SITE DEVELOPMENT PLANS
FOR
COVINGTON FIRE STATION #23

C064 010
9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING - CM - CORRIDOR MIXED USE

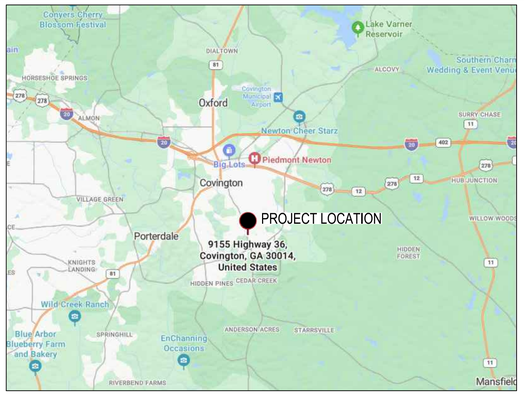
GSWCC CHECKLIST NUMBER (TYP)

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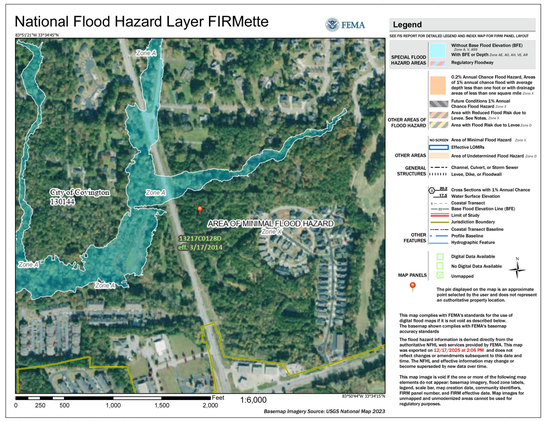
WATER SOURCE:

WSID NUMBER: 2170001
COVINGTON/NEWTON COUNTY
WATER SYSTEM
CORNIISH CREEK WTF
11905 ALCOVY RD.
COVINGTON, GA 30014
PHONE: 770-784-2128



VICINITY MAP
NOT TO SCALE

GPS COORDINATES
N 33° 34' 29.7984" W - 83° 51' 2.3868"
N 33.574944 W -83.850663



FLOOD MAP
NOT TO SCALE

LEGEND

STANDARD ABBREVIATIONS

APPROX = APPROXIMATE
BLDG = BUILDING
BM = BENCH MARK
C&G = CURB AND GUTTER
CI = CURB INLET
C.L. = CHAIN LINK
CMP = CORRUGATED METAL PIPE
CO = CLEAN OUT
CPP = CORRUGATED PLASTIC PIPE
CTF = CRIMP TOP FOUND
DB = DEED BOOK
DIA = DIAMETER
DS = DOWNSPOUT
DWCB = DOUBLE WING CATCH BASIN
ESMPC = EROSION, SEDIMENTATION, AND POLLUTION CONTROL
FDC = FIRE DEPARTMENT CONNECTION
FFE = FINISH FLOOR ELEVATION
FH = FIRE HYDRANT
FO = FIBER OPTIC
FT = FEET
GI = GRATE INLET
GM = GAS METER
GP = GUY POLE
GV = GAS VALVE
ICV = IRRIGATION CONTROL VALVE
IE = INVERT ELEVATION
IMP = IMPERVIOUS
IPF = IRON PIN FOUND
JB = JUNCTION BOX
LIA = LOCAL ISSUING AUTHORITY
LP = LIGHT POLE
NTS = NOT TO SCALE
OHE = OVER HEAD POWER
PB = PLAT BOOK
PG = PAGE
P = PROPERTY LINE
POB = POINT OF BEGINNING
PP = POWER POLE
PVC = POLYVINYL CHLORIDE PIPE
RBF = REBAR FOUND
RCP = REINFORCED CONCRETE PIPE
R/W = RIGHT OF WAY
SMH = STORM MANHOLE
SS = SANITARY SEWER
SSMH = SANITARY SEWER MANHOLE
SWCB = SINGLE WING CATCH BASIN
TC = TRAFFIC CONTROL BOX
TMP = TAX MAP PARCEL
W = WATER
WM = WATER METER
WV = WATER VALVE

STANDARD SYMBOLS

= BM
= BM IDENTIFICATION
= CO
= DS
= FDC
= FENCE
= FH
= FO
= GAS LINE
= GAS METER
= GAS VALVE
= GATE
= GP
= GUY WIRE
= H/C PARKING
= ICV
= IPF
= LIGHT BOX
= LP
= POWER (OVERHEAD)
= POWER (UNDERGROUND)
= POWER BOX
= POWER METER
= PP
= SIGN
= SMH
= SS LINE
= SSMH
= TC
= TELECOMM STRUCTURE
= TELE PEDESTAL
= TRAFFIC WIRE
= TRANSFORMER
= WATER LINE
= WM
= WV

CONSTRUCTION SEQUENCE SCHEDULE

LAND DISTURBING ACTIVITY SHALL NOT COMMENCE PRIOR TO A PRECONSTRUCTION MEETING WITH THE LOCAL ISSUING AUTHORITY.
NOTIFY INSPECTOR 24 HOURS PRIOR TO CONSTRUCTION.

BMP'S	ACTIVITY
INITIAL	PRECONSTRUCTION MEETING WITH LOCAL ISSUING AUTHORITY
	PERFORM INITIAL MONITORING
	INSTALL CONSTRUCTION EXIT
	INSTALL INITIAL SILT FENCE (PERIMETER SILT FENCE LOCATIONS FIRST)
	PROVIDE ANY INITIAL MULCHING, GRASSING, OR OTHER GROUND COVER
	INSTALL TOPSOIL LOCATION SILT FENCE
	BEGIN CLEARING, GRUBBING, TOPSOILING, AND GRADING OPERATIONS WITHIN LIMITS OF DETENTION POND
	INSTALL DETENTION BASIN WITH SKIMMER OUTLET (INCLUDES STORM STRUCTURES OF3-OF1)
	INSTALL APPROPRIATE VEGETATIVE AND STRUCTURAL BMPS (INLET / OUTLET PROTECTION, FbCs, ETC.)
	INSTALL WHEEL WASH AND FUEL STORAGE LOCATION
	COORDINATE SITE REVIEW MEETING WITH ENGINEER AND LOCAL ISSUING AUTHORITY
INTERMEDIATE	INSTALL STORM PIPE SYSTEMS WITH PROTECTED INLETS (SD2'S)
	THROUGHOUT LAND DISTURBANCE PROCESS, MAINTAIN EX. BMPS (VEGETATIVE AND STRUCTURAL)
	THROUGHOUT LAND DISTURBANCE PROCESS, CONTINUE NPDES MONITORING AND REPORTING
	COORDINATE WITH UTILITY COMPANIES ON UTILITY / SLEEVE LOCATIONS
	BEGIN REMAINING CLEARING, GRUBBING, TOPSOILING, AND GRADING OPERATIONS
	INSTALL TOPSOIL AT STOCKPILE LOCATION, IMMEDIATELY GRASS / MULCH, INSTALL ANY REMAINING TOPSOIL LOCATION SILT FENCE
	PERFORM REMAINING GRADING (ADJUST STORM RISERS WITH GRADE CHANGES) AND ADJUST ALL SCD'S
	AS AREAS ARE BROUGHT TO FINISH GRADE, GRASS / BLANKET ANY AREAS THAT ARE FINISH GRADE OR THAT WILL BE LEFT BARE FOR 7 DAYS
	EACH FILL SLOPE SHALL HAVE A DIVERSION AT THE TOP THAT IS MAINTAINED AND REINSTALLED AS THE SLOPE IS CONSTRUCTED
	CONTINUE FLOCCULANT / COAGULANT APPLICATIONS (EVERY 7 DAYS THROUGHOUT PROJECT)
	INSTALL REMAINING STORM SYSTEMS(I AS GRADES ARE ACHIEVED
	IMMEDIATELY INSTALL EACH STORM STRUCTURE WITH ASSOCIATED SCD'S AND ADJUST/CLOGE TO EACH STORM STRUCTURE
	GRASS / MULCH / FbCs DISTURBED AREAS AND INSTALL ASSOCIATED INTERMEDIATE BMP'S
	INSTALL SANITARY SEWER MAINS AND SERVICES
	GRASS / MULCH / FbCs DISTURBED AREAS AND INSTALL ASSOCIATED INTERMEDIATE BMP'S
	INSTALL WATER SYSTEM
	GRASS / MULCH / FbCs DISTURBED AREAS AND INSTALL ASSOCIATED INTERMEDIATE BMP'S
	INSTALL REMAINING UTILITIES (POWER, PHONE, CABLE, GAS, ETC.) WITH APPROPRIATE BMP'S
	INSTALL GAB THROUGHOUT PARKING AREA UP TO DESIGNATED LINE
	INSTALL REMAINING GAB
	BUILDING CONSTRUCTION
	GRASS / MULCH / FbCs DISTURBED AREAS AND INSTALL ASSOCIATED INTERMEDIATE BMP'S
	INSTALL CURB AND GUTTER
	GRASS / MULCH / FbCs DISTURBED AREAS AND INSTALL ASSOCIATED INTERMEDIATE BMP'S
	INSTALL PAVEMENT
	FINISH GRADE SHOULDERS AND STABILIZE DISTURBED AREAS WITH PERMANENT VEGETATION
	CONTINUE TO APPLY FLUCCULENT / COAGULANT APPLICATIONS, MULCHING, AND GRASSING AT EACH STEP TO LIMIT SOIL EXPOSURE
FINAL	THROUGHOUT LAND DISTURBANCE PROCESS, MAINTAIN EX. BMP'S (VEGETATIVE AND STRUCTURAL)
	THROUGHOUT LAND DISTURBANCE PROCESS, CONTINUE NPDES MONITORING AND REPORTING
	COMPLETE PAVING OPERATIONS
	ACHIEVE FINAL SITE STABILIZATION
	COORDINATE SITE REVIEW MEETING WITH ENGINEER AND/OR LOCAL ISSUING AUTHORITY INSPECTOR
	CLEAN SILT FROM ALL STORM SYSTEMS (DISTRIBUTE ON SITE AND STABILIZE)
	REMOVE ANY TEMPORARY BMP PRACTICES ONCE SITE STABILIZATION IS ACHIEVED AND SIGNED OFF BY ENGINEER
	COORDINATE SITE REVIEW MEETING WITH ENGINEER FOR FINAL SITE APPROVAL

SITE INFORMATION

PROJECT CONSISTS OF THE CONSTRUCTION OF A FIRE STATION WITH ADMINISTRATIVE OFFICES AND TWO ADDTIONAL OFFICES FOR LEASE TO OTHER EMERGENCY SERVICES.

ZONING (PER LOCAL JURISDICTION)	CM- CORRIDOR MIXED USE
LOCAL JURISDICTION	CITY OF COVINGTON
PROPERTY AREA	2.997 AC
DISTURBED AREA	3.08 AC (0.46 AC OF R/W)
MINIMUM LOT SIZE	N/A
MINIMUM LOT WIDTH	50'
MINIMUM FRONT SETBACK	20'
MINIMUM SIDE SETBACK	10' OR 0'
MINIMUM REAR SETBACK	20'
MINIMUM OPEN SPACE	20%
MAXIMUM IMPERVIOUS	90% (PROPOSED 43.26%)

MISCELLANEOUS INFORMATION

SIGNAGE	SIGNAGE SHALL BE HANDLED UNDER A SEPARATE PERMIT
SITE LIGHTING	SITE LIGHTING IS NOT A PART OF THE CIVIL PLANS (SITE WORK CONSTRUCTION DRAWINGS).
SOIL SERIES	PACOLET SANDY LOAM, 6 TO 10 PERCENT SLOPES PACOLET SANDY LOAM, 10 TO 15 PERCENT SLOPES PACOLET-URBAN LAND COMPLEX, 10 TO 25 PERCENT SLOPES TOCCOA AND CONGAREE SOILS, FREQUENTLY FLOODED
FLOOD PLAIN	THERE IS ZONE A FLOODPLAIN ALONG THE NORTHERN EDGE OF THIS PROPERTY AS PER FIRM PANEL 13217C0128D DATED 3/17/2014. NO WORK IS BEING DONE WITHIN A FLOODPLAIN. THE PROPERTY SHOWN HEREON LIES WITHIN ZONE X AND IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA.
STATE WATERS	THERE ARE NO STATE WATERS PRESENT ON THIS SITE. THERE ARE STATE WATERS PRESENT WITHIN 200' OF THIS SITE THERE ARE NO STREAM BUFFERS ON THIS PROPERTY
HYDROLOGY	THE PROPOSED SITE CONTAINS (1) OVERALL POST DEVELOPMENT DETENTION BASIN THAT GENERALLY FLOWS FROM SOUTHEAST TO NORTHWEST TO A PROPOSED DRY DETENTION BASIN. A STORM WATER SYSTEM WILL CONVEY SURFACE WATER RUNOFF TO THE POND TO REDUCE THE POST DEVELOPMENT PEAK FLOW RATES TO LESS THAN PRE DEVELOPMENT PEAK FLOW RATES FOR THE 1-YEAR THROUGH 100-YEAR STORM EVENTS FOR THE DELINEATED BASIN AT THE STUDY POINT. WATER QUALITY MEASURES WILL BE PROVIDED THROUGH THE USE OF A PROPRIETARY WATER QUALITY BOX. CHANNEL PROTECTION MEASURES WILL BE PROVIDED WITHIN THE DETENTION BASIN AND PROPOSED OUTLET CONTROL STRUCTURE.
WETLANDS	THERE ARE NO WETLANDS BEING DISTURBED ON THIS SITE.
	THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLANDS INVENTORY MAPS HAVE BEEN CONSULTED AND, 2) THE APPROPRIATE PLAN SHEET DOES INDICATE WETLANDS AS SHOWN ON THE MAP, AND 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS APPROPRIATE FEDERAL WETLANDS ALTERATION (SECTION 404) PERMIT HAS BEEN OBTAINED.
	IF WETLANDS ARE IMPACTED BY THIS DEVELOPMENT, A CORPS OF ENGINEERS PERMIT SHALL BE OBTAINED PRIOR TO DISTURBANCE, ONCE ATTAINED, A COPY OF THE WETLAND PERMIT SHALL BE KEPT ON SITE AT ALL TIMES. UPON THE CORPS OF ENGINEERS APPROVAL, A SEPARATE COPY OF THE PERMIT SHALL BE SUBMITTED TO THE LIA.

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON,
GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

JASON P. BROWN
LEVEL II CERTIFIED
DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA811 www.Georgia811.com
Contact 811 before you dig

Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including falls verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not, hitcontinent. relocation, etc. of utilities shall be coordinated with the respective utility company.

georgia civil
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
311 N. Main St, Ste. 101, Unit C
P.O. Box 896 | Madison, GA 30650
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www.georgiacivil.com

Professional Seal

GEORGIA REGISTERED NO. PE024855 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23
9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title

COVER SHEET

Sheet Number

CV-1.0

GENERAL NOTES:

1. ALL UTILITY INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF COVINGTON WATER AND SEWER STANDARDS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND REVIEWING SAID STANDARDS AND SPECIFICATIONS.
2. NOTIFY CITY OF COVINGTON INSPECTION 24 HRS BEFORE BEGINNING OF CONSTRUCTION.
3. CONTRACTOR SHALL THOROUGHLY REVIEW CONSTRUCTION PLANS AND BE FAMILIAR WITH EXISTING CONDITIONS BY SITE VISITATION, PRIOR TO FORMULATING BID.
4. CONTRACTOR SHALL VERIFY CONDITIONS AND DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCY FOUND IN THIS SET SHALL BE REFERRED TO THE SITE DESIGN PROFESSIONAL OF THE CONTRACTOR FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR DISCREPANCIES WHICH ARE NOT REPORTED.
5. CONSTRUCTION SHALL MEET OR EXCEED CITY OF COVINGTON MINIMUM STANDARDS AND SPECIFICATIONS.
6. CONTRACTOR SHALL ADHERE TO NORMAL WORKING HOURS AS PER CITY OF COVINGTON ORDINANCES. CONSTRUCTION OUTSIDE OF NORMAL WORKING HOURS, MAY BE ALLOWED UPON PRIOR APPROVAL BY CITY OF COVINGTON.
7. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL ADHERE TO FEDERAL, STATE, COUNTY AND LOCAL LAWS, ORDINANCES, AND REGULATIONS WHICH IN ANY MANNER AFFECT THE CONDUCT OF THE WORK, INCLUDING, BUT NOT LIMITED TO, INITIATING, MAINTAINING, AND SUPERVISING SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. (I.E. THE REQUIREMENTS OF APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)). CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD CITY OF COVINGTON AND ITS AGENTS, THE OWNER AND THE SITE DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN THE CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
8. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
9. DO NOT BREAK THESE DOCUMENTS INTO PARTS AND SUB-PARTS. THE SITE DESIGN PROFESSIONAL AND OWNER ASSUMES NO RESPONSIBILITY FOR THE SEPARATION OF THESE DOCUMENTS BY ANY ENTITY OR THE CONTRACTOR'S AGENTS. EACH CONTRACTING ENTITY SHALL BE RESPONSIBLE FOR ALL OF THE WORK RELATED TO THEIR TRADES WHEREVER IT MAY BE SHOWN WITHIN THE CONTRACT DOCUMENTS PACKAGE.
10. NO WORK SHALL BE PERFORMED WITHIN GEORGIA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY (IF APPLICABLE) UNTIL PERMIT(S) (INCLUDING GEORGIA DEPARTMENT OF TRANSPORTATION UTILITY ENCROACHMENT PERMIT) ARE OBTAINED FROM GEORGIA DEPARTMENT OF TRANSPORTATION AND ON SITE.
11. BARRICADES, SUFFICIENT LIGHTS, TRAFFIC SAFETY SIGNS, AND OTHER TRAFFIC CONTROL MEASURES AS DEEMED NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION ON ROADS ACCESSED BY THE GENERAL PUBLIC.
12. SIGNS (LOCATION, NUMBER, AND SIZE) ARE NOT APPROVED UNDER THIS DEVELOPMENT PERMIT. A SEPARATE PERMIT IS REQUIRED FOR EACH SIGN.
13. NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL SITE IMPROVEMENTS ARE COMPLETE.
14. ACCESS TO BUILDINGS DURING CONSTRUCTION SHALL BE MAINTAINED AND OPEN TO EMERGENCY VEHICLES AT ALL TIMES, THROUGH THE USE OF EXISTING OR TEMPORARY ROADS, DRIVES, AND/OR WALKS.
15. SITE LIGHTING SHALL BE FULLY SHIELDED. SITE LIGHTING IS TO BE DESIGNED BY OTHERS.
16. ALL WORK SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY CONTRACTOR.
17. CONTRACTOR IS RESPONSIBLE FOR QUANTITY TAKE OFFS AND ESTIMATING ALL QUANTITIES FOUND WITHIN THE SITE WORK CONSTRUCTION DRAWINGS. ANY QUANTITY TAKE OFFS OR ESTIMATES PROVIDED BY THE SITE DESIGN PROFESSIONAL ON THESE DOCUMENTS OR OTHERWISE SHALL BE VERIFIED BY THE CONTRACTOR BY PERFORMING HIS/HER OWN QUANTITY TAKE OFF AND/OR ESTIMATE. ANY COST FOR ANY DISCREPANCY IN QUANTITY TAKE OFF OR ESTIMATE PROVIDED BY SITE DESIGN PROFESSIONAL AND REQUIRED CONSTRUCTION QUANTITIES SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL COST TO THE SITE DESIGN PROFESSIONAL AND/OR OWNER AND/OR OWNER'S REPRESENTATIVE.

DEMOLITION REQUIREMENTS:

1. THE CONTRACTOR SHALL INSPECT ALL STRUCTURES, FACILITIES, AND AREAS SLATED FOR DEMOLITION TO GAIN A FULL UNDERSTANDING OF THE WORK REQUIRED. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES NECESSARY TO PROTECT THE SAFETY OF THE PUBLIC, HIS/HER EMPLOYEES AND AGENTS DURING THE DEMOLITION AND SUBSEQUENT WORK. THE OWNER, CLIENT AND SITE DESIGN PROFESSIONAL ARE NOT RESPONSIBLE FOR THE CONDITION OF THE BUILDINGS, FACILITIES, OR OTHER AREAS SLATED FOR DEMOLITION.
2. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE OWNER TO DEMOLISH ANY STRUCTURE ON THE SITE BEFORE PROCEEDING WITH WORK.
3. ALL WORK PERFORMED ON THE SITE SHALL ADHERE TO ALL (OSHA) OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION SAFETY STANDARDS.
4. ALL MATERIALS NOT SLATED FOR REUSE SHALL BE DISPOSED OF OFF SITE IN A LEGAL MANNER. THE CONTRACTOR MAY SALVAGE ALL MATERIALS NOT DESIGNATED BY THE OWNER TO BE SAVED. THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND STORE SAFELY ALL MATERIALS SLATED TO BE SAVED OR REUSED. THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS USING PHOTOGRAPHS PRIOR TO START OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR OR REPLACE MATERIALS DAMAGED DUE TO HIS WORK OR FAILURE TO PROTECT THROUGHOUT THE DURATION OF HIS CONTRACT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL APPROPRIATE UTILITY OWNERS, OPERATORS AND USERS PRIOR TO DISCONNECTION AND DEMOLITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL PLUGS, STOPS, AND CAPS SHALL BE PER AGENCIES REQUIREMENTS AND IF NONE EXIST THEN A 3000 PSI CONCRETE PLUG WITH A THICKNESS EQUAL TO THE DIAMETER OF THE PIPE SHALL BE USED.
6. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY AND STOP ALL WORK IN AREAS WHERE HAZARDOUS MATERIALS ARE DISCOVERED, WHEN REQUIRED. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE ENVIRONMENTAL AND HEALTH AGENCIES. THE CONTRACTOR SHALL FLAG OFF ALL ACCESS WITH SUFFICIENT FLAGGING THAT THERE IS AN APPARENT WARNING OF THE PRESENCE OF HAZARDOUS MATERIALS.
7. NO BURNING, EXPLOSIVES OR OTHER POTENTIALLY DANGEROUS METHODS OF DEMOLITION SHALL BE ALLOWED UNLESS WRITTEN PERMISSION IS GRANTED BY THE OWNER AND ALL APPROPRIATE PERMITS ARE GRANTED.
8. THE CONTRACTOR SHALL PROVIDE WHAT EVER SAFETY EQUIPMENT AND DEVICES ARE NECESSARY TO PROTECT THE ADJACENT PROPERTIES, STRUCTURES AND OTHER AREAS SLATED TO REMAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR OR REPLACE ANY DAMAGE CAUSED BY HIS/HER WORK. THIS SHALL ALSO INCLUDE EROSION CONTROL, DUST CONTROL AND SETTLEMENT.
9. ALL AREAS SHALL BE BROUGHT BACK TO THEIR ORIGINAL GRADE OR THAT OF THE SURROUNDING AREA, WHICH EVER IS CLOSER TO THE FINAL GRADES OF THE PROJECT FOR THAT AREA. ALL TEMPORARY SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL. ALL AREAS REQUIRING FILL SHALL BE COMPACTED TO THE REQUIREMENTS OF THE AREA BUT IN NO CASE LESS THAN 90% OF MODIFIED PROCTOR (ASTM D-1557).
10. THE CONTRACTOR SHALL PROVIDE NECESSARY EROSION CONTROL MEASURES DURING THE DEMOLITION AND REMOVAL OF EXISTING SITE FEATURES.
11. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL TIMES.
12. EXISTING BUILDINGS, APPURTENANCES, CANOPIES AND FOUNDATIONS ON THE PROPERTY SHALL BE PROTECTED UNLESS OTHERWISE NOTED.
13. THE CONTRACTOR SHALL MAINTAIN SAFE, CLEARLY MARKED PEDESTRIAN ACCESS ROUTES TO BUILDING ENTRANCES THROUGHOUT ALL PHASES OF CONSTRUCTION. ACCESS TO BUILDINGS SHALL BE MAINTAINED AT ALL TIMES.
14. SERVICES SHOWN ARE TO ASSIST CONTRACTOR IN LOCATING UTILITIES. ITEMS ARE SHOWN SCHEMATICALLY AND NEITHER THE ARCHITECT, SITE DESIGN PROFESSIONAL, NOR THE OWNER ASSUMES ANY RESPONSIBILITY FOR VARIANCES IN THE ACTUAL LOCATION OF THE EXISTING UTILITIES.
15. THE CONTRACTOR SHALL REPAIR OR REPLACE AS NECESSARY ANY UTILITIES DAMAGED, WHETHER SHOWN ON THESE PLANS OR NOT, AT NO ADDITIONAL COST TO THE CONTRACT.
16. EXISTING UTILITY APPURTENANCES (CLEAN OUTS, VALVE/METER BOXES AND/OR COVERS, MANHOLES, ETC.) LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED AS NECESSARY OR ADJUSTED TO FINISHED GRADE AT THE EXPENSE OF THE CONTRACTOR.
17. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY PROVIDER OF DAMAGE TO ANY ACTIVE UTILITY AND PROVIDE CORRECTIVE MEASURES AS DIRECTED BY THE UTILITY PROVIDER AT NO ADDITIONAL COST TO THE CONTRACT.
18. EXISTING ITEMS TO REMAIN WITHIN THE PROJECT LIMITS SHALL BE RETAINED IN PLACE AND PROTECTED FROM DAMAGE DURING CONSTRUCTION, UNLESS OTHERWISE NOTED OR DIRECTED BY THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
19. ALL DISPOSAL SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES.
20. THERE SHALL BE NO ON SITE BURIAL.
21. WORK DONE AHEAD OF SCHEDULE OR FOR TEMPORARY PROVISIONS SHALL HAVE EXISTING DISTURBED SURFACES PATCHED TO MATCH ORIGINAL CONDITIONS UNTIL NEW CONSTRUCTION REPLACES SUCH REPAIRS OR MODIFICATIONS.
22. PAVEMENT AREAS TO BE SAWED SHALL BE ABRASION SAW CUT PRIOR TO DEMOLITION. FAILURE TO PROVIDE A CLEAN EDGE MAY RESULT IN ADDITIONAL DEMOLITION AND NEW PAVEMENT INSTALLATION PAID FOR AND EXECUTED BY THE CONTRACTOR.
23. LIMITS OF CURB AND GUTTER DEMOLITION ARE SUBJECT TO THE NEAREST CONSTRUCTION JOINT. CURB AND GUTTER AND WALKS SHALL BE REPAIRED TO THE NEAREST CONSTRUCTION JOINT.
24. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR THE REMOVAL OF EXISTING LANDSCAPE MATERIALS OR SITE FEATURES WHICH THE OWNER ELECTS TO RETAIN.
25. DEMOLITION WITHIN THE DRIP-LINE OF EXISTING SPECIMEN TREES SHALL BE ACCOMPLISHED UTILIZING MANUAL PROCEDURES WITHOUT DAMAGING THE ROOT SYSTEM OF THE TREE(S).
26. THE CONTRACTOR SHALL NOT CONSIDER DEMOLITION DESIGNATIONS AND NOTES TO BE ALL-INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT AND ASSESS EACH AREA AND TO PERFORM THE DEMOLITION AS REQUIRED TO ACCOMMODATE THE SCHEDULED NEW CONSTRUCTION.

STAKING REQUIREMENTS:

1. SURVEYING WORK PERFORMED BY THE CONTRACTOR SHALL BE SUFFICIENT AND ACCURATE TO CONSTRUCT THE WORK IN ACCORDANCE WITH THE SITE WORK CONSTRUCTION DRAWINGS. LAYOUT AND STAKING WORK SHALL BE IN ACCORDANCE WITH GENERALLY ACCEPTED SURVEYING PRACTICES AND PROVISIONS OF THE CONTRACT.
2. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR ACTUAL BUILDING DIMENSIONS. CONTRACTOR SHALL NOT STAKE BUILDING DIMENSIONS FROM THE BUILDING(S) SHOWN ON THE SITE WORK CONSTRUCTION DRAWINGS. REFERENCES IN THESE DOCUMENTS TO BUILDING SQUARE FOOTAGES ARE FOR OWNER'S PURPOSES ONLY. DO NOT RELY ON THESE NUMBERS FOR ANY OTHER PURPOSE.
3. CONTRACTOR SHALL STAKE BUILDING CORNERS AND HAVE APPROVAL FROM THE ARCHITECT AND/OR SITE DESIGN PROFESSIONAL BEFORE COMMENCING THE CONSTRUCTION OF ANY FOOTINGS.
4. DIMENSIONS SHOWN ARE TO THE FACE OF CURB(S), UNLESS OTHERWISE NOTED. ANGLES ARE 90° (INCLUDING STREET CENTER-LINES) UNLESS NOTED OTHERWISE.
5. CURB AND GUTTER RADII ARE 5.0 FT, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION AND OR PERPETUATION OF EXISTING RIGHT-OF-WAY MONUMENTS, BENCHMARKS CONTROL POINTS AND REFERENCE MARKS (AS APPLICABLE) WITHIN THE CONTRACTOR'S AREA OF WORK. THE CONTRACTOR SHALL NOT DISTURB OR REMOVE EXISTING RIGHT-OF-WAY MONUMENTS, BENCHMARKS CONTROL POINTS AND REFERENCE MARKS WITHOUT THE PERMISSION OF CITY OF COVINGTON, AND CONTRACTOR SHALL BEAR THE EXPENSE OF RESETTING EXISTING RIGHT-OF-WAY MONUMENTS, BENCHMARKS CONTROL POINTS AND REFERENCE MARKS WHICH MAY BE DISTURBED OR REMOVED WITH OR WITHOUT PERMISSION. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 15 WORKING DAYS NOTICE TO CITY OF COVINGTON PRIOR TO DISTURBANCE OR REMOVAL OF EXISTING RIGHT-OF-WAY MONUMENTS, BENCHMARKS CONTROL POINTS AND REFERENCE MARKS. THE CONTRACTOR SHALL UTILIZE THE SERVICES OF A GEORGIA LAND SURVEYOR TO RESET DISTURBED OR REMOVED RIGHT-OF-WAY MONUMENTS, BENCHMARKS CONTROL POINTS AND REFERENCE MARKS OR PROVIDE WITNESS MONUMENTS, AND FILE THE REQUIRED DOCUMENTATION WITH CITY OF COVINGTON.
7. THE CONTRACTOR (UNLESS OTHERWISE INSTRUCTED BY THE OWNER) SHALL PROVIDE STAKING AND LAYOUT SERVICES, INCLUDING BUT NOT LIMITED TO, CENTERLINE STAKES, ADDITIONAL LINES, CONSTRUCTION MARKS & CUT SHEETS, GRADE STAKES, CONSTRUCTION BENCHMARKS AND REFERENCE STAKES LOCATING DRAINAGE, ROADWAY, AND UTILITIES NECESSARY FOR THE PROJECT. ALIGNMENT CONTROL ESTABLISHED BY THE CONTRACTOR SHALL BE REFERENCED, AND A COPY OF THE REFERENCES SHALL BE FURNISHED TO THE SITE DESIGN PROFESSIONAL.
8. THE CONTRACTOR SHALL VERIFY ALL INVERTS OF EXISTING STORM AND SANITARY SEWER TIE-INS AND ALL GRADES AT EXISTING PAVEMENT TIE-INS BEFORE PROCEEDING WITH ANY SITE WORK.
9. ALL CONTROL SHALL BE VERIFIED BEFORE PROCEEDING. SURVEYOR SHALL VERIFY INVERTS AT ALL GRAVITY STORM AND SEWER TIE IN POINTS BEFORE PROCEEDING. SURVEYOR SHALL VERIFY TIE POINT ELEVATIONS AT ALL ACCESS POINTS BEFORE PROCEEDING.

