COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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The Electronic Application Of Kentucky Power)	
Company For A Certificate Of Public Convenience)	
And Necessity To Construct 69 kV Transmission)	Case No. 2023-00040
Lines And Associated Facilities In Pike County,)	
Kentucky ("Belfry Area Transmission Line Project"))	

Kentucky Power Company's Notice of Filing of Survey

In accordance with Paragraph 2 of the Commission's October 6, 2023 Order in this proceeding, Kentucky Power files as **EXHIBIT A** to this notice a copy of survey for the Orinoco Station.

Respectfully submitted,

Katie M. Glass

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421 West Main Street

P. O. Box 634

Frankfort, Kentucky 40602-0634

Telephone: (502) 223-3477

kglass@stites.com

COUNSEL FOR KENTUCKY POWER

COMPANY

EXHIBIT A

CIVIL ENGINEER: LOGAN MCKINNEY PHONE: 540-494-4591

STATION ENGINEER: MIKE LIVELY (GANNETT FLEMING)

PHONE: 540-769-9911 EMAIL: MLIVELY@GFNET.COM

EMAIL: LKMCKINNEY@AEP.COM

TCR: CHAD HOWELL PHONE: 606-331-1414 EMAIL: CDHOWELL@AEP.COM

AEP WERS: DARREN KIDWELL PHONE: 540-449-8826 EMAIL: DWKIDWELL@AEP.COM CIVIL/SITE DESIGN CONSULTANT:

POWER ENGINEERS, INC. 235 CLAIBORNE AVENUE ROCKY MOUNT, VA 24151

STUART TORAASON, PE PHONE: (513) 326-1504 EMAIL: STUART.TORAASON@POWERENG.COM

SURVEY CONSULTANT:

MPOWER RESOURCES, LLC.

BECKLEY, WEST VIRGINIA

TIM KOSUT PHONE: (304) 573-2165 EMAIL: TKOSUT@MPWRR.COM

PROJECT STATISTICS:

STATION ADDRESS: ORINOCO STATION BELFRY, KENTUCKY 41514

PARCEL NUMBER: N/A

PROJECT LIMITS OF DISTURBANCE: 1.59 ACRES

NWBD HYDROLOGIC UNIT CODE (HUC 12): 050702010313 DEQ REGION: POND CREEK

TMDL CLASSIFICATION: N/A

ZONING DESIGNATION: N/A CENTER OF SITE LATITUDE AND LONGITUDE

LAT: 37°16'47.15" LONG: 82°16'17.16"

FLOOD INFORMATION: FLOOD INSURANCE RATE MAP PANEL: 21195C0070J EFFECTIVE DATE: 09/16/2015 FLOOD HAZARD ZONE: X

LEGEND

———— PROPERTY LINE PROPERTY MARKER ----- STRUCTURE INDEX CONTOUR ---- INTERMEDIATE CONTOUR WETLAND — FP — FLOOD PLAIN —————— EDGE OF PAVEMENT — — EDGE OF GRAVEL

EXISTING

— O — CHAIN LINK FENCE . TREE LINE SD STORM DRAIN PIPE ——>—— DITCH — OHE — OVERHEAD ELECTRIC UTILITY POLE ELECTRIC TOWER STRUCTURE

DRAINAGE AREA ----> ---- DRAINAGE TC PATH — OHT — OVERHEAD TELEPHONE STORM/SANITARY EXISTING

NOTE: THE LEGEND & SHEET INDEX IS TO BE SHEETS FOR THE PURPOSE OF CLARITY AND

----- STRUCTURE

——X—— SILT FENCE

DRAINAGE Tc PATH

— LOD — LIMITS OF DISTURBANCE

— · · — PLAN SHEET MATCH LINE

DRAINAGE AREA

STORM/SANITARY NEW

— INTERMEDIATE CONTOUR ×2519.6 GRADE SPOT SHOT EDGE OF PAVEMENT — — EDGE OF GRAVEL GRAVEL HATCH (ACCESS ROADS) GRAVEL HATCH (SUBSTATION) GRAVEL HATCH (LAYDOWN STORAGE YARD) A— — A CROSS SECTION — • — CHAIN LINK FENCE . TREE LINE ■ SD ■ STORM DRAIN PIPE STORM DRAIN INLET STORM DRAIN MANHOLE STORM WATER OUTFALL STRUCTURE CONCRETE CHANNEL/SWALE ——>—— GRASS CHANNEL/SWALE OVERHEAD ELECTRIC UTILITY POLE ELECTRIC TOWER STRUCTURE EROSION AND SEDIMENT CONTROL (SEE ESC LEGEND)

PROPOSED

USED THROUGHOUT THE CONSTRUCTION PLANS. IT HAS NOT BEEN PLACED ON REMAINING PLAN READABILITY.

NOTIFY UTILITY COMPANIES BEFORE YOU DIG

THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVE-GROUND STRUCTURES. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED

UTILITIES/STRUCTURES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 811 TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

AMERICAN ELECTRIC POWER FOR KENTUCKY POWER COMPANY

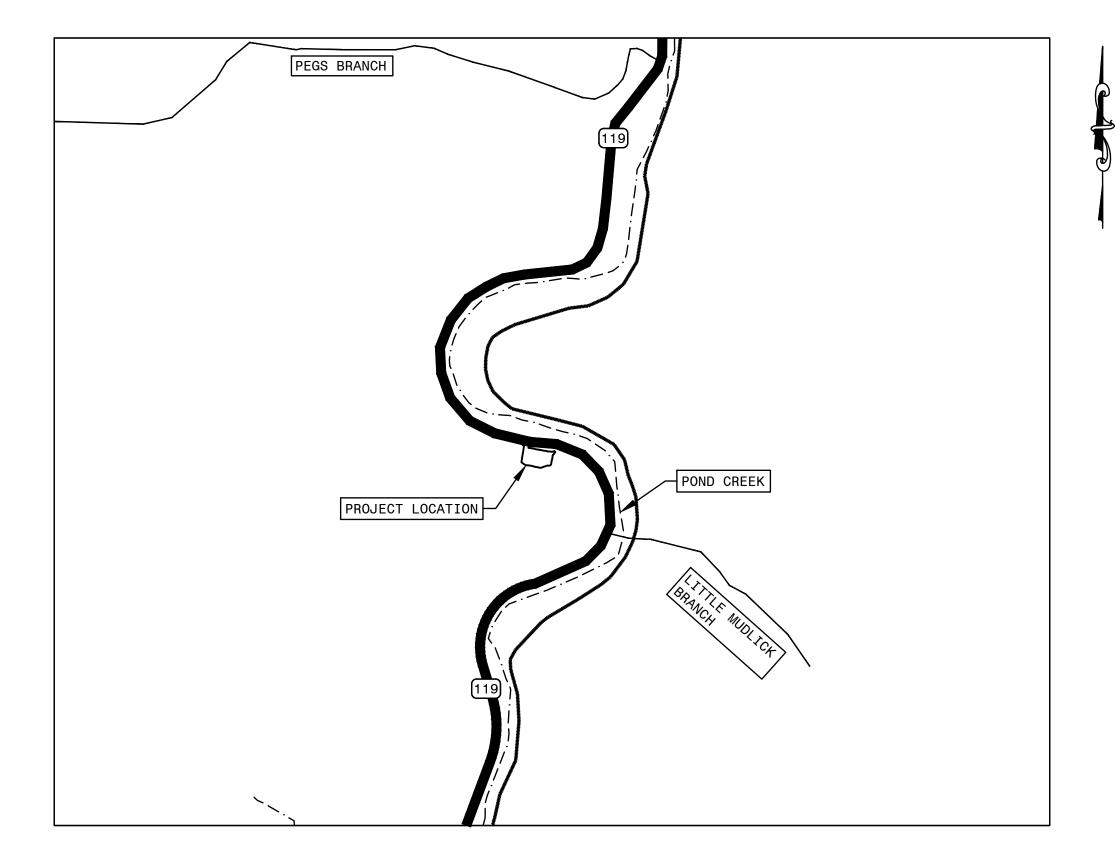
ORINOCO STATION

BELFRY, KENTUCKY

PIKE COUNTY

SITE/CIVIL GRADING PACKAGE

(STATION COORDINATES: 37.613097°, -82.271433°)



VICINITY MAP

N.T.S.

DRAWING INDEX				
SHEET #	SHEET TITLE	REV 0		
E-1220	COVER SHEET	6/14/2024		
E-1221	GENERAL NOTES (WITH MINIMUM STANDARDS)	6/14/2024		
E-1222	EROSION AND SEDIMENT CONTROL PLAN (SOILS MAP & DESCRIPTIONS)	6/14/2024		
E-1223	STATION LAYOUT PLAN (EXISTING CONDITIONS AND DEMOLITION)	6/14/2024		
E-1224	STATION LAYOUT PLAN	6/14/2024		
E-1225	GRADING PLAN (PHASE I - EROSION AND SEDIMENT CONTROL PLAN)	6/14/2024		
E-1226	GRADING PLAN (PHASE II - EROSION AND SEDIMENT CONTROL PLAN)	6/14/2024		
E-1227	EROSION AND SEDIMENT CONTROL PLAN (LAND COVER PLAN)	6/14/2024		
E-1228	GRADING SECTION VIEWS (STATION SECTION VIEWS)	6/14/2024		
E-1229	GRADING SECTION VIEWS (ACCESS ROADS)	6/14/2024		
E-1230	GRADING SECTION VIEWS (SCC PROFILE)	6/14/2024		
E-1231	EROSION AND SEDIMENT CONTROL PLAN (PRE DRAINAGE AREAS)	6/14/2024		
E-1232	EROSION AND SEDIMENT CONTROL PLAN (POST DRAINAGE AREAS)	6/14/2024		
E-1233	EROSION AND SEDIMENT CONTROL DETAILS	6/14/2024		
E-1234	EROSION AND SEDIMENT CONTROL DETAILS	6/14/2024		

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QUANTITY ESTIMATE

SITE WORK & CLEARING/SURVEYING		
EARTHWORK		
DESCRIPTION	UNIT	QUANTI
GRADING		
CLEARING AND GRUBBING: REMOVAL AND DISPOSAL OF EXISTING VEGETATION WITHIN		
CONSTRUCTION LIMITS AND DISPOSAL OFF-SITE IN AN AEP APPROVED FACILITY.	ACRE	1.25
DEMOLITION AND DISPOSAL	LS	1.00
EARTHWORK: CUT SOIL	CY	605.00
EARTHWORK: FILL (15% ADDED FOR COMPACTION)	CY	340.00
STATION PAD CONSTRUCTION		
STONE # 57 WASHED LIMESTONE - 3" WORKING SURFACE - STATION PAD:	TON	615.00
STONE # 57 WASHED LIMESTONE - 5" FINISH DEPTH- STATION PAD:	TON	1,025.0
CHAIN LINK FENCE w/ APPURTENANCES PER AEP STANDARDS:	LF	696.00
4' MAN GATE:	EACH	1.00
24'-0" WIDE DOUBLE ACCESS GATE INCLUDING CONCRETE GRADE BEAM FOUNDATION:	EACH	2.00
ACCESS ROAD AND PARKING LOT		
4" STONE #57 OR EQUIVALENT - PARKING:	TON	180.00
5" STONE #304 OR EQUIVALENT - PARKING:	TON	125.00
MIRAFI 600X GEOTEXTILE FABRIC OR EQUIVALENT: BASED ON SQUARE FOOTAGE OF ACCESS		
ROAD AND PARKING LOT.	SY	808.00
CONSTRUCTION AREAS OF NECESSITY:		
CONCRETE WASHOUT:	EACH	1.00
EROSION AND CONTROL MEASURES:		
SILT FENCE - INSTALL/MAINTAIN/REMOVE: (BELTED SILT FENCE)	LF	1,000.0
CONSTRUCTION ENTRANCE:	EACH	1.00
DIVERSION	LF	420.00
SEEDING AND MULCHING (HYDROSEED): INCLUDES ALL AREAS NOT COVERED BY STONE.	ACRE	0.54
CULVERT INLET PROTECTION:	EACH	1.00
CULVERT OUTLET PROTECTION:	EACH	1.00
ROCK CHECK DAMS PER STATE STANDARD:	EACH	5.00
STORMWATER MANAGEMENT & OUTFALL:		
CONCRETE LINED DITCHES:	CY	43.00
18" RCP CLASS IV PIPE:	LF	24.00
CONCRETE HEADWALL/ENDWALL - RDH-005-02:	EACH	2.00

PROVIDED QUANTITIES ARE ESTIMATED AND NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNITS PRIOR TO PREPARING AND SUBMITTING A FORMAL BID.

QUANTITIES DETERMINED USING THE FOLLOWING VALUES:

ENGINEER ONSITE DURING CONSTRUCTION.

- WASHED, CRUSHED LIMESTONE AGGREGATE NO. 57: 2 TONS/CY.

 CRUSHER RUN AGGREGATE: 2 TONS/CY. - WASHED, CRUSHED LIMESTONE AGGREGATE NO. 304: 2 TONS/CY.

SUITABILITY OF ALL MATERIALS SHALL BE DETERMINED BY GEOTECHNICAL

OLD DWG :		STD DWG :		
OR REPRODUCED, IN WHOLE OF	RTY OF AMERICAN ELECTRIC POW R IN PART, OR USED FOR FURNISHIN R, OR FOR ANY PURPOSE DETRIMEI	NG INFORMATION TO ANY PERSON	WITHOUT THE WRITTEN CONSE	
	AMERICAN ELE	ECTRIC POWER		
ORINOCO STATION				
BELFRY KENTUC			KENTUCKY	
138kV				
COVER SHEET				
SCALE: NONE	DR: AKS	ENG: AKS	CH: ST	
AMERICAN	WO#: 101484400	APPD: LKM	DATE: 06/14/2024	
POWER BOUNDLESS ENERGY	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. E-1220	R E V	

SITE / CIVIL GENERAL NOTES

- 1. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF AMERICAN ELECTRIC POWER COMPANY DOCUMENT NO. SS-160102. "TECHNICAL SPECIFICATION FOR SUBSTATION AND SWITCHING STATION CONSTRUCTION". HERE IN AFTER KNOWN AS THE "SPECIFICATION" OR THIS SITE GRADING PACKAGE AND PROJECT SPECIFIC SPECIFICATIONS. WHICHEVER IS MOST STRINGENT.
- 2. THE TOPOGRAPHIC SURVEY WAS PERFORMED ON MAY 31, 2022 BY MPOWER RESOURCES, LLC, BECKLEY, WV, (304) 573-2165, ATTN.: TIM KOSUT, EMAIL: TKOSUT@MPWRR.COM, FOR USE IN DESIGN OF THE AEP ELECTRICAL SUBSTATION IN ACCORDANCE WITH OVERALL SITE DEVELOPMENT RULES / REGULATIONS. THIS MAP MEETS THE MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
- 3. THE EARTHWORK QUANTITIES SHOWN ARE BASED ON CUT/FILL VOLUMES BETWEEN EXISTING AND FINISHED SUBGRADE. EARTHWORK STRIPPING SHALL BE A MINIMUM OF 12" BELOW FINISHED GRADE FOR THE SUBSTATION PAD AND 6" BELOW FINISHED GRADE ON THE REMAINDER OF THE SITE. ALL EXISTING GRAVEL, TOPSOIL AND ORGANIC MATERIAL SHALL BE THOROUGHLY STRIPPED AND REPLACED WITH SUITABLE FILL MATERIAL COMPACTED IN ACCORDANCE WITH ABOVE REFERENCED SPECIFICATION.
- 4. ELEVATIONS SHOWN ON THE GRADING DRAWING (E-1226) ARE TOP OF FINISHED SURFACE. THE EXISTING CONTOUR INTERVAL IS ONE (1') FOOT. THE PROPOSED CONTOUR INTERVAL IS ONE (1') FOOT.
- 5. SIDE SLOPES SHALL BE A MINIMUM OF THREE (3) HORIZONTAL TO ONE (1) VERTICAL, UNLESS OTHERWISE NOTED. STEEPER SIDE SLOPES MAY BE OBTAINED THROUGH GEOTEXTILE MEMBRANE INSTALLATION.
- 6. ALL DISTURBED AREAS THAT ARE NOT STONED SHALL BE RE-SEEDED IN ACCORDANCE WITH THE KENTUCKY EROSION PREVENTION AND SEDIMENT CONTROL. THE APPLICATION RATES FOR SEEDING, MULCHING, FERTILIZER AND LIME SHALL BE IN ACCORDANCE WITH THIS
- 7. UNDER ALL ROADWAY, PARKING AREAS AND STORMWATER CHANNELS , A GEOTEXTILE FABRIC (MIRAFI 600X, OR APPROVED EQUIVALENT) SHALL BE INSTALLED ON THE PREPARED SUBGRADE AND FASTENED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 8. GRADING CONTRACTOR TO PLACE 3" OF #357 STONE FOLLOWING COMPLETION OF PAD. ONCE THE ABOVE AND BELOW GRADE CONSTRUCTION IS COMPLETED THE GRADING CONTRACTOR IS TO FINISH GRADE THE SITE TO FINAL CONTOUR AND PROVIDE 5" OF DOUBLE WASHED #57 STONE.
- 9. CONTRACTOR SHALL CONTACT KENTUCKY 811 (OR SIMILAR LOCATOR SERVICE) TO CONFIRM UTILITY LOCATIONS BEFORE BEGINNING CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATIONS AND / OR PRESENCE OF EXISTING UTILITIES.
- 10. EXCESS SPOIL MATERIAL IS TO BE DISPOSED OF OFFSITE AS PER LOCAL, STATE AND FEDERAL REGULATIONS AT A DUMP SITE APPROVED BY AEP AND THE PLAN APPROVING AUTHORITY.
- 11. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING ALL TEMPORARY & PERMANENT DRAINAGE & EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE SWPPP.
- 12. FUELS, OILS AND OTHER BULK MATERIAL SHALL NOT BE STORED AT THE SITE FOR LONGER THAN A 24 HOUR PERIOD.
- 13. ALL PAVEMENT WITH VERTICAL GRADE GREATER THAN 10% SHALL BE PAVED.

