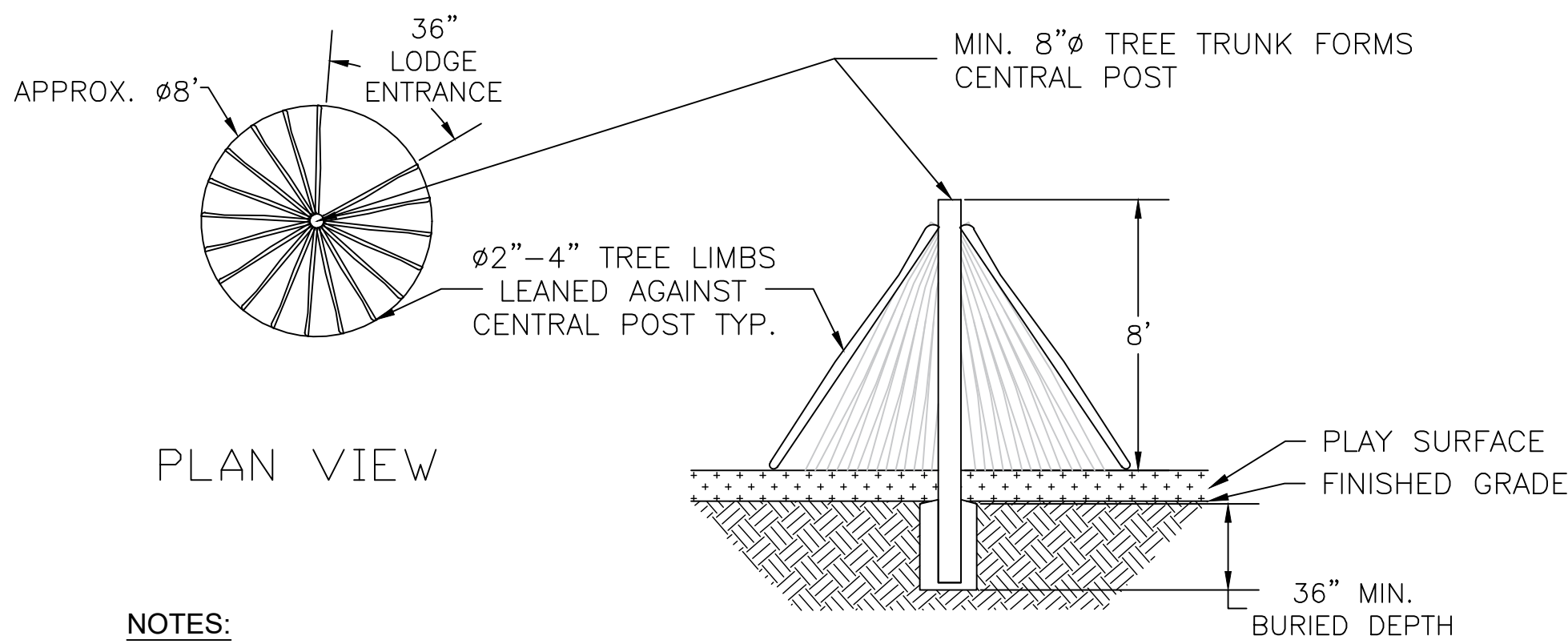
PLANT SCHEDULE					
TREES					
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
CF	1	Cornus florida	Flowering Dogwood	3.5"	Native, flowering
GT	1	Gleditsia triacanthos	Honey Locust	3.5"	Native
JV	5	Juniperus virginiana 'Emerald Sentinel'	Emerald Sentinel Red Cedar	7'	Native, evergreen
PS	3	Pinus strobus	White Pine	7'	Native, evergreen

SHEET NAME:		SHEET NO.:	
NATURE PLAY DESIGN LAYOUT		30	
<div>Landscape Plan FOR</div> <div>OPALANIE PARK</div> <div>1422 St Matthews Rd, Chester Springs, PA 19425</div>			
PREPARED BY:		DATE:	
THEURKAUF DESIGN & PLANNING, LLC		1-6-25	
1350 ELBOW LANE CHESTER SPRINGS, PA 19425 P: 484-888-5574		 Theurkauf DESIGN & PLANNING	



PEBBLE PIT

NOT TO SCALE



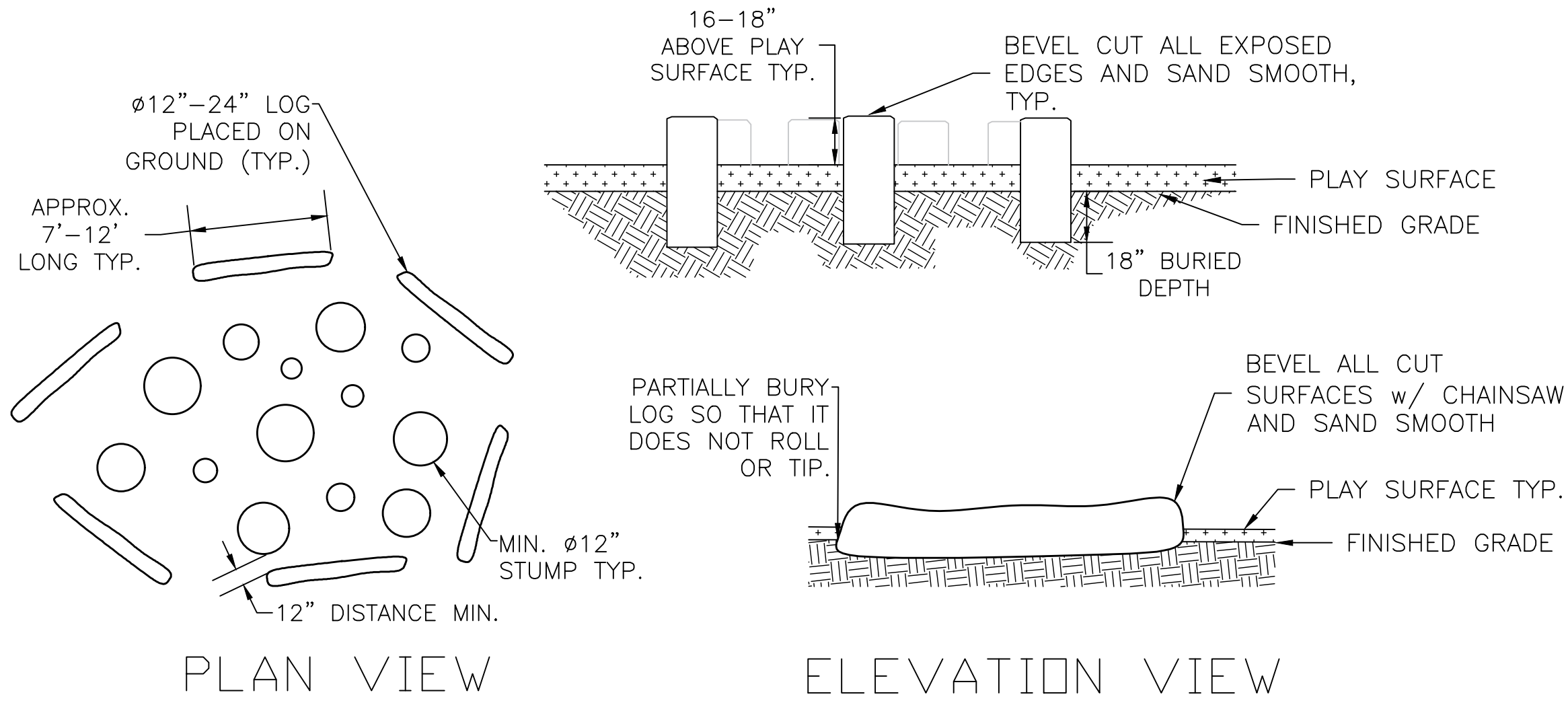
NOTES:

- SAND SMOOTH ALL EXPOSED CUT SURFACES AND SHARP EDGES.