CLEAR AND GRUB REQUIREMENTS:

1. THE CONTRACTOR SHALL REVIEW PLANS AND IDENTIFY AND SAFELY MARK ALL PLANTS AND TREES TO BE SAVED. THE CONTRACTOR SHALL PROTECT ALL PLANTS AND TREES TO BE SAVED THROUGH OUT THE CONTRACT. THIS SHALL INCLUDE PROHIBITING ANY WORK WITHIN THE DRIP LINE OF THE TREE EXCEPT UNDER THE SUPERVISION OF A LICENSED LANDSCAPE ARCHITECT. THIS INCLUDES NOT PARKING ANY EQUIPMENT OVER OR STORAGE AREAS WITHIN THE DRIP LINE OF THE TREE EXCEPT UNDER THE SUPERVISION OF A LICENSED LANDSCAPE ARCHITECT.
2. ALL AREAS TO BE CLEARED AND GRUBBED SHALL BE SURVEYED IN THE FIELD TO ESTABLISH THE APPROPRIATE LIMITS OF WORK.
3. THE CONTRACTOR SHALL TAKE WHAT EVER MEASURES NECESSARY TO LOCATE AND PROTECT EXISTING UTILITIES, STRUCTURES, AND OTHER FACILITIES TO REMAIN.
4. ALL TREES, SHRUBS, STUMPS, ROOTS AND OTHER DEBRIS SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
5. NO BURNING SHALL BE ALLOWED ON THE SITE.

COMPACTION FOR UTILITY INSTALLATION:

1. ANALYTICAL COMPACTION RESULTS SHALL BE SUBMITTED TO CITY OF COVINGTON ENGINEERING DEPARTMENT (OR SIMILAR DEPARTMENT), THE FOLLOWING APPLIES TO STORMWATER, SANITARY SEWER, AND WATER:
   a. BACKFILL UNDER PERMANENT CONCRETE OR BITUMINOUS PAVEMENT, AND AS ELSEWHERE SPECIFIED OR INDICATED ON THE PLANS, SHALL BE APPROVED BANK-RUN SAND OR GRAVEL OR CRUSHED STONE FREE FROM LARGE STONES AND CONTAINING NOT MORE THAN TEN PERCENT (10%) BY WEIGHT OF LOAM OR CLAY. THIS BACKFILL SHALL BE COMPACTED TO ONE HUNDRED PERCENT (100%) AS DETERMINED BY THE MODIFIED PROCTOR TEST FROM PIPE BEDDING TO TWO (2) FEET BELOW FINISH TOP. MECHANICAL VIBRATING EQUIPMENT SHALL BE USED TO ACHIEVE THE REQUIRED COMPACTION. PAVEMENT SHALL BE REPLACED IMMEDIATELY AFTER THE BACKFILLING IS COMPLETED.
   b. BACKFILL UNDER GRAVEL OR CRUSHED STONE SURFACED ROADWAYS SHALL BE THE APPROVED SUITABLE EXCAVATED MATERIAL PLACED IN SIX (6) INCH LAYERS THOROUGHLY COMPACTED FOR THE FULL DEPTH AND WIDTH OF THE TRENCH, CONFORMING TO THE COMPACTION, DENSITY COMPACTION METHOD AND MATERIALS AS SPECIFIED ABOVE.
   c. BACKFILL IN UNPAVED AREAS SHALL BE COMPACTED WITH MECHANICAL VIBRATING EQUIPMENT TO NINETY PERCENT (90%) AS DETERMINED BY THE MODIFIED PROCTOR TEST. BACKFILL MATERIAL FROM PIPE BEDDING TO GROUND SURFACE SHALL BE EXCAVATED FREE FROM LARGE STONES & OTHER DEBRIS.

ALL UTILITY MATERIALS, INSTALLATION, TESTING, AND PROCEDURES SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS SET FORTH BY THE LOCAL AUTHORITY HAVING JURISDICTION. IF THERE IS A DISCREPANCY BETWEEN STATED STANDARDS AND SPECIFICATIONS ON THESE PLANS AND THE STATED STANDARDS AND SPECIFICATIONS OF THE LOCAL AUTHORITY HAVING JURISDICTION, THE CONTRACTOR SHALL ADHERE TO THE STANDARDS AND SPECIFICATIONS OF THE LOCAL AUTHORITY HAVING JURISDICTION.

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, READING, UNDERSTANDING, AND ADHERING TO THE THE MANUAL OF STANDARDS FOR DESIGN AND CONSTRUCTION SPECIFICATIONS IF THIS DOCUMENT IS PROVIDED FOR AT THE AGENCY HAVING JURISDICTION.

GRADING / EARTHWORK REQUIREMENTS:

1. PRIOR TO STARTING ANY CUTS OR FILLS, THE CONTRACTOR SHALL STRIP AND STOCKPILE ALL TOPSOIL. STRIPPING OF TOPSOIL CAN ONLY COMMENCE AFTER THE CLEAR AND GRUB OPERATIONS ARE COMPLETE IN THAT AREA. TOPSOIL SHALL BE STOCKPILED IN AREAS DESIGNATED ON THE PLANS OR APPROVED WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL REVIEW THE SOILS REPORTS, BORING LOGS AND WHEN NECESSARY HIS OWN FIELD VERIFICATION SO AS TO BE FAMILIAR WITH THE DEPTH OF TOPSOIL. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT OVER AND UNDER REMOVAL.
2. UNLESS OTHERWISE NOTED, THE GRADES SHOWN ON THE PLANS ARE FINISHED GRADES. THEREFORE, PAVEMENT, FLOORS, SUBBASE AND OTHER IMPROVEMENTS MUST BE SUBTRACTED TO CALCULATE SUBGRADE ELEVATIONS. THE CONTRACTOR SHALL COORDINATE THE STAKING OF THE SITE GRADING WITH THE SURVEYOR AND ENGINEER OF RECORD BEFORE PROCEEDING WITH CONSTRUCTION STAKING.
3. THE CONTRACTOR SHALL MAINTAIN A SURVEY GRID OF NOT LESS THAN 100' X 100' OR OTHER MEANS ACCEPTABLE TO THE OWNER'S REPRESENTATIVE THAT SHALL INDICATE LOCATION AND AMOUNT OF CUT OR FILL REMAINING. A REPORT SHOWING THIS GRID SHALL BE 50' X 50' WITH LOCATION AND FINAL GRADE MARKED CLEARLY. OR SURVEY SHALL BE COMPLETED DEMONSTRATING THAT THE SUBGRADE IS +/- 0.1 FEET OF REQUIRED SUBGRADE.
4. UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL RETAIN AND PAY ALL COST FOR SOIL COMPACTION TESTING TO BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY. FOR EACH LIFT PLACED, COMPACTION TESTING SHALL BE DONE EVERY 2000 SQUARE FEET, IN TRENCHES, COMPACTION TESTING SHALL BE DONE EVERY OTHER LIFT WITH AT LEAST 1 TEST FOR EVERY 100 LINEAR FEET.
5. COMPACTION REQUIREMENTS SHALL BE THOSE OUTLINED IN THE GEOTECHNICAL EVALUATION. IF THE GEOTECHNICAL EVALUATION IS NOT CLEAR OR DOES NOT GIVE REQUIREMENTS THE FOLLOWING SHALL BE USED. UNDER AND TO 20 FEET OUTSIDE THE BUILDING ENVELOPE, THE SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM D 1557 (MODIFIED PROCTOR). ALL LANDSCAPE AREAS SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY PER ASTM D 1557 (MODIFIED PROCTOR). THE TESTING LAB SHALL TEST SOILS IN ACCORDANCE ASTM D 2922 (NUCLEAR METHOD) WITH PROCTORS FOR EACH SOIL TYPE.
6. UNLESS OTHERWISE NOTED IN THE GEOTECHNICAL REPORT OR ON THE DRAWINGS, THE ON SITE MATERIAL SHALL BE USED TO MAKE FILLS, ALL MATERIAL TO BE USED FOR FILL SHALL BE FREE OF ORGANICS, DEBRIS, CONSTRUCTION MATERIALS, AND ANY ROCKS LARGER THAN 4 INCHES. FOR ALL PLACEMENT WITHIN 3 FOOT OF SUBGRADE NO ROCK SHALL BE GREATER THAN 2 INCHES IN DIAMETER. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DRYING, SEGREGATING OR OTHER REQUIRED METHODS TO TREAT SOILS TO MEET COMPACTION AND OTHER REQUIREMENTS.
7. FILLS SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN ALL AREAS.
8. IF IMPORTED MATERIAL IS REQUIRED, THE SOURCE AND A RANDOM COMPOSITE SAMPLE SHALL BE REVIEWED BY THE TESTING LABORATORY PRIOR TO BEING BROUGHT TO SITE. THE TESTING LABORATORY SHALL TEST FOR PERCENT PASSING THE 200 SIEVE THAT DOES NOT EXCEED THE EXISTING ON SITE MATERIAL OR IN NO CASE GREATER THAN 35%. THEY SHALL ALSO VERIFY CONSISTENCY WITH EXISTING ON SITE MATERIALS AND ALL OTHER REQUIREMENTS. WAIVERS TO THESE REQUIREMENTS CAN ONLY BE GIVEN JOINTLY BY OWNER AND THE GEOTECHNICAL ENGINEER THAT PREPARED THE GEOTECHNICAL REPORT.
9. THE TESTING LAB MAY RESTRICT SOME ON SITE MATERIALS FROM BEING USED AS FILL IN BUILDING OR PAVEMENT AREAS WHEN IT IS THEIR OPINION THAT THE MATERIAL WILL NOT MEET REQUIREMENTS STATED HERE OR IN THE GEOTECHNICAL REPORT. IF SUCH CONDITIONS DO EXIST AND OTHER MATERIAL IS NOT AVAILABLE ON SITE, THE OWNER'S REPRESENTATIVE MUST AUTHORIZE IN WRITING THE USE OF IMPORT MATERIAL UNLESS THERE WILL BE NO ADDITION COST TO THE CONTRACT.
10. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EARTHWORK OPERATIONS FROM WEATHER AND GROUND WATER INCLUDING KEEPING POSITIVE DRAINAGE, DIVERTING WATER AWAY FROM EXCAVATIONS AND FILLS AND NOT ALLOWING WATER TO ACCUMULATE IN PLACE.
11. PRIOR PLACEMENT OF FILLS, IN AREAS WHERE THE FINAL DEPTH WILL BE LESS THAN 4 FEET, THE AREA SHALL BE PROOF ROLLED WITH A 10 TON ROLLER OR A LOADED 10 WHEEL DUMP TRUCK. SOFT AREAS SHALL BE SCARIFIED, DRIED AND RE-COMPACTED PRIOR TO FILL BEING PLACED, RETEST BY PROOF ROLL AS NECESSARY.
12. ALL FINAL SUBGRADE UNDER PROPOSED PAVEMENT, BUILDING OR OTHER STRUCTURE SHALL BE PROOF ROLLED AS DESCRIBED ABOVE FOR THE IDENTIFICATION OF SOFT AREAS, AREAS FOUND TO BE UNACCEPTABLE TO THE GEOTECHNICAL ENGINEER'S TECHNICIAN SHALL BE SCARIFIED, DRIED AND RECOMPACTED, RETEST BY PROOF ROLL AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PROOF ROLLS WITH THE GEOTECHNICAL ENGINEER AND SHALL HAVE THE GEOTECHNICAL ENGINEER OR THE GEOTECHNICAL ENGINEER'S TECHNICIAN ON SITE AT THE TIME OF ALL PROOF ROLLING.
13. TRENCH EXCAVATION REQUIRING SHEETING, SHORING OR OTHER STABILIZING DEVICES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER AND MEET ALL O.S.H.A. REQUIREMENTS. ALL EXCAVATIONS SHALL MAINTAIN SAFE SIDED SLOPES IN ACCORDANCE WITH LOCAL, STATE AND O.S.H.A. REQUIREMENTS, NO STOCKING OF MATERIAL CLOSE TO AN OPEN CUT OR STEEP SLOPE SHALL BE PERMITTED IN AN EFFORT TO PREVENT CAVE-INS.
14. TRENCH EXCAVATIONS SHALL BE MADE UNIFORM AND STRAIGHT TO WIDTHS DETERMINED BY CITY OF COVINGTON. IF NO GUIDELINES FROM CITY OF COVINGTON EXIST, THE FOLLOWING SHALL BE USED: (FOR PIPES 36 INCHES OR LESS, THE TRENCH WIDTH SHALL BE THE OUTSIDE PIPE DIAMETER PLUS 2 FEET, IN NO CASE SHALL THE WIDTH SHALL BE THE DIAMETER PLUS 3 FEET). ADDITIONAL WIDTH SHALL ONLY BE ALLOWED WHEN COMPACTION EQUIPMENT LIMITATIONS REQUIRE AND ONLY AFTER APPROVAL OF THE ENGINEER OF RECORD. NO MORE TRENCH SHALL BE OPEN IN ONE DAY THAN CAN BE PROPERLY BACKFILLED IN THAT SAME DAY TO MINIMIZE WEATHER AND SAFETY CONCERNS. WHEN EXCAVATIONS HAVE BEEN BACKFILLED AND PROPER COMPACTION UNDER, ALONG AND OVER THE LAKE SHALL BE GIVEN WHILE BACKFILLING AROUND PIPES TO PREVENT DAMAGE TO THE PIPES INCLUDING: PLACING BACKFILL/EMBEDMENT BY HAND, USING HAND OPERATED PLATE TAMPS OR JUMPING JACKS, AND OTHER LOAD RESTRICTIVE TECHNIQUES UNTIL FILLS ARE A MINIMUM OF 2 FEET OR MANUFACTURER'S RECOMMEND DEPTH, WHICH EVER IS GREATER, ABOVE THE TOP OF THE PIPE. COMPACTION REQUIREMENTS ARE GIVEN ELSEWHERE IN THE DRAWINGS OR AS DIRECTED BY THE ENGINEER OF RECORD OR AS NOTED ABOVE.
15. IF ROCK IS ENCOUNTERED THAT WAS NOT INDICATED ON THE PLANS OR GEOTECHNICAL REPORT, THE AREA FOR REMOVAL SHALL BE MEASURED AND REVIEWED WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROCK REMOVAL. ROCK WILL BE DEFINED AS THE NATURAL EARTH MATERIALS THAT CAN NOT BE REMOVED WITH A D9 DOZER WITH A SINGLE TOOTH RIPPER.
16. WHERE ROCK IS ADJACENT TO A STRUCTURE OR UTILITY, THE ROCK SHALL BE REMOVED TO A MINIMUM OF 6 INCHES BELOW AND 1 TIMES THE DIAMETER, BUT NOT LESS THAN 1 FOOT OR GREATER THAN 3 FEET ON ANY SIDE.
17. NO EXPLOSIVES SHALL BE ALLOWED UNTIL ALL PERMITS ARE GRANTED AND THE OWNER HAS SIGNED OFF. PRE AND POST BLAST REPORTS SHALL BE KEPT AND RECORDED, ALL STRUCTURES WITHIN THE AREA OF THAT SHALL RECEIVE A PRE-BLAST SURVEY, ALL BLASTING SHALL BE PERFORMED BY A LICENSED BLASTER.
18. UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE CONTRACTOR SHALL REMOVE ALL EXCESS TOPSOIL, CUT MATERIAL OR WASTE MATERIAL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
19. NO FILL SHALL BE PLACED ON EXISTING GROUND WITHIN THE LIMITS OF DISTURBANCE UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL AND OTHER DELETERIOUS MATERIAL SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES OR TO A DEPTH RECOMMENDED BY THE GEOTECHNICAL REPORT AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACING OF FILL. DELETERIOUS MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, RUBBISH, TRASH, OR OTHER ORGANIC MATERIALS OR RUBBISH SHALL BE REMOVED FROM AREAS TO RECEIVE COMPACTED FILL. UNSUITABLE MATERIALS, SUCH AS TOPSOIL, WEATHERED BEDROCK, ETC., SH

SURVEYORS CERTIFICATION

This plat is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated hereon. RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section15-6-67.

GEORGIA PROFESSIONAL No. 2629 LAND SURVEYOR G. BRIAN SLATE

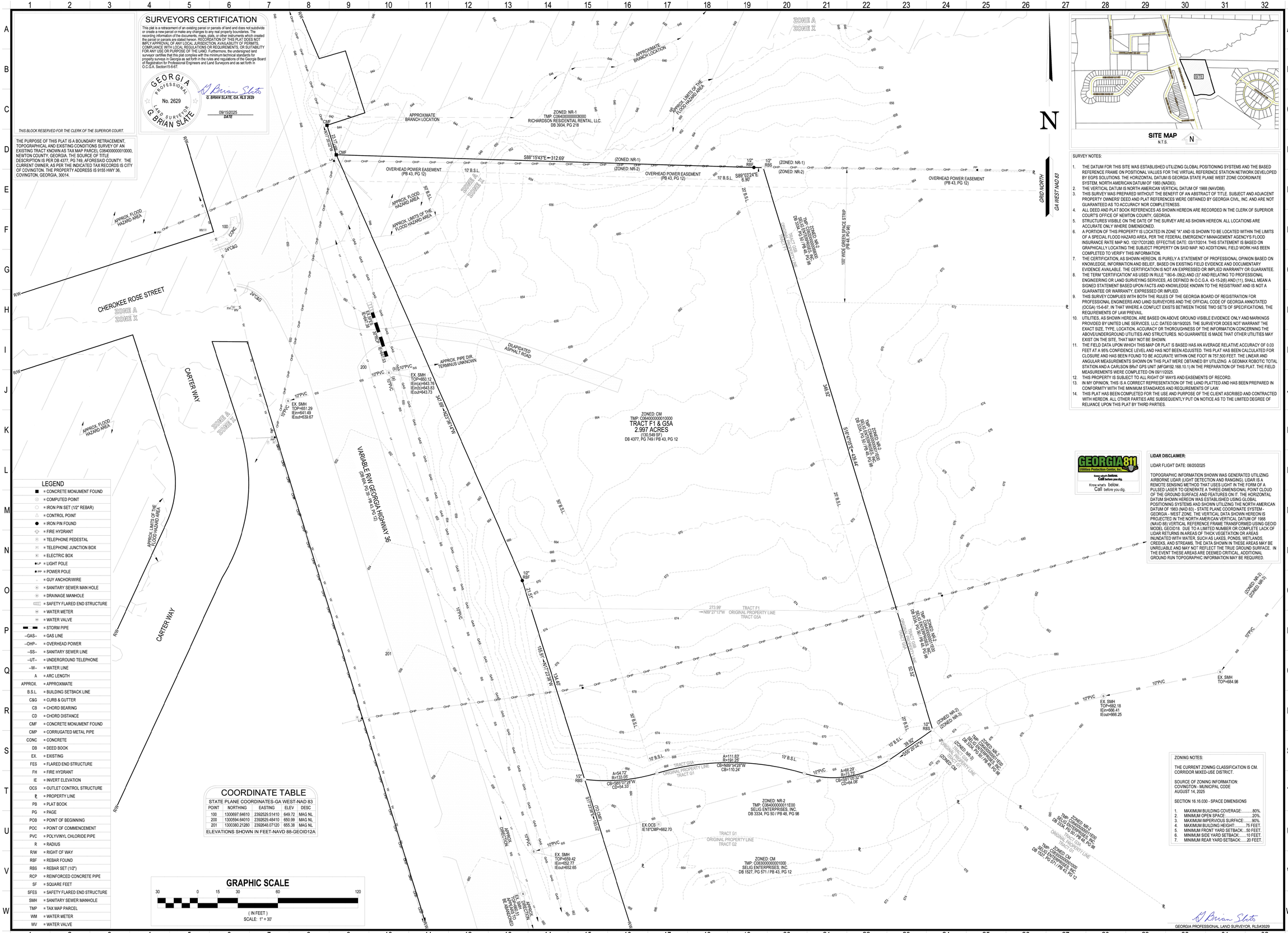
G. Brian Slate

G. BRIAN SLATE, GA. RLS 2629

09/15/2025
DATE

THIS BLOCK RESERVED FOR THE CLERK OF THE SUPERIOR COURT.

THE PURPOSE OF THIS PLAT IS A BOUNDARY RETRACEMENT, TOPOGRAPHICAL AND EXISTING CONDITIONS SURVEY OF AN EXISTING TRACT KNOWN AS TAX MAP PARCEL C064000000010000, NEWTON COUNTY, GEORGIA. THE SOURCE OF TITLE DESCRIPTION IS PER DB 4377, PG 749, AFORESAID COUNTY. THE CURRENT OWNER, AS PER THE INDICATED TAX RECORDS IS CITY OF COVINGTON. THE PROPERTY ADDRESS IS 9155 HWY 36, COVINGTON, GEORGIA, 30014.



LEGEND

■	= CONCRETE MONUMENT FOUND
⊙	= COMPUTED POINT
○	= IRON PIN SET (1/2" REBAR)
△	= CONTROL POINT
●	= IRON PIN FOUND
	= FIRE HYDRANT
T	= TELEPHONE PEDESTAL
T	= TELEPHONE JUNCTION BOX
E	= ELECTRIC BOX
LP	= LIGHT POLE
PP	= POWER POLE
	= GUY ANCHOR/WIRE
S	= SANITARY SEWER MAN HOLE
D	= DRAINAGE MANHOLE
SFES	= SAFETY FLARED END STRUCTURE
W	= WATER METER
W	= WATER VALVE
	= STORM PIPE
--GAS--	= GAS LINE
--OHP--	= OVERHEAD POWER
--SS--	= SANITARY SEWER LINE
--UT--	= UNDERGROUND TELEPHONE
--W--	= WATER LINE
A	= ARC LENGTH
APPROX.	= APPROXIMATE
B.S.L.	= BUILDING SETBACK LINE
C&G	= CURB & GUTTER
CB	= CHORD BEARING
CD	= CHORD DISTANCE
CMF	= CONCRETE MONUMENT FOUND
CMP	= CORRUGATED METAL PIPE
CONC	= CONCRETE
DB	= DEED BOOK
EX.	= EXISTING
FES	= FLARED END STRUCTURE
FH	= FIRE HYDRANT
IE	= INVERT ELEVATION
OCS	= OUTLET CONTROL STRUCTURE
℄	= PROPERTY LINE
PB	= PLAT BOOK
PG	= PAGE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
PVC	= POLYVINYL CHLORIDE PIPE
R	= RADIUS
R/W	= RIGHT OF WAY
RBF	= REBAR FOUND
RBS	= REBAR SET (1/2")
RCP	= REINFORCED CONCRETE PIPE
SF	= SQUARE FEET
SFES	= SAFETY FLARED END STRUCTURE
SMH	= SANITARY SEWER MANHOLE
TMP	= TAX MAP PARCEL
WM	= WATER METER
WV	= WATER VALVE

COORDINATE TABLE

STATE PLANE COORDINATES-GA WEST-NAD 83

POINT	NORTHING	EASTING	ELEV	DESC
100	1300697.64610	2392529.51410	649.72	MAG NL
200	1300594.64010	2392629.48410	650.99	MAG NL
201	1300380.21280	2392648.07120	655.38	MAG NL

ELEVATIONS SHOWN IN FEET-NAVD 88-GEOID12A

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
SCALE: 1" = 30'

SURVEY NOTES:

1. THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS AND THE BASED REFERENCE FRAME ON POSITIONAL VALUES FOR THE VIRTUAL REFERENCE STATION NETWORK DEVELOPED BY EGPS SOLUTIONS. THE HORIZONTAL DATUM IS GEORGIA STATE PLANE WEST ZONE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. THE VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE. SUBJECT AND ADJACENT PROPERTY OWNERS' DEED AND PLAT REFERENCES WERE OBTAINED BY GEORGIA CIVIL, INC. AND ARE NOT GUARANTEED AS TO ACCURACY NOR COMPLETENESS.
4. ALL DEED AND PLAT BOOK REFERENCES AS SHOWN HEREON ARE RECORDED IN THE CLERK OF SUPERIOR COURT'S OFFICE OF NEWTON COUNTY, GEORGIA.
5. STRUCTURES VISIBLE ON THE DATE OF THE SURVEY ARE AS SHOWN HEREON. ALL LOCATIONS ARE ACCURATE ONLY WHERE DIMENSIONED.
6. A PORTION OF THIS PROPERTY IS LOCATED IN ZONE "A" AND IS SHOWN TO BE LOCATED WITHIN THE LIMITS OF A SPECIAL FLOOD HAZARD AREA, PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP NO. 13217C0126D; EFFECTIVE DATE: 03/17/2014. THIS STATEMENT IS BASED ON GRAPHICALLY LOCATING THE SUBJECT PROPERTY ON SAID MAP. NO ADDITIONAL FIELD WORK HAS BEEN COMPLETED TO VERIFY THIS INFORMATION.
7. THE CERTIFICATION, AS SHOWN HEREON, IS PURELY A STATEMENT OF PROFESSIONAL OPINION BASED ON KNOWLEDGE, INFORMATION AND BELIEF, BASED ON EXISTING FIELD EVIDENCE AND DOCUMENTARY EVIDENCE AVAILABLE. THE CERTIFICATION IS NOT AN EXPRESSED OR IMPLIED WARRANTY OR GUARANTEE.
8. THE TERM "CERTIFICATION" AS USED IN RULE "180-6-.09(2) AND (3)" AND RELATING TO PROFESSIONAL ENGINEERING OR LAND SURVEYING SERVICES, AS DEFINED IN O.C.G.A. 43-15-2(6) AND (11), SHALL MEAN A SIGNED STATEMENT BASED UPON FACTS AND KNOWLEDGE KNOWN TO THE REGISTRANT AND IS NOT A GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED.
9. THIS SURVEY COMPLIES WITH BOTH THE RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE OFFICIAL CODE OF GEORGIA ANNOTATED (OCGA) 15-6-67, IN THAT WHERE A CONFLICT EXISTS BETWEEN THOSE TWO SET'S OF SPECIFICATIONS, THE REQUIREMENTS OF LAW PREVAIL.
10. UTILITIES, AS SHOWN HEREON, ARE BASED ON ABOVE GROUND VISIBLE EVIDENCE ONLY AND MARKINGS PROVIDED BY UNITED LINE SERVICES, LLC. DATED 08/19/2025. THE SURVEYOR DOES NOT WARRANT THE EXACT SIZE, TYPE, LOCATION, ACCURACY OR THOROUGHNESS OF THE INFORMATION CONCERNING THE ABOVE/UNDERGROUND UTILITIES AND STRUCTURES. NO GUARANTEE IS MADE THAT OTHER UTILITIES MAY EXIST ON THE SITE, THAT MAY NOT BE SHOWN.
11. THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS AN AVERAGE RELATIVE ACCURACY OF 0.03 FEET AT A 95% CONFIDENCE LEVEL AND HAS NOT BEEN ADJUSTED. THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND HAS BEEN FOUND TO BE ACCURATE WITHIN ONE FOOT IN 757,500 FEET. THE LINEAR AND ANGULAR MEASUREMENTS SHOWN ON THIS PLAT WERE OBTAINED BY UTILIZING A GEOMAX ROBOTIC TOTAL STATION AND A CARLSON BRx7 GPS UNIT (MFG#192.168.10.1) IN THE PREPARATION OF THIS PLAT. THE FIELD MEASUREMENTS WERE COMPLETED ON 09/11/2025.
12. THIS PROPERTY IS SUBJECT TO ALL RIGHT OF WAYS AND EASEMENTS OF RECORD.
13. IN MY OPINION, THIS IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND HAS BEEN PREPARED IN CONFORMITY WITH THE MINIMUM STANDARDS AND REQUIREMENTS OF LAW.
14. THIS PLAT HAS BEEN COMPLETED FOR THE USE AND PURPOSE OF THE CLIENT ASCRIBED AND CONTRACTED WITH HEREON. ALL OTHER PARTIES ARE SUBSEQUENTLY PUT ON NOTICE AS TO THE LIMITED DEGREE OF RELIANCE UPON THIS PLAT BY THIRD PARTIES.

GEORGIA811 Utilities Protection Center, Inc. Know what's below. Call before you dig. Know what's below. Call before you dig.

LIDAR DISCLAIMER:

LIDAR FLIGHT DATE: 08/20/2025

TOPOGRAPHIC INFORMATION SHOWN WAS GENERATED UTILIZING AIRBORNE LIDAR (LIGHT DETECTION AND RANGING). LIDAR IS A REMOTE SENSING METHOD THAT USES LIGHT IN THE FORM OF A PULSED LASER TO GENERATE A THREE-DIMENSIONAL POINT CLOUD OF THE GROUND SURFACE AND FEATURES ON IT. THE HORIZONTAL DATUM SHOWN HEREON WAS ESTABLISHED USING GLOBAL POSITIONING SYSTEMS AND SHOWN UTILIZING THE NORTH AMERICAN DATUM OF 1983 (NAD 83) - STATE PLANE COORDINATE SYSTEM - GEORGIA - WEST ZONE. THE VERTICAL DATA SHOWN HEREON IS PROJECTED IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) VERTICAL REFERENCE FRAME TRANSFORMED USING GEOID MODEL GEOID18. DUE TO A LIMITED NUMBER OR COMPLETE LACK OF LIDAR RETURNS IN AREAS OF THICK VEGETATION OR AREAS INUNDATED WITH WATER, SUCH AS LAKES, PONDS, WETLANDS, CREEKS, AND STREAMS, THE DATA SHOWN IN THESE AREAS MAY BE UNRELIABLE AND MAY NOT REFLECT THE TRUE GROUND SURFACE. IN THE EVENT THESE AREAS ARE DEEMED CRITICAL, ADDITIONAL GROUND RUN TOPOGRAPHIC INFORMATION MAY BE REQUIRED.

ZONING NOTES:

THE CURRENT ZONING CLASSIFICATION IS CM. CORRIDOR MIXED-USE DISTRICT.

SOURCE OF ZONING INFORMATION:
COVINGTON - MUNICIPAL CODE
AUGUST 14, 2025

SECTION 16.16.030 - SPACE DIMENSIONS

1. MAXIMUM BUILDING COVERAGE:.....80%.
2. MINIMUM OPEN SPACE:.....20%.
3. MAXIMUM IMPERVIOUS SURFACE:.....90%.
4. MAXIMUM BUILDING HEIGHT:.....75 FEET.
5. MINIMUM FRONT YARD SETBACK:...50 FEET.
6. MINIMUM SIDE YARD SETBACK:.....10 FEET.
7. MINIMUM REAR YARD SETBACK:.....20 FEET.

GEORGIA PROFESSIONAL LAND SURVEYOR, RLS#2629

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GEORGIA PROFESSIONAL No. 2629 LAND SURVEYOR G. BRIAN SLATE

SURVEYED BY:
G. BRIAN SLATE, RLS#2629
C: 706-201-0996
bslate@georgiacivil.com

"THE SURVEY WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 180-7 OF THE RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE OFFICIAL CODE OF GEORGIA ANNOTATED (OCGA) 15-6-67, AS AMENDED BY HB1004 (2016)".