AEP ENVIRONMENTAL/CULTURAL GENERAL NOTES:

- 1. PRIOR TO CONSTRUCTION, MARK (FENCING AND/OR SIGNAGE) PROTECTED ENVIRONMENTAL RESOURCE BOUNDARIES SUCH AS, BUT NOT LIMITED TO, SPRINGS, WETLANDS, KARST FEATURES (SINKHOLES, FISSURES, CAVES), ABANDONED MINE PORTALS, ARCHAEOLOGICAL SITE, GRAVE SITE, SPECIES HABITAT, HAZARDOUS WASTE AREAS, ETC.
- 2. CEASE CONSTRUCTION AND CONTACT THE RESPONSIBLE AEP REGIONAL ENVIRONMENTAL SPECIALIST (DARREN KIDWELL, 540-449-8826) IF AN UNDOCUMENTED NATURAL RESOURCE IS ENCOUNTERED DURING CONSTRUCTION. FOR EXAMPLE, REPORT IMMEDIATELY ANY OF THE FOLLOWING IN THE AREA OF CONSTRUCTION IF NOT CLEARLY IDENTIFIED ON THE MAPPING: STREAMS, SPRINGS, WETLANDS, KARST FEATURES (SINKHOLES, FISSURES, CAVES), WILDLIFE HABITAT, ETC.
- 3. WORK COMPLETED WITHIN 100 FEET OF CEMETERIES OR BURIALS SHOULD BE CONSIDERED SENSITIVE. CONTACT THE RESPONSIBLE AEP ENVIRONMENTAL SPECIALIST (DARREN KIDWELL, 540-449-8826) BEFORE PROCEEDING WITH ANY WORK.
- 4. DISCOVERY DURING CONSTRUCTION OF ANY HUMAN OR UNIDENTIFIED ARTIFACTS OR OTHER UNKNOWN OBJECTS THAT ARE UNEARTHED OR OTHERWISE DISCOVERED REQUIRES CONSTRUCTION TO CEASE AND IMMEDIATE NOTIFICATION TO THE RESPONSIBLE AEP ENVIRONMENTAL SPECIALIST (DARREN KIDWELL, 540-449-8826).
- 5. DISCOVERY DURING CONSTRUCTION OF ANY HAZARDOUS WASTE INDICATORS (I.E. TIRES, OIL, LANDFILL, OR OTHER) OR OTHER ISSUE OF POTENTIAL CONCERN (I.E. MINE PORTAL), REQUIRES CONSTRUCTION TO CEASE AND IMMEDIATE NOTIFICATION TO THE RESPONSIBLE AEP ENVIRONMENTAL SPECIALIST (DARREN KIDWELL, 540-449-8826).
- 6. NO WORK, DISTURBANCE, STORAGE OR ANY OTHER ACTIVITY OUTSIDE "LIMITS OF DISTURBANCE" BOUNDARY SHOWN ON PLANS.
- 7. NO NEW (I) LAY DOWN YARDS, (II) MARSHALLING YARDS, (III) EQUIPMENT STORAGE AREAS, (IV) TIMBER/LOG LANDING AREAS, (V) OTHER GROUND DISTURBANCES ARE PERMITTED UNLESS SHOWN ON THIS PLAN.
- 8. PROVIDE ANY PROPOSED NEW GROUND DISTURBANCE TO THE PROJECT ENGINEER OR PROJECT MANAGER, IF NOT SHOWN ON THIS PLAN.
- 9. PROVIDE ANY ACCESS ROAD MODIFICATIONS OR ADDITIONS TO THE PROJECT ENGINEER OR PROJECT MANAGER, IF NOT SHOWN ON THIS
- 10. ANY MODIFICATIONS OR ADDITIONS MUST BE ADDED TO THIS PLAN, FIELD CHECKED, AND PERMITS UPDATED AS NEEDED PRIOR TO CONSTRUCTION.
- 11. THE CONDITIONS AND RESTRICTIONS SHOWN ON THESE PLANS ARE PART OF THE APPROVED PERMITS AND MUST BE STRICTLY FOLLOWED.
- 12. THE LOCATION OF ANY CONCRETE WASHOUTS UTILIZED ON-SITE WILL BE ADDED TO THE EROSION AND SEDIMENT CONTROL PLAN (APPENDIX B) BY THE TCR OR HIS/HER DESIGNEE ALONG WITH ANY NECESSARY CONTROLS.

EARTHWORK / TRENCHING NOTES:

- 1. SATISFACTORY SOIL MATERIALS: ASTM D 2487 "COHESIVE" SOIL CLASSIFICATION GROUPS HAVING A PLASTICITY INDEX BETWEEN 10 TO 23. FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION & OTHER DELETERIOUS MATTER.
- 2. UNSATISFACTORY SOIL MATERIALS: ASTM D 2487 SOIL CLASSIFICATION GROUP; CH.
- 3. ENGINEERED BACKFILL & STRUCTURAL FILL MATERIALS: SATISFACTORY SAND AND/OR GRAVEL MATERIALS CONFORMING TO THE REQUIREMENTS OF KYTC SPECIFICATIONS, WELL-GRADED AND GENERALLY MEET UNIFIED SOIL CLASSIFICATION SYSTEM. DESIGNATION; SM, SC, ML, CL.
- 4. SUBBASE & BASE MATERIAL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE CONFORMING TO ASTM D 2940, WITH AT LEAST 95 PERCENT PASSING AN 1-1/2" SIEVE & NOT MORE THAN 8 PERCENT PASSING A NO.
- 5. ENGINEERED BACKFILL: SUBBASE OR BASE MATERIALS
- 6. STATION PAD MATERIAL: EVENLY GRADED MIXTURE OF CRUSHED STONE AASHTO #57 WASHED LIMESTONE AGGREGATE.
- 7. PROVIDE EROSION CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS & DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES.
- 8. PREVENT SURFACE WATER & SUBSURFACE OR GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES & FROM FLOODING PROJECT SITE & SURROUNDING AREA. PROTECT SUBGRADES & FOUNDATION SOILS FROM SOFTENING & DAMAGE BY RAIN OR WATER ACCUMULATION.
- 9. "UNCLASSIFIED EXCAVATION" EXCAVATION IS UNCLASSIFIED & INCLUDES EXCAVATION TO REQUIRED SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF MATERIALS & OBSTRUCTIONS ENCOUNTERED.
- 10. EXCAVATE SWALES TO INDICATED SLOPES, LINES, DEPTHS & INVERT ELEVATIONS AS INDICATED ON THE GRADING PLAN.
- 11. DRAINAGE SWALE BOTTOMS: EXCAVATE & SHAPE SWALE BOTTOMS TO PROVIDE UNIFORM BEARING & SUPPORT. SHAPE SUBGRADE TO PROVIDE CONTINUOUS UNIFORMITY. REMOVE STONES & DEBRIS TO ALLOW THE UNIFORM FLOW OF ANY OVERLAND DRAINAGE SURFACE WATER THAT MAY BE PRESENT.
- 12. STOCKPILE EXCAVATED MATERIALS ACCEPTABLE FOR BACKFILL ALONG WITH FILL SOIL MATERIALS, INCLUDING ACCEPTABLE BORROW MATERIALS. STOCKPILE SOIL MATERIALS IN DESIGNATED AREA. PLACE, GRADE & SHAPE STOCKPILES TO DRAIN SURFACE WATER.

NOTIFY UTILITY COMPANIES BEFORE YOU DIG



CM 1 2 3 4 5 6 7

THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVE-GROUND STRUCTURES, LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 811 TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION

- 13. PLACE AND COMPACT INITIAL BACKFILL OF SATISFACTORY SOIL MATERIAL OR SUBBASE MATERIAL TO FINAL GRADE AS INDICATED ON THE DRAWINGS. CAREFULLY COMPACT MATERIAL AT THE BOTTOM OF DRAINAGE SWALES AND BRING BACKFILL EVENLY UP ON BOTH SIDES AND ALONG THE FULL LENGTH OF DRAINAGE SWALE.
- 14. PLACE AND COMPACT FINAL BACKFILL OF SATISFACTORY SOIL MATERIAL TO FINAL SUBGRADE.
- 15. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY APPROPRIATE COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED
- 16. PERFORM FIELD IN PLACE DENSITY TESTS ACCORDING TO ASTM D 1556 (SAND CONE METHOD), ASTM D 2167 (RUBBER BALLOON METHOD), OR ASTM D 2937 (DRIVE CYLINDER METHOD), AS APPLICABLE.
- 17. DRAINAGE SWALE BACKFILL: IN EACH COMPACTED INITIAL AND FINAL BACKFILL LAYER, PERFORM AT LEAST ONE FIELD IN PLACE DENSITY TEST FOR EACH 150 FEET OR LESS OF SWALE, BUT NO FEWER THAN TWO TESTS.
- 18. DISPOSAL: REMOVE SURPLUS SATISFACTORY SOIL AND WASTE MATERIAL. INCLUDING UNSATISFACTORY SOIL. TRASH AND DEBRIS AND DISPOSE OF IT IN SOIL DISPOSAL AREA ON-SITE. UNLESS OTHERWISE AUTHORIZED BY TCR.
- 19. A GEOTECHNICAL REPRESENTATIVE SHALL BE ON-SITE DURING ALL EXCAVATION WITHIN WETLAND AREAS. THE GEOTECHNIAL REPRESENTATIVE SHALL DETERMINE WHAT ADDITIONAL WETLAND SOILS MUST BE REMOVED AND WHEN ADEQUATE SUBGRADE HAS BEEN REACHED. THE GEOTECHNICAL REPRESENTATIVE SHALL BE PROVIDED BY THE OWNER; HOWEVER, THE CONTRACTOR SHALL COORDINATE WITH THE TCR TO DETERMINE WHEN THE GEOTECHNICAL REPRESENTATIVE SHALL BE ON-SITE.
- 20. DESIGN IS SUBJECT TO CHANGE DEPENDANT UPON ENVIRONMENTAL EVALUATION
- 21. PREPARE AND TEST EXPOSED SUBGRADE AREAS IN ACCORDANCE WITH AEP SS-160102, SECTION 4.6.1 PRIOR THE PLACEMENT OF ANY STRUCTURAL FILL MATERIAL, AGGREGATE, OR CONCRETE.

AEP CONSTRUCTION NOTES

- 1. COORDINATE PROPOSED DESIGN AND WORK WITH FLOYD COUNTY, THE KENTUCKY DEPARTMENT OF TRANSPORTATION, AND LANDOWNERS.
- 2. DEVELOP THE APPROPRIATE TRAFFIC CONTROL PLAN WITH KYTC AND MUNICIPALITIES AS REQUIRED. COORDINATE THIS PROJECT WITH THE COUNTY OF PIKE AND KYTC ON PLANS CURRENTLY BEING DESIGNED FOR IMPROVEMENTS TO THE TRANSPORTATION CORRIDOR. CONTACT THE KYTC DISTRICT 12 AT (606) 433-7791.
- 3. ENSURE PROPER KYTC ENTRANCE PERMITS ARE OBTAINED (VERIFY WITH POWER ENGINEERS, STUART TORAASON; (SEE ATTACHMENT FOR CONTACTS).
- 4. POTENTIAL IMPACTS TO PUBLIC WATER DISTRIBUTION SYSTEMS OR SANITARY SEWAGE COLLECTION SYSTEMS MUST BE VERIFIED BY THE LOCAL UTILITY.
- 5. IF BEDROCK UNITS OF LIMESTONE/DOLOMITE ARE CONTACTED WITH CONSTRUCTION ACTIVITIES, THESE INTERCEPTIONS OF THE ROCK UNIT SHOULD BE POSITIVELY SEALED TO PREVENT ONGOING TRANSMISSION OF POTENTIAL CONTAMINATES INTO THE SUBSURFACE.
- 6. MARK AND ENFORCE THE LIMITS OF CONSTRUCTION ACTIVITY TO PREVENT UNNECESSARY IMPACTS AND WHERE APPROPRIATE. FOR EXAMPLE, ALL CONSTRUCTION VEHICLE MOVEMENT OUTSIDE THE AREA OF CONSTRUCTION SHOULD BE RESTRICTED TO PRE-DESIGNATED ACCESS, CONTRACTOR-ACQUIRED ACCESS, OR PUBLIC ROADS. DURING CLEARING OF TREES AND VEGETATION, ACTIVITIES SHOULD BE LIMITED TO THE ROW AREA AND TO DANGEROUS TREES LOCATED ALONG THE EDGE OF THE ROW, WHILE TREES NOT IDENTIFIED FOR REMOVAL SHOULD BE PROTECTED TO THE EXTENT PRACTICAL.
- 7. WHEREVER FEASIBLE, EXISTING GROUPINGS AND/OR CLUSTERS OF RIGHT-OF-WAY COMPATIBLE TREES AND NATURAL VEGETATION SHOULD REMAIN IN THE RIGHT-OF-WAY TO PROVIDE ESTHETIC AND ENVIRONMENTAL BENEFITS.
- 8. TREES NOT SLATED FOR REMOVAL CAN BE PROTECTED FROM THE EFFECTS OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH FUTURE CONSTRUCTION. THESE TREES SHOULD BE MARKED AND FENCED AT LEAST TO THE DRIP LINE OR THE END OF THE ROOT SYSTEM, WHICHEVER EXTENDS FARTHER FROM THE STEM. MARKINGS SHOULD BE DONE WITH HIGHLY VISIBLE RIBBON SO THAT EQUIPMENT OPERATORS SEE THE PROTECTED AREAS EASILY.
- 9. PARKING AND STOCKING OF HEAVY EQUIPMENT AND CONSTRUCTION MATERIALS NEAR TREES CAN DAMAGE ROOT SYSTEMS BY COMPACTING THE SOIL. SOIL COMPACTION, FROM WEIGHT OR VIBRATION, AFFECTS ROOT GROWTH, WATER AND NUTRIENT UPTAKE, AND GAS EXCHANGE. THE PROTECTION MEASURES SUGGESTED ABOVE SHOULD BE USED FOR PARKING AND STACKING AS WELL AS FOR MOVING OF EQUIPMENT AND MATERIALS. IF PARKING AND STACKING ARE UNAVOIDABLE, THE CONTRACTORS SHOULD USE TEMPORARY CROSSING BRIDGES OR MATS TO MINIMIZE SOIL COMPACTION AND MECHANICAL INJURY TO PLANTS.
- 10. ANY STOCKPILING OF SOIL SHOULD TAKE PLACE AWAY FROM TREES. PILING SOIL AT A TREE STEM CAN KILL THE ROOT SYSTEM OF THE TREE. SOIL STOCKPILES SHOULD BE COVERED, AS WELL, TO PREVENT SOIL EROSION AND FUGITIVE DUST.
- 11. QUESTIONS PERTAINING TO PROTECTION OF TREES AND FOREST RESOURCES OF THE STATE MAY BE ADDRESSED TO NATE JESTER, ADMINISTRATOR, KENTUCKY DIVISION OF FORESTRY, HAZARD FIELD OFFICE, AT (606) 435-6073.
- 12. ALL COMMUNICATIONS AND INTERACTIONS WITH PROPERTY OWNERS AND OCCUPANTS OF PROPERTY WILL BE POLITE AND PROFESSIONAL.
- 13. CONTRACTORS WILL RESPECT AND BE MINDFUL OF THE PROPERTY OWNERS/OCCUPANTS, AND THE PROPERTY YOU ARE ACCESSING. DO NOT LEAVE LITTER OR MESS. REPORT ANY DAMAGES OR ACCIDENTS IMMEDIATELY TO THE AEP TCR.
- 14. CONTRACTORS WILL REMOVE PROMPTLY SPILLED OR TRACKED DIRT, OTHER MATERIALS ON PAVED STREETS, AND DRIED SEDIMENTS RESULTING FROM SOIL EROSION.
- 15. SHARED CONSTRUCTION AND PROPERTY OWNER ROADS WILL BE MAINTAINED FOR UNIMPEDED PROPERTY OWNER VEHICLE INGRESS/EGRESS.
- 16. PROJECT QUESTIONS FROM PROPERTY OWNER ARE TO BE DIRECTED TO THE AEP LAND AGENT TO THE EXTENT PRACTICABLE.
- 17. ADHERE STRICTLY TO APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS; FOR EXAMPLE, EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT, SEE SOIL & EROSION CONTROL CONSTRUCTION SEQUENCE THIS PAGE.
- 18. WETLANDS HAVE BEEN DELINEATED AND FLAGGED WITH SIGNAGE, AND PROTECTION BARRIERS WILL BE ERECTED BEFORE CONSTRUCTION. THERE SHALL BE NO MECHANIZED CLEARING WITHIN WETLANDS AND WITHIN 50' OF STREAM BANKS.
- 19. WETLAND IMPACTS WILL BE LIMITED TO THE CLEARING OF WOODY VEGETATION ONLY; NO SOIL DISTURBANCE WILL BE ALLOWED IN WETLANDS; AND THERE WILL BE NO EQUIPMENT FORGING OF SURFACE WATERS. NO STRUCTURAL FOUNDATIONS WILL BE PROPOSED WITHIN WETLAND AREAS AND EQUIPMENT MATS WILL BE USED DURING CLEARING ACTIVITIES. NON-MECHANIZED CLEARING ONLY IS PERMITTED. SURFACE WATERS SHOULD BE SPANNED.
- 20. ANY TEMPORARY IMPACTS TO SURFACE WATERS ASSOCIATED WITH THIS PROJECT WILL REQUIRE RESTORATION, AS DETERMINED BY AEP ENVIRONMENTAL AFTER CONSTRUCTION, TO PRE-EXISTING CONDITIONS. RESTORATION IS TO BE UTILIZED USING NON-MECHANIZED METHODS ONLY.
- 21. NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA, UNLESS THE PRIMARY PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER. NO CULVERTS ARE TO BE INSTALLED AS STREAM CROSSINGS AND ANY CULVERTS CALLED OUT ON PLANS ARE TO BE USED FOR ROADWAY DRAINAGE ONLY. NO ROADSIDE DITCHES ARE TO BE INSTALLED IN STREAMS. STREAM CROSSINGS ARE BE UTILIZED USING TIMBER MAT BRIDGES AS SPECIFIED IN THE PLANS.
- 22. EROSION AND SEDIMENTATION CONTROLS WILL BE DESIGNED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES RAINWATER AND LAND DEVELOPMENT MANUAL. THOSE CONTROLS WILL BE PLACED PRIOR TO CLEARING AND GRADING AND MAINTAINED IN GOOD WORKING ORDER TO MINIMIZE IMPACTS TO STATE WATERS. THE CONTROLS WILL REMAIN IN PLACE UNTIL THE AREA IS STABILIZED AND WILL THEN BE REMOVED. ANY EXPOSED SLOPES AND STREAM BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF WORK IN EACH PERMITTED AREA. ALL DENUDED AREAS WILL BE PROPERLY STABILIZED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES RAINWATER AND LAND DEVELOPMENT MANUAL.