TREE LIMB LODGE

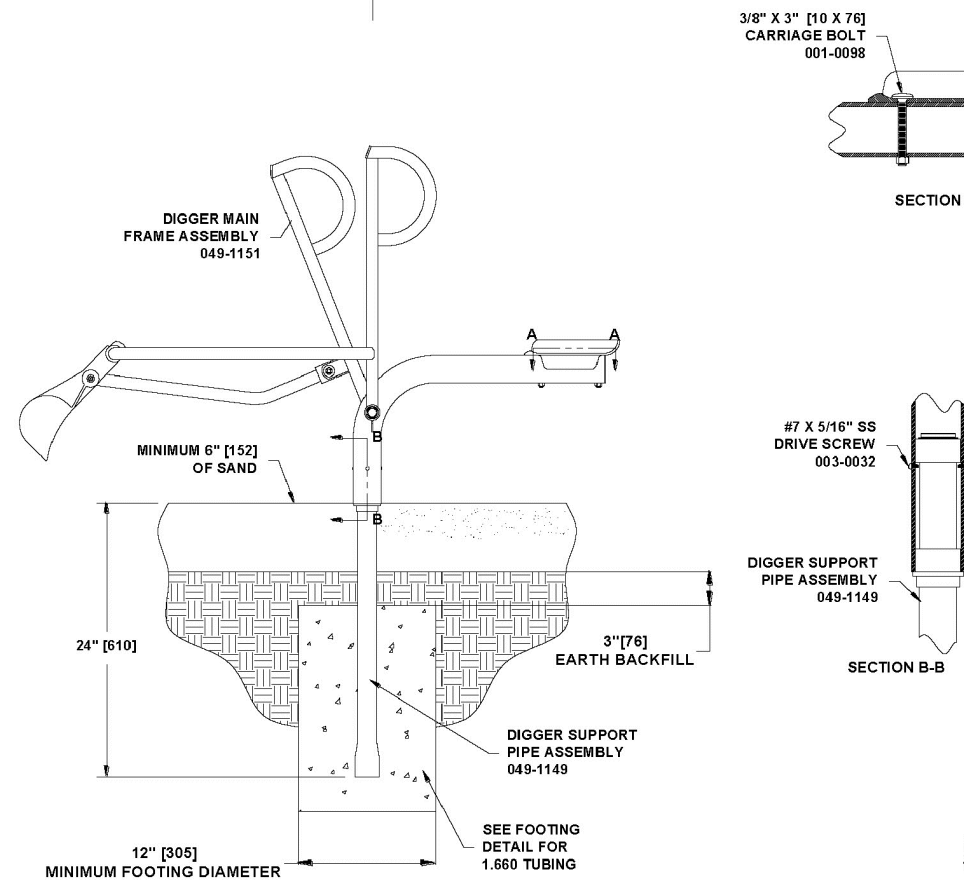
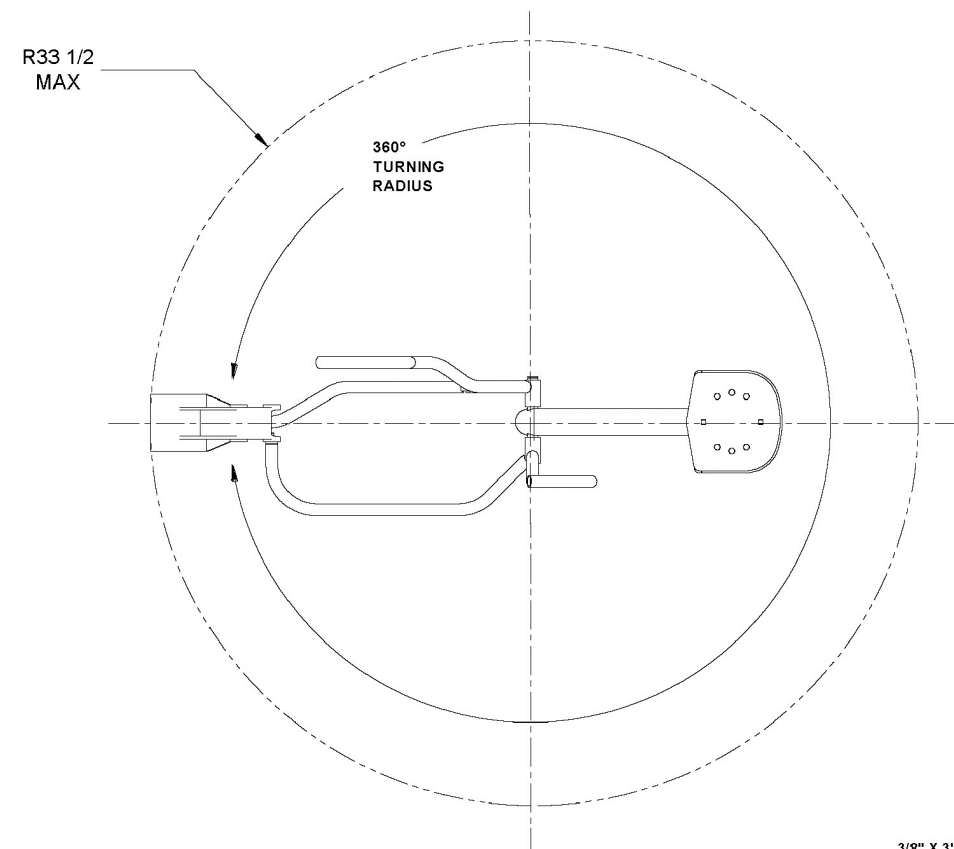
NOT TO SCALE

- NOTES:**
- BEVEL CUT ALL EXPOSED EDGES w/ CHAINSAW AND SAND SMOOTH.
 - REMOVE ALL LOOSE BARK AND LIMBS LESS THAN $\phi 8"$.
 - INSTALL LOGS SO THAT THEY DO NOT ROLL OR TIP. PARTIALLY BURY LOGS IF NECESSARY TO ENSURE STABILITY.