CERTIFICATE OF AUTHORIZATION LSF001055

Project Information

SURVEY FOR:

CITY OF COVINGTON

2.997 ACRES, TRACT F1 AND TRACT G5A, OF THE F.L. BULLARD SURVEY
IN LAND LOT 232 OF THE 9th LAND DISTRICT
IN THE CITY OF COVINGTON, NEWTON COUNTY, GEORGIA

CREW CHIEF:	GB
SURVEYED:	09/11/2025
PROJECT #:	25SBB005
DRAWING DATE:	09/15/2025
DRAWN BY:	MP
CHECKED BY:	GBS

REVISIONS

DATE:	DESCRIPTION:

SCALE: 1"=30'

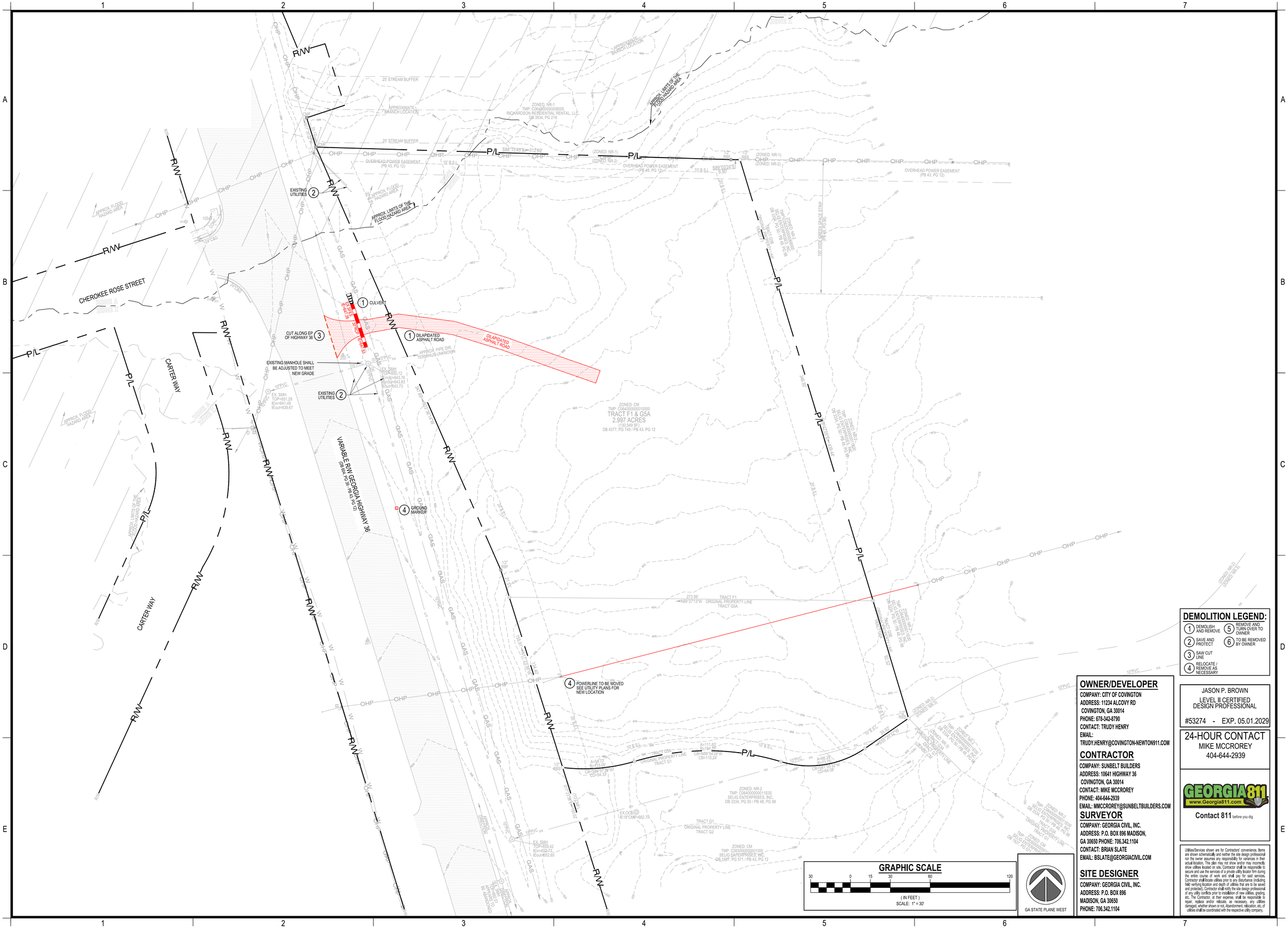
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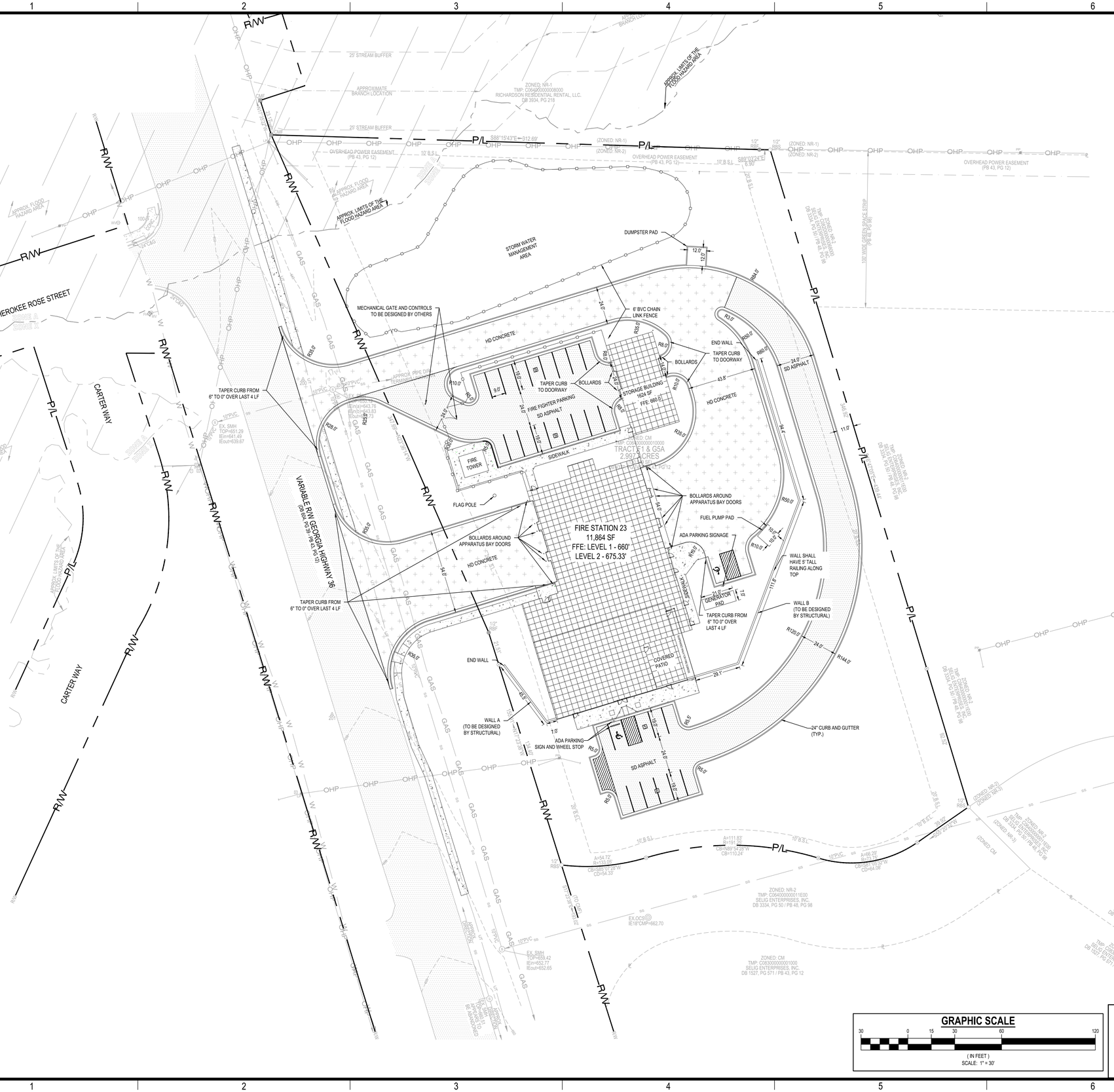
Sheet Title

BOUNDARY RETRACEMENT TOPOGRAPHICAL AND EXISTING CONDITIONS SURVEY

Sheet Number

S-1


1
2
3
4
5
6
7
A
B
C
D
E
R/W
P/L
OHP
GAS
W
UT
CHEROKEE ROSE STREET
CARTER WAY
CARTER WAY
APPROX. LIMITS OF THE FLOOD HAZARD AREA
APPROX. FLOOD HAZARD AREA
APPROXIMATE 1' BRANCH LOCATION
25' STREAM BUFFER
OVERHEAD POWER EASEMENT (PB 43, PG 12)
OVERHEAD POWER EASEMENT (PB 40, PG 12)
EXISTING UTILITIES (2)
1 CULVERT
1 DILAPIDATED ASPHALT ROAD
DILAPIDATED ASPHALT ROAD
CUT ALONG EP OF HIGHWAY 36 (3)
EXISTING MANHOLE SHALL BE ADJUSTED TO MEET NEW GRADE
EXISTING UTILITIES (2)
VARIABLE R/W GEORGIA HIGHWAY 36 (Rel 604, PG 98 / PB 43, PG 12)
4 GROUND MARKER
4 POWERLINE TO BE MOVED SEE UTILITY PLANS FOR NEW LOCATION
ZONED: NR-1
TMP: C064900000008000
RICHARDSON RESIDENTIAL RENTAL, LLC.
DB 3934, PG 215
ZONED: CM
TMP: C064000000010000
TRACT F1 & G5A
2.997 ACRES
(130,549 SF)
DB 4377, PG 749 / PB 43, PG 12
ZONED: NR-2
TMP: C064000000011E00
SELIG ENTERPRISES, INC.
DB 3334, PG 50 / PB 46, PG 86
ZONED: CM
TMP: C063000000001000
SELIG ENTERPRISES, INC.
DB 1587, PG 571 / PB 43, PG 12
TRACT F1
ORIGINAL PROPERTY LINE
TRACT G5A
TRACT G1
ORIGINAL PROPERTY LINE
TRACT G2
TRACT G5A
ORIGINAL PROPERTY LINE
TRACT G1



REQUIRED PARKING	60
PROVIDED PARKING	31
ADA SPACES REQUIRED	2
ADA SPACES PROVIDED	2

PAVING LEGEND:

HD = HEAVY DUTY
SD = STANDARD DUTY

- HD CONCRETE PAVING
- SD CONCRETE PAVING
- SD ASPHALT PAVING

REFER TO DETAILS FOR SECTION REQUIREMENTS.

NOTES:

1. ALL STRIPING SHOWN INCLUDING ARROWS, STOPBARS, AND PARKING SPACES REFLECTS STRIPING TO BE DONE BY CONTRACTOR.
2. ALL PAVEMENT MARKINGS SHALL BE INSTALLED PRIOR TO ACCEPTANCE BY THE LIA AND/OR ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
3. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE INITIAL INSTALLATION OF STOP SIGNS.

OWNER/DEVELOPER

COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR

COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
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CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

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SITE DESIGNER

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MADISON, GA 30650
PHONE: 706.342.1104

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
SCALE: 1" = 30'

GA STATE PLANE WEST

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Professional Seal

GEORGIA REGISTERED NO. PE024861 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

JASON P. BROWN
LEVEL II CERTIFIED DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA 811 www.Georgia811.com
Contact 811 before you dig

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DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title

LAYOUT & STAKING PLAN

Sheet Number

C-2.1



TOPSOIL NOTES:

1. CONTRACTOR SHALL STOCKPILE TOPSOIL AS DIRECTED. CONTRACTOR SHALL ENSURE AN ADEQUATE QUANTITY OF ONSITE TOPSOIL, AS DETERMINED BY THE GENERAL NOTES AND SPECIFICATIONS, IS PRESERVED, THEN EVENLY SPREAD AND TILLED ACROSS ALL LANDSCAPING AREAS, INCLUDING PLANTING BEDS.

2. CONTRACTOR SHALL INFORM THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT DURING THE STRIPPING PHASE OF THE PROJECT IF THE AVAILABLE TOPSOIL IS INSUFFICIENT FOR THE LANDSCAPING AREAS. CONTRACTOR SHALL NOT WASTE TOPSOIL ON SLOPES OR NON-STRUCTURAL AREAS UNTIL IT IS CONFIRMED THAT SUFFICIENT QUANTITIES OF ONSITE TOPSOIL ARE RESERVED FOR USE IN SITE LANDSCAPING.

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GEORGIA REGISTERED NO. PE024850 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title

GRADING PLAN

Sheet Number

C-3.0

Line	ToLine	LineLength	Incr.Area	TotalArea	RunoffCoeff.	IncrC x A	TotalC x A	InletTime	TimeConc	RnfallInt	TotalRunoff	AdvlFlow	TotalFlow	CapacFull	Veloc	PipeSize	PipeSlope	InvElevDn	InvElevUp	HGLDn	HGLUp	Grnd/RimDn	Grnd/RimUp	Line ID
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	Outfall	37.689	0.06	1.58	0.95	0.06	1	5.0	18.3	5.5	5.53	0.00	5.53	17.40	4.70	24	0.50	648.00	648.19	648.78	649.02	652.32	655.53	A0-A1
2	1	82.182	0.19	1.08	0.69	0.13	0.55	5.0	13.1	6.3	3.50	0.00	3.50	7.11	5.15	15	1.03	652.25	653.10	652.87	653.85	655.53	657.84	A2-A1
3	2	114.947	0.45	0.89	0.41	0.18	0.42	5.0	12.3	6.5	2.72	0.00	2.72	6.97	4.16	15	0.99	653.20	654.34	653.85	655.00	657.84	661.44	A3-A2
4	3	148.657	0.28	0.36	0.45	0.13	0.2	5.0	8.6	7.3	1.47	0.00	1.47	5.45	4.75	12	2.00	658.19	661.16	658.54	661.67	661.44	668.77	A4-A3
5	4	173.770	0.08	0.08	0.95	0.08	0.08	5.0	5.0	8.2	0.63	0.00	0.63	5.46	3.70	12	2.00	665.27	668.75	665.50	669.08	668.77	673.40	A5-A4
6	1	29.662	0.16	0.18	0.90	0.14	0.15	5.0	18.0	5.6	0.83	0.00	0.83	3.75	3.43	12	0.94	652.00	652.28	652.32	652.66	655.53	656.00	B1-A1
7	6	78.644	0.01	0.02	0.25	0	0.01	5.0	11.7	6.6	0.03	0.00	0.03	0.96	1.84	6	2.49	652.78	654.74	652.84	654.83	656.00	659.27	B2-B1
8	7	42.255	0.01	0.01	0.25	0	0	5.0	5.0	8.2	0.02	0.00	0.02	0.59	1.33	6	0.95	656.23	656.63	656.29	656.70	659.27	659.35	B3-B2
9	3	97.093	0.00	0.08	0.64	0	0.03	5.0	7.7	7.5	0.25	0.00	0.25	3.01	1.69	12	0.61	654.69	655.28	655.00	655.49	661.44	658.71	A3A-A3
10	9	62.506	0.04	0.08	0.60	0.02	0.03	5.0	7.0	7.7	0.26	0.00	0.26	0.43	2.29	6	0.50	655.78	656.09	656.06	656.37	658.71	659.17	A3B-A3A
11	10	49.277	0.04	0.04	0.25	0.01	0.01	5.0	5.0	8.2	0.08	0.00	0.08	0.43	1.18	6	0.51	656.16	656.41	656.46	656.56	659.17	659.00	A3C-A3B
12	1	58.479	0.08	0.26	0.86	0.07	0.24	5.0	7.5	7.5	1.81	0.00	1.81	11.33	4.07	18	0.99	648.69	649.27	649.10	649.78	655.53	653.10	C1-A1
13	12	119.450	0.18	0.18	0.95	0.17	0.17	5.0	5.0	8.2	1.41	0.00	1.41	10.30	2.95	18	0.82	649.27	650.25	649.78	650.69	653.10	656.34	C2-C1
14	Outfall	35.075	0.90	6.46	0.95	0.86	2.5	5.0	5.9	8.0	19.90	0.00	19.90	45.51	10.69	24	3.45	645.60	646.81	646.53	648.41	647.90	651.84	D1-D0
15	14	55.070	0.27	5.56	0.59	0.16	1.64	5.0	5.7	8.0	13.19	0.00	13.19	32.18	7.90	24	1.73	647.83	648.78	648.72	650.09	651.84	653.03	D2-D1
16	15	158.865	5.29	5.29	0.28	1.48	1.48	5.0	5.0	8.2	12.22	0.00	12.22	32.12	6.53	24	1.72	649.02	651.75	650.09	653.00	653.03	655.50	D3-D2

STORM LEGEND		
	ACCMP	ALUMINUM COATED CORRUGATED METAL PIPE
	BCCMP	BITUMNOUS COATED CORRUGATED METAL PIPE
	DI	DROP INLET
	DWCB	DOUBLE WING CATCH BASIN
	FES	FLARED END SECTION
	SES	SAFETY END SECTION
	GI	GRATE INLET
	HDPE	HIGH DENSITY POLYETHYLENE
	HGI	HOODED GRATE INLET
	HW	HEADWALL
	JB	JUNCTION BOX
	OCS	OUTLET CONTROL STRUCTURE
		PEDESTAL TOP INLET
	RCP	REINFORCED CONCRETE PIPE
	SWCB-L	LEFT SINGLE WING CATCH BASIN
	SWCB-R	RIGHT SINGLE WING CATCH BASIN

NOTE: 1019As AND HIGH CAPACITY GRATES IN CURB LINE TO BE HOODED

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
SCALE: 1" = 30'

GA STATE PLANE WEST

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
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CONTACT: TRUDY HENRY
EMAIL:
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Professional Seal

GEORGIA REGISTERED NO. PE024855 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
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REVISIONS	
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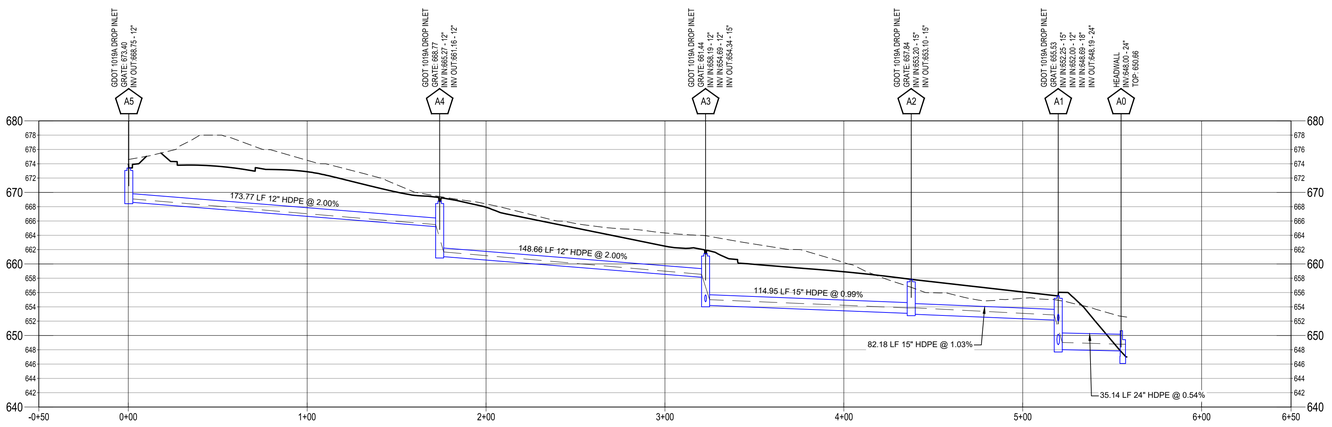
Sheet Title

STORM WATER MANAGEMNET PLAN

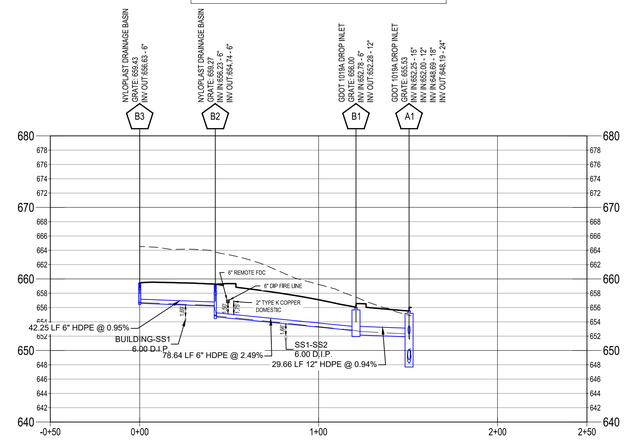
Sheet Number

C-4.0

STORM A PROFILE
STA. -0+50 TO STA. 6+50



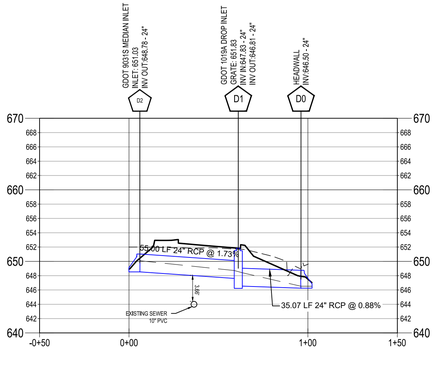
STORM B PROFILE
STA. -0+50 TO STA. 2+50



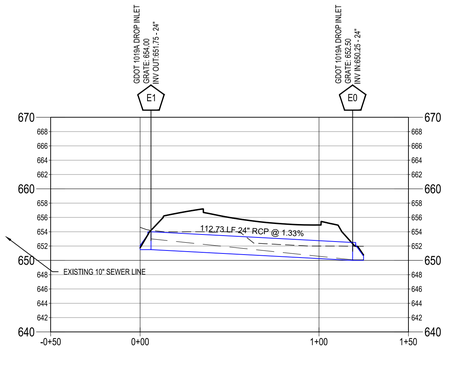
STORM C PROFILE
STA. -0+50 TO STA. 3+50

STORM A3 PROFILE
STA. -0+50 TO STA. 2+50

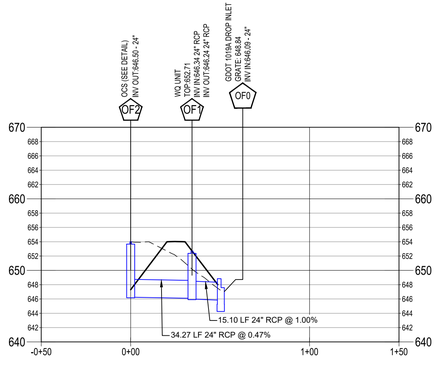
STORM D PROFILE
STA. -0+50 TO STA. 1+50



STORM E PROFILE
STA. -0+50 TO STA. 1+50



STORM OF PROFILE
STA. -0+50 TO STA. 1+50



NOTE: 1019As AND HIGH CAPACITY GRATES IN CURB LINE TO BE HOODED

SCALE
VERTICAL SCALE - 1" = 10'
HORIZONTAL SCALE - 1" = 40'

LEGEND
- EXISTING GRADE
- PROPOSED GRADE
- 25 YR HGL

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
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COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS	
DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title

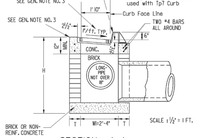
STORM WATER MANAGEMNET PROFILES

Sheet Number

C-4.1

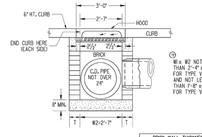
DROP INLET TYPE V-I

(WITH HOOD)



SECTION A-A

(SEE GEN. NOTE NO. 7)

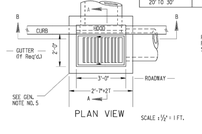


SECTION B-B

SCALE: 1½" = 1 FT.

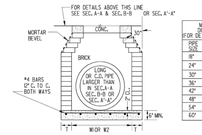
BRICK WALL THICKNESS	
H	T (MIN.)
TO 10'	8"
10' TO 20'	12"
20' TO 30'	16"

NOTE:
THE MINIMUM H DIMENSIONS SHOWN ARE BASED ON TYPICAL OUTSIDE DIAMETERS OF PIPES AND MAY BE MODIFIED IF SO DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, DIMENSIONS GIVEN ARE MINIMUM EXCEPT FOR "D" WHICH IS MAXIMUM.



PLAN VIEW

SCALE: 1½" = 1 FT.



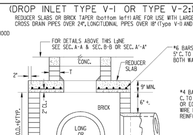
MINIMUM H (FOR DETAIL AT LEFT)	
PIPE SIZE D	H (MIN.)
18"	4'-2"
24"	4'-9"
30"	5'-3"
36"	5'-9"
42"	7'-0"
48"	8'-1"
54"	10'-0"
60"	11'-2"

ALTERNATE-REDUCTION OF WIOR W2 DIMENSIONS WITH BRICK MASONRY

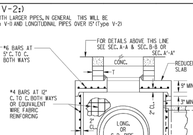
SCALE: 1½" = 1 FT.

(DROP INLET TYPE V-I OR TYPE V-2)

REDUCER SLABS OR BRICK TAPER (bottom left) ARE FOR USE WITH LARGER PIPES, IN GENERAL THIS WILL BE CROSS DRAIN PIPES OVER 24", LONGITUDINAL PIPES OVER 18" (Type V-I) AND LONGITUDINAL PIPES OVER 21" (Type V-2)



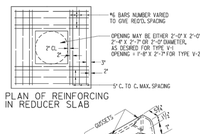
SCALE: ½" = 1 FT.



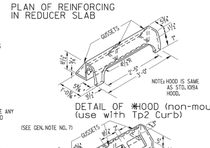
SCALE: ½" = 1 FT.

DETAIL OF REDUCING WI OR W2 DIMENSIONS WITH REDUCER SLAB.

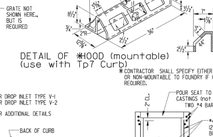
MINIMUM W1, W2 AND H DIMENSIONS			
PIPE SIZE D	MINIMUM W1(MIN.) BRICK	REINF. CONC.	H (MIN.)
15"	① 1'-8"	① 1'-8"	3'-10"
18"	① 2'-0"	① 2'-0"	4'-3"
24"	2'-7"	2'-7"	4'-9"
30"	3'-4"	3'-4"	5'-10"
36"	3'-10"	4'-0"	6'-5"
42"	4'-5"	4'-6"	7'-3"
48"	5'-0"	5'-0"	8'-1"
54"	5'-7"	5'-6"	8'-9"
60"	6'-2"	6'-0"	9'-6"

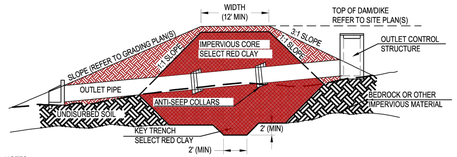


PLAN OF REINFORCING IN REDUCER SLAB



TYPICAL PLAN VIEW WITH SKEWED PIPES

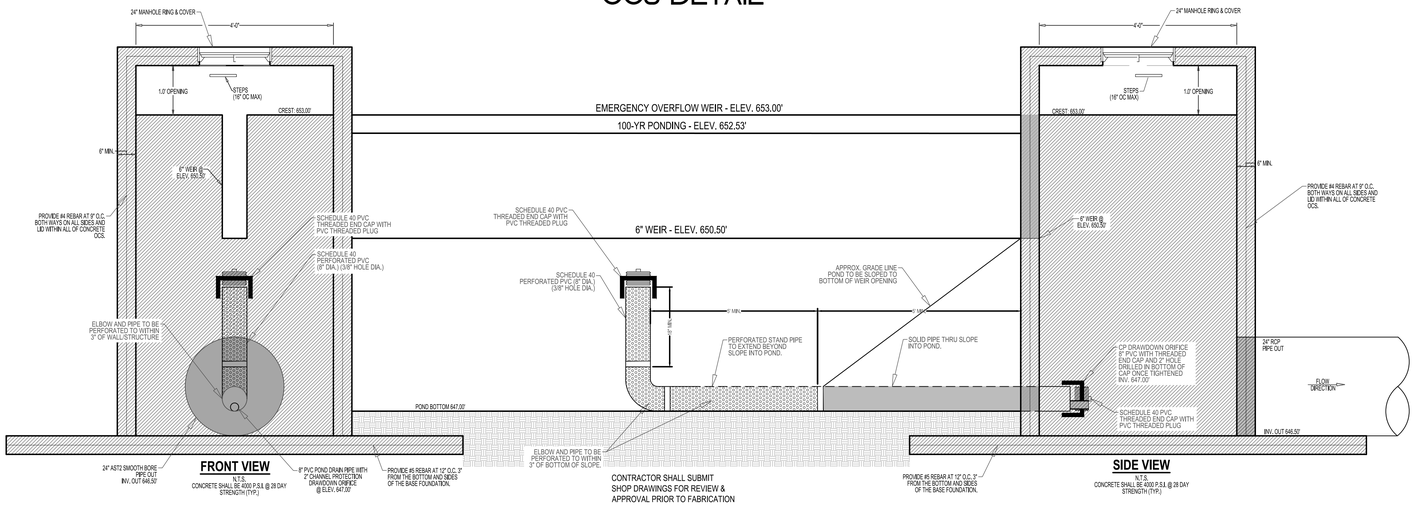

GASKETS
SEE GEN. NOTE NO. 7
CURB
GRATE
HOOD
3'-0"
2'-7"
2'-4"
2'-0"
2'-7"
2'-0"
2'-4"
2'-0"
2'-7"
2'-0"
2'-4"
2'-0"
2'-7"
2'-0



NOTES:
1. ALL FILL MATERIAL FOR DAM/DIKE SHALL BE COMPACTED TO 98% MAXIMUM DENSITY AS DETERMINED BY STANDARD PROTOR TEST.
2. SELECT CORE MATERIAL SHALL BE OBTAINED FROM ON-SITE SOURCE AS IDENTIFIED AND DIRECTED BY GEOTECHNICAL ENGINEER.
3. ANTI-SEEP COLLARS/BRICK COLLAR WALLS SHALL BE INSTALLED AT ALL PIPE JOINTS WITHIN LIMITS OF DAM/DIKE.

DB — DETENTION BASIN DAM/DIKE
NOT TO SCALE

OCS DETAIL



FRONT VIEW
N.T.S.
CONCRETE SHALL BE 4000 P.S.I. @ 28 DAY STRENGTH (TYP.)

SIDE VIEW
N.T.S.
CONCRETE SHALL BE 4000 P.S.I. @ 28 DAY STRENGTH (TYP.)

CONTRACTOR SHALL SUBMIT
SHOP DRAWINGS FOR REVIEW &
APPROVAL PRIOR TO FABRICATION

OCS SHALL BE CONSTRUCTED ON COMPACTED SUBGRADE, MIN. 6" #57 STONE BENEATH MANHOLE AND DP. COMPACTION TO 98% STANDARD PROCTOR BELOW.

COMPACTION BELOW SHALL BE APPROVED BY ONSITE GEOTECHNICAL ENGINEER.

ALL PIPE SLOPES & LENGTHS ARE CALCULATED FROM CENTER OF STORM STRUCTURE TO CENTER OF STORM STRUCTURE.

