

Construction Drawings for

NORTHWOODS STREAM RESTORATION

INTERSECTION OF WHEELER DR. & CHESTNUT DR.
3370 CHESTNUT DR., DORAVILLE, GA 30340

PARCEL: 18 296 06 007
LAND LOT:
ZONING: R-1
ZONING TYPE: SINGLE-FAMILY RESIDENTIAL

PLANS DEVELOPED FOR:
CITY OF DORAVILLE
3725 PARK AVENUE
DORAVILLE, GA 30340
CONTACT: JUDE WAGUESPACK
770-451-8745

PLANS DEVELOPED BY:
KECK & WOOD INC.
3090 PREMIERE PKWY, STE 200
DULUTH, GA 30097
OFFICE: 678-417-4000

PROJECT DIRECTORY

CIVIL ENGINEER/PROJECT MANAGER
KECK & WOOD INC.
CONTACT: JENNI OLIVO, PE
PHONE: 678-471-4057
EMAIL: JOLIVO@KECKWOOD.COM

UTILITY DIRECTORY

WATER SERVICE PROVIDER:
DEKALB COUNTY
DEPARTMENT OF WATERSHED
MANAGEMENT
PHONE: 770-270-6243

ELECTRIC SERVICE PROVIDER:
GEORGIA POWER
PHONE: 888-891-0938

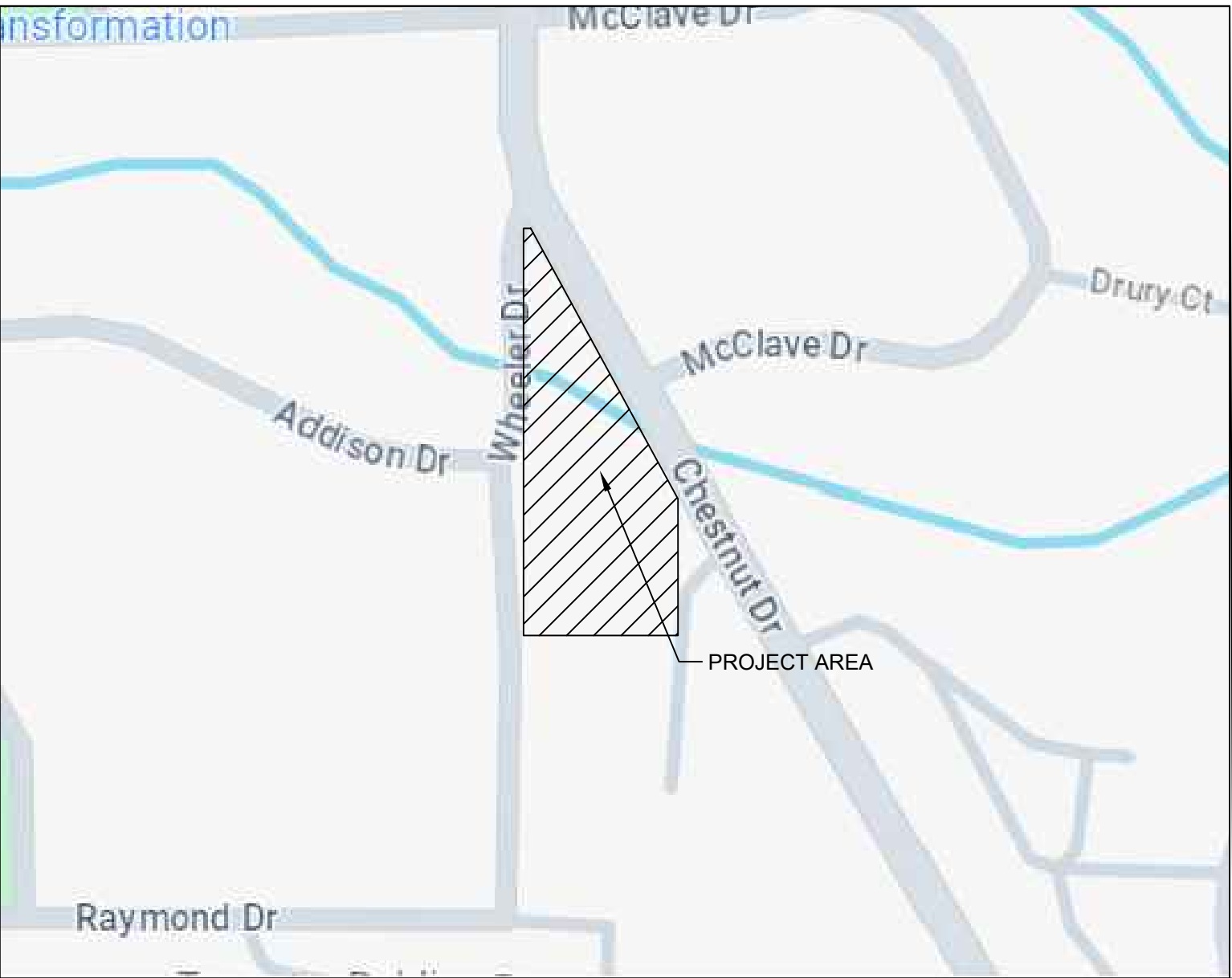
SANITARY SEWER PROVIDER:
DEKALB COUNTY
DEPARTMENT OF WATERSHED
MANAGEMENT
PHONE: 770-270-6243

GAS SERVICE PROVIDER:
GAS SOUTH
ATLANTA GAS LIGHT COMPANY
PHONE: 770-907-4231

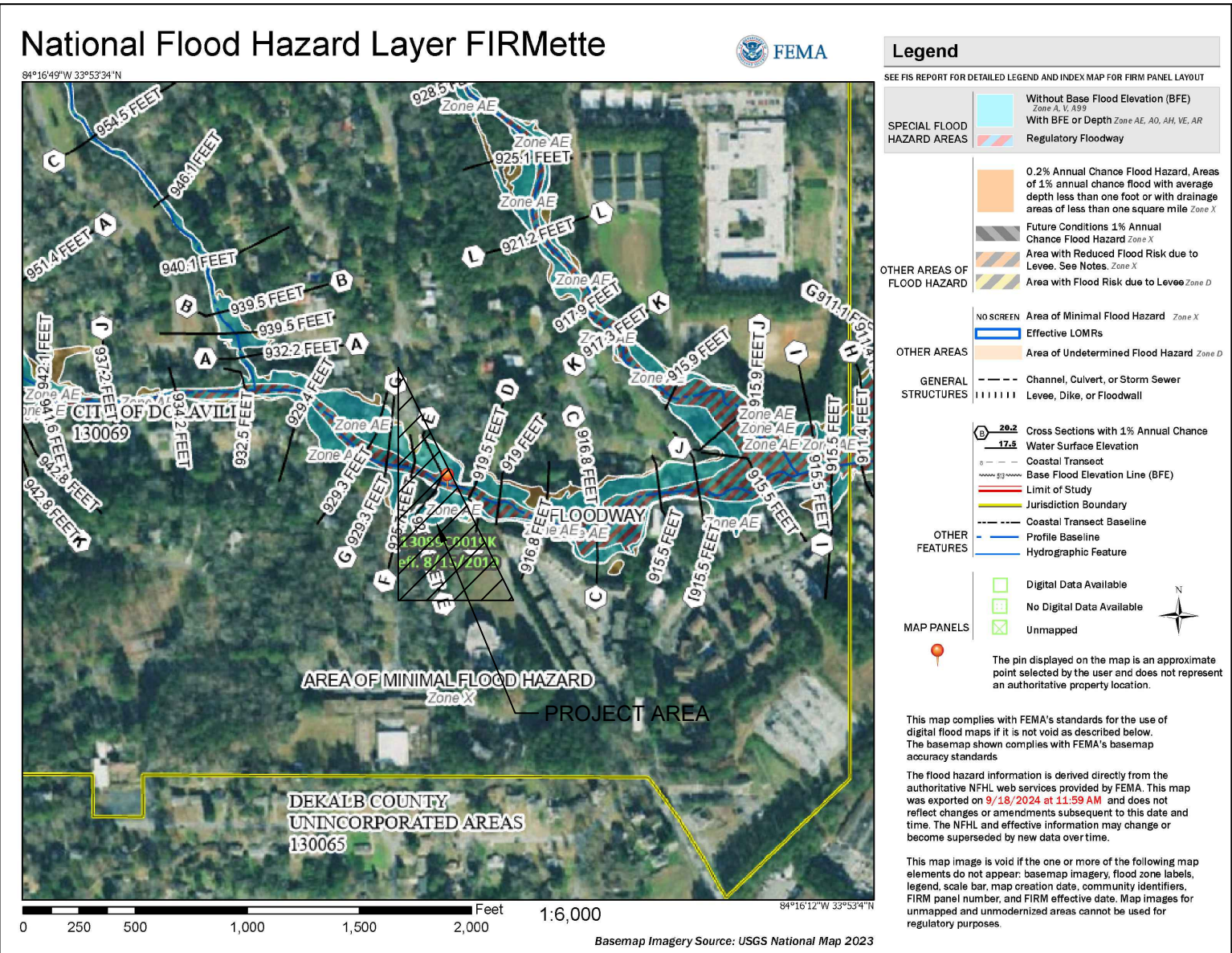
TELEPHONE SERVICE PROVIDER:
AT&T
PHONE: 800-288-2020

PERMIT NO. Permit No

LOCATION MAP
(NOT TO SCALE)



FEMA MAP PANEL: 13089C0019K
DATE: 08/15/2019



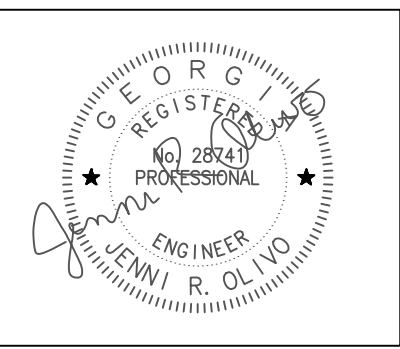
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REVISION	
NO.	DATE

NORTHWOODS STREAM RESTORATION INTERSECTION OF WHEELER DR. & CHESTNUT DR. DORAVILLE, GA 30340	
COVER SHEET	

THIS BAR IS 1 INCH LONG PLOTTED FULL SCALE	
Project Manager: JENNI OLIVO	
Drawn By DY	Checked By JO
Date: 11/17/2025	
Scale: NONE	
Project No: 240285	
Drawing No.: G.1.0	

DEMOLITION NOTES:

- DEMOLITION PLAN HAS BEEN PREPARED TO IDENTIFY MAJOR DEMOLITION ITEMS AND DOES NOT IDENTIFY EVERY SINGLE ITEM AND COMPONENT OF DEMOLITION. GENERAL CONTRACTOR MUST PERFORM A SITE VISIT PRIOR TO PREPARING A BID TO IDENTIFY ALL DEMOLITION ITEMS AND BECOME FAMILIAR WITH THE FIELD CONDITIONS OF THE PROJECT.
- THE APPROXIMATE LOCATION OF KNOWN UNDERGROUND UTILITIES HAVE BEEN SHOWN BY THE SURVEY AND CIVIL PLANS. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY, LOCATE, AND PROTECT ALL UTILITIES ON THE SITE. CONTRACTOR SHALL HIRE THEIR OWN PRIVATE UTILITY CONTRACTOR TO LOCATE AND IDENTIFY ALL UTILITIES WITHIN THE PROPOSED CONSTRUCTION AREA. CONTRACTOR SHALL IMMEDIATELY CONTRACT OWNER , OWNER'S REPRESENTATIVE, AND PROJECT ENGINEER IF ANY DISCREPANCIES, CONFLICTS, OR OTHER UTILITIES ARE ENCOUNTERED PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST AND COORDINATION OF ALL NEW RELOCATED, AND/OR REMOVED UTILITIES FOR THE PROJECT UNLESS OTHERWISE INDICATED IN THE PROJECT DOCUMENTS.
- ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.
- PRIOR TO DEMOLITION OCCURRING, ALL INITIAL PHASE EROSION CONTROL DEVICES ARE TO BE INSTALLED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION OF UTILITY SERVICES TO THE EXISTING STRUCTURES PRIOR TO DEMOLITION OF THE BUILDINGS.
- THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH EACH UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANIES WITH ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. CONTRACTOR IS RESPONSIBLE FOR ALL FEES, CHARGES, AND COSTS INVOLVED IN THE REMOVAL OR RELOCATION OF ANY UTILITY, WHETHER THE WORK BE PERFORMED BY THE UTILITY COMPANY'S FORCES OR BY THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION & REMOVAL OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL & BROUGHT TO GRADE WITH SUITABLE, COMPACTED FILL MATERIAL PER THE SPECIFICATIONS AND/OR THE GEOTECHNICAL RECOMMENDATIONS.
- ALL EXISTING UTILITIES INDICATED FOR DEMOLITION ARE TO BE REMOVED, TERMINATED & CAPPED AT THE RIGHT-OF-WAY OR AT THE EXISTING TRUNK LINES, AS DIRECTED BY THE UTILITY OWNER. EXISTING METERS, VALVES, AND OTHER APPURTENANCES ARE TO BE REMOVED AND RETURNED TO THE UTILITY OWNER IF DIRECTED BY THE UTILITY OWNER.
- ALL WORK SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, STANDARDS OR CODES. ALL NECESSARY LICENSES OR PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL, ALONG WITH ANY PERMIT FEES OR DISPOSAL FEES.
- EXISTING MANHOLES & VALVE BOXES TO REMAIN IN PLACE SHALL BE ADJUSTED TO FINAL GRADES.
- ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
- CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES AND APPROVED BY CONSTRUCTION MANAGER.
- CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS; BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
- CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
- NO EQUIPMENT SHALL BE STORED WITH IN ANY RIGHT-OF-WAY WITH OUT PERMISSION OF RIGHT-OF-WAY OWNER.
- WITHIN OR ADJACENT TO EXISTING BUSINESSES, CONTRACTOR SHALL MAINTAIN ALL PARKING, SIDEWALKS, DRIVES, ETC. CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC TO AND FROM THE SITE.
- THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO THE EXISTING ADJACENT BUSINESSES AT ALL TIMES. IF INTERRUPTIONS TO UTILITY SERVICES CANNOT BE AVOIDED, THE CONTRACTOR SHALL COORDINATE WITH THE BUILDING MANAGERS AND UTILITY COMPANIES TO COORDINATE PHASE THE RELOCATION AND/OR REMOVAL OF UTILITIES TO MINIMIZE DISTURBANCE AND INCONVENIENCE TO BUSINESS OPERATIONS AND CUSTOMERS. SERVICE SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM THE BUILDING MANAGERS.
- THE CONTRACTOR SHALL COORDINATE WATERMAIN WORK WITH THE FIRE DEPT. AND THE CITY/COUNTY UTILITY DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO ANY STRUCTURES AND THE SITE THROUGH OUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATERMAIN SHUT OFFS WITH THE CITY/COUNTY DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATERMAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AS PART OF THE BASE BID.
- DAMAGE TO ANY EXISTING CONDITIONS TO REMAIN WILL BE REPLACED/REPAIRED AT CONTRACTOR'S EXPENSE.
- CONTRACTOR TO REPLACE/REPAIR ASPHALT AS NEEDED AFTER DEMOLITION, ABANDONMENT, OR RELOCATION OF PAVING, UTILITIES, STRUCTURES, ETC. AS PART OF THE BASE BID.
- IF ANY AREA OUTSIDE THE LIMITS OF CONSTRUCTION IS DAMAGED AS A RESULT OF DELIVERIES, STORAGE, OR OTHER RELATED CONSTRUCTION ACTIVITY, THE CONTRACTOR IS REQUIRED TO REPAIR ANY DAMAGE TO THE SATISFACTION OF THE PROPERTY OWNER(S) AFFECTED.
- BACKFILL AND COMPACT ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK TO MEET THE REQUIREMENTS AND SPECIFICATIONS FOR THE INTENDED USE OF THE AREA, EXAMPLE IF EXCAVATION IS IN AN AREA TO BE A NEW BUILDING - COMPACTION AND BACKFILLING MUST COMPLY WITH SPECIFICATIONS FOR STRUCTURAL FILL FOR BUILDING PADS
- WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, STRUCTURAL, OR PLUMBING ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE THE NATURE AND EXTENT OF THE CONFLICT. IMMEDIATELY SUBMIT A WRITTEN REPORT TO THE OWNER OR OWNER'S REPRESENTATIVE DOCUMENTING THE CONFLICT ALONG WITH A RECOMMENDED SOLUTION AND ESTIMATE COST.
- LIMITS OF DEMOLITION OF CURB AND GUTTER, AND CONCRETE SIDEWALKS, SHALL BE TO THE NEAREST CONSTRUCTION JOINT BEYOND THE AREA SHOWN TO BE DEMOLISHED. REPAIR WORK SHALL ALSO BE TO THE NEAREST JOINT.
- CONTRACTOR SHALL COORDINATE A MEETING ON SITE WITH THE OWNER/OWNER'S REPRESENTATIVE TO REVIEW ALL ELEMENTS OF DEMOLITION, SCHEDULE OF DEMOLITION, IDENTIFY ALL ITEMS TO BE SALVAGED, AND LOCATIONS FOR STORAGE IF NECESSARY.
- ALL EXISTING UTILITIES LOCATED UNDER PROPOSED BUILDING FOUNDATIONS ARE TO BE RE-LOCATED AROUND AND AWAY FROM THE NEW BUILDING FOOTPRINT UNLESS OTHERWISE NOTED.
- DEMOLITION PLAN DOES NOT TAKE INTO ACCOUNT THE PHASING REQUIRED TO EXECUTE THE PROPOSED CONSTRUCTION PLAN. THE PHASING AND METHODS FOR DEMOLITION ARE CONSIDERED PART OF THE GENERAL CONTRACTORS MEANS AND METHODS.
- IF CONTRACTOR DISCOVERS HAZARDOUS MATERIALS ON-SITE NOTIFY OWNER AND OWNER'S REPRESENTATIVE IMMEDIATELY. ALL HAZARDOUS MATERIALS MUST BE HAULED OFF SITE AND DISPOSED OF LEGALLY AND TAKEN TO AN APPROVED LANDFILL APPROVED FOR THE SPECIFIC HAZARDOUS MATERIALS.

SITE PLAN NOTES

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. SEE SPECIFICATIONS.
- ALL CURBED RADII ARE TO BE 10' UNLESS OTHERWISE NOTED. STRIPED RADII ARE TO BE 5'.
- ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
- SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY ROCHESTER AND ASSOCIATES, LLC DATED 10/21/2024.
- TOTAL LAND AREA IS .75 ACRES.
- NO WETLANDS WERE PRESENT ON THIS SITE PER THE NATIONAL WETLANDS INVENTORY MAP.
- THIS PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION AE BASED ON THE FLOOD INSURANCE RATE MAP 13089C0019K DATED 08/15/2019. DETERMINATION WAS MADE BY GRAPHICALLY DETERMINING THE POSITION OF THIS SITE ON SAID FIRM MAPS UNLESS OTHERWISE NOTED.
- THE CURRENT ZONING OF ALL PROPERTY SHOWN FOR DEVELOPMENT IS "SINGLE FAMILY RESIDENTIAL".
- CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS & ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO THE LOCATION & TIE-INS/CONNECTIONS TO THEIR FACILITIES.
- ALL DIMENSIONS SHOWN TO BUILDING ARE TO OUTSIDE FACE OF BUILDING AND FACE OF CURB UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL AREAS INDICATED TO REMAIN UNDISTURBED. AREAS TO REMAIN AS BUFFERS, AND ALL PROPERTY CORNERS; AND REPLACING ALL PINS ELIMINATED OR DAMAGED DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC.. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- ALL STRIPING SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION.
- CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND ENGINEER OF RECORD OF ANY DISCREPANCIES, CONFLICTS, OR ERRORS THAT THEY MAY DISCOVER IN THE CONSTRUCTION DOCUMENTS.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, GUARDS, LIGHTS, AND OTHER INSTALLATIONS REQUIRED TO PROTECT PERSONS AND PROPERTY DURING THE ENTIRE CONSTRUCTION PROCESS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED TEMPORARY CONSTRUCTION FENCING AND GATES NECESSARY TO SECURE THE PROJECT SITE AND RELOCATE TEMPORARY FENCING AS MAY BE REQUIRED THOUGH THE PROGRESSIVE STAGES OF CONSTRUCTION.
- ALL BUILDING FOUNDATIONS & LAYOUT SHALL BE COORDINATED USING THE ARCHITECTURAL DRAWINGS ONLY. ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER CIVIL DRAWINGS IN MATTER OF FOUNDATION AND BUILDING FOOTPRINTS.
- UNDERGROUND UTILITIES SERVING OR CROSSING THE PREMISES MAY EXISTING THAT HAVE NOT BEEN SHOWN ON THE SURVEY OR DESIGN DOCUMENTS. ALL UNDERGROUND UTILITY LOCATIONS MUST BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION ACTIVITY.
- CONTRACTOR MUST OBTAIN ALL NECESSARY LANE AND ROAD CLOSURE PERMITS BEFORE ANY WORK DONE IN THE RIGHT OF WAY AFFECTING TRAFFIC.
- AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SEWER AND WATER, ARE REQUIRED PRIOR TO ACCEPTANCE OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- A SEPARATE BUILDING PERMIT SHALL BE OBTAINED FOR ALL RETAINING WALLS GREATER THAN 4 FEET IN HEIGHT AND ALL RETAINING WALLS USED AS A DAM PRIOR TO CONSTRUCTION OF WALLS.
- A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER SHALL BE ON SITE DURING CONSTRUCTION OF RETAINING WALLS TO INSPECT THE INTEGRITY OF SOILS USED TO CONSTRUCT ALL RETAINING WALLS.

SITE UTILITY NOTES

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND COORDINATE THE SCOPE OF WORK AND TIMING ASSOCIATED WITH ANY NEW UTILITY CONSTRUCTION OR RELOCATION WITH THE UTILITY COMPANY.
- ALL CONSTRUCTION TO CONFORM TO APPLICABLE CITY/COUNTY SPECIFICATIONS AND IN ACCORDANCE WITH CITY/COUNTY ORDINANCES.
- CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES & REQUIREMENTS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES & OWNERS INSPECTING AUTHORITIES.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THESE SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
- TRENCHES OF 20 FEET OR GREATER REQUIRES SHORING, DESIGN TO BE CERTIFIED BY A PROFESSIONAL ENGINEER. TRENCH SAFETY REQUIREMENTS WILL BE STRICTLY ENFORCED. CONTRACTOR TO MEET OR EXCEED ALL OSHA STANDARDS.
- CONTRACTOR TO REMOVE OR RELOCATE WHEN APPLICABLE, ALL EXISTING BUILDINGS, FOUNDATIONS, EASEMENTS, CONNECTING IMPROVEMENTS, DRAIN PIPES, SANITARY SEWER PIPE, POWER POLES & GUY WIRES, WATER METERS & WATER LINES, WELLS, SIDEWALKS, SIGN POLES, UNDERGROUND GAS, SEPTIC TANKS, & ASPHALT, SHOWN & NOT SHOWN, WITHIN CONSTRUCTION LIMITS & WHERE NEEDED, TO ALLOW FOR FILL MATERIAL, UNLESS OTHERWISE DENOTED, TO BE REMOVED AS UNCLASSIFIED EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS TO REMAIN DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- ALL PRIMARY & SECONDARY SERVICE LOCATIONS ARE APPROXIMATE & ARE SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE POWER COMPANY, TO DETERMINE EXACT LOCATION & RESPONSIBILITIES INCLUDING COST.
- DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES. THE INFORMATION SHOWN ON THESE PLANS RELATED TO THE EXISTING UTILITIES (AERIAL AND SUBSURFACE) IS BASED ON FIELD RUN SURVEY, AS-BUILT RECORDS AND/OR UTILITY COMPANY RECORDS AND IS CORRECT TO THE BEST KNOWLEDGE OF THE ENGINEER. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- THE EXISTING SUBSURFACE FACILITIES HAVE NOT BEEN EXPOSED AND VERIFIED AND THEREFORE THE INFORMATION PROVIDED IS NOT TO BE CONSIDERED PRECISE. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXACT LOCATION, SIZE, MATERIAL AND INVERT ELEVATION AT THE PROPOSED TIE-IN POINT(S) OF THE EXISTING SUBSURFACE UTILITIES PRIOR TO ORDERING MATERIALS TO INSTALL THE PROPOSED UTILITIES. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IF CONDITIONS IDENTIFIED IN THE FIELD ARE SUBSTANTIALLY DIFFERENT THAN THOSE SHOWN ON THE PLANS. THE OWNER WILL NOT ACCEPT ANY CHANGE ORDERS ASSOCIATED WITH UNEXPECTED FIELD CONDITIONS THAT ARE NOT IDENTIFIED PRIOR TO ORDERING MATERIALS FOR PROPOSED CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE THE TIMING OF ALL UTILITY CONNECTIONS AND/OR RELOCATIONS WITH THE RESPECTIVE UTILITY SERVICE PROVIDERS. LINES TO BE RELOCATED SHALL REMAIN OPERATIONAL AT ALL TIMES UP UNTIL THE NEW SERVICE LINE BECOMES ACTIVE. CONNECTIONS BETWEEN EXISTING AND RELOCATED LINES THAT REQUIRE TEMPORARY INTERRUPTION OF SERVICE SHALL BE PERFORMED ONLY AT LOW DEMAND TIMES WHICH MAY REQUIRE WORK TO BE PERFORMED AT NIGHT AND/OR ON WEEKENDS. CONTRACTOR SHALL INCLUDE ALL COSTS FOR SUCH WORK IN THE BASE BID.
- PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM SEWER, ROOF DRAIN, SANITARY SEWER, WATER MAIN, GAS MAIN, OR ANY OTHER DRY UTILITY THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND NOTIFY OWNER/ OWNER'S REPRESENTATIVE, AND ENGINEER OF ANY CONFLICTS OR DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION, OWNER WILL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO PERFORM SUCH VERIFICATION OR FAILS TO NOTIFY THE OWNER PRIOR TO COMMENCING CONSTRUCTION OF THE UTILITY.
- CONTRACTOR SHALL PROVIDE A COMPLETE AS-BUILT SURVEY FOR ALL NEW CONSTRUCTION AREA AND ITEMS. OWNER TO APPROVED CONTRACTOR'S SURVEYOR PRIOR TO ANY WORK. IT IS THE OWNER'S DESIRE TO HAVE A COMPLETE AS-BUILT OF WORK PERFORMED BY THE CONTRACTOR AND FOR THAT INFORMATION TO BE INCORPORATED INTO THEIR MASTER BOUNDARY AND TOPOGRAPHIC SURVEY, PLANS AND PROFILES FOR SANITARY SEWER AND WATER LINES TO ALSO BE INCLUDED IN THE SURVEY AND PROVIDED TO THE OWNER AFTER CONSTRUCTION IS COMPLETED. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS AND CERTIFICATIONS FROM WATER AND SEWER AUTHORITY IN ORDER TO OBTAIN THE CERTIFICATE OF OCCUPANCY OR AS REQUIRED BY THE LAND DISTURBANCE PERMIT.
- CONTRACTOR SHALL PROVIDE OWNER WITH WRITTEN CERTIFICATION FROM THE WATER AUTHORITY THAT THE WATER LINES INSTALLED AND ALL REQUIRED TESTING COMPLY WITH THEIR STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE INERT POLYETHYLENE IDENTIFICATION TAPE BURIED IN THE SAME TRENCH 18" MAXIMUM BELOW FINISH GRADE FOR ALL UTILITY LINES AND WASTE LINES (NO EXCEPTIONS). FOR ALL UTILITY LINES (PVC OR NON-METALLIC) CONTRACTOR, IN ADDITION TO PROVIDING AND INSTALLING IDENTIFICATION TAPE, SHALL TRACER WIRE AS WELL. CONTRACTOR TO PROVIDE OWNER WITH PHOTOGRAPHS OF TRENCHES TO DOCUMENT THE IDENTIFICATION TAPE HAS BEEN INSTALLED.
- ALL TRENCH BACKFILLING FOR UTILITIES SHALL HAVE CLASS B BEDDING. CLASS B BEDDING SHALL BE DEFINED AS #57 STONE PLACED IN TRENCH MINIMUM OF 6 INCHES BELOW UTILITY INVERT AND FILLED UP TO THE CENTERLINE OF THE UTILITY PIPE UNLESS OTHERWISE DETAILED DIFFERENTLY IN THE CONSTRUCTION DOCUMENTS. THOROUGHLY TAMP AND COMPACT THE GRANULAR MATERIAL AS IT IS BEING PLACED IN THE DITCH.

NOTES ON ECOSYSTEM RESTORATIONS

- ADAPTIVE MANAGEMENT

BECAUSE A SYSTEM STREAM WILL CHANGE THROUGH TIME IN RESPONSE TO A VARIETY OF FORCES AND REBALANCING OF THE ECOSYSTEM, THERE IS A DEGREE OF UNCERTAINTY ASSOCIATED WITH HOW A NATURE-BASED SOLUTION WILL RESPOND TO FUTURE FLOOD (HIGH FLOW OR LONG DURATION) EVENTS. IN CONSIDERATION OF THIS UNCERTAINTY, ADAPTIVE MANAGEMENT BY THE OWNER IS NECESSARY TO MAINTAIN OR RESTORE FUNCTION OF THESE FACILITIES SHOULD A LARGE EVENT OCCUR PRIOR TO ESTABLISHMENT OF VEGETATION AND OTHER NATURAL STABILIZING FACTORS BEING FULLY REALIZED. KECK & WOOD WILL PROVIDE RECOMMENDATIONS IN THE OPERATIONS AND MAINTENANCE PLAN FOR THE ADAPTIVE MANAGEMENT ACTIVITIES TO BE PERFORMED BY THE CLIENT.
- STREAM RESTORATION

THE POTENTIAL FOR MOVEMENT IN THE STREAM EXISTS. THE STREAM MAY CHANGE ITS CHANNEL, AND THE CHATTAHOOCHEE RIVER MAY AFFECT THE CHANNEL AND STREAM FLOW, WHILE THE PROPOSED PROJECT WILL NOT AGGRAVATE THE PROBLEM, THE NATURAL PROCESSES ARE STILL INTACT. FUTURE MONITORING OF THE STREAM, INCLUDING THE DEFINED PROJECT AREA AND UPSTREAM REACHES, IS RECOMMENDED SO THAT PLAN FORM CHANGES CAN BE ADDRESSED AS THEY ARISE. MONITORING DURING LARGE STORM EVENTS, PERIODS OF HIGH RAINFALL, AND LARGE SNOW-FREEZE MELTS, AS WELL AS REGULAR MONITORING SHOULD BE PERFORMED. KECK & WOOD WILL PROVIDE RECOMMENDATIONS IN THE OPERATIONS AND MAINTENANCE PLAN FOR THE ADAPTIVE MANAGEMENT ACTIVITIES TO BE PERFORMED BY THE CLIENT.
- VEGETATION FOR STABILIZATION

THE STABILIZATION OF THE BANK RELIES IN PART ON THE EFFECT THAT THE MATURE ROOT SYSTEM OF THE PLANTINGS WILL HAVE ON THE BANK. IT IS IMPORTANT TO NOTE THAT AT THE COMPLETION OF CONSTRUCTION THIS ROOT SYSTEM WILL NOT YET BE MATURE, AND THE PROJECT WILL BE IN A VULNERABLE PERIOD UNTIL THOSE ROOTS ARE ESTABLISHED. IT WILL BE IMPORTANT FOR THE OWNER TO MONITOR THE STREAM FOR INDICATIONS OF INSTABILITY, IN PARTICULAR DURING LARGE STORM EVENTS OR PERIODS OF HIGH RAINFALL, AND BE PREPARED TO MITIGATE ANY DETRIMENTAL CHANGES THAT OCCUR. THE CLIENT SHOULD UNDERSTAND THAT SUCH MEASURES MAY NOT MATURE IN TIME TO SUFFICIENTLY ADDRESS EVENTS OCCURRING DURING OR IMMEDIATELY AFTER PROJECT COMPLETION.

DWM NOTES:

- CONTACT THE BACKFLOW DIVISION PRIOR TO INSTALLATION OF ANY BACKFLOW ASSEMBLY.
- BUILDINGS, BUILDING PADS, WALLS, AND ANY PERMANENT STRUCTURE MUST MAINTAIN 10 FEET OF HORIZONTAL CLEARANCE AND CANNOT BE PLACED WITHIN EASEMENTS.
- VAULTS SHALL HAVE ONLY ONE (1) LINE ENTERING AND LEAVING THE STRUCTURE.
- FIELD CHANGES DURING CONSTRUCTION MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT BEFORE CHANGES ARE IMPLEMENTED.
- FOR PROJECTS LOCATED WITHIN THE CITIES, THE DEVELOPER SHALL PROVIDE A MAINTENANCE BOND TO DEKALB COUNTY WATERSHED MANAGEMENT PRIOR TO APPROVAL OF AS-BUILT PLANS.
- CONTRACTOR MUST JET CLEAN AND CCTV SANITARY SEWER LINES AFTER ALL TIE-IN CONNECTIONS ARE MADE TO THE EXISTING SEWER INFRASTRUCTURE. TRACER WIRE SHALL BE INSTALLED FOR ALL PVC PIPES.
- CONTRACTOR TO NOTIFY THE DWM CONSTRUCTION INSPECTOR AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. EMAIL DWMINSPCT@DEKALBCOUNTYGA.GOV WITH APPROVED PLAN APPLICATION NUMBER TO SCHEDULE.
- WATER AND SEWER ACCESS FEES MAY BE LEVEED FOR: NEW CONSTRUCTION, RE-DEVELOPMENT, ADDITIONS, CHANGE OF USE, CHANGE OF OCCUPANCY ETC. PAYMENT FOR PERMITTED ACTIVITIES ARE MADE TO THE PERMITTING DEPARTMENT.