23. NO MACHINERY MAY ENTER SURFACE WATERS.

- 24. HEAVY EQUIPMENT IN TEMPORARILY IMPACTED SURFACE WATERS WILL BE PLACED ON MATS, GEOTEXTILE FABRIC OR OTHER SUITABLE MATERIAL TO MINIMIZE SOIL DISTURBANCE TO THE MAXIMUM EXTENT PRACTICABLE. EQUIPMENT AND MATERIALS WILL BE REMOVED IMMEDIATELY UPON COMPLETION OF WORK.
- 25. ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH ANY TIME-OF-YEAR RESTRICTION(S) AS RECOMMENDED BY THE KEPA. THE PERMITTEE WILL RETAIN A COPY OF THE AGENCY CORRESPONDENCE CONCERNING THE TIME-OF-YEAR RESTRICTION(S), OR THE LACK THEREOF, FOR THE DURATION OF THE CONSTRUCTION PHASE OF THE PROJECT.
- 26. ALL CONSTRUCTION, CONSTRUCTION ACCESS AND DEMOLITION ACTIVITIES ASSOCIATED WITH THIS PROJECT WILL BE ACCOMPLISHED IN A MANNER THAT MINIMIZES CONSTRUCTION MATERIALS OR WASTE MATERIALS FROM ENTERING SURFACE WATERS. UNLESS AUTHORIZED BY A PERMIT. WET. EXCESS OR WASTE CONCRETE WILL BE PROHIBITED FROM ENTERING SURFACE WATERS. CONCRÉTE WASHOUTS ARE TO BE LOCATED IN AREAS THAT DRAIN AWAY FROM WETLANDS AND STREAMS.
- 27. HERBICIDES USED IN OR AROUND ANY SURFACE WATER OR KARST FEATURE MUST BE APPROVED FOR AQUATIC USE BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) OR THE U.S. FISH AND WILDLIFE SERVICE. THESE HERBICIDES WILL BE APPLIED ACCORDING TO THE LABEL DIRECTIONS BY A LICENSED HERBICIDE APPLICATOR. A NON-PETROLEUM BASED SURFACTANT WILL BE USED IN OR AROUND ANY SURFACE WATERS.
- 28. KENTUCKY POWER COMPANY MUST HAVE A CERTIFIED RESPONSIBLE LAND DISTURBER IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE PROJECT-SPECIFIC EROSION AND SEDIMENT CONTROL PLAN AND THE LAND DISTURBING ACTIVITY, INCLUDING RIGHT-OF-WAY CLEARING, GRADING, AND ROAD CONSTRUCTION. KENTUCKY POWER COMPANY MUST CONTACT THE KEPA TWO WEEKS PRIOR TO LAND DISTURBANCE.
- 29. KENTUCKY POWER COMPANY WILL NOT BURN DEBRIS FROM RIGHT-OF-WAY CLEARING OR OTHER CONSTRUCTION-RELATED ACTIVITIES.
- 30. DURING CONSTRUCTION, FUGITIVE DUST MUST BE KEPT TO A MINIMUM BY USING CONTROL METHODS OUTLINED IN THE KENTUCKY EROSION PREVENTION AND SEDIMENT CONTROL MANUAL. THESE PRECAUTIONS INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: USE, WHERE POSSIBLE, OF WATER OR CHEMICALS FOR DUST CONTROL; INSTALLATION AND USE OF HOODS, FANS, AND FABRIC FILTERS TO ENCLOSE AND VENT THE HANDLING OF DUSTY MATERIALS; COVERING OF OPEN EQUIPMENT FOR CONVEYING MATERIALS; AND PROMPT REMOVAL OF SPILLED OR TRACKED DIRT OR OTHER MATERIALS FROM PAVED STREETS AND REMOVAL OF DRIED SEDIMENTS RESULTING FROM SOIL EROSION.
- 31. CEASE CONSTRUCTION AND CONTACT AN AEP CONSTRUCTION REPRESENTATIVE IMMEDIATELY IF THE FOLLOWING NATURAL OR CULTURAL RESOURCES OF CONCERN ARE ENCOUNTERED DURING CONSTRUCTION: WETLANDS, KARST FEATURES (SINKHOLE, FISSURES, CAVES, SPRINGS), ABANDONED MINE PORTALS, NATIVE AMERICAN ARTIFACTS, GRAVE SITE, ENDANGERED SPECIES, SUSPECTED HAZARDOUS WASTE OR CONTAMINATED SOILS, ETC. (SEE ENVIRONMENTAL FIELD REFERENCE CARDS, ATTACHMENT 7.12).
- 32. TO MINIMIZE ADVERSE IMPACTS TO THE AQUATIC ECOSYSTEM, IMPLEMENT AND STRICTLY ADHERE TO APPLICABLE STATE AND LOCAL EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT LAWS AND REGULATIONS.
- 33. CONTRACTORS WILL STRICTLY ADHERE TO THE SWPPP PLAN, WHICH ADDRESSES WATER QUALITY AND QUANTITY IN ACCORDANCE WITH THE KEPA.
- 34. ACCESS ROADS, STORAGE YARDS, STRUCTURES, AND SO ON WILL BE BUILT AS SHOWN ON PLANS; ANY PROPOSED CHANGE OR ALTERATION MAY NEED TO BE VERIFIED WITH THE FOLLOWING ANALYSES: WETLANDS AND STREAMS DELINEATED BY QUALIFIED PERSONNEL, RTE STUDIES, CULTURAL STUDIES, AND LAND AGENT REVIEW. NOTIFY THE TCR IMMEDIATELY OF ANY PROPOSED CHANGE.
- 35. FOLLOW THE ACCESS ROAD GUIDELINES AND DETAILS TO THE EXTENT PRACTICABLE TO MINIMIZE ENVIRONMENTAL IMPACTS OF ROADS.
- 36. PROMPTLY SEED AND FERTILIZE AREAS OF GROUND DISTURBANCE TO SPEED REVEGETATION, PROVIDE SCREENING, REDUCE EROSION, PROMOTE AND MAINTAIN WILDLIFE HABITAT, REDUCE INVASION PRESSURE BY NON-NATIVE PLANTS, REDUCE BIRD NEST PARASITISM AND PREDATION, AND RESTRICT ACCESS BY OFF-ROAD VEHICLES.
- 37. KARST FEATURES WILL BE DELINEATED AND FLAGGED WITH SIGNAGE AND PROTECTION BARRIERS WILL BE ERECTED BEFORE CONSTRUCTION. CLEARING WILL BE LIMITED TO HAND CLEARING OF WOODY VEGETATION; NO SOIL DISTURBANCE WILL BE ALLOWED IN SINKHOLES; AND NO EQUIPMENT WILL ENTER SINKHOLES OR KARST FEATURES.
- 38. NO EQUIPMENT OR MECHANIZED CLEARING OF LAND ALLOWED IN WETLANDS FOR THE RIGHT-OF-WAY OR CONSTRUCTION OF ACCESS ROADS.

ATTENTION:

TO ENSURE ALL PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION, ANY PROJECT ACTIVITIES SUCH AS THOSE SHOWN BELOW MUST BE APPROVED IN WRITING (OR EMAIL) BY THE PROJECT MANAGER PRIOR TO BEGINNING THE ACTIVITY.

4. RIGHT OF WAY CLEARING

EXFOLIATING BARK

~ CULVERT INSTALLATION ~ RIP RAP INSTALLATION

6. FACILITY MODIFICATIONS

WATER BODIES, FLOOD PLAINS

~ FORD CROSSINGS AND BANK RESTORATION

- PRE-CONSTRUCTION ACTIVITIES
- ~ CORE BORING, TESTING AND STUDIES ANY TREE CLEARING FOR PROJECTS REQUIRING NEW RIGHT OF WAY
- 2. GENERAL CONSTRUCTION ACTIVITIES
- ~ GRADING STUMP REMOVAL OR GRINDING
- ~ TOPSOIL REMOVAL OR SPREADING OF SPOILS
- NOT REQUIRED) ~ CONSTRUCTION OF A LAY DOWN YARD
- ~ A CHANGE IN VEGETATION COVER
- 3. ACCESS ROADS
- ~ INSTALLATION OF NEW ROADS
- ~ MODIFICATION OF EXISTING ROADS (REPAIRS, WIDENING, MAINTENANCE, ETC)
 - REFERENCE DRAWING:

PLACING OR SPREADING GRAVEL (UNLESS GRADING IS

~ CHANGES TO TRANSMISSION LINE STRUCTURES OR CONDUCTORS (INCLUDES REPLACEMENT, RELOCATION, ETC.), STATION EXPANSIONS OR ANY WORK OUTSIDE THE CURRENTLY FENCED, GRAVELED AREA

~ ANY MECHANIZED CLEARING IN EXISTING RIGHT OF WAY

~ ANY CLEARING OF DEAD/DYING TREES. OR TREES WITH LOOSE OR

5. ANY WORK IN OR NEAR (WITHIN 75 FEET) STREAMS, WETLAND,

E-1220 COVER SHEET *E-1221 GENERAL NOTES (WITH MINIMUM STANDARDS) E-1222 EROSION AND SEDIMENT CONTROL PLAN (SOILS MAP & DESCRIPTIONS) E-1223 STATION LAYOUT PLAN (EXISTING CONDITIONS AND DEMOLITION) E-1224 STATION LAYOUT PLAN E-1225 GRADING PLAN (PHASE I - EROSION AND SEDIMENT CONTROL PLAN) GRADING PLAN (PHASE II - EROSION AND SEDIMENT CONTROL PLAN) E-1226 E-1227 EROSION AND SEDIMENT CONTROL PLAN (LAND COVER PLAN) GRADING SECTION VIEWS (STATION SECTION VIEWS) E-1228 GRADING SECTION VIEWS (ACCESS ROADS) E-1229 E-1230 GRADING SECTION VIEWS (SCC PROFILES) E-1231 EROSION AND SEDIMENT CONTROL PLAN (PRE DRAINAGE AREAS)

E-1232 EROSION AND SEDIMENT CONTROL PLAN (POST DRAINAGE AREAS) EROSION AND SEDIMENT CONTROL DETAILS E-1233 E-1234

EROSION AND SEDIMENT CONTROL DETAILS OLD DWG:

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ORINOCO STATION BELFRY

GENERAL NOTES WITH MINIMUM STANDARDS ENG: AKS SCALE: NONE DR: AKS CH: ST WO#: 101484400 APPD: LKM DATE: 06/14/2024 **AMERICAN** ELECTRIC 1 RIVERSIDE PLAZA DWG. E-122

NO DATE REVISION DESCRIPTION

APPR DR ENG CK ISSUE#

CADFILEPATH

KENTUCKY

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INCHES

Custom Soil Resource Report

MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at Area of Interest (AOI) Area of Interest (AOI) Warning: Soil Map may not be valid at this scale. Soil Rating Polygons Not rated or not available ____ A Enlargement of maps beyond the scale of mapping can cause Water Features A/D misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of В contrasting soils that could have been shown at a more detailed Transportation B/D +++ Rails C Please rely on the bar scale on each map sheet for map C/D US Routes ___ D Major Roads Source of Map: Natural Resources Conservation Service Not rated or not available Local Roads Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Soil Rating Lines - A Aerial Photography Maps from the Web Soil Survey are based on the Web Mercator A/D projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the 🚙 В This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Pike County, Kentucky Not rated or not available Survey Area Data: Version 21, Sep 2, 2022 Soil Rating Points Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Oct 14, 2020—Dec В The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
KsF	Kimper-Sharondale- Muskingum complex, 30 to 80 percent slopes, very stony	В	30.1	51.0%
MaF	Marrowbone-Clifftop- Matewan complex, 35 to 75 percent slopes, very rocky	В	18.1	30.6%
MyD	Myra very channery silt loam, 6 to 30 percent slopes	В	2.3	3.9%
uAdrB	Anthroportic Udorthents- Urban land-Grigsby complex, 0 to 6 percent slopes, occasionally flooded	С	7.2	12.1%
uAdrF	Anthroportic Udorthents- Urban land-Rock outcrop complex, 0 to 80 percent slopes, benched	С	1.4	2.4%
Totals for Area of Inter	est		59.1	100.0%

CM 1 2 3 4 5 6 7

Custom Soil Resource Report

Pike County, Kentucky

KsF—Kimper-Sharondale-Muskingum complex, 30 to 80 percent slopes, very stony

Map Unit Setting National map unit symbol: lgc5 Elevation: 630 to 2,360 feet Mean annual precipitation: 39 to 50 inches Mean annual air temperature: 46 to 70 degrees F Frost-free period: 166 to 211 days

Farmland classification: Not prime farmland **Map Unit Composition** Kimper and similar soils: 50 percent Sharondale and similar soils: 25 percent

Muskingum and similar soils: 10 percent

Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimper

Landform: Mountain slopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Mountainflank Down-slope shape: Linear Across-slope shape: Linear Parent material: Loamy colluvium derived from sedimentary rock Typical profile

H1 - 0 to 8 inches: very channery loam H2 - 8 to 52 inches: channery loam H3 - 52 to 75 inches: very channery fine sandy loam R - 75 to 85 inches: unweathered bedrock

Properties and qualities

Slope: 30 to 80 percent Surface area covered with cobbles, stones or boulders: 2.0 percent Depth to restrictive feature: 60 to 99 inches to lithic bedrock Drainage class: Well drained Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.9 inches) Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7e Hydrologic Soil Group: B Ecological site: F125XY002WV - Interbedded Sedimentary Colluvium Hydric soil rating: No

uAdrB—Anthroportic Udorthents-Urban land-Grigsby complex, 0 to 6 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: 2x5j3 Elevation: 640 to 800 feet Mean annual precipitation: 28 to 54 inches Mean annual air temperature: 42 to 68 degrees F Frost-free period: 156 to 222 days Farmland classification: Not prime farmland

Map Unit Composition

Anthroportic udorthents, unstable fill, and similar soils: 40 percent Urban land, rarely flooded: 35 percent Grigsby, occasionally flooded, and similar soils: 15 percent Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Anthroportic Udorthents, Unstable Fill

Landform: Flood plains Down-slope shape: Linear Across-slope shape: Linear

Parent material: Loamy or loamy-skeletal mine spoil or earthy fill derived from interbedded sedimentary rock over sandy and gravelly alluvium

Typical profile

^Ap - 0 to 5 inches: very channery silt loam ^C1 - 5 to 22 inches: very channery silt loam ^C2 - 22 to 35 inches: very channery silt loam

^C3 - 35 to 52 inches: channery loam ^C4 - 52 to 64 inches: channery loam 2C5 - 64 to 76 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 0 to 6 percent Surface area covered with cobbles, stones or boulders: 0.0 percent Depth to restrictive feature: More than 80 inches Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20

to 0.57 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: NoneOccasional

Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

10

Custom Soil Resource Report

Hydrologic Soil Group: C Hydric soil rating: No

MaF—Marrowbone-Clifftop-Matewan complex, 35 to 75 percent slopes, very rocky

Map Unit Setting National map unit symbol: 2tqhc Elevation: 800 to 2,000 feet Mean annual precipitation: 39 to 50 inches Mean annual air temperature: 46 to 70 degrees F Frost-free period: 166 to 211 days Farmland classification: Not prime farmland

Map Unit Composition

Marrowbone, very stony, and similar soils: 35 percent Clifftop, very stony, and similar soils: 25 percent Matewan, very stony, and similar soils: 15 percent Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Custom Soil Resource Report

Description of Marrowbone, Very Stony

Landform: Ridges Landform position (two-dimensional): Summit Landform position (three-dimensional): Mountaintop Down-slope shape: Convex Across-slope shape: Linear

Parent material: Coarse-loamy residuum weathered from sandstone

Typical profile Oi - 0 to 1 inches: slightly decomposed plant material A - 1 to 5 inches: fine sandy loam Bw1 - 5 to 10 inches: loam

Bw2 - 10 to 17 inches: fine sandy loam Bw3 - 17 to 23 inches: loam BC - 23 to 28 inches: channery loam R - 28 to 38 inches: bedrock

Properties and qualities

Slope: 35 to 75 percent Surface area covered with cobbles, stones or boulders: 1.0 percent Depth to restrictive feature: 24 to 32 inches to lithic bedrock

Drainage class: Well drained Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr) Depth to water table: More than 80 inches

NOTIFY UTILITY COMPANIES BEFORE YOU DIG

ARE BASED ON ABOVE-GROUND STRUCTURES. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS

PROGRESS OF THIS SURVEY TO LOCATE BURIED

UTILITIES/STRUCTURES.

THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON

SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE

OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY

OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE

CONTRACTOR SHALL NOTIFY MISS UTILITY AT 811 TWO

Frequency of flooding: None Frequency of ponding: None Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7e Hydrologic Soil Group: B Ecological site: F125XY003WV - Interbedded Sedimentary Uplands Hydric soil rating: No

REFERENCE DRAWING:

E-1220	COVER SHEET
E-1221	GENERAL NOTES (WITH MINIMUM STANDARDS)
E-1222	EROSION AND SEDIMENT CONTROL PLAN (SOILS MAP & DESCRIPTIONS)
E-1223	STATION LAYOUT PLAN (EXISTING CONDITIONS AND DEMOLITION)
E-1224	STATION LAYOUT PLAN
E-1225	GRADING PLAN (PHASE I - EROSION AND SEDIMENT CONTROL PLAN)
E-1226	GRADING PLAN (PHASE II - EROSION AND SEDIMENT CONTROL PLAN)
F 1007	EDOCIONI AND CEDIMENT CONTROL DI ANI (LAND COMED DI ANI)

EROSION AND SEDIMENT CONTROL PLAN (LAND COVER PLAN) E-1227 E-1228 GRADING SECTION VIEWS (STATION SECTION VIEWS) E-1229 GRADING SECTION VIEWS (ACCESS ROADS)

E-1230 GRADING SECTION VIEWS (SCC PROFILES) EROSION AND SEDIMENT CONTROL PLAN (PRE DRAINAGE AREAS) E-1231 E-1232 EROSION AND SEDIMENT CONTROL PLAN (POST DRAINAGE AREAS)

E-1233 EROSION AND SEDIMENT CONTROL DETAILS E-1234 EROSION AND SEDIMENT CONTROL DETAILS

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AMERICAN ELECTRIC POWER ORINOCO STATION BELFRY

EROSION AND SEDIMENT CONTROL PLAN SOIL MAPS & DESCRIPTIONS ENG: AKS SCALE: NONE DR: AKS WO#: 101484400 APPD: LKM DATE: 06/14/2024 AMERICAN

ELECTRIC POWER APPR DR ENG CK ISSUE#

(2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. NO DATE REVISION DESCRIPTION

1 RIVERSIDE PLAZA COLUMBUS, OH 43215 NO. E-1222

CADFILEPATH

KENTUCKY

DEMOLITION NOTES:

- 1. CONTRACTOR TO MAKE ARRANGEMENTS WITH AMERICAN ELECTRIC POWER TO SHUT OFF ELECTRICAL POWER TO ALL AFFECTED AREAS PRIOR TO PERFORMING DEMOLITION OPERATIONS.
- 2. CONTRACTOR SHALL CONTACT MISS UTILITY (OR SIMILAR LOCATOR SERVICE) TO CONFIRM UTILITY LOCATIONS BEFORE BEGINNING CONSTRUCTION, CONTRACTOR SHALL VERIFY LOCATIONS AND / OR PRESENCE OF EXISTING UTILITIES.
- 3. VERIFY THAT ELECTRICAL CONNECTIONS AND ANY OTHER UTILITIES HAVE BEEN DISCONNECTED & CAPPED PROPERLY.
- 4. CONTRACTOR TO PROPERLY GROUND, DISCONNECT, REMOVE, SEAL OR CAP ELECTRICAL EQUIPMENT, WIRING, ETC. BEFORE THE REMOVAL OF STRUCTURAL COMPONENTS.
- 5. AMERICAN ELECTRIC POWER PERSONNEL SHALL VALIDATE CONTRACTOR'S ELECTRICAL DEMOLITION OPERATIONS FOR SAFETY. CONTRACTOR SHALL NOT PROCEED WITH STRUCTURAL DEMOLITION EXISTING UTILITY POLE (TYP.) WITHOUT SIGN-OFF FROM UTILITIES' DULY AUTHORIZED REPRESENTATIVE.
- 6. CONTRACTOR SHALL CONDUCT DEMOLITION OPERATIONS IN A MANNER AS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO EXISTING STRUCTURES & FACILITIES DESIGNATED TO REMAIN.
- 7. ERECT TEMPORARY PROTECTION, AS REQUIRED BY OSHA STANDARDS, LATEST EDITION TO PROTECT SURROUNDING AREAS.
- 8. ERECT & MAINTAIN DUST CONTROL MEASURES DURING DEMOLITION OPERATIONS, SUCH AS WATER MIST, TEMPORARY ENCLOSURES, AND OTHER SUITABLE MATERIALS TO PREVENT THE SPREAD OF DUST & DIRT PARTICLES.
- 9. PROVIDE TEMPORARY WEATHER PROTECTION, DURING INTERVAL BETWEEN DEMOLITION & REMOVAL OF EXISTING CONSTRUCTION, AND ON EXTERIOR SURFACES OF NEW CONSTRUCTION TO ENSURE NO WATER LEAKAGE OR DAMAGE OCCURS.
- 10.COVER & PROTECT ALL CONDUIT, WIRING & EQUIPMENT DESIGNATED TO REMAIN.
- 11.REMOVE STRUCTURAL FRAMING MEMBERS & LOWER TO GROUND BY METHOD SUITABLE TO AVOID FREE FALL AND TO PREVENT GROUND IMPACT OR DUST GENERATION.
- 12.DO NOT USE CUTTING TORCHES FOR STURCTURAL DEMOLITION WITHOUT WRITTEN AUTHORIZATION FROM AMERICAN ELECTRIC POWER.
- 13.DEMOLISH AND/OR REMOVE DRILLED CONCRETE PIER FOUNDATIONS IN SECTION LENGTHS NECESSARY TO AVOID CONFLICT WITH OVERHEAD OR ADJACENT STRUCTURES, WIRES, ETC.
- 14.BREAK UP & REMOVE CONCRETE SLABS ON GRADE IN PIECES SUITABLE FOR DUMP TRUCK LOADING & DISPOSAL.
- 15.DISPOSE OF DEMOLISHED ITEMS & MATERIALS PROPERLY. ON-SITE STORAGE OR SALE OF REMOVED ITEMS IS PROHIBITED.
- 16.ALL BACKFILL MATERIAL FOR VOIDED AREAS RESULTING FROM DEMOLITION SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN ELECTRIC POWER DOCUMENT NO. SS-160102, "TECHNICAL SPECIFICATION FOR SUBSTATION AND SWITCHING STATION CONSTRUCTION."

DEMOLITION KEY		
ITEM	NOTES	
<u>D</u> 1	REMOVE EXISTING GRAVEL	
<u>/D2</u>	REMOVE EXISTING ASPHAULT	
D3	RELOCATE EXISTING UTILITY POLE	

EXISTING PIPE TABLE						
NAME	SIZE (IN)	TYPE	LENGTH (LF)	INVERT IN	INVERT OUT	SLOPE (%)
EX-P1	18	CMP	153	710.40	709.84	0.37%
EX-P2	30	CMP	122	709.69	708.59	0.90%

STREAM TABLE				
STREAM ID	TYPE	DISTURBANCE (LF)	DESCRIPTION	
SKY-AGS-052	INT	0	INTERMITTENT	

WETLAND TABLE				
WETLAND ID	TYPE	JURISDICTION	ACREAGE	DISTURBANCE (AC)
WKY-AGS-001	PSS	ADJACENT	0.024	0.024
WKY-AGS-002	PEM	ABUTTING	0.083	0.008
WKY-AGS-003	PEM	ADJACENT	0.017	0
WKY-AGS-004	PEM/PSS	WETLAND	0.061	0.061
WKY-AGS-005	PEM	WETLAND	0.004	0.004
WKY-AGS-006	PEM	ADJACENT	0.044	0.044
TOTAL:			0.233	0.141

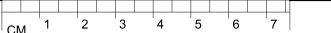
REFERENCE DRAWING:

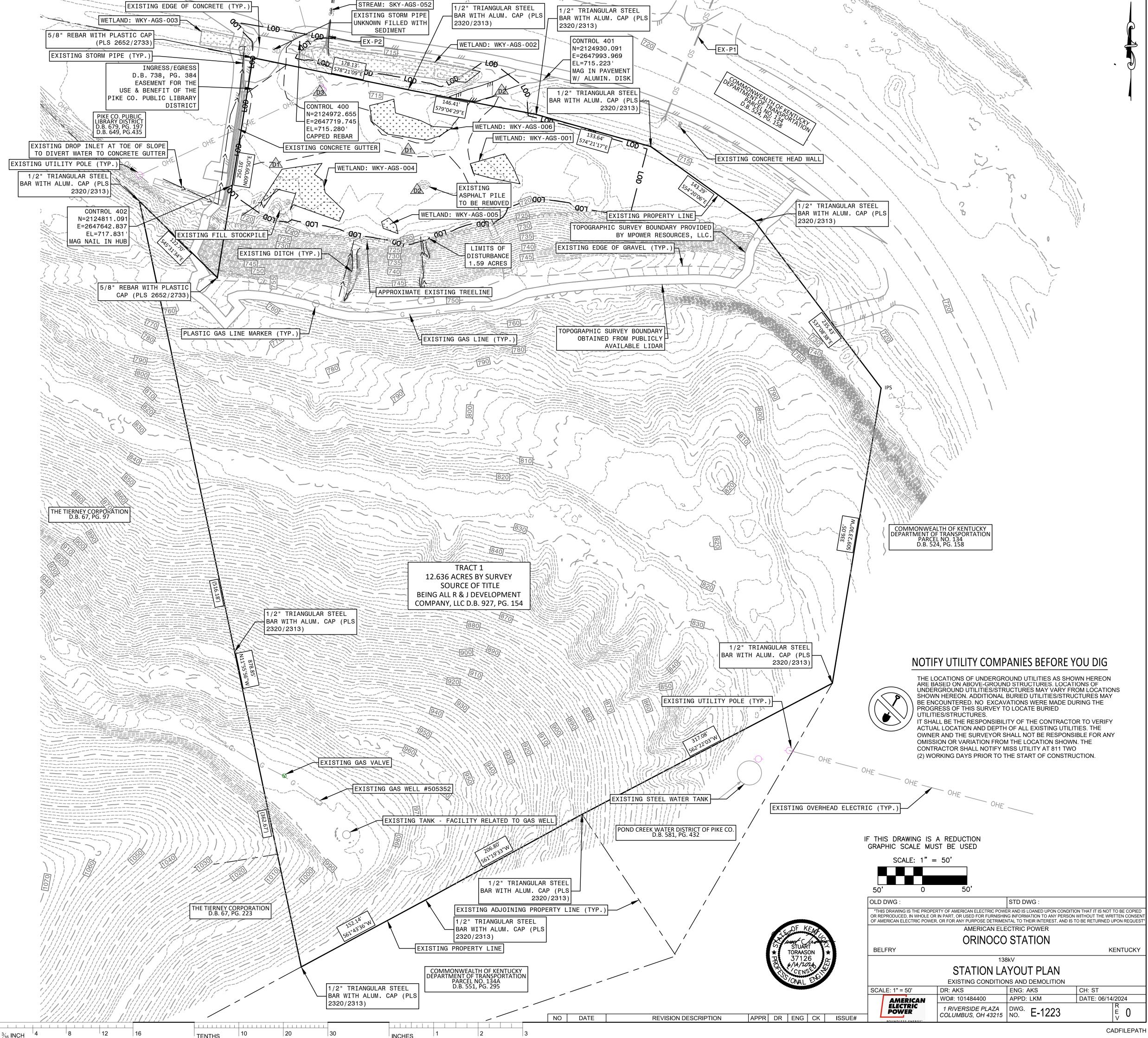
E-1220	COVER SHEET
F 1001	CENEDAL NO

L-1220	COVER SHEET			
E-1221	GENERAL NOTES	(WITH MINIMUM	STANDARDS)	

E-1222 EROSION AND SEDIMENT CONTROL PLAN (SOILS MAP & DESCRIPTIONS)

E-1232 EROSION AND SEDIMENT CONTROL DETAILS E-1233 E-1234 EROSION AND SEDIMENT CONTROL DETAILS





INCHES

STATION LAYOUT PLAN (EXISTING CONDITIONS AND DEMOLITION) *E-1223

E-1224 STATION LAYOUT PLAN

E-1225 GRADING PLAN (PHASE I - EROSION AND SEDIMENT CONTROL PLAN)

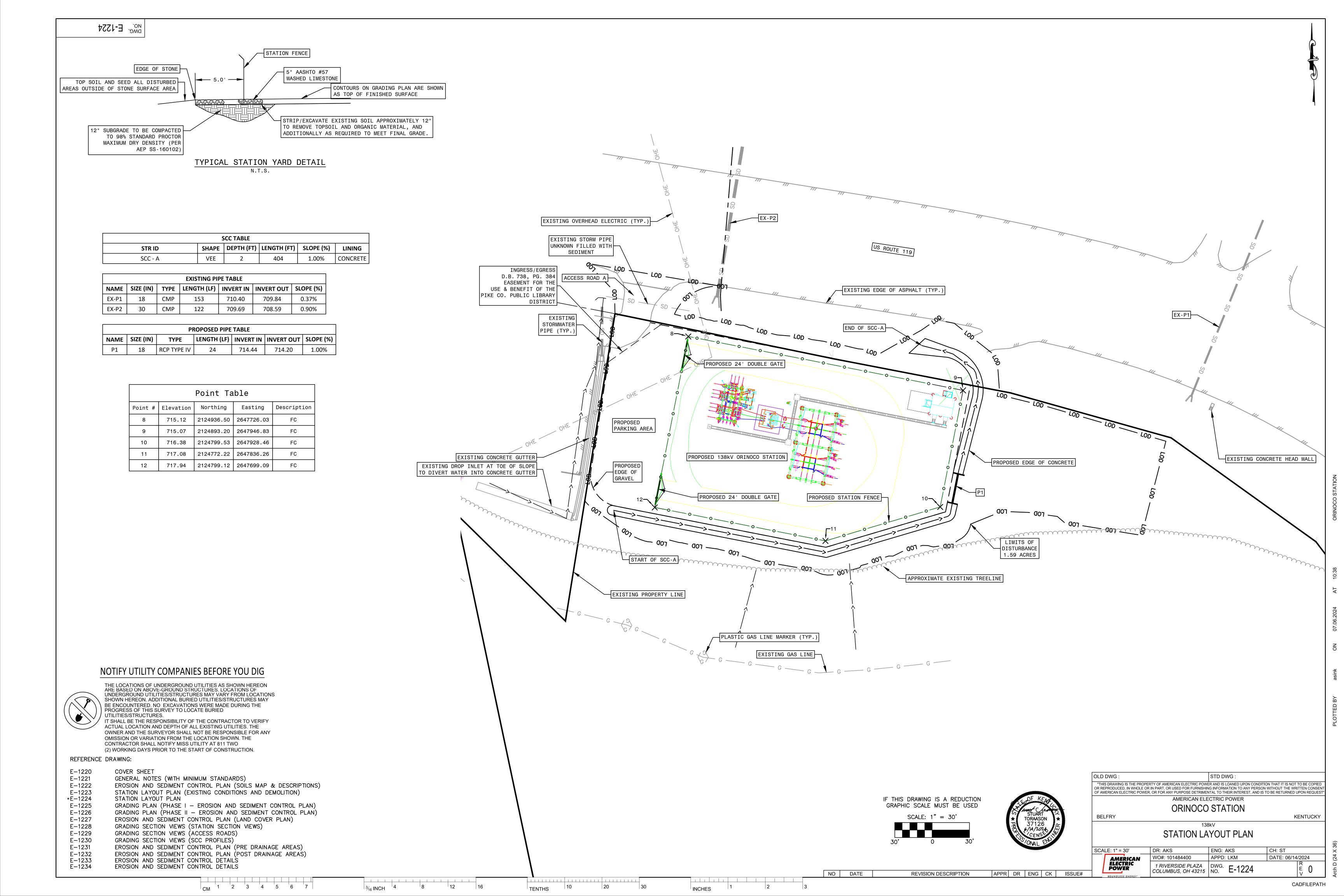
E-1226 GRADING PLAN (PHASE II - EROSION AND SEDIMENT CONTROL PLAN) E-1227

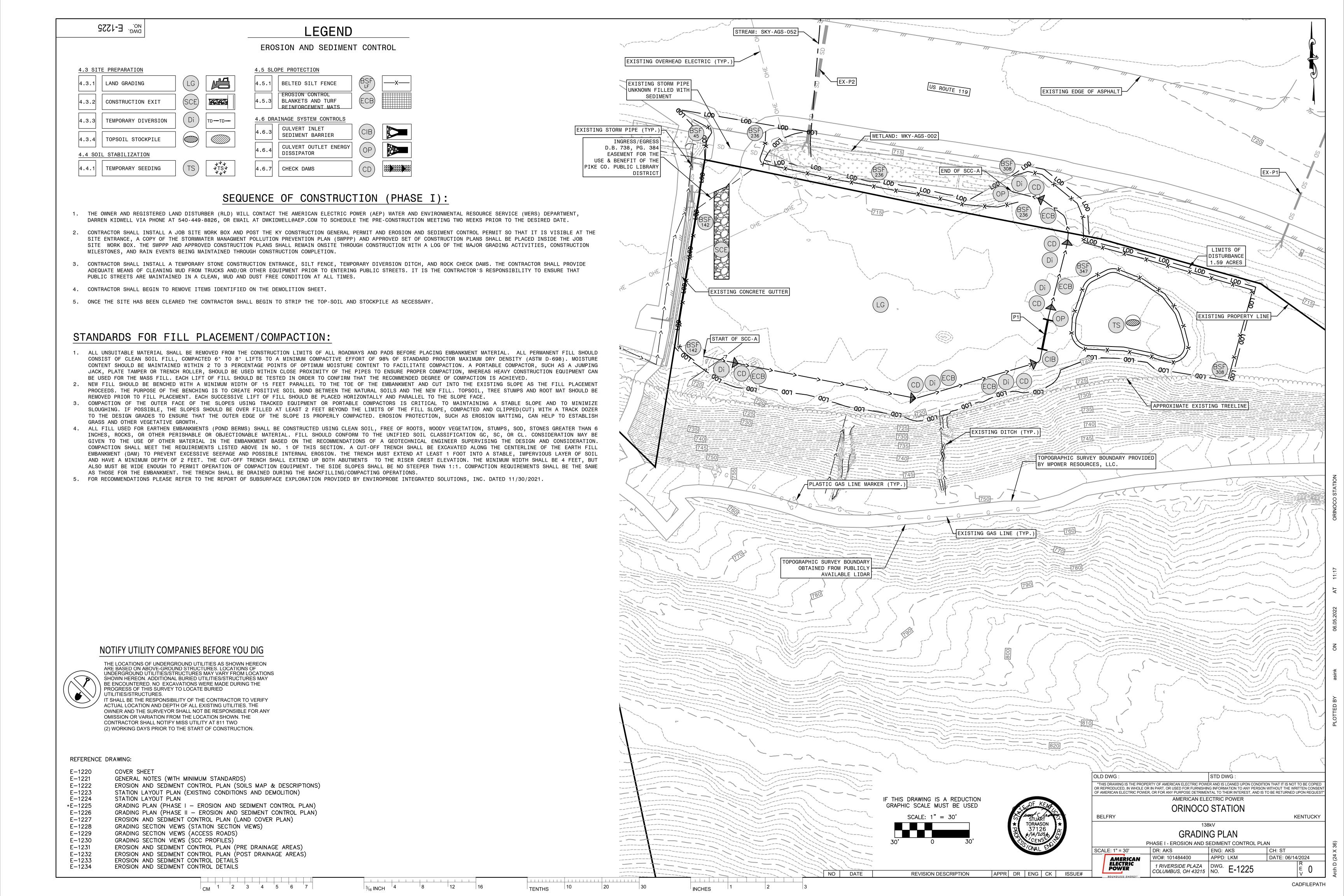
EROSION AND SEDIMENT CONTROL PLAN (LAND COVER PLAN) GRADING SECTION VIEWS (STATION SECTION VIEWS)