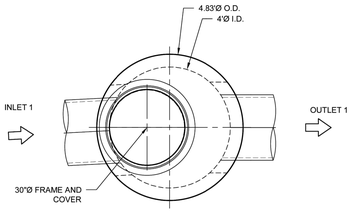
CONCRETE SHALL BE 4000 P.S.I. @ 28 DAY STRENGTH (TYP.)

NOTES:
1. STONE FILTER SHALL BE #4 STONE.
2. ALL CONCRETE TO BE 6" MIN. THICKNESS.
3. OCS MANHOLE SHALL BE OFFSET TO PROVIDE DIRECT ACCESS TO STRUCTURE ACCESS STEPS.
4. THE OCS WEIR SHALL BE PLACED IN THE STRUCTURE WALL.

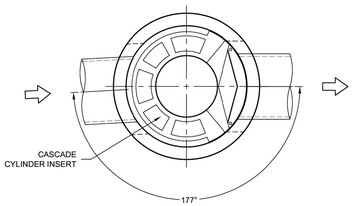
ROUND OUTLET CONTROL STRUCTURE

PRECAST OUTLET CONTROL STRUCTURE BOX SHALL EXTEND A MINIMUM OF 6" LOWER THAN THE LOWEST INVERT. PRECAST STRUCTURE SHALL BE OPEN IN THE BOTTOM WHEN DELIVERED TO SITE, AND SHALL BE SET INTO CONCRETE WHEN BASE FOUNDATION IS POURED IN PLACE. SIX INCHES BELOW THE LOWEST INVERT, #5 REBAR SHALL EXTEND THROUGH DRILLED HOLES, ONE FOOT ON CENTER, ON ALL FOUR SIDES. CONTINUOUS SECTIONS OF #5 REBAR SHALL EXTEND THROUGH THE HOLES FORM ONE SIDE OF THE STRUCTURE, ACROSS THE INSIDE OF THE STRUCTURE AND THROUGH THE MATCHING HOLE ON THE OTHER SIDE OF THE STRUCTURE. THE REBAR SHALL EXTEND A MINIMUM OF 10" BEYOND EACH OUTSIDE FACE OF THE STRUCTURE AND BE WIRED TO THE REBAR SET IN THE CONCRETE BASE FOUNDATION. CONCRETE SHALL BE POURED AND FINISHED UP TO THE ELEVATION OF THE LOWEST INVERT ON THE INSIDE AND OUTSIDE OF THE OUTLET CONTROL STRUCTURE.

Buoyancy Calculations For OCS:
HEIGHT OF OCS= 8 FT
TOP OF STRUCTURE (EMER. OVRFLW) = 653.00'
BOTTOM OF MANHOLE= 646.50'
100YR STAGE= 652.53'
DEPTH OF WATER TOP-BOTTOM= 6.03 FT
VOLUME WATER DISPLACED= (4)(3.14)(6.03)= 75.74 CF
Fb displaced water:
Fb dw= (62.4 lb/cf) * 75.74 cf= 4726.18 lbs
Concrete Volume of Manhole With 6" Walls=
(5)(3.14)(6.03) - (4)(3.14)(6.03)= 18.93 cf
Specific weight concrete= 150 lb/cf
Weight of Manhole= 18.93*150 lb/f= 2,839.50 lbs
Required weight of concrete footing and manhole=
= 4726.18 lbs
Required Weight of Footing= 4,726.18 - 2,839.50 = 1,886.68 lbs
Volume Req= 1,886.68/150= 12.58 cf
Dimensions of footing= 6' X 6' X 1.00'= 36 cf



PLAN VIEW
INTERNALS NOT SHOWN



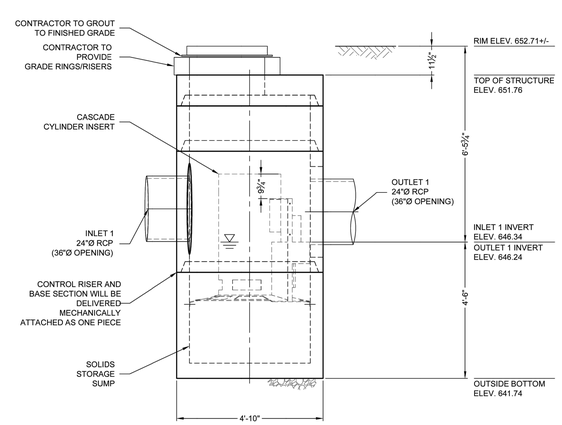
PLAN VIEW FOR PIPE ORIENTATION
TOP SLAB NOT SHOWN

MATERIAL LIST - PROVIDED BY CONTECH

COUNT	DESCRIPTION	INSTALLED BY
1	CS-4 CYLINDER INSERT, STD.	CONTECH
4	CS-4 ALUMINUM INSTALLATION BRACKETS	CONTECH
1	CS-4 HARDWARE KIT	CONTECH
1	SEALANT FOR JOINTS	CONTRACTOR
1	30"Ø X 4" FRAME AND COVER, EJ #41600483, OR EQUIV.	CONTRACTOR

SITE DESIGN DATA

WATER QUALITY FLOW RATE	0.22 CFS
PEAK FLOW RATE	5.93 CFS
RETURN PERIOD OF PEAK FLOW	100 YRS



ELEVATION VIEW

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 7000 LBS.
OF 3 PIECES

MAXIMUM FOOTPRINT = 4.83'Ø

CONTECH
PROPOSAL
DRAWING

PLHM
LAYOUT 1A

The design and information shown on this drawing is provided as a service to the project owner, engineer, and contractor by CONTECH Engineered Solutions LLC (CONTECH). No reliance may be placed on this drawing for use in construction unless it is accompanied by a written and signed sales quotation or project specific submittal from CONTECH. CONTECH makes no representation as to the accuracy of any information shown or contained on this drawing. By using this drawing, the owner and engineer agree to indemnify CONTECH and its officers, employees, and agents against any and all claims arising out of the use of this drawing for construction purposes, regardless of any errors or omissions which may be contained in this drawing.

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MARK	DATE	REVISION DESCRIPTION	BY

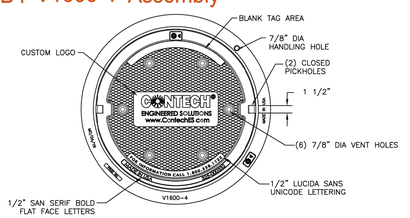
CS-4 - 885372-010
COVINGTON FIRE STATION #23
COVINGTON, GA
SITE DESIGNATION: OF1

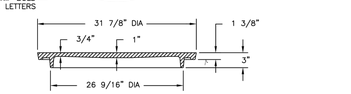
CONTECH ENGINEERED SOLUTIONS LLC
A QUIKRETE COMPANY
9025 Centre Pointe Drive, Suite 400, West Chester, OH 45069
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www.ContechES.com

CASCADE separator®
HIGH PERFORMANCE STORMWATER TREATMENT SYSTEM

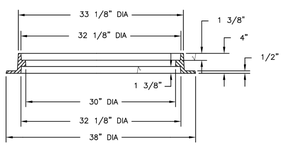
DATE: 2/11/26
DESIGNED: JRS
DRAWN: JRS
CHECKED: JRS
APPROVED: JRS
PROJECT No.: 885372
SEQUENCE No.: 010
SHEET: 1 OF 1

1810B4 V1600-4 Assembly





COVER SECTION



FRAME SECTION

ej

Product Number
41600483
Design Features
-Materials
Cover
Gray Iron (CL35B)
Frame
Gray Iron (CL35B)

-Design Load
Heavy Duty
-Open Area
n/a
-Coating
Undipped
- -/ Designates Machined Surface

Certification
-
- ASTM A48
-
-Country of Origin:USA

Major Components
00180783
41600410

Drawing Revision
05/09/2007 Designer: SMH
6/26/2017 Revised By: DAE

Disclaimer
Weights (lbs./kg) dimensions (inches/mm) are approximate. Due to continuous improvement, we reserve the right to modify specifications without prior notice.

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Contact
800 626 4653
ejco.com

JASON P. BROWN
LEVEL II CERTIFIED
DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

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COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
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COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON,
GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

GEORGIA811
www.Georgia811.com
Contact 811 before you dig

Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including field verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not. Abandonment, relocation, etc. of utilities shall be coordinated with the respective utility company.

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Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title
STORM WATER MANAGEMNET DETAILS

Sheet Number
C-4.3

\\QUIKRETE.NET\CONTECH\MFG_INPROJECT\ACTIVE\885300\885372\885372-010-CASCADE\DRAWINGS\885372-10-CS-4-COVFAILING 3/11/2026 10:42 AM

S300K Iron Edged Channels Spec Sheet

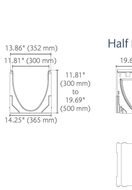
One Meter Channel



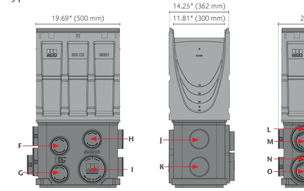


Knock-outs included on every 5th channel

Half Meter Channel

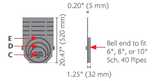


Type 903D Inline Catch Basin



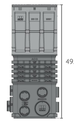
Total Capacity = 15.59 gallons

End Caps



Type 904D Inline Catch Basin

1. Riser can be cut down in 1" (25 mm) increments.
2. Maximum capacity including riser 27.82 gallons.
3. Add 12" (300 mm) to all heights if using riser.
4. Outlet flow rates will be higher due to increased depth - contact ACO Sales Office for more details.



www.acousa.com

S300K Iron Edged Channels Spec Sheet

Description	Part No.	Invert in² (mm²)	Weight lbs.
SK3-00 Constant depth channel - 39.37" (1m)[1]	69041	11.81 (300)	140
SK3-1 Sloped channel - 39.37" (1m)	69001	12.01 (305)	140
SK3-2 Sloped channel - 39.37" (1m)	69002	12.2 (310)	141.3
SK3-3 Sloped channel - 39.37" (1m)	69003	12.4 (315)	142.8
SK3-4 Sloped channel - 39.37" (1m)	69004	12.6 (320)	144.1
SK3-5 Sloped channel - 39.37" (1m)[2]	69005	12.8 (325)	145.4
SK3-6 Sloped channel - 39.37" (1m)	69006	12.99 (330)	146.9
SK3-7 Sloped channel - 39.37" (1m)	69007	13.19 (335)	148.2
SK3-8 Sloped channel - 39.37" (1m)	69008	13.39 (340)	149.5
SK3-9 Sloped channel - 39.37" (1m)	69009	13.58 (345)	150.9
SK3-10 Sloped channel - 39.37" (1m)[2]	69010	13.78 (350)	152.3
SK3-010 Constant depth channel - 39.37" (1m)[3]	69042	13.78 (350)	152.3
SK3-010 Constant depth channel - 19.69" (0.5m)[3]	69045	13.78 (350)	84.2
SK3-11 Sloped channel - 39.37" (1m)	69011	13.98 (355)	153.6
SK3-12 Sloped channel - 39.37" (1m)	69012	14.17 (360)	155
SK3-13 Sloped channel - 39.37" (1m)	69013	14.37 (365)	156.4
SK3-14 Sloped channel - 39.37" (1m)	69014	14.57 (370)	157.3
SK3-15 Sloped channel - 39.37" (1m)[2]	69015	14.76 (375)	149.1
SK3-16 Sloped channel - 39.37" (1m)	69016	14.96 (380)	160.5
SK3-17 Sloped channel - 39.37" (1m)	69017	15.16 (385)	161.9
SK3-18 Sloped channel - 39.37" (1m)	69018	15.35 (390)	163.2
SK3-19 Sloped channel - 39.37" (1m)	69019	15.55 (395)	164.6
SK3-20 Sloped channel - 39.37" (1m)[2]	69020	15.75 (400)	166
SK3-020 Constant depth channel - 39.37" (1m)[3]	69044	15.75 (400)	166
SK3-0203 Constant depth channel - 19.69" (0.5m)[3]	69047	15.75 (400)	92
SK3-21 Sloped channel - 39.37" (1m)	69021	15.94 (405)	167.3
SK3-22 Sloped channel - 39.37" (1m)	69022	16.14 (410)	168.7
SK3-23 Sloped channel - 39.37" (1m)	69023	16.34 (415)	170.1
SK3-24 Sloped channel - 39.37" (1m)	69024	16.54 (420)	171.4
SK3-25 Sloped channel - 39.37" (1m)[2]	69025	16.73 (425)	172.7
SK3-26 Sloped channel - 39.37" (1m)	69026	16.93 (430)	174.2
SK3-27 Sloped channel - 39.37" (1m)	69027	17.13 (435)	175.5
SK3-28 Sloped channel - 39.37" (1m)	69028	17.32 (440)	176.8
SK3-29 Sloped channel - 39.37" (1m)	69029	17.52 (445)	178.3
SK3-30 Sloped channel - 39.37" (1m)[2]	69030	17.72 (450)	179.6
SK3-030 Constant depth channel - 39.37" (1m)[3]	69046	17.72 (450)	179.6
SK3-0303 Constant depth channel - 19.69" (0.5m)[3]	69049	17.72 (450)	100
SK3-31 Sloped channel - 39.37" (1m)	69031	17.91 (455)	180.9
SK3-32 Sloped channel - 39.37" (1m)	69032	18.11 (460)	182.4
SK3-33 Sloped channel - 39.37" (1m)	69033	18.31 (465)	183.7
SK3-34 Sloped channel - 39.37" (1m)	69034	18.50 (470)	185
SK3-35 Sloped channel - 39.37" (1m)[2]	69035	18.70 (475)	186.5
SK3-36 Sloped channel - 39.37" (1m)	69036	18.90 (480)	187.7
SK3-37 Sloped channel - 39.37" (1m)	69037	19.09 (485)	189.1
SK3-38 Sloped channel - 39.37" (1m)	69038	19.29 (490)	190.3
SK3-39 Sloped channel - 39.37" (1m)	69039	19.49 (495)	191.9
SK3-40 Sloped channel - 39.37" (1m)[2]	69040	19.69 (500)	193.2
SK3-040 Constant depth channel - 39.37" (1m)[3]	69048	19.69 (500)	193.2
SK3-0403 Constant depth channel - 19.69" (0.5m)[3]	69050	19.69 (500)	109
SK3-903D In-line catch basin - 19.69" (0.5m)[4]	69053	37.40 (950)	99.4
SK3-904D In-line catch basin - 19.69" (0.5m)[4]	69054	49.53 (1258)	104.4

Description	Part No.	Invert in² (mm²)	Weight lbs.
Series 600 Optional plastic riser	99902	-	10
Foul air trap - fits both 910 & 610 basins	90854	-	1.2
SK3 channel Universal end cap	96827	19.69 (500)	2.5
SK3 channel installation device	97479	-	4.9
Grate removal tool	01318	-	0.3
SK3 ductile iron slotted grate[4]	02445	-	50
SK3 ductile iron longitudinal ADA grate[4]	96833	-	64
SK3 ductile iron 4-bolt	99592	-	50.2

1. *This channel offers bottom knockout feature: 6" ø 8" round.*
2. *Inverts shown are male end; for female invert depth subtract 5mm (+0.2") from male invert (except neutral channels where it will be same as male invert). To calculate overall channel depth, add 20 mm (0.79") to invert depth.*
3. *Catch basin assembly includes grate, polymer concrete top, trash bucket and plastic base.*
4. *Catch basin grate/frame is ductile iron grate specification info for grate details.*
5. *See 12" width ductile iron grate specification info for grate details.*

Outlet Flow Rates

Outlet	Product	Outlet size (Sch. 40)	Invert Depth in (mm)	GPM	CFS
A	Bottom outlet - SK3-00	6" round	11.81 (300)	421	0.94
A	Bottom outlet - SK3-040	6" round	19.69 (500)	544	1.21
B	Bottom outlet -SK3-00	8" round	11.81 (300)	748	1.67
B	Bottom outlet - SK3-040	8" round	19.69 (500)	966	2.15
C	End outlet - SK3-00	6" round	11.81 (300)	364	0.81
C	End outlet - SK3-40	6" round	19.69 (500)	500	1.11
D	End outlet - SK3-10	8" round	13.78 (350)	681	1.52
D	End outlet - SK3-40	8" round	19.69 (500)	863	1.92
E	End outlet - SK3-20	10" round	15.75 (400)	1116	2.49
E	End outlet - SK3-40	10" round	19.69 (500)	1304	2.91
F	Type SK3-903D	4" round	29.80 (757)	287	0.64
G	Type SK3-903D	4" round	36.29 (922)	319	0.71
H	Type SK3-903D	4" round	28.22 (717)	279	0.62
I	Type SK3-903D	4" round	36.29 (922)	707	1.57
J	Type SK3-903D	4" round	28.37 (721)	280	0.62
K	Type SK3-903D	4" round	34.87 (886)	312	0.7
L	Type SK3-903D	6" round	29.15 (740)	626	1.4
M	Type SK3-903D	4" round	28.59 (726)	281	0.63
N	Type SK3-903D	4" round	36.28 (922)	707	1.57
O	Type SK3-903D	4" round	35.72 (907)	316	0.7
P	Type SK3-903D	6" round	35.72 (907)	701	1.56
Q	Type SK3-903D	8" round	36.28 (922)	1237	2.76
R	Type SK3-903D	4" round	34.78 (883)	690	1.54
S	Type SK3-903D	4" round	27.65 (702)	276	0.61
T	Type SK3-903D	4" round	34.36 (873)	310	0.69

These are the pipe flow rates at the specified outlet, NOT channel flow rates. Catch basin flow rates are without trash bucket - using trash bucket reduces flow.

CLASSES OF EMBEDMENT AND BACKFILL MATERIALS

PIPE SHAPE & MATERIAL DESIGNATION	MATERIAL	PIPE SHAPE DESCRIPTION	AASHTO M145 SOIL GROUP	AASHTO M145 SOIL GROUP	PERFORMING ENGINEER'S NOTE			ATTENTION! NOTE	CODE PROVISIONS	
					TYPE 1 (Class)	TYPE 2 (Class)	TYPE 3 (Class)	CL.	M	
ARCH	CORRUGATED METAL PIPE-ARCH	N/A	PIPE-ARCH, CORRUGATED METAL, STRUCTURAL PLATE, CORRUGATED STEEL OR ALUMINUM ALLOY PIPE	A-1, A-2, A-3, A-4	N/A					N/A
B	CLOSED, CORRUGATED METAL PIPE	12"	WELL-GRADED GRAVEL, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	A-1a, A-1b, A-2-4, A-2-5	P1, P2	150%	150%	>150%	NON PLASTIC	4 | 1 to 3
		18"	WELL-GRADED GRAVEL, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							4 | >1 to 4
		24" to 72"	POORLY GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							4 | 1 to 3
		78" to 144"	POORLY GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							4 | >1 to 4
	HIGHER-STRENGTH CORRUGATED METAL PIPE	SEE ABOVE	N/A							
	REINFORCED THERMOSET PLASTIC PIPE	12"	SILTY OR CLAYEY GRAVEL AND SAND MIXTURES	A-2-6, A-2-7, A-4, A-5, A-6, A-7-5, A-7-6	P3, P4, P5, P6	150%	150%	>150%	NON PLASTIC	6 | 1 to 3
		18"	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES							6 | >1 to 4
		24" to 72"	WELL-GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | 1 to 3
		78" to 144"	POORLY GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | >1 to 4
	REINFORCED THERMOSET PLASTIC PIPE	SEE ABOVE	N/A							
B	REINFORCED THERMOSET PLASTIC PIPE	12"	SILTY OR CLAYEY GRAVEL AND SAND MIXTURES	A-2-6, A-2-7, A-4, A-5, A-6, A-7-5, A-7-6	P3, P4, P5, P6	150%	150%	>150%	NON PLASTIC	6 | 1 to 3
		18"	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES							6 | >1 to 4
		24" to 72"	WELL-GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | 1 to 3
		78" to 144"	POORLY GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | >1 to 4
	REINFORCED THERMOSET PLASTIC PIPE	SEE ABOVE	N/A							
A-R	REINFORCED THERMOSET PLASTIC PIPE	12"	SILTY OR CLAYEY GRAVEL AND SAND MIXTURES	A-2-6, A-2-7, A-4, A-5, A-6, A-7-5, A-7-6	P3, P4, P5, P6	150%	150%	>150%	>1000 LIN. FT.	6 | 1 to 3
		18"	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES							6 | >1 to 4
		24" to 72"	WELL-GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | 1 to 3
		78" to 144"	POORLY GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | >1 to 4
	REINFORCED THERMOSET PLASTIC PIPE	SEE ABOVE	N/A							
A-R	REINFORCED THERMOSET PLASTIC PIPE	12"	SILTY OR CLAYEY GRAVEL AND SAND MIXTURES	A-2-6, A-2-7, A-4, A-5, A-6, A-7-5, A-7-6	P3, P4, P5, P6	150%	150%	>150%	>1000 LIN. FT.	6 | 1 to 3
		18"	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES							6 | >1 to 4
		24" to 72"	WELL-GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | 1 to 3
		78" to 144"	POORLY GRADED GRAVEL AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES							6 | >1 to 4
	REINFORCED THERMOSET PLASTIC PIPE	SEE ABOVE	N/A							

NOTES:
1. REFER TO AUTO SERIES 3000 SERIES 7 MANUFACTURERS INSTALLATION MANUAL DESCRIPTIONS.
2. REFER TO AUTO SERIES 3000 SERIES 7 MANUFACTURERS INSTALLATION MANUAL DESCRIPTIONS.
3. REFER TO AUTO SERIES 3000 SERIES 7 MANUFACTURERS INSTALLATION MANUAL DESCRIPTIONS.
4. ALL PARTIES TO BE NOTIFIED BY CONTRACTOR.
5. ALL PARTIES TO BE NOTIFIED BY CONTRACTOR.
6. ALL VIDEO & MOTION SENSORS MUST BE INSTALLED BY CONTRACTOR.

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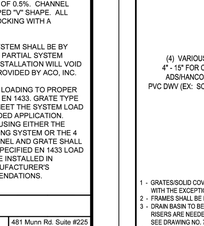
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D	NOTE: ALL DIMENSIONS ARE ± 1/2 FOOT.
7	REV. WORDING TANK/ OIP NUMBER	TJR	07/28/16		
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D	

DIA. DETRIET SYSTEM
CLASSES OF EMBEDMENT AND BACKFILL MATERIALS
DRAWING NUMBER: STD-709

4640 TRUEMAN BLVD HILLIARD, OHIO 43026

DRAWN BY: TJR
DATE: 07/28/16
SCALE: NTS
SHEET: 1 OF 1

RECOMMENDED MINIMUM TRENCH WIDTHS



PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING TO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

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REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D	NOTE: ALL DIMENSIONS ARE ± 1/2 FOOT.
6	INITIAL BACKFILL	JAB	04/02/20		

DIA. DETRIET SYSTEM
TRENCH INSTALLATION DETAIL (N-12 PER AASHTO)
DRAWING NUMBER: STD-101

4640 TRUEMAN BLVD HILLIARD, OHIO 43026

DRAWN BY: TJR
DATE: 07/28/16
SCALE: NTS
SHEET: 1 OF 1

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

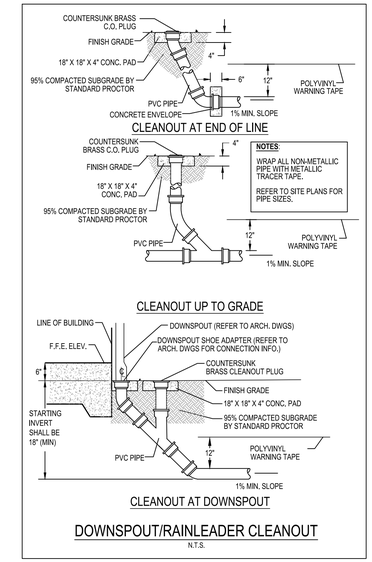
PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLASS II		CLASS III
	COMPACTED	DUMPED	95%	90%	95%
4" (100mm)	37' (11.3m)	18' (5.5m)	25' (7.6m)	18' (5.5m)	18' (5.5m)
6" (150mm)	44' (13.4m)	20' (6.1m)	29' (8.8m)	20' (6.1m)	21' (6.4m)
8" (200mm)	32' (9.8m)	15' (4.6m)	22' (6.7m)	15' (4.6m)	16' (4.9m)
10" (250mm)	38' (11.6m)	18' (5.5m)	26' (7.9m)	18' (5.5m)	18' (5.5m)
12" (300mm)	35' (10.7m)	17' (5.2m)	24' (7.3m)	17' (5.2m)	17' (5.2m)
15" (375mm)	38' (11.6m)	17' (5.2m)	25' (7.6m)	17' (5.2m)	18' (5.5m)
18" (450mm)	36' (11.0m)	17' (5.2m)	24' (7.3m)	17' (5.2m)	17' (5.2m)
24" (600mm)	28' (8.5m)	13' (4.0m)	20' (6.1m)	13' (4.0m)	14' (4.3m)
30" (750mm)	28' (8.5m)	13' (4.0m)	20' (6.1m)	13' (4.0m)	14' (4.3m)
36" (900mm)	26' (7.9m)	12' (3.7m)	18' (5.5m)	13' (4.0m)	13' (4.0m)
42" (1050mm)	23' (7.0m)	11' (3.4m)	16' (4.9m)	11' (3.4m)	11' (3.4m)
48" (1200mm)	25' (7.6m)	11' (3.4m)	17' (5.2m)	11' (3.4m)	12' (3.7m)
60" (1500mm)	25' (7.6m)	11' (3.4m)	17' (5.2m)	11' (3.4m)	12' (3.7m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (Ys) = 120 PCF



DOWNSPOUT/RAINLEADER CLEANOUT

N.T.S.

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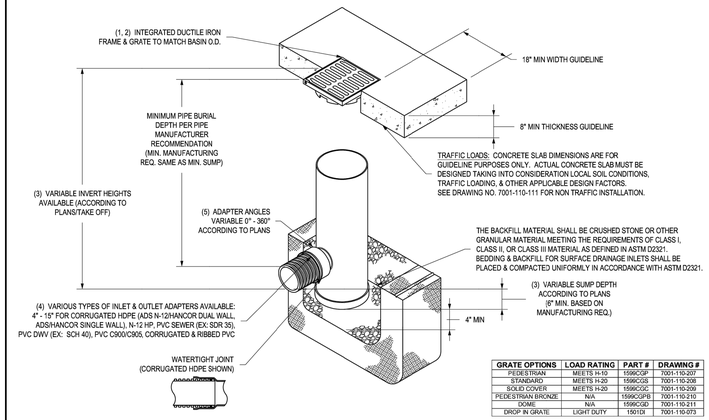
GEORGIA REGISTERED NO. PE024854 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

NYLOPLAST 15" DRAIN BASIN: 2815AG _ _ X



GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	1596CGP	7001-110-207
STANDARD	MEETS H-20	1596CGS	7001-110-208
SOLID COVER	MEETS H-20	1596CGC	7001-110-209
PEDESTRIAN BRONZE	N/A	1596CGPB	7001-110-210
DOME	N/A	1596CGD	7001-110-211
DROP IN GRATE	LIGHT DUTY	1501DI	7001-110-073

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

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DRAWN BY	EBC	MATERIAL	
DATE	03-30-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-14-16		
DWG SIZE	A	SCALE 1:25	SHEET 1 OF 1

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE
15 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-190 REV E

Specification Summary

General

The surface drainage system shall be ACO Drain PowerDrain S300K as manufactured by ACO, Inc. or equal approved. (Add appropriate grate - see grate spec information).

Installation

The trench drain system shall be installed in accordance with the manufacturer's installation instructions and recommendations.

Materials

The trench system bodies shall be manufactured from polymer concrete with minimum properties as follows:

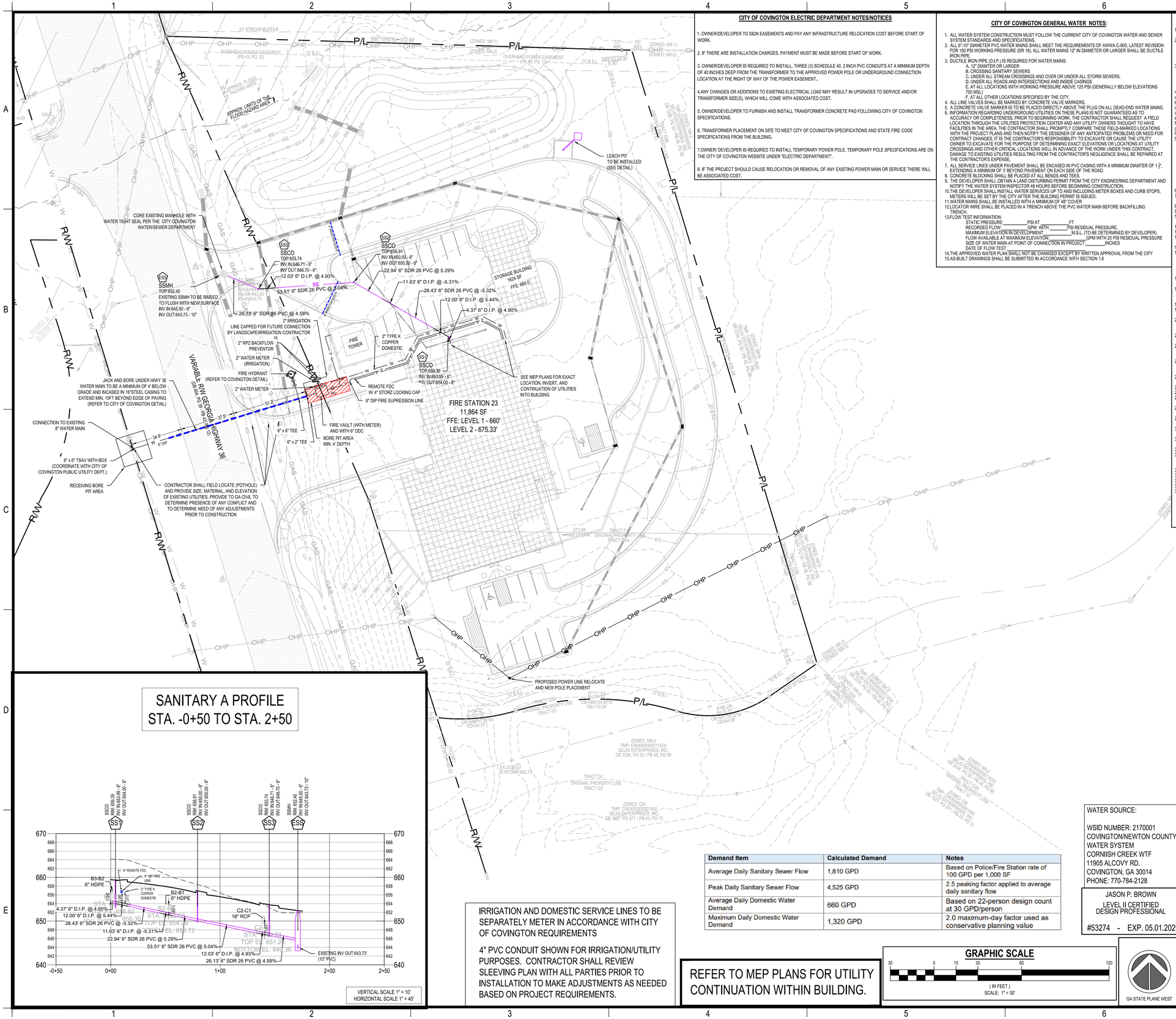
- Compressive strength: 14,000 psi
- Flexural strength: 4,000 psi
- Water absorption 0.07%
- Frost-proof
- Salt-proof
- Dilute acid and alkali-resistant

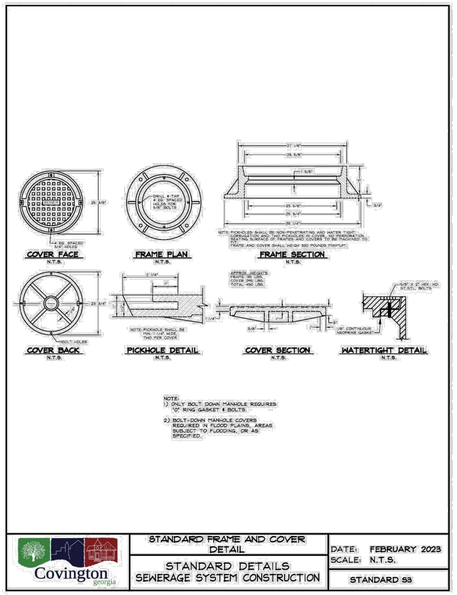
The nominal clear opening shall be 12" (300 mm) with overall width of 10.24" (260 mm). Pre-cast units shall be manufactured with either an invert slope of 0.5% or with neutral invert and have a wall thickness of at least 0.67" (16 mm). Each unit will feature a partial radius in the trench bottom and a male to female interconnecting end profile. Units shall have horizontal cast in anchoring keys on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement surface. The ductile iron edge rail will be integrally cast in by the manufacturer to ensure maximum homogeneity between polymer concrete body and edge rail. Each edge rail shall be at least 1/4" (6 mm) thick.