- FEES ARE TO BE PAID THROUGH THE EPERMITTING PORTAL OR AT 178 SAMS STREET, DECATUR, GA 30030.

WATER NOTES:

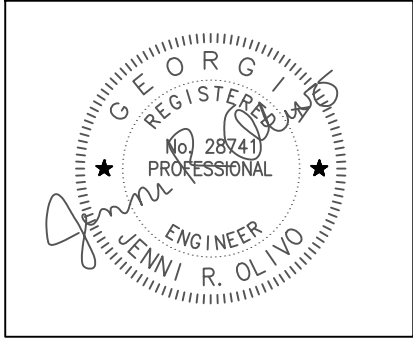
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND STRUCTURES ALONG THE PROPOSED ALIGNMENT. CONTRACTOR IS TO NOTIFY THE OWNER OR ENGINEER ANY CONFLICTS THAT MAY ARISE DUE TO UTILITY LOCATIONS.
- MINIMUM ALLOWABLE DEPTH OF COVER IS 4-FEET, UNLESS NOTED OTHERWISE. MAXIMUM ALLOWABLE DEPTH OF COVER IS 6.5- FEET, UNLESS NOTED OTHERWISE. CONTACT DORAVILLE PUBLIC WORKS DIRECTOR, CHRIS LAFLEUR, FOR REVIEW AND APPROVAL OF ALL PIPE WITH DEPTHS GREATER THAN 6.5- FEET.
- BEND INDICATED IN THE DRAWINGS ARE ESTIMATED ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF BENDS & OTHER FITTINGS DEEMED NECESSARY TO AVOID CONFLICTS AND ADJUST WATER LINE DEPTH AS NECESSARY. CONTRACTOR SHALL NOT EXCEED MANUFACTURE'S MAXIMUM DEFLECTION ANGLE BETWEEN JOINTS.
- ALL WATER MAINS AND SERVICE LINES SHALL BE BACKFILLED AND COMPACTED, PRESSURE TESTED, STERILIZED, PASS THE BACTERIA TEST PER DEKALB COUNTY SPECIFICATIONS, AND BE ACCEPTED BY THE CITY PRIOR TO CUSTOMER TIE-IN. CUSTOMER TIE-INS REQUIRE 72-HOURS ADVANCED NOTIFICATION OF SERVICE INTERRUPTIONS. TIE-INS MAY REQUIRE BEING DONE DURING EVENINGS OR ON WEEKENDS.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF DORAVILLE'S PROJECT COORDINATOR FOR ALL WATER LINE FACILITY WORK: CHRIS LAFLEUR (PHONE: 678-446-4028).
- DURING ALL TIMES OF CONSTRUCTION, CONTRACTORS IS TO HAVE ON HAND ALL MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE A REPAIR OF ANY POTENTIAL AND/OR UNFORESEEN EXISTING WATER MAIN AND/OR SERVICE LINE BREAK.
- CONTRACTOR IS PROHIBITED FROM LEAVING EXCAVATED AREAS OPEN OVERNIGHT. EXCAVATED AREAS SHALL EITHER BE BACKFILLED AND COMPACTED FLUSH TO GRADER OR STEEL PLATES OF SUFFICIENT THICKNESS WILL BE USED ATOP EXCAVATION.
- CONTRACTOR SHALL NOTIFY DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT INSPECTOR FORTY EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.
- ALL EXISTING UNDERGROUND UTILITIES SHOWN ON PROFILES ARE ASSUMED TO BE SHOWN IN APPROXIMATE LOCATION ONLY.
- CONTRACTOR WILL PROVIDE BACKFLOW PREVENTERS AND/OR PRESSURE RELEASE VALVES AT EACH EXISTING BUILDING WHERE NEW SERVICE WILL BE PROVIDED.



THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF ALL EXISTING UTILITIES ABOVE OR BELOW GROUND AS SHOWN ON THESE PLANS ARE APPROXIMATE AND WERE LOCATED BASED ON EITHER VISUAL OBSERVATIONS AT THE SITE, EXISTING SURVEYS AND/OR FROM UTILITY OWNERS. KECK & WOOD INC. DOES NOT GUARANTEE THAT EXISTING UTILITY LOCATIONS SHOWN ARE EXACT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATIONS OF EXISTING UTILITIES (ABOVE OR BELOW GROUND) BEFORE BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AND THE UTILITIES PROTECTION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY OWNER AND/OR ENGINEER OF ANY UTILITY CONFLICTS WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

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NO.	DATE	REVISION							

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

GENERAL NOTES

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager: JENNI OLIVO	
Drawn By DY	Checked By JO
Date:	11/17/2025
Scale:	NONE

Project No:	240285
Drawing No:	G.2.0

LEGEND

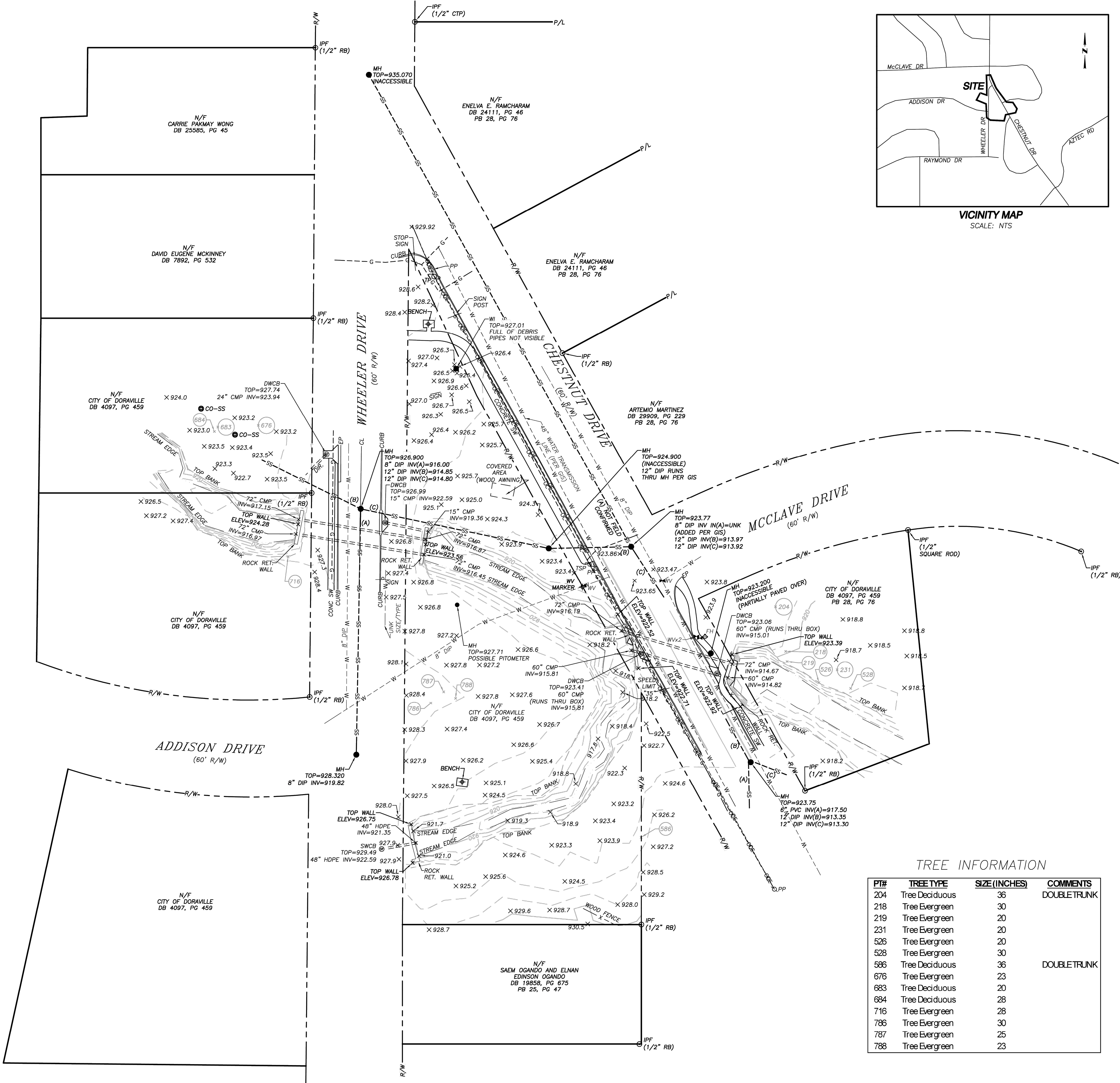
- AKA - ALSO KNOWN AS
CMP - CONCRETE MONUMENT FOUND
CMP - CORRUGATED METAL PIPE
CONC - CONCRETE
CO-SS - CLEANOUT SANITARY
DB,PG - DEED BOOK, PAGE
DIP - DUCTILE IRON PIPE
DWC - DOUBLE-WING CATCH BASIN
EC - EDGE OF CONCRETE
ELEV - ELEVATION
EP - EDGE OF PAVEMENT
G - GAS LINE
GM - GAS METER
HDPE - HIGH DENSITY POLYETHYLENE PIPE
INV - INVERT
IPF - IRON PIN FOUND
MB - MAILBOX
MH - MANHOLE
N/F - NOW OR FORMERLY
-OC- - OVERHEAD COMMUNICATION LINE
-OE- - OVERHEAD POWER LINE
OTP - OPEN TOP PIPE
PB,PG - PLAT BOOK, PAGE
P/L - PROPERTY LINE
PP - POWER POLE
PVC - POLYVINYLCHLORIDE PIPE
RB - REBAR
RCP - REINFORCED CONCRETE PIPE
RET. - RETAINING
R/W - RIGHT OF WAY
SWCB - SINGLE-WING CATCH BASIN
-SS- - SANITARY SEWER LINE
SW - SIDEWALK
TP - TELEPHONE POLE
UNK - UNKNOWN
-W- - WATER LINE
WI - WEIR INLET

SURVEY NOTES

1. THE FIELD DATA DATED 9/9/2024 UPON WHICH THIS SURVEY IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 26,356 FEET AND AN ANGULAR ERROR OF 2" SECONDS PER ANGLE AND WAS ADJUSTED USING LEAST SQUARES. A TRIMBLE S-SERIES ROBOTIC TOTAL STATION WAS USED FOR ANGULAR AND LINEAR MEASUREMENTS.
2. THE HORIZONTAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN DATUM OF 1983 (NAD 83 GEORGIA WEST ZONE) AND THE VERTICAL DATUM USED IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVOD88) AS DETERMINED BY UTILIZING GPS. THE EQUIPMENT USED TO OBTAIN THIS DATA WAS A DUAL FREQUENCY TRIMBLE R12-I GNSS GPS RECEIVER WITH A TRIMBLE TSC7 DATA COLLECTOR RECEIVING RTK CORRECTIONS VIA A WIRELESS NETWORK FROM BASE STATIONS OPERATED BY TRIMBLE NAVIGATION. THE AVERAGE RELATIVE POSITIONAL ACCURACY OBTAINED ON THE POSITIONS UTILIZED IN THIS SURVEY WAS 0.04 FT. HORIZONTAL AND 0.07 FT. VERTICAL. THESE VALUES WERE DERIVED FROM GPS PROCESSING SOFTWARE. THE REMAINDER OF THE FIELD WORK WAS PERFORMED WITH CONVENTIONAL EQUIPMENT AS DESCRIBED ABOVE.
3. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE COMMITMENT; THEREFORE EXCEPTION IS MADE HEREIN TO ANY EASEMENTS, RESERVATIONS, RIGHTS OF WAY AND RESTRICTIONS OF RECORD, WHICH MAY EXIST. FURTHERMORE, THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, RESERVATIONS, RIGHTS OF WAY, OR RESTRICTIONS, WHICH ARE NOT RECORDED OR NOT DISCLOSED BY THE TITLE COMMITMENT OR OTHERWISE UNKNOWN TO THE SURVEYOR; THEREFORE EXCEPTION IS TAKEN TO ANY SUCH ITEMS.
4. THIS IS NOT A BOUNDARY SURVEY, THIS PLAT IS FOR THE EXCLUSIVE USE OF THE ENTITIES SHOWN HEREON; ANY USE BY THIRD PARTIES IS AT THEIR OWN RISK.
5. ALL DISTANCES AS SHOWN ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET (39.37 INCHES = 1 METER)
6. CONTOUR INTERVAL IS 2 FEET.

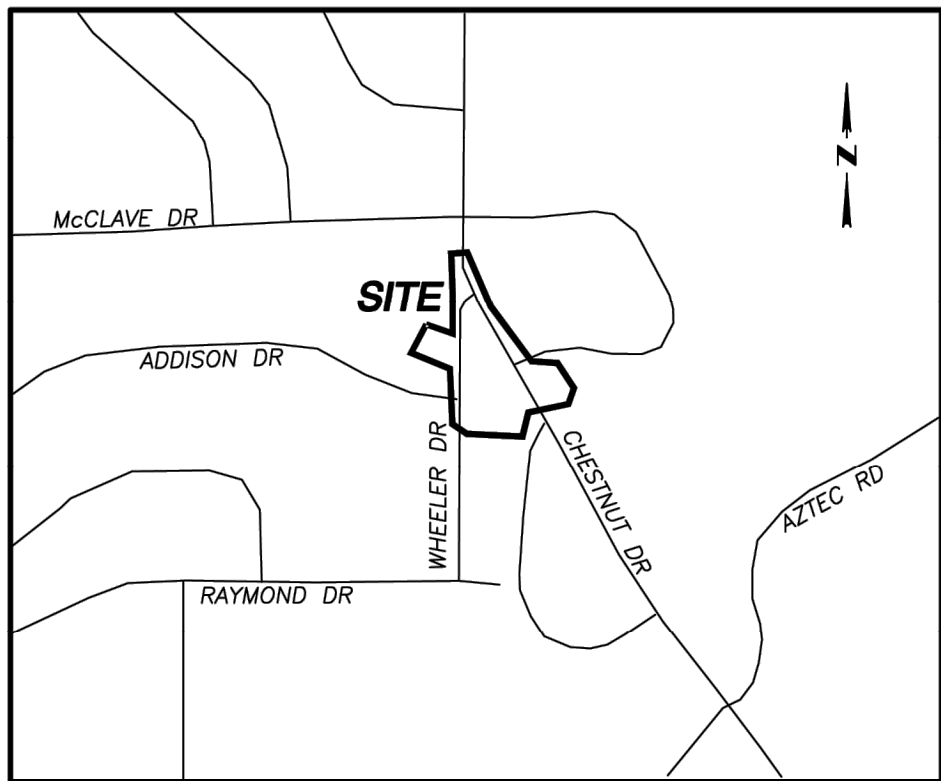


Know what's below.
Call before you dig.



TREE INFORMATION

PT#	TREE TYPE	SIZE (INCHES)	COMMENTS
204	Tree Deciduous	36	DOUBLETRUNK
218	Tree Evergreen	30	
219	Tree Evergreen	20	
231	Tree Evergreen	20	
526	Tree Evergreen	20	
528	Tree Evergreen	30	
586	Tree Deciduous	36	DOUBLETRUNK
676	Tree Evergreen	23	
683	Tree Deciduous	20	
684	Tree Deciduous	28	
716	Tree Evergreen	28	
786	Tree Evergreen	30	
787	Tree Evergreen	25	
788	Tree Evergreen	23	



VICINITY MAP
SCALE: NTS

CITY OF DORAVILLE
STREAM RESTORATION

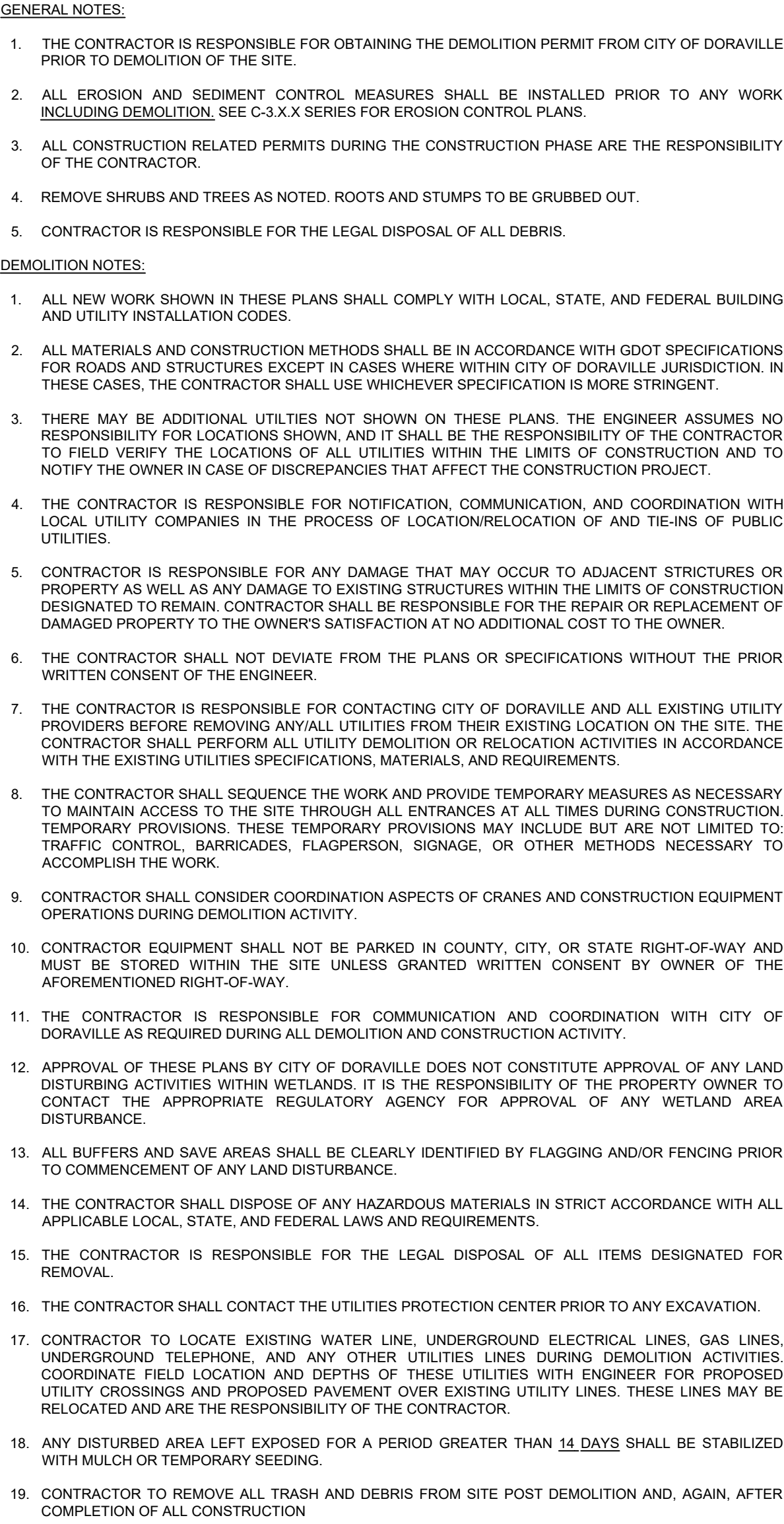
TOPOGRAPHIC SURVEY

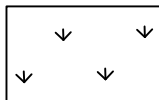
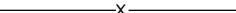
LAND LOT 296, 18TH DISTRICT
CITY OF DORAVILLE
DEKALB COUNTY, GEORGIA

REVISIONS			
NO.	DATE	DESCRIPTION	

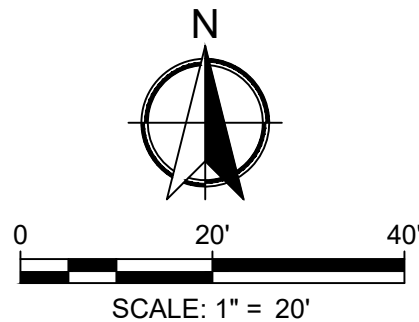


SHEET	1
OF	1
DATE:	10/21/2024
SCALE:	1" = 30'
JOB NO.:	0224107 KAW
DRAWN BY:	AJA
DWG NO.:	SRW103



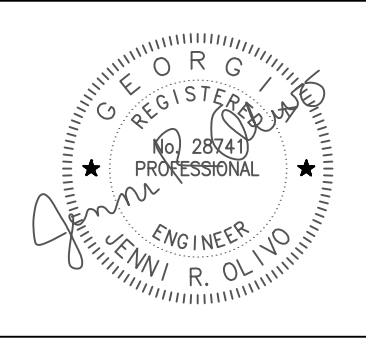
LEGEND	
	CLEARING & GRUBBING AREA EXISTING VEGETATION TO BE REMOVED
	LIMITS OF CONSTRUCTION (TYP.)
	TREE SAVE FENCE (TYP.)
	STREAM BUFFER (TYP.)

EXISTING TREE #	DBH UNITS FOR EX. TREE	DENSITY UNITS FOR EX. TREE
1	23"	6.3
2	25"	6.6
3	30"	7.5
4	36"	8.4
5	36"	8.4
6	30"	7.5
7	20"	6
8	20"	6
9	20"	6
10	30"	7.5
TOTAL:		70.2



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NO.	DATE	REVISION
1	12/23/2025	CITY LDF REVISIONS
2	05/01/2026	CLARIFICATIONS FOR BIDDING

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

DEMOLITION PLAN

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager: JENNI OLIVO	
Drawn By DY	Checked By JO
Date: 11/17/2025	
Scale:	1" = 20'

Project No.:
240285

Drawing No.:
C.1.0

GENERAL NOTES		
ITEM #	1.	OWNER
		CITY OF DORAVILLE 3725 PARK AVENUE DORAVILLE GEORGIA 30340
ITEM #	2.	EMERGENCY
		NAME: JUDE WAGUESPACK 24-HOUR CONTACT ENVIRONMENTAL COMPLIANCE/GIS ANALYST OFFICE # (678) 331-9093
ITEM #	3.	TOTAL SITE AREA: 0.94 ACRES
		DISTURBED AREA: 0.75 ACRES
ITEM #	4.	THE LAND DISTRICTS AND LAND LOTS FOR THE PROJECT ARE: DISTRICT 18, LAND LOT 296
		DESCRIPTION: THE CONSTRUCTION ACTIVITIES GENERALLY INCLUDE CLEARING, GRADING, LANDSCAPING AND EARTHWORK REQUIRED TO RESTORE AND STABILIZE APPROXIMATELY 400 LF OF STREAMBANK.
ITEM #	5.	EXISTING SITE CONDITIONS AND ADJACENT AREAS: THE MAJORITY OF THE EXISTING SITE IS VEGETATED AND/OR WOODED ALONG A COMBINATION OF ROADWAY RIGHT-OF-WAYS. SLOPES VARY FROM GENTLE TO STEEP AND THE VEGETATION VARIES FROM GRASS AND SOD TO MOSS AND DIRT SCATTERED WITH GRAVEL. THERE ARE TWO EXISTING STREAMS ONSITE.
	6.	EXISTING SITE CONDITIONS AND ADJACENT AREAS: THE MAJORITY OF THE EXISTING SITE IS VEGETATED AND/OR WOODED ALONG A COMBINATION OF ROADWAY RIGHT-OF-WAYS. SLOPES VARY FROM GENTLE TO STEEP AND THE VEGETATION VARIES FROM GRASS AND SOD TO MOSS AND DIRT SCATTERED WITH GRAVEL. THERE ARE TWO EXISTING STREAMS ONSITE.
	7.	THIS SITE DOES NOT CONTAIN WETLANDS.
	8.	NO UNIQUE VEGETATION, INCLUDING WETLAND VEGETATION, HAVE BEEN FOUND TO EXIST WITHIN THE LIMITS OF THIS PROJECT.
	9.	PROJECT SITE CONTAINS STATE WATERS REQUIRING UNDISTURBED BUFFERS, 25'.
	10.	NORTH FORK PEACHTREE CREEK TRIBUTARY 1.1 IS THE RECEIVING WATERS.
ITEM #	11.	THIS PROJECT DOES NOT DISCHARGE STORM WATER INTO AN IMPAIRED STREAM SEGMENT AND IS WITHIN 1 MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT. NORTH FORK PEACHTREE CREEK. IMPAIRED FOR FC, BIO M, AND BIO F.
	12.	NO EXISTING STORM DRAIN PIPES OR WEIRS WILL BE AFFECTED.
	13.	WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
ITEM #	14.	SITE IS LOCATED IN THE CITY OF DORAVILLE UNLESS OTHERWISE NOTED.
	15.	ALL LAND DISTURBING ACTIVITY IS LOCATED WITHIN RESIDENTIAL AND RURAL AREAS.
	16.	ALL SPECIAL FLOOD HAZARD AREA INFORMATION TAKEN FROM PANELS ON FIRM MAPS DATED 8/15/2019.
	17.	WORK ZONES WILL BE SET UP ACCORDING TO M.U.T.C.D. MANUAL.
	18.	RETAINING WALLS OVER 4' IN HEIGHT AND PART OF INITIAL INFRASTRUCTURE WILL BE REQUIRED TO BE INSPECTED BY DESIGN PROFESSIONAL OR REPRESENTATIVE AND INSPECTION REPORT WILL BE REQUIRED AT TIME OF C.O.
	19.	ALL MANHOLES OR CATCH BASINS MAY NOT BE COVERED DURING OR AFTER CONSTRUCTION AND SHALL BE VISIBLE AND CLEAN ON FINAL INSPECTION.
	20.	SHOULDER RESTORATION WILL BE LEVEL WITH EXISTING ASPHALT AND SLOPING TO DITCH LINE.
	21.	ALL DRIVEWAY APRONS MUST BE INSPECTED WHEN FORMED AND AFTER POURED.
	22.	CONTRACTOR MUST CALL CITY PUBLIC WORKS ENGINEERS OFFICE FOR INSPECTION OF ALL STORM DRAIN SYSTEMS (PIPES, BOXES, CATCH BASINS, ETC.) BEFORE BACKFILLING.
	23.	CONCRETE TRUCK DRUMS SHALL NOT BE WASHED OUT ONSITE AND SURPLUS CONCRETE WILL NOT BE DISCARDED ONSITE.
	24.	CONCRETE TRUCK SHOOTS AND TOOLS WILL BE WASHED OUT INTO THE WORKING TRENCH PRIOR TO BACKFILL. NO WATER FROM WASHING OFF TOOLS OR SHOOTS WILL LEAVE THE SITE OR DRAIN ONTO UNDISTURBED AREAS.
	25.	ANY SOIL OR DEBRIS ON ROAD WILL BE REMOVED DAILY OR IMMEDIATELY IF A HAZARDOUS ROAD CONDITION EXISTS.
ITEM #	26.	THE NATURE OF THIS PROJECT IS A STREAMBANK RESTORATION AND STABILIZATION PROJECT. THE PROJECT IS REQUIRED TO BE LOCATED WITHIN THE 25' STREAM BUFFER AND WILL REQUIRE AN STREAM BUFFER VARIANCE AND A PERMIT FROM THE US ARMY CORPS OF ENGINEERS.
	27.	LIMIT OF DISTURBANCE SHALL BE NO GREATER THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE EPD DISTRICT OFFICE.

EROSION CONTROL NOTES		
ITEM #	19.	1.
ITEM #	20.	2.
ITEM #	21.	3.
	4.	EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE MINIMUM REQUIREMENTS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR WHERE DETERMINED NECESSARY BY LOCAL AUTHORITIES OR THE ENGINEER BASED UPON ACTUAL SITE CONDITIONS. CHECK DAMS (Cd) WILL BE USED AS NEEDED.
	5.	EROSION CONTROL MEASURES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE DRAWINGS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE DRAINAGE PATTERNS SHOWN ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ADDITIONAL SEDIMENT BARRIERS WILL BE PLACED AS REQUIRED BY INSPECTOR.
	6.	MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION.
	7.	PROVISIONS TO PREVENT EROSION OF SOIL FROM SITE SHALL BE, AT A MINIMUM, IN CONFORMANCE WITH THE LATEST REVISION OF THE "MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA."
	8.	FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED.
	9.	IF FINES OR PENALTIES ARE LEVIED AGAINST THE PROPERTY OR THE PROPERTY OWNER BECAUSE OF A LACK OF EROSION OR SEDIMENTATION CONTROL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF SUCH FINES OR PENALTIES, OR THE COST OF SUCH FINES OR PENALTIES SHALL BE DEDUCTED FROM THE CONTRACT AMOUNT.
	10.	ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAYS OR INTO STORM DRAINS SHALL BE KEPT TO A MINIMUM & REMOVED BY THE END OF THE DAY.

EROSION CONTROL CERTIFICATION:

"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES, OR (B) WHERE ANY SUCH SPECIFIC IDENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODY IS NOT PROPOSED TO BE SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS REQUIRED IN THE GENERAL NPDES PERMIT NO. GAR100002, THAT THE INCREASE IN THE TURBIDITY OF EACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER."

Jenni R Olivo
DESIGN PROFESSIONAL

EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CERTIFICATION:

THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR THE NORTHWOODS STREAM RESTORATION PROJECT WERE DEVELOPED UNDER THE DIRECT SUPERVISION OF JENNI R OLIVO, GSWCC LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERTIFICATION NO. 20711.

EROSION CONTROL NOTES (CONT.)		
ITEM #	36.	12.
	13.	THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL TAKE PLACE PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
	14.	TEMPORARY MULCHING SHALL BE PROVIDED TO DISTURBED AREAS DAILY.
	15.	LIMITS OF CONSTRUCTION SHALL BE CONTAINED WITHIN THE RIGHT OF WAY AND EASEMENTS OBTAINED BY THE PUBLIC UTILITIES DEPARTMENT.
	16.	PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO DISTURBANCE ACTIVITY SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE DRAWINGS.
	17.	ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) WILL BE INSPECTED DAILY, AND ANY DEFICIENCIES WILL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL EROSION CONTROL BMPs WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION BY THE ISSUING AUTHORITY.
	18.	SEDIMENT CONTROL MEASURES WILL BE MAINTAINED UNTIL ALL UPSTREAM DISTURBED GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/PARKING HAVE BEEN PAVED.
	19.	CONTRACTOR SHALL INSPECT AND REPAIR EROSION CONTROL MEASURES AT LEAST DAILY AND PRIOR TO EACH ANTICIPATED RAINFALL.
	20.	THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT FROM SEDIMENT BARRIERS AND CHECK DAMS WHICH BECOME SILTED ABOVE ONE-HALF OF THEIR ORIGINAL HEIGHT.
	21.	ALL AREAS TO BE PAVED SHALL BE STABILIZED WITH BASE MATERIAL AS SOON AS PRACTICAL.
	22.	TEMPORARY OR PERMANENT VEGETATIVE STABILIZATION SHALL BE PROVIDED IMMEDIATELY AFTER REACHING FINAL GRADE FOR ALL AREAS NOT TO BE PAVED.
	23.	THE CONSTRUCTION ACTIVITIES AT THESE SITES WILL NOT RESULT IN FLOODING OR CHANNEL DEGRADATION DOWNSTREAM.
	24.	NO CUT OR FILL SLOPES STEEPER THAN 2:1 ARE ALLOWED. SPECIAL ATTENTION WILL BE GIVEN TO FILLS OVER 5 FEET IN HEIGHT.
	25.	ALL FILL SLOPES WILL HAVE SILT FENCES AT THE TOE OF SLOPES.
	26.	SURFACE ROUGHENING (Su): ALL CUT AND FILL SLOPES SHALL BE SURFACE ROUGHENED AND VEGETATED WITHIN (3) THREE DAYS AFTER GRADING IS COMPLETED.
	27.	AT THE END OF EACH WORK DAY, ALL SLOPES 2:1 OR STEEPER AND HIGHER THAN 5 FEET SHALL RECEIVE SURFACE ROUGHENING, POLYMERS, AND MATTING.
	28.	DOUBLE ROW TYPE C SILT FENCE REQUIRED WHEN PLACED ALONG STATE WATERS AND AT THE TOE OF SLOPES EXCEEDING 10' VERTICAL.
	29.	CHECK DAMS SHALL HAVE A MAXIMUM SPACING OF 150 FEET IN DITCH LINE.
	30.	AN UNDISTURBED VEGETATIVE BUFFER (MEETING COUNTY & STATE REGULATIONS) AND THE APPROPRIATE IMPERVIOUS SETBACK ADJACENT TO ALL STATE WATERS WILL BE PRESERVED.
	31.	SIGN EVERY LOT OR EVERY 100', WHICHEVER IS LESS, STATING: "STREAMSIDE BUFFER - DO NOT REMOVE OR ALTER EXISTING NATIVE VEGETATION."
	32.	CRITICAL AREAS: RIP RAP AND/OR STONE CHECK DAMS SHALL BE PLACED AT ALL CRITICAL EROSION AREAS INCLUDING, BUT NOT LIMITED TO, STREAM CROSSINGS.
	33.	PERMANENT VEGETATION SHALL BE PROVIDED AT THE EARLIEST SUITABLE GROWING SEASON.
	34.	WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE, THE CONTRACTOR SHALL NOT DEPOSIT ANY BUILDING OR OTHER EXCAVATION SPOIL DIRT, CONSTRUCTION TRASH OR DEBRIS, ECT. IN THE DRAINAGE COURSE OR ASSOCIATED FLOOD PLAIN.
	35.	GRADING EQUIPMENT MUST CROSS FLOWING STREAMS BY THE MEANS OF BRIDGING OR CULVERTS, EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE; ALL STREAM CROSSINGS WILL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF THE "MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA."
	36.	DISCHARGE OF STORM-WATER RUN-OFF FROM DISTURBED AREAS TO A STREAM SHALL BE CONTROLLED TO THE EXTENT THAT TURBIDITY OF THE STREAM DOWNSTREAM FROM THE DISCHARGE SHALL NOT EXCEED AN INCREASE OF 25 NEPHELOMETRIC TURBIDITY UNITS HIGHER THAN THE TURBIDITY LEVEL OF THE RECEIVING STREAM IMMEDIATELY UPSTREAM FROM THE STORM-WATER RUN-OFF DISCHARGE AT THE TIME OF SUCH DISCHARGE.
	37.	DISPOSE OF WASTE SOILS AND CLEARED AND GRUBBED & CONSTRUCTION DEBRIS OFF-SITE AT AN APPROVED LANDFILL SECURED BY THE CONTRACTOR, AND IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
	38.	ALL SOLID WASTE IS TO BE HAULED OFF-SITE. STUMPS AND CONSTRUCTION DEBRIS SHALL BE DEPOSITED IN A PROPERLY PERMITTED LANDFILL.
	39.	CONSTRUCTION EXIT IS PROVIDED TO MINIMIZE THE AMOUNT OF OFF-SITE VEHICLE TRACKING OF DIRT, SOILS, AND SEDIMENTS AND DUST GENERATION. THE CONSTRUCTION ENTRANCE/EXIT ALSO ACTS AS A FUELING AREA WHICH WILL PROVIDE REMEDIATION OF PETROLEUM SPILLS AND LEAKS.
	40.	NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFER AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS, EXCEPT AS PERMITTED UNDER GEN. NPDES PERMIT # GAR100002 PART IV (i), (ii), AND (iii).
	41.	UPON NOTIFICATION BY THE PRIMARY PERMITTEE, THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN SHALL INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN SEVEN (7) DAYS AFTER INSTALLATION.
	42.	ANY AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
	43.	THESE PLANS HAVE BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION (EPD), GENERAL PERMIT NO. GAR 100001 FOR AUTHORIZATION TO DISCHARGE UNDER THE NPDES, STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR THIS PROJECT
	44.	RETAINING WALLS OVER 4' IN HEIGHT AND PART OF INITIAL INFRASTRUCTURE WILL BE REQUIRED TO BE INSPECTED BY DESIGN PROFESSIONAL OR REPRESENTATIVE AND AN INSPECTION REPORT WILL BE REQUIRED AT TIME OF C.O.
	45.	SEE DETAIL PAGES FOR CHART WITH SYMBOLS, DETAILS, AND DESCRIPTIONS OF FULL EROSION CONTROL MEASURES.
	46.	GPS LOCATION OF CONSTRUCTION EXIT: 33.8884 N -84.2756 E
	47.	CONTRACTOR IS TO ENSURE SITE WILL HAVE THE APPROPRIATE STAGING & ACCESS REQUIREMENTS FOR CONSTRUCTION EQUIPMENT.