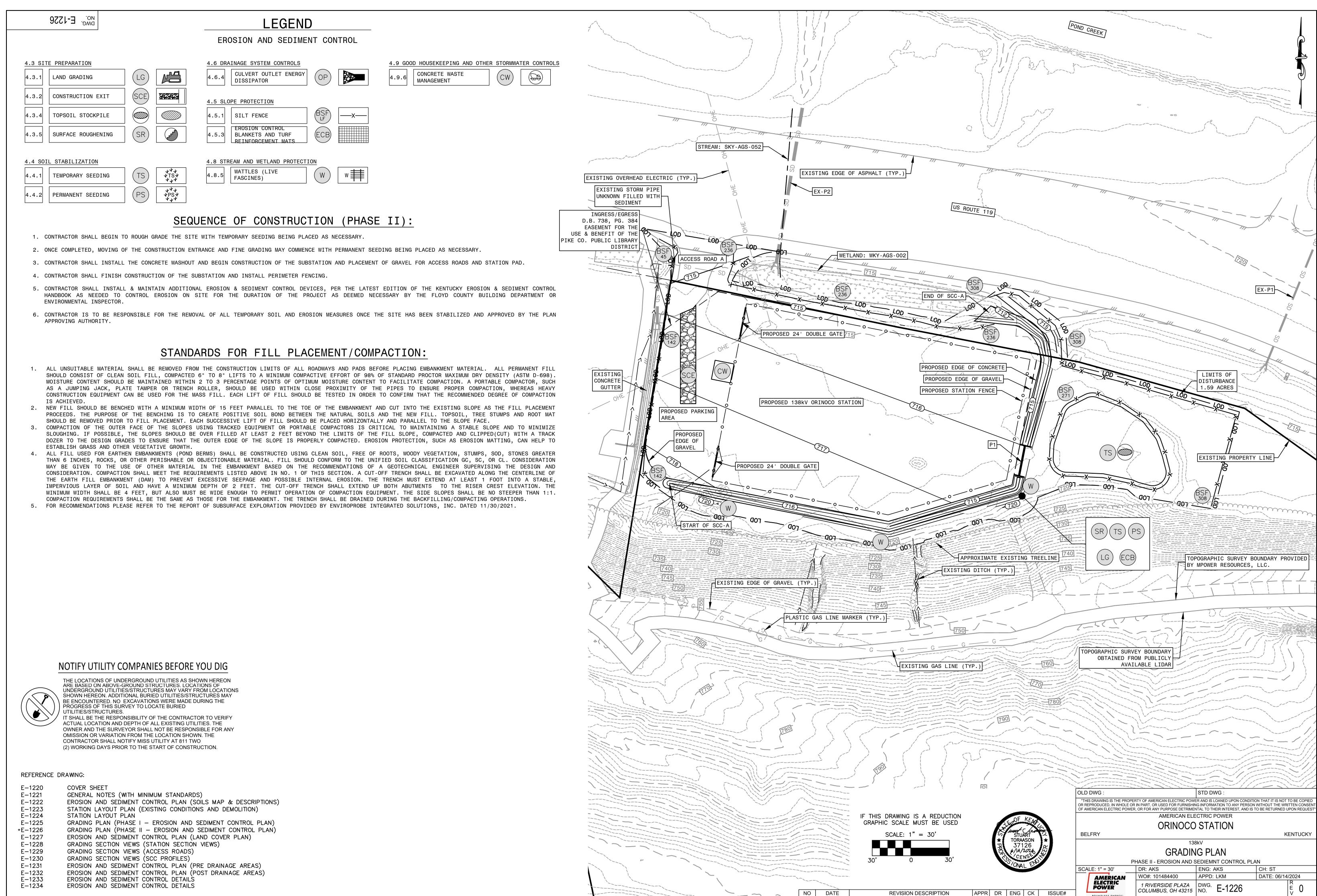
E-1228 E-1229 GRADING SECTION VIEWS (ACCESS ROADS)

E-1230 GRADING SECTION VIEWS (SCC PROFILES)

E-1231 EROSION AND SEDIMENT CONTROL PLAN (PRE DRAINAGE AREAS) EROSION AND SEDIMENT CONTROL PLAN (POST DRAINAGE AREAS)