EN1433 Load Class F
202,328 lbs – 4,177 psi

ACO, Inc.

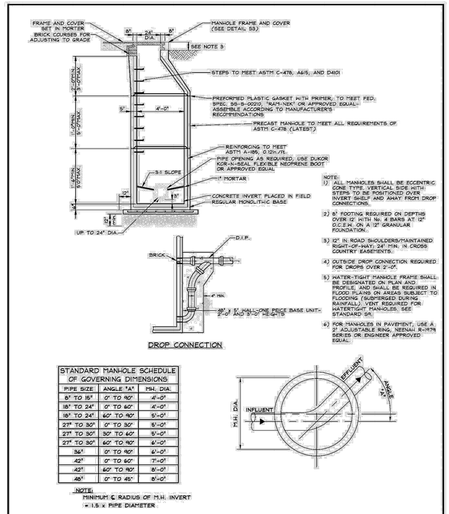
© January 2026 ACO, Inc.
All reasonable care has been taken in compiling the information in this document. All recommendations and suggestions on the use of ACO products are made without guarantee since the conditions of use are bey


FIRE STATION 23
11,864 SF
FFE: LEVEL 1 - 660'
LEVEL 2 - 675.33'
STORAGE BUILDING
1624 SF
FFE: 669.0
FIRE TOWER
LEACH PIT
TO BE INSTALLED
(SEE DETAIL)
CORE EXISTING MANHOLE WITH
WATER TIGHT SEAL PER THE CITY COVINGTON
WATER/SEWER DEPARTMENT
SSMH
TOP:652.40
EXISTING SSMH TO BE RAISED
TO FLUSH WITH NEW SURFACE
INV IN:645.50 - 6"
INV OUT:643.73 - 10"
SSCO
TOP:653.74
INV IN:646.71 - 6"
INV OUT:646.70 - 6"
12.03' 6" D.I.P. @ 4.93%
53.51' 6" SDR 26 PVC @ 5.04%
26.13' 6" SDR 26 PVC @ 4.59%
SSCO
TOP:656.91
INV IN:650.00 - 6"
INV OUT:650.00 - 6"
22.94' 6" SDR 26 PVC @ 5.29%
11.63' 6" D.I.P. @ -5.31%
28.43' 6" SDR 26 PVC @ -5.32%
12.00' 6" D.I.P. @ 5.44%
4.37' 6" D.I.P. @ 4.90%
SSCO
TOP:659.39
INV IN:653.99 - 6"
INV OUT:654.00 - 6"
2" IRRIGATION
LINE CAPPED FOR FUTURE CONNECTION
BY LANDSCAPE/IRRIGATION CONTRACTOR
2" RPZ BACKFLOW
PREVENTOR
2" WATER METER
(IRRIGATION)
FIRE HYDRANT
(REFER TO COVINGTON DETAIL)
2" WATER METER
2" TYPE K
COPPER
DOMESTIC
REMOTE FDC
W/ 4" STORZ LOCKING CAP
6" DIP FIRE SUPRESSION LINE
SEE MEP PLANS FOR EXACT
LOCATION, INVERT, AND
CONTINUATION OF UTILITIES
INTO BUILDING
JACK AND BORE UNDER HWY 36
WATER MAIN TO BE A MINIMUM
GRADE AND INCASED IN 16"STEEL CASING TO
EXTEND MIN. 10FT BEYOND EDGE OF PAVING
(REFER TO CITY OF COVINGTON DETAIL)
CONNECTION TO EXISTING
8" WATER MAIN
8" x 6" TSAV WITH BOX
(COORDINATE WITH CITY OF
COVINGTON PUBLIC UTILITY DEPT.)
RECEIVING BORE
PIT AREA
CONTRACTOR SHALL FIELD LOCATE (POTHOLE)
AND PROVIDE SIZE, MATERIAL, AND ELEVATION
OF EXISTING UTILITIES PRIOR TO GA CIVIL TO
DETERMINE PRESENCE OF ANY CONFLICT AND
TO DETERMINE NEED OF ANY ADJUSTMENTS
PRIOR TO CONSTRUCTION
FIRE VAULT (WITH METER)
AND WITH 6" DDC
BORE PIT AREA
MIN. 4' DEPTH
6" x 6" TEE
6" x 2" TEE
VARIABLE R/W GEORGIA HIGHWAY 36
(DB 64, PG 98 PB 10, PG 102)
APPROX. LIMITS OF THE
FLOOD HAZARD AREA
25' STREAM BUFFER
OVERHEAD POWER EASEMENT
(PB 43, PG 12)
OVERHEAD POWER EASEMENT
(PB 45, PG 12)
PROPOSED POWER LINE RELOCATE
AND NEW POLE PLACEMENT
ZONED: NR-1
TMP: C064000000011E00
SELIG ENTERPRISES, INC.
DB 3334, PG 50 / PB 48, PG 98
ZONED: CM
TMP: C083000000001000
SELIG ENTERPRISES, INC.
DB 1807, PG 571 / PB 43, PG 12
ZONED: NR-2
TMP: C064000000011E00
SELIG ENTERPRISES, INC.
DB 3334, PG 50 / PB 48, PG 98



Covington georgia	STANDARD FRAME AND COVER DETAIL STANDARD DETAILS SEWERAGE SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD 53

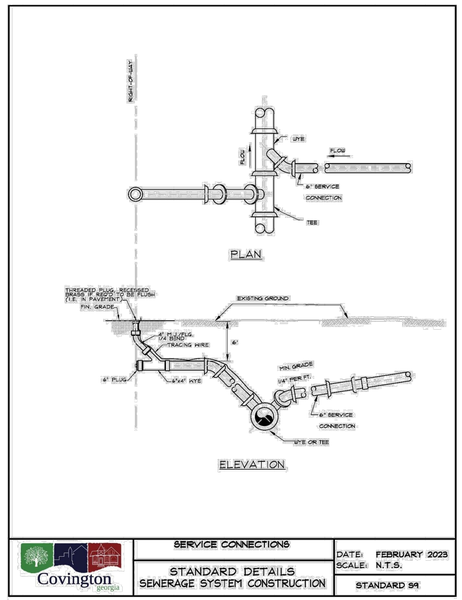
SECTION 8 APPENDIX A – STANDARD DETAILS



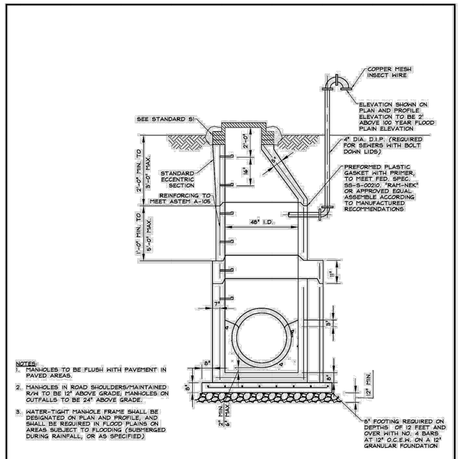
PIPE SIZE	ANGLE "A"	MH. DIA.
8" TO 15"	0° TO 90°	4'-0"
18" TO 24"	0° TO 60°	4'-0"
18" TO 24"	60° TO 90°	5'-0"
27" TO 30"	0° TO 30°	5'-0"
27" TO 30"	30° TO 60°	5'-0"
27" TO 30"	60° TO 90°	6'-0"
36"	0° TO 90°	6'-0"
42"	0° TO 60°	7'-0"
42"	60° TO 90°	8'-0"
48"	0° TO 45°	8'-0"

NOTE:
MINIMUM ℄ RADIUS OF M.H. INVERT = 1.5 x PIPE DIAMETER

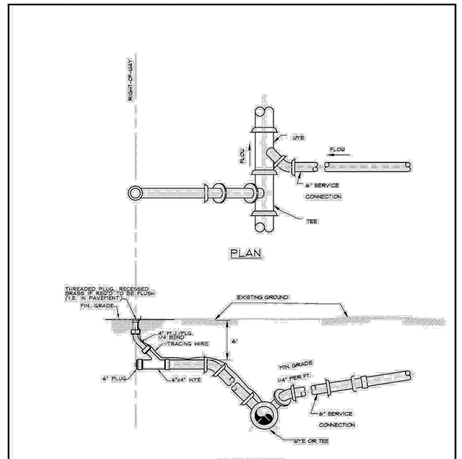
Covington georgia	PRECAST DROP MANHOLE DETAIL STANDARD DETAILS SEWERAGE SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD 51



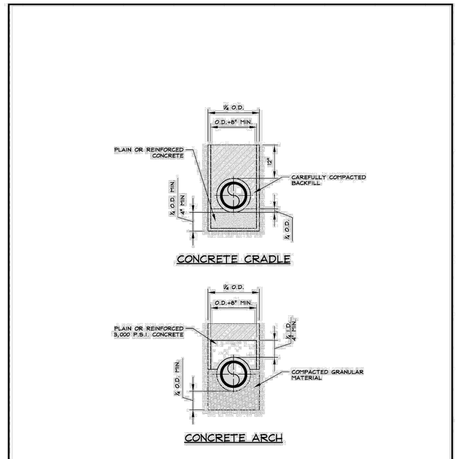
Covington georgia	SERVICE CONNECTIONS STANDARD DETAILS SEWERAGE SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD 54



Covington georgia	STANDARD VENTED MANHOLE (FOR PIPE LARGER THAN 18") STANDARD DETAILS SEWERAGE SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD 510



Covington georgia	SERVICE CONNECTIONS STANDARD DETAILS SEWERAGE SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD 54



Covington georgia	PIPE CLASS "A" BEDDING STANDARD DETAILS SEWERAGE SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD 512

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P: 706.342.1104
www.georgiacivil.com

Professional Seal

GEORGIA REGISTERED NO. PE024887 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON, GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

JASON P. BROWN
LEVEL II CERTIFIED DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA811 www.Georgia811.com
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Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including field verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not. Abandonment, relocation, etc. of utilities shall be coordinated with the respective utility company.

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

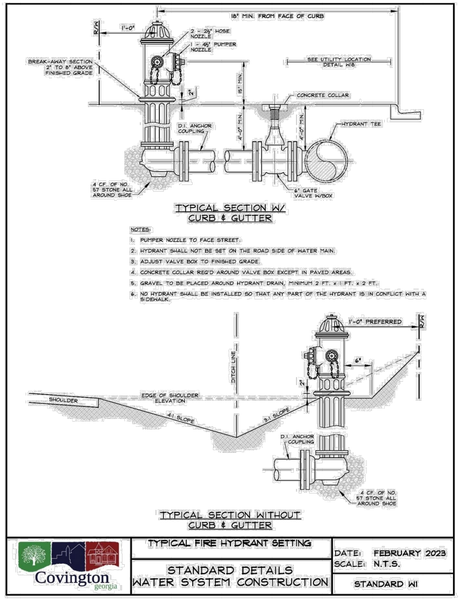
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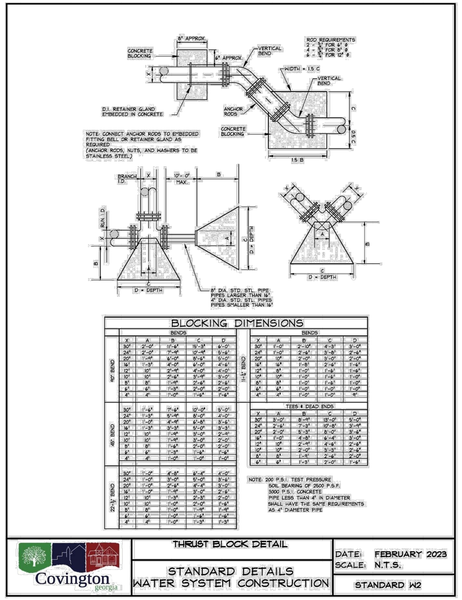
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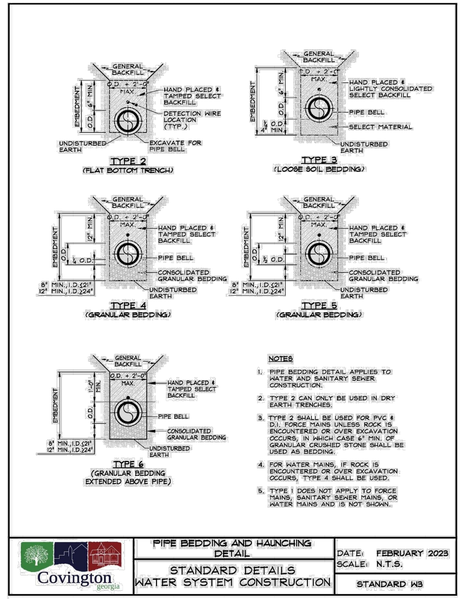
UTILITY DETAILS

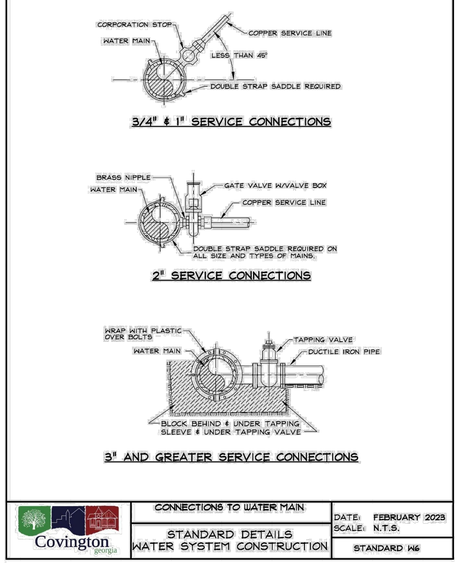
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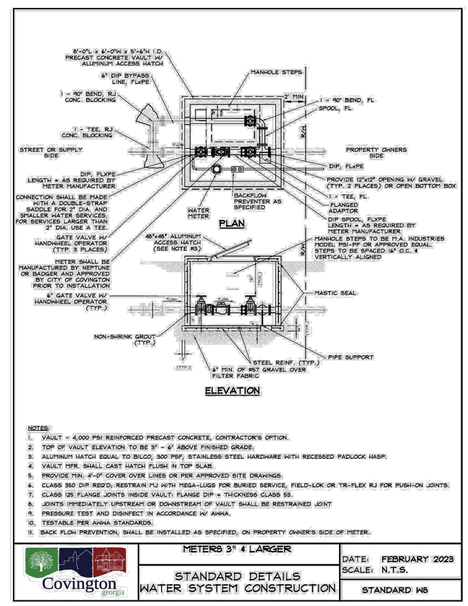
C-5.1

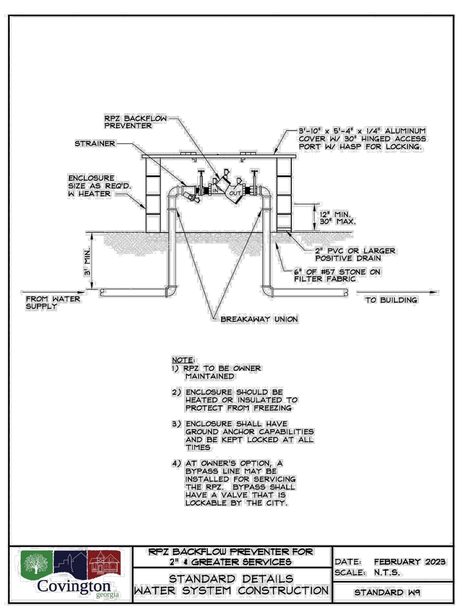












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Professional Seal

GEORGIA REGISTERED NO. PE024855 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

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REVISIONS

DATE:	DESCRIPTION:
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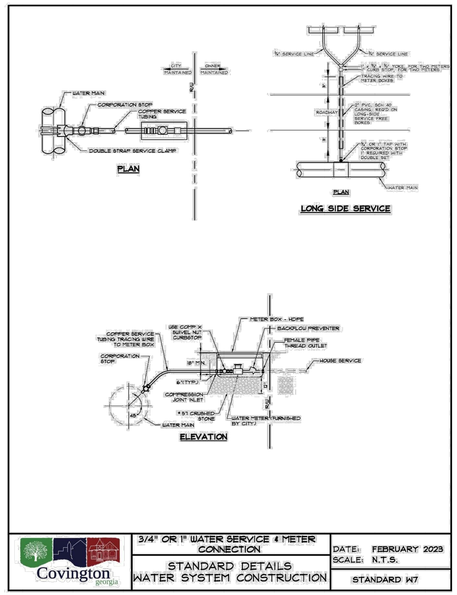
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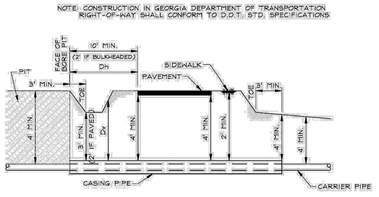
UTILITY DETAILS

Sheet Number

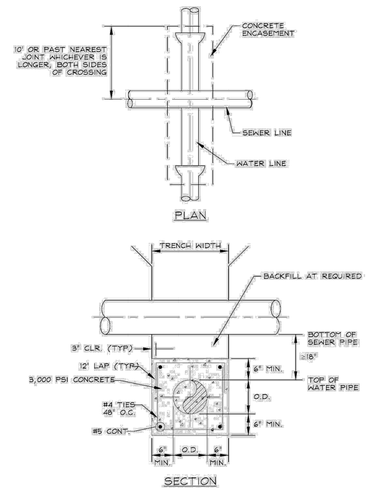
C-5.2



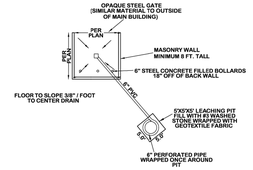
Covington georgia	3/4" OR 1" WATER SERVICE & METER CONNECTION STANDARD DETAILS WATER SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD W7



Covington georgia	HIGHWAY UTILITY CROSSING DETAIL STANDARD DETAILS WATER SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD W17



Covington georgia	CONCRETE ENCASEMENT DETAIL STANDARD DETAILS WATER SYSTEM CONSTRUCTION	DATE: FEBRUARY 2023 SCALE: N.T.S. STANDARD W20



GENERAL NOTES:
Title 16.Zoning
Chapter 16.40 Open Space, Buffers, and Screening
16.40.020.G.

1) ALL DUMPSTERS SHALL BE ENCLOSED WITH A WALL OF EQUAL OR GREATER HEIGHT ON THREE SIDES BY A MASONRY WALL ENCLOSURE THAT IS A MINIMUM OF EIGHT FEET IN HEIGHT, ACCESSED BY AN OPAQUE STEEL GATE THE MATERIAL OF WHICH SHALL BE SIMILAR TO THE MATERIAL ON THE OUTSIDE OF THE MAIN BUILDING.
2) DUMPSTERS SHALL BE PLACED IN THE REAR YARD AND MAY BE LOCATED FIVE FEET FROM THE PROPERTY LINE IF THE ADJOINING PROPERTY IS ZONED NM, CM, TCM, M1, OR M2 AND FIVE FEET FROM ALL APPLICABLE BUFFERS IF THE ADJOINING PROPERTY IS ZONED NR1, NR2, NR3, CR, OR TCR.
3) DUMSPTER PAD.
   a. DUMPSTERS SHALL BE PLACED ON CONCRETE PADS OF SUFFICIENT SIZE AND STRENGTH TO SUPPORT THE WEIGHT OF SERVICE VEHICLES.
   b. RESTAURANTS AND OTHER FOOD SERVICE ESTABLISHMENTS SHALL PLACE DUMPSTERS ON CONCRETE PADS THAT ARE DESIGNED TO SLOPE INTO A DRAIN THAT IS EQUIPPED WITH A GREASE TRAP.

TOTAL ENGINEERS
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Macon, GA 31201
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SEWER AND WATER DEMAND REPORT

Fire Station #23
City of Covington

Highway 36
Covington, Georgia 30014

Project Information	
Project Name	Fire Station #23
Owner	City of Covington / Covington Fire Department
Project Address	Highway 36, Covington, Georgia 30014
Architectural Job No.	25033
Drawing Set Used	SD Set dated 12/15/2025
Prepared For	City of Covington
Prepared By	Jeremy Keyser Total Engineers 169 New Street, Macon, Georgia 31201
Report Date	May 12, 2026

1. Executive Summary

This report summarizes the estimated sanitary sewer and domestic water demands for the proposed Fire Station #23. The calculations are based on the architectural SD set, the attached sewer and water demand criteria provided for this review, and a design people count of 22 persons for domestic water demand.

Demand Item	Calculated Demand	Notes
Average Daily Sanitary Sewer Flow	1,810 GPD	Based on Police/Fire Station rate of 100 GPD per 1,000 SF
Peak Daily Sanitary Sewer Flow	4,525 GPD	2.5 peaking factor applied to average daily sanitary flow
Average Daily Domestic Water Demand	660 GPD	Based on 22-person design count at 30 GPD/person
Maximum Daily Domestic Water Demand	1,320 GPD	2.0 maximum-day factor used as conservative planning value

2. Basis of Design

Source Item	Value Used	Basis / Reference	Use in Calculation
Building Area	18,100 GSF	Architectural life safety drawings list Level 1 = 11,860 GSF, Level 2 = 4,400 GSF, and Storage Building = 1,840 GSF.	Sewer demand
Design People Count	22 persons	Design people count provided for actual anticipated fire station staffing/use; architectural code occupant load is not used for domestic water demand.	Water demand
Sanitary Flow Rate	100 GPD / 1,000 SF	Atlanta sanitary flow table lists Police/Fire Station at 100 GPD per 1,000 SF.	Average daily sewer flow
Sanitary Peaking Factor	2.5	Atlanta sanitary calculation notes require peak daily flow to be 2.5 times average daily flow.	Peak daily sewer flow
Water Demand Rate	30 GPD/person	Georgia EPD water demand table lists Office Buildings at 15-30 GPD/person. The upper end is used for a conservative estimate.	Average daily domestic water demand
Maximum Day Factor	2.0	Georgia EPD water demand guidance states small systems may experience maximum day demand of 1.5 to 2.0 times average day; 2.0 is used as a conservative placeholder.	Maximum daily domestic water demand

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3. Sanitary Sewer Demand Calculation

The sanitary sewer calculation uses the total building area and the Police/Fire Station sanitary generation rate from the attached sanitary flow table.

Step	Formula	Calculation	Result
Average Daily Flow	Area / 1,000 x rate	18,100 SF / 1,000 x 100 GPD	1,810 GPD
Peak Daily Flow	Average daily flow x 2.5	1,810 GPD x 2.5	4,525 GPD
Average Flow Rate	Average daily flow / 1,440 min/day	1,810 GPD / 1,440	1.26 GPM
Peak Daily Flow Rate	Peak daily flow / 1,440 min/day	4,525 GPD / 1,440	3.14 GPM

Recommended sanitary sewer demand for utility coordination: 1,810 GPD average daily sanitary flow and 4,525 GPD peak daily sanitary flow.

4. Domestic Water Demand Calculation

The domestic water calculation uses a design people count of 22 persons, as directed for this facility, and the conservative upper end of the Office Buildings demand range in the water demand guidance.

Step	Formula	Calculation	Result
Average Daily Domestic Demand	Occupants x rate	22 occupants x 30 GPD/person	660 GPD
Average Flow Rate	Average daily demand / 1,440 min/day	660 GPD / 1,440	0.46 GPM
Maximum Daily Domestic Demand	Average daily demand x 2.0	660 GPD x 2.0	1,320 GPD
Maximum Daily Flow Rate	Maximum daily demand / 1,440 min/day	1,320 GPD / 1,440	0.92 GPM

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Recommended domestic water demand for utility coordination: 660 GPD average daily domestic water demand and 1,320 GPD maximum daily domestic water demand.

5. Notes and Exclusions

- The sanitary sewer demand uses the full listed building area of 18,100 GSF. No credit was taken for existing flow removal or demolished prior use.
- Domestic water demand uses a 22-person design count in lieu of the architectural/code occupant load for this facility.
- The domestic water demand is for normal domestic/plumbing use only.
- Fire flow, fire sprinkler demand, irrigation, vehicle wash, hose-down, training water, process water, and other special water uses are not included in the domestic water demand values above.
- Final demand values should be coordinated with the serving utility, civil engineer, and local authority having jurisdiction if they require a specific local demand factor or alternate calculation method.

6. Suggested Calculation Narrative

Sanitary Sewer: Fire Station #23 total building area = 18,100 SF. Police/Fire Station sewer generation rate = 100 GPD per 1,000 SF. 18,100 SF / 1,000 x 100 GPD = 1,810 GPD average daily flow. 1,810 GPD x 2.5 peaking factor = 4,525 GPD peak daily flow.

Domestic Water: Design people count = 22 persons. Office building water demand = 30 GPD/person, which is the conservative upper end of the 15-30 GPD/person range. 22 persons x 30 GPD/person = 660 GPD average daily demand. 660 GPD x 2.0 = 1,320 GPD maximum daily demand.

7. Source Documents

- 25033_Covington Fire Station 23_SD Set 20251215.pdf - project name, owner, address, and building area.
- ATLANTA SEWER CALULATION NUMBERS (just the number).pdf - sanitary flow contribution table and 2.5 peaking factor.
- atlanta water demand.pdf - Georgia EPD Minimum Standards for Public Water Systems, average daily water demand guidance.

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Professional Seal

GEORGIA REGISTERED NO. PE024855 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON,
GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

JASON P. BROWN
LEVEL II CERTIFIED
DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA811 www.Georgia811.com
Contact 811 before you dig.

Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including field verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not. Abandonment, relocation, etc. of utilities shall be coordinated with the respective utility company.

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title

UTILITY DETAILS

Sheet Number

C-5.3

EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN CERTIFICATION:

I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of Best Management Practices (BMPs) required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia 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 100001.

Signed: _____ Date: 5/15/2026

Georgia Civil Inc.
JASON P. BROWN
Level II Certified Design Professional # 52374

I, TODD M. PEASTER, 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 direct supervision.

Signed: _____ Date: 5/15/2026
SIGNATURE OF PLAN PREPARER AND DATE

"The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." in accordance with Part IV A 5 page 25 of the permit. "

Signed: _____ Date: 5/15/2026
SIGNATURE OF PLAN PREPARER AND DATE

NOTE: CONTRACTOR SHALL PROVIDE A PHYSICAL BARRIER SUCH AS PLASTIC SHEETING OR TEMPORARY ROOFS ON ALL BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTE, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND ANY SUCH OTHER MATERIALS IN ORDER TO REDUCE EXPOSURE TO PRECIPITATION AND STORMWATER.

PART IV EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS

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.

NPDES PERMIT PART IV.

(I). EXCEPT AS PROVIDED IN PART IV (III), BELOW, NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A 25 FOOT BUFFER ALONG THE BANKS OF ALL STATE WATERS, AS MEASURED HORIZONTALLY FROM THE POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION, EXCEPT WHERE THE DIRECTOR HAS DETERMINED TO ALLOW A VARIANCE THAT IS AT LEAST AS PROTECTIVE OF NATURAL RESOURCES AND THE ENVIRONMENT IN ACCORDANCE WITH THE PROVISIONS OF O.C.G.A. 12-7-6, OR WHERE A DRAINAGE STRUCTURE OR A ROADWAY DRAINAGE STRUCTURE MUST BE CONSTRUCTED, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED IN THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED, OR ALONG ANY EPHEMERAL STREAM, OR WHERE BUKKHEADS AND SEWALLS MUST BE CONSTRUCTED TO PREVENT THE EROSION OF THE SHORELINE ON LAKE OCONEE AND LAKE SINCLAIR, THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED:

1. PUBLIC DRINKING WATER SYSTEM RESERVOIRS
2. STREAM CROSSINGS FOR WATER LINES AND SEWER LINES, PROVIDED THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER.
3. STREAM CROSSINGS FRO ANY UTILITY LINES OF ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION, ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION, OR DISTRIBUTION OF POWER, PROVIDED THAT: (A) THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, (B) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (C) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT.
4. BUFFER CROSSINGS FOR FENCES, PROVIDED THAT THE CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS WITHIN THE BUFFER.
5. STREAM CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT (A) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 100 LINEAR FEET, (B) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCE TO THE BUFFER, (C) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E. DISTURBANCE OF UNDERLYING VEGETATION IS MINIMIZED), AND (D) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION.
6. RIGHT-OF-WAY POSTS, GUY WIRES, ANCHORS, SURVEY MARKERS, AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN OR FINANCE IN WHOLE OR IN PART BY THE DEPARTMENT OF TRANSPORTATION, THE GEORGIA HIGHWAY AUTHORITY OR STATE ROAD AND TOLLWAY AUTHORITY OR UNDERTAKEN BY ANY COUNTY MUNICIPALITY, PROVIDED THAT (A) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (B) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (C) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS OR DISTURBED AREAS WITHIN THE BUFFER AND (D) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT;
7. RIGHT-OF-WAY POSTS, GUY-WIRES, ANCHORS, SURVEY MARKERS, AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY BY ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION , ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION, OR DISTRIBUTION OF POWER, PROVIDED THAT (A) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (B) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (C) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (D) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT;
8. MAINTENANCE (EXCLUDING DREDGING), REPAIR AND/OR UPGRADE OF SOIL AND WATER CONSERVATION DISTRICT WATERSHED DAMS WHEN UNDER THE TECHNICAL SUPERVISION OF USDA NATURAL RESOURCES CONSERVATION SERVICE.