SOIL CLEANUP AND CONTROL PRACTICES

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
- MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MAPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
- SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACT, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACT, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.
- THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1,320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.
- SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY REGARDLESS OF THE SIZE.
- THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- THE CONTRACTOR'S SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSON WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THIS INDIVIDUAL WILL BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE (OR DESIGNATED ONSITE JOB LOCATION).

PRODUCT SPECIFIC PRACTICES		
ITEM #	25.	1.
	26.	PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATERS, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.
	27.	PAINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
	28.	CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.
	29.	FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.
	30.	BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF USING PROPER WASTE DISPOSAL PROCEDURES.

EROSION CONTROL SITE VISIT CERTIFICATION:

"I HEREBY CERTIFY UNDER PENALTY OF THE LAW THAT THE EROSION AND SEDIMENTATION CONTROL PLANS FOR THIS PROJECT WERE PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION."

Jenni R Olivo

DESIGN PROFESSIONAL

ITEM #

12

EROSION CONTROL CERTIFICATION:

"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100002."

Jenni R Olivo

DESIGN PROFESSIONAL

ITEM #

13

EROSION CONTROL CERTIFICATION:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

Jenni R Olivo

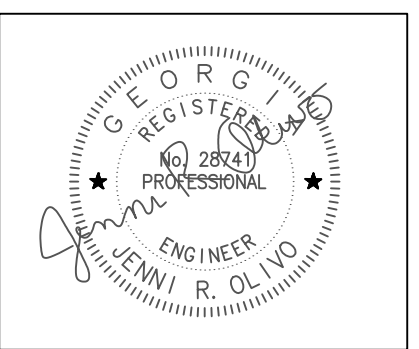
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REVISION		DATE		NO.	

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

EROSION CONTROL NOTES

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By
DY

Checked By
JO

Date: 11/17/2025

Scale: NONE

Project No.:

240285

Drawing No.:

C.3.1.0

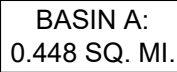
FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES
STATE SOIL AND WATER CONSERVATION COMMISSION OF GEORGIA
STRUCTURAL PRACTICES

VEGETATIVE MEASURES

DUST CONTROL

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
------	----------	--------	---------------	-------------

--	--	--



DRAINAGE AREA
SCALE: 1" = 2000'

SYMBOL	ITEM #	SOIL TYPE	SLOPE %
AuC		APPLING-URBAN LAND COMPLEX	2 TO 10
Tf		TOCCOA SANDY LOAM	0 TO 2

I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION SERVICE ON JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF THE BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001.

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.

SIGNATURE OF ENGINEER

DATE _____

CERTIFICATION #

06/01/2028
EXPIRATION



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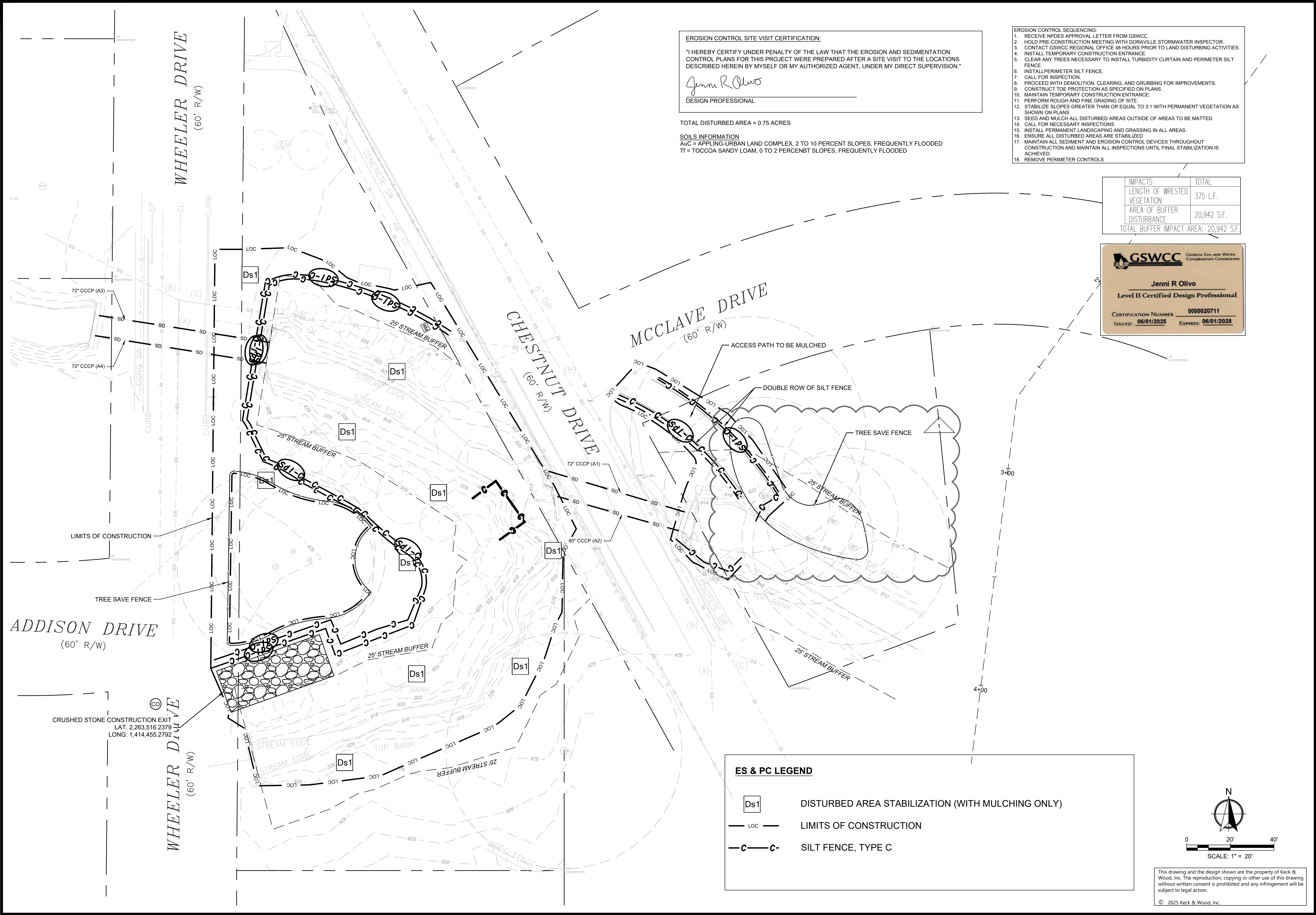
NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

EROSION CONTROL NOTES

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager: JENNI OLIVO	
Drawn By DY	Checked By JO
Date:	11/17/2025
Scale:	NONE

Project No.: 240285
Drawing No.: C.3.1.1





COLLABORATION BY DESIGN

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DULUTH, GA 30097
(678) 417-4000
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REGISTERED PROFESSIONAL ENGINEER
JENNI R. OLIVO
No. 28010

NO.	DATE	REVISION
1	12/23/2025	CITY LDP REVISIONS

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

EROSION CONTROL PLAN - PHASE I

THIS BAR IS 1 INCH LONG PLOTTED FULL SCALE

Project Manager: JENNI OLIVO

Drawn By DY Checked By JO

Date: 11/17/2025

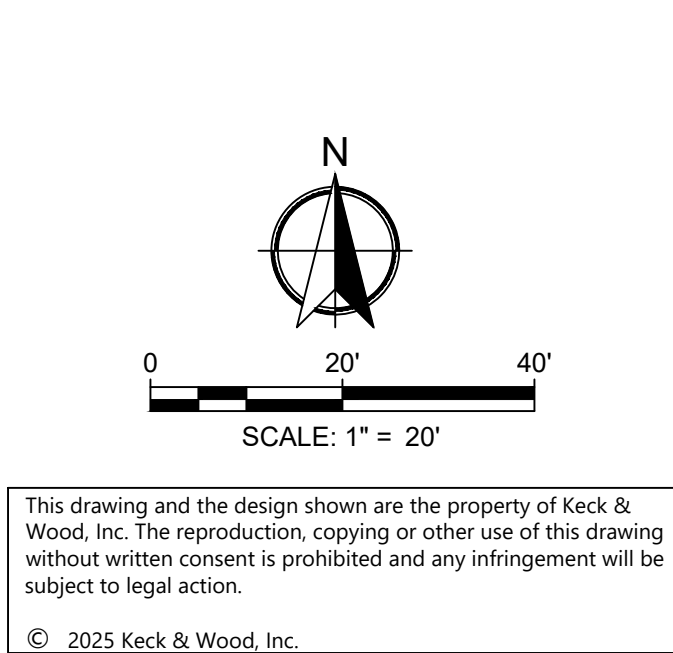
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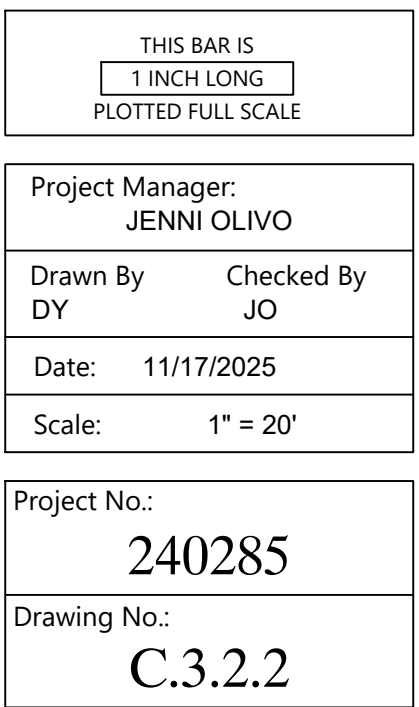
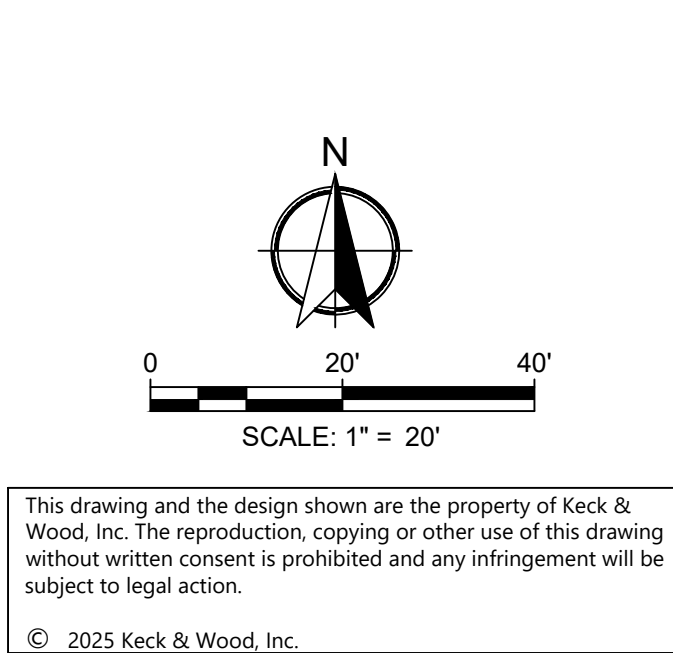
Project No: 240285

Drawing No: C.3.2.0

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DEFINITION

Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

CONDITIONS

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored, and have a continuous 90% cover or greater of the soil surface. Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months. If an area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed.

SPECIFICATIONS

MULCHING WITHOUT SEEDING

This standard applies to grades or cleared areas where seedlings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

Site Preparation

1. Grade to permit the use of equipment for applying and anchoring mulch.
2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials

Select one of the following materials and apply at the depth indicated:
1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.

2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. Cutback asphalt (slow curing) shall be applied at 1200 gallons per acre (or 1/4 gallon per sq.yd.).
4. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

Applying Mulch

- When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.
1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanicalequipment.
 2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
 3. Cutback asphalt shall be applied uniformly. Care should be taken in areas of pedestrian traffic due to problems of 'tracking in' or damage to shoes, clothing, etc.
 4. Apply polyethylene film on exposed areas.

Anchoring Mulch

1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately after application. Straw or hay mulch spread with special blower-type equipment may be anchored with emulsified asphalt (Grade AE-5 or SS-1). The asphalt emulsion shall be sprayed onto the mulch as it is ejected from the machine. Use 100 gallons of emulsified asphalt and 100 gallons of water per ton of mulch. Tackifiers and binders can be substituted for emulsified asphalt. Please refer to specification Tb -Tackifiers and Binders. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.
2. Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.
3. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

DEFINITION

The establishment of temporary vegetative cover with fast growing seedlings for seasonal protection on disturbed or denuded areas.

CONDITIONS

Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established. eeded.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre *	PLANTING DATES **
Rye	3.9 pounds	3 bu.	9/1-3/1
Ryegrass	0.9 pound	40 lbs.	8/15-4/1
Annual Lespedeza	0.9 pound	40 lbs.	1/15-3/15
Weeping Lovegrass	0.1 pound	4 lbs.	2/15-6/15
Sudangrass	1.4 pounds	60 lbs.	3/1-8/1
Browntop Millet	0.9 pound	40 lbs.	4/1-7/15
Wheat	4.1 pounds	3 bu.	10/15-2/1

- * Unusual site conditions may require heavier seeding rates
- ** Seeding dates may need to be altered to fit temperature variations and conditions.

SPECIFICATIONS

Grading and Shaping

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.

No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed Preparation

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or handseeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.

When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate determined by soil test for pH. Quick acting lime should be incorporated to modify pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper, or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulically applied, preferably in the first pass with seed and some hydraulic mulch, then topped with the remaining required application rate.

Seeding

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand.

Mulching

Temporary vegetation can, in most cases, be established without the use of mulch. Mulch without seeding should be considered for short term protection. Refer to Ds1 - Disturbed Area Stabilization (With Mulching Only).

Irrigation

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

BLANKET AND MATTING CROSS-SECTIONS

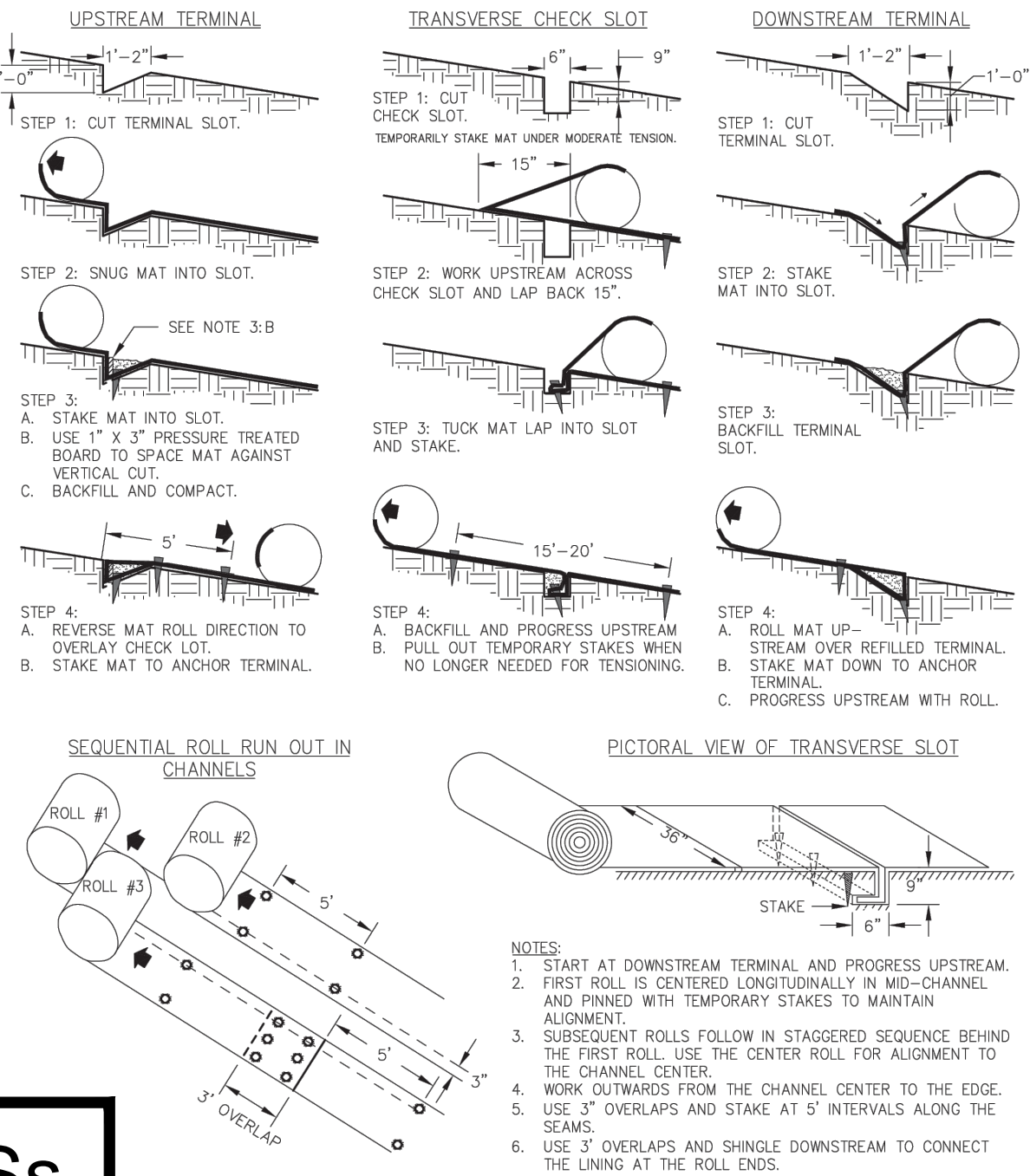


Figure 6-10.1 - Typical Installation Guidelines for Matting and Blankets

GSWCC 2016 Edition

NO.	DATE	REVISION

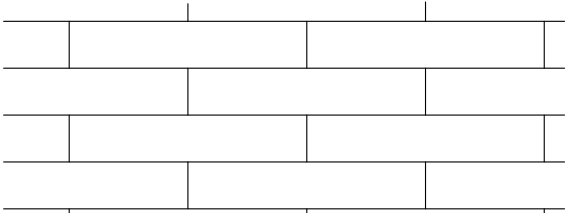
DISTURBED AREA STABILIZATION - Ds1

DISTURBED AREA STABILIZATION - Ds2

SLOPE STABILIZATION - Ss

SOD MAINTENANCE AND INSTALLATION

SOD LAYOUT AND PREPARATION



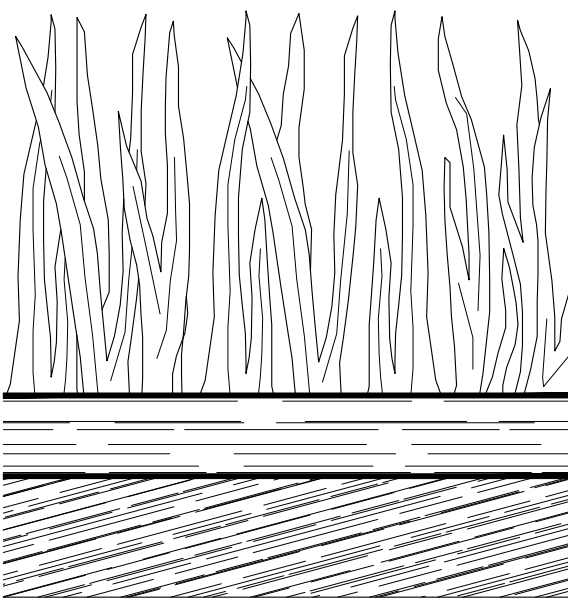
LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

BUTTING: ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

DIRECTIONS FOR INITIAL MAINTENANCE

- Step 1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL
- Step 2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.
- Step 3. MOW WHEN THE SOD IS ESTABLISHED -- IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").

APPEARANCE OF GOOD SOD

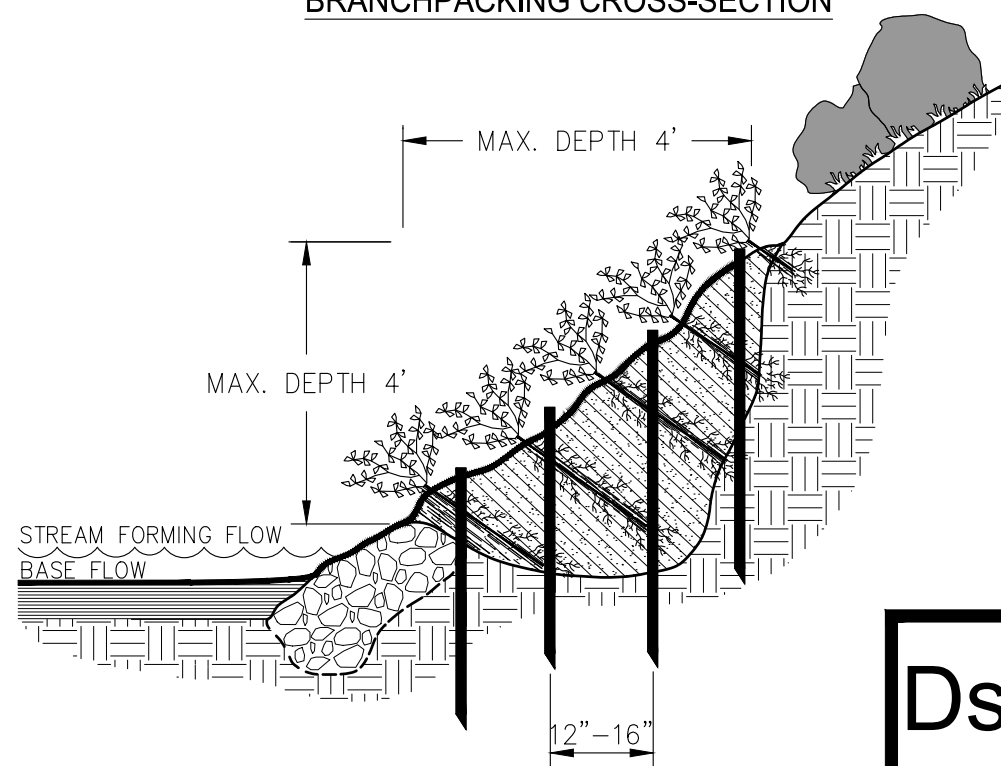


SHOOTS OR GRASS BLADES: GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH: GRASS CLIPPINGS AND DEAD LEAVES (UP TO 1/2" THICK).

ROOT ZONE: SOIL AND ROOTS. SHOULD BE 1/2"-3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.

STREAMBANK STABILIZATION
BRANCHPACKING CROSS-SECTION



- NOTES:
1. ROOT/LEAFED CONDITION OF THE LIVING PLANT MATERIAL IS NOT REPRESENTATIVE OF THE TIME OF INSTALLATION.
 2. STARTING AT THE LOWEST POINT, DRIVE THE WOODEN POSTS VERTICALLY 3' TO 4' INTO THE GROUND AND SET THEM 12"-16" APART.
 3. A LAYER OF LIVING BRANCHES (4"-6" THICK) IS PLACED IN THE BOTTOM OF THE HOLE, BETWEEN THE VERTICAL POSTS. THEY SHALL BE PLACED IN A CRISSCROSS CONFIGURATION.
 4. THE FINAL INSTALLATION SHALL MATCH THE EXISTING SLOPE. BRANCHES SHOULD PROTRUDE ONLY SLIGHTLY FROM THE FILLED FACE.
 5. EACH LAYER OF BRANCHES SHALL BE FOLLOWED BY A 12" LAYER OF SOIL HAND TAMPED TO ENSURE CONTACT WITH THE BRANCH CUTTINGS.
 6. THE SOIL SHALL BE MOIST OR MOISTENED TO ENSURE THAT LIVE BRANCHES DO NOT DRY OUT.
 7. WHERE SPECIFIED, LIVE STAKES SHALL BE USED IN PLACE OF POSTS.

DEFINITION

A permanent vegetation using sods on highly erodible or critically eroded lands.

CONDITIONS

This application is appropriate for areas which require immediate vegetative covers, drop inlets, grass swales, and waterways with intermittent flow.

CONSTRUCTION SPECIFICATIONS INSTALLATION

Soil Preparation

- Bring soil surface to final grade. Clear surface of trash, woody debris, stones and clods larger than 1". Apply sod to soil surfaces only and not frozen surfaces, or gravel type soils.
- Topsoil properly applied will help guarantee stand. Don't use topsoil recently treated with herbicides or soil sterilants.
- Mix fertilizer into soil surface. Fertilize based on soil tests or Table 6-6.1. For fall planting of warm season species, half the fertilizer should be applied at planting and the other half in the spring.

Table 6-6.1. Fertilizer Requirements for Soil Surface Application

Fertilizer Type (lbs./acre)	Fertilizer Rate (lbs./acre)	Fertilizer Rate	Season
10-10-10	1000	.025	Fall

- Agricultural lime should be applied based on soil tests or at a rate of 1 to 2 tons per acre.

Installation

- Lay sod with tight joints in straight lines. Don't overlap joints. Stagger joints and do not stretch sod.
- On slopes steeper than 3:1, sod should be anchored with wooden or biodegradable pins or other approved methods.
- Installed sod should be rolled or tamped to provide good contact between sod and soil.
- Irrigate sod and soil to a depth of 4" immediately after installation.
- Sod should not be cut or spread in extremely wet or dry weather.
- Irrigation should be used to supplement rainfall for a minimum of 2-3 weeks.

Ds4 DISTURBED AREA STABILIZATION (WITH SODDING)

MATERIALS

- Sod selected should be certified. Sod grown in the general area of the project is desirable.
- Sod should be machine cut and contain 3/4" ±1/4" of soil, not including shoots or thatch.
- Sod should be cut to desired size within ±5%. Torn or uneven pads should be rejected.
- Sod should be cut and installed within 36 hours of digging.
- Avoid planting when subject to frost heave or hot weather if irrigation is not available.
- The sod type should be shown on the plans or installed according to Table 6-6.2. See Figure 6-4.1 for your Resource Area.

Table 6-6.2. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tiflawn	M-L, P, C P, C P, C P, C	Warm Weather
Bahiagrass	Pensacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M-L, P	Cool Weather

MAINTENANCE

- Re-sod areas where an adequate stand of sod is not obtained.
- New sod should be mowed sparingly. Grass height should not be cut less than 2"-3" or as specified.
- Apply one ton of agricultural lime as indicated by soil test or every 4-6 years.
- Fertilize grasses in accordance with soil tests or Table 6-6.3.

Table 6-6.3. Fertilizer Requirements for Sod

Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
Cool Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 30
Warm Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30

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DISTURBED AREA STABILIZATION - Ds4

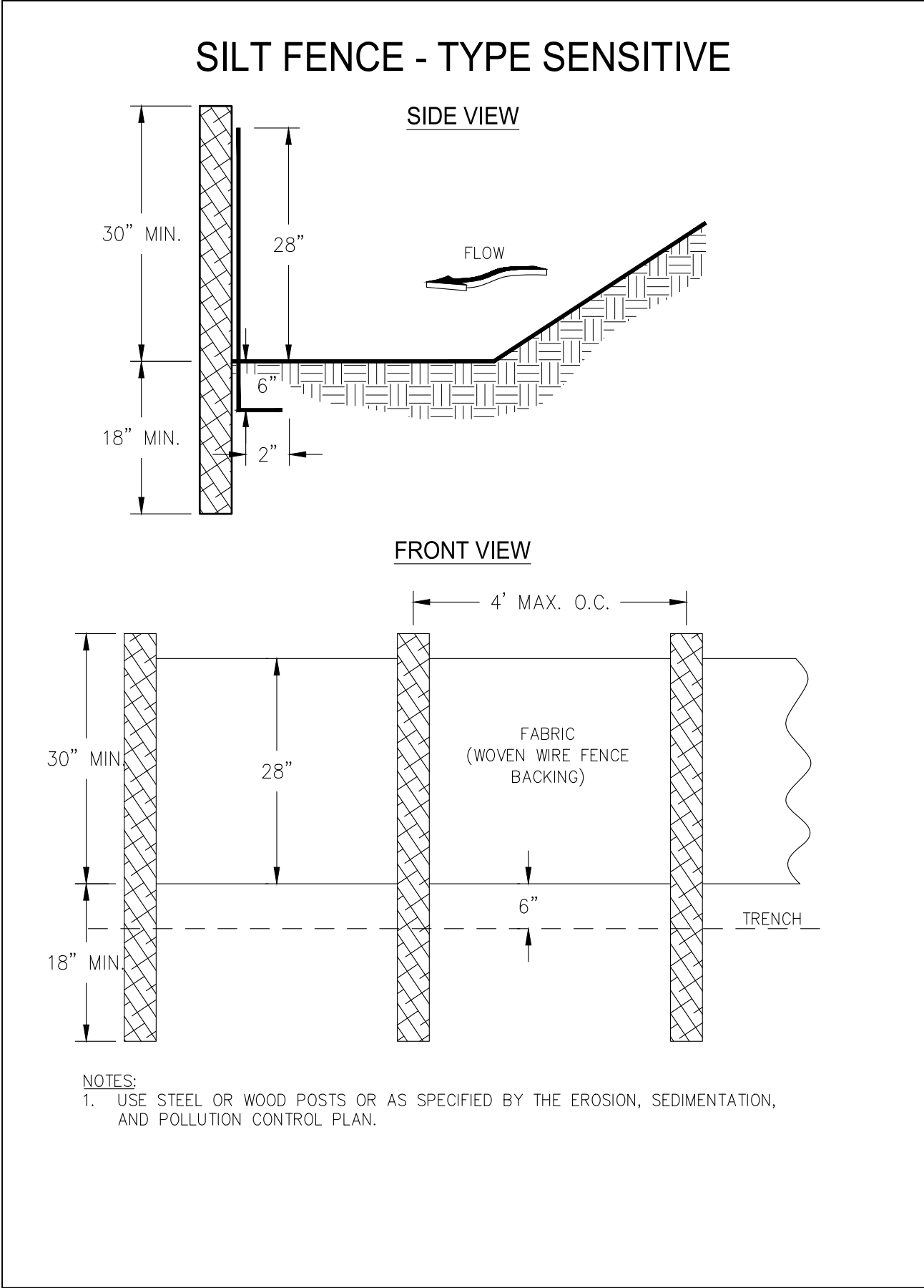
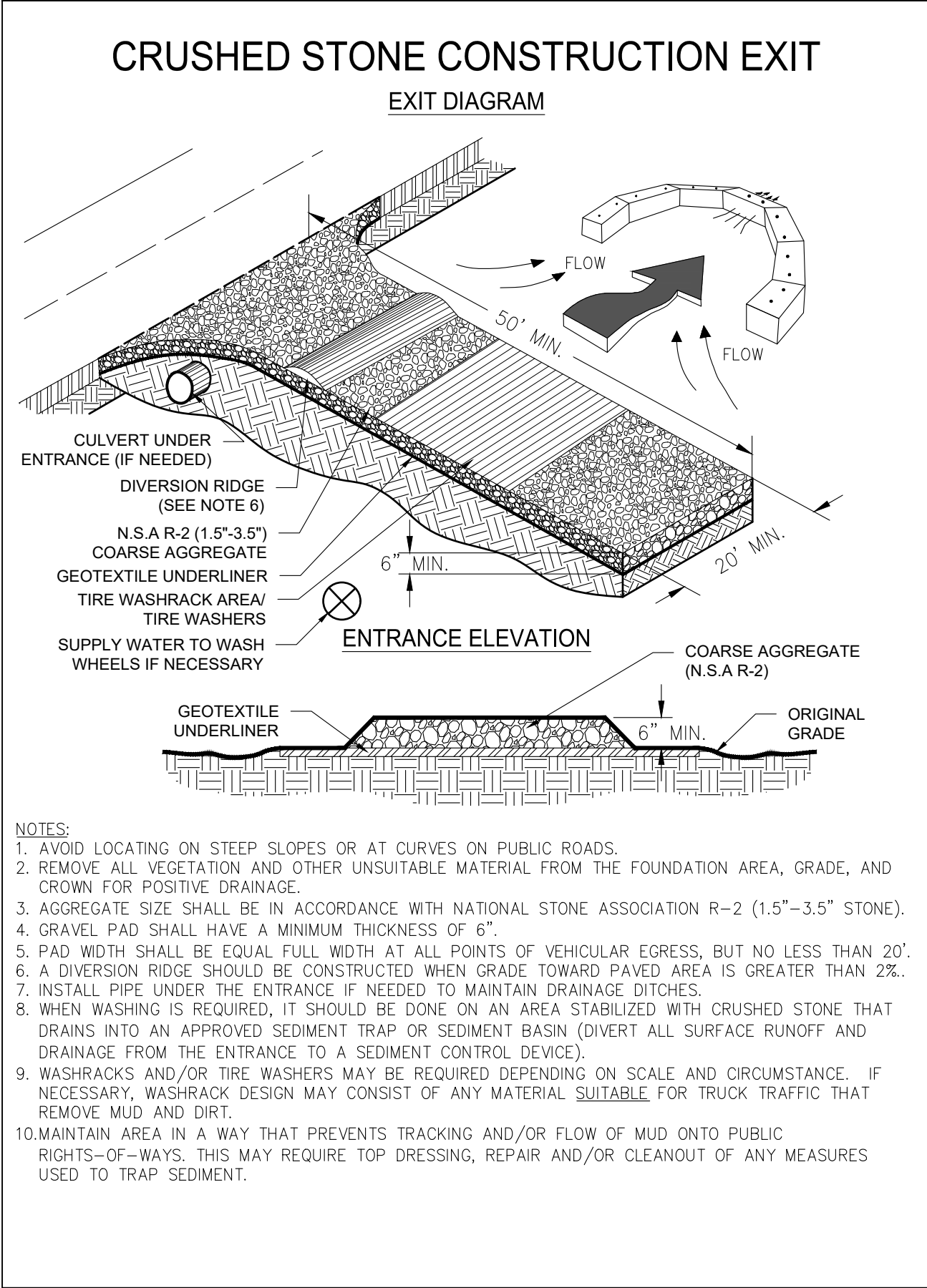
DISTURBED AREA STABILIZATION - Ds4

DISTURBED AREA STABILIZATION - Ds4

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:	JENNI OLIVO
Drawn By	Checked By
DY	JO
Date:	11/17/2025
Scale:	NONE

Project No.:	240285
Drawing No.:	C.3.3.0



DEFINITION

The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization. Permanent perennial vegetation shall be used to achieve final stabilization.