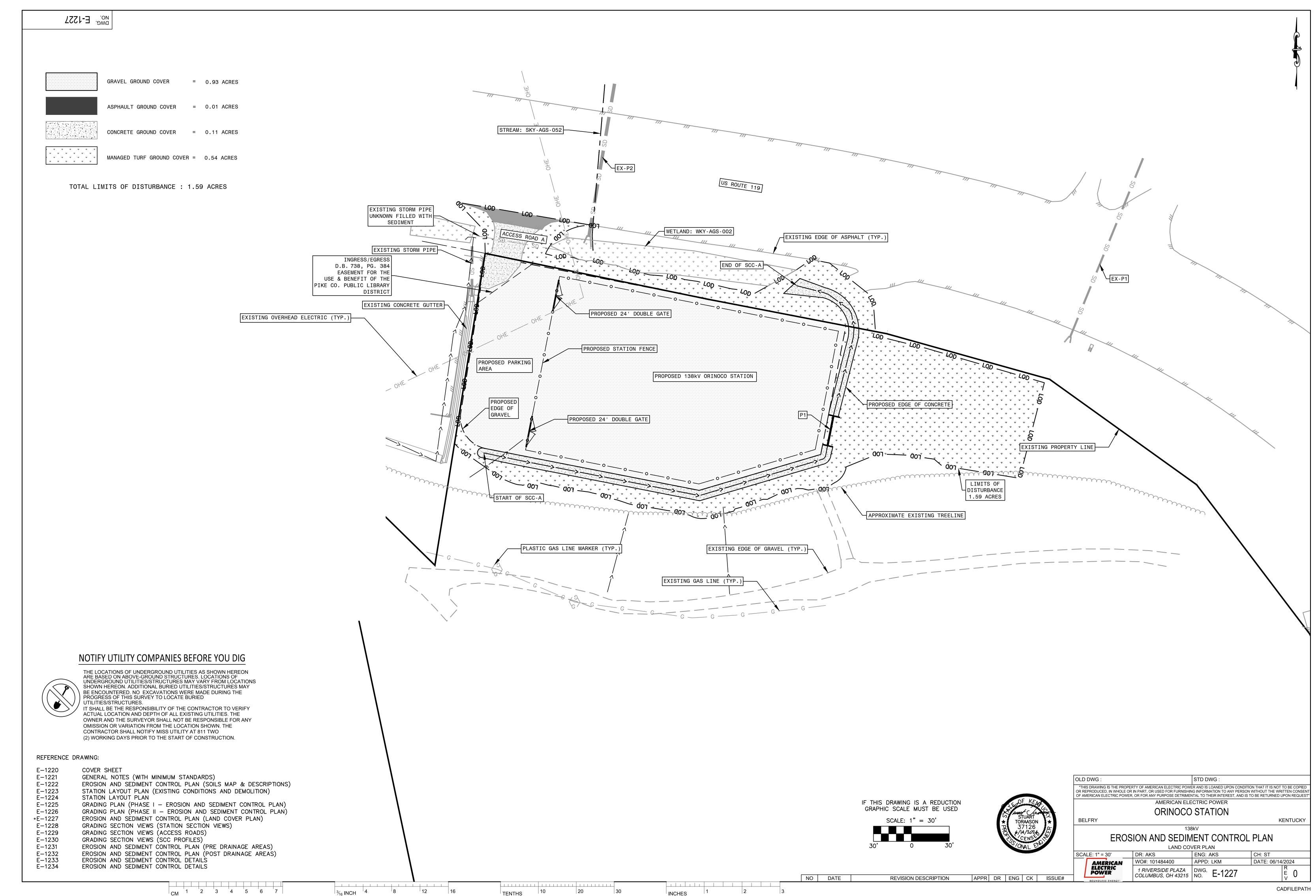


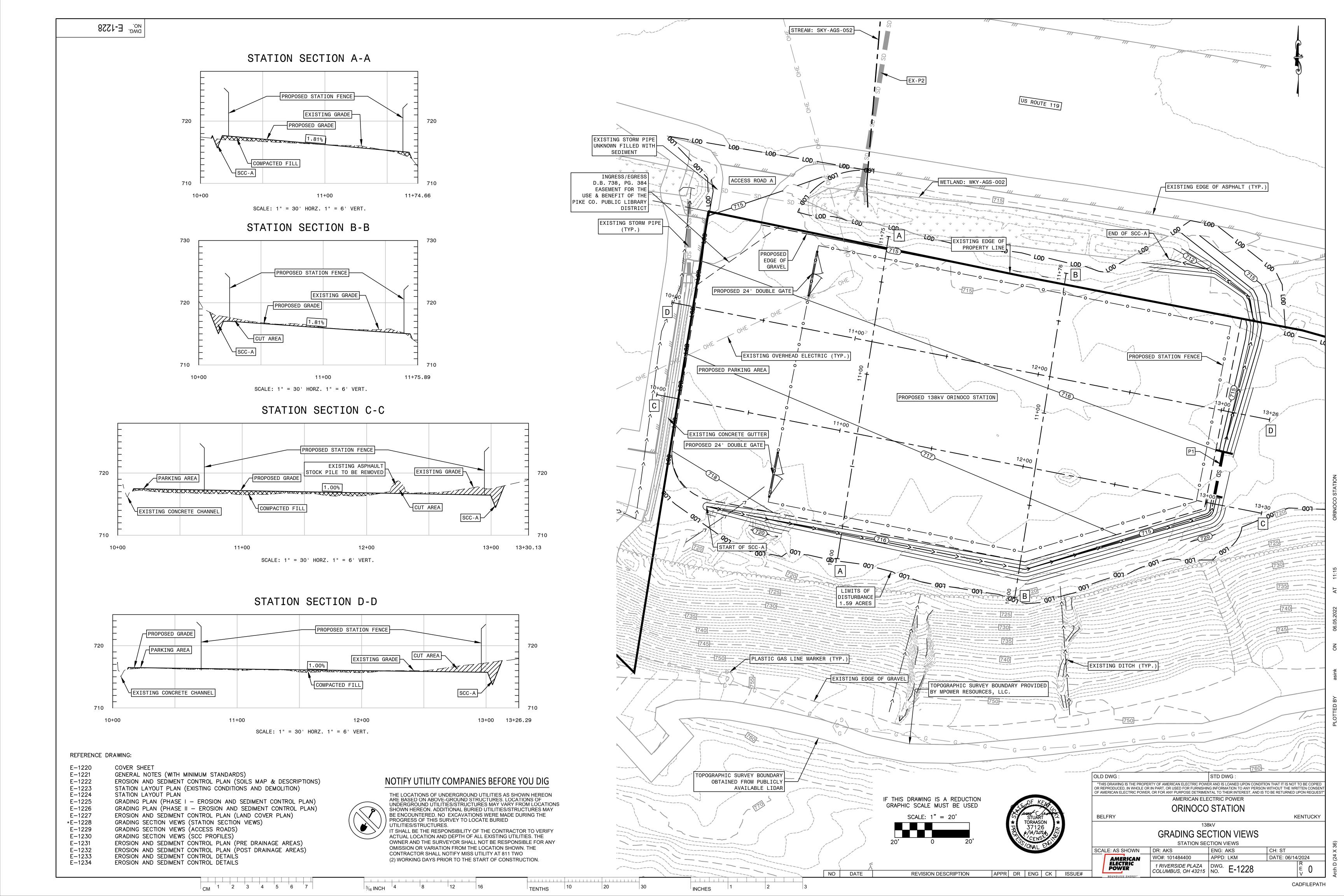
CADFILEPATH

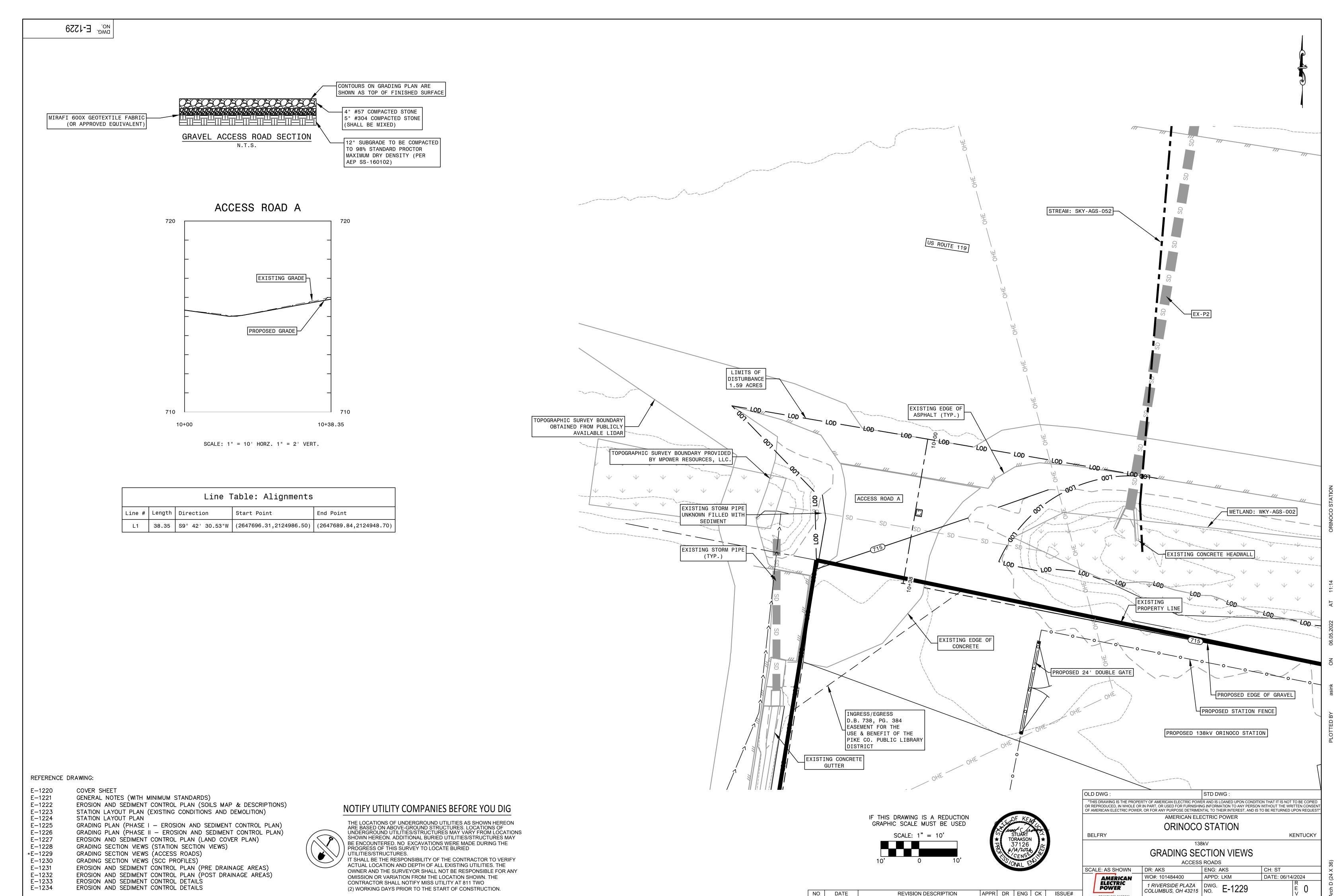
CM 1 2 3 4 5 6 7

 $\frac{3}{16}$ INCH $\frac{1}{4}$ $\frac{1}{8}$ $\frac{1}{12}$ $\frac{1}{16}$

______ INCHES







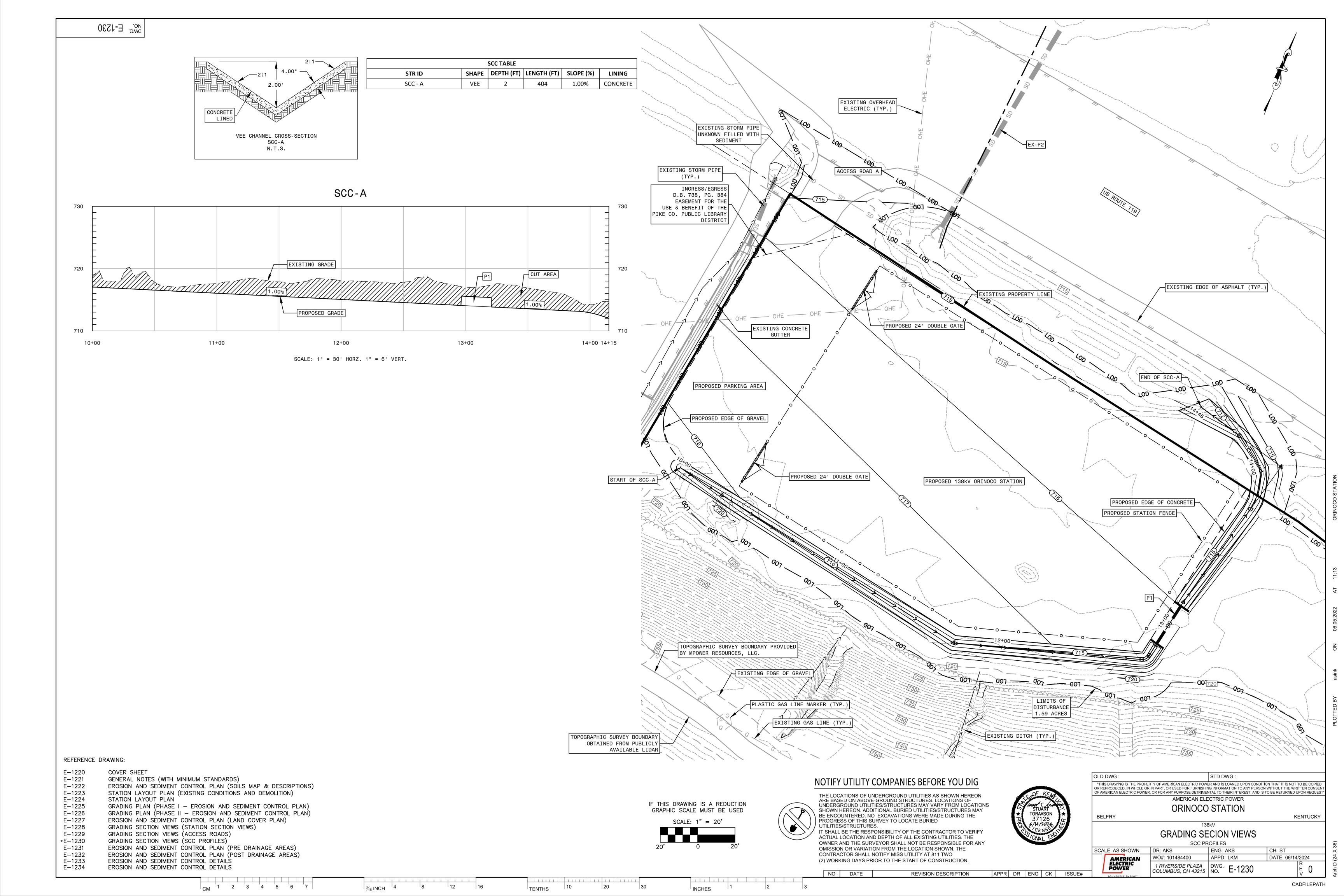
INCHES 1

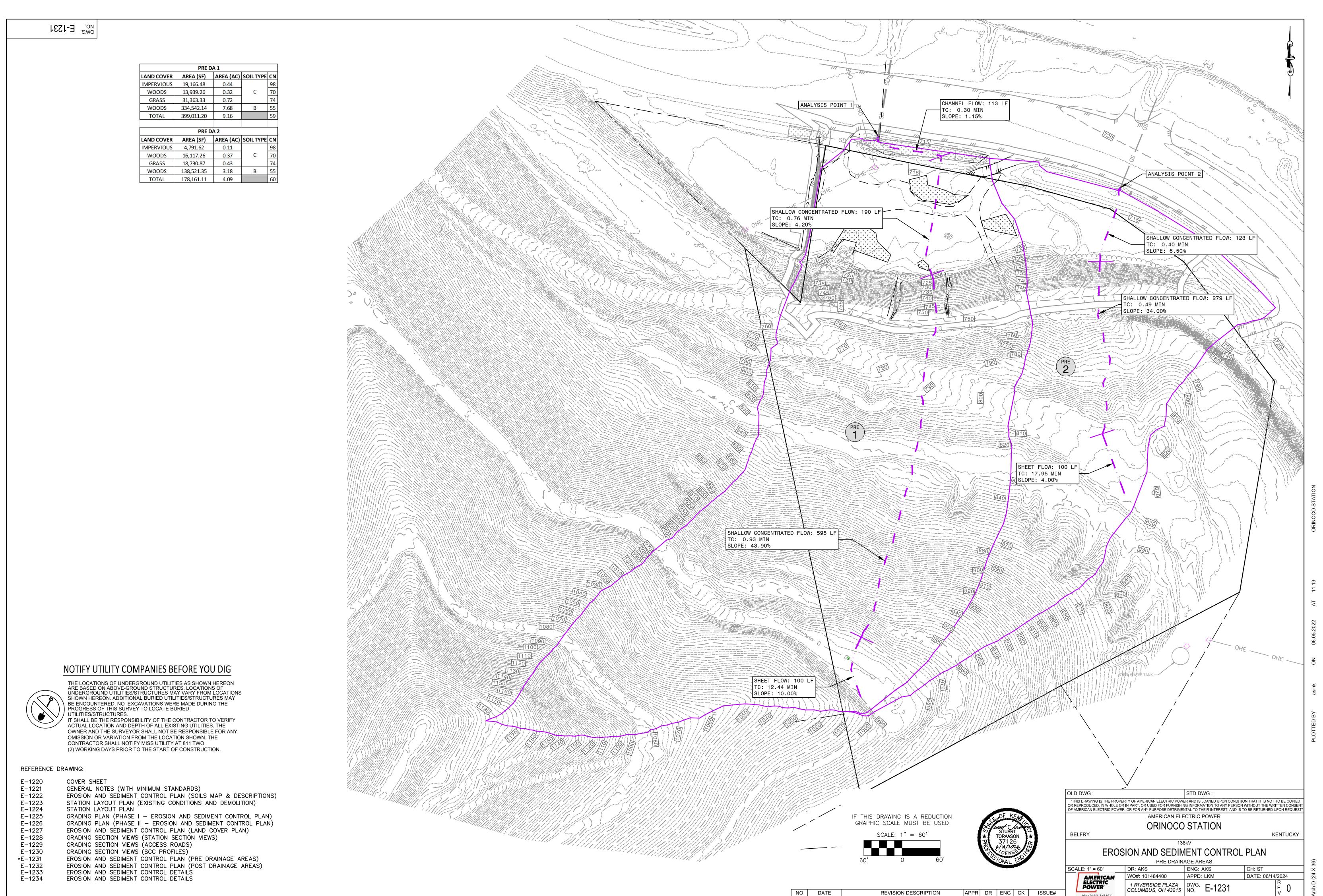
 $\frac{3}{16}$ INCH $\frac{1}{4}$ $\frac{1}{8}$ $\frac{1}{12}$ $\frac{1}{16}$

CM 1 2 3 4 5 6 7

REVISION DESCRIPTION

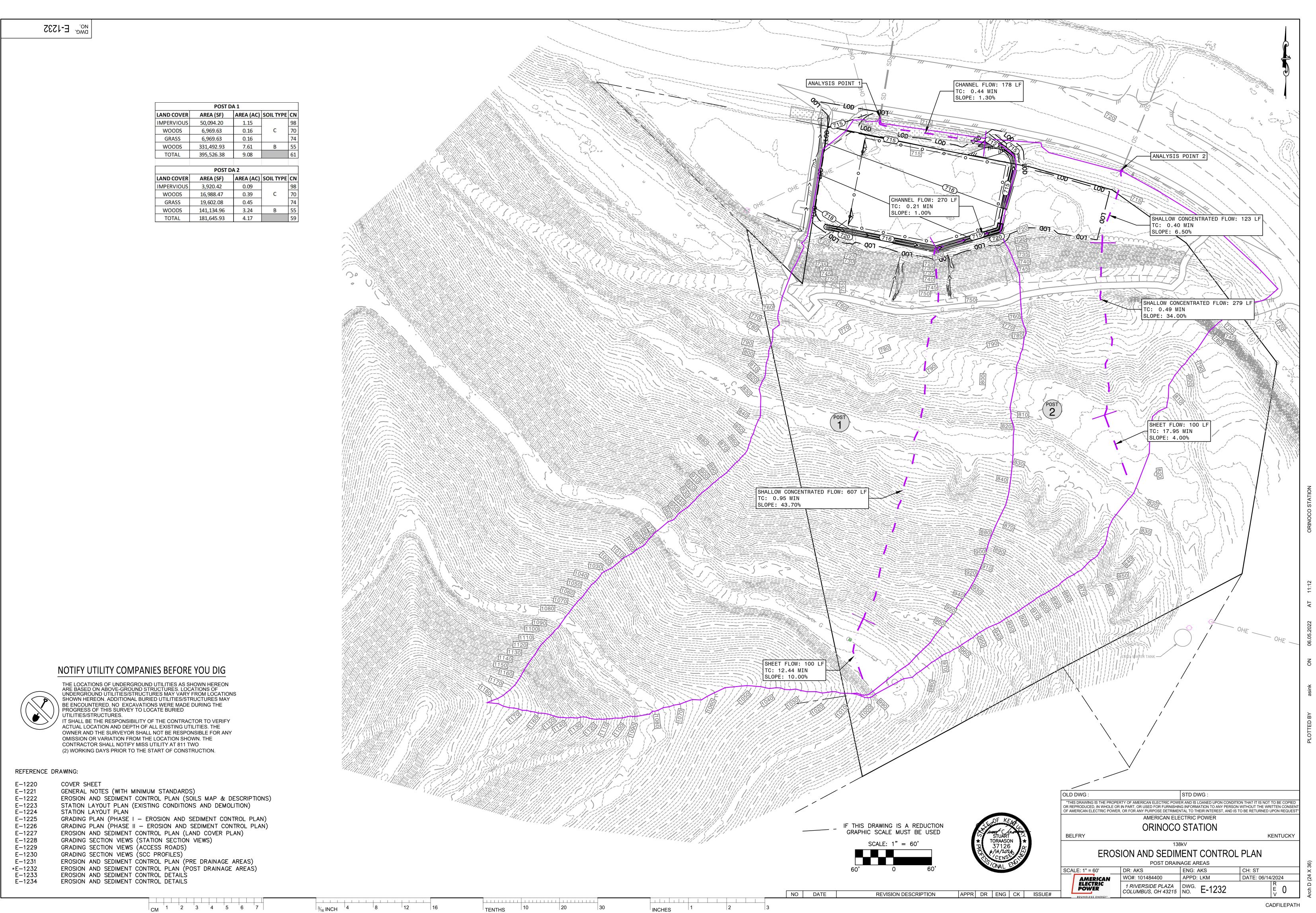
APPR DR ENG CK ISSUE#





| 3₁₆ INCH | 4 | 8 | 12 | 16

CM 1 2 3 4 5 6 7



RIGHT-OF-WAY.

SOURCE: SALIX APPLIED EARTHCARE EROSION DRAW 5.0

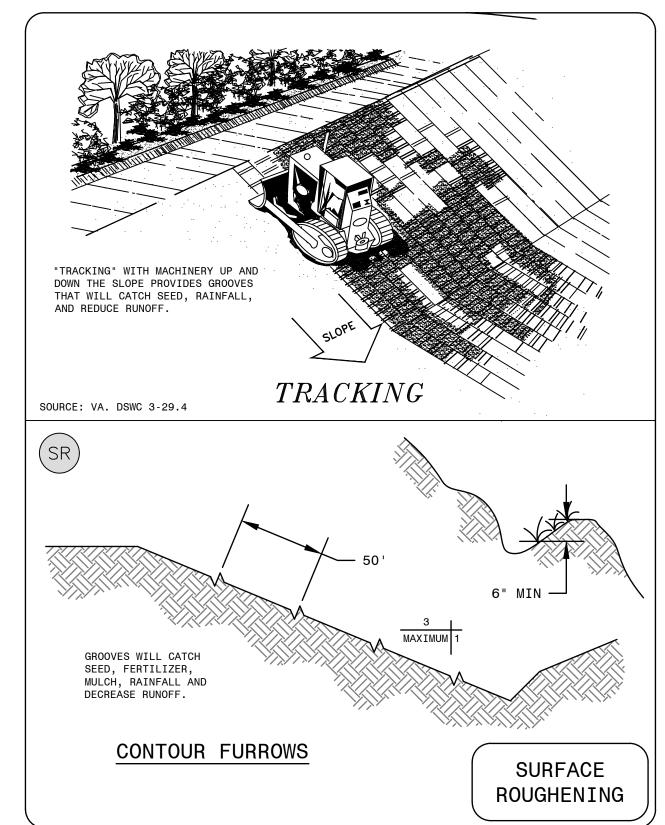
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT MEASURES USED TO TRAP SEDIMENT 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC

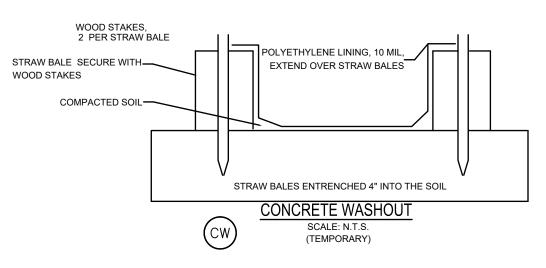
. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH

CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

CONSTRUCTION

ENTRANCE





1. CONCRETE WASHOUT SYSTEM WILL CONTAIN WASHOUT WATER WHEN CHUTES & HOPPERS ARE RINSED FOLLOWING CONCRETE DELIVERY TO THE CONSTRUCTION SITE. 2. SCRAP AS MUCH MATERIAL FROM CHUTES AS POSSIBLE BEFORE WASHING THEM. USE

NON-WATER CLEANING METHODS TO MINIMIZE THE CHANCE FOR WASTE TO FLOW OFF SITE. 3. DO NOT BACK FLUSH EQUIPMENT AT THE PROJECT SITE, IT SHOULD BE RESTRICTED TO PLANT. 4. DO NOT USE ADDITIVES WITH WASH WATER. DO NOT USE ACID OR SOLVENTS.

5. FURNISH A SIGNAGE FOR THE CONCRETE WASHOUT AREA. 6. FURNISH ORANGE SAFETY FENCING OR EQUAL.

POLYETHYLENE LINING, 10 MIL, _____ EXTEND OVER STRAW BALES STRAW BALE SECURE WITH ____ WOOD STAKES WOOD STAKES, 2 PER STRAW BALE METAL PINS OR STAPLES -TO SECURE LINING TO STRAW BALES

Seeding Rates for Temporary Site Protection			
March 1 to October 31	Per 1,000 Square Feet	Per Acre	
1. Oats	3 lbs.	120 lbs.	
2. Perennial Ryegrass	1 lbs.	40 lbs.	
3. Tall Fescue	1 lbs.	40 lbs.	
4. Wheat	3 lbs.	120 lbs.	
5. Annual Rye	3 lbs.	120 lbs.	
November 1 to February 28	Per 1,000 Square Feet	Per Acre	
1. Annual Rye	3 lbs.	120 lbs.	
2. Wheat	3 lbs.	120 lbs.	
3. Perennial Ryegrass	1 lb.	40 lbs.	
4. Tall Fescue	3 lbs.	120 lbs.	

Install the needed erosion control practices, such as diversion berms and ditches.

Seedbed Preparation

Spread lime (in lieu of a soil test recommendation) on acid soil and subsoil, at a rate of one ton per acre of agricultural ground limestone. For best results, test the soil—this can reduce the expense of unneeded lime and fertilizer and potential excess nutrient loss through runoff and leaching. Fertilizer (in lieu of a soil test recommendation) should be applied at a rate of no more than 800 pounds per acre of 10-10-10 analysis. For best results, test the soil to determine fertilizer requirements. In limestone areas with streams and rivers impacted by high algae concentrations, use 10-0-10 fertilizer. Work the lime and fertilizer into the soil with a disk harrow, springtooth harrow, or other suitable field equipment to a depth of 4 inches. On sloping land, the final operation must be on the contour.

Kentucky Transportation Cabinet Seed Mixes

Mixture Type	Seed Mixture
Mixture No. I	75% Kentucky 31 Tall Fescue
	10% Red Top
	5% White Dutch Clover
	10% Ryegrass (perennial)
Mixture No. III	30% Kentucky 31 Tall Fescue
	15% Red Top
	15% Partridge Pea
	20% Sericea Lespedeza
	10% Sweet Clover – Yellow
	10% Ryegrass

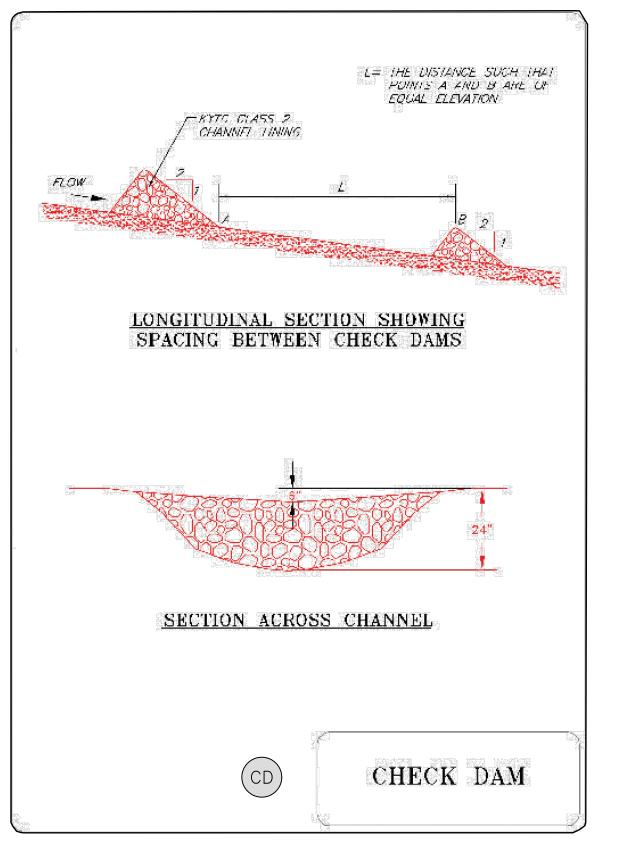
KYTC does not specify the seeding rate but requires that sufficient seed be applied to ensure a "dense, uniform vegetative cover."

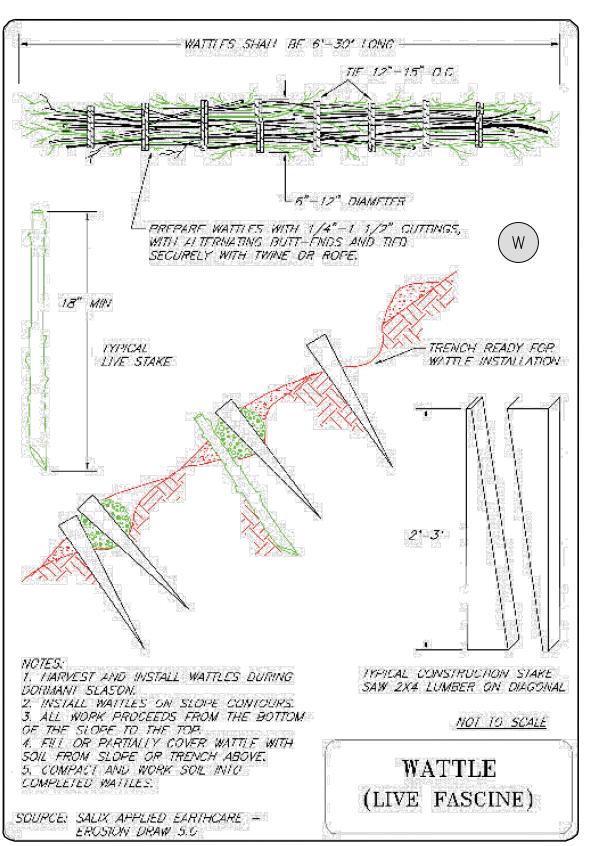
Recommended Seeding Rates and Other Information for Various Species and Seed

Seed species & mixtures	Seeding rate/acre	Per 1000 sq. ft	Soil pH	Other Information	
Seed and seed mixtures for	relatively flat or slight	ly sloping a	reas		
Perennial ryegrass	25 to 35 lbs	1 lb	5.6 to 7.0	Apply lime at 2 tons per acre if soil	
+ tall fescue	15 to 30 lbs	1 lb	5.5 to 7.5	pH is below 5.5; use 400-800 lb	
Tall fescue	40 to 50 lbs	1.5 lb		fertilizer (10-10-10) on poor soils. Use wildflower mixes to save on mowing	
+ ladino or white clover	1 to 2 lbs	2 oz		and watering costs.	
Steep slopes, banks, cuts, a	and other low mainten	ance areas (not mowed)		
Smooth bromegrass	25 to 35 lbs	1 lb	5.5 to 7.5	Track steep slopes with dozer up and	
+ red clover	10 to 20 lbs	0.5 lb		down hill before seeding. Mulch slopes	
Tall fescue	40 to 50 lbs	1 lb	5.5 to 7.5	after seeding with 2 to 3 tons of straw or 6 tons of wood chips per acre. Use	
+ white or ladino clover	1 to 2 lbs	2 oz		tackifier on mulch, disk it in, or punch	
Orchardgrass	20 to 30 lbs	1 lb	5.6 to 7.0	in with sheep-foot roller. Disk or sheep	
+ red clover	10 to 20 lbs	0.5 lb		foot on the contour (across slope, on the level). For extremely steep slopes,	
+ ladino clover	1 to 2 lbs	2 oz		use erosion control blankets after	
Crownvetch	10 to 12 lbs	0.25 lb	5.6 to 7.0	seeding. Use 20" spacing on blanket	
+ tall fescue	20 to 30 lbs	1 lb		staples	
Seed species & mixtures	Seeding rate/acre	Per 1000 sq. ft	Soil pH	Other Information	