(II). NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A 50 FOOT BUFFER, AS MEASURED HORIZONTALLY FROM THE POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION, ALONG THE BANKS OF ANY STATE WATERS CLASSIFIED AS "TROUT STREAMS" EXCEPT WHEN APPROVAL IS GRANTED BY THE DIRECTOR FOR AN ALTERNATE BUFFER REQUIREMENTS IN ACCORDANCE WIT THE PROVISIONS OF O.C.G.A. 12-7-6, OR WHERE A ROADWAY DRAINAGE STRUCTURE MUST BE CONSTRUCTED; PROVIDED, HOWEVER, THAT SMALL SPRINGS AND STREAMS CLASSIFIED AS "TROUT STEAMS" WHICH DISCHARGE AN AVERAGE ANNUAL FLOW OF 25 GALLONS PER MINUTE OR LESS SHALL HAVE A 25 FOOT BUFFER OR THEY MAY BE PIPED, AT THE DISCRETION OF THE PERMITTEE. PURSUANT TO THE TERMS OF A RULE PROVIDING FOR A GENERAL VARIANCE PROMULGATED BY THE BOARD OF NATURAL RESOURCES INCLUDING NOTIFICATION OF SUCH TO EPD AND THE LOCAL ISSUING AUTHORITY OF THE LOCATION AND EXTENT OF PIPING AND PRESCRIBED METHODOLOGY FOR MINIMIZING THE IMPACT OF SUCH PIPING AND FOR MEASURING THE VOLUME OF WATER DISCHARGED BY THE STREAM, AND SUCH PIPE MAY EXTEND TO THE TOP SHORT OF THE DOWNSTREAM PERMITTEE'S PROPERTY, AND THE PERMITTEE MUST COMPLY WITH THE BUFFER REQUIREMENT FOR ANY ADJACENT TROUT STREAMS. THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED:

1. PUBLIC DRINKING WATER SYSTEM RESERVOIRS
2. STREAM CROSSINGS FOR WATER LINES AND SEWER LINES, PROVIDED THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS WITHIN THE BUFFER.
3. STREAM CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT (A) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 100 LINEAR FEET, (B) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCE TO THE BUFFER, (C) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E. DISTURBANCE OF UNDERLYING VEGETATION IS MINIMIZED), AND (D) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION.
4. RIGHT-OF-WAY POSTS, GUY WIRES, ANCHORS, SURVEY MARKERS, AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN OR FINANCE IN WHOLE OR IN PART BY THE DEPARTMENT OF TRANSPORTATION, THE GEORGIA HIGHWAY AUTHORITY OR STATE ROAD AND TOLLWAY AUTHORITY OR UNDERTAKEN BY ANY COUNTY MUNICIPALITY, PROVIDED THAT (A) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (B) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (C) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS OR DISTURBED AREAS WITHIN THE BUFFER AND (D) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT;
5. STREAM CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT (A) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 100 LINEAR FEET, (B) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCE TO THE BUFFER, (C) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E. DISTURBANCE OF UNDERLYING VEGETATION IS MINIMIZED), AND (D) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION.
6. RIGHT-OF-WAY POSTS, GUY WIRES, ANCHORS, SURVEY MARKERS, AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN OR FINANCE IN WHOLE OR IN PART BY THE DEPARTMENT OF TRANSPORTATION, THE GEORGIA HIGHWAY AUTHORITY OR STATE ROAD AND TOLLWAY AUTHORITY OR UNDERTAKEN BY ANY COUNTY MUNICIPALITY, PROVIDED THAT (A) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (B) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (C) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS OR DISTURBED AREAS WITHIN THE BUFFER AND (D) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT;
7. RIGHT-OF-WAY POSTS, GUY-WIRES, ANCHORS, SURVEY MARKERS, AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY BY ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION , ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION OR DISTRIBUTION OF POWER, PROVIDED THAT (A) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (B) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (C) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS OR DISTURBED AREAS WITHIN THE BUFFER AND (D) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT;
8. MAINTENANCE (EXCLUDING DREDGING), REPAIR AND/OR UPGRADE OF SOIL AND WATER CONSERVATION DISTRICT WATERSHED DAMS WHEN UNDER THE TECHNICAL SUPERVISION OF USDA NATURAL RESOURCES CONSERVATION SERVICE.

(III). EXCEPT AS PROVIDED IN PART IV (IV) BELOW, NO CONSTRUCTION ACTIVITY SHALL BE CONDUCTED WITHIN A 25 FOOT BUFFER ALONG COASTAL MARSHLANDS, AS MEASURED HORIZONTALLY FROM THE COASTAL MARSHLAND-UPLAND INTERFACE, AS DETERMINED IN ACCORDANCE WITH PART 4 OF ARTICLE 4 OF CHAPTER 5 OF TITLE 12, THE COASTAL MARSHLANDS PROTECTION ACT OF 1970, AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER, EXCEPT WHERE THE DIRECTOR DETERMINES TO ALLOW A VARIANCE THAT IS AT LEAST AS PROTECTIVE OF NATURAL RESOURCES AND THE ENVIRONMENT IN ACCORDANCE WITH THE PROVISIONS OF O.C.G.A. 12-7-6, OR WHERE OTHERWISE ALLOWED BY THE DIRECTOR PURSUANT TO CODE SECTION 12-2-8, OR WHERE AN ALTERATION WITHIN THE BUFFER AREA HAS BEEN AUTHORIZED PURSUANT TO CODE SECTION 12-5-286, OR FOR MAINTENANCE OF ANY CURRENTLY SERVICEABLE STRUCTURE, LANDSCAPING, OR HARDSCAPING, INCLUDING BRIDGES, ROADS, PARKING LOTS, GOLF COURSES, GOLF CART PATHS, RETAINING WALLS, BULKHEADS, AND PATIOS, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND SUCH MEASURES ARE FULLY IMPLEMENTED, OR WHERE A DRAINAGE STRUCTURE OR ROADWAY STRUCTURE IS CONSTRUCTED OR MAINTAINED, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND SUCH MEASURES ARE FULLY IMPLEMENTED, OR ON THE LANDWARD SIDE OF ANY CURRENTLY SERVICEABLE SHORELINE STABILIZATION STRUCTURE, OR FOR THE MAINTENANCE OF ANY MANMADE STORMWATER DETENTION BASIN, GOLF COURSE POND, OR IMPOUNDMENT THAT IS LOCATED ENTIRELY WITHIN THE PROPERTY OF A SINGLE INDIVIDUAL, PARTNERSHIP, OR CORPORATION, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND SUCH MEASURES ARE FULLY IMPLEMENTED. THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED:

1. PUBLIC DRINKING WATER SYSTEM RESERVOIRS
2. CROSSINGS FOR UTILITY LINES THAT CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER
3. ANY LAND DISTURBING ACTIVITY CONDUCTED PURSUANT TO AND IN COMPLIANCE WITH A VALID AND UNEXPIRED GRANDFATHERING PERMIT ISSUED SUBSEQUENT TO APRIL 22, 2014 AND PRIOR TO DECEMBER 31, 2015,
4. ANY LOT FOR WHICH THE PRELIMINARY PLAT HAS BEEN APPROVED PRIOR TO DECEMBER 31, 2015 IF ROADWAYS, BRIDGES, OR WATER AND SEWER LINES HAVE BEEN EXTENDED TO SUCH LOT PRIOR TO THE EFFECTIVE DATE OF THIS ACT AND IF THE REQUIREMENT TO MAINTAIN A 25 FOOT BUFFER WOULD CONSUME AT LEAST 18 PERCENT OF THE HIGH GROUND AREA OF THE PLATTED LOT OTHERWISE AVAILABLE FOR DEVELOPMENT;
5. BUFFER CROSSINGS FOR FENCES, PROVIDED THAT THE CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS WITHIN THE BUFFER.
6. CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT (A) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCED 100 LINEAR FEET, (B) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCE TO THE BUFFER, (C) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E. DISTURBANCE OF UNDERLYING VEGETATION IS MINIMIZED), AND (D) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION.
7. RIGHT-OF-WAY POSTS, GUY WIRES, ANCHORS, SURVEY MARKERS, AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN OR FINANCE IN WHOLE OR IN PART BY THE DEPARTMENT OF TRANSPORTATION, THE GEORGIA HIGHWAY AUTHORITY OR STATE ROAD AND TOLLWAY AUTHORITY OR UNDERTAKEN BY ANY COUNTY MUNICIPALITY, PROVIDED THAT (A) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (B) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (C) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS OR DISTURBED AREAS WITHIN THE BUFFER AND (D) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT;
8. RIGHT-OF-WAY POSTS, GUY-WIRES, ANCHORS, SURVEY MARKERS, AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY BY ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION , ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION OR DISTRIBUTION OF POWER, PROVIDED THAT (A) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (B) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (C) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE AREAS OR DISTURBED AREAS WITHIN THE BUFFER AND (D) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT;
9. MAINTENANCE (EXCLUDING DREDGING), REPAIR AND/OR UPGRADE OF SOIL AND WATER CONSERVATION DISTRICT WATERSHED DAMS WHEN UNDER THE TECHNICAL SUPERVISION OF USDA NATURAL RESOURCES CONSERVATION SERVICE.

(IV). EXCEPT AS PROVIDED ABOVE, FOR BUFFERS REQUIRED PURSUANT TO PART IV (I), AND (II) AND (III), NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A BUFFER AND A BUFFER SHALL REMAIN IN ITS NATURAL, UNDISTURBED, STATE OF VEGETATION UNTIL ALL LAND-DISTURBING ACTIVITIES ON THE CONSTRUCTION SITE ARE COMPLETED, DURING COVERAGE UNDER THIS PERMIT, A BUFFER CANNOT BE THINNED OR TRIMMED OF VEGETATION AND A PROTECTIVE VEGETATIVE COVER MUST REMAIN TO PROTECT WATER QUALITY AND AQUATIC HABITAT AND A NATURAL CANOPY MUST BE LEFT IN SUFFICIENT QUANTITY TO KEEP SHADE ON THE STREAM BED OR MARSH.

GSWCC EROSION CONTROL NOTES:

1. 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.
2. Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit.
3. 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.
4. 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.
5. Any disturbance left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.

ADDITIONAL EROSION CONTROL NOTES:

1. Maximum cut slopes are 3:1, 3 horizontal to 1 vertical, unless otherwise noted.
2. Maximum fill slopes are 3:1, 3 horizontal to 1 vertical, unless otherwise noted.
3. All buffers, tree save areas, and/or limits of disturbance shall be clearly marked in the field by the contractor by flagging or fencing and signage, prior to commencement of any land disturbance activities or clearing/grubbing activities. Buffers, tree save areas, and areas beyond limits of disturbance are to be left undisturbed in their natural state.
4. Contractor shall not disturb underground utilities while installing Erosion, Sedimentation and Pollution Control Practices. Contractor shall have all utilities field located before proceeding with any work.
5. Contractor shall notify design professional 48 hours before beginning each phase of construction.
6. Contractor shall notify CITY OF COVINGTON inspectors 24 hours before beginning each phase of construction.
7. Construction debris and/or waste shall not be buried or burned on site. All construction debris and/or waste shall be taken to a state approved landfill.
8. All buffers and tree save areas shall be clearly identified by flagging and/or fencing prior to commencement of any land disturbance activities.
9. The installation of erosion and sedimentation control measures and practices shall occur prior to or concurrent with land disturbing activities and construction on the site and shall be maintained until permanent ground cover is established to 80%.
10. All initial phase Erosion, Sedimentation and Pollution Control best management practices shall be installed prior to any grading.
11. All Erosion, Sedimentation and Pollution Control best management practices shall be inspected and repaired of damage daily. Any accumulated silt shall be removed and spread on site and controlled with temporary mulching and/or grassing.
12. Erosion, Sedimentation, and Pollution Control best management practices shall be maintained at all times. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION OR AS REQUIRED BY ENGINEER OR LOCAL JURISDICTION INSPECTOR.
13. Maintenance of all soil erosion and sedimentation control measures and practices whether temporary or permanent shall be the responsibility of the contractor.
14. Any discrepancy within these plans shall be referred to the design professional by the contractor for clarification before proceeding with work.
15. Sediment storage maintenance indicators must be installed in sediment storage structures, indicating the 1/3 full volume.
16. Contractor shall provide temporary diversion berms and down drains on fill slopes to prevent erosion prior to stabilization.
17. Contractor shall remove accumulated sediment from detention basin at end of construction when all disturbed areas have been fully stabilized.

REVISIONS SHOWN ON ES&PC PLAN:

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.

INTENDED LAND DISTURBANCE CONSTRUCTION ACTIVITY SEQUENCE:

Initial Phase:

1. Preconstruction meeting with CITY OF COVINGTON
2. Perform initial monitoring
3. Install construction exit
4. Install initial silt fence (perimeter silt fence locations first)
5. Provide any needed initial mulching, grassing or other ground cover
6. Install topsoil/location silt fence
7. Begin clearing, grubbing, topsoiling, and grading operations within limits of detention ponds & install construction road Install appropriate vegetative and structural BMP's (inlet / outlet protection, flocculants / coagulants, mulching / grassing, etc.)
8. Install wheel wash and fuel storage location (if necessary)
9. Coordinate Site Review Meeting with Engineer and/or Local Issuing Authority

Intermediate Phase:

1. Install storm pipe systems with protected inlets (Sd2's)
2. Throughout land disturbance process, maintain existing BMP's (Vegetative and Structural Practices)
3. Throughout land disturbance process, continue NPDES monitoring and reporting
4. Coordinate with utility companies on utility/sleeve locations
5. Begin remaining clearing, grubbing, topsoiling, and grading operations
6. Install topsoil pile at stockpile location and immediately grass/mulch and install any remaining topsoil/location silt fence
7. Perform remaining grading (adjust storm risers with grade change(s) and adjust all affected Sd2's)
8. As areas are brought to finish grade, grass and blanket any areas that are finish grade or that will be left bare for 7 days
9. Adjust storm risers with grade change(s) and adjust all Sd2's
10. Each fill slope shall have a diversion at the top that is maintained and reinstalled as the slope is constructed
11. Continue flocculant / coagulant applications and continue every 7 days throughout project
12. Install remaining storm system(s) as grades are achieved
13. Immediately install each storm structure with associated Sd2's and add floc logs to each storm structure
14. Grass / mulch / flocculent / coagulant disturbed areas and install intermediate BMPs
15. Install utilities (water and septic/sewer)
16. 16. Grass / mulch / flocculent / coagulant disturbed areas and install intermediate BMPs
17. Install GAB throughout roadway up to designated line
18. Grass / mulch / flocculent / coagulant disturbed areas and install intermediate BMPs
19. Install curb & gutter
20. Grass / mulch / flocculent / coagulant disturbed areas and install intermediate BMPs
21. Install pavement
22. Finish grade shoulders and stabilize disturbed areas with permanent vegetation
23. Continue to apply flocculent / coagulant applications, mulching, and grassing at each step to limit soil exposure

Final Phase:

1. Throughout land disturbance process, maintain existing BMP's (vegetative and structural practices)
2. Throughout land disturbance process, continue NPDES monitoring and reporting
3. Complete paving operations
4. Achieve Final Site Stabilization
5. Coordinate Site Review Meeting with Engineer and/or Local Issuing Authority Inspector
6. Clean silt from all storm systems (distribute onsite and stabilize)
7. Remove any temporary BMP practices once site stabilization is achieved and signed off by Engineer
8. Coordinate Site Review Meeting with Engineer for final site approval

CONCRETE WASHOUT:

Contractor shall install a concrete washdown. This area is only for the washdown of items such as tools, concrete mixer chutes, hoppers and the rear of the vehicles. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

WASTE DISPOSAL, SANITARY SEWER, SEPTIC TANK REGULATIONS (ES&PC PLAN COMPLIANCE):

Construction Debris shall be recycled to the extent deemed practical by Owner/Contractor. All waste generated from the development of this site,including but not limited to, solid waste, liquid waste, chemical waste, construction waste, sanitary sewer discharge, septic tank and septic systems waste, shall be collected and disposed of in a manner that follows all local, state, and federal laws and regulations for collection and disposal of each type of waste. All required signage, notification, documentation, and training of personnel on correct handling of waste shall be done in a manner that follows all local, state, and federal laws and regulations. Owner/Contractor is responsible for obtaining the services (and facilities) of a licensed Waste Management Company in the state of Georgia to adequately and safely handle waste collection and disposal. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

BMP'S FOR PETROLEUM SPILLS AND LEAKS:

1. Fix any leaks immediately, maintain and clean equ

a. PERMITTEE REQUIREMENTS.

(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(2). MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

(3). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS: (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. CERTIFIED PERSONNEL SHALL ALSO CONDUCT INSPECTIONS WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST). POST-RAIN INSPECTIONS WILL RESET THE 7-DAY INSPECTION FREQUENCY REQUIREMENT. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(4). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

(5). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

(6). A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

5. MAINTENANCE: THE PLAN SHALL INCLUDE A DESCRIPTION OF PROCEDURES TO ENSURE THE TIMELY MAINTENANCE OF VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE SITE PLAN.

6. SAMPLING REQUIREMENTS. THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THIS PARAGRAPH SHALL NOT APPLY TO ANY LAND DISTURBANCE ASSOCIATED WITH THE CONSTRUCTION OF SINGLE-FAMILY HOMES WHICH ARE NOT PART OF A SUBDIVISION OR PLANNED COMMON DEVELOPMENT UNLESS FIVE (5) ACRES OR MORE WILL BE DISTURBED. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

a. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

(1). A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE STAND ALONE CONSTRUCTION: (A) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION, INTO WHICH THE STORMWATER IS DISCHARGED AND (B) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORMWATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC MAP;

(2). A WRITTEN NARRATIVE OF SITE-SPECIFIC ANALYTICAL METHODS USED TO COLLECT, HANDLE AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;

(3). WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE SAMPLED, A RATIONALE MUST BE INCLUDED ON THE PLAN FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX B. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES); AND

(4). ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE PERMITTEE OF THE INFORMATION NECESSARY AND THE TIMELINE FOR SUBMITTAL.

b. SAMPLE TYPE.

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

(1). SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.

(2). SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.

(3). LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.

(4). MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.

(5). SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

c. SAMPLING POINTS

(1). FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLING POINTS SHALL BE LOCATED ON APPLICABLE PAGES OF THE INITIAL, INTERMEDIATE, AND FINAL PHASE OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS. SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORMWATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:

(A). THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORMWATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.

(B). THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORMWATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.

(C). IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORMWATER OUTFALL CHANNEL(S).

(D). CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORMWATER CHANNEL.

(E). THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.

(F). THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.

(G). PERMITTEES DO NOT HAVE TO SAMPLE SHEET FLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION).

(H). ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORMWATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.A. OR III.D.5., WHICHEVER IS APPLICABLE.

d. SAMPLING FREQUENCY.

(1). THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN IN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORMWATER DISCHARGE.

(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

(A). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;

(B). IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST;

(C). AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-RAIN EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED;

(D). WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.A.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; AND

(E). EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

7. NON-STORMWATER DISCHARGES. EXCEPT FOR FLOWS FROM FIRE-FIGHTING ACTIVITIES, SOURCES OF NON-STORMWATER LISTED IN PART III.A.2. OF THIS PERMIT THAT ARE COMBINED WITH STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MUST BE IDENTIFIED IN THE PLAN. THE PLAN SHALL IDENTIFY AND ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE

E. REPORTING.

5. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORMWATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

6. ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

a. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;

b. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;

c. THE DATE(S) ANALYSES WERE PERFORMED;

d. THE TIME(S) ANALYSES WERE INITIATED;

e. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;

f. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;

g. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;

h. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND

i. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.

3. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE EPD DISTRICT OFFICE OR DELIVERY RECEIPT EMAIL TO THE APPROPRIATE EPD DISTRICT OFFICE RESOURCE MAILBOX ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

F. RETENTION OF RECORDS.

1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:

a. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;

b. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;

c. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;

d. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;

e. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;

f. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D. OF THIS PERMIT; AND

g. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). OF THIS PERMIT.

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

INITIAL INSPECTION AND REPORTING:

FOR COMMON DEVELOPMENTS THAT BEGIN CONSTRUCTION ACTIVITY AFTER THE EFFECTIVE DATE OF THIS PERMIT, THE PRIMARY PERMITTEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, EXCEPT WHERE THE PRIMARY PERMITTEE HAS REQUESTED IN WRITING AND EPD HAS AGREED TO AN ALTERNATE DESIGN PROFESSIONAL, TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WHICH THE DESIGN PROFESSIONAL DESIGNED WITHIN SEVEN (7) DAYS AFTER INSTALLATION. THE DESIGN PROFESSIONAL SHALL DETERMINE IF THESE BMPS HAVE BEEN INSTALLED AND ARE BEING MAINTAINED AS DESIGNED. THE DESIGN PROFESSIONAL SHALL REPORT THE RESULTS OF THE INSPECTION TO THE PRIMARY PERMITTEE WITHIN SEVEN (7) DAYS AND THE PERMITTEE MUST CORRECT ALL DEFICIENCIES WITHIN TWO (2) BUSINESS DAYS OF RECEIPT OF THE INSPECTION REPORT FROM THE DESIGN PROFESSIONAL UNLESS WEATHER RELATED SITE CONDITIONS ARE SUCH THAT ADDITIONAL TIME IS REQUIRED.

MINIMUM QUALIFICATIONS OF INSPECTORS:

"DESIGN PROFESSIONAL" MEANS A PROFESSIONAL LICENSED BY THE STATE OF GA IN THE FIELD OF: ENGINEERING, ARCHITECTURE, LANDSCAPE ARCHITECTURE, FORESTRY, GEOLOGY, OR LAND SURVEYING; OR A PERSON THAT IS A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) WITH A CURRENT CERTIFICATION BY ENVIROCERT INTERNATIONAL, INC. DESIGN PROFESSIONALS SHALL PRACTICE IN A MANNER THAT COMPLIES WITH APPLICABLE GA LAW GOVERNING PROFESSIONAL LICENSURE.

"CERTIFIED PERSONNEL" MEANS A PERSON WHO HAS SUCCESSFULLY COMPLETED THE APPROPRIATE CERTIFICATION COURSE APPROVED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION.

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS
SWCD: REGION 4: CENTRAL DISTRICT

Project Name: COVINGTON FIRE STATION #23 **Address:** 9155 HIGHWAY 36,COVINGTON, GA 30014
City/County: CITY OF COVINGTON **Date on Plans:** 5/15/2026
Name & email of person filling out checklist: JASON P. BROWN JASON@GEORGIACIVIL.COM

TO BE SHOWN ON ES&PC PLAN

Plan Included Page #	Y/N		
C-6.1	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)
C-6.2,C-6.4	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.
N/A	N	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.)
C-6.2,C-6.4	Y	4	The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.
C-6.0	Y	5	Provide the name, address, email address, and phone number of primary permittee.
C-6.0	Y	6	Note total and disturbed acreages of the project or phase under construction.
C-6.0	Y	7	Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
ALL	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-6.0	Y	9	Description of the nature of construction activity and existing site conditions.
C-6.0	Y	10	Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
C-6.0	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-6.0	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 19 of the permit.
C-6.0	Y	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 19 of the permit. *
C-6.0	Y	14	Clearly note the statement "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." in accordance with Part IV.A.5 page 26 of the permit. *
C-6.0	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-6.0	Y	16	Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
C-6.0	Y	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." *
C-6.0	Y	18	Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except

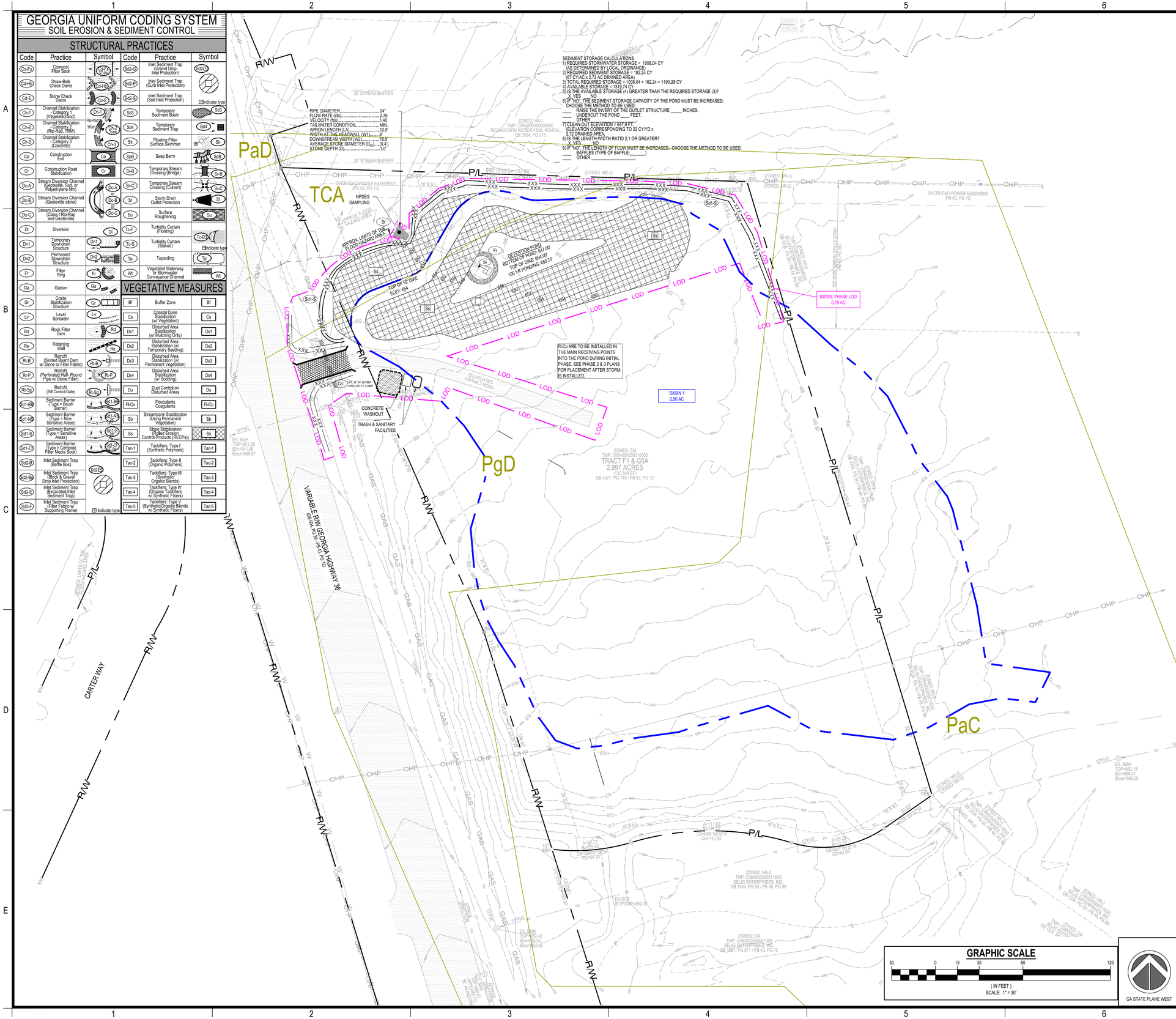
GEORGIA UNIFORM CODING SYSTEM
SOIL EROSION & SEDIMENT CONTROL

STRUCTURAL PRACTICES

Code	Practice	Symbol
Cs-Fs	Compost Filter Sock	Cs-Fs
Cs-Hb	Straw-Bale Check Dams	Cs-Hb
Cs-S	Stone Check Dams	Cs-S
Ch-1	Channel Stabilization Category 1 (Vegetated/Sod)	Ch-1
Ch-2	Channel Stabilization Category 2 (Rip-Rap/ TRM)	Ch-2
Ch-3	Channel Stabilization Category 3 (Concrete)	Ch-3
Co	Construction Exit	Co
Cr	Construction Road Stabilization	Cr
Dc-A	Stream Diversion Channel (Geotextile, Soil, or Polyethylene film)	Dc-A or Dc-B or Dc-C
Dc-B	Stream Diversion Channel (Geotextile alone)	
Dc-C	Stream Diversion Channel (Class I Rip-Rap and Geotextile)	
Di	Diversion	Di
Dn1	Temporary Downdrain Structure	Dn1
Dn2	Permanent Downdrain Structure	Dn2
Fr	Filter Ring	Fr
Ga	Gabion	Ga
Gr	Grade Stabilization Structure	Gr
Lv	Level Spreader	Lv
Rd	Rock Filter Dam	Rd
Re	Retaining Wall	Re
Rf-B	Retrofit (Slotted Board Dam w/ Stone or Filter Fabric)	Rf-B
Rf-P	Retrofit (Perforated Hall- Round Pipe w/ Stone Filter)	Rf-P
Rf-Sg	Retrofit (Silt Control Gate)	Rf-Sg
Sd1-Bf	Sediment Barrier (Type = Brush Barrier)	Sd1-Bf
Sd1-Nb	Sediment Barrier (Type = Non-Sensitive Areas)	Sd1-Nb
Sd1-S	Sediment Barrier (Type = Sensitive Areas)	Sd1-S
Sd1-Cf	Sediment Barrier (Type = Compost Filter Media Sock)	Sd1-Cf
Sd2-B	Inlet Sediment Trap (Baffle Box)	Sd2-Cf
Sd2-Bg	Inlet Sediment Trap (Block & Gravel Drop Inlet Protection)	
Sd2-E	Inlet Sediment Trap (Excavated Inlet Sediment Trap)	
Sd2-F	Inlet Sediment Trap (Filter Fabric w/ Supporting Frame)	☐ Indicate type
Sd2-G	Inlet Sediment Trap (Gravel Drop Inlet Protection)	Sd2-G ☐ Indicate type
Sd2-P	Inlet Sediment Trap (Curb Inlet Protection)	
Sd2-S	Inlet Sediment Trap (Sod Inlet Protection)	
Sd3	Temporary Sediment Basin	Sd3
Sd4	Temporary Sediment Trap	Sd4
Sk	Floating Filter Surface Skimmer	Sk
Sp8	Seep Berm	Sp8
St-B	Temporary Stream Crossing (Bridge)	St-B
St-C	Temporary Stream Crossing (Culvert)	St-C
St	Storm Drain Outlet Protection	St
Su	Surface Roughening	Su
Tc-F	Turbidity Curtain (Floating)	Tc-Cl ☐ Indicate type
Tc-S	Turbidity Curtain (Staked)	
Tp	Topsoiling	Tp
Wt	Vegetated Waterway or Stormwater Conveyance Channel	Wt

VEGETATIVE MEASURES

Bf	Buffer Zone	Bf
Cs	Coastal Dune Stabilization (w/ Vegetation)	Cs
Ds1	Disturbed Area Stabilization (w/ Mulching Only)	Ds1
Ds2	Disturbed Area Stabilization (w/ Temporary Seeding)	Ds2
Ds3	Disturbed Area Stabilization (w/ Permanent Vegetation)	Ds3
Ds4	Disturbed Area Stabilization (w/ Sodding)	Ds4
Du	Dust Control on Disturbed Areas	Du
Fl-Co	Flocculants Coagulants	Fl-Co
Sb	Streambank Stabilization (Using Permanent Vegetation)	Sb
Ss	Slope Stabilization (Rolled Erosion Control Products (RECPs))	Ss
Tac-1	Tackifiers: Type I (Synthetic Polymers)	Tac-1
Tac-2	Tackifiers: Type II (Organic Polymers)	Tac-2
Tac-3	Tackifiers: Type III (Synthetic Organic Blends)	Tac-3
Tac-4	Tackifiers: Type IV (Organic Tackifiers w/ Synthetic Fibers)	Tac-4
Tac-5	Tackifiers: Type V (Synthetic/Organic Blends w/ Synthetic Fibers)	Tac-5



THE PRIMARY PERMITTEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE PLAN TO CONDUCT INSPECTIONS DURING THE INTERMEDIATE GRADING AND DRAINAGE BMP PHASE AND DURING THE FINAL BMP PHASE.