CONDITIONS

Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dunes, and other denuded areas.

SPECIFICATIONS

Grading and Shaping

Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment.

When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation.

concentrations of water that will cause excessive soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

Seedbed Preparation

Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used. When conventional seeding is to be used, seedbed preparation will be done as follows:

Broadcast plantings

1. Tillage at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches, alleviate compaction, incorporate lime and fertilizer, smooth and firm the soil, allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.
2. Tillage may be done with any suitable equipment.
3. Tillage should be done on the contour where feasible.

Individual Plants

1. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.
2. For nursery stock plants, holes shall be large enough to accommodate roots without crowding.
3. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

Planting

Hydraulic Seeding

Mix the seed (manculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

Conventional Seeding

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a cultipacker seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

No-Till Seeding

No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface. Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

Mulching

Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% soil cover. Select the mulching material from the following and apply as indicated:

1. Dry straw or dry hay of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.
2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Drystraw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. One thousand pounds of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper.
4. Serious lespedeza hay containing mature seed shall be applied at a rate of three tons per acre.
5. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding purposes. Other suitable materials in sufficient quantity may be used where ornamentals or other ground covers are planted. This is not appropriate for seeded areas.
6. When using temporary erosion control blankets or block sod, mulch is not required.
7. Bituminous treated roving may be applied on planted areas on slopes, in ditches or dry waterways to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.

Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual maturing and aid in uniform application during seeding.

Applying Mulch

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface.

Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchoring Mulch

Anchor straw or hay mulch immediately after application by one of the following methods:

1. Emulsified asphalt can be (a) sprayed uniformly onto the mulch as it is ejected from the blower machine or (b) sprayed on the mulch immediately following mulch application when straw or hay is spread by methods other than special blower equipment.

The combination of asphalt emulsion and water shall consist of a homogeneous mixture satisfactory for spraying. The mixture shall consist of 400 gallons of grade 88-4h or CSS-4h emulsified asphalt and 400 gallons of water per ton of mulch.

Care shall be taken at all times to protect state waters, the public, adjacent property, pavements, curbs, sidewalks, and all other structures from asphalt discoloration.

2. Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.
3. Synthetic tackifiers or binders approved by GDOT shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. Refer to "Tackifiers and Binders."
4. Rye or wheat can be included with Fall and Winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one half bushel per acre.
5. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Irrigation

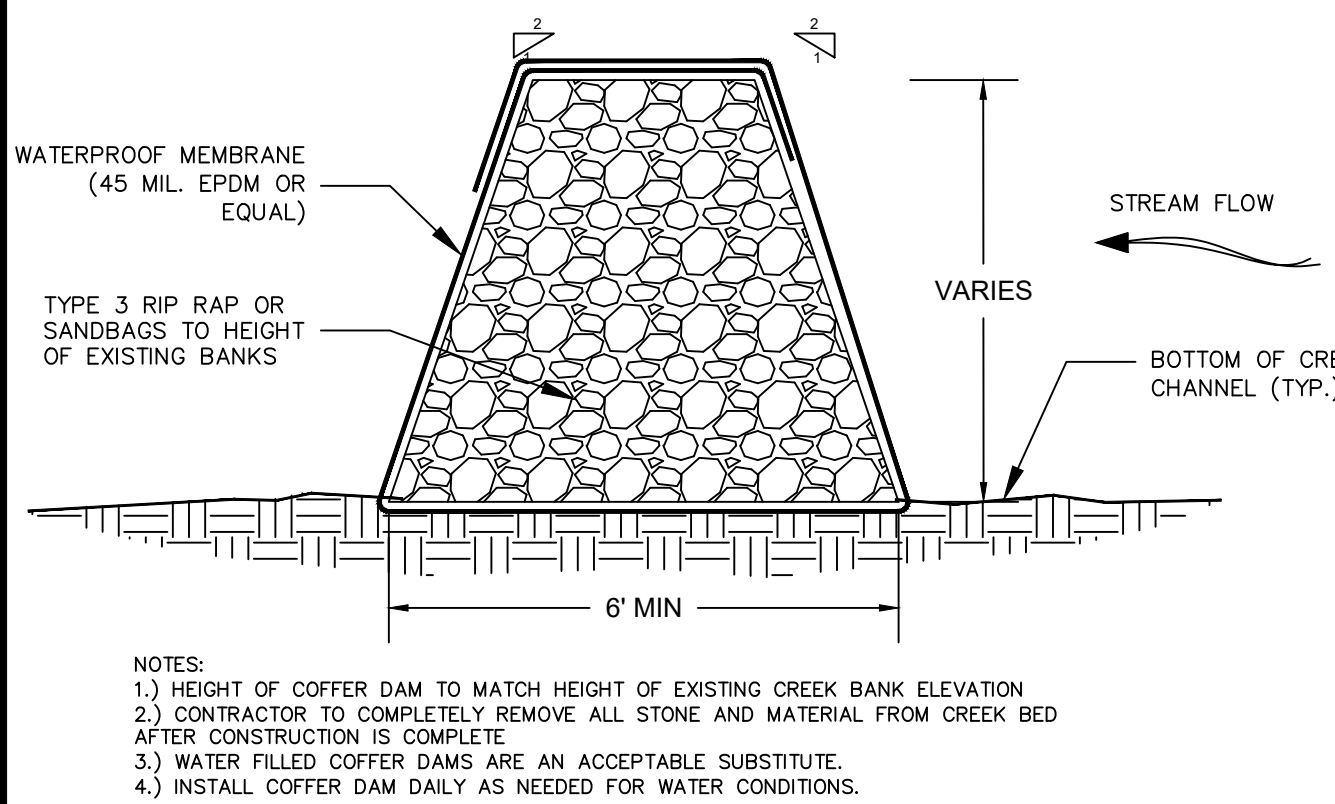
Irrigation shall be applied at a rate that will not cause runoff.

SEEDING RATES FOR PERMANENT SEEDING

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre *	PLANTING DATES **
BAHIA	1.4 POUNDS	60 LBS.	6/1-12/31
BERMUDA	0.2 POUND	40 LBS.	2/15-7/1
CENTPEDE	BLOCK SOD ONLY	BLOCK SOD ONLY	4/1-7/1
LESPEDEZA	1.7 POUNDS	75 LBS.	6/1-12/31
WEeping LOVE GRASS	0.1 POUND	1 LBS.	2/1-6/15
SWITCH GRASS	0.9 POUND	40 LBS.	3/15-6/1

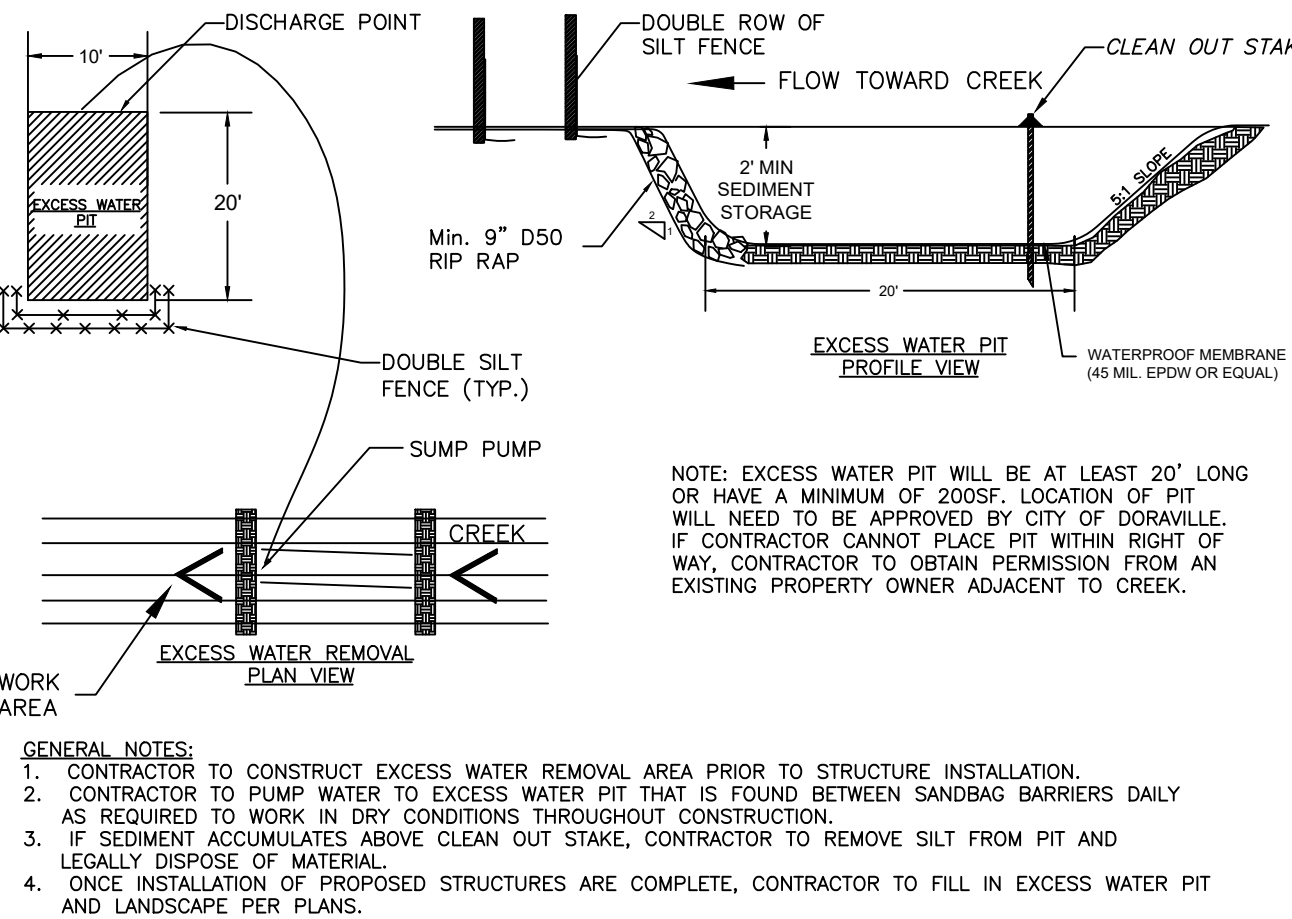
* Unusual site conditions may require heavier seeding rates
** Seeding dates may need to be altered to fit temperature variations and conditions.

CONSTRUCTION EXIT - Co



TEMPORARY COFFER DAM

SILT FENCE - SENSITIVE - Sd1-C



EXCESS WATER REMOVAL

DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) - Ds3

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.

Ds2 TEMPORARY

Ds3 PERMANENT

RATES PER 1,000 SQUARE FEET

AREA	SOWING SEASON	SPECIES	SEED	FERTILIZER	LIMESTONE	MAINTENANCE	MULCH
FLAT TO ROLLING TERRAIN WITH SLOPES LESS THAN 3:1	8/1 - 4/1 4/1 - 9/1	RYEGRASS SUNDANGRASS	4.0 LBS. 1.4 LBS.	12 LBS. (10-10-10) 12 LBS. (10-10-10)	92 LBS. 92 LBS.	7 LBS. (10-10-10) 7 LBS. (10-10-10)	115 LBS. 115 LBS.
EMBANKMENTS WITH SLOPES GREATER THAN 3:1	3/15 - 6/15	WEEPING LOVEGRASS	0.1 LB.	12 LBS. (10-10-10)	92 LBS.	7 LBS. (10-10-10)	115 LBS.
FLAT TO ROLLING TERRAIN WITH SLOPES LESS THAN 3:1	3/1 - 6/15 8/15 - 10/30	COMMON BERMUDA (HULLED SEED) FESCUE, TALL	1.4 LBS. 0.05 LBS. 1.1 LBS.	35 LBS. (6-12-12) 35 LBS. (6-12-12)	92 LBS. 92 LBS.	10 LBS. (10-10-10) 10 LBS. (10-10-10)	115 LBS. 115 LBS.
EMBANKMENTS WITH SLOPES GREATER THAN 3:1	3/1 - 6/30 9/1 - 3/30	COMMON BERMUDA (HULLED SEED) *LESPEDEZA SERICEA	0.2 LB. 1.7 LBS.	35 LBS. (6-12-12) 35 LBS. (6-12-12)	92 LBS. 92 LBS.	10 LBS. (10-10-10) 10 LBS. (10-10-10)	115 LBS. 115 LBS.

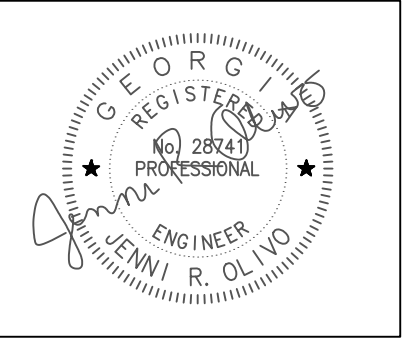
THE PROJECT SITE IS LOCATED IN THE PIEDMONT REGION.

SEEDING REQUIREMENTS

SEEDING CHART

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NO.	DATE	REVISION

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS GAR100001

SWCD:___ DEKALB COUNTY SWCD
Project Name: NORTHWOODS STREAM RESTORATION Address: WHEELER DRIVE & CHESTNUT DRIVE
Local Issuing Authority: CITY OF DORAVILLE Date on Plans: MARCH 21, 2025
Name & Email of person filling out checklist: JENNI OLIVO, jolivo@keckwood.com

Plan Included
Page # Y/N TO BE SHOWN ON ES&PC PLAN

- C.3.1.2 Y 1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed. **Permit IV.D.1, pg 27**
- C.3.0.0 Y 2 Level II certification number issued by the Commission, signature and seal of the certified design professional.
Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed. The Level II certification must be issued to the Design Professional, **after completion of a GSWCC approved course**, and whose signature and seal are on the Plan.
- NA 3 Limits of disturbance shall be **less than** 50 acres at any one time without prior written authorization from the GAEPD District Office. If GAEPD approves the request to disturb 50 acres or more at any one time, the Plan must include the GAEPD approval letter and completed Appendix 1 of this checklist with at least 4 of the chosen BMPs. *
A copy of the written approval by GAEPD must be attached to the Plan for the Plan to be reviewed. **Permit IV.D.3, pg 28**
- C.3.1.0 Y 4 The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.
- C.3.1.0 Y 5 Provide the name, address, email address, and phone number of Primary Permittee.
- C.3.1.0 Y 6 Note total and disturbed acreages of the project or phase under construction.
- C.3.1.0 Y 7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
- C.3.1.0 Y 8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
- C.3.1.0 Y 9 Descriptions of the nature of construction activity and existing site conditions.
- C.3.0.0 Y 10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
- C.3.1.0 Y 11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
- C.3.1.1 Y 12 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on **Part IV page 20** of the permit.
- NA 13 Design professional's certification statement and signature that the Permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on **Part IV page 20** of the permit. *
- NA 14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect **and certify** the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." *
- C.3.1.0 Y 15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of ~~wrested~~ vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
- C.3.1.0 Y 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
- NA 17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional." *
- NA 18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *
- C.3.1.0 Y 19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
- C.3.1.0 Y 20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."
- C.3.1.0 Y 21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
- NA 22 Any construction activity which discharges storm water into a Biota Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as any portion of a Biota Impaired Stream Segment, must comply with **Part III.C.** of the permit. Include the completed Appendix 1 of this checklist with at least 4 of the chosen BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. *
- NA 23 If a TMDL Implementation Plan for sediment has been finalized for the Biota Impaired Stream Segment (identified in Item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan. *
- NA 24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Include statement that washout of the drum at the construction site is prohibited. *
- C.3.1.0 Y 25 Provide BMPs for the remediation of all petroleum spills and leaks.
- NA 26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. *
- NA 27 Description of practices to provide cover for building materials and building products on site. *
- NA 28 Description of the practices that will be used to reduce the pollutants in storm water discharges. *
- C-3.0.0 Y 29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, grading, infrastructure, temporary and final stabilization).
- NA 30 Provide complete requirements of Inspections and record keeping by the Primary Permittee. *
- NA 31 Provide complete requirements of Sampling Frequency and Reporting of sampling results. *
- NA 32 Provide complete details for Retention of Records as per **Part IV.F.** of the permit. *
- NA 33 Description of analytical methods to be used to collect and analyze the samples from each location. *
- NA 34 Appendix B rationale for NTU values at all outfall sampling points where applicable. *
- NA 35 Delineate all sampling locations on **all phases** of the Plan, and perennial and intermittent streams and other water bodies into which storm water is discharged. *
- NA 36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial sediment storage requirements and initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all BMPs into a single phase plan. *

C.3.2.2 THROUGH C.3.2.2	☐
C.3.2.2 THROUGH C.3.2.2	☐

☐	NA
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C.3.2.2 THROUGH C.3.2.2	☐
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C.3.0.0	☐
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C.3.2.2 THROUGH C.3.2.2	☐
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C.3.2.2 THROUGH C.3.2.2	☐
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C.3.4.0 THROUGH C.3.4.1	☐
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C.3.2.2 THROUGH C.3.2.2	☐
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37 Graphic scale and North arrow.

38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2% Rolling 2 - 8% Steep 8% +	0.5 or 1 1 or 2 2, 5 or 10

39 Use of Alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov.

40 Use of Alternative BMP for application to the Equivalent BMP List. Refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. *

41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State Waters and any additional buffers as required by the Local Issuing Authority. Clearly note and delineate all areas of impact.

42 Delineation of all State Waters and wetlands located on or within 200 feet of the project site.

43 Delineation and acreage of contributing drainage basins on the project site.

44 Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions. *

45 Estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed. **For solar farm projects, post-construction impervious area shall be calculated as 70% of total solar panel square footage.**

46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate at all storm water discharge points.

47 Soil series for the project site and their delineation.

48 The limits of disturbance for each phase of construction.

49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, Permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.

50 Location of Best Management Practices that are consistent with, and no less stringent than, the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual Chapter 6, with legend.

51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

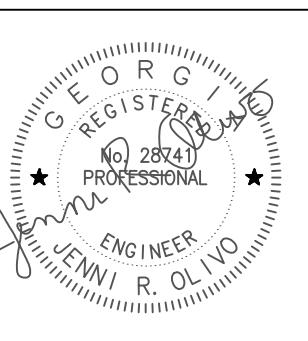
52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

* If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream, the * checklist items would be N/A.

Effective January 1, 2025

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NO.	DATE	REVISION

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

EROSION CONTROL CHECKLIST

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By Checked By
DY JO

Date: 11/17/2025

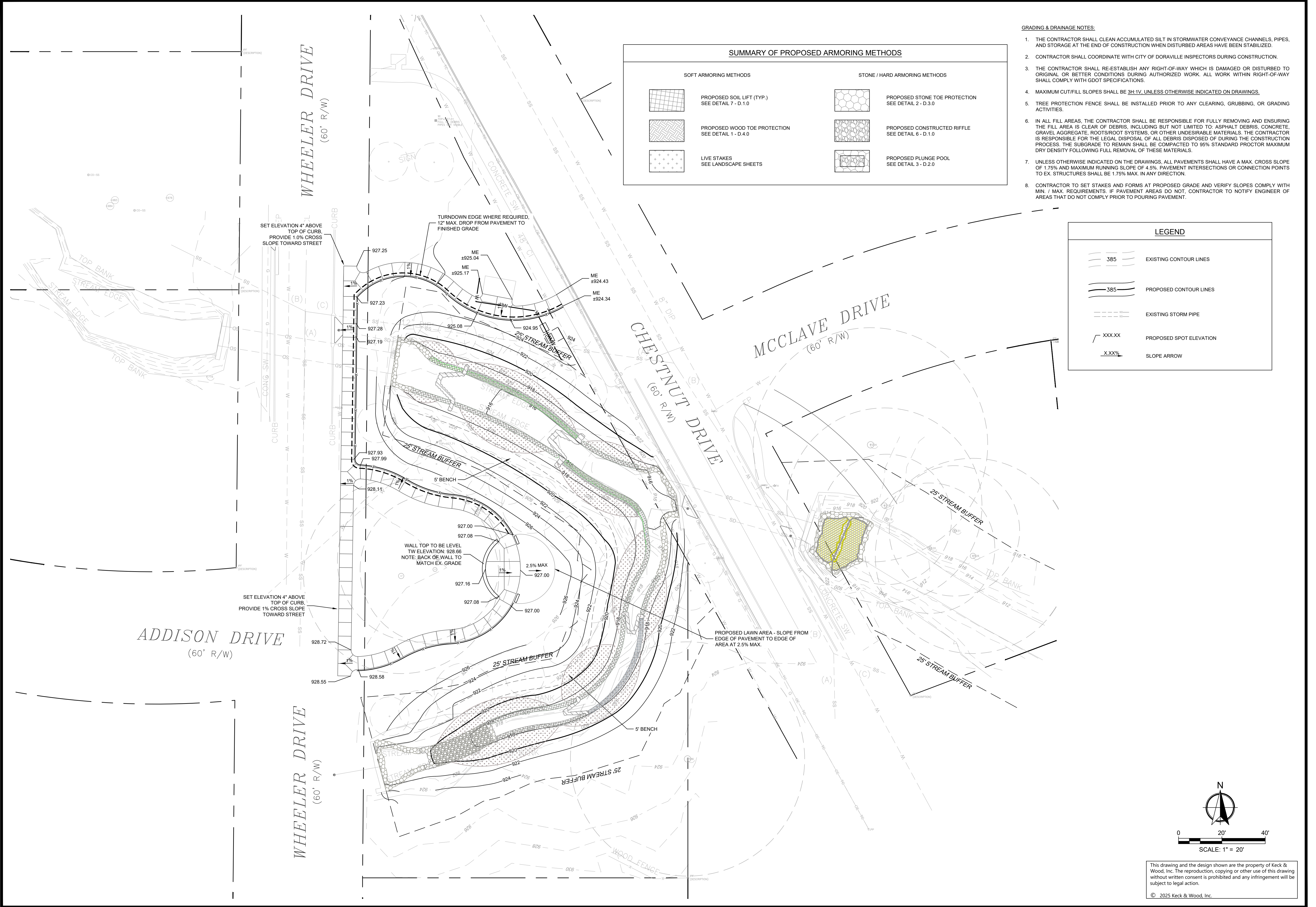
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Project No.:

240285

Drawing No.:

C.3.3.2



385

EXISTING CONTOUR LINES

385

PROPOSED CONTOUR LINES

EXISTING STORM PIPE

XXX.XX

PROPOSED SPOT ELEVATION

X.XX%

SLOPE ARROW

0

20'

40'

SCALE: 1" = 20'

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By
DY

Checked By
JO

Date:
11/17/2025

Scale:
1" = 20'

Project No.:
240285

Drawing No.:
C.4.0

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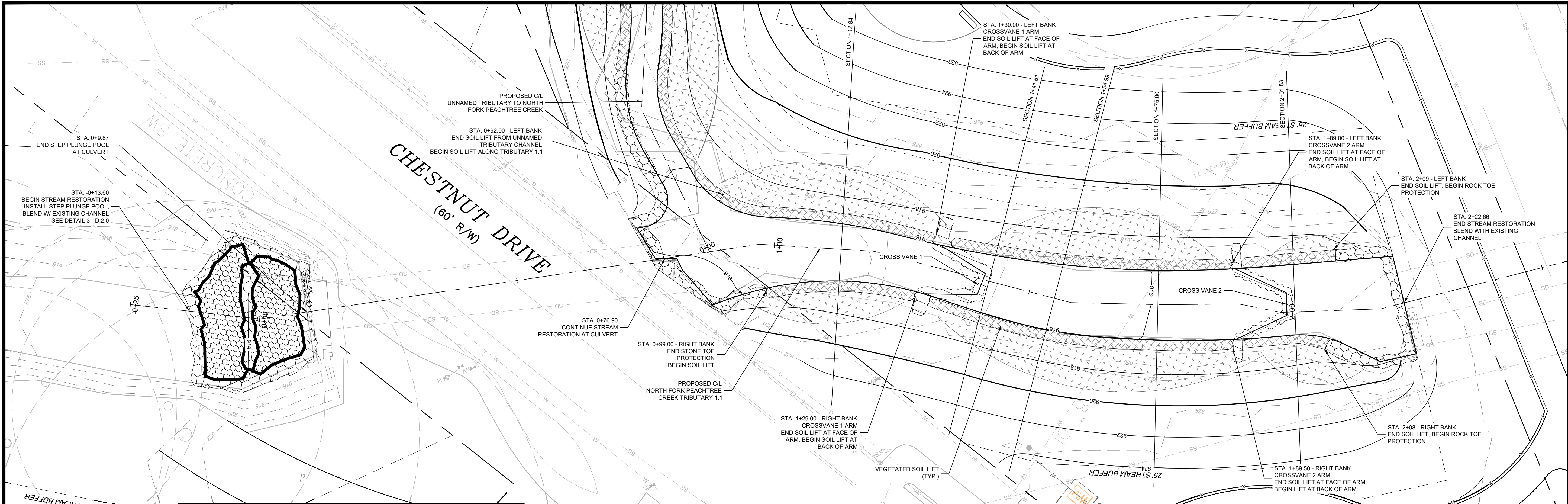
COLLABORATION BY DESIGN

3030 PREMIERE PARKWAY, SUITE 200
DULUTH, GA 30097
(678) 417-4000
keckwood.com

REGISTERED PROFESSIONAL ENGINEER
JENNI R. OLIVO

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

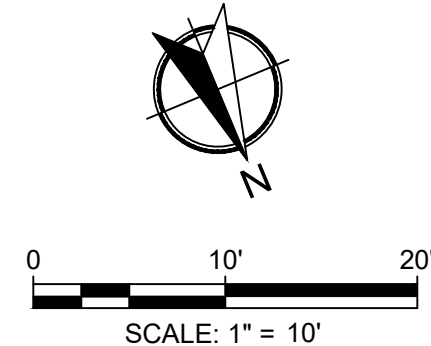
GRADING PLAN



AREA OF ARMORING METHODS NORTH FORK PEACHTREE CREEK TRIB. 1.1					
METHOD	BEGIN STA.	END STA.	LENGTH	BELOW OHW	AREA
PLUNGE POOL (HARD ARMOR) (NOTE: AREA INCLUDES FULL WIDTH OF STREAM)					
BOTH BANKS	0+13.60	0+9.87	23.47 LF	18"	602.17 SF
		PLUNGE POOL TOTAL:	23.47 LF		602.17 SF
STONE TOE PROTECTION (HARD ARMOR)					
LEFT BANK	0+76.90	0+99.00	22.10 LF	18"	33.15 SF
	2+08.00	2+22.66	14.66 LF	18"	21.99 SF
RIGHT BANK	2+09.00	2+22.66	13.66 LF	18"	20.49 SF
		STONE ARMOR TOTAL:	73.85 LF		110.78 SF
SOIL LIFT W/ LIVE STAKES (SOFT ARMOR)					
LEFT BANK	0+99.00	1+29.00	30.00 LF	18"	45.00 SF
	1+89.50	2+08.00	18.50 LF	18"	27.75 SF
RIGHT BANK	1+30.00	2+09.00	79.00 LF	18"	118.50 SF
		SOIL LIFT TOTAL:	127.50 LF		191.25 SF
WOOD TOE (SOFT ARMOR)					
LEFT BANK	1+29.00	1+89.50	60.50 LF	18"	90.75 SF
RIGHT BANK	0+92.00	1+30.00	38.00 LF	18"	57.00 SF
		WOOD TOE TOTAL:	98.50 LF		147.75 SF

NORTH FORK PEACHTREE CREEK TRIBUTARY 1.1 STREAM BANK RESTORATION PLAN

LEGEND			
	PROPOSED SOIL LIFT (TYP.) SEE DETAIL 7 - D.1.0		PROPOSED STONE TOE PROTECTION SEE DETAIL 2 - D.3.0
	PROPOSED WOOD TOE PROTECTION SEE DETAIL 1 - D.4.0		PROPOSED ROCK CROSS VANE SEE DETAIL 2 - D.2.0
	LIVE STAKES SEE LANDSCAPE SHEETS		PROPOSED CONSTRUCTED RIFFLE SEE DETAIL 6 - D.1.0

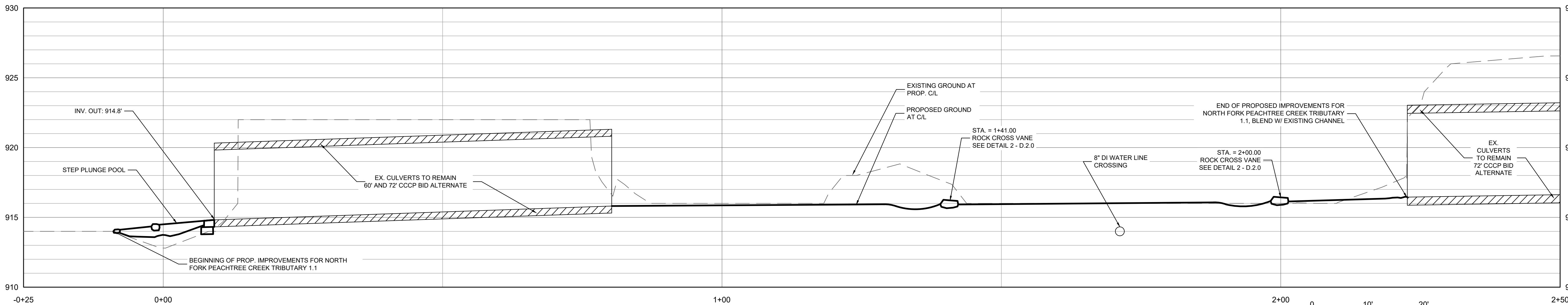


GENERAL NOTES:

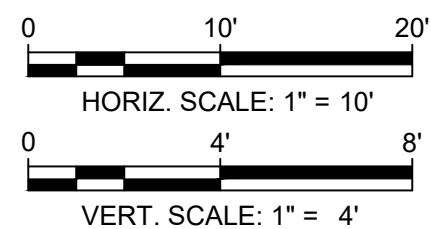
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE SURVEY SHOWN IN THESE PLANS AND FIELD CONDITIONS BEFORE PROCEEDING IN ANY NEW CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CORRECT HORIZONTAL AND VERTICAL ALIGNMENT OF ALL TIE-INS BETWEEN PROPOSED AND EXISTING PAVEMENTS, INCLUDING BUT NOT LIMITED TO: SIDEWALKS, CURBS, GUTTERS, UTILITIES, AND WALLS.