BALANCE LOGS

NOT TO SCALE

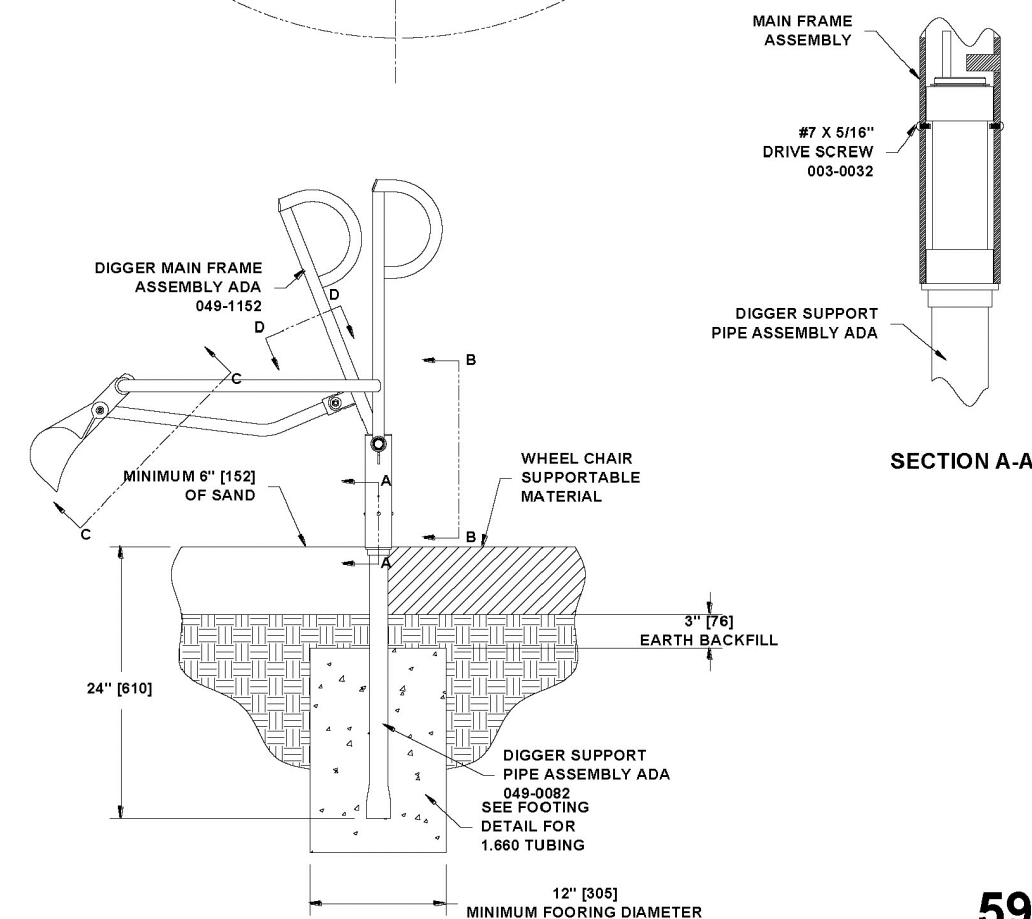
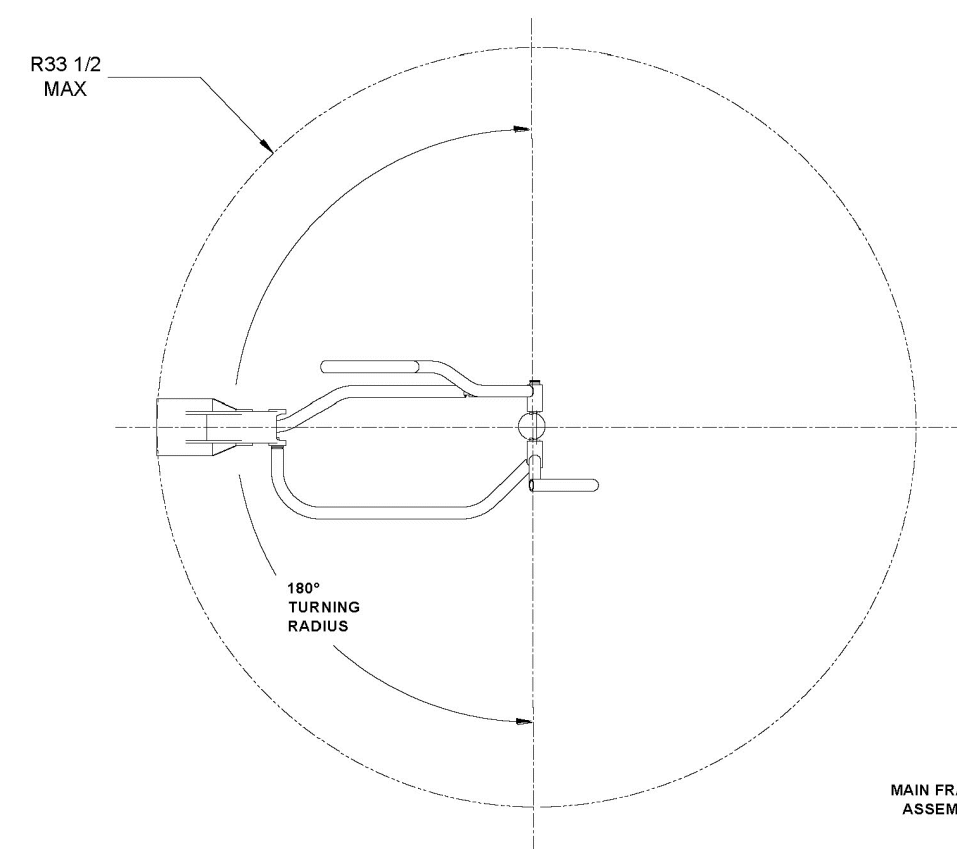


590-0064 LITTLE DIGGER

BCI Burke Company, LLC

P.O. Box 549 Fond du Lac, Wisconsin 54936-0549

Telephone 1-800-356-2070



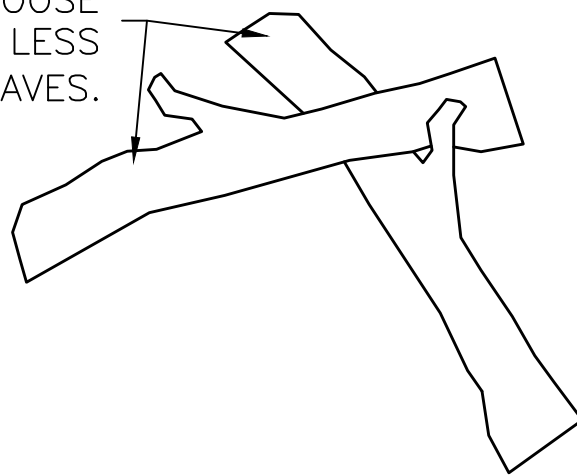
590-0063 LITTLE DIGGER ADA

BCI Burke Company, LLC

P.O. Box 549 Fond du Lac, Wisconsin 54936-0549

Telephone 1-800-356-2070

MIN. 30" TREES REMOVE ALL LOOSE BARK, STEMS LESS THAN $\phi 8"$ AND LEAVES.

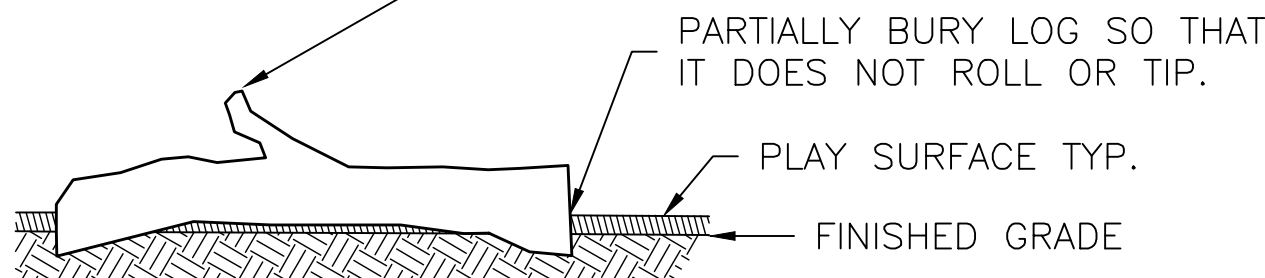


PLAN VIEW

Climbing trees

NOT TO SCALE

BEVEL ALL CUT SURFACES w/ CHAINSAW AND SAND SMOOTH



BOTTOM TREE ELEVATION VIEW

- ITEM 21.02 - BURKE LITTLE DIGGER, 590-0064
- ITEM 21.03 - BURKE LITTLE DIGGER ADA, 590-0063
- ITEM 21.04 - PEBBLE PIT EDGING
- ITEM 21.05 - PEBBLE PIT INFILL
- ITEM 21.13 - WOOD NATURE PLAY ELEMENTS
- ITEM 21.24 - CALMING AREA