NOTE: WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

NOTE: SILT FENCE J-HOOKS (SEE DETAIL) SHALL BE INSTALLED WHERE NECESSARY TO INCREASE PONDING, PREVENT SEDIMENT FROM ESCAPING AROUND SILT FENCE ENDS AND DECREASE THE LINEAR LENGTH OF SILT FENCE INSTALLATION INTO SMALLER SEGMENTS. J-HOOKS ARE NOT TO BE USED IN STREAMS, CHANNELS, DRAINS OR OTHER AREAS OF CONCENTRATED FLOW. J-HOOKS SHALL BE INSTALLED AS FOLLOWS:

TYPICAL J HOOK SPACING		
SLOPE PERCENT	TYPE OF SILT FENCE	MIN. SPACING (FT)
1%-2%	TYPE A	100'+/-
2%-3%	TYPE A	50'+/-
3%-4%	TYPE C	50'+/-
4%-5%	TYPE C	25'+/-

REFER TO SHEET C-1.1 AND C-6.1 FOR EROSION, SEDIMENTATION, AND POLLUTION CONTROL NOTES

Maintenance of all soil erosion and sedimentation control measures and practices, whether temporary or permanent, shall be at all times the responsibility of the property owner.

GSWCC EROSION CONTROL NOTES:

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.

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.

Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.

Any amendments/revisions to the ESⅈP Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional.

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-6790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON,
GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

JASON P. BROWN
LEVEL II CERTIFIED DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA811 www.Georgia811.com
Contact 811 before you dig

Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including field verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not, Abandonment, relocation, etc. of utilities shall be coordinated with the respective utility company.

georgia civil
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
311 N. Main St, Ste. 101, Unit C
P.O. Box 896 | Madison, GA 30650
P: 706.342.1104
www.georgiacivil.com

Professional Seal

GEORGIA REGISTERED NO. PE024844 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23
9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title

INITIAL EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN

Sheet Number

C-6.2

GEORGIA UNIFORM CODING SYSTEM
SOIL EROSION & SEDIMENT CONTROL

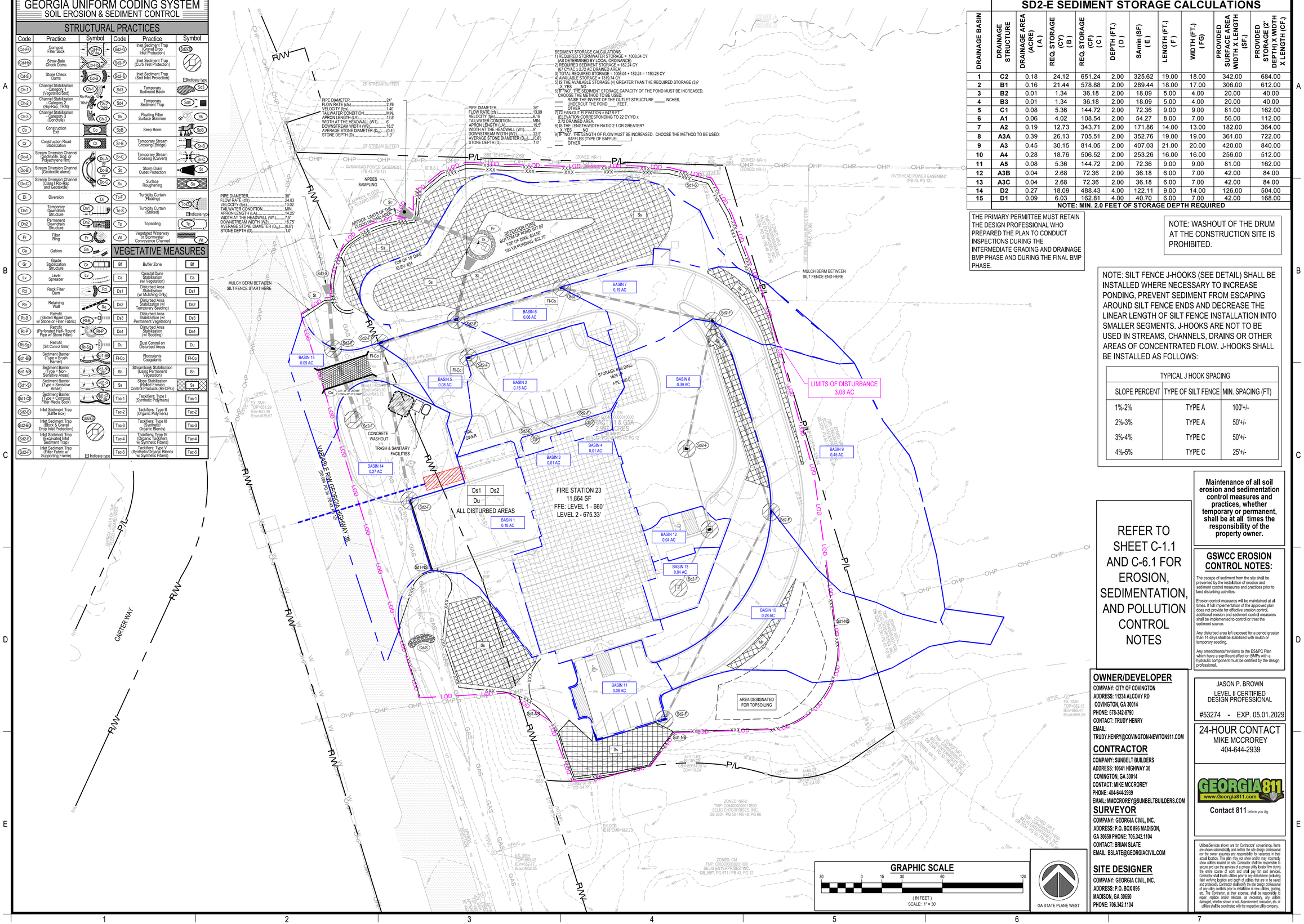
STRUCTURAL PRACTICES

Code	Practice	Symbol
Cs-Fs	Compost Filter Sock	Cs-Fs
Cs-Hb	Straw-Bale Check Dams	Cs-Hb
Cs-S	Stone Check Dams	Cs-S
Ch-1	Channel Stabilization - Category 1 (Vegetated/Sod)	Ch-1
Ch-2	Channel Stabilization - Category 2 (Rip-Rap, TRM)	Rip-Rap/TRM, Ch-2
Ch-3	Channel Stabilization - Category 3 (Concrete)	Ch-3
Co	Construction Exit	Co
Cr	Construction Road Stabilization	Cr
Dc-A	Stream Diversion Channel (Geotextile, Sripl, or Polyethylene film)	Dc-A
Dc-B	Stream Diversion Channel (Geotextile alone)	Dc-B
Dc-C	Stream Diversion Channel (Class I Rip-Rap and Geotextile)	Dc-C
Di	Diversion	Di
Dn1	Temporary Downdrain Structure	Dn1
Dn2	Permanent Downdrain Structure	Dn2
Fr	Filter Ring	Fr
Ga	Gabion	Ga
Gr	Grade Stabilization Structure	Gr
Lv	Level Spreader	Lv
Rd	Rock Filter Dam	Rd
Re	Retaining Wall	Re
Rt-B	Retrofit (Slotted Board Dam w/ Stone or Filter Fabric)	Rt-B
Rt-P	Retrofit (Perforated Half- Round Pipe w/ Stone Filter)	Rt-P
Rt-So	Retrofit (Silt Control Gate)	Rt-So
Sd1-Bf	Sediment Barrier (Type = Brush Barrier)	Sd1-Bf
Sd1-Nb	Sediment Barrier (Type = Non-Sensitive Areas)	Sd1-Nb
Sd1-S	Sediment Barrier (Type = Sensitive Areas)	Sd1-S
Sd1-Cf	Sediment Barrier (Type = Compost Filter Media Sock)	Sd1-Cf
Sd2-B	Inlet Sediment Trap (Baffle Box)	Sd2-B
Sd2-Bg	Inlet Sediment Trap (Block & Gravel Drop Inlet Protection)	Sd2-Bg
Sd2-E	Inlet Sediment Trap (Excavated Inlet Sediment Trap)	Sd2-E
Sd2-F	Inlet Sediment Trap (Filter Fabric w/ Supporting Frame)	Sd2-F, ⊡ Indicate type

Code	Practice	Symbol
Sd2-G	Inlet Sediment Trap (Gravel Drop Inlet Protection)	Sd2-G
Sd2-P	Inlet Sediment Trap (Curb Inlet Protection)	⊡Indicate type
Sd2-S	Inlet Sediment Trap (Sod Inlet Protection)	
Sd3	Temporary Sediment Basin	Sd3
Sd4	Temporary Sediment Trap	Sd4
Sk	Floating Filter Surface Skimmer	Sk
Sp8	Seep Berm	Sp8
St-B	Temporary Stream Crossing (Bridge)	St-B
St-C	Temporary Stream Crossing (Culvert)	St-C
St	Storm Drain Outlet Protection	St
Su	Surface Roughening	Su
Tc-F	Turbidity Curtain (Floating)	Tc-Cf, ⊡Indicate type
Tc-S	Turbidity Curtain (Slatted)	
Tp	Topsoiling	Tp
Wt	Vegetated Waterway or Stormwater Conveyance Channel	Wt

VEGETATIVE MEASURES

Code	Practice	Symbol
Bf	Buffer Zone	Bf
Cs	Coastal Dune Stabilization (w/ Vegetation)	Cs
Ds1	Disturbed Area Stabilization (w/ Mulching Only)	Ds1
Ds2	Disturbed Area Stabilization (w/ Temporary Seeding)	Ds2
Ds3	Disturbed Area Stabilization (w/ Permanent Vegetation)	Ds3
Ds4	Disturbed Area Stabilization (w/ Sodding)	Ds4
Du	Dust Control on Disturbed Areas	Du
Fl-Co	Flocculants Coagulants	Fl-Co
Sb	Streambank Stabilization (Using Permanent Vegetation)	Sb
Ss	Slope Stabilization (Rolled Erosion Control Products (RECPs))	Ss
Tac-1	Tackifiers: Type I (Synthetic Polymers)	Tac-1
Tac-2	Tackifiers: Type II (Organic Polymers)	Tac-2
Tac-3	Tackifiers: Type III (Synthetic/ Organic Blends)	Tac-3
Tac-4	Tackifiers: Type IV (Organic Tackifiers w/ Synthetic Fibers)	Tac-4
Tac-5	Tackifiers: Type V (Synthetic/Organic Blends w/ Synthetic Fibers)	Tac-5


PIPE DIAMETER.....24"
FLOW RATE (cfs).....2.76
VELOCITY (fps).....1.40
TAILWATER CONDITION.....MIN.
APRON LENGTH (LA).....12.5'
WIDTH AT THE HEADWALL (W1).....6
DOWNSTREAM WIDTH (W2).....18.5'
AVERAGE STONE DIAMETER (D_{50}).....(0.4')
STONE DEPTH (D).....1.0'
PIPE DIAMETER.....30"
FLOW RATE (cfs).....24.83
VELOCITY (fps).....10.02
TAILWATER CONDITION.....MIN.
APRON LENGTH (LA).....14.25'
WIDTH AT THE HEADWALL (W1).....7.5'
DOWNSTREAM WIDTH (W2).....16.75'
AVERAGE STONE DIAMETER (D_{50}).....(0.6')
STONE DEPTH (D).....1.0'
PIPE DIAMETER.....36"
FLOW RATE (cfs).....13.99
VELOCITY (fps).....6.16
TAILWATER CONDITION.....MIN.
APRON LENGTH (LA).....19.5'
WIDTH AT THE HEADWALL (W1).....9'
DOWNSTREAM WIDTH (W2).....22.5'
AVERAGE STONE DIAMETER (D_{50}).....(0.6')
STONE DEPTH (D).....1.0'
SEDIMENT STORAGE CALCULATIONS
1) REQUIRED STORMWATER STORAGE = 1008.04 CY
(AS DETERMINED BY LOCAL ORDINANCE)
2) REQUIRED SEDIMENT STORAGE = 182.24 CY
(67 CY/AC x 2.72 AC DRAINED AREA)
3) TOTAL REQUIRED STORAGE = 1008.04 + 182.24 = 1190.28 CY
4) AVAILABLE STORAGE = 1319.74 CY
5) IS THE AVAILABLE STORAGE (4) GREATER THAN THE REQUIRED STORAGE (3)?
X YES NO
6) IF "NO", THE SEDIMENT STORAGE CAPACITY OF THE POND MUST BE INCREASED.
CHOOSE THE METHOD TO BE USED:
___ RAISE THE INVERT OF THE OUTLET STRUCTURE ____ INCHES.
___ UNDERCUT THE POND ____ FEET.
___ OTHER
7) CLEAN-OUT ELEVATION = 647.3 FT.
(ELEVATION CORRESPONDING TO 22 CY/YD x
2.72 DRAINED AREA)
8) IS THE LENGTH-WIDTH RATIO 2:1 OR GREATER?
X YES NO
9) IF "NO", THE LENGTH OF FLOW MUST BE INCREASED. CHOOSE THE METHOD TO BE USED:
___ BAFFLES (TYPE OF BAFFLE:_____)
___ OTHER
RW
OHP
P/L
LOD
XXX
SS=15.45 Ss=312.89
OVERHEAD POWER EASEMENT (PB 43, PG 12)
10' B.S.L.
25' STREAM BUFFER
NPDES SAMPLING
FLAMMABLE FLUIDS HAZARD AREA
APPROX. LIMITS OF FLOODHAZARD AREA
TOP OF 10' DIKE ELEV. 654
DETENTION POND BOTTOM OF POND: 641.00' TOP OF DIKE: 654.00' 100 YR PONDING: 652.70'
MULCH BERM BETWEEN SILT FENCE START HERE
MULCH BERM BETWEEN SILT FENCE END HERE
LIMITS OF DISTURBANCE 3.08 AC
BASIN 1 0.18 AC
BASIN 2 0.16 AC
BASIN 3 0.01 AC
BASIN 4 0.01 AC
BASIN 5 0.08 AC
BASIN 6 0.06 AC
BASIN 7 0.19 AC
BASIN 8 0.39 AC
BASIN 9 0.45 AC
BASIN 10 0.28 AC
BASIN 11 0.08 AC
BASIN 12 0.04 AC
BASIN 13 0.04 AC
BASIN 14 0.27 AC
BASIN 15 0.09 AC
FIRE STATION 23
11,864 SF
FFE: LEVEL 1 - 660'
LEVEL 2 - 675.33'
STORAGE BUILDING 1628 SF FFE: 660.0
CONCRETE WASHOUT
TRASH & SANITARY FACILITIES
AREA DESIGNATED FOR TOPSOILING
ALL DISTURBED AREAS
Ds1 Ds2
Du
VARIABLE R/W GEORGIA HIGHWAY 36
CARTER WAY
EX. SMH TOP=659.42 IEin=652.72 IEout=652.65
EX.OCB IE18"CMP=662.70
EX. SMH TOP=682.19 IEin=666.41 IEout=666.25
ZONED: NR-2 TMP: C0640000000110E00 SELIG ENTERPRISES, INC. DB 3334, PG 50 / PB 48, PG 98
ZONED: CM TMP: C0830000000010000 SELIG ENTERPRISES, INC. DB 5287, PG 571 / PB 43, PG 12
ZONED: NR-2 TMP: C0640000000110E00 SELIG ENTERPRISES, INC. DB 3334, PG 50 / PB 48, PG 98

GEORGIA UNIFORM CODING SYSTEM
SOIL EROSION & SEDIMENT CONTROL

STRUCTURAL PRACTICES

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Ga	Gabion	Ga
Gr	Grade Stabilization Structure	Gr
Lv	Level Spreader	Lv
Rd	Rock Filter Dam	Rd
Re	Retaining Wall	Re
Ri-B	Retrofit (Slotted Board Dam w/ Stone or Filter Fabric)	Ri-B
Ri-P	Retrofit (Perforated Hall- Round Pipe w/ Stone Filter)	Ri-P
Ri-Ss	Retrofit (Silt Control Gate)	Ri-Ss
Sd1-Bf	Sediment Barrier (Type = Brush Barrier)	Sd1-Bf
Sd1-Ns	Sediment Barrier (Type = Non-Sensitive Areas)	Sd1-Ns
Sd1-S	Sediment Barrier (Type = Sensitive Areas)	Sd1-S
Sd1-Cf	Sediment Barrier (Type = Compost Filter Media Sock)	Sd1-Cf
Sd2-B	Inlet Sediment Trap (Baffle Box)	Sd2-B
Sd2-Bg	Inlet Sediment Trap (Block & Gravel Drop Inlet Protection)	Sd2-Bg
Sd2-E	Inlet Sediment Trap (Excavated Inlet Sediment Trap)	Sd2-E
Sd2-F	Inlet Sediment Trap (Filter Fabric w/ Supporting Frame)	Sd2-F
Sd2-G	Inlet Sediment Trap (Gravel Drop Inlet Protection)	Sd2-G
Sd2-P	Inlet Sediment Trap (Curb Inlet Protection)	Sd2-P
Sd2-S	Inlet Sediment Trap (Sod Inlet Protection)	Sd2-S
Sd3	Temporary Sediment Basin	Sd3
Sd4	Temporary Sediment Trap	Sd4
Sk	Floating Filter Surface Skimmer	Sk
Sp8	Seep Berm	Sp8
St-B	Temporary Stream Crossing (Bridge)	St-B
St-C	Temporary Stream Crossing (Culvert)	St-C
St	Storm Drain Outlet Protection	St
Su	Surface Roughening	Su
Tc-F	Turbidity Curtain (Floating)	Tc-Cf
Tc-S	Turbidity Curtain (Staked)	
Tp	Topsoiling	Tp
Wt	Vegetated Waterway or Stormwater Conveyance Channel	Wt

VEGETATIVE MEASURES

Bf	Buffer Zone	Bf
Cs	Coastal Dune Stabilization (w/ Vegetation)	Cs
Ds1	Disturbed Area Stabilization (w/ Mulching Only)	Ds1
Ds2	Disturbed Area Stabilization (w/ Temporary Seeding)	Ds2
Ds3	Disturbed Area Stabilization (w/ Permanent Vegetation)	Ds3
Ds4	Disturbed Area Stabilization (w/ Sodding)	Ds4
Du	Dust Control on Disturbed Areas	Du
Fl-Co	Flocculants Coagulants	Fl-Co
Sb	Streambank Stabilization (Using Permanent Vegetation)	Sb
Ss	Slope Stabilization (Rolled Erosion Control Products (RECPs))	Ss
Tac-1	Tackifiers: Type I (Synthetic Polymers)	Tac-1
Tac-2	Tackifiers: Type II (Organic Polymers)	Tac-2
Tac-3	Tackifiers: Type III (Synthetic/ Organic Blends)	Tac-3
Tac-4	Tackifiers: Type IV (Organic Tackifiers w/ Synthetic Fibers)	Tac-4
Tac-5	Tackifiers: Type V (Synthetic/Organic Blends w/ Synthetic Fibers)	Tac-5

Indicate type

SEDIMENT STORAGE CALCULATIONS
1) REQUIRED STORMWATER STORAGE = 1008.04 CY
(AS DETERMINED BY LOCAL ORDINANCE)
2) REQUIRED SEDIMENT STORAGE = 182.24 CY
(67 CY/AC x 2.72 AC DRAINED AREA)
3) TOTAL REQUIRED STORAGE = 1008.04 + 182.24 = 1190.28 CY
4) AVAILABLE STORAGE = 1319.74 CY
5) IS THE AVAILABLE STORAGE (4) GREATER THAN THE REQUIRED STORAGE (3)?
X YES NO
6) IF "NO", THE SEDIMENT STORAGE CAPACITY OF THE POND MUST BE INCREASED.
CHOOSE THE METHOD TO BE USED:
___ RAISE THE INVERT OF THE OUTLET STRUCTURE ____ INCHES.
___ UNDERCUT THE POND ____ FEET.
___ OTHER
7) C.E.A.N.-OUT ELEVATION = 647.9 FT.
(ELEVATION CORRESPONDING TO 22 CY/YD x
2.72 DRAINED AREA)
8) IS THE LENGTH-WIDTH RATIO 2:1 OR GREATER?
X YES NO
9) IF "NO", THE LENGTH OF FLOW MUST BE INCREASED. CHOOSE THE METHOD TO BE USED:
___ BAFFLES (TYPE OF BAFFLE:_____)
___ OTHER

PIPE DIAMETER..... 24"
FLOW RATE (cfs)..... 2.76
VELOCITY (fps)..... 1.40
TAILWATER CONDITION..... MIN.
APRON LENGTH (LA)..... 12.5'
WIDTH AT THE HEADWALL (W1)..... 6
DOWNSTREAM WIDTH (W2)..... 18.5'
AVERAGE STONE DIAMETER (D_{50})..... (0.4')
STONE DEPTH (D)..... 1.0'

PIPE DIAMETER..... 36"
FLOW RATE (cfs)..... 13.99
VELOCITY (fps)..... 6.16
TAILWATER CONDITION..... MIN.
APRON LENGTH (LA)..... 19.5'
WIDTH AT THE HEADWALL (W1)..... 9'
DOWNSTREAM WIDTH (W2)..... 22.5'
AVERAGE STONE DIAMETER (D_{50})..... (0.6')
STONE DEPTH (D)..... 1.0'

PIPE DIAMETER..... 30"
FLOW RATE (cfs)..... 24.83
VELOCITY (fps)..... 10.02
TAILWATER CONDITION..... MIN.
APRON LENGTH (LA)..... 14.25'
WIDTH AT THE HEADWALL (W1)..... 7.5'
DOWNSTREAM WIDTH (W2)..... 16.75'
AVERAGE STONE DIAMETER (D_{50})..... (0.6')
STONE DEPTH (D)..... 1.0'

Ds3	Ds4
Du	

ALL DISTURBED AREAS

MULCH BERM BETWEEN SILT FENCE START HERE

MULCH BERM BETWEEN SILT FENCE END HERE

LIMITS OF DISTURBANCE 3.08 AC

FIRE STATION 23
11,864 SF
FFE: LEVEL 1 - 660'
LEVEL 2 - 675.33'

STORAGE BUILDING 1624 SF FFE: 660.0

DETENTION POND
BOTTOM OF POND: 641.00'
TOP OF BERM: 654.00'
100 YR PONDING: 650.70'

TOP OF 10' DIKE ELEV: 654

APPROX. LIMITS OF THE FLOODHAZARD AREA

APPROX. PIPE DIR. THROUGH LANDFILL

NPDES SAMPLING

CONCRETE WASHOUT

TRASH & SANITARY FACILITIES

FIRE TOWER

CARTER WAY

VARIABLE R/W GEORGIA HIGHWAY 36
(DB 664 PG 98 & 671 PG 67)

OVERHEAD POWER EASEMENT (PB 43, PG 12)

25' STREAM BUFFER

ZONED: NR-2
TMP: C064000000011E00
SELIG ENTERPRISES, INC.
DB 3334, PG 50 / PB 48, PG 98

ZONED: CM
TMP: C083000000001000
SELIG ENTERPRISES, INC.
DB 1587, PG 571 / PB 43, PG 12

EX. OCB
E to C/MH=662.70

EX. SMH
TOP=659.42
E=n=652.22
E=out=652.05

EX. SMH
TOP=651.29
E=n=641.49
E=out=639.67

EX. SMH
TOP=682.10
IE=n=666.41
IE=out=666.26

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
SCALE: 1" = 30'

GA STATE PLANE WEST

REFER TO SHEET C-1.1 AND C-6.1 FOR EROSION, SEDIMENTATION, AND POLLUTION CONTROL NOTES

THE PRIMARY PERMITTEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE PLAN TO CONDUCT INSPECTIONS DURING THE INTERMEDIATE GRADING AND DRAINAGE BMP PHASE AND DURING THE FINAL BMP PHASE.

NOTE: WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

NOTE: SILT FENCE J-HOOKS (SEE DETAIL) SHALL BE INSTALLED WHERE NECESSARY TO INCREASE PONDING, PREVENT SEDIMENT FROM ESCAPING AROUND SILT FENCE ENDS AND DECREASE THE LINEAR LENGTH OF SILT FENCE INSTALLATION INTO SMALLER SEGMENTS. J-HOOKS ARE NOT TO BE USED IN STREAMS, CHANNELS, DRAINS OR OTHER AREAS OF CONCENTRATED FLOW. J-HOOKS SHALL BE INSTALLED AS FOLLOWS:

TYPICAL J HOOK SPACING		
SLOPE PERCENT	TYPE OF SILT FENCE	MIN. SPACING (FT)
1%-2%	TYPE A	100'+/-
2%-3%	TYPE A	50'+/-
3%-4%	TYPE C	50'+/-
4%-5%	TYPE C	25'+/-

Maintenance of all soil erosion and sedimentation control measures and practices, whether temporary or permanent, shall be at all times the responsibility of the property owner.

GSWCC EROSION CONTROL NOTES:

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.

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.

Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.

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.

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
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EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON,
GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

JASON P. BROWN
LEVEL II CERTIFIED DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA811 www.Georgia811.com
Contact 811 before you dig

Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including field verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not. Abandonment, relocation, etc. of utilities shall be coordinated with the respective utility company.

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Professional Seal
GEORGIA REGISTERED NO. PE024880 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23
9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title
FINAL EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN

Sheet Number
C-6.4

Ds1

GSWCC 2016 Edition

REQUIREMENT FOR REGULATORY COMPLIANCE

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 6 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 6 months.

If any area will remain undisturbed for greater than 6 months, permanent vegetative techniques shall be employed. Refer to **Ds2-Disturbed Area Stabilization (With Temporary Seeding)**, **Ds3 - Disturbed Area Stabilization (With Permanent Seeding)**, and **Dd4 - Disturbed Area Stabilization (With Sodding)**.

SPECIFICATIONS (Mulching Without Seeding)

This standard applies to graded 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 compacted soil to a minimum depth of 3".

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" 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". Organic material from the clearing stage of development should remain on site, be chopped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and re-used.

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 straw mulch shall be applied uniformly by hand or by mechanical equipment.
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. 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" or more in diameter and 8" to 12" 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.
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.

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) - (Ds1)

Ds2

GSWCC 2016 Edition

PLANT, PLANTING RATE, AND PLANTING DATE FOR TEMPORARY COVER OR COMPANION CROPS

Table 6-4.1 - Temporary Cover or Companion Cover Crops

SPECIES	BROADCAST RATES	RESOURCE AREA[2]	PLANTING DATES BY RESOURCE AREA (**SOLID** lines indicate optimum dates, **DOTTED** lines indicate permissible, but marginal dates)	REMARKS
BARLEY *Hordeum vulgare*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	3 bu. (144 lbs) / 3.3 lbs	M-L		14,000 seed per pound. Winter hardy. Use on productive soils.
in mixture	1 ½ bu. (24 lbs) / 0.6 lb	P C		
LESPEDEZA, ANNUAL *Lespedeza striata*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	40 lbs / 0.9 lb	M-L		200,000 seed per pound. May volunteer for several years. Use inoculant EL.
in mixture	10 lbs / 0.2 lb	P C		
LOVEGRASS, WEEPING *Eragrostis curvula*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	4 lbs / 0.1 lb	M-L		1,500,000 seed per pound. May last for several years, Mix with Serissa lespedeza.
in mixture	2 lbs / 0.05 lb	P C		
MILLET, BROWNTOP *Panicum fasciculatum*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	40 lbs / 0.9 lb	M-L		137,000 seed per pound. Quick dense cover. Will provide excessive competition in mixtures if seeded at right rate.
in mixture	10 lbs / 0.2 lb	P C		
MILLET, PEARL *Pennesetum glaucum*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	50 lbs / 1.1 lbs	M-L		88,000 seed per pound. Quick dense cover. May reach 3 in height. Not recommended for mixtures.
		P		
		C		
OATS *Avena sativa*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	4 bu. (128 lbs) / 2.9 lbs	M-L		13,000 seed per pound. Use on productive soils. Not as a winter hardy as rye or barley.
in mixture	1 bu. (32 lbs) / 0.7 lb	P C		
RYE *Secale cereale*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	3 bu. (168 lbs) / 3.9 lbs	M-L		18,000 seed per pound. Quick cover, Drought tolerant and winter hardy.
in mixture	½ bu. (28 lbs) / 0.6 lb	P C		
RYEGRASS, ANNUAL *Lolium temulentum*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	40 lbs / 0.9 lb	M-L		227,000 seed per pound. Dense cover, Very competitive and is not to be used in mixtures.
		P		
		C		
SUDANGRASS *Sorghum sudanese*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	60 lbs / 1.4 lbs	M-L		55,000 seed per pound. Good on droughty sites. Not recommended for mixtures.
		P		
		C		
TRITICALE *X-Triticosecale*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	3 bu. (144 lbs) / 3.3 lbs	C		Use on lower part of Southern Coastal Plain and in Atlantic Coastal Flatwoods only.
in mixture	½ bu. (24 lbs) / 0.6 lb			
WHEAT *Triticum aestivum*	Rate Per Acre[1] / Pure Live Seed Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	3 bu. (180 lbs) / 4.1 lbs	M-L		15,000 seed per pound. Winter hardy.
		P		
in mixture	½ bu. (30 lbs) / 0.7 lb	C		

[1] Temporary cover crops are very competitive and will crowd out perennials if seeded too heavily

[2] Reduce seeding rates by 50% when drilled.

[3] **M-L** represents the Mountain; Blue Ridge; and Ridges and Valleys MLRAs*; **P** represents the Southern Piedmont MLRA* **C** represents Southern Coastal Plain; Sand Hills, Black Lands; and Atlantic Coast Flatwoods MLRAs*

* Refer to Georgia Major Land Resource Areas Map

REQUIREMENT FOR REGULATORY COMPLIANCE

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Temporary grassing, instead of mulch, can be applied to tough graded areas that will be exposed for less than 6 months. If an area is expected to be undisturbed for longer than 6 months, permanent perennial vegetation shall be employed. If optimum planting conditions for temporary grassing is lacking, mulch can be used as a singular erosion control device for up to 6 months but it shall be applied at the appropriate depth, anchored, and have a continuous 90% cover or greater of the soil surface. Refer to specification **Ds1-Disturbed Area Stabilization (With Temporary Seeding).**

CONDITIONS

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. Note: Some species of temporary vegetation are not appropriate for companion crop plantings because of their potential to out-compete the desired species (e.g. annual ryegrass).

Contact NRCS or the local SWCD for more information.

SPECIFICATIONS

Grading and Shaping

Excessive water runoff 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 hand-seeding, 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 last 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 ¼" to ½" 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. See **Table 6-4.1 - Temporary Cover or Companion Cover Crops.**

Mulching

Temporary vegetation can, in most cases, be established without the use of mulch, provided there is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. 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.