SITE NOTES:

- EXISTING TRACT IS ZONED: R-1, SINGLE-FAMILY RESIDENTIAL.
- ALL BUFFERS, TREE SAVE AREAS, AND UNDISTURBED AREAS SHALL BE CLEARLY IDENTIFIED BY FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBING ACTIVITIES.
- NO OUTSIDE STORAGE IS PROPOSED. THIS INCLUDES: SUPPLIES, VEHICLES, PRODUCTS, ETC.
- CONSTRUCTION TRAILERS ARE TO BE PERMITTED THROUGH CITY OF DORAVILLE.
- ALL EROSION AND SEDIMENT CONTROL MEASURES AND TREE PROTECTION MEASURES ARE TO BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- MAXIMUM FILL/CUT SLOPES SHALL BE AS SHOWN ON PLANS.
- 24-HOUR CONTACT: JUDE WAGUESPACK, (678) 331-9093.
- CONTRACTOR SHALL COORDINATE WITH CITY OF DORAVILLE, GEORGIA POWER, DEKALB COUNTY, AND GDOT INSPECTORS REGARDING ALL CERTIFICATE OF OCCUPANCY REQUIREMENTS AND COORDINATE WITH ENGINEER APPROXIMATELY 8-WEEKS PRIOR TO ANTICIPATED CERTIFICATE OF OCCUPANCY DATE REGARDING ANY ITEMS REQUIRING ENGINEER APPROVAL OR CERTIFICATION.



NORTH FORK PEACHTREE CREEK TRIBUTARY 1.1 STREAM BANK RESTORATION PROFILE



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NO.	DATE	REVISION

NORTHWOODS STREAM RESTORATION INTERSECTION OF WHEELER DR. & CHESTNUT DR. DORAVILLE, GA 30340

NORTH FORK PEACHTREE CREEK TRIBUTARY 1.1 CENTERLINE

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By
DY

Checked By
JO

Date: 11/17/2025

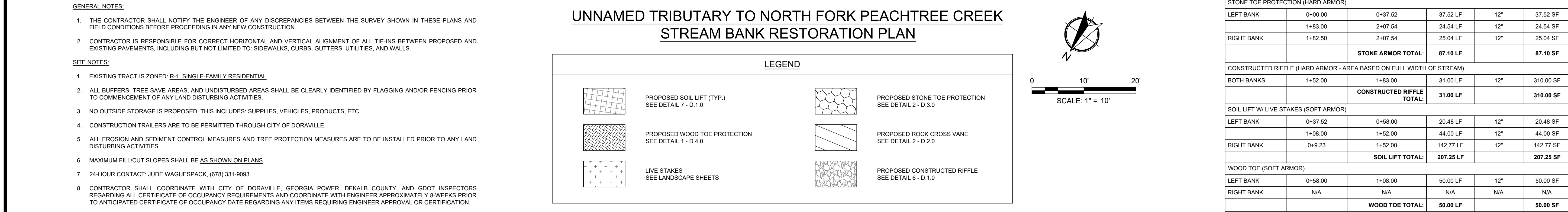
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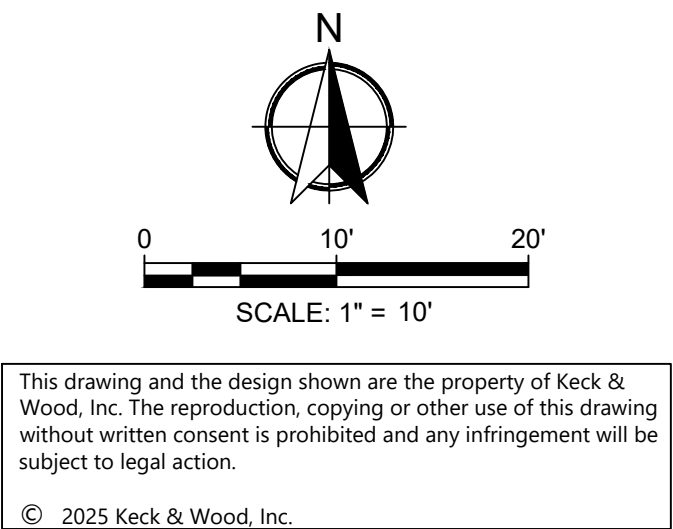
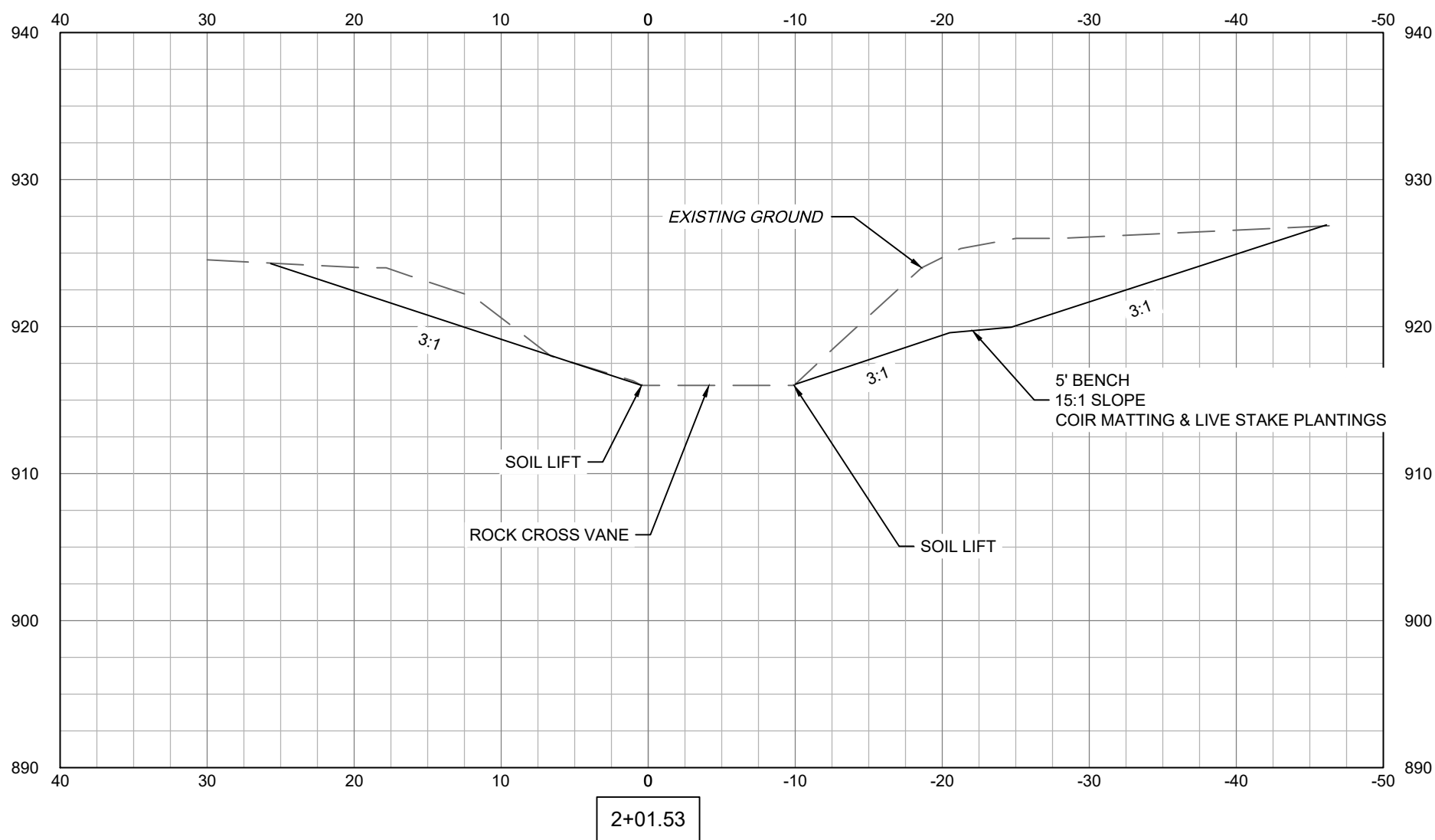
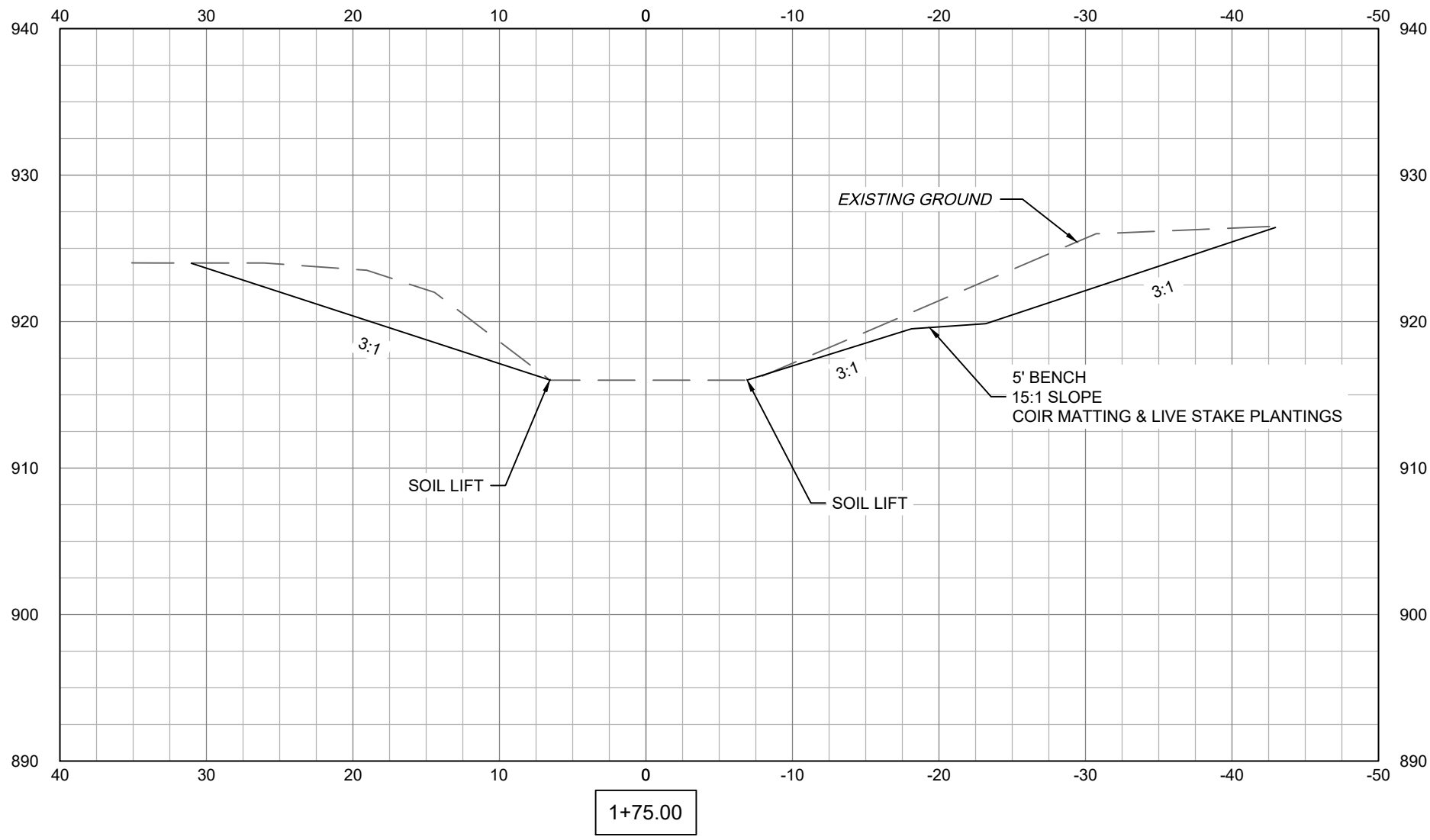
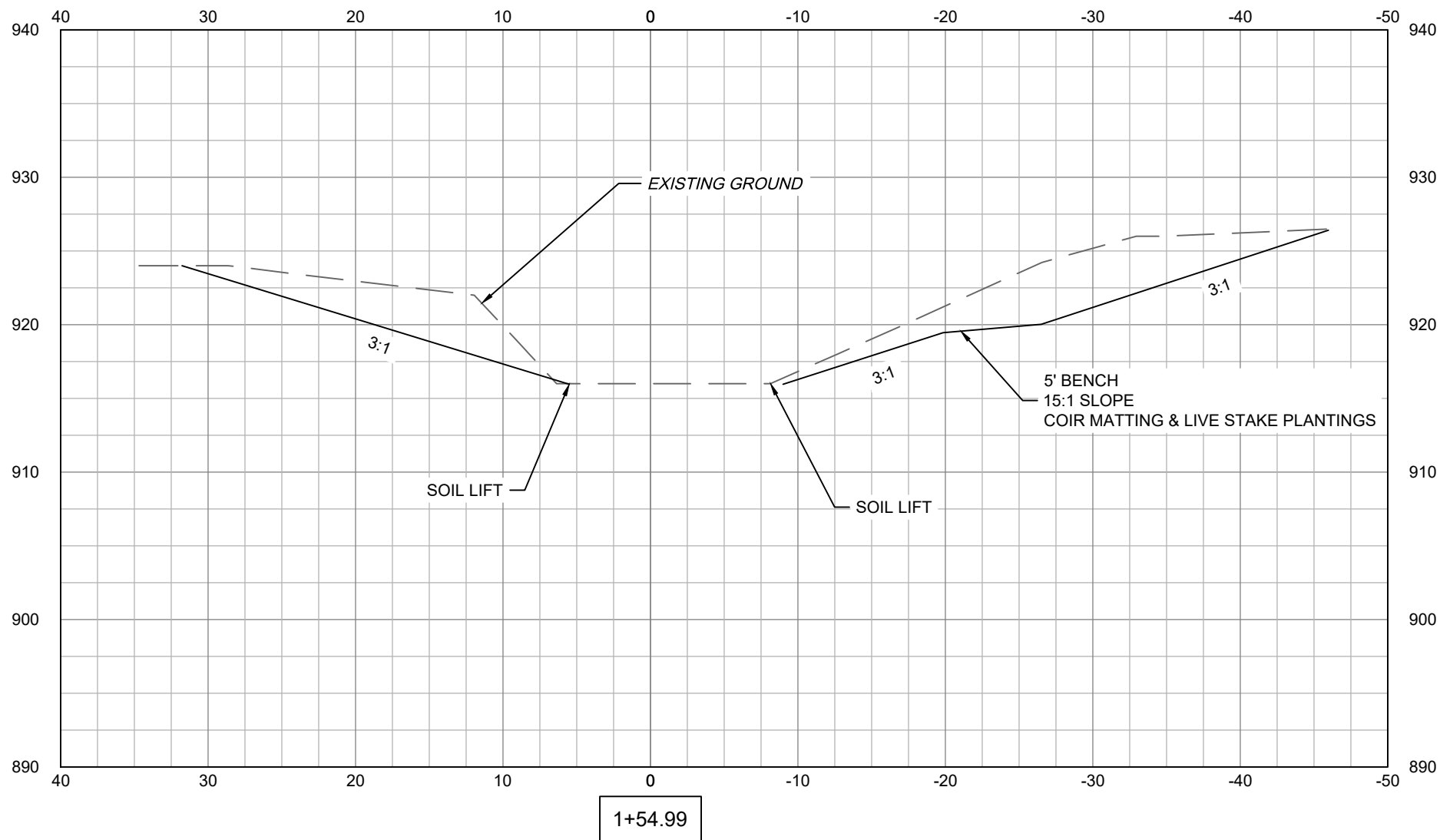
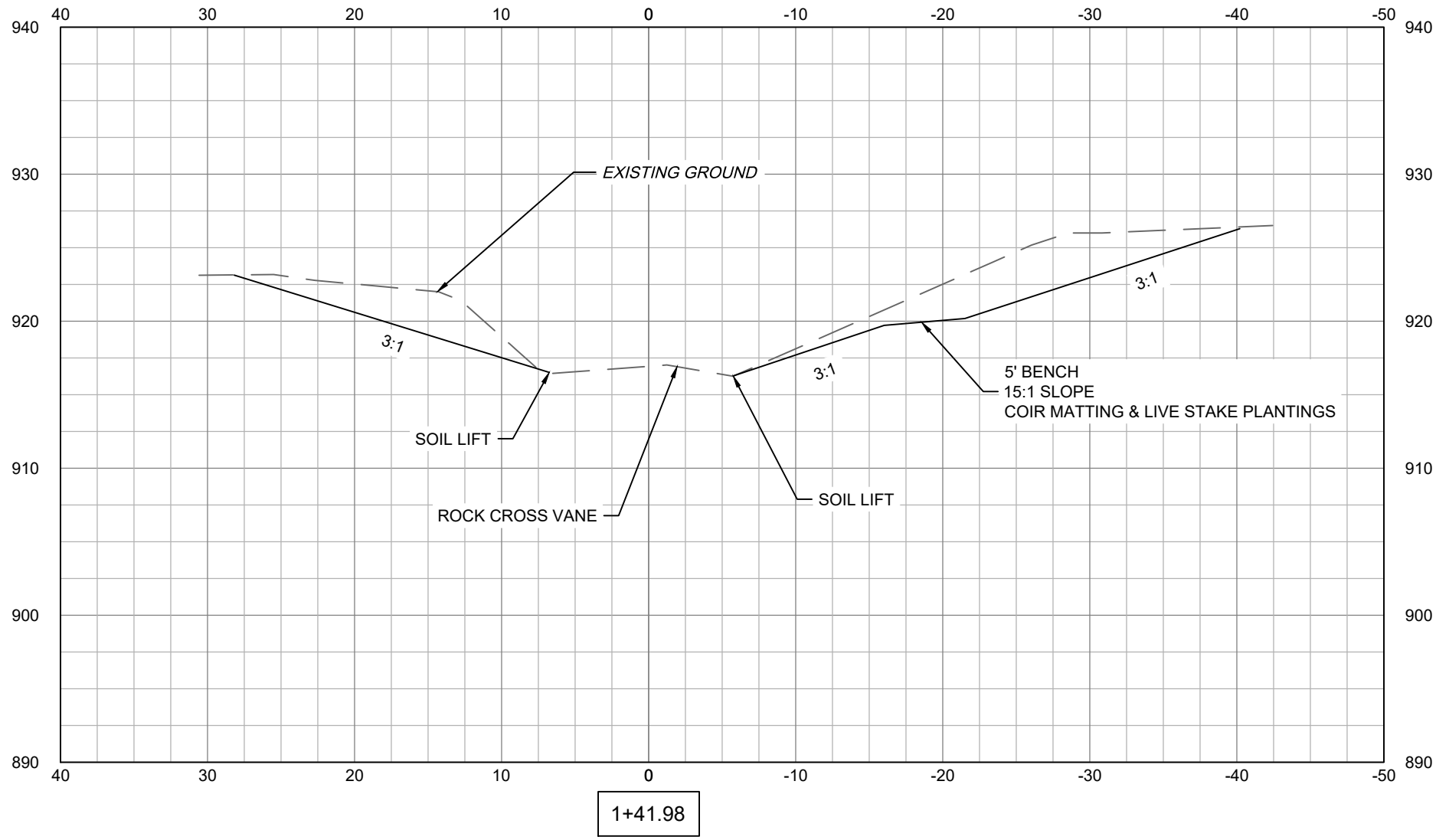
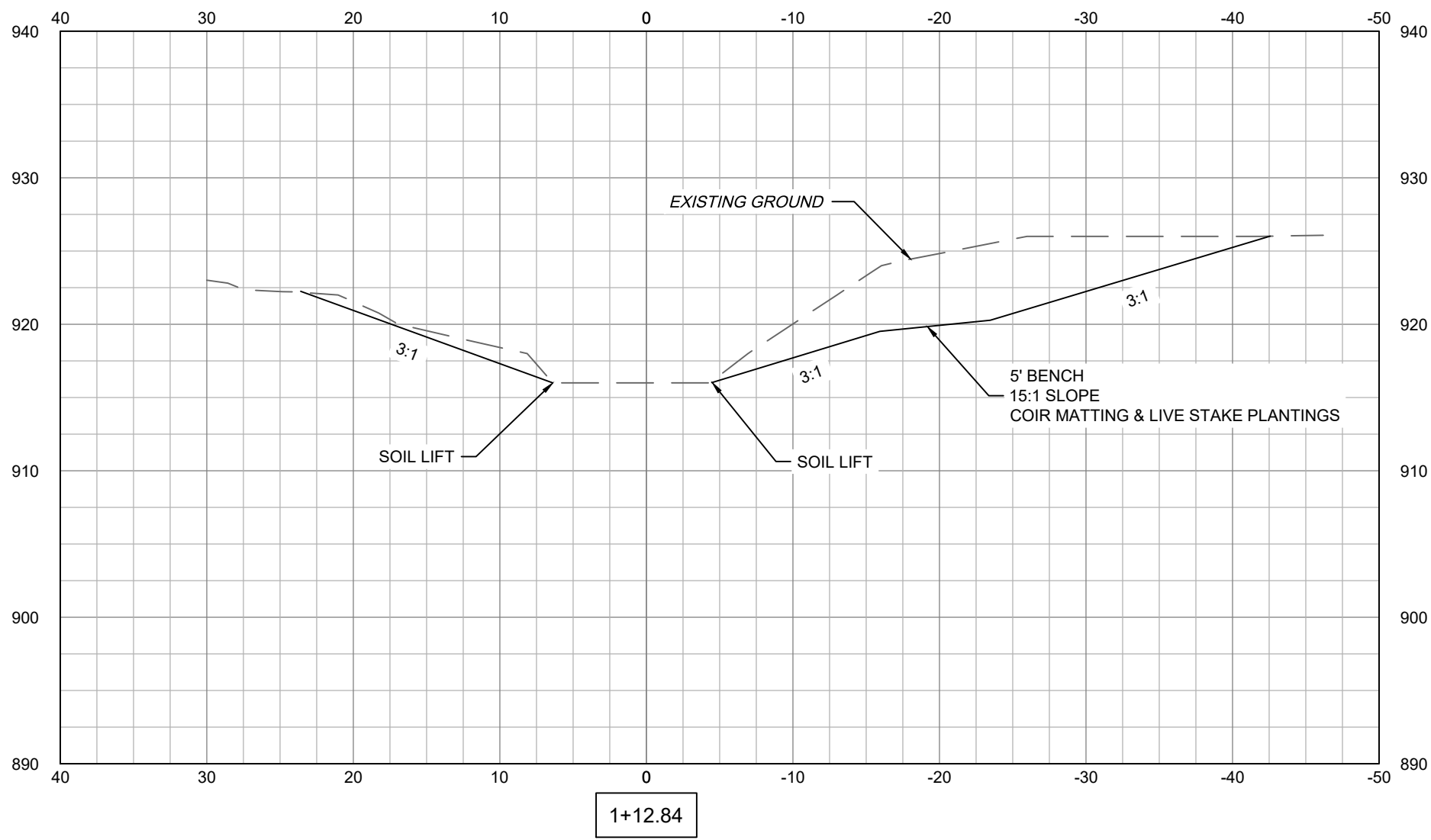
Project No.:

240285

Drawing No.:

C.4.1





COLLABORATION BY DESIGN
3090 PREMIERE PARKWAY, SUITE 200
DULUTH, GA 30097
(678) 417-4000
keckwood.com

NO.	DATE	REVISION

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

NORTH FORK PEACHTREE CREEK
TRIBUTARY 1.1 CROSS SECTIONS

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

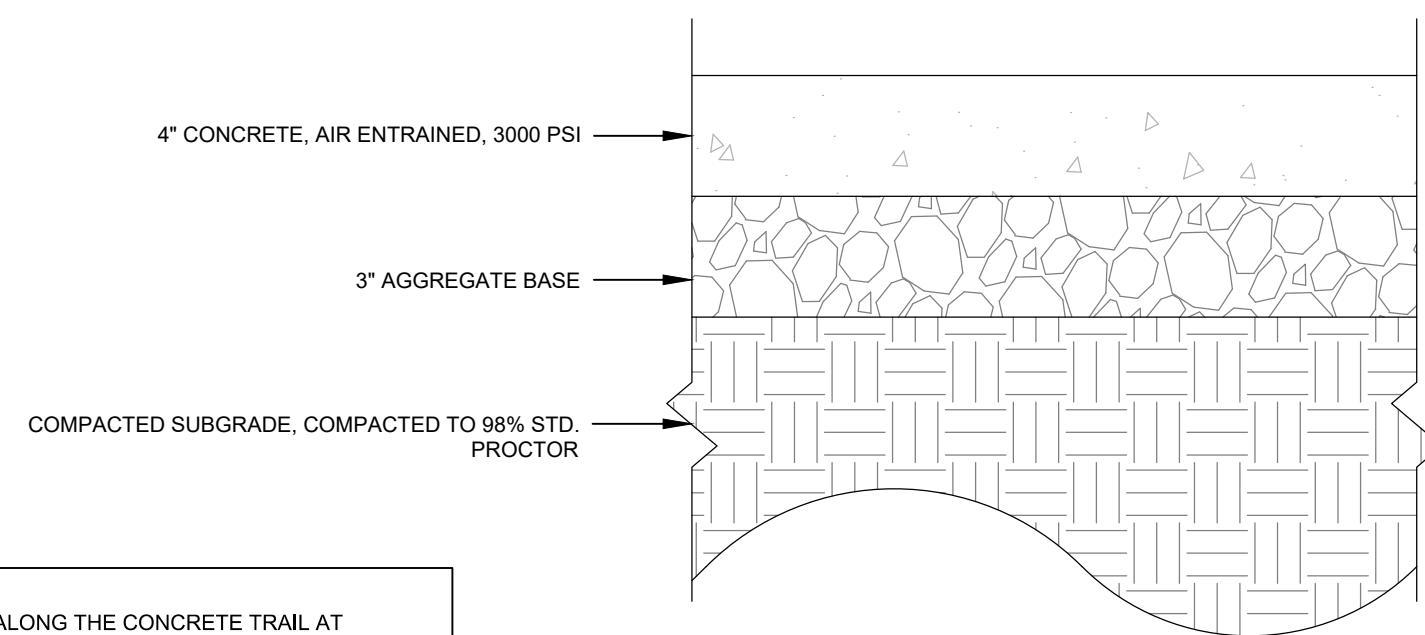
Drawn By: DY Checked By: JO

Date: 11/17/2025

Scale: 1" = 10'

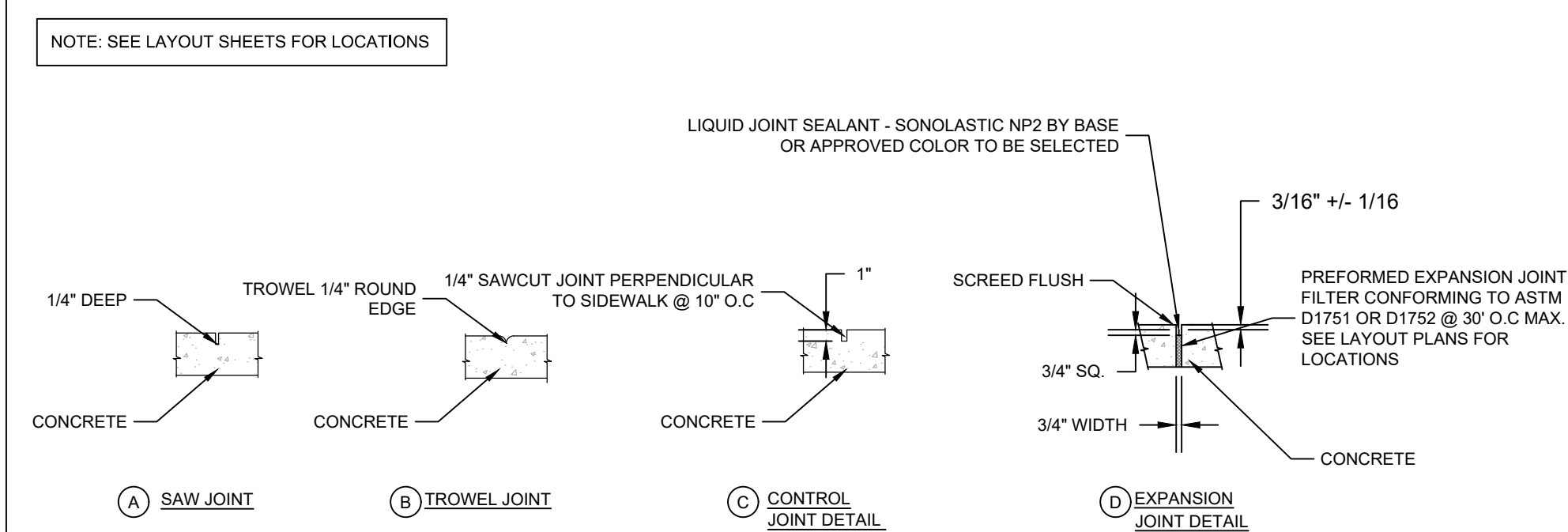
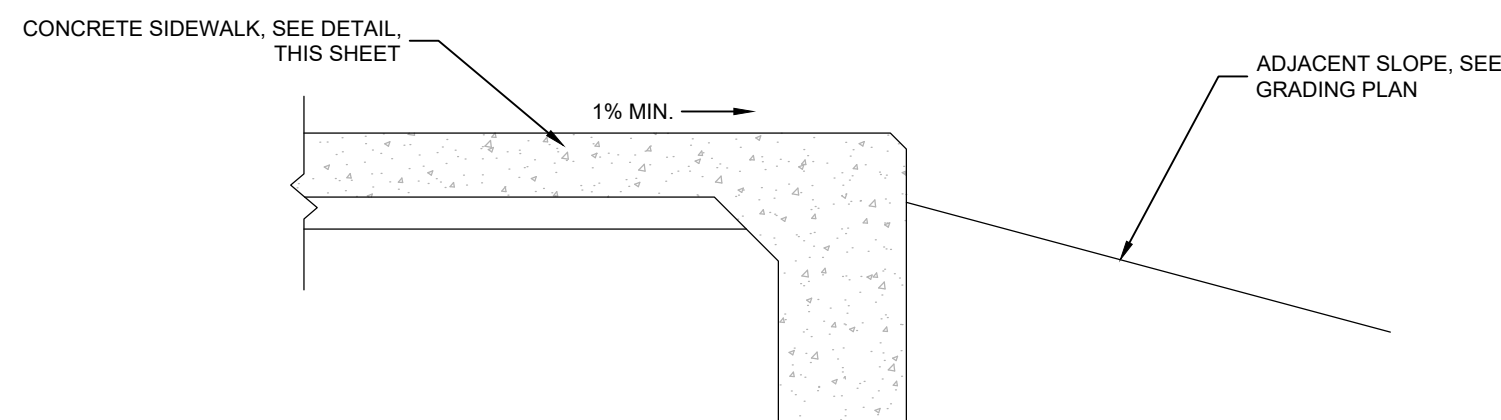
Project No.:
240285

Drawing No.:
C.4.3



- NOTES:
1. PLACE EXPANSION JOINTS ALONG THE CONCRETE TRAIL AT REGULAR INTERVALS NOT MORE THAN 30' APART AS WELL AS BETWEEN ALL RIGID FIXED OBJECTS ON THE NEW CONCRETE TRAIL.
 2. THE CONTRACTOR SHALL ENSURE THAT THE CONCRETE TRAIL SECTION DOES NOT EXCEED THE 2% MAXIMUM CROSS-SLOPE CRITERIA IF EXISTING GRADES IN THE FIELD DICTATE A STEEPER CROSS-SLOPE. THEN THE UPPER SIDE OF THE TRAIL SECTION SHALL SET 4' ABOVE EXISTING GRADE, AND THE COMPACTED LOWER SIDE SUBGRADE SHOULDERS SHALL BE TRANSITIONED (MAX) TO MAINTAIN THE 2% MAX CROSS-SLOPE REQUIREMENT ACROSS TRAIL SECTION.

- NOTES:
1. SOME AREAS MAY CONTAIN EXCEPTIONALLY WEAK SUBGRADE MATERIALS WHICH WILL REQUIRE ADDITIONAL SOIL STABILIZATION MEASURES PER DIRECTION OF GEOTECHNICAL ENGINEER, AND SUBJECT TO APPROVAL OF LANDSCAPE ARCHITECT, ARCHITECT, AND/OR PROJECT ENGINEER.