REVISIONS	
DATE	NOTES

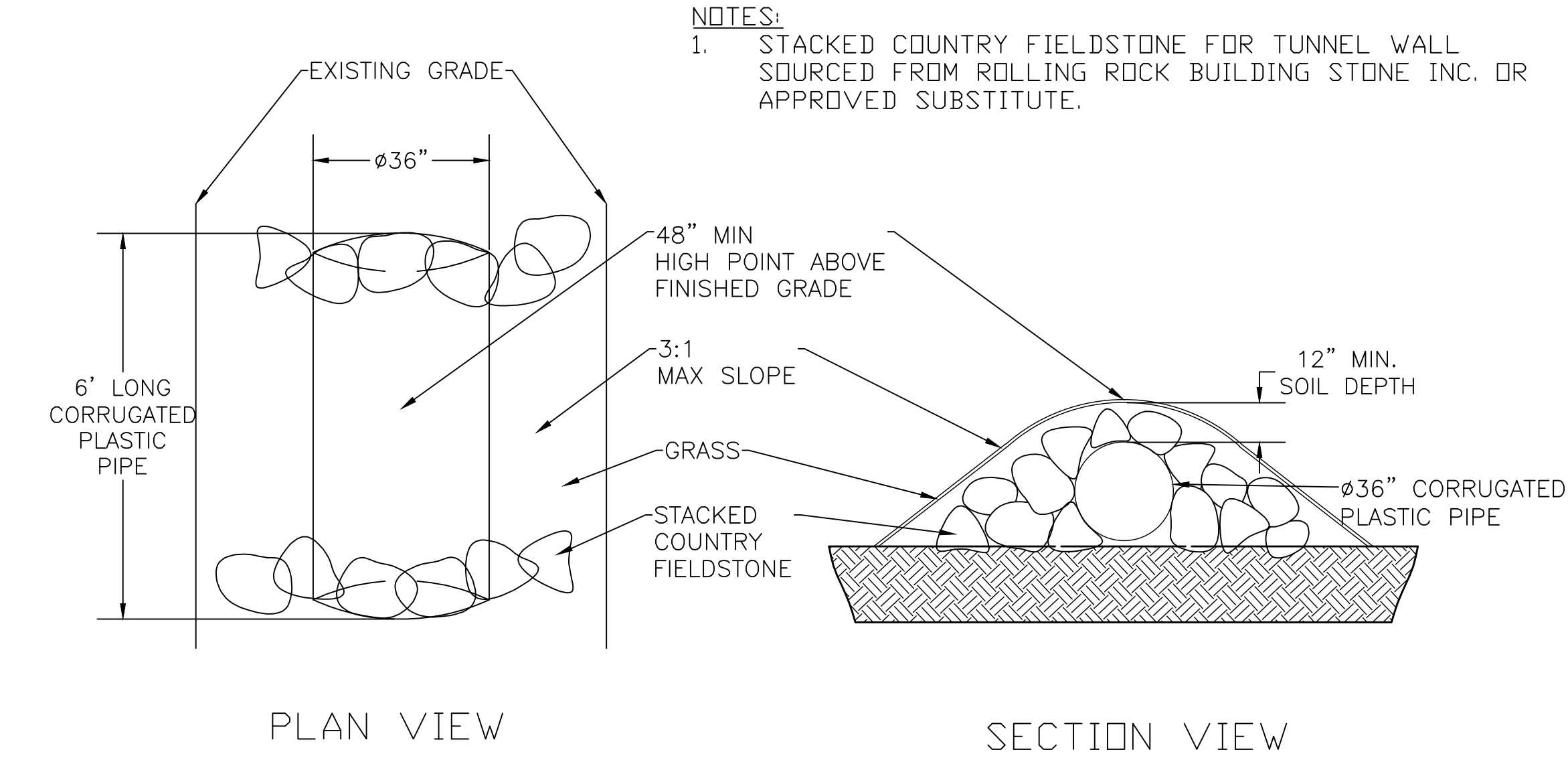
SEAL



Edward A. Theurkauf, RLA, ASLA, APA

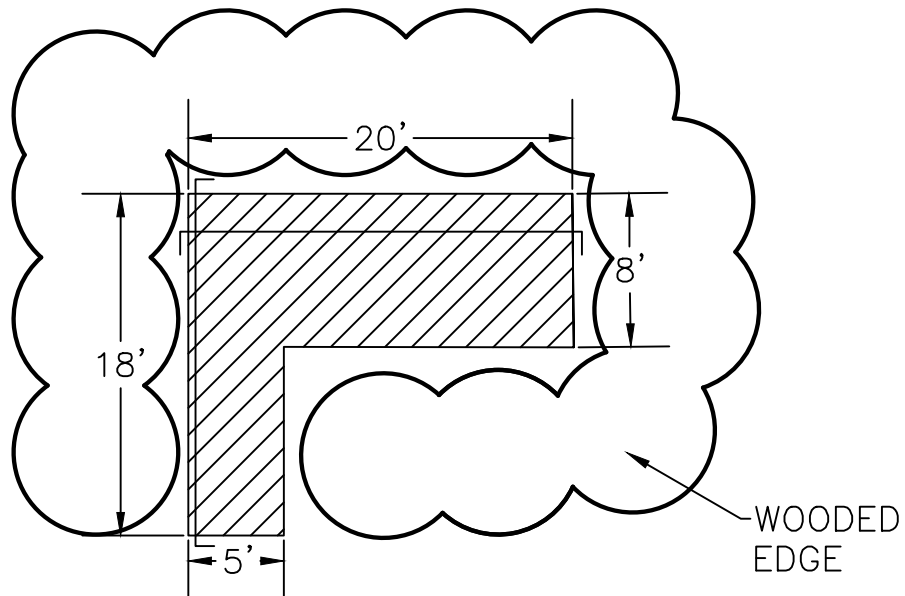
SHEET NAME:	SHEET NO.:
NATURE PLAY DETAILS	31
Landscape Plan FOR OPALANIE PARK 1422 St Matthews Rd, Chester Springs, PA 19425	
PREPARED BY:	DATE:
THEURKAUF DESIGN & PLANNING, LLC	1-6-25
1350 ELBOW LANE CHESTER SPRINGS, PA 19425 P: 484-888-5574	

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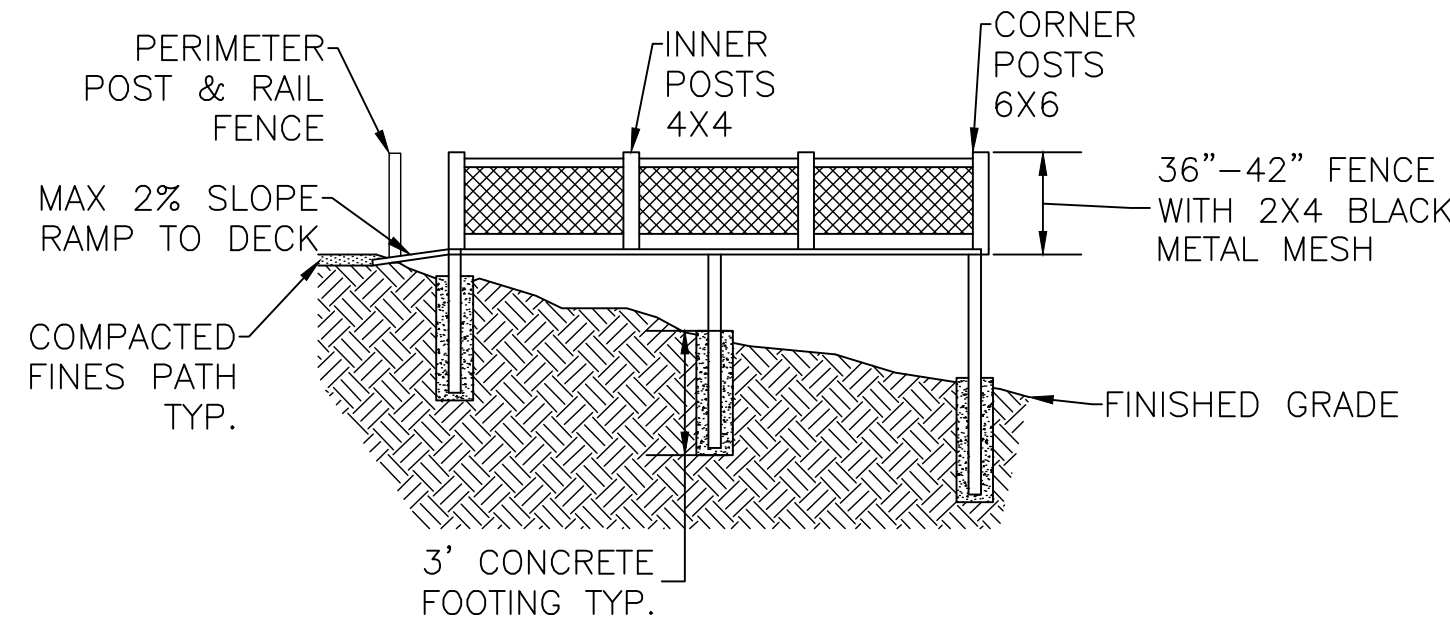
TUNNEL MOUNDS