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING) - (Ds2)

Ds3

GSWCC 2016 Edition

PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER[1]

Table 6-5.2- Permanent Cover Crops

SPECIES	BROADCAST RATES	RESOURCE AREA[2]	PLANTING DATES BY RESOURCE AREA (SOLID lines indicate optimum dates, DOTTED lines indicate permissible, but marginal dates)	REMARKS
BAHIA, PENSACOLA *Paspalum notatum*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
alone or with temporary cover	60 lbs / 1.4 lbs	P		198,000 seed per pound. Low growing, Sod forming. Slow to establish. Plant with a companion crop. Will spread into Bermuda pastures and lawns. Mix with Serissa lespedeza or weeping lovegrass.
with other perennials	30 lbs / 0.7 lb	C		
BAHIA, WILMINGTON *Paspalum notatum*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.	M-L		198,000 seed per pound. Low growing, Sod forming. Slow to establish. Plant with a companion crop. Will spread into Bermuda pastures and lawns. Mix with Serissa lespedeza or weeping lovegrass.
alone or with temporary cover	60 lbs / 1.4 lbs	P		
with other perennials	30 lbs / 0.7 lb	C		
BERMUDA, COMMON *Cynodon dactylon*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
Hulled seed alone	10 lbs / 0.2 lb	P		1,787,000 seed per pound. Quick cover. Low growing and sod forming. Full sun. Good for athletic fields.
with other perennials	6 lbs / 0.1 lb	C		
BERMUDA, COMMON *Cynodon dactylon*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
Unhulled seed with temporary cover	10 lbs / 0.2 lb	P		Plant with winter annuals.
with other perennials	6 lbs / 0.1 lb	C		Plant with Tall Fescue
BERMUDA SPRIG *Cynodon dactylon*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
Coastal, Common, Midland, or TifHi 44	40 sq.ft., 0.9 cu. ft., or sod plugs 3" x3"	M-L		Cubic foot = approx. 800 sprigs. A bushel contains 1.25 cubic feet of sprigs. Plant 400 sprigs per sq.ft.
Coastal, Common, or Tift 44		P		
Tift 78		C		Southern Coastal Plain only
CENTIPEDE *Eremochloa ophiuroides*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
Block sod only		P		Drought tolerant. Full sun or partial shade. Effective adjacent to concrete curbs. Will not withstand foot traffic. Irrigation is needed until fully established. Not tolerant to salt. Not for use on Coastal Plain soils.
		C		
CROWNVETCH *Coronilla varia*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
with winter annuals or cool season grasses	15 lbs	M-L		160,000 seed per pound. Dense growth. Drought tolerant and fire resistant. Attractive rose, pink and white blossoms during early summer. Mix with 20 lbs of Tall fescue or 10 lbs of rye. Inoculate seed with EL inoculant. Use from North Alabama to Virginia.
	0.3 lb	P		
		C		
FESCUE, TALL *Festuca arundinacea*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	50 lbs	M-L		227,000 seed per pound. Use alone only on better soils. Mix with perennial lespedeza or Crownvetch. Not to be used in spring Mixtures with fall plantings. Not for heavy use areas or athletic fields.
	1.1 lbs	P		
with other perennials	30 lbs	C		
LESPEDEZA SERICEA *Lespedeza cuneata*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
scarified	60 lbs	M-L		330,000 seed per pound. Inoculate seed with EL inoculant.
	1.4 lbs	P		
		C		
unscarified	75 lbs	M-L		Mix with Tall fescue or winter annuals.
	1.7 lbs	P		
		C		
seed-bearing hay	3 tons	M-L		Cut when seed mixture is mature, but before, it shatters. Add Tall fescue or winter annuals.
	1338 lbs	P		
		C		
LESPEDEZA *Ambro virgata Lespedeza virgata* DC or *Appalow Lespedeza cuneata* (Dumont) G. Don)	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
scarified	60 lbs	M-L		330,000 seed per pound. Height of growth is 18"-24". Advantageous in shallow areas. Spreads/age growth. Has growth habit like common lespedeza. Mix with weeping lovegrass, common lespedeza, or Tall fescue. Tetra 2x3 used to become established in shallow areas. Inoculate seed with EL inoculant.
	1.4 lbs	P		
		C		
unscarified	75 lbs	M-L		
	1.7 lbs	P		
		C		
LESPEDEZA, SHRUB *Lespedeza bicolor/ Lespedeza thunbergii*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
plants	3'x3'	M-L		Provide wildlife food and cover.
		P		
		C		
LOVEGRASS, WEEPING *Eragrostis curvula*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	4 lbs	M-L		1,500,000 seed per pound. Quick cover. Drought tolerant. Grows well with Serissa lespedeza on roadcuts.
with other perennials	2 lbs	P		
	0.05 lb	C		
MAIDENCANE *Panicum hemitomon*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
sprigs	2'x3' spacing	ALL		For very wet sites, May clog channels. May suffer from foot traffic. Use along river banks and shorelines.
PANICGRASS, ATLANTIC COASTAL *Panicum amarum var amarulum*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
	20 lbs	P		Grows well in coastal sand dunes, dune areas, and gravel pits. Provides better cover for wildlife. Mix with Serissa lespedeza except on sand dunes.
	0.5 lb	C		
REED CANARY GRASS *Phalaris arundinacea*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	50 lbs	M-L		Grows similar to Tall fescue
with other perennials	1.1 lbs	P		
	0.7 lb	C		
SUNFLOWER, 'AZTEC MAXIMILIAN' *Helianthus maximiliani*	Rate Per Acre / Pure Live Seed[3] Per 1000 sq.ft.		J F M A M J J A S O N D	
alone	10 lbs	M-L		227,000 seed per pound. Mix with Weeping lovegrass or other low-growing grasses or legumes.
with other perennials	0.2 lb	P		
		C		

[1] Reduce seeding rates by 50% when drilled

[2] PLS is an abbreviation for Pure Live Seed. Refer to Section V.E. of these specifications.

[3] **M-L** represents the Mountain; Blue Ridge, and Ridges and Valleys MLRAs*; **P** represents the Southern Piedmont MLRA* **C** represents Southern Coastal Plain; Sand Hills, Black Lands; and Atlantic Coast Flatwoods MLRAs*

* Refer to Georgia Major Land Resource Areas Map

REQUIREMENT FOR REGULATORY COMPLIANCE

This practice shall be applied immediately to rough graded areas that will be undisturbed for longer than 6 months. This practice or sodding shall be applied immediately to all areas at final grade. Final Stabilization means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by the EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures.

Permanent vegetation shall consist of, planted trees, shrubs, perennial vines, or a crop of perennial vegetation appropriate for the region, such that within the growing season a 70% coverage by perennial vegetation shall be achieved. Final stabilization includes applications to accomplish stabilization for each phase of construction. For linear construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use. Until this standard is satisfied and permanent control measures and facilities are operational, interim stabilization measures and temporary erosion and sedimentation control measures shall not be removed.

CONDITIONS

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

PLANNING CONSIDERATIONS

1. Use conventional planting methods where possible.
2. When mixed plantings are done during marginal planting periods, companion crops shall be used.
3. No-till planting is effective when planting is done following a summer or winter annual cover crop, Sericea lespedeza planted no-till into stands of rye is an excellent procedure.
4. Block sod provides immediate cover, it is especially effective in controlling erosion adjacent to concrete flumes and other structures. Refer to Specification **Dd-Disturbed Area Stabilization (With Sodding).**
5. Irrigation should be used when the soil is dry or when summer plantings are done.
6. Low maintenance plants, as well as natives, should be used to ensure long-lasting erosion control.
7. Mowing should not be performed during the peak nesting season (May to September).
8. Wildlife plantings should be included in critical area plantings.

Wildlife Plantings

Commercially available plants beneficial to wildlife species include the following:

Mast Bearing Trees

Beech, Black Cherry, Blackgum, Chestnut, Chinkapin, Hackberry, Hickory, Honey Locust, Native Oak, Persimmon, Sawtooth Oak and Sweetgum.

Fruit trees that produce nuts or fruits are favored by many game species. Hickory provides nuts used mainly by squirrels and bear.

Shrubs and Small Trees

Blueberry, Bicolor Lespedeza, Crabapple, Dogwood, Huckleberry or Native Blueberry, Mountain Laurel, Native Holly, Red Cedar, Red Mulberry, Sumac, Wax Myrtle, Wild Plum and Blackberry.

– *Plant in patches without tall trees to develop stable shrub communities.* All produce fruits used by many kinds of wildlife, except for bicolored lespedeza that produces seeds used by quail and songbirds.

Grasses, Legumes, Vines and Temporary Cover

Bahiagrass, Bermudagrass, Grass-Legume mixtures, Partridge Pea, Annual Lespedeza, Orchardgrass (for mountains), Browntop Millet (for temporary cover), and Native grapes.

– Provides herbaceous cover in clearings for a game bird brood-rearing habitat. Appropriate legumes such as vetches, clovers, and lespedezas may be mixed with grass, but they may die out after a few years.

CONSTRUCTION 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 dozed to angles 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.

Lime and Fertilizer Rates and Analysis

Agricultural lime is required at the rate of 1-2 tons per acre unless soil tests indicate otherwise. Graded areas require lime application. If lime is applied within 6 months of planting permanent perennial vegetation, additional lime is not required. Agricultural lime shall be within the specifications of the GA Department of Agriculture. Lime spread by conventional equipment shall be ground limestone. Ground limestone is fabric or sack material may be used but not to be less than 50% of the material will pass through a 10-mesh sieve, not less than 35% will pass through a 30-mesh sieve and not less than 20% will pass through a 100-mesh sieve. Fast-acting lime spread by hydraulic seeding equipment shall be finely ground limestone, quicklime, or hydrated lime. Lime may be omitted from the mixture if the soil pH is adequate. Fertilizer shall be a soluble or colloidal mixture containing not less than 50% of the nitrogen from a natural organic source. Fertilizer shall be applied at a minimum rate of 500 lbs per acre (11.5 lbs per 1000 sq.ft.) of 10-10-10 or equivalent. Fertilizer rates are listed in **Table 6-5.1**. Agricultural lime is generally not required where only trees are planted. Initial fertilization, nitrogen, topdressing, and maintenance fertilizer requirements for each species or combination of species are listed in **Table 6-5.1.**

Lime and Fertilizer Application

When hydraulic seeding equipment is used, the initial fertilizer shall be mixed with seed, inoculant (if needed), and wood cellulose or wood pulp fiber mulch and applied in a slurry. The inoculant, if needed, shall be mixed with the seed prior to being placed into the hydraulic seeder. The slurry mixture will be agitated sufficiently to keep the ingredients thoroughly mixed. The mixture will be spread uniformly over the area within one hour after being placed in the hydroseeder. Finely ground limestone can be applied in the mulch slurry in combination with the lime dressing. When conventional planting is to be done, the initial fertilizer shall be applied uniformly on the surface of the following ways:

1. Apply before last preparation so that it will be mixed with the soil during seedbed preparation or,
2. Apply before land preparation so that it will be mixed with the soil during seedbed preparation or, Work into the soil sized to fit the holes, distribute in furrows, 3. Broadcast after seeding operations are completed, pitted or trenched, 4. A fertilizer pellet shall be placed in each hill or hole.

Seeding

Select 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 seeders (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed ¼" to ½" 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. See **Table 6-4.1 - Temporary Cover or Companion Cover Crops.**

Mulching

Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting a mulch, consider the mulch's functional longevity, vegetation establishment enhancement, and erosion control effectiveness. 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 2.25 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 lbs per acre. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. 1,000 lbs 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. Rice straw may be used in coastal areas at the rate of 2 tons per acre. Dry straw or dry hay shall be applied at 3 tons per acre.
5. Small grain straw (oat, barley, or wheat) applied at a thickness of 2" 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, 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 GA 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 metering and aid in uniform application during seeding.

Anchoring 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. 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" or more in diameter and 8" to 12" 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.
2. Synthetic tackifiers, binders or hydraulic mulch specifically designed to tack straw, 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. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be verified nontoxic through EPA 2021.0 testing. Refer to **Tackifiers-Tac**
3. Rye or wheat can be included with Fall and Winter plantings to stabilize the mulch. They shall be applied at a rate of ½ to 2 bushel per acre.
4. A netting, mesh or netting with mesh no larger than ½" by ½" 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.

Bedding Material

Mulch is used as bedding material to conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bare areas on lawns.

Material	Depth
Straw	4" to 6"
Grass Hay	4" to 6"
Pine needles	3" to 5"
Wood waste	4" to 6"

Irrigation

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

Topdressing

Topdressing will be applied on all temporary and permanent (perennial) species planted alone or in mixtures with other species. Recommended rates of application are listed in **Table 6-5.1.**

Second Year and Maintenance Fertilization

Second year fertilizer rates and maintenance fertilizer rates are listed in **Table 6-5.1.**

Lime Maintenance Application

Apply 1ton/1000 sq.ft agricultural lime every 4 to 6 years or as indicated by soil tests. Soil tests can be conducted to determine more accurate requirements, if desired.

Use and Management

Mow Serissa Lespedeza only after frost to ensure that the seeds are mature. Mow between November and March. Bermudagrass, Bahiagrass and Tall Fescue may be mowed as desired. Maintain at least 2" of top growth under any use and management. Moderate use of top growth is beneficial after establishment. Exclude traffic until plants are well established. Because of quail nesting season, mowing should not take place between May and September.

Table 6-5.1, Fertilizer Requirements

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. Cool Season Grasses	First	6-12-12	1500 lbs./ac.	50-100 lbs./ac. 1/
	Second	6-12-12	1000 lbs./ac.	
	Maintenance	10-10-10	400 lbs./ac.	30 lbs./ac.
2. Cool Season Grasses and Legumes	First	6-12-12	1500 lbs./ac.	0-50 lbs./ac. 1/
	Second	0-10-10	1000 lbs./ac.	—
	Maintenance	0-10-10	1000 lbs./ac.	—
3. Ground Covers	First	10-10-10	1300 lbs./ac. 3/	—
	Second	10-10-10	1300 lbs./ac. 3/	—
	Maintenance	10-10-10	1000 lbs./ac.	—
4. Pine Seedlings	First	20-10-5	1 gal. per seedling placed in the planting hole	—
5. Shrub Lespedeza	First	0-10-10	700 lbs./ac.	—
	Maintenance	0-10-10	700 lbs./ac. 4/	—
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac. 5/
7. Warm Season Grasses	First	6-12-12	1500 lbs./ac.	50-100 lbs./ac. 2/6/
	Second	6-12-12	800 lbs./ac.	50-100 lbs./ac. 2/
	Maintenance	10-10-10	400 lbs./ac.	30 lbs./ac.
8. Warm Season Grasses & Lespedeza	First	6-12-12	1500 lbs./ac.	50 lbs./ac./6/
	Second	0-10-10	1000 lbs./ac.	—
	Maintenance	0-10-10	400 lbs./ac.	—

1/ Apply in spring following seeding.
2/ Apply in split applications when high rates are used.
3/ Apply in 3 split applications.
4/ Apply when plants are pruned.
5/ Apply to grass species only.
6/ Apply when plants grow to a height of 3" to 4".

Table 6-5.3, Durable Shrubs and Ground Covers for Permanent Cover

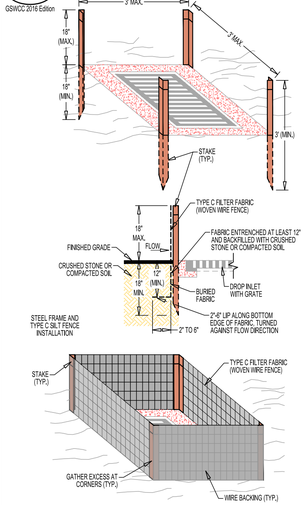
Ground covers include a wide range of low-growing plants planted together in considerable numbers to cover large areas of the landscape. Ground covers grow slower than grasses. Weeds are likely to compete, especially the first year. Maintenance is needed to insure survival. These ground covers will not be used unless proper maintenance is planned. Maintain mulch at 3" thickness until plants provide adequate cover. Fall planting is encouraged because the need for constant watering is reduced and plants have time to establish new roots before hot weather.

COMMON NAME	SCIENTIFIC NAME	MATURE HEIGHT	PLANT SPACING	COMMENT
Abelia	*Abelia grandiflora*	3'-4'	5'	Also a prostrate form 7' high. Sun, semi-shade, Semi evergreen.
Carolina Yellow Jessamine	*Gelsemium sempervirens*	low	3'	Vine, Yellow, trumpet-like flowers, Hardy, one of best native vines, Evergreen. Native to GA
Carpet Blue	*Ajuga reptans*	2"-4"	3'	Needs good drainage, partial shade. Blue or white flowers, Evergreen.
Beerberry Cotoneaster	Cotoneaster *dammeri*	2'-4'	5'	White flowers, red fruit, Sun, Evergreen.
Ground Cover Cotoneaster	Cotoneaster *adpressus 'Praecox'*	1'-2'	5'	White flowers, red fruit, Sun, Evergreen.
Rock Cotoneaster	Cotoneaster *horizontalis*	1'-2'	5'	Semi-Evergreen. Sun.
Virginia Creeper	Parthenocissus *quinquefolia*	low	3'	Red in fall, Vine, Deciduous, Native to GA.
Daylily	Hemerocallis spp.	3'-4'	3'	Many flower colors. Full sun, Very hardy.
Compacta Holly	*Ilex cornuta 'Compacta'*	3'-4'	5'	Sun, Semi-shade.
Chinese Holly	*Ilex cornuta 'Rotunda'*	3'-4'	5'	Very durable, Sun, Semi-shade.
Dwarf Burford Holly	*Ilex burfordii 'Nana'*	5'-8'	8'	" "
Dwarf Yaupon Holly	*Ilex vomitoria 'Nana'*	3'-4'	3'	Very durable, Sun, Semi-shade.
Repandens Holly	*Ilex cornuta 'Repandens'*	2'-3'	5'	Sun, Semi-shade.
Andorra Juniper	Juniperus *horizontalis 'Plumosa compacta'*	2'-3'	5'	Excellent for slopes. Sun.
Andorra Compacta Juniper	Juniperus *horizontalis 'Plumosa compacta'*	1'-2'	5'	More compact than Andorra.
Andorra Compacta Juniper	Juniperus *horizontalis 'Plumosa Compacta'*	1'-2'	5'	More compact than Andorra.
Blue Chip Juniper	Juniperus *horizontalis 'Blue Chip'*	8"-10"	4'	" "
Blue Rug Juniper	Juniperus *horizontalis (Wilton)*	4"-6"	3'	Very low. Sun.
Parsons Juniper	Juniperus *davurica 'Expansa' (Squamata parsoni)*	18"-24"	5'	One of the best, good winter cover.
Pfitzer Juniper	Juniperus *chinensis 'Pfitzerana'*	6'-8'	6'	Needs room.
Prince of Wales Juniper	Juniperus *horizontalis 'Prince of Wales'*	6"-10"	4'	Feathery appearance.
Sargent Juniper	Juniperus *chinensis 'Sargentii'*	1'-2'	5'	Full sun, Needs good drainage, Good winter color,
Shore Juniper	Juniperus *conferta*	2'-3'	5'	Emerald Sea or Blue Pacific cultivars are good.
Linope	*Liriope muscari*	8"-10"	3'	" "
Creeping Linope	*Liriope spicata*	10"-12"	1'	Spreads by runners.
Big Leaf Periwinkle	*Vinca major*	12"-18"	4'	Lilac flowers in spring, Semi-shade.
Common Periwinkle	*Vinca minor*	5"-6"	4'	Lavender-blue flowers in spring, Semi-shade.
Cherokee Rose	*Rosa laevigata*	2'	5'	Rampant grower, Not for restricted spaces, State flower.
Memoria Rose	*Rosa wauchuriana*	2'	5'	Rampant grower,
St. Johnswort	Hypericum *calycinum*	8"-12"	3'	Semi-shade.
Anthony Waterer Spirea	Spirea *bumalda*	3'-4'	5'	Sun.
Thunberg Spirea	Spirea *thunbergii*	3'-4'	5'	Sun.

Table 6-5.4, Trees for Erosion Control

SITE	SOIL MATERIAL	COMMON SOILS	PLANTING TREE SPECIES	SPACING	PLANTING DATES[2]
Borrow areas, graded areas, and spoil material	Sandy	Lakeland, Troup	Loblolly Pine (*Pinus taeda*)	2	M-L, P 1/1- 3/15 C 12/1- 3/1
			Longleaf Pine (*Pinus palustris*)		

Sd2-F
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NOTE

1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAX. OF 3 APART).
3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.

Figure 6-28.1 - Fabric and Supporting Frame For Inlet Projection

PURPOSE
To prevent sediment from entering a storm drainage systems prior to permanent stabilization of the disturbed area draining to the inlet.

CONDITIONS
All storm drain drop inlets that receive runoff from disturbed areas.

DESIGN CRITERIA
Through testing there are 2 different categories (high retention and high flow) supported. In areas where BMPs are being used on paved surfaces, or safety is a concern, the potentially negative effects of ponding should be taken into account. In such cases, a high flow BMP is preferred. On unpaved areas where ponding will not cause a safety hazard, high retention shall be taken into account. If high retention is not used in this situation a rationale shall be given on the plan and an unpaved application should apply. Sediment traps must be self-draining unless they are otherwise protected in an approved fashion that will not present a safety hazard. The drainage area entering the inlet sediment trap shall be no greater than 1 acre. If runoff may bypass the protected inlet, a temporary dike should be constructed on the down slope side of the structure. Also, a stone filter ring may be used on the up slope side of the inlet to slow runoff and filter larger soil particles. **Refer to FI-Stone Filter Ring.**

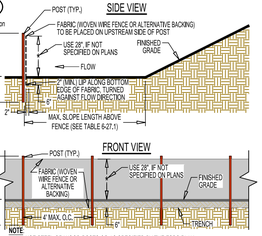
CONSTRUCTION SPECIFICATIONS
Filter Fabric with Supporting Frame
This method of inlet protection is applicable where the inlet drains a relatively flat area (slope no greater than 5%) and shall not apply to inlets receiving concentrated flows, such as in street or highway medians. As shown in Figure 6-28.1, Type S silt fence supported by steel posts should be used. The stakes shall be spaced evenly around the perimeter of the inlet a maximum of 3' apart, and securely driven into the ground, approximately 18" deep. The fabric shall be 36" tall and entrenched 12" and backfilled with crushed stone or compacted soil. Fabric and wire shall be securely fastened to the posts, and fabric ends must be overlapped a minimum of 18" or wrapped together around a post to provide a continuous fabric barrier around the inlet.

MAINTENANCE
The trap shall be inspected daily and after each rain, and repairs made as needed. Sediment shall be removed when the sediment has accumulated to one-half the height of the trap. Sediment shall be removed from curb inlet protection immediately. For excavated inlet sediment traps, sediment shall be removed when one-half of the sediment storage capacity has been lost to sediment accumulation. Sod inlet protection shall be maintained as specified in Ds4 - Disturbed Area Stabilization (With Sodding). Sediment shall not be washed into the inlet. It shall be removed from the sediment trap, disposed of and stabilized so that it will not enter the inlet again. When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed, and either salvaged or disposed of properly. The disturbed area shall be brought to proper grade, then smoothed and compacted. Appropriately stabilize all disturbed areas around the inlet.

INLET SEDIMENT TRAP (FILTER FABRIC W/ SUPPORTING FRAME) - (Sd2-F)

N.T.S.

Sd1-S
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NOTE

1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE ESPC PLAN.
2. HEIGHT (▼) IS TO BE SHOWN ON THE ESPC PLAN. (USE 28", IF NOT SPECIFIED ON PLANS)

Figure 6-27.2

PURPOSE
To minimize and prevent sediment carried by sheet flow from leaving the site and entering natural drainage ways or storm drainage systems by slowing storm water runoff and causing the deposition and/or filtration of sediment at the structure. The barriers retain the soil on the disturbed land until the activities disturbing the land are completed and vegetation is established.

CONDITIONS
Barriers should be installed where runoff can be stored behind the barrier without damaging the submerged area behind the barrier or the structure itself. Sediment barriers shall not be installed across streams, ditches, waterways, or other concentrated flow areas.

DESIGN CRITERIA
Sediment barriers are designed to retain sediment transported by sheet flow from disturbed areas. It is important for the design professional to take into account the profile of the product for use on the site.

Sediment Barriers should also provide a rip-rap splash pad or other outlet protection device for any point where flow may overtop the sediment barrier. Ensure that the maximum height of the barrier at a protected, reinforced outlet does not exceed 1' and that the support spacing does not exceed 4'.

Where all runoff is to be stored behind the sediment barrier (where no storm water disposal system is present), maximum continuous slope length behind a sediment barrier shall not exceed those shown in Table 6-27.1. For longer slope lengths, slope interrupters must be used. The drainage area shall not exceed ¼ acre for every 100' of sediment barrier.

Table 6-27.1 Criteria for Sediment Barrier

Land Slope	Maximum Slope Length Above Fence
Percent	Feet
< 2	100
2 to 5	75
5 to 10	50
10 to 20	25
>20 *	15

*In areas where the slope is greater than 20%, a flat area length of 10' between the toe of slope to the barrier should be provided.

Placement
The type of sediment barrier dependents on whether the area is sensitive or non-sensitive. Sensitive areas can be defined as any area that needs additional protection. These areas include, but are not limited to, state waters, wetlands, or any area the design professional designates as sensitive. When using multiple types of sediment barriers on a site in a single run, the barriers must be overlapped 18" or as specified by the design professional. See Figure 6-27.5.

CONSTRUCTION SPECIFICATIONS
Sediment barriers being used as Type S shall have a support spacing of no greater than 4' on center, with each being driven into the ground a minimum of 18".

*As of January 1, 2016, in the existing Georgia Department of Transportation Qualified Products List #36 (QPL- 36), Type C will fall under sensitive applications and be classified as sensitive. Refer to Appendix A-2 and the Equivalent BMP List.

PRACTICE CLASSIFICATIONS
For silt fence Type C, refer to Table 6-27.4.

Type C Silt Fence
Type C fence is 36" wide with wire reinforcement or equivalent. The wire reinforcement is necessary because this fabric allows almost three times the flow rate as Type A silt fence. Type C silt fence shall be used where runoff flows or velocities are particularly high or where slopes exceed a vertical height of 10'. **Type C is classified as sensitive application.**

Installation
Sediment barriers should be installed along the contour. Temporary sediment barriers shall be installed according to the following specifications as shown on the plans or as directed by the design professional. For installation of sensitive barriers, see Figure 6-27.2 and 6-27.5.

Post installation shall start at the center of a low point (if applicable) with the remaining posts spaced no greater than 4' apart for Type S sediment barriers. For post size requirements, see Table 6-27.2. Fasteners for wood posts are listed in Table 6-27.3.

Static Slicing Method
The static slicing machine pulls a narrow blade through the ground to create a slit 12" deep, and simultaneously inserts the silt fence fabric into this slit behind the blade. The blade is designed to slightly disrupt soil upward next to the slit and to minimize horizontal compaction, thereby creating an optimum condition for compacting the soil vertically on both sides of the fabric. Compaction is achieved by rolling a tractor wheel along both sides of the slit in the ground 2 to 4 times to achieve nearly the same or greater compaction as the original undisturbed soil. This vertical compaction reduces the air spaces between soil particles, which minimizes infiltration. Without this compaction, infiltration can saturate the soil, and water may find a pathway under the fence. When a silt fence is holding back several tons of accumulated water and sediment, it needs to be supported by posts that are driven 18" into the soil. Driving in the posts and attaching the fabric to them completes the installation.

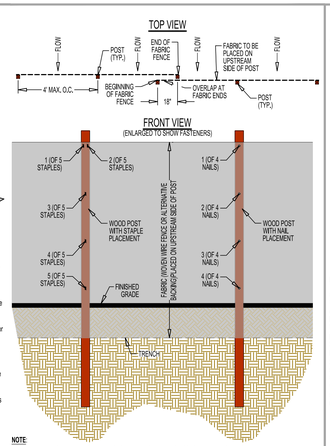
Trenching Method
Trenching machines have been used for over 25 years to dig a trench for burying part of the filter fabric underground. Usually the trench is about 2"-6" wide with a 6" excavation. Post setting and fabric installation often precede compaction, which make effective compaction more difficult to achieve. EPA supported an independent technology evaluation (ASCE 2001), which compared 3 progressively better variations of the trenching method with static slicing. The static slicing method performed better than 2 lower performance levels of the trenching method, and was as good as or better than the trenching method's highest performance level. The best trenching method typically required nearly triple the time and effort to achieve results comparable to the static slicing method.

Along all State Waters and other sensitive areas, 2 rows of Sensitive Area(s) Sediment Barrier (Type C Silt Fence) shall be used. The 2 rows of Sensitive Area(s) Sediment Barrier (Type C Silt Fence) shall be placed a minimum of 36" apart.

MAINTENANCE
Sediment shall be removed once it has accumulated to ½ the original height of the barrier. Sediment barriers shall be replaced whenever they have deteriorated to such an extent that the effectiveness of the product is reduced (approximately 6 months) or the height of the product is not maintaining 90% of its properly installed level. Temporary sediment barriers shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulated at the barrier shall be removed and properly disposed of before the barrier is removed.

SENSITIVE AREA(S) SEDIMENT BARRIER (TYPE C SILT FENCE) - (Sd1-S)

N.T.S.



NOTE

1. THE FABRIC AND WIRE SHALL BE SECURELY FASTENED TO POSTS AND FABRIC ENDS.
2. MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE CONTINUOUS FABRIC BARRIER.

Figure 6-27.5

Table 6-27.2 Post Size

Type	Min. Length	Type of Post	Size of Post
S	4'	Steel	1.15-1.25 lb./ ft. min
		Oak	2"x2"

Table 6-27.3 Fasteners for Wood Posts

Type	Gauge	Crown	Legs	Staples per Post
Wire Staples	17 min.	¾" wide	½" long	5 min.
Type	Gauge	Length	Button Heads	Nails per Post
Nails	14 min.	1"	¾"	4 min.

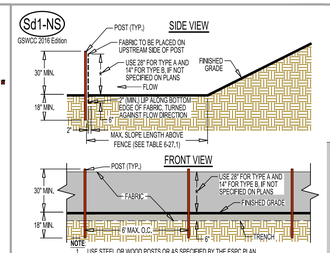
Note: Filter Fabric may also be attached to the post by wire, cords, and pockets.

Table 6-27.4

	Type C Fabric Fence
Tensile Strength (Lbs. Min.)[1] (ASTM D-4632)	Warp - 260 Fill - 180
Elongation (% Max.) (ASTM D-4632)	40
AOS (Apparent Opening Size) (Max. Sieve Size) (ASTM D-4751)	#30
Flow Rate (Gal/Min/Sq. Ft.) (GDT-87)	70
Ultraviolet Stability[2] (ASTM D-4632 after 300 hours weathering in accordance with ASTM D-4355)	80
Bursting Strength (PSI Min.) (ASTM D-3786 Diaphragm Bursting Strength Tester)	175
Minimum Fabric Width (Inches)	36

[1] Minimum roll average of five specimens.
[2] Percent of required initial minimum tensile strength.

Sd1-NS
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NOTE

1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE ESPC PLAN.
2. HEIGHT (▼) IS TO BE SHOWN ON THE ESPC PLAN. (USE 28", IF NOT SPECIFIED ON PLANS)

Figure 6-27.1

PURPOSE
To minimize and prevent sediment carried by sheet flow from leaving the site and entering natural drainage ways or storm drainage systems by slowing storm water runoff and causing the deposition and/or filtration of sediment at the structure. The barriers retain the soil on the disturbed land until the activities disturbing the land are completed and vegetation is established.

CONDITIONS
Barriers should be installed where runoff can be stored behind the barrier without damaging the submerged area behind the barrier or the structure itself. Sediment barriers shall not be installed across streams, ditches, waterways, or other concentrated flow areas.

DESIGN CRITERIA
Sediment barriers are designed to retain sediment transported by sheet flow from disturbed areas. It is important for the design professional to take