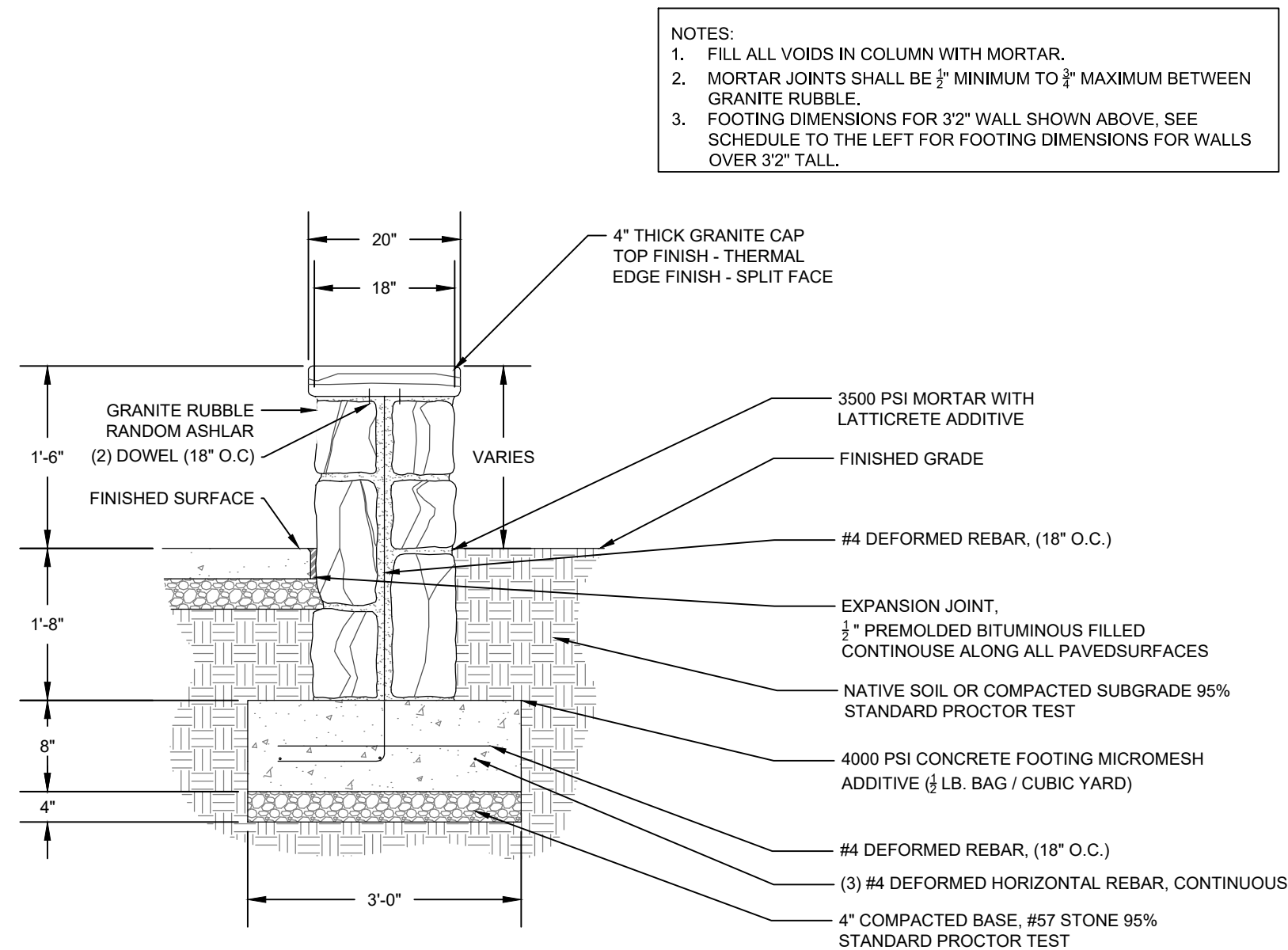


- NOTES:
1. CONTROL JOINTS TO BE PROVIDED AT A FREQUENCY EQUAL TO WIDTH OF THE SIDEWALK NOT TO EXCEED 10' SPACING.
 2. EXPANSION JOINTS TO BE PLACED ALONG SIDEWALK AT REGULAR INTERVALS NOT MORE THAN 30' APART AS WELL AS BETWEEN ALL RIGID FIXED OBJECTS ON THE NEW CONCRETE SIDEWALK.
 3. EXPANSION JOINTS TO BE PROVIDED BETWEEN POURS.

CONCRETE SIDEWALK

CONCRETE SIDEWALK W/ TURNDOWN EDGE

CONTROL & EXPANSION JOINTS



EDUCATIONAL SIGNAGE

BASIS OF DESIGN:
WAYMAKER OUTDOOR SIGN PANEL BY UPLAND EXHIBITS (OR EQUAL)

WWW.UPLANDEXHIBITS.COM

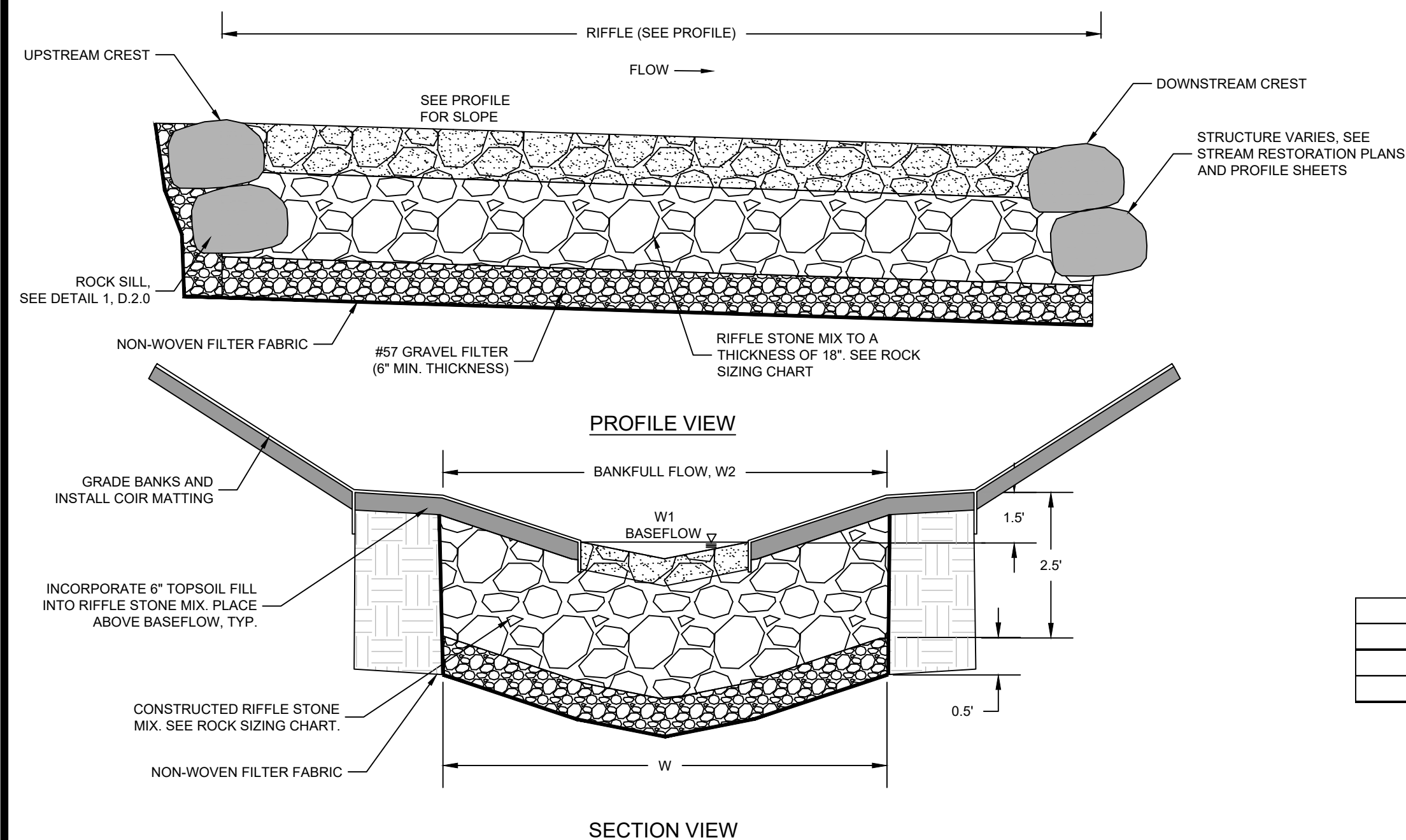
1. 30° VIEW ANGLE
2. PANEL SIZE: 45" WIDE BY 20" HIGH
3. IN-GROUND MOUNTING
4. LEG HEIGHT: 34" ABOVE GROUND
5. LEG INSET: 5.5" FROM EDGE TO CENTER OF POST
6. ORDER SIGN BASE W/ GRAPHICS FROM SINGLE MANUFACTURER
(SEE GRAPHIC NOTE BELOW)
7. COLOR: BLACK POWDER COAT (FOR NON - GRAPHIC PORTIONS)
8. GRAPHIC TO BE CUSTOM HIGH-PRESSURE LAMINATE (CHPL)

SIGN GRAPHICS TO BE PROVIDED BY OWNER / DESIGNER PRIOR TO ORDERING SIGN PANELS. CONTRACTOR TO COORDINATE WITH DESIGN TEAM.

SIGN TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS AND DETAILS.

PROVIDE 2

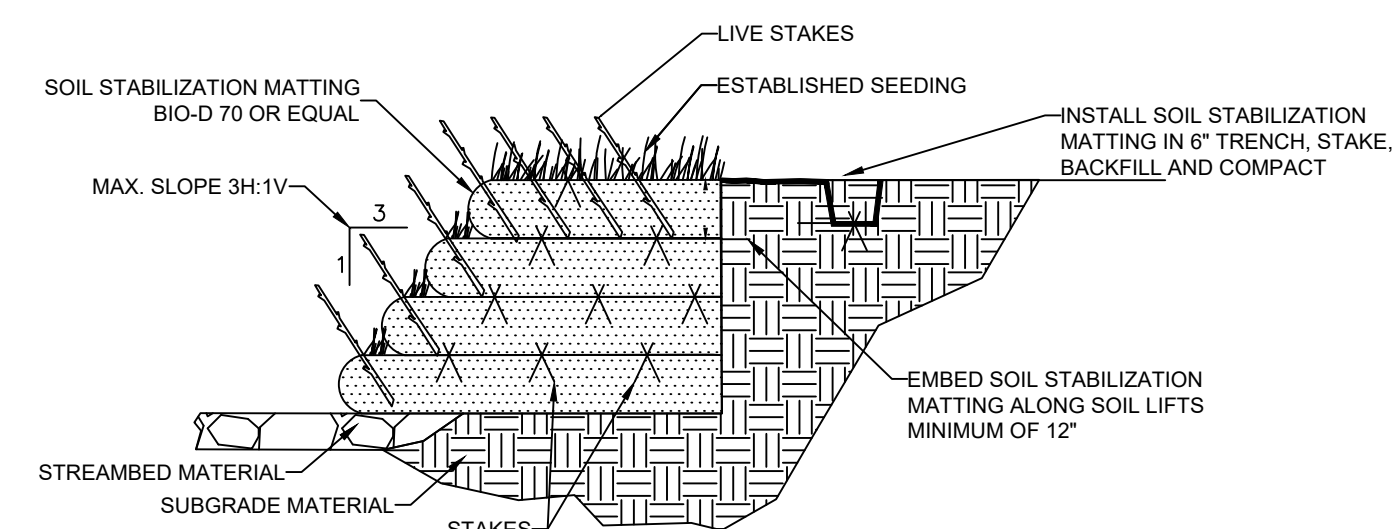
RUBBLE SEAT WALL



- CONSTRUCTED RIFLE NOTES:**
1. CONTACT NATURAL CHANNEL BACKFILL TO MATCH PRE-CONSTRUCTION GRADE UNLESS OTHERWISE SPECIFIED.
 2. CROSS SECTIONAL DIMENSIONS AND LONGITUDINAL SPACING OF FEATURES VARY. SEE STRUCTURE TABLES, CROSS SECTIONS, AND PROFILES FOR DIMENSIONS OF EACH STRUCTURE.
 3. RIFLE COBBLE SHALL BE PLACED SO THAT IT SHINGLES IN A DOWNSTREAM DIRECTION. SMALL AND LARGE STONES AND NATIVE SOIL SHALL BE MIXED ONSITE PRIOR TO PLACEMENT TO FILL VOID SPACES. STONE MUST BE PLACED IN A MANNER TO PROMOTE INTERLOCKING. DUMPING OF STONE SHALL NOT BE PERMITTED.
 4. STREAMBED MATERIAL SHALL BE WASHED INTO RIPRAP VOIDS. WHERE INSUFFICIENT SUPPLY EXISTS TO REUSE STOCKPILED BED MATERIAL, CONTRACTOR SHALL PROVIDE STREAMBED MATERIAL MIX. LOWER LIFTS OF RIFLE SHALL BE BACKFILLED WITH STREAMBED MATERIAL TO PREVENT RIPRAP FROM BEING CHOKED WITH REUSED STOCKPILED STREAMBED MATERIAL TO ENSURE SURFACE FLOW.

CONSTRUCTED RIFFLE SCHEDULE					
STRUCTURE	PROJECT AREA	STATION	WIDTH, W1	WIDTH, W2	IN-STREAM
CONSTRUCTED RIFFLE 4	UNNAMED TRIBUTARY		FT	FT	END STRUCTURE
		1+52	6	15	ROCK SILL

SOIL LIFT - SECTION VIEW



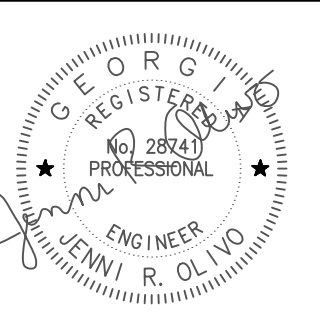
- GENERAL NOTES:
1. DO NOT EXCEED A 3H:1V SLOPE FOR SOIL LIFTS.
 2. MAXIMUM LIFT THICKNESS, 12", MINIMUM, 6".
 3. KEY-IN AND OVERLAP LIFTS AT A MINIMUM OF 1'.
 4. EACH SOIL LIFT WILL BE SECURELY STAKED AND KEYED INTO THE EXISTING BANK.

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CONSTRUCTED RIFFLE

SOIL LIFT

[illegible]

INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

CONSTRUCTION DETAILS

THIS BAR IS
1 INCH LONG
NOT FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By
Y

Checked By
JO

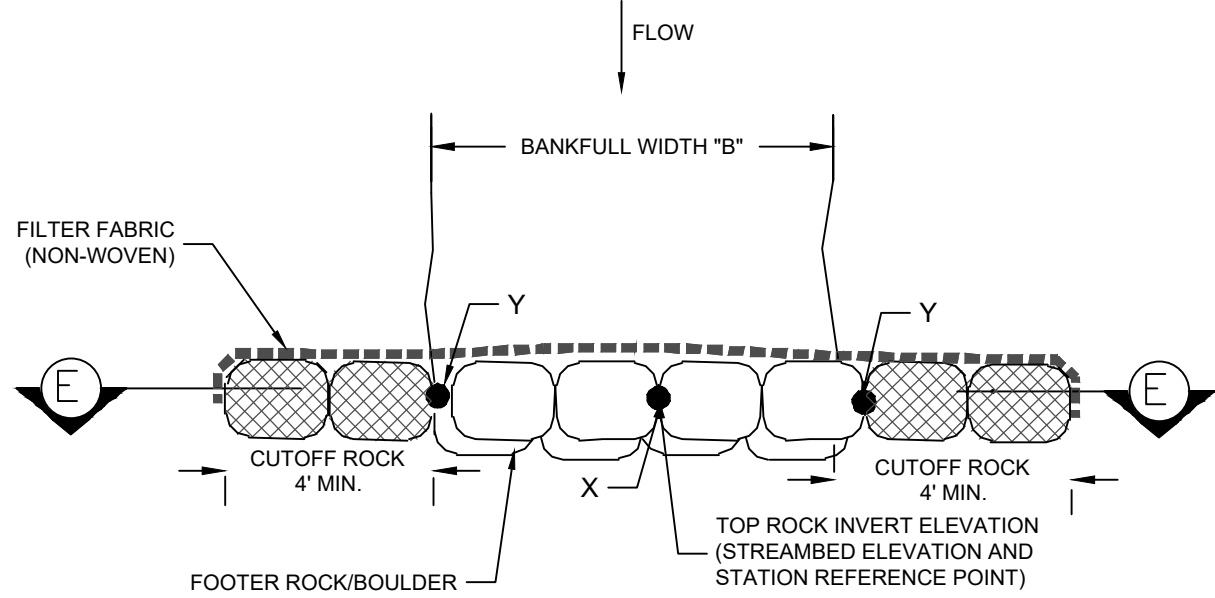
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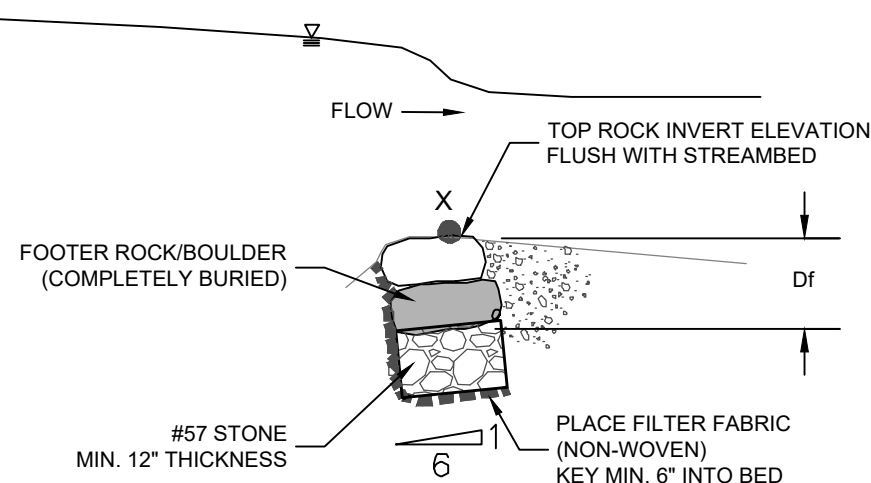
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wing No.:

D.1.0



PLAN VIEW



SEE SIZING CHART FOR ALL ROCK SIZING

PROFILE VIEW

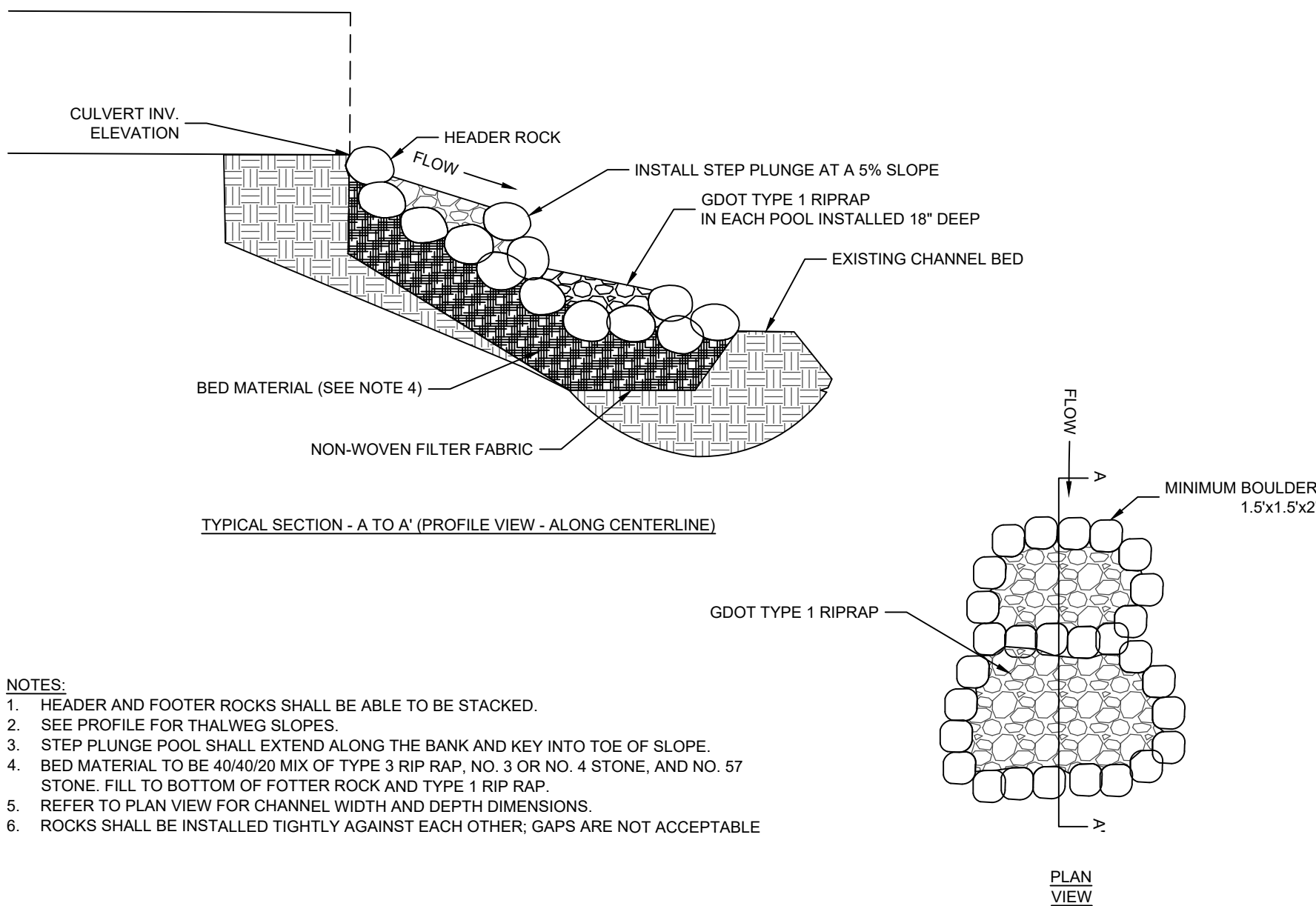
ROCK SILL SCHEDULE					
STRUCTURE	PROJECT AREA	STATION	TYPE	B (FT)	Df (FT)
ROCK SILL #1	UNNAMED TRIBUTARY	1+52	DOWNSTREAM	15 FT	2 FT
ROCK SILL #2	UNNAMED TRIBUTARY	1+85	UPSTREAM	15 FT	2 FT

ROCK SILL NOTES:

- SILL SHALL BE CONSTRUCTED BY EXCAVATING A TRENCH SLIGHTLY LARGER THAN THE SILL DIMENSIONS.
- TOP ROCKS SHALL BE SUPPORTED BY A FOOTER ROCK AND SHINGLED UPSTREAM INTO THE STREAM BANK. ALL ROCKS SHALL BE INTERLOCKED MINIMIZING OR ELIMINATING GAPS WITH NO VOIDS/GAPS LARGER THAN 4 INCHES.
- THE MINIMUM ELEVATION DIFFERENCE BETWEEN ELEVATION "X" AND ELEVATION "Y" IS 4 INCHES.
- PLACE FILTER FABRIC (NON-WOVEN) ON UPSTREAM SIDE OF SILL. FABRIC SHALL COVER THE UPSTREAM FACE OF THE ENTIRE SILL (EXCLUDING CUTOFF ROCKS) AND SHALL EXTEND A MAXIMUM OF 2 FEET UPSTREAM OF STRUCTURE.
- DISTURBED STREAMBED SHALL BE BACKFILLED WITH 6 INCHES MIN. OF STREAMBED MATERIAL OR RIFFLE STONE TO MEET FINISHED GRADE.
- STREAM BANK AROUND STRUCTURE SHALL BE BACKFILLED AND HAND COMPACTED.
- SEE STRUCTURE TABLE PROFILE AND GRADING SHEETS FOR ALL DIMENSIONS AND ELEVATIONS.
- SILL ROCKS/BOULDERS SHALL BE FLUSH WITH FINISHED GRADE AND CUTOFF ROCKS SHALL EXTEND A MINIMUM OF 4 FEET INTO THE STREAMBANK.

1

ROCK SILL



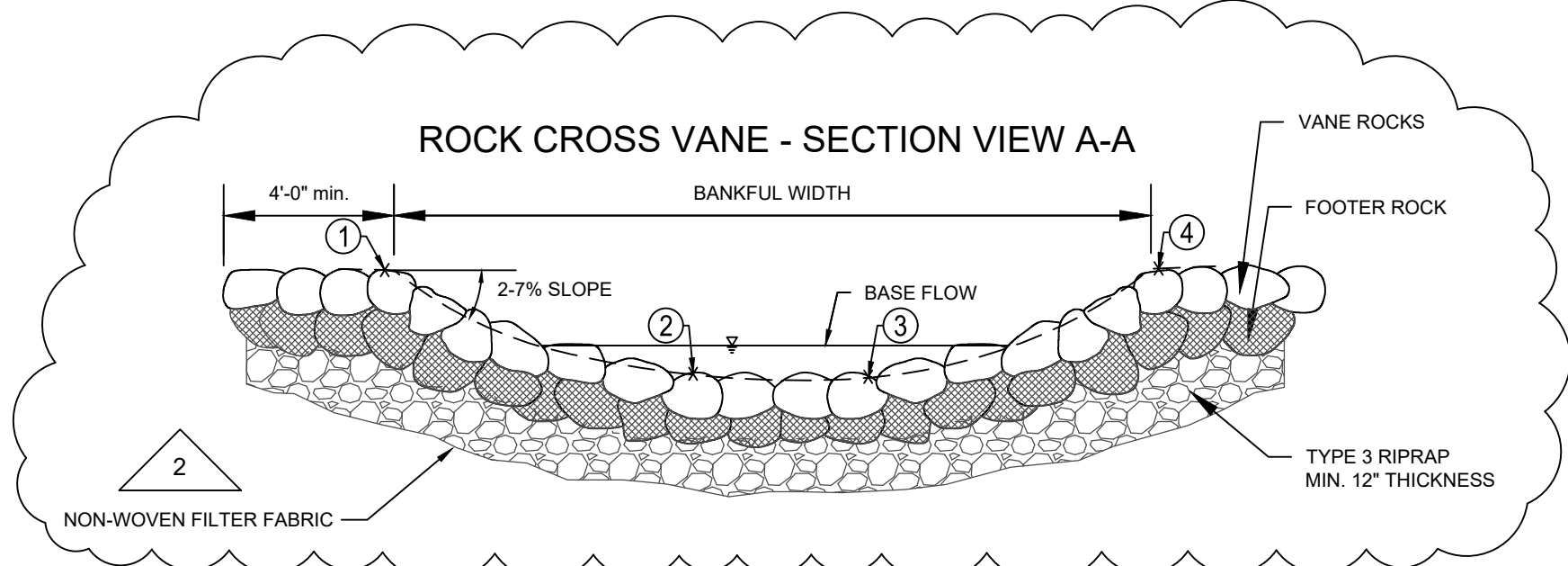
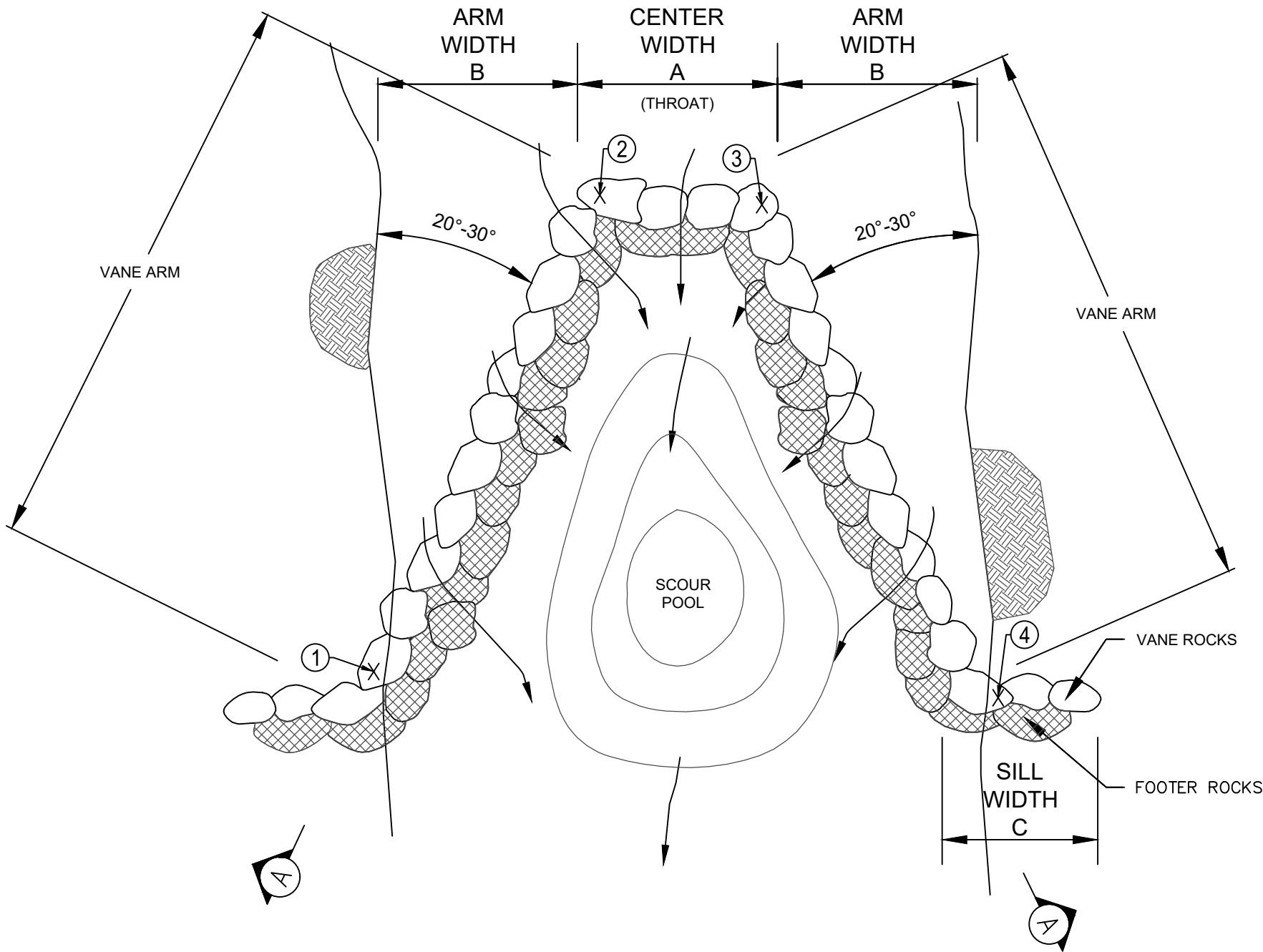
NOTES:

- HEADER AND FOOTER ROCKS SHALL BE ABLE TO BE STACKED.
- SEE PROFILE FOR THALWEG SLOPES.
- STEP PLUNGE POOL SHALL EXTEND ALONG THE BANK AND KEY INTO TOE OF SLOPE.
- BED MATERIAL TO BE 40/40/20 MIX OF TYPE 3 RIP RAP, NO. 3 OR NO. 4 STONE, AND NO. 57 STONE. FILL TO BOTTOM OF FOOTER ROCK AND TYPE 1 RIP RAP.
- REFER TO PLAN VIEW FOR CHANNEL WIDTH AND DEPTH DIMENSIONS.
- ROCKS SHALL BE INSTALLED TIGHTLY AGAINST EACH OTHER, GAPS ARE NOT ACCEPTABLE.

3

STEP PLUNGE POOL

ROCK CROSS VANE PLAN VIEW



2

ROCK CROSS VANE

CROSS VANE SCHEDULE				
FEATURE	CROSS VANE #1	CROSS VANE #2	CROSS VANE #3	CROSS VANE #4
ANGLE	20	20	20	20
CENTER WIDTH (FT)	4.5	3.67	2	2
ARM WIDTH(FT)	4.5	3.67	2	2
SILL WIDTH (FT)	4	4	4	4
ARM LENGTH (FT)	13.5	8.8	6	6
ARM RISE (FT)	0.5	0.5	0.3	0.3
ELEVATION POINTS 1 & 4 (FT)	916	915.5	917.3	917.8
ELEVATION POINTS 2 & 3 (FT)	915.5	915	917	917.5

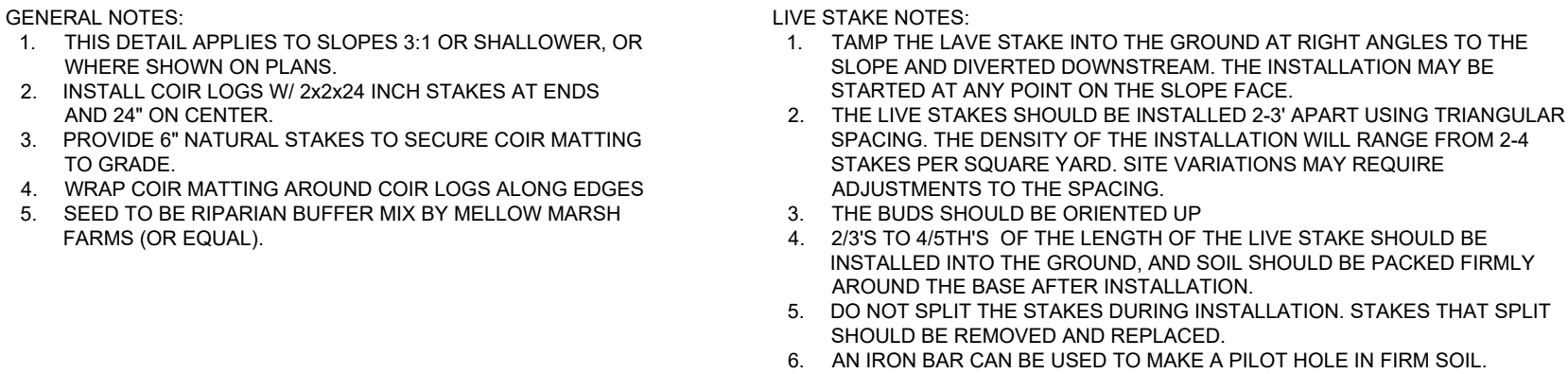
CROSS VANE NOTES:

- ALL DIMENSIONS/ELEVATIONS TO BE FIELD ADJUSTED TO ENSURE STABLE INSTALLATION, FISH PASSAGE, AND TIE-IN TO BANKS.
- VANE STONES SHALL BE BOULDERS THAT ARE FLAT SIDED AND STACKABLE AND MINIMUM DIMENSION OF 12 INCHES IN ANY DIRECTION UNLESS NOTED OTHERWISE (SEE ROCK SIZING CHART).
- ROCKS/BOULDERS SHALL BE TIGHT FITTING WITH NO VOIDS/GAPS LARGER THAN 1 INCH. VOIDS ALONG APEX AND VANE ARMS SHALL BE CHINKED-IN WITH SMALLER NON-WEATHERING STONE TO ESTABLISH SURFACE FLOW AND INTERCONNECTION OF ROCKS.
- ROCKS/BOULDERS ALONG APEX AND VANE ARMS SHALL BE FLUSH WITH THE TOP SURFACES OF ADJACENT STONES.
- TOP ROCKS SHALL BE SUPPORTED BY A FOOTER ROCK AND SHINGLED UPSTREAM.
- STONE PLACEMENT SHALL BE FIELD ADJUSTED TO ENSURE STONE WILL REMAIN IN PLACE OVER FULL RANGE OF FLOW CONDITIONS.
- REPLACEMENT OF ROCKS/BOULDERS MAY BE REQUIRED BASED UPON INSPECTION OF COMPLETED INSTALLATION TO MEET DESIGN INTENT AND PERMIT REQUIREMENTS.
- SPACING BETWEEN DIVERTER ROCKS SHALL BE 1/3 TO 1/2 THE LENGTH OF THE APEX STONE LENGTH UNLESS NOTED OTHERWISE (SEE DETAIL TABLE). DIVERTER STONES SHALL BE PLACED SO THAT THE TOP SURFACE IS 3 TO 6 INCHES ABOVE THE APEX ROCK ELEVATION.
- TIE-IN SILLS SHALL EXTEND 4 FT (MIN.) INTO STABLE CHANNEL BANK UNLESS NOTED OTHERWISE (SEE DETAIL TABLE). TIE IN SILLS MAY BE CONSTRUCTED USING LOGS OR ROOT WADS WITH PRIOR APPROVAL BY THE ENGINEER.
- ANGLE OF VANE ARM SHALL BE BETWEEN 20 (MIN.) AND 30 (MAX) DEGREES UNLESS NOTED OTHERWISE (SEE DETAIL TABLE).
- SLOPE OF VANE ARM SHALL BE BETWEEN 2% (MIN.) AND 7% (MAX.) UNLESS NOTED OTHERWISE (SEE DETAIL TABLE). ARM SLOPE IS MEASURED FROM APEX POINT X TO BANK TIE-IN POINT Y.
- PLACE FILTER FABRIC (NON-WOVEN) ON UPSTREAM SIDE OF APEX AND VANE ROCKS/LOGS. FABRIC SHALL COVER THE UPSTREAM FACE OF THE ENTIRE STRUCTURE INCLUDING THE TIE-IN SILLS AND EXTEND BENEATH THE FOOTER ROCKS/LOGS.
- WHERE EXISTING BED MATERIAL IN SCOUR POOLS MATCHES SIZE AND MATERIAL OF STREAM BED MATERIAL (SBM) MIX, SCOUR POOL STONE LINING IS NOT REQUIRED UNLESS NOTED OTHERWISE. WHERE SCOUR POOL LIES IN CLAY OR OTHER SUBSTRATE FINER THAN THE SBM MIX, THE CONTRACTOR SHALL OVER EXCAVATE BY 6 INCHES (MIN.) UNLESS NOTED OTHERWISE (SEE DETAIL TABLE) AND PLACE SBM MIX TO PROPOSED GRADE OR AS DIRECTED BY THE ENGINEER.
- STREAM BED MATERIAL SHALL COME FROM SALVAGED SOURCE FIRST AND THEN FURNISHED AS NECESSARY. OFFSITE STREAMBED MATERIAL SHALL BE USED TO CHOKE BOTTOM LAYERS OF ROCK WITH SALVAGED MATERIAL SAVED FOR TOP.
- ROCKS (APEX, ARM, AND FOOTERS) ARE PLACED AT 6:1 CAMBER WITH HORIZONTAL.
- SEE ROCK SIZING CHART FOR STONE SIZES.