NOT TO SCALE

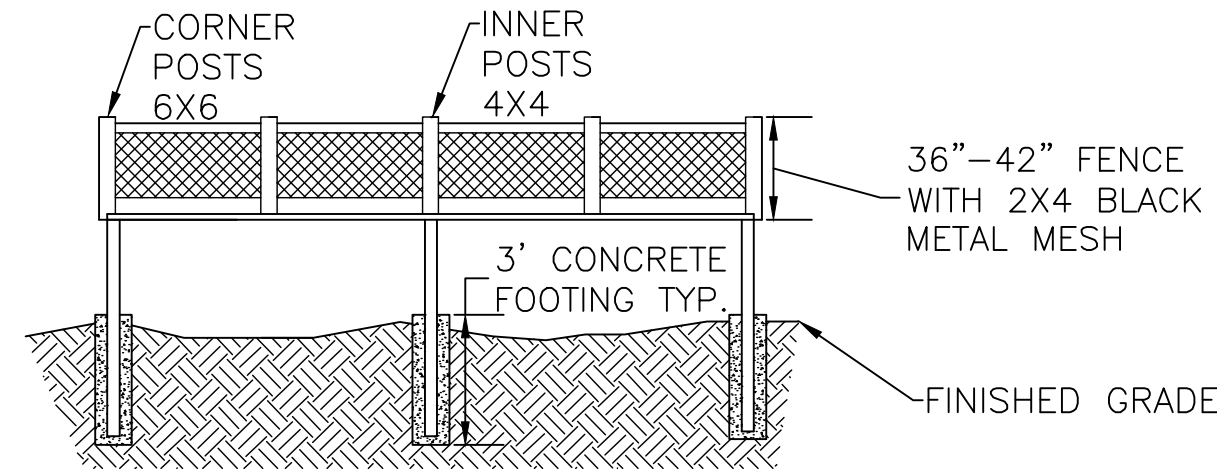


WOODLAND OVERLOOK

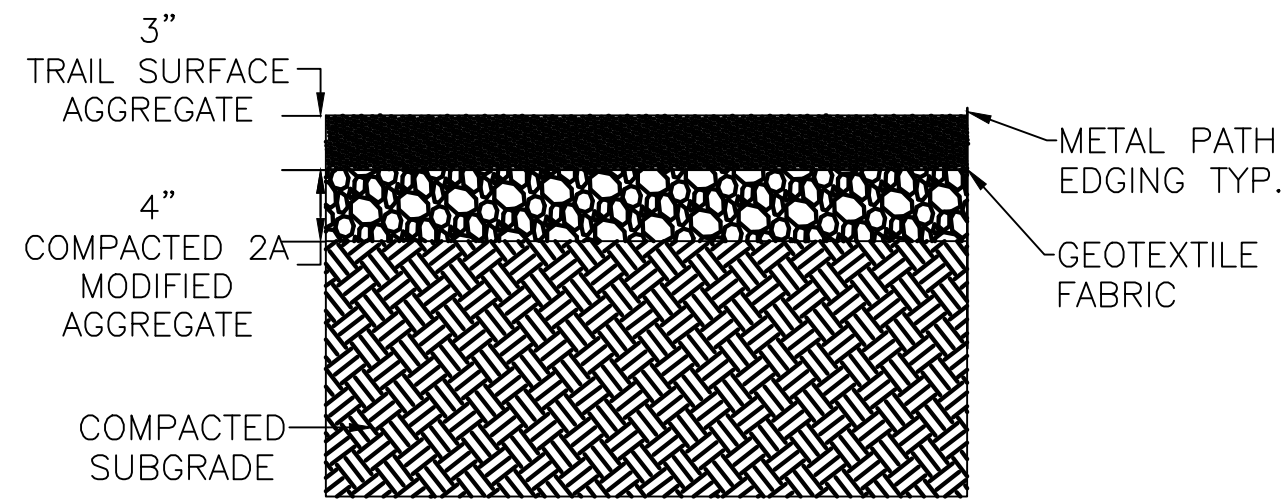
NOT TO SCALE



SECTION A

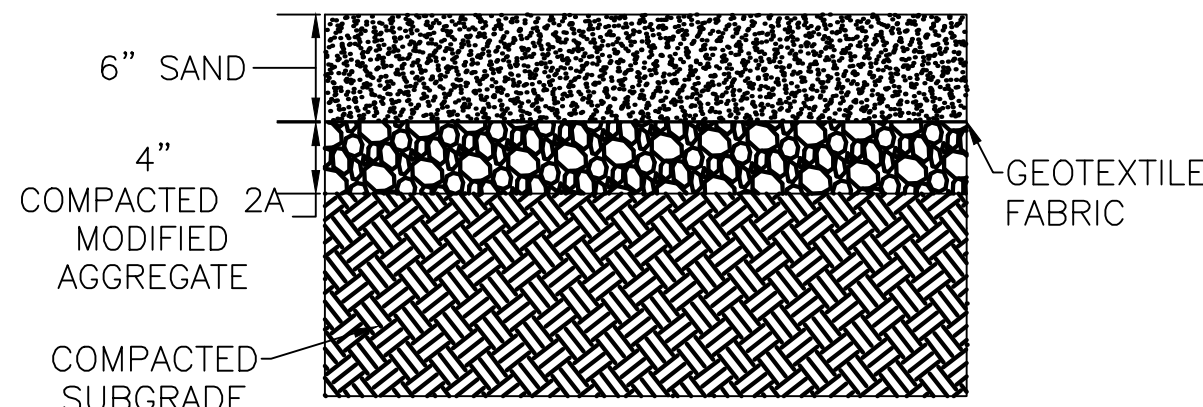