Technical Specifications for BMPs

Perennial ryegrass (turf) 45 to 60 lbs 2 lb 5.6 to 7.0





6" TYP. HEADWALL	ONS AND	QUA	ANTIT	IES	CURIO	- VARDC
TO CLO F ROADWAY 9" TYP. BECTION Y.Y SECTION Y.Y SECTION X.X 12" 11-8" 11-2" 41-0" 22-6" 15" 11-81½" 11-2½" 41-3" 22-9" 16" 11-9" 11-3" 41-6" 31-0" 12-1" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 18" 11-9" 11-3" 51-0" 31-6" 12" 11-9½" 11-3½" 51-3" 31-9" 12" 11-9½" 11-3½" 51-3" 31-9" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 41-9" 31-3" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 12" 11-9½" 11-3½" 51-9" 31-9" 11-9½" 11-3½" 51-9" 31-9" 11-9½" 11-3½" 51-9" 31-9" 11-9½"	DWALL DIMENS	SIONS			CON	YARDS CRETE ONE
STANDARD 15" 1-8½ 1-2½ 4-3" 2-9"	E F	G	H	J		OWALL (ROCK)
STANDARD 18" 1-9" 1-3" 4-6" 3-0"	_ _	<u> </u>	<u> </u>	6'-0''	1.05	0.87
STANDARD ELEVATION VIEW CONSTRUCT PARALLEL TO CL OF ROADWAY 9" H 1 6" TO L OF ROADWAY SECTION Y-Y SECTION X-X SECTION X-X STANDARD 12" 11-9½" 11-3		_	_	6'-9''	1.25	1.03
21" 1'-9½" 1'-10" 1'-4" 5'-0" 3'-5" 3'-5" 2'' 1'-10½" 1'-4½" 5'-5" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 4'-0" 2'-5" 12" 1'-10½" 1'-4½" 5'-5" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 13" 1'-10½" 1'-4½" 5'-5" 13" 3'-9" 12" 13" 13" 13" 13" 13" 13" 13" 13" 13" 13		_	_	7'-6''	1.48	1.23
270 1-101/20 1-41/20 5-30 3-90 120 1-87/20 1-127/20 4-60 3-00 150 1-87/20 1-127/20 4-60 3-00 151 1-87/20 1-127/20 4-120 3-30 152 1-127/20 1-127/20 4-120 3-120 153 1-127/20 1-127/20 1-127/20 4-120 154 1-127/20 1-127/20 1-127/20 4-120 155 1-127/20 1-127/20 1-127/20 4-120 156 1-127/20 1-127/20 4-120 157 1-127/20 1-127/20 4-120 158 1-127/20 1-127/20 4-120 159 1-127/20 1-127/20 4-120 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20 1-127/20 150 1-127/20	_ _		_	8'-3''	1.73	1.46
ELEVATION VIEW TO CL OF ROADWAY 9"	_ _			9'-0''	1.99	1.69
ELEVATION VIEW CONSTRUCT PARALLEL TO CL OF ROADWAY 9" H 1 6" 1-8½" 1-9½" 1-3½" 5-0" 3-6" 3-9"				9'-9''	2.27	1.93
TO CL OF ROADWAY 9" H 1 6" 21" 1'-91/2" 1'-31/2" 5'-3" 3'-9" 24" 1'-10" 1'-4/2" 5'-6" 4'-9" 27" 1'-10/2" 1'-31/2" 4'-9" 3'-3" 29" 1'-10/2" 1'-31/2" 4'-9" 3'-3" 21" 1'-91/2" 1'-31/2" 4'-9" 3'-3" 21" 1'-91/2" 1'-31/2" 4'-9" 3'-3" 22" 1'-10/2" 1'-31/2" 4'-9" 3'-3" 24" 1'-10" 1'-4/2" 5'-0" 3'-6" 21" 1'-91/2" 1'-31/2" 4'-9" 3'-3" 24" 1'-10" 1'-4/2" 5'-0" 3'-6" 27" 1'-10/2" 1'-4/2" 5'-3" 3'-9" 24" 1'-10" 1'-4/2" 5'-0" 3'-6" 21" 1'-91/2" 1'-31/2" 4'-9" 3'-3" 24" 1'-10" 1'-4/2" 5'-0" 3'-6" 21" 1'-91/2" 1'-31/2" 4'-9" 3'-3" 24" 1'-10" 1'-4/2" 5'-0" 3'-6" 21" 1'-91/2" 1'-31/2" 4'-9" 3'-3" 24" 1'-10" 1'-4/2" 5'-0" 3'-6" 21" 1'-91/2" 1'-31/2" 4'-9" 3'-3" 24" 1'-10" 1'-4/2" 5'-0" 3'-6" 21" 1'-91/2" 1'-31/2" 5'-0" 3'-6" 21" 1'-91/2" 1'-31/2" 5'-9" 4'-3" 3 FELL 4 1'-10" 1'-4/2" 5'-9" 4'-3" 1 THE DIMENSION MAY BE VARIED 9" 9" 1 THE DIMENSION OF CIRCULAR PIPE I ELLIPTICAL CONCIRCULAR PIPE I ELLIPTICAL CONCIRCU	_ _			7'-6''		1.23
TO CL OF ROADWAY 9" H 1 6" 21" 1'-9½" 1'-3½" 5'-3" 3'-9" 24" 1'-10" 1'-4" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 12" 1'-8" 1'-2½" 4'-0" 2'-6" 15" 1'-8½" 1'-2½" 4'-0" 2'-6" 15" 1'-8½" 1'-2½" 4'-9" 3'-3" 21" 1'-10½" 1'-4½" 5'-0" 3'-6" 21" 1'-9½" 1'-3½" 4'-9" 3'-3" 22" 1'-10½" 1'-4½" 5'-0" 3'-6" 21" 1'-9½" 1'-3½" 4'-9" 3'-3" 22" 1'-10½" 1'-4½" 5'-0" 3'-6" 24" 1'-10" 1'-4" 5'-6" 4'-0" 25" 1'-10½" 1'-4½" 5'-3" 3'-9" 26" 1'-10½" 1'-4½" 5'-3" 3'-9" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 24" 1'-10" 1'-4" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 29" 1'-10½" 1'-4½" 5'-9" 4'-3" 20" 1'-10½" 1'-4½" 5'-9" 4'-3" 20" 1'-10½" 1'-4½" 5'-9" 4'-9" 20" 1'-10½" 1'-4½" 5'-9" 4'-9" 20" 1'-10½" 1'-4½" 5'-9" 4'-9" 20" 1'-10½" 1'-4½" 5'-9" 4'-9" 20" 1'-10½" 1'-4½" 5'-9" 4'-9" 20" 1'-10½" 1'-4½" 5'-9" 4'-9" 20" 1'-10½" 1'-4½" 5'-9" 20" 1'-	_ _		_	8'-3''		1.43
9" H (1) 6" 24" 1'-10" 1'-4" 5'-6" 4'-0" 2'-6" 1'-10" 1'-4" 5'-9" 4'-3" 1'-10" 1'-4" 5'-9" 4'-3" 1'-10" 1'-4" 5'-9" 4'-3" 1'-10" 1'-4" 5'-9" 3'-3" 1'-10" 1'-4" 1'-4" 1'-4" 1'-4"	_ _	_		9'-0''	1.96	1.67
27" 1'-10½" 1'-4½" 5'-9" 4'-3" 12" 1'-8" 1'-2" 4'-0" 2'-6" 15" 1'-8½" 1'-2½" 4'-9" 3'-3" 21" 1'-9½" 1'-3½" 4'-9" 3'-3" 24" 1'-10" 1'-4" 5'-0" 3'-6" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 24" 1'-10" 1'-4" 5'-0" 3'-6" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 28	_ _			9'-9''		1.93
D STANDARD 18" 1'-2" 4'-0" 2'-6" 15" 1'-8½" 1'-2½" 4'-3" 2'-9" 15" 1'-9½" 1'-3½" 4'-9" 3'-3" 24" 1'-10" 1'-4½" 5'-3" 3'-9" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 15" 1'-8½" 1'-2½ 4'-9" 3'-3" 15" 1'-8½" 1'-2½ 4'-9" 3'-3" 15" 1'-8½" 1'-2½ 4'-9" 3'-3" 15" 1'-9½" 1'-3½" 5'-3" 3'-9" 24" 1'-10" 1'-4" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10" 1'-4½ 5'-9" 4'-3" 3" 15" 1'-9½" 1'-3½" 5'-3" 3'-9" 24" 1'-10" 1'-4½ 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 3" 1'-9½" 1'-3½" 5'-9" 4'-3" 4" 1'-10" 1'-4½ 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 3" 1'-9½" 1'-10½" 1'-4½" 5'-9" 4'-3" 4" 1'-10" 1'-4½" 5'-9" 4'-3"	_ _	_		10'-6"		2.19
15" 1'-81½" 1'-2½" 4'-3" 2'-9"		3'-0''	 ' 2'-6''	4'-8"	1.19	0.99
STANDARD 18" 1'-9" 1'-3" 4'-6" 3'-0"	2'-3" 3'-11½'			5'-2½"		1.19
ELL 21" 1'-9½" 1'-3½" 4'-9" 3'-3" 24" 1'-10" 1'-4" 5'-0" 3'-6" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 24" 1'-10" 1'-4" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10" 1'-4½" 5'-9" 4'-3" 24" 1'-10" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-9" 4'-3" 24" 1'-10½" 1'-4½" 5'-9" 4'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 4'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9" 3'-9" 24" 1'-10½" 1'-4½" 5'-9" 3'-9"	2'-6" 4'-3"	4'-0''				1.41
24" 1'-10" 1'-4" 5'-0" 3'-6" 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 12" 1'-8½" 1'-2½" 4'-6" 3'-0" 15" 1'-8½" 1'-2½" 4'-9" 3'-3" 15" 1'-9½" 1'-3½" 5'-3" 3'-9" 24" 1'-10" 1'-4½ 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" A 9" TYP. B O O O O O O O O O O O O	2'-9" 4'-61/2"				1.93	1.63
2 27" 1'-10½" 1'-4½" 5'-3" 3'-9" 12" 1'-8" 1'-2" 4'-6" 3'-0" 15" 1'-8½" 1'-2½" 4'-9" 3'-3" 18" 1'-9" 1'-3" 5'-0" 3'-6" 18" 1'-9½" 1'-3½" 5'-3" 3'-9" 12" 1'-10" 1'-4" 5'-6" 4'-0" 12" 1'-10½" 1'-4½" 5'-9" 4'-3" 12" 1'-10½" 1'-4½" 1'-10½" 1'-4½" 1'-10½" 1'-4½" 1'-10½" 1'-4½" 1'-10½" 1'-4½" 1'-10½" 1'-4½" 1'-10½" 1'-4½" 1'-10½" 1'-4½" 1'-10½" 1'-	3'-0" 4'-10"		' 3'-6''	6'-10''		1.89
SECTION Y-Y SECTION X-X B A B A F SECTION X-X SEC	3'-3" 5'-1½"	5'-6''	' 3'-9''	7'-4½"	2.52	2.15
SECTION Y-Y SECTION X-X RAISED ELL 18" 1'-9" 1'-3" 5'-0" 3'-6" 21" 1'-9½" 1'-3½" 5'-3" 3'-9" 24" 1'-10" 1'-4" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" A 9" TYP. A 9" TYP. B B C TION X-X RAISED ELL 18" 1'-9" 1'-3" 5'-0" 3'-6" 21" 1'-3½" 5'-3" 3'-9" 3	2'-9" 4'-5"	3'-9''	' 3'-3''	5'-5''	1.62	1.37
SECTION Y-Y SECTION X-X RAISED ELL 21" 1'-9½" 1'-3½" 5'-0" 3'-6" 21" 1'-9½" 1'-3½" 5'-3" 3'-9" 224" 1'-10" 1'-4½" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 1'-10½" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9" 4'-3" 1'-4½" 5'-9	3'-0" 4'-8½"	4'-3''	3'-6''	5'-11½'	1.88	1.59
SECTION X-X 24" 1'-10" 1'-4" 5'-6" 4'-0" 27" 1'-10½" 1'-4½" 5'-9" 4'-3" A 9" TYP. B G" TYP. C C C C C C C C C C C C C	3'-3" 5'-0"	4'-9''	' 3'-9''	6'-6''	2.16	1.85
24" 1'-10" 1'-4" 5'-6" 4'-0" 1 27" 1'-10½" 1'-4½" 5'-9" 4'-3" 2 2 2 2 2 2 2 2 2	3'-6" 5'-3½"	5'-3"	_	7'-0½"		2.12
A 9" TYP. B G" TYP.	3'-9" 5'-7"	5'-9''		7'-7''		2.41
A 9" TYP. B G" TYP. C THE DIMENSION MAY BE VARIED VOLUME BASED 3 FINISH BY FLOAT 4. CIRCULAR PIPE II ELLIPTICAL CONC CIRCULAR REINF	4'-0'' 5'-10½'	" 6'-3"	4'-6''	8'-1½"	3.14	2.72
A 9" TYP. B B C MAY BE VARIED VOLUME BASED 3 FINISH BY FLOAT 4. CIRCULAR PIPE II ELLIPTICAL CONC CIRCULAR REINF			NO	OTES		
A 9" TYP. B B C 2 VOLUME BASED 3 FINISH BY FLOAT 4. CIRCULAR PIPE I ELLIPTICAL CONG CIRCULAR REINF	I AND/OR ANG	GLE OF	INTERS	ECTION I	BETWEEN T	HE WALLS
A 9" TYP. 6" TYP. C CIRCULAR PIPE II ELLIPTICAL CONC CIRCULAR REINF				DTU 12"	' ON DOCK	
4. CIRCULAR PIPE II ELLIPTICAL CONC CIRCULAR REINF		JF 10	ON EAR	NIH, 12	ON ROCK.	
6" TYP.			_		VIDATED LOVE	37
		AIIL	,	DEPART	KENTUCK FMENT OF F	HIGHWAYS
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					LAR PIPE	CULVERTS
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					DRAWING NO. F	RDH-005-02
PLAN VIEW (ELL HEADWALL) ELEVATION VIEW (ELL HEADWALL)				UBMITTED	DIRECTOR DIVISION OF DESIGNATE HIGHWAY ENGINEER	GN DATE