NO.	DATE	REVISION	CLARIFICATIONS FOR BIDDING				
2	05/01/2026						

Project Manager: JENNI OLIVO	
Drawn By DY	Checked By JO
Date:	11/17/2025
Scale:	NONE

Project No:	240285
Drawing No:	D.2.0



Practice	Detail Reference	Subcomponent	Purpose	Material	D50 (in)	D100 (in)	GDOT Classification	Notes
ROCK SILL	D2.0, DETAIL 1	Top Rock	Grade Control	Rock Boulders	12	18		Flat & Stackable 12" H x 18" W approx.
		Bottom Rock	Grade Control	Rock Boulders	12	18		Flat & Stackable 12" H x 18" W approx.
CONSTRUCTED RIFFLE	D1.0, DETAIL 6	Riffle Stone Mix	Grade Control	Riffle Stone	6	12		Tan/Brown in color
		Bedding	Stability	No. 57 Stone	NA	NA	No. 57 Stone	
STONE TOE PROTECTION	D4.0, DETAIL 2	Riprap	Toe Protection	Graded Riprap	12	18	GDOT Type 1	Tan/Brown in color
		Vane Rock	Grade Control	Rock Boulders	18	24		Flat & Stackable 18" H x 24" W approx.
ROCK CROSS VANE #1 & #2 (MEDIUM)	D2.0, DETAIL 2	Footer Rock	Grade Control	Rock Boulders	18	24		Flat & Stackable 18" H x 24" W approx.
		Bedding Stone	Stability	Graded Riprap	6	12	GDOT Type 3	
ROCK CROSS VANE #3 & #4 (SMALL)	D2.0, DETAIL 2				12	18		Flat & Stackable 12" H x 18" W approx.
STEP PLUNGE POOL	D2.0, DETAIL 3	Header and Footer Rocks	Stability	Rock Boulders	18	24		Flat & Stackable 18" H x 24" W approx.
		Riprap	Outlet Protection	Graded Riprap	12	18	GDOT Type 1	Tan/Brown in color

*CONTRACTOR TO PROVIDE SUBMITTALS OF ALL STONE PRIOR TO INSTALLATION



NO.	DATE	REVISION
2	05/01/2026	CLARIFICATIONS FOR BIDDING

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

CONSTRUCTION DETAILS

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By
DY

Date: 11/17/2025

Project No.:

240285

Drawing No.:

D.3.0

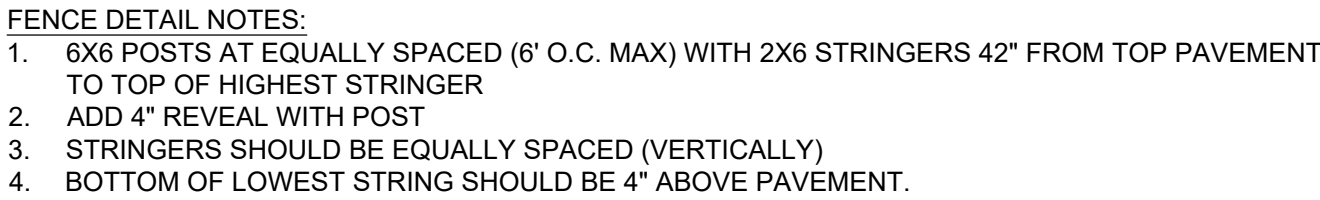
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ROCK MATERIALS



- NOTES:**
1. SOIL BACKFILL SHALL BE PLACED TO TRANSITION BETWEEN THE BANK AND TOE PROTECTION.
 2. RIP-RAP TOE PROTECTION SHALL CONSIST OF CLASS 1 RIP-RAP AS SPECIFIED BY THE DESIGNER.
 3. TYPE-2 NON-VONNEN FILTER FABRIC SHALL BE PLACED UNDER THE TOE PROTECTION.
 4. THE PLAN VIEW ILLUSTRATES A PERPENDICULAR PERSPECTIVE OF EACH SURFACE DEPICTED IN THE CROSS-SECTION. THERE IS NO FORESHORTENING OF THE BANK (OR ANY SURFACE) IN THE PLAN VIEW.



STONE TOE PROTECTION

TIMBER FENCE



- STEP 1 - NOTES:

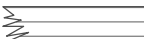
1. EXCAVATE TO ELEVATION E1 "IN THE DRY" - SEE SEPARATE PUMP AROUND DETAILS FOR PROCEDURE. INSTALL 12-INCH MINIMUM BED OF SBM MIX. FOR POOR UNDERLYING SOILS, CONTACT DESIGN ENGINEER IMMEDIATELY - USE ADDITIONAL STONE AND/OR FILTER CLOTH MAY BE REQUIRED.
2. INSTALL FOOTER LOGS AT ANGLE α WITH THE DESIGN STREAM THALWEG. POSITION FOOTER LOGS TO ACCOMMODATE AT LEAST TWO CANTILEVERED TOP LOGS.
3. PACK VOIDS BETWEEN FOOTER LOGS WITH WOODY DEBRIS MATERIALS AND FILL REMAINING VOIDS WITH SBM MIX.

- STEP 2 - NOTES:

4. INSTALL TOP LOGS PERPENDICULAR TO DESIGN THALVEG AND POSITION SUCH THAT EACH FOOTER LOG PROVIDES THE FOUNDATION FOR AT LEAST TWO TOP LOGS. LOGS SHALL BE PLACED SO THAT THE ROOT COLLAR IN LINE WITH THE DESIGN FACE/OFFSET.
5. PACK VOIDS BETWEEN TOP LOGS WITH WOODY DEBRIS MATERIAL AND FILL REMAINING VOIDS WITH APPROVED FILL.
6. ROOT FLORES EXTENDING ABOVE THE TOP LOG SHALL BE CUT FLUSH AT THE TOP LOG ELEVATION (E4).

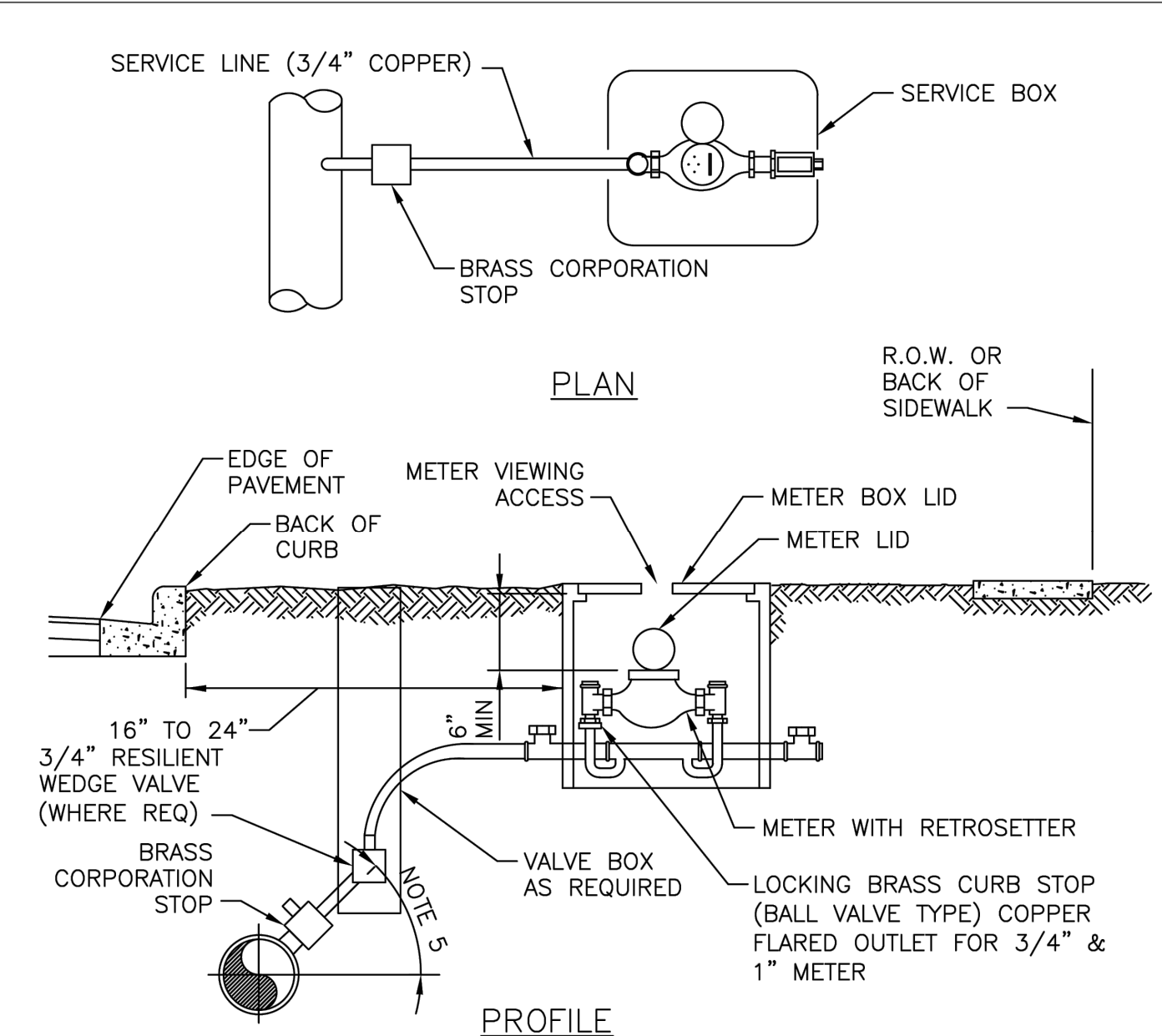
- STEP 3 - NOTES:

7. INSTALL A 3" LAYER OF LIVE BRUSH ABOVE TOP LOGS. BRUSH SHALL EXTEND A MINIMUM OF 3' INTO THE STRUCTURE LANDWARD FROM THE DESIGN FACE/OFFSET. BACKFILL WITH TOPSOIL AND LIGHTLY TAMP FOR FINISHED 3" THICKNESS.
8. LAY COIR MAT OVER FINISHED BRUSH LAYER. PLACE APPROVED FILL TO SPECIFIED DIMENSIONS AND COMPACT WITH EXCAVATOR BUCKET.
9. PLACE 6" TOPSOIL AND COMPACT WITH EXCAVATOR BUCKET.
10. PLACE SEED AND STRAW, WRAP COIR MAT AROUND FILL MATERIAL AND STAKE IN PLACE PER SEPARATE COIR MAT DETAIL.
11. INSTALL LIVE STAKES PER SEPARATE DETAIL.
12. PLANT BENCH AND SLOPES PER PLANTING PLANS.

<u>LEGEND</u>	
-----	BANKFULL (BKF)
— — — —	EXISTING GRADE
— ■ — ■ —	COIR MATTING, BIO-D 70 (OR APPROVED EQUAL)
=====	PROPOSED GRADE
- - - - -	STREAM CENTERLINE/THALWEG
	APPROVED FILL
	EXISTING SOIL
	FOOTER LOG
	LIVE STAKE/TUBELING
	STREAMBED MATERIAL (SMB) MIX
	TOP LOG
	WOODY DEBRIS

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- NOTES:
- METER SHALL BE INSTALLED BETWEEN SIDEWALK AND CURB AND IN NO CASE SHALL IT BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.
 - ALL POTABLE WATER IRRIGATION METERS REQUIRE AN APPROVED BACKFLOW PREVENTER.
 - ALL PROPERTIES WITH ALTERNATIVE WATER SYSTEMS (WELL, ETC.) REQUIRE BACKFLOW PREVENTERS.
 - SERVICE LINES SHALL NOT BE LESS THAN METER SIZE.
 - SERVICE TAP SHALL BE BETWEEN 10:00 O'CLOCK AND 2:00 O'CLOCK WITHOUT SADDLE TAP.

	STANDARD DETAILS	09/17
	Residential Water Meter Installation Detail	
	NOT TO SCALE	DETAIL NO. W-021

MINIMUM CONTAINMENT PROTECTION REQUIREMENT
NEW CONSTRUCTION AND RETROFIT INSTALLATIONS
SERVICE SIZE: 1/2 INCH THRU 2 INCH METER SIZE: THRU 1/2 INCH THRU 2 INCH
DOUBLE CHECK VALVE ASSEMBLY (DC)

SPECIFICATION: THE CUSTOMER/OWNER SHALL FURNISH AND INSTALL A DOUBLE CHECK (DC) VALVE BACKFLOW PREVENTION ASSEMBLY (BFP) IN A SIZE TO MATCH THAT OF THE REQUIRED SERVICE LINE CONNECTION. THE DC BFP ASSEMBLY SHALL INCLUDE A FULL PORT BALL VALVE ON THE INLET AND OUTLET SIDE WITH A UNION OR UNION COUPLING NUT BETWEEN THE ASSEMBLY AND EACH VALVE. THE ASSEMBLY SHALL HAVE THREE BALL VALVE TEST COCKS IN THE VERTICAL POSITION FITTED WITH BRASS OR PLASTIC THREADED PLUGS. A FOURTH TEST COCK SHALL ALSO BE PROVIDED ON THE UPSTREAM SIDE OF THE INLET SHUT-OFF VALVE.

NOTE: ALL COMPONENTS OF THE ASSEMBLY SHALL BE CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY. THE DC BFP ASSEMBLY SHALL HAVE APPROVAL AND CONFORMANCE TO ALL CURRENT REQUIREMENTS OF THE UNIVERSITY OF SOUTHERN CALIFORNIA, FOUNDATION FOR CROSS-CONNECTION CONTROL, AND HYDRAULIC RESEARCH (USC FCOMB). ASSEMBLY TO BE INDIVIDUALLY FACTORY TESTED, SHIPPED AND INSTALLED AS A UNIT.

INSTALLATION INSTRUCTIONS: THE DC BFP ASSEMBLY SHALL NOT BE BURIED IN EARTH. INSTALL IN A UTILITY BOX ADJACENT TO OR AS CLOSE AS PRACTICAL TO THE PROPERTY LINE OF THE PREMISES TO THE DOWNSTREAM SIDE OF THE WATER METER, AND OUT OF RIGHT OF WAY. THE DC BFP ASSEMBLY MUST BE CENTERED IN THE ENCLOSURE.

NOTE: UNDER NO CIRCUMSTANCES SHALL A BY-PASS OR ANY INTERVENING CONNECTION BE ALLOWED BETWEEN THE WATER METER AND THE DC BFP USED FOR SYSTEM PROTECTION UNLESS THAT CONNECTION IS PROTECTED BY AN APPROVED BFP. AT THE BOTTOM, SEE EXCERPT FROM STATE OF GEORGIA PLUMBING CODE ON THERMAL EXPANSION.

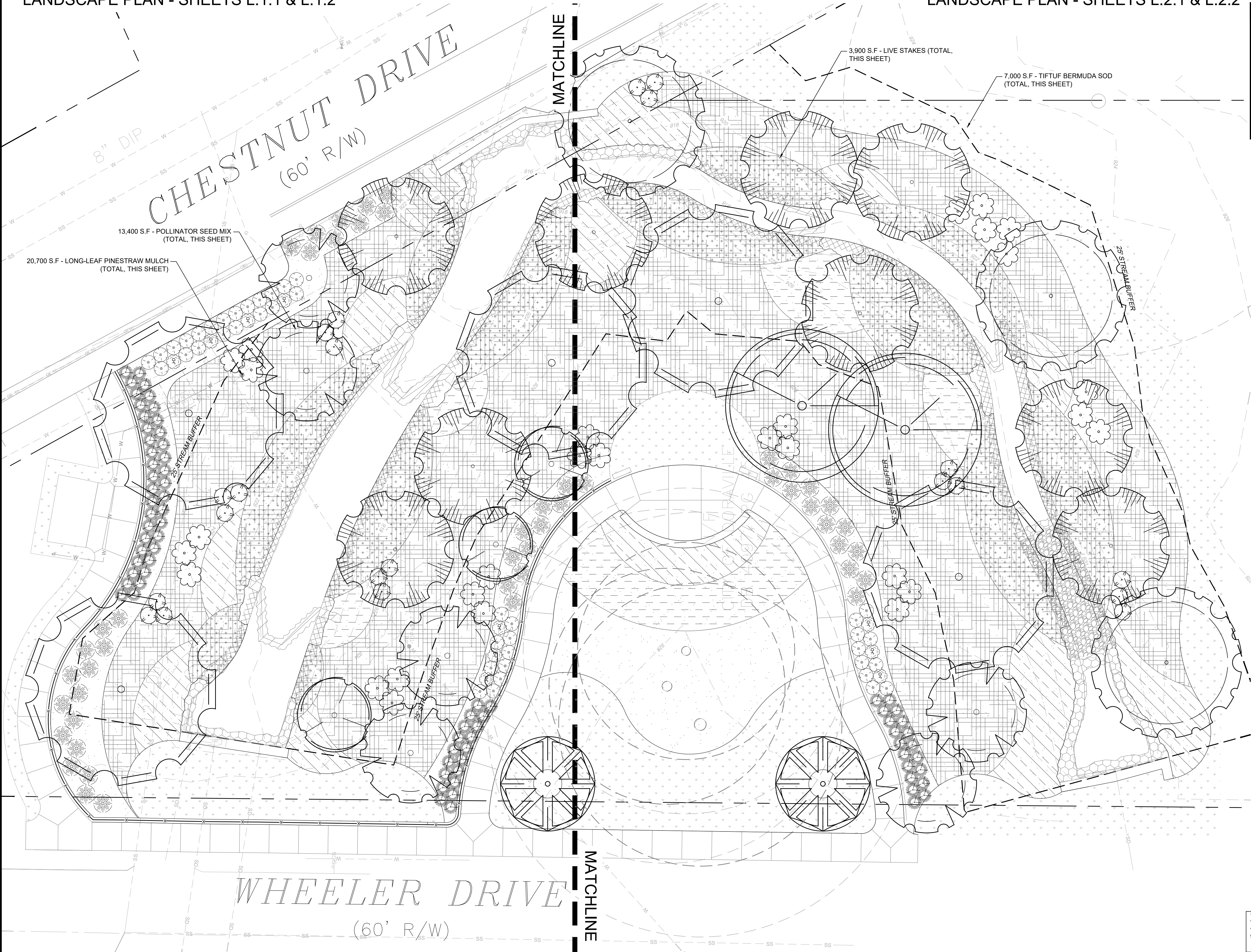
APPROVED UTILITY BOXES (OR EQUIVALENT):
CARSON INDUSTRIES MODEL NUMBER R24C93PQWL
COR SYSTEM CORP. MODEL NUMBER WA10132-18
BRIDGES PRODUCTS, INC. MODEL NUMBER 1324

NOTE: DOMESTIC DC BFPs SHALL BE LEAD FREE.

ASSEMBLY TESTING: ALL DC BFPs SHALL BE FIELD TESTED FOLLOWING INSTALLATION, REPAIR, RELOCATION, AND AT LEAST ANNUALLY THEREAFTER.

PLAN APPROVAL AND INSPECTION: PLAN APPROVAL MUST BE OBTAINED AND INSPECTION SCHEDULED PRIOR TO WORK. THROUGH DEKALB COUNTY DEPARTMENT OF WATER/SED MANAGEMENT. CONTACT CROSS-CONNECTION CONTROL SECTION AT (404) 897-4875 FOR BACKFLOW INSPECTION PRIOR TO INSTALLATION.

APPROVED ASSEMBLYS (OR EQUIVALENT):
ARI DC-100 3/2", 1", 1/2", 1/4", 1/8", 1/16", 1/32", 1/64", 1/128", 1/256", 1/512", 1/1024", 1/2048", 1/4096", 1/8192", 1/16384", 1/32768", 1/65536", 1/131072", 1/262144", 1/524288", 1/1048576", 1/2097152", 1/4194304", 1/8388608", 1/16777216", 1/33554432", 1/67108864", 1/134217728", 1/268435456", 1/536870912", 1/1073741824", 1/2147483648", 1/4294967296", 1/8589934592", 1/17179869184", 1/34359738368", 1/68719476736", 1/137438953472", 1/274877906944", 1/549755813888", 1/1099511627776", 1/2199023255552", 1/4398046511104", 1/8796093022208", 1/17592186044416", 1/35184372088832", 1/70368744177664", 1/140737488355328", 1/281474976710656", 1/562949953421312", 1/1125899906842624", 1/2251799813685248", 1/4503599627370496", 1/9007199254740992", 1/18014398509481984", 1/36028797018963968", 1/72057594037927936", 1/144115188075855872", 1/288230376151711744", 1/576460752303423488", 1/1152921504606846976", 1/2305843009213693952", 1/4611686018427387904", 1/9223372036854775808", 1/18446744073709551616", 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LEGEND

- LONG-LEAF PINESTRAW MULCH
- POLLINATOR SEED
- TIFTUF BERMUDA SOD

Keck+Wood
COLLABORATION BY DESIGN
3090 PREMIERE PARKWAY, SUITE 200
DULUTH, GA 30097
(678) 417-4000
keckwood.com

REGISTERED PROFESSIONAL
ENGINEER
JENNI R. OLIVO
STATE OF GEORGIA

NO.	DATE	REVISION

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

OVERALL LANDSCAPE PLAN

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By
DY

Checked By
JO

Date:
11/17/2025

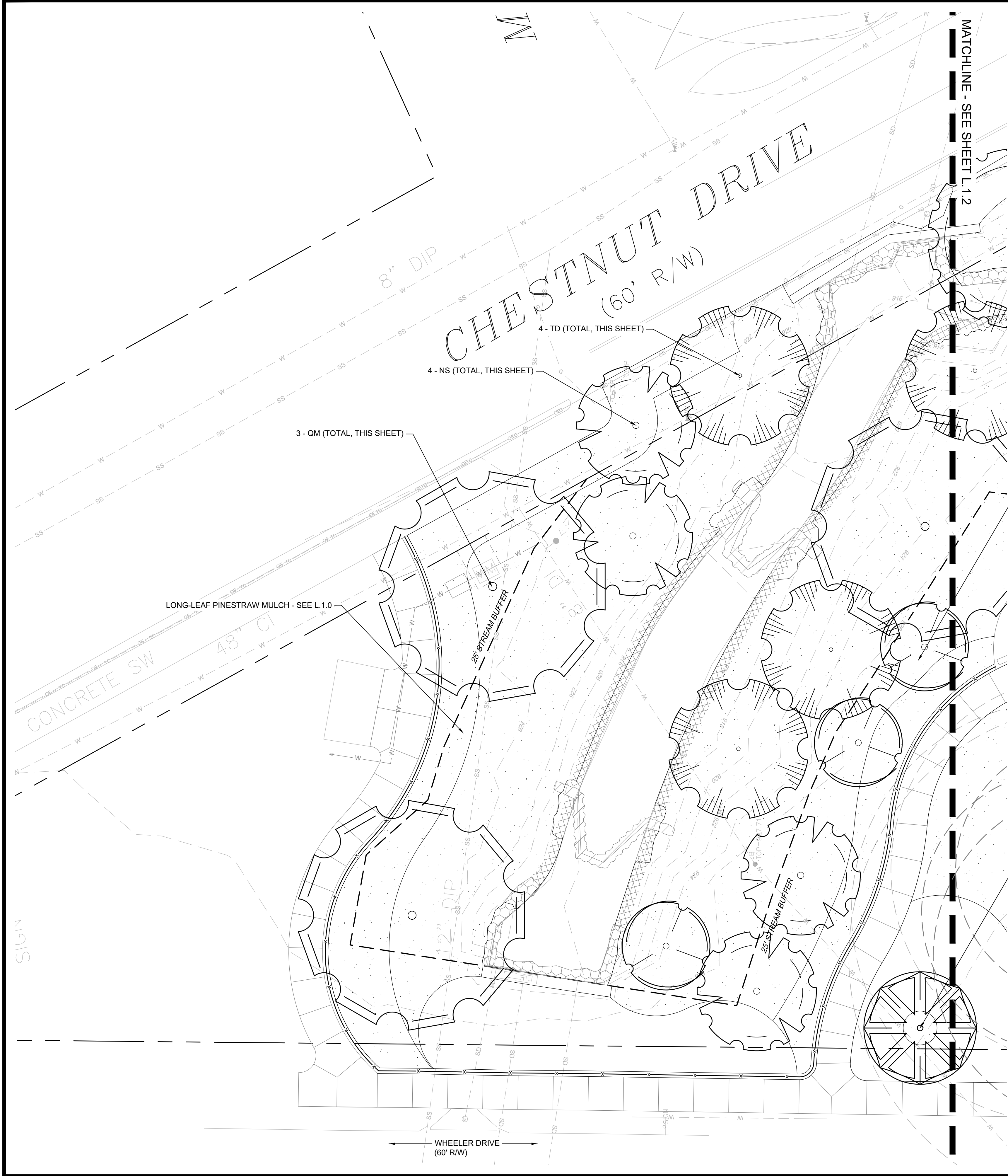
Scale:
1" = 10'

Project No.:
240285

Drawing No.:
L.1.0

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LEGEND

CANOPY TREES

LT - TULIP POPLAR

QM - SWAMP CHESTNUT OAK

TD - SHAWNEE BRAVE BALD CYPRESS

NS - WILDFIRE BLACKGUM

AR - OCTOBER GLORY RED MAPLE

ORNAMENTAL TREES

AG - AUTUMN BRILLIANCE SERVICEBERRY

CC - APPALACHIAN RED REDBUD

1

REPLACEMENT TREES TO DENSITY UNITS CALCULATIONS		
(ORNAMENTAL/UNDERSTORY)		
PROPOSED TREE #	CALIPER OF REPLACEMENT TREE	DENSITY UNITS FOR REPLACEMENT TREE
1	3"	0.5
2	3"	0.5
3	3"	0.5
4	3"	0.5
5	3"	0.5
TOTAL:		2.5 DENSITY UNITS

1

TREE SAVE CALCULATIONS (EDF)		
EXISTING TREE #	DBH UNITS FOR EX. TREE	DENSITY UNITS FOR EX. TREE
1	23"	6.3
2	25"	6.6
3	30"	7.5
4	36"	8.4
5	36"	8.4
6	30"	7.5
7	20"	6
8	20"	6
9	20"	6
10	30"	7.5
TOTAL:		70.2

1

DENSITY FACTOR ANALYSIS:
SDF (SITE DENSITY FACTOR) = EDF (EXISTING DENSITY FACTOR) + RDF (REPLACEMENT DENSITY FACTOR)

1. SITE DENSITY FACTOR (SDF)

SDF = (SITE ACRES) x 30

SDF = (0.75) x 30 = **22.5**

2. EXISTING DENSITY FACTOR (EDF)

EDF = **70.2**

3. REPLACEMENT DENSITY FACTOR (RDF)

RDF = SDF (22.5) - EDF (70.2) = **-47.7**

SCALE: 1" = 10'

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COLLABORATION BY DESIGN

3090 PREMIERE PARKWAY, SUITE 200
DULUTH, GA 30097
(678) 417-4000
keckwood.com

GEORGIA
REGISTERED
PROFESSIONAL
ENGINEER
JENNI R. OLIVO

NO.	DATE	REVISION
1	12/23/2025	CITY LDP REVISIONS

NORTHWOODS STREAM RESTORATION
INTERSECTION OF WHEELER DR. & CHESTNUT DR.
DORAVILLE, GA 30340

LANDSCAPE PLAN - TREES

THIS BAR IS
1 INCH LONG
PLOTTED FULL SCALE

Project Manager:
JENNI OLIVO

Drawn By
DY

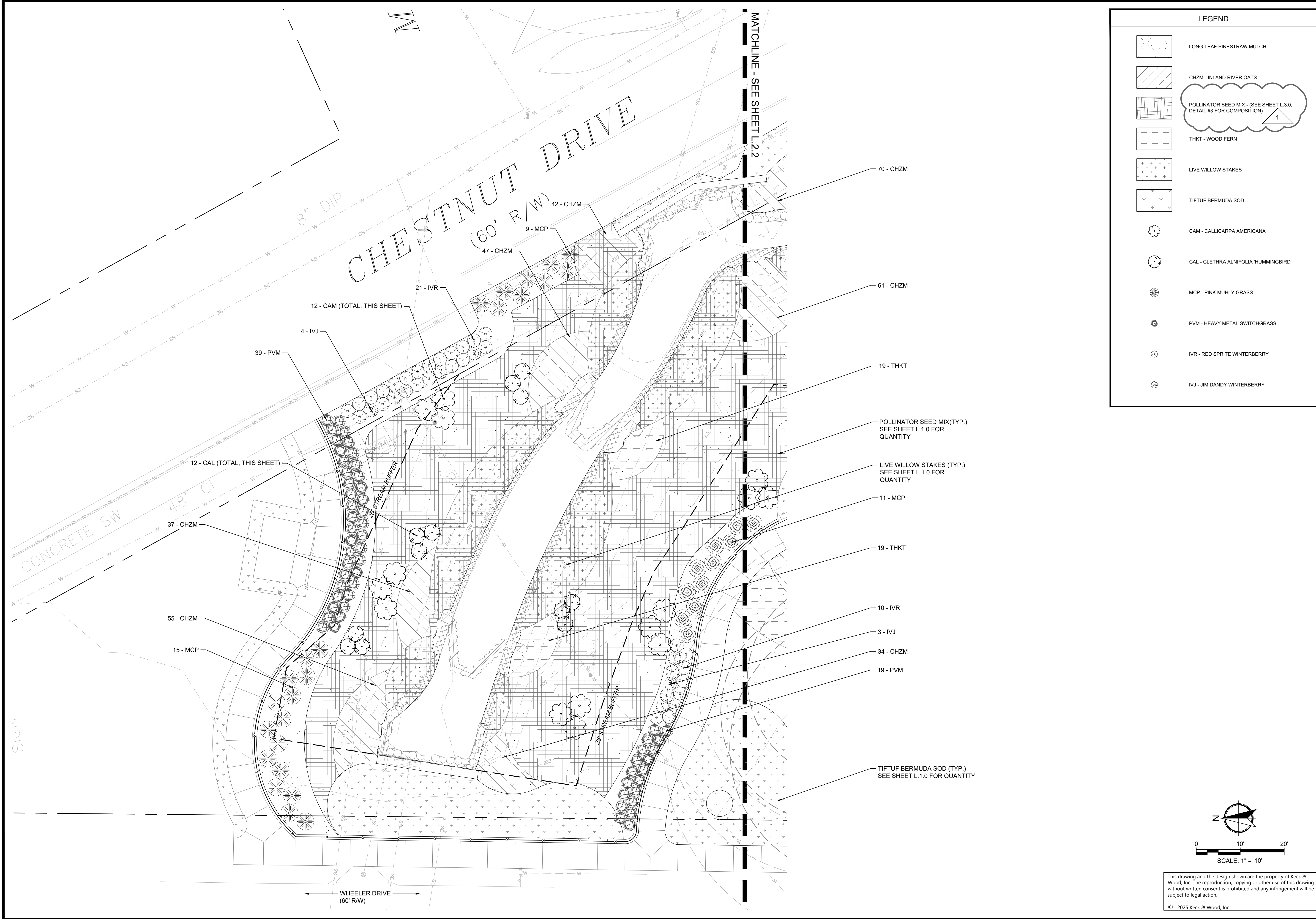
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JO

Date:
11/17/2025

Scale:
1" = 10'

Project No.:
240285

Drawing No.:
L.1.1



KECK+WOOD

COLLABORATION BY DESIGN

3030 PREMIERE PARKWAY, SUITE 200

DULUTH, GA 30097

(678) 417-4000

keckwood.com

REGISTERED PROFESSIONAL ENGINEER

JENNI R. OLIVO

NO. 12232025

NO.	DATE	REVISION
1	12/23/2025	CITY L.D.P. REVISIONS

NORTHWOODS STREAM RESTORATION

INTERSECTION OF WHEELER DR. & CHESTNUT DR.