SECTION B



ADA ACCESSIBLE TRAIL SURFACE AGGREGATE

NOT TO SCALE

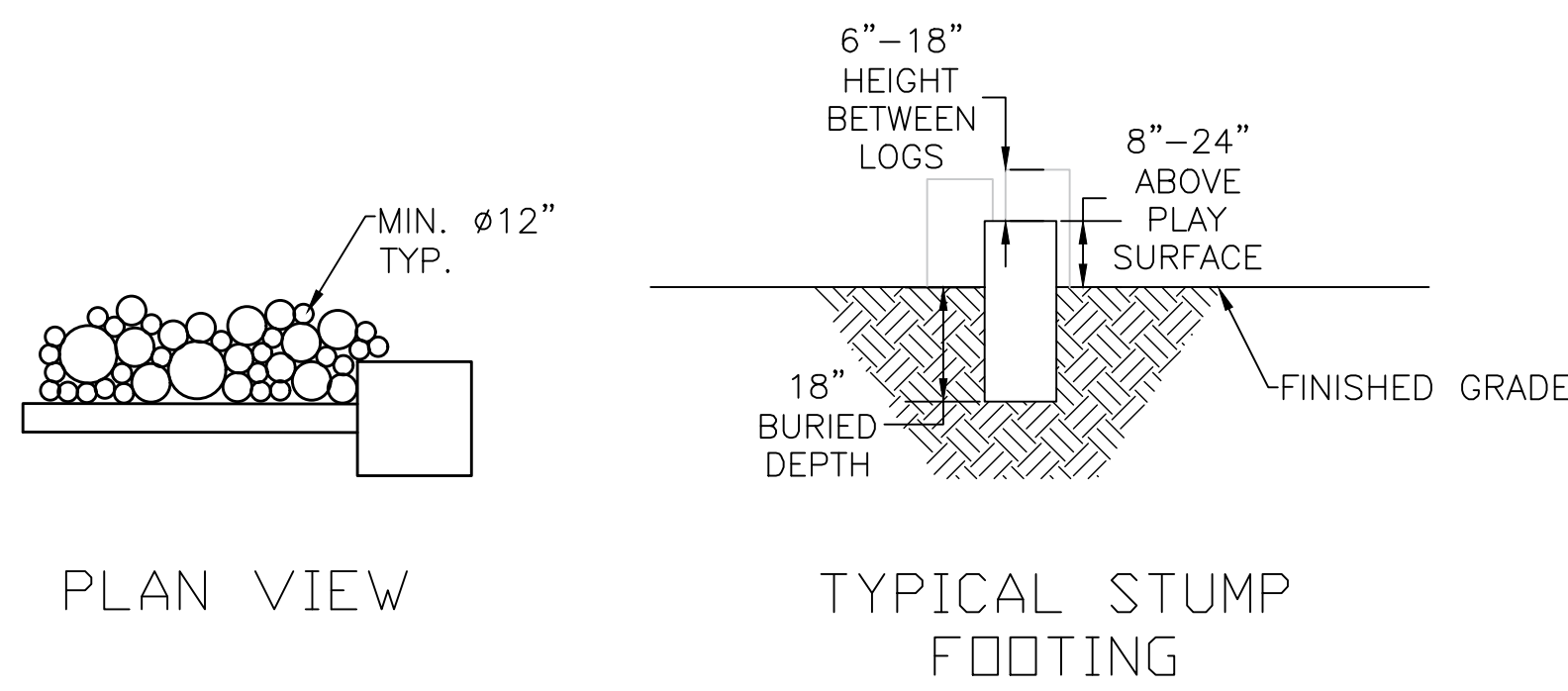
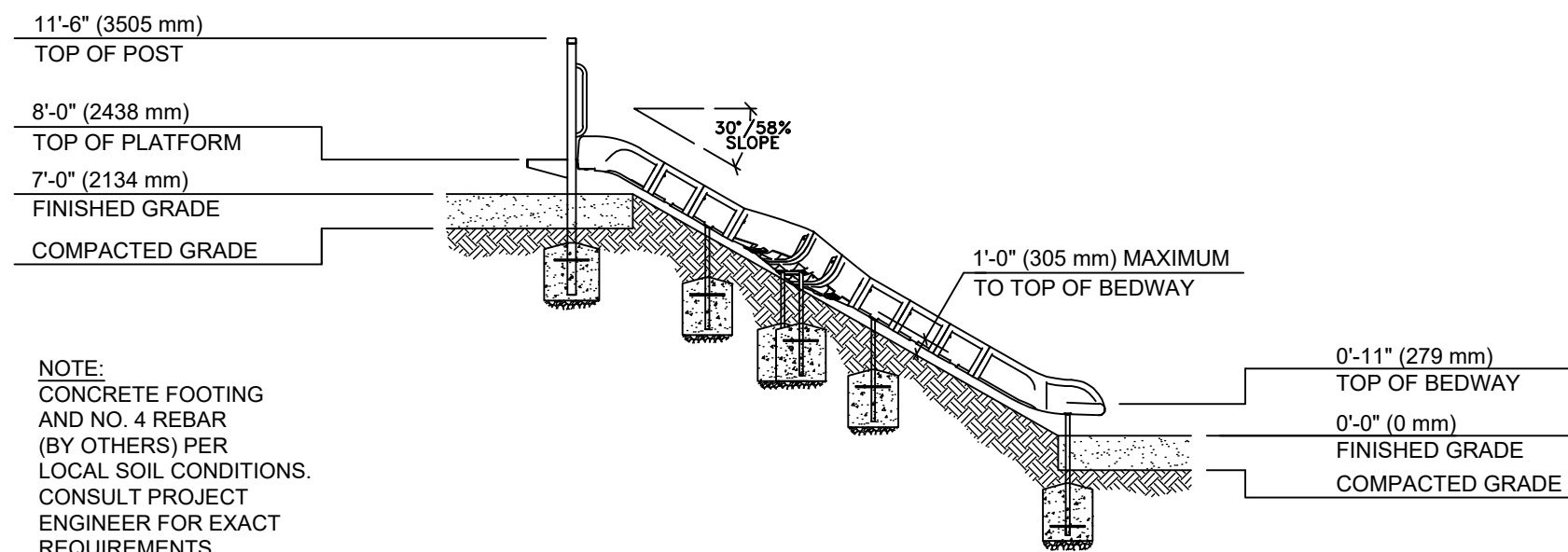
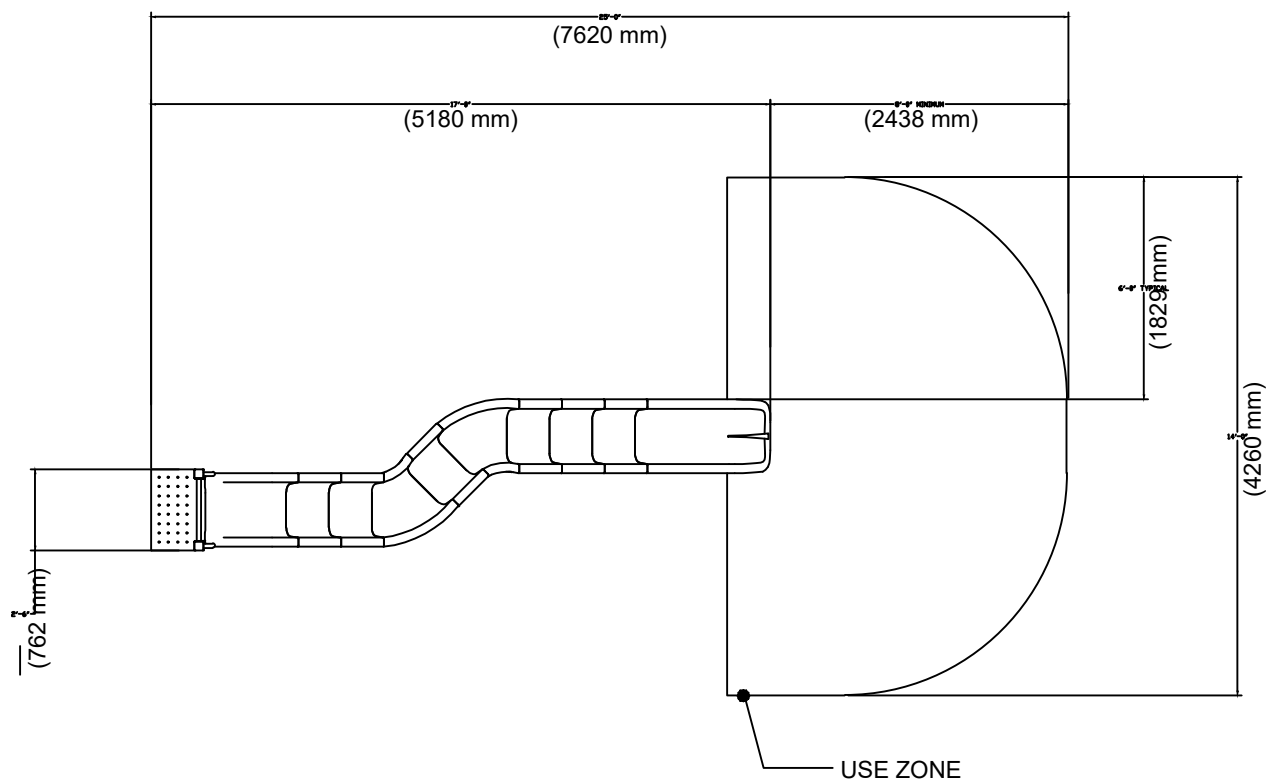