Tall fescue (turf type) + bluegrass - third or hadring or white clover Tall fescue + perennial ryegrass + white or ladino clover 1 to 2 ths - to 20 to 10 to 150 ths + white or ladino clover 1 to 2 ths - third or white clover 1 to 2 ths - third or white clover 1 to 2 ths - third or white clover 1 to 2 ths - third or white clover 1 to 2 ths - third or white clover 1 to 2 ths - to 20 the conditions - third or white clover 1 to 2 ths - to 20 the conditions - third or white clover 1 to 2 ths - to 20 the condition clover 1 to 2 ths - to 20 the conditions - third or white clover 1 to 2 ths - to 20 the conditions - the condition	of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. It wetlands—leave a 15 to 30 it but of natural vegetation. Seed ditches and channels thickly not use fertilizer near ditch or char bottom. Use erosion control blanks or turf reinforcement mats when channel bottom slopes exceed 3% or whe channel slopes exceed 5% or whe channels lopes exceed 5% or whe channels begin downcutting (gully on the bottom. Do not use silt fend or straw bales as silt check dams are needed when channels with slopes greater than use rock or brush instead. It is sepecially needed when seedings are made or straw bales as silt check dams or straw bales as	130 to 170 lbs
+ bluegrass 20 to 30 lbs 1 lb Channels and other areas of concentrated water flows Perennial ryegrass 100 to 150 lbs 3 lb 5.6 to 7.0 Seed ditches and channels thick on the content of t	150 lbs 1 lb rated water flows 150 lbs 3 lb 5.6 to 7.0 Seed ditches and channels thickly not use fertilizer near ditch or charnels bottom. Use erosion control blanks or turf reinforcement mats when channel bottom slopes exceed 3% 2 oz 25 lb Silt check dams are needed when channel slopes exceed 5% or whe channels begin downcutting (gully on the bottom. Do not use silt fencion so 2 oz 150 lbs 3 lb 5.5 to 7.5 or straw bales as silt check dams in the bottom. Do not use silt fencion so 2 oz 150 lbs 3 lb 5.5 to 7.5 or straw bales as silt check dams in the bottom. Do not use silt fencion so 2 oz 150 lbs 0.5 lb	20 to 30 lbs 1 lb areas of concentrated water flows 100 to 150 lbs 3 lb ver 1 to 2 lbs 2 oz 20 lbs 0.5 lb is 10 lbs .25 lb 3 lbs 2 oz 4 lbs .25 lb 10 lbs .25 lb 10 lbs .25 lb ver 1 to 2 lbs 2 oz 100 to 150 lbs 3 lb ver 1 to 2 lbs 2 oz 100 to 150 lbs 3 lb 15 to 20 lbs 0.5 lb at Maintenance the grass is firmly established. This season, in abnormally dry and hot searce as for failures and make necessarians.
Channels and other areas of concentrated water flows Perennial ryegrass 100 to 150 lbs 3 lb 5.6 to 7.0 Seed ditches and channels thich not use fallizer near dict not use fallizer section. Use crossion control blat or turf reinforcement mats when channel bottom slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf the plantien slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turn turf reinforcement mats when channel slopes exceed 3 so turf turf reinforcement mats when channel slopes exceed 3 so turf turf reinforcement mats when channel slopes exceed 3 so turf turf reinforcement mats when channel slopes exceed 4 so turf reinforcement mats when channel slopes exceed 5 so turf turf reinforcement mats wh	tated water flows 150 lbs 3 lb 5.6 to 7.0 Seed ditches and channels thickly not use fertilizer near ditch or chan bottom. Use erosion control blanks or turf reinforcement mats when channel bottom slopes exceed 3% or when channel slopes exceed 5% or when channel slopes exceed 5% or when channels begin downcutting (gully on the bottom. Do not use silt fencions as 3 lb 5.5 to 7.5 or straw bales as silt check dams in channels with slopes greater than use rock or brush instead. 150 lbs 0.5 lb ance Inly established. This is especially needed when seedings are mathormally dry and hot season, or on sites with steep slopes or other as and make necessary repairs, replacements, reseedings, and son. 25 percent groundcover) seed over the site and fertilize, using half, and apply mulch.	100 to 150 lbs 3 lb Ver 1 to 2 lbs 2 oz 20 lbs 0.5 lb Is 10 lbs .25 lb 3 lbs 2 oz 4 lbs .25 lb 10 lbs .25 lb Ver 1 to 2 lbs 2 oz 100 to 150 lbs 3 lb 15 to 20 lbs 0.5 lb Ind Maintenance Ithe grass is firmly established. This season, in abnormally dry and hot seareas for failures and make necessar
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Kentucky bluegrass 20 lbs 0.5 lb 5.5 to 7.5 bottom. Use eroiston control blan or turf reinforcement mats when channel bottom slopes exceed 3 strictly are perennial ryegrass 10 lbs 2.5 lb Silt check dams are needed when the perennial ryegrass 10 lbs 2.5 lb Silt check dams are needed when the perennial ryegrass 10 lbs 2.5 lb Silt check dams are needed when the perennial ryegrass 10 lbs 2.5 lb Silt check dams are needed when the perennial ryegrass 10 lbs 2.5 lb Silt check dams are needed when the perennial ryegrass 10 lbs 2.5 lb Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 2.5 lb Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Silt check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Check dams are needed when the perennial ryegrass 15 to 20 lbs 0.5 lb Silt Check dams are needed when the recent silt of the perennial ryegras 15 to 20 lbs 0.5 lb Silt Check dams are needed when the recent silt of the perennial ryegras 15 to 20 lbs 0.5 lb Silt Check dams are needed when the recent silt of the perennial ryegras 15 to 20 lbs 0.5 lb Silt Check dams are needed when the recent silt of the perennial ryegras 15 to 20 lbs 0.5 lb Silt Check dams are needed when the recent silt of the perennial ryegras 15 to 20 lbs 0.5 lb Silt Check dams are needed when the recent silt of the perennial ryegras 15 to 20 lbs 0.5 lb Silt Check dams are needed when	0.5 lb 5.5 to 7.5 bottom. Use erosion control blank or turf reinforcement mats when channel bottom slopes exceed 3% 2 oz 2.25 lb Silt check dams are needed when channel slopes exceed 5% or whe channels begin downcutting (gully on the bottom. Do not use silt fencing or straw bales as silt check dams in channels with slopes greater than use rock or brush instead. 150 lbs 3 lb 5.5 to 7.5 channels with slopes greater than use rock or brush instead. 150 lbs 0.5 lb	20 lbs 0.5 lb 3 lbs 2 oz 4 lbs .25 lb 10 lbs .25 lb 10 lbs .25 lb 10 lbs .25 lb 10 lbs .25 lb ver 1 to 2 lbs 2 oz 100 to 150 lbs 3 lb ver 1 to 2 lbs 2 oz 100 to 150 lbs 3 lb 15 to 20 lbs 0.5 lb ad Maintenance the grass is firmly established. This season, in abnormally dry and hot seareas for failures and make necessar
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+ switchgrass 3 lbs 2 oz + timothy 4 lbs .25 lb .3ilt check dams are needed when perennial ryegrass 10 lbs .25 lb .5 to 7.5 channel slopes exceed 5% or w channels begin downcutting (gu on the bottom. Do not use silt feore a channel slopes exceed 5% or w channels begin downcutting (gu on the bottom. Do not use silt feore a channels begin downcutting (gu on the bottom. Do not use silt feore a channels she gin downcutting (gu on the bottom. Do not use silt feore a channels with slopes greater that leading or white clover 1 to 2 lbs 2 oz channels logically silt check dams are needed when laborated the channels begin downcutting (gu on the bottom. Do not use silt feore a channels with slopes greater that the planting season is 15 to 20 lbs 0.5 lb considered. This is especially needed when seedings are maken in the planting season, in abnormally dry and hot season, or on sites with steep slopes or oth diverse conditions. Inspect all seeded areas for failures and make necessary repairs, replacements, reseedings, and amulching within the planting season. It is tand is inadequate, (less than 85 percent groundcover) seed over the site and fertilize, using he seeding rate originally applied, and apply mulch. It is tand is more than 60 percent damaged, reestablish the stand. Follow the original seedbed reparation methods, seeding and mulching recommendations, and apply lime and fertilizer as necording to a soil test.	2 oz 25 lb 25 lb channel slopes exceed 5% or whe channels begin downcutting (gully on the bottom. Do not use silt fence or straw bales as silt check dams in channels with slopes greater than use rock or brush instead. 2 oz 4150 lbs 3 lb 5.5 to 7.5 6 lbs 6 lbs 0 lbs 0.5 lb 6 lbs 0.5 lb 7.5 7.5 8 lbs 0 lbs 0.5 lb	3 lbs 2 oz 4 lbs .25 lb 10 lbs .25 lb 10 lbs .25 lb ver 1 to 2 lbs 2 oz 100 to 150 lbs 3 lb ver 1 to 2 lbs 2 oz 100 to 150 lbs 3 lb 15 to 20 lbs 0.5 lb ad Maintenance the grass is firmly established. This season, in abnormally dry and hot seareas for failures and make necessar
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Seed ditches immediately after		te, (less than 85 percent groundcov ginally applied, and apply mulch. n 60 percent damaged, reestablish
	Seed ditches immediately after construction. Use mulch, netting, erosion control blankets to prote	est.
newly seeded areas.	newly seeded areas.	

105 to 140 lbs 3 lb 5.5 to 7.0 Use wildflower mixes to save on

REFERENCE DRAWING:

E-1220	COVER SHEET
E-1221	GENERAL NOTES (WITH MINIMUM STANDARDS)
E-1222	EROSION AND SEDIMENT CONTROL PLAN (SOILS MAP & DESCRIPTIONS
E-1223	STATION LAYOUT PLAN (EXISTING CONDITIONS AND DEMOLITION)
E-1224	STATION LAYOUT PLAN `
E-1225	GRADING PLAN (PHASE I - EROSION AND SEDIMENT CONTROL PLAN)
F 4000	ODADINO DI ANI (DILACE II - EDOCIONI AND CEDIMENT CONTROL DI ANI)

GRADING PLAN (PHASE II - EROSION AND SEDIMENT CONTROL PLAN) E-1226 E-1227 EROSION AND SEDIMENT CONTROL PLAN (LAND COVER PLAN) E-1228 GRADING SECTION VIEWS (STATION SECTION VIEWS)

CM 1 2 3 4 5 6 7

E-1230 GRADING SECTION VIEWS (SCC PROFILES)

*E-1233 EROSION AND SEDIMENT CONTROL DETAILS E-1234 EROSION AND SEDIMENT CONTROL DETAILS

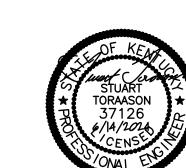
E-1229 GRADING SECTION VIEWS (ACCESS ROADS) E-1231 EROSION AND SEDIMENT CONTROL PLAN (PRE DRAINAGE AREAS) EROSION AND SEDIMENT CONTROL PLAN (POST DRAINAGE AREAS) E-1232

NOTIFY UTILITY COMPANIES BEFORE YOU DIG

THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVE-GROUND STRUCTURES. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 811 TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

8 12 16



OLD DWG :	STD DWG :
"THIS DRAWING IS THE PROPERTY OF AMERICAN ELECTRIC POWE OR REPRODUCED, IN WHOLE OR IN PART, OR USED FOR FURNISHIN OF AMERICAN ELECTRIC POWER, OR FOR ANY PURPOSE DETRIMEN	
AMERICAN ELE	CTRIC POWER

Kentucky Construction Site BMP Planning and Technical Specifications Manual

ORINOCO STATION

EROSIC	ON AND SEDIME	NT CONTROL D	ETAILS
NONE	DR: AKS	ENG: AKS	CH: ST
AMERICAN	WO#: 101484400	APPD: LKM	DATE: 06/14/2024

1 RIVERSIDE PLAZA COLUMBUS, OH 43215 NO. E-1233 NO DATE APPR DR ENG CK ISSUE# REVISION DESCRIPTION

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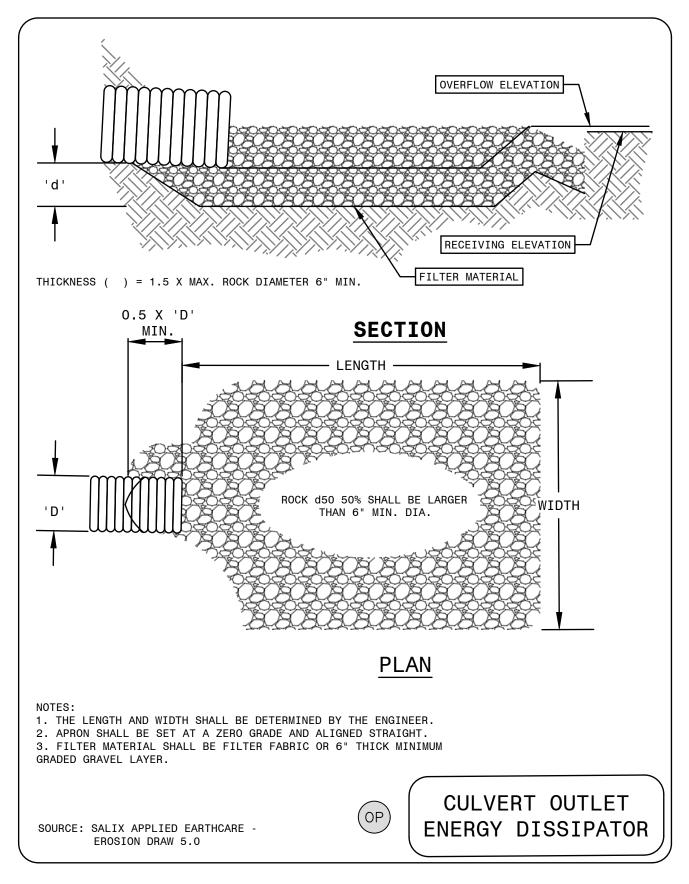
BELFRY

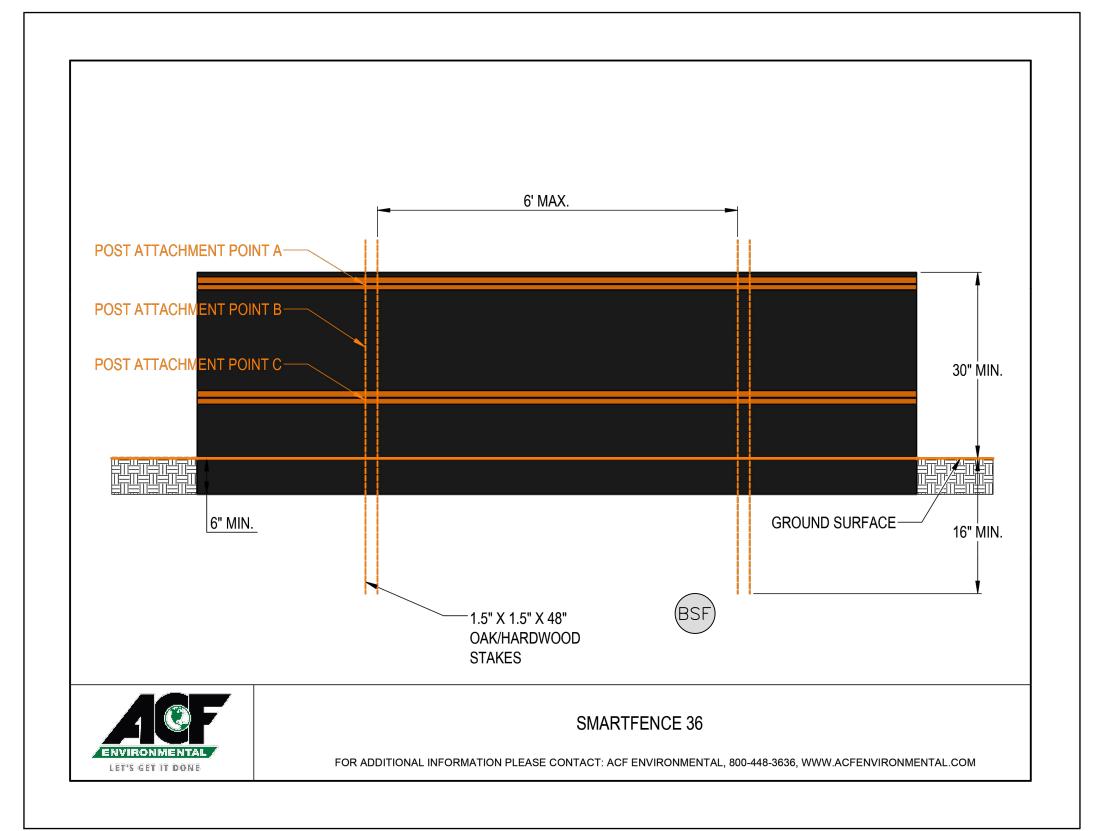
sites, especially those with long, steep slopes.

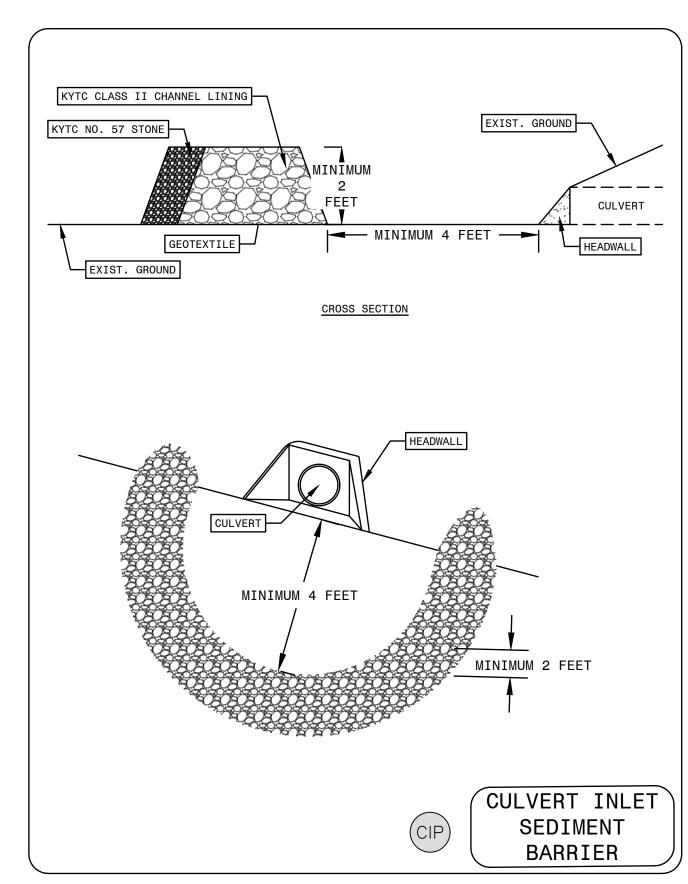
materials mixing and application rates.

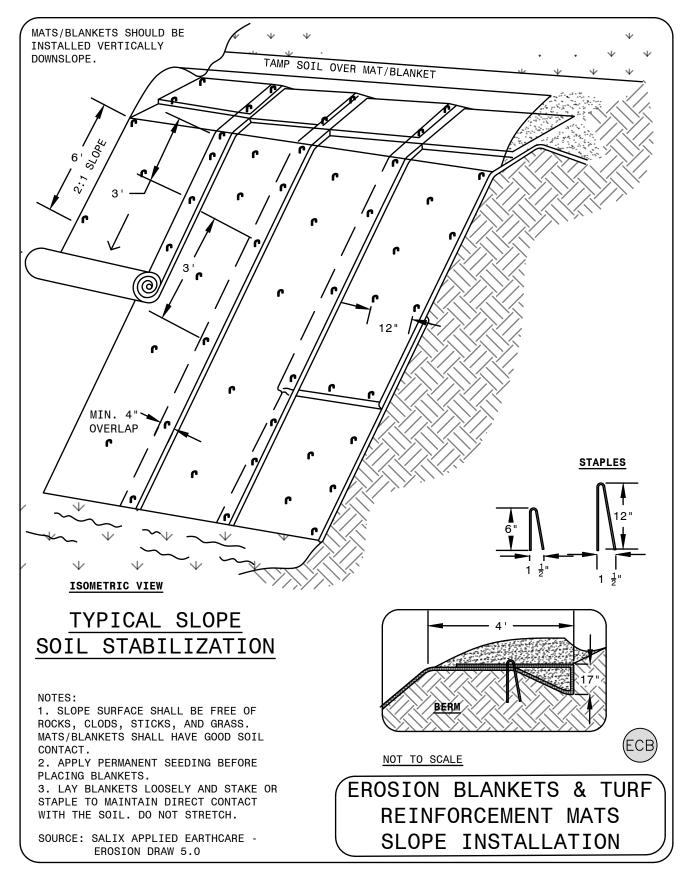
Follow manufacturer's recommendation regarding

KENTUCKY









REFERENCE DRAWING:

E-1220 COVER SHEET E-1221 GENERAL NOTES (WITH MINIMUM STANDARDS) E-1222 EROSION AND SEDIMENT CONTROL PLAN (SOILS MAP & DESCRIPTIONS) E-1223 STATION LAYOUT PLAN (EXISTING CONDITIONS AND DEMOLITION) E-1224 STATION LAYOUT PLAN E-1225 GRADING PLAN (PHASE I - EROSION AND SEDIMENT CONTROL PLAN) E-1226 GRADING PLAN (PHASE II - EROSION AND SEDIMENT CONTROL PLAN) E-1227 EROSION AND SEDIMENT CONTROL PLAN (LAND COVER PLAN) GRADING SECTION VIEWS (STATION SECTION VIEWS) E-1228

CM 1 2 3 4 5 6 7

E-1229 GRADING SECTION VIEWS (ACCESS ROADS) E-1230 GRADING SECTION VIEWS (SCC PROFILES)

E-1231 EROSION AND SEDIMENT CONTROL PLAN (PRE DRAINAGE AREAS) E-1232 EROSION AND SEDIMENT CONTROL PLAN (POST DRAINAGE AREAS)

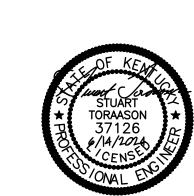
EROSION AND SEDIMENT CONTROL DETAILS E-1233 EROSION AND SEDIMENT CONTROL DETAILS *E-1234

NOTIFY UTILITY COMPANIES BEFORE YOU DIG

3/16 INCH 4 8 12 16

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OLD DWG :	STD DWG:
OR REPRODUCED, IN WHOLE OR IN PART, OF	RICAN ELECTRIC POWER AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE R USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN (NY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON R
	AMERICAN ELECTRIC POWER
	ORINOCO STATION
BELFRY	KENTU
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EROSION AND SEDIMENT CONTROL DETAILS

SCALE: NONE ENG: AKS DR: AKS AMERICAN ELECTRIC POWER WO#: 101484400 APPD: LKM DATE: 06/14/2024

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