DORAVILLE, GA 30340

LANDSCAPE PLAN -

SHRUBS & GROUND COVER

THIS BAR IS 1 INCH LONG PLOTTED FULL SCALE

Project Manager: JENNI OLIVO

Drawn By: DY

Checked By: JO

Date: 11/17/2025

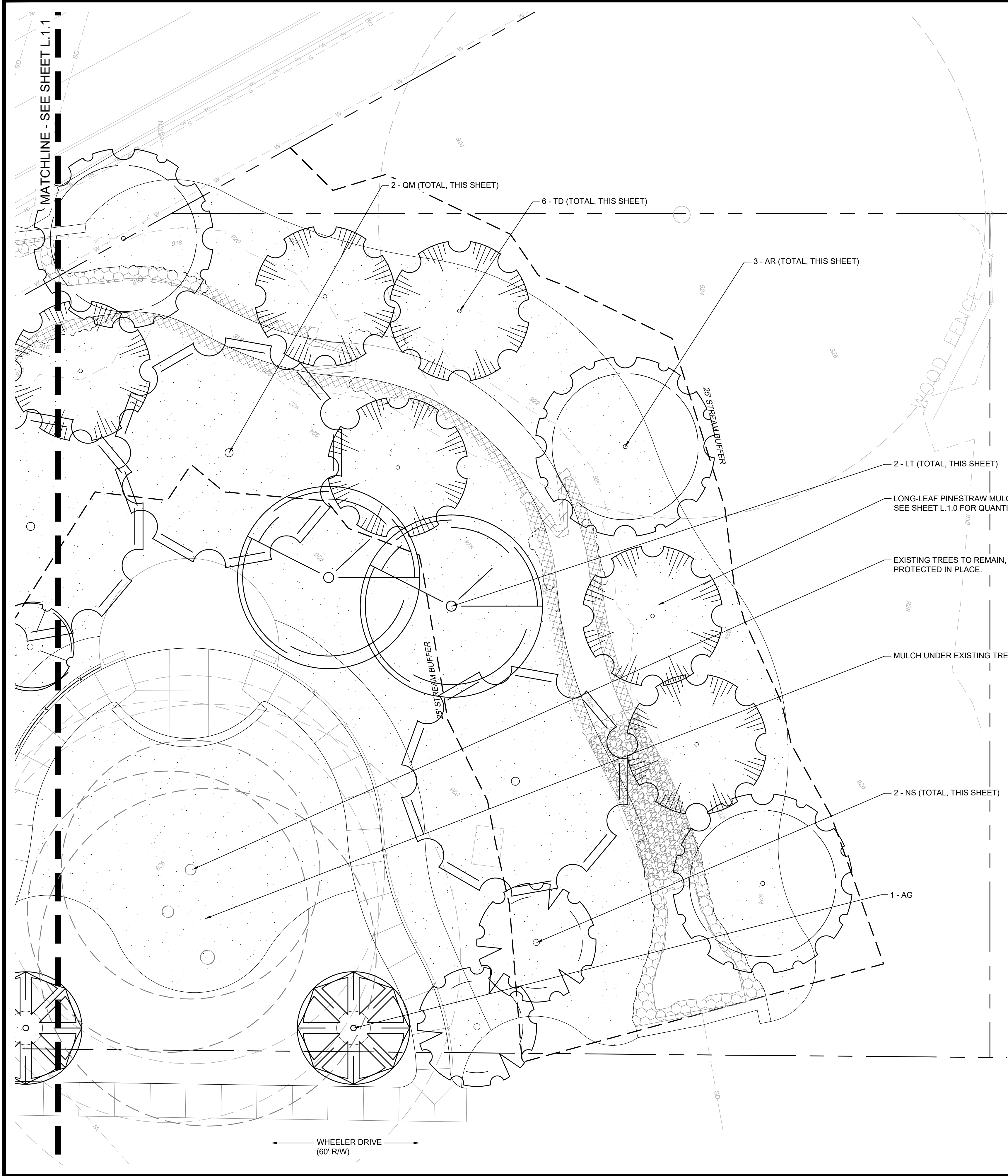
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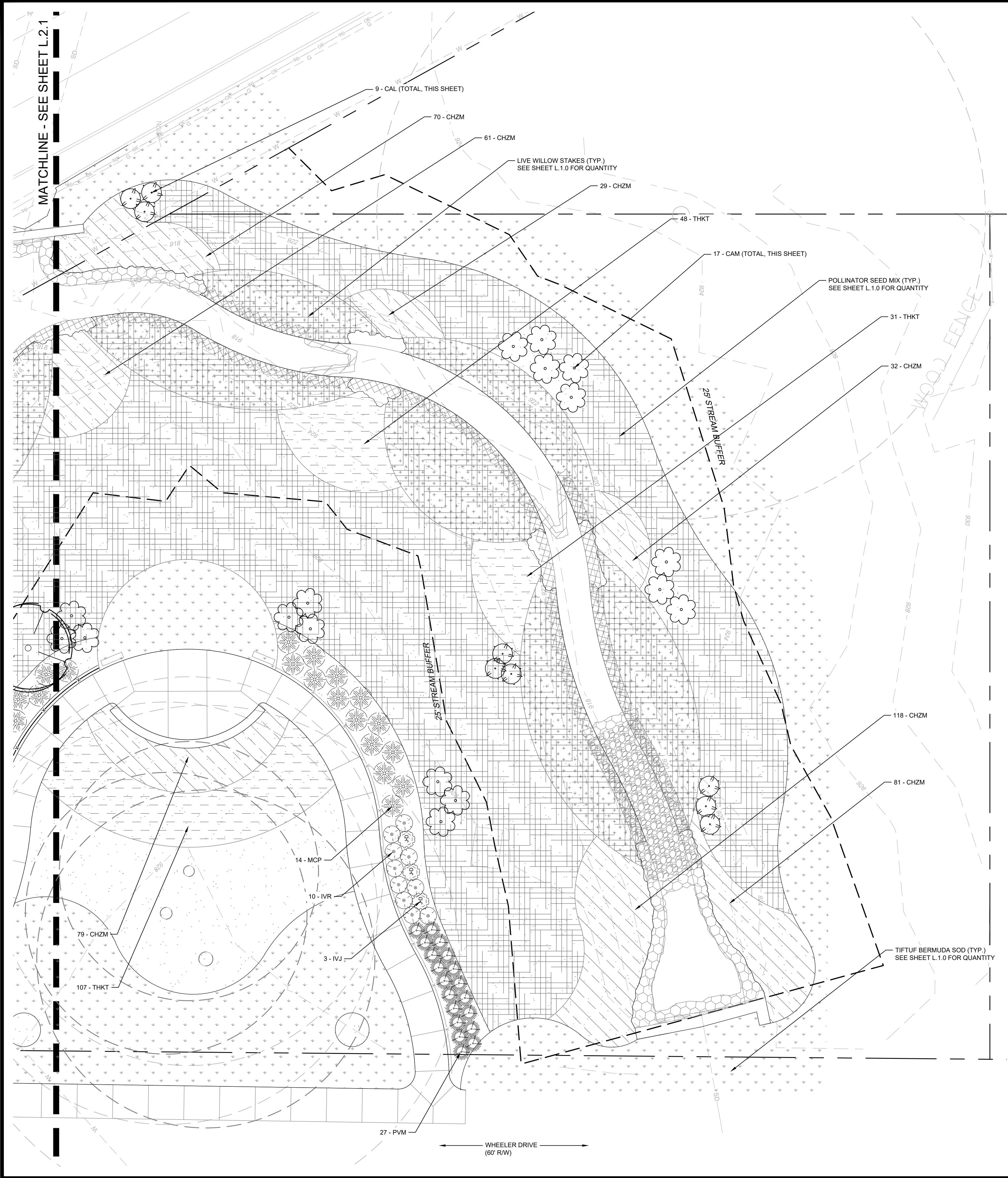
Project No.: 240285

Drawing No.: L.1.2

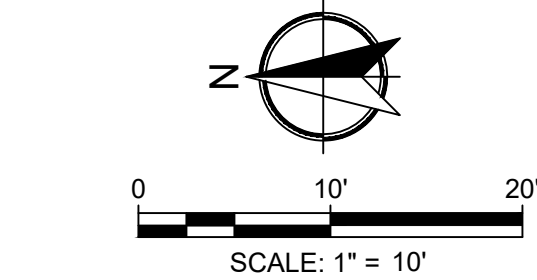
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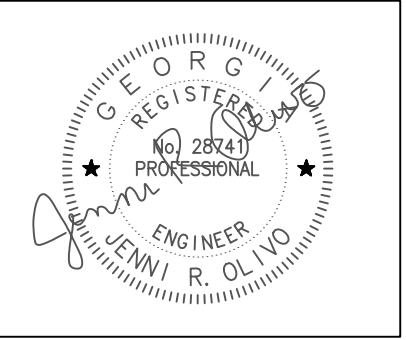


LEGEND	
	LONG-LEAF PINESTRAW MULCH
	POLLINATOR SEED MIX - (SEE SHEET L.3.0, DETAIL #3 FOR COMPOSITION)
	TIFTUF BERMUDA SOD
	CHZM - INLAND RIVER OATS
	THKT - WOOD FERN
	LIVE WILLOW STAKES
	CAM - CALLICARPA AMERICANA
	CAL - CLETHRA ALNIFOLIA 'HUMMINGBIRD'
	MCP - PINK MUHLY GRASS
	PVM - HEAVY METAL SWITCHGRASS
	IVR - RED SPRITE WINTERBERRY
	IVJ - JIM DANDY WINTERBERRY



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LANDSCAPE PLAN - SHRUBS & GROUNDCOVER

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1 INCH LONG
PLOTTED FULL SCALE

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Drawn By DY	Checked By JO
Date:	11/17/2025
Scale:	1" = 10'

Project No:	240285
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LANDSCAPE NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES IN THE PLANT LIST. ANY DISCREPANCIES BETWEEN QUANTITIES ON PLAN AND PLANT LIST SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND ANY FIELD ADJUSTMENTS OR QUANTITY ADJUSTMENTS MUST BE AUTHORIZED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
2. ALL TREES, SHRUBS AND PLANTS SHALL CONFORM TO ACCEPTED STANDARDS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE PROJECT SPECIFICATIONS.
3. ALL PLANT MATERIAL SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
4. THE TOP OF ALL ROOT BALLS SHALL BE 2" ABOVE FINISHED GRADE IN WELL DRAINED SOILS. IN POORLY DRAINED SOILS, ROOT BALLS SHALL BE ¼ HEIGHT OF ROOT BALL ABOVE FINISHED GRADE.
5. ALL ROOT BALLS REMOVED FROM CANS SHALL BE SCARIFIED PRIOR TO BACKFILLING.
6. ALL PLANTS SHALL BE GUARANTEED TO BE IN HEALTHY CONDITION FOR ONE (1) YEAR AFTER ACCEPTANCE BY OWNER OF ALL PLANT MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE/FERTILIZATION/WATERING DURING THE WARRANTY PERIOD.
7. MULCH A MIN. 4 FOOT AREA AROUND EACH TREE. MULCH A CONTINUOUS AREA AROUND ALL SHRUB BEDS, AS INDICATED ON THE PLAN, WITHIN 2 DAYS AFTER PLANTS ARE INSTALLED. MULCH SHALL BE 3-4" OF LONG-LEAF PINESTRAW MULCH UNLESS OTHERWISE NOTED.
8. LANDSCAPE CONTRACTOR SHALL REMOVE TOP 1/3 OF ALL WIRE BASKETS, TOP 1/3 OF BURLAP AND ASSOCIATED TWINE AND STRAPPING FROM TREE ROOT BALLS PRIOR TO FINAL ACCEPTANCE OF PLANTS.
9. TOPSOIL SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AND USED FOR BACKFILLING ALL PITS AND BED ESTABLISHMENT FOR PLANTS. PROVIDE TOPSOIL WHICH IS FERTILE, FRIABLE, NATURAL LOAM, SURFACE SOIL, REASONABLY FREE OF SUB- SOIL, CLAY LUMPS, BRUSH, WEEDS AND OTHER LITTER AND FREE OF ROOTS, STUMPS, STONES LARGER THAN 1" IN ANY DIMENSION, AND OTHER EXTRANEIOUS OF TOXIC MATTER HARMFUL TO PLANT GROWTH. TOPSOIL SHALL HAVE 2-5% ORGANIC MATTER(MINIMUM), A 60% MAXIMUM CLAY CONTENT, AND PH VALVE OF 6-6.5%.
10. SOIL AMENDMENT SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AND USED FOR BACKFILLING AND BED ESTABLISHMENT. SOIL AMENDMENT SHALL CONSIST OF THE BELOW PERCENTAGES AND HAVE A PH RANGE BETWEEN 5.5 AND 7%. SOIL AMENDMENT SHALL NOT BE USED IN FROZEN OR MUDDY CONDITIONS. CONTRACTOR TO SUBMIT VENDOR INFORMATION FOR ALL SOIL AMENDMENTS. ALL BEDS SHOULD BE TILLED PRIOR TO ADDING PLANTING SOIL. PLANTING SOIL SHALL CONSIST OF 2/3 TOPSOIL AND 1/3 SOIL AMENDMENT. SEE PLANTING BED ESTABLISHMENT DETAIL FOR MORE INFORMATION.
11. CONTRACTOR IS RESPONSIBLE FOR HAVING ALL UNDERGROUND UTILITIES LOCATED AND CLEARLY PAINTED WITHIN 10 DAYS OF ANY GROUND DISTURBING ACTIVITY. OWNER WILL NOT PAY FOR UTILITY REPAIRS DUE TO FAILURE TO MARK AND OBSERVE UTILITY LOCATIONS.
12. CONTRACTOR TO ENSURE POSITIVE DRAINAGE IN ALL PLANTING AREAS AND NO PONDING SHALL OCCUR. POORLY DRAINED SOILS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. ALL POORLY DRAINED SOILS SHALL BE CORRECTED BEFORE PLANTING OCCURS BY IMPORTING SUITABLE SOILS OR ADDING A DRAINAGE SYSTEM.
13. ALL PLANTING BEDS SHALL HAVE 50Z. MINIMUM WEED CONTROL FABRIC.
14. ALL EXISTING TURF/LAWN/WEEDS SHALL BE ERADICATED FROM PLANTING AREAS BEFORE TILLAGE.
15. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF LANDSCAPE THROUGH DURATION OF PROJECT AND WITHIN THE 1 YEAR WARRANTY PERIOD, INCLUDING BUT NOT LIMITED TO: WATERING, MULCHING, PRUNING, ETC. SEE SPECS FOR ADDITIONAL DETAILS.

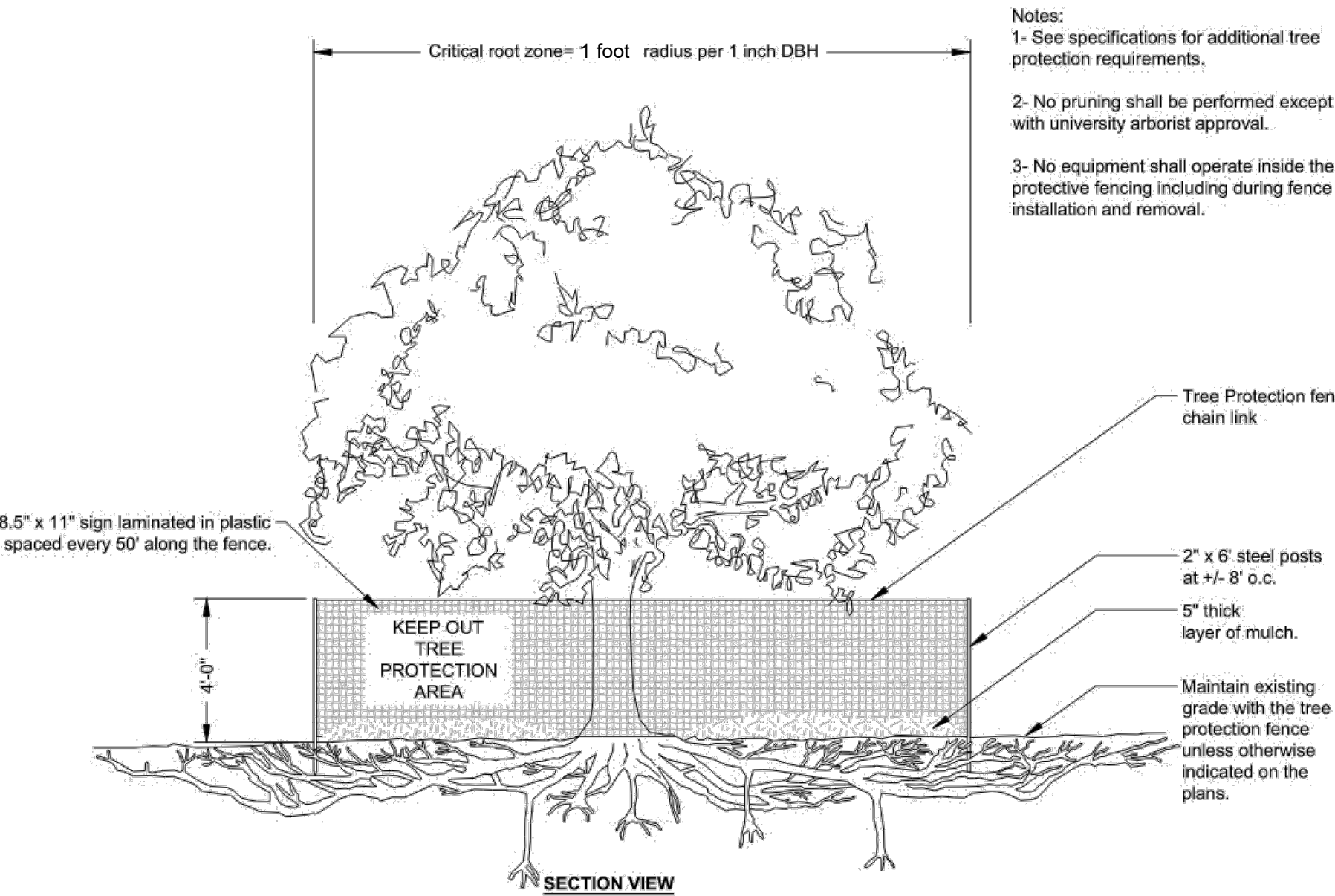
Northwoods Stream Restoration - Planting Schedule					
Qty.	Symbol	Scientific Name	Common Name	Size	Notes
Canopy Trees					
2	LT	Liriodendron tulipifera	Tulip Poplar	3" Cal.	Full Crown, 8' Min. Ht.
5	QM	Quercus michauxii	Swamp Chestnut Oak	3" Cal.	Full Crown, 8' Min. Ht.
9	TD	Taxodium distichum 'Shawnee Brave'	Shawnee Brave Bald Cypress	3" Cal.	Full to Ground, 8' Min. Ht.
6	NS	Nyssa sylvatica 'Wildfire'	Wildfire Blackgum	3" Cal.	Full Crown, 8' Min. Ht.
3	AR	Acer rubrum 'October Glory'	October Glory Red Maple	3" Cal.	Full Crown, 8' Min. Ht.
Total 25					
Ornamental Trees					
2	AG	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	3" Cal.	Full Crown, 6-8' Min. Ht.
3	CC	Cercis canadensis 'Appalachian Red'	Appalachian Red Redbud	3" Cal.	Full Crown, 6-8' Min. Ht.
Total 5					
Shrubs/Ornamental Grasses					
29	CAM	Callicarpa americana	American Beautyberry	3 Gal.	18" Min. Ht.
21	CAL	Clethra Alnifolia 'Hummingbird'	Hummingbird Summersweet	3 Gal.	18" Min. Ht.
49	MCP	Muhlenbergia capillaris	Pink Muhly Grass	3 Gal.	18" Min. Ht.
77	PVM	Panicum virgatum 'Heavy Metal'	Heavy Metal Switchgrass	3 Gal.	18" Min. Ht.
41	IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	3 Gal.	18" Min. Ht., Pollinated by Jim Dandy
10	IVJ	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry	3 Gal.	18" Min. Ht., Pollinator
Total 227					
Groundcover/Vines					
643	CHZM	Chazzmanthium latifolium	Inland River Oats	1 GAL.	Approx. 24" O.C. Spacing
224	THKT	Thelypteris kunthii	Wood Fern	1 GAL.	Approx. 30" O.C. Spacing
Total 867					
Mulch					
20,700	SF	Long-Leaf Pinestraw Mulch			
Total 20,700					
Grass/Seed/Stake					
13,400	SF	Pollinator Seed	Mellow Marsh Farm Pollinator Mix	Seed	Install Per Manufacturer's Specifications
3,900	SF	Live Stakes	Mellow Marsh Farm		Equal blend of Ninebark, Silky Willow, and Buttonbush
7,000	SF	TifTuf Bermuda Sod			
Total 24,300					

MMF Pollinator Mix Recommended application rate: 20 to 25 lbs. per acre (1 lb./2000 sq.ft.)		
Species	Common Name	Percent
Agrostis hyemalis	Winter bentgrass	1.0%
Agrostis perennans	Upland bentgrass	1.0%
Anemone virginiana	Tall thimbleweed	1.0%
Aquilegia canadensis	Eastern columbine	0.5%
Asclepias tuberosa	Butterfly weed	1.0%
Bidens aristosa	Bearded beggarticks	15.0%
Chamaecrista fasciculata	Partridge pea	12.0%
Coreopsis lanceolata	Lance-leaf coreopsis	11.0%
Echinacea purpurea	Purple coneflower	2.5%
Elymus virginicus	Virginia wildrye	9.0%
Helianthus angustifolius	Swamp sunflower	3.0%
Heliopsis helianthoides	Smooth oxeye	10.0%
Monarda punctata	Spotted beebalm	0.5%
Oenothera biennis	Common evening primrose	0.5%
Penstemon laevigatus	Eastern smooth beardtongue	0.5%
Pycnanthemum tenuifolium	Narrowleaf mountainmint	0.5%
Rudbeckia hirta	Blackeyed susan	4.0%
Schizachyrium scoparium	Little bluestem	10.0%
Sisyrinchium angustifolium	Narrowleaf blue-eyed grass	1.0%
Solidago rugosa	Wrinkleleaf goldenrod	0.5%
Sorghastrum nutans	Indian grass	7.0%
Symphycotrichum novae-angliae	New England aster	0.5%
Tridens flavus	Purpletop	2.0%
Tripsacum dactyloides	Eastern gamagrass	6.0%
		100%

Optimal Planting Schedule

Woody Plant Material Including Trees and Shrubs	Oct 15 - Dec 15
Ground Cover	Oct 15 -Dec 15
Ornamental Grasses	March 15 - May 15
Live Stakes	Dec 1 - March 1
Native Seed Mixes (Mellow Marsh Seed Mix)	Per manufactures specifications March 1 - June 1; Sept 15 - Dec 1
Turf Seed Cool Season Grasses (Fescue and Rye) Warm Season Grasses	Oct 15 - Nov 15 & March 15 - April 15 May 1 - July 1 (soil temps must be 70+ degrees)

- Notes:
1. These planting dates are based on normal weather patterns in Zones 7 & 8 of South Carolina. Abnormal weather problems and drought shall be avoided unless irrigation or other maintenance practices are available.
2. Contractor shall submit schedule of work to Engineer for approval upon award of project. Contractor shall make every effort to plant as close to optimal planing times as possible.



- Notes:
1. ANY PROPOSED ALTERNATIVE POLLINATOR SEED MIX MUST BE A NATIVE MIX AND OF THE SAME COMPOSITION AS THE PROPOSED POLLINATOR SEED MIX.
2. CONTRACTOR TO PROVIDE ALTERNATIVE POLLINATOR SEED MIX PERCENTILE LIST IF AN ALTERNATIVE MIX IS PROPOSED.
3. ALL AREAS WITH PROPOSED POLLINATOR SEED TO INCLUDE C125BN EROSION CONTROL MATTING (OR EQUAL). AREAS PROPOSED WITH POLLINATOR SEED AND LIVE STAKES TO BE TREATED PER THE LIVE STAKE DETAIL.

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LANDSCAPE DETAILS

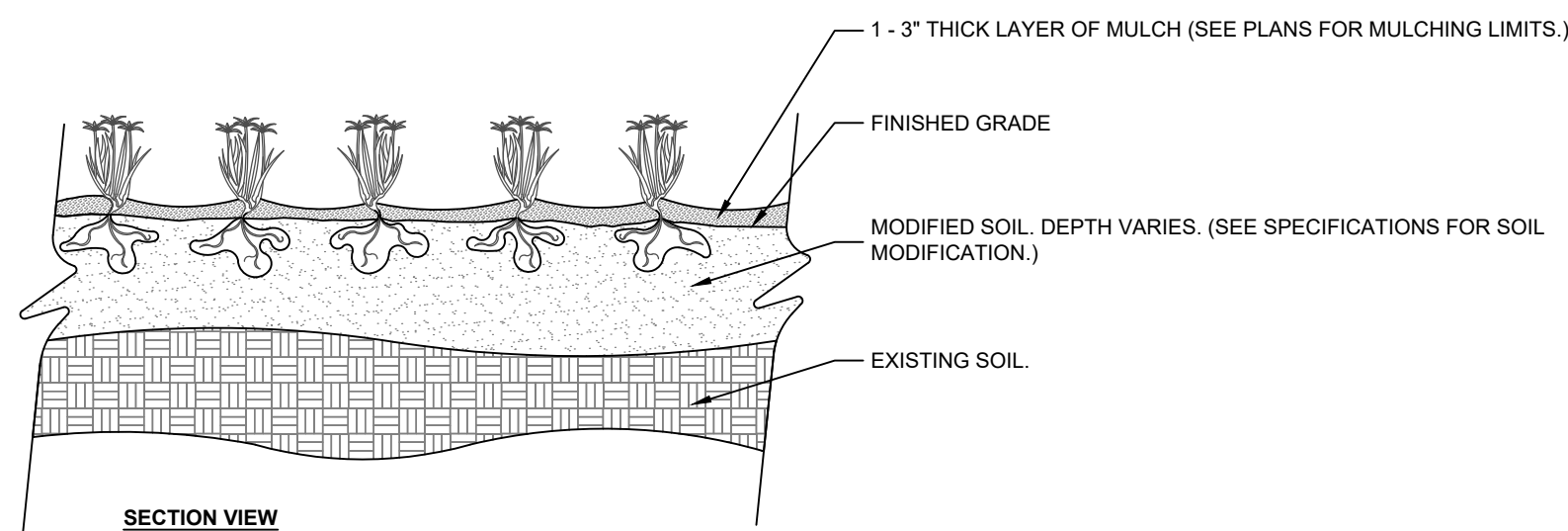
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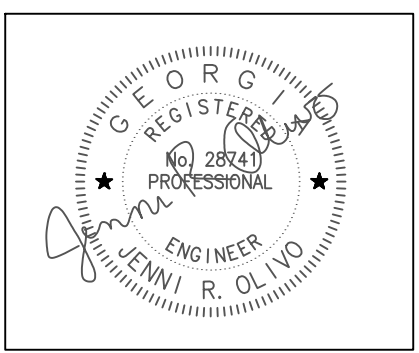
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- NOTES:
1. SEE PLANTING SCHEDULE FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
 2. SMALL ROOTS (1/4" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).
 3. SETTLE SOIL AROUND RELAT ROOT BALL OF EACH GROUND COVER PRIOR TO MULCHING.
 4. OMIT WEED CONTROL FABRIC IN AREAS OF RHIZOME SPREADING GROUNDCOVER.

4 SEE PLANS FOR BED WIDTH 3" - 4" - AS SPECIFIED ON PLANS 4" 6" NO PONDING SHALL OCCUR CONCRETE CURB (TYP.) ASPHALT AND BASE (TYP.) 10" MIN. PLANTING SOIL MIX AT 6" DEPTH (SEE SPECS.) NATIVE SOIL/BACKFILL TILLED/SCARIFIED AT 10" DEPTH MIN. COMPACTED SUBGRADE (TYP.) PLANTING BEDS		5 TYP. COLLAR MIN. 2" HT. MIN. 3" LAYER "V" TRENCH AROUND ENTIRE PLANTING BED EDGE OF PLANTING BED SPACING VARIES SEE SITE PLAN REMOVE ANY BROKEN OR DEAD AND DISEASED LIMBS TAMP SOIL MIX UNDER EACH PLANT BALL TO MINIMIZE SETTLEMENT DEEP TILL PLANTING MIX TO 8" DEPTH SCARIFY ROOT BALL AS NECESSARY IN CONTAINERIZED PLANTS THAT ARE ROOT BOUND NOTES: 1. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT. 2. INSTALL TOP OF PLAN BALL 2-3" ABOVE ADJACENT GRADE. 3. TAMP PLANTING MIX FIRMLY AS PIT FILLED AROUND EACH PLANT BALL. 4. SOAK EACH PLANT BALL AND PLANT BED IMMEDIATELY AFTER INSTALLATION. 5. SHRUBS SHALL HAVE SAME RELATIONSHIP TO FINISH GRADE AS TO PREVIOUS EXISTING GRADE. 6. PLANT AZALEAS, RHODODENDRONS AND CAMELLIAS HIGH. 1/2 TO 1/3 OF BALL ABOVE HE GROUND. BRING SOIL UP TO AND COVER THE EXPOSED BALL. 7. ENSURE ALL PLANTING AREAS HAVE POSITIVE DRAINAGE. 8. NOTIFY LANDSCAPE ARCHITECT OF ANY POORLY DRAINED SOIL FOUND ON SITE. TYPICAL SHRUB DETAIL	
5 ORIGINAL SLOPE SHOULD PASS THROUGH THE POINT WHERE THE TRUNK MEETS SUBSTRATE/SOIL 4" LAYER OF MULCH. NO MORE THAN 1" OF MULCH ON TOP OF ROOT BALL. (SEE SPECIFICATIONS FOR MULCH). MODIFIED SOIL DEPTH VARIES. (SEE SPECIFICATIONS FOR SOIL MODIFICATION). BOTTOM OF ROOT BALL RESTS ON EXISTING OR RECOMPACTED SOIL. SECTION VIEW SHRUB (TYP.) ROOT BALL 4" HIGH X 8" WIDE ROUND - TOPPED SOIL BERM ABOVE ROOT BALL. SURFACE SHALL BE CENTERED ON THE DOWNHILL SIDE OF THE ROOT BALL FOR 240". BERM SHALL BEGIN AT ROOT BALL PERIPHERY. PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND THE ROOT BALL IN 6" LIFTS TO BRACE SHRUB. DO NOT OVER COMPACT. WHEN THE PLANTING HOLE HAS BEEN BACKFILLED, POUR WATER AROUND THE ROOT BALL TO SETTLE THE SOIL. EXISTING SOIL. NOTES: 1. SHRUBS SHALL BE OF QUALITY AS PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATION. 2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL. SHRUB ON SLOPE (20:1) TO (2:1)		6 ORIGINAL SLOPE SHOULD PASS THROUGH THE POINT WHERE THE TRUNK MEETS SUBSTRATE/SOIL 4" LAYER OF MULCH. NO MORE THAN 1" OF MULCH ON TOP OF ROOT BALL. (SEE SPECIFICATIONS FOR MULCH). MODIFIED SOIL DEPTH VARIES. (SEE SPECIFICATIONS FOR SOIL MODIFICATION). BOTTOM OF ROOT BALL RESTS ON EXISTING OR RECOMPACTED SOIL. SECTION VIEW SHRUB (TYP.) ROOT BALL 4" HIGH X 8" WIDE ROUND - TOPPED SOIL BERM ABOVE ROOT BALL. SURFACE SHALL BE CENTERED ON THE DOWNHILL SIDE OF THE ROOT BALL FOR 240". BERM SHALL BEGIN AT ROOT BALL PERIPHERY. PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND THE ROOT BALL IN 6" LIFTS TO BRACE SHRUB. DO NOT OVER COMPACT. WHEN THE PLANTING HOLE HAS BEEN BACKFILLED, POUR WATER AROUND THE ROOT BALL TO SETTLE THE SOIL. EXISTING SOIL. NOTES: 1. SHRUBS SHALL BE OF QUALITY AS PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATION. 2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL. SHRUBS PLANTING DETAILS	

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