SAND

NOT TO SCALE

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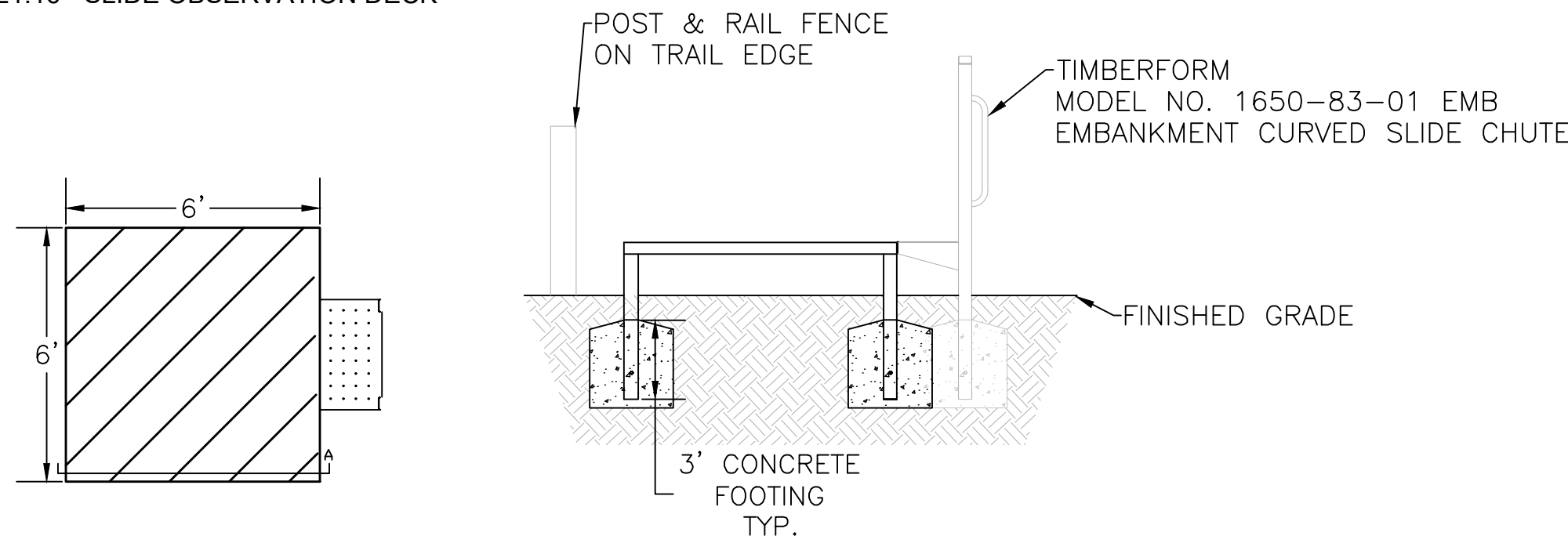


STUMP STEPS

NOT TO SCALE

ITEM 21.10 - COMPACTED FINES PATH
ITEM 21.12 - PLAYGROUND MULCH
ITEM 21.13 - WOOD NATURE PLAY ELEMENTS
ITEM 21.19 - WOODLAND OVERLOOK DECK
ITEM 21.23 - TUNNEL MOUNDS

ADD ITEM 5:
ITEM 21.14 - CLIMBING BOULDERS
ITEM 21.15 - SLIDE
ITEM 21.16 - SLIDE OBSERVATION DECK



SLIDE OBSERVATION DECK

NOT TO SCALE

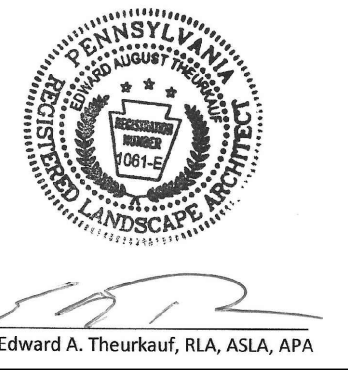


ADA ACCESSIBLE PLAYGROUND MULCH

NOT TO SCALE

REVISIONS	
DATE	NOTES

SEAL



SHEET NAME: NATURE PLAY DETAILS		SHEET NO.: 32
Landscape Plan FOR OPALANIE PARK 1422 St Matthews Rd, Chester Springs, PA 19425		
PREPARED BY: THEURKAUF DESIGN & PLANNING, LLC 1350 ELBOW LANE CHESTER SPRINGS, PA 19425 P: 484-888-5574	DATE: 1-6-25	

ISSUE FOR BID - 05/09/2025

PLANTING NOTES

1. The Contractor is responsible for contacting PA ONE CALL and locating all underground utilities before any digging or plant removal occurs. Contractor shall be required to repair damage to any underground utilities damaged in the course of digging or plant removal.
2. Plant material quantities listed for the convenience of the Contractor. Actual numbers of symbols shall take precedence over quantities listed in cases of conflict.
3. All plant material subject to approval by the Landscape Architect prior to installation. Plant material shall be nursery grown locally, and shall be free of pests, disease, and defects such as injuries, disfigurement and sunscald. Any material that is found to be unacceptable shall be replaced by the Contractor with acceptable material.
4. The Contractor shall advise the Landscape Architect of any substitutions of plant material specified and such substitutions shall be subject to approval by the Landscape Architect prior to installation.
5. Plant material and installation shall be in accordance with the American Standard for Nursery Stock of the American Association of Nurserymen and with the general planting specifications as set forth by the Township.
6. All planting locations subject to field conditions. The Contractor shall notify the Landscape Architect if field conditions require relocation of plant materials.
7. Areas adjacent to curbs and walks shall be crowned a minimum of 8" higher than the top of curb or walk to allow for settling, although topsoil immediately adjacent to the walk or curb shall be sufficiently depressed to accommodate required mulch.
8. See Tree Planting Details for tree planting, staking, and fencing directions. See Shrub and Groundcover Planting Details for shrub and herbaceous planting directions. Only trees that are located in areas subject to high wind pressure shall be staked. Trees shall be fenced to protect from deer damage. Trees shall be staked and/or fenced immediately after planting.
9. Remove all twine and wire from tree and shrub planting balls. Remove all non-rot burlap from all plant material prior to planting. Untie all twine and/or burlap from the trunk of the plant material and drape down ball or remove prior to planting.
10. Prune dead or broken branches after planting only. Pruning shall follow American Association of Nurserymen standards.
11. Trees shall be placed a minimum of 30" from paved areas and walkways.
12. Trees and shrubs shall be planted even with or higher than the grade that the plants were grown at the nursery (roughly the top of the root ball).
13. Trees and shrubs shall be planted at minimum 10" from underground utilities. Trees under overhead wires shall be sited according to PECO's "Plant the Right Tree in the Right Place" guidelines to avoid tree-wire conflicts.
14. Lawn trees to be mulched with a minimum 2' wide mulched ring unless otherwise noted or required for tree protection. Mulch shall not touch tree trunks.
15. All shrub groupings shall be planted and mulched as a single bed.
16. Mulch to be shredded hardwood bark, aged a minimum of six months.
17. Plant material shall be installed the same day as it is delivered to the site as practical. Any plant material not planted the same day shall be protected from drying out by the Contractor until it is planted.
18. All plant material shall be thoroughly watered during installation. Contractor shall provide supplemental watering to all plant material in absence of natural rainfall.
19. Contractor shall provide all required topsoil, compost, mulch, fertilizers and other amendments unless otherwise directed by Owner.
20. Topsoil shall consist of excavated material, graded, free of roots, rocks larger than one inch, subsoil, debris, and weeds. Where additional topsoil is needed topsoil shall be imported, friable loam, free of subsoil, roots, grass, weeds, stone, and foreign matter; acidity range (pH) of 5.5 to 7.0; containing a minimum of 7 percent and a maximum of 25 percent organic matter.
21. Contractor shall grade all planting areas and berms as needed prior to planting. Planting beds to be fine raked again after the installation of plant material and prior to mulching the beds.
22. Upon completion of planting and mulching, remove all extraneous material and debris, broom sweep and wash the area clean.
23. Contractor shall guarantee all plant material for a period of 18 months from the date of installation. All plant material that does not survive the guarantee period shall be replaced by the Contractor. Dead plants shall be replaced not later than the next planting season.
24. Contractor shall notify the Owner upon completion of guarantee period and request a final inspection of plant material. At final inspection, Contractor shall remove any remaining tree stakes and prune as needed unless otherwise directed by Owner.
25. Contractor shall be responsible for the maintenance of plant material until such time as the project is accepted by the Owner. Maintenance shall include but is not limited to watering, weeding, mulching, pruning, and fertilizing necessary to establish plantings.

MEADOW SEEDING & ESTABLISHMENT NOTES

SUMMARY

The meadow plantings are intended to reduce maintenance costs after meadow establishment. Successful meadow establishment requires proper invasive plant control before seeding and during establishment. Following meadow establishment, only occasional mechanical or chemical removal of invasive plant species should be necessary.

The Contractor shall be responsible for all required meadow maintenance and establishment practices during the guarantee period or until the project is accepted by the Owner.

REFERENCES

1. Ernst Conservation Seeds, Inc. Planting Guides, <http://www.ernstseed.com/resources/planting-guide/>
2. Interpretation of plant names and descriptions shall reference the following document: USDA - The Germplasm Resources Information Network (GRIN) <http://www.ars-grin.gov/npgs/searchgrin.html>

SEED MIX SELECTION & SEEDING LOCATIONS

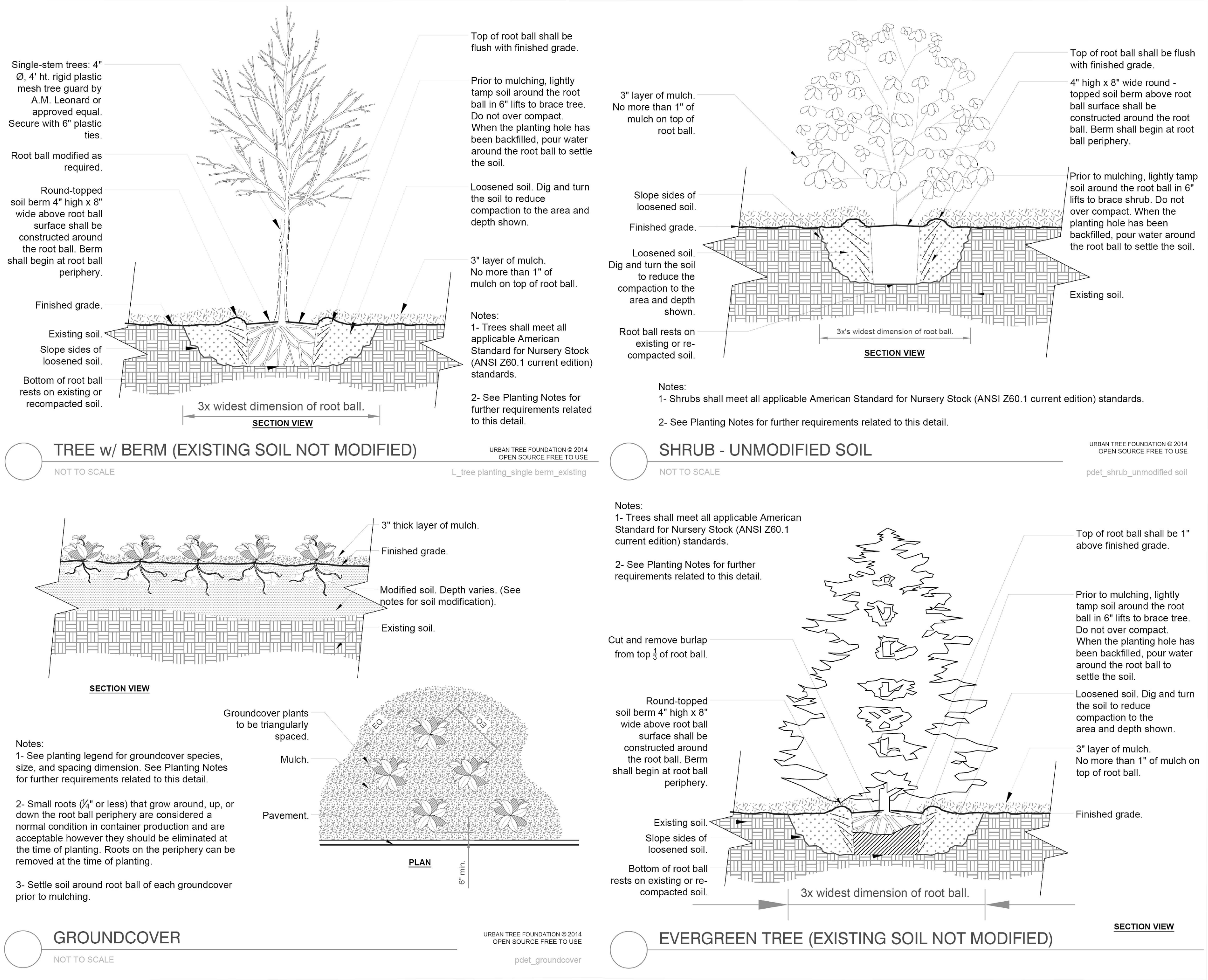
1. All meadow seed mixes and cover crops are specified in the Seed Mixes tables. They shall be provided by Ernst Conservation Seeds, Inc. or approved alternative.
 - a. Butterfly and Hummingbird Mix (ERNMX-179) shall be seeded in the area noted on page 1.

SITE PREPARATION AND SEEDING

1. Meadow establishment shall be undertaken in spring or in early fall.
2. Competition from invasive or undesirable vegetation is the most limiting factor in meadow preparation. Prior to planting, all such vegetation shall be fully controlled through use of an approved herbicide, repeated close mowing, tiling, or hand pulling. Pre-emergent herbicides shall not be used as they will prevent meadow seed germination.
3. Apply herbicide only during dry periods. Herbicides are most effective on actively growing plant tissues, so they are very effective on new growth in the spring. Spraying should begin when growth is approximately 6" high. One to two weeks later, a follow-up application of spray may be made to address skips or persistent species. All chemical applications shall be made by licensed applicators for the type of chemicals to be used. Seeding shall take place at least one week after final herbicide application.
4. If substantial plant tissues remain on the surface following a full kill by herbicides, a close mowing shall be necessary to achieve good seed-to-soil contact.
5. Lightly scarify the surface with a rake prior to seeding. Plant seed mixes specified in the accompanying tables via hand-seeding or mechanical broadcasting at the specified rates. Seeding shall not take place when the soil is wet.
6. Mix seed with carrier material such as clay cat litter at a 1:1 ratio for uniformity of seed broadcasting. Divide seed/carrier material mix into two equal amounts. Apply half of the mix evenly across the site in one direction of passes. Apply the other half of the mix in a direction perpendicular to the first passes.
7. Fertilizer application is unnecessary and may encourage weed growth. In areas where soil is especially poor as determined by soils testing apply 1"-2" of topsoil or compost that is free of weed seeds, then incorporate into the top 4"-6" of soil prior to seeding.
8. Lightly rake seeded areas to incorporate seed into the soil. Seed planting depth shall not exceed ½". Establish good seed to soil contact by firming the seedbed with a cultipacker or lawn roller.
9. Apply light covering (1,000 to 4,000 lb per acre) of weed-free wheat or oat straw mulch to retain moisture and discourage consumption of seed by wildlife.

MEADOW ESTABLISHMENT

1. After Seed Mix Germination (Year 1): Cut meadows throughout the growing season to a height of 6" whenever vegetation reaches 18" tall to weaken fast-growing weeds; stop cutting by mid-September. Mowing shall not be done with a lawn mower as the mowing height is too low and native seedlings will be killed.
2. Identify undesirable or invasive weed species and eradicate manually or with spot application of herbicide.
3. Provide supplemental irrigation during drought conditions.
4. Year 2: Mow in early spring prior to April 1 close to ground (approx. 2"). Continue to monitor for invasive vegetation; mow again only if there is heavy weed infestation, to a height of 8 inches.
5. Manage invasive vegetation by manual pulling or spot spraying of herbicide.
6. Remove trash and debris from all planting areas and maintain in a neat and tidy appearance. The number of trash and debris removal visits shall be no less than 2 times per year and may coincide with other maintenance visits.



ITEM 21.20 - MEADOW SEEDING
ITEM 21.21 - DISTURBED TURF AREA

REVISIONS		SEAL
DATE	NOTES	

Edward A. Theurkauf, RLA, ASLA, APA

SHEET NAME:		SHEET NO.:
NATURE PLAY DETAILS		33
Landscape Plan FOR OPALANIE PARK 1422 St Matthews Rd, Chester Springs, PA 19425		
PREPARED BY:	DATE:	1-6-25
THEURKAUF DESIGN & PLANNING, LLC		
1350 ELBOW LANE CHESTER SPRINGS, PA 19425 P: 484-888-5574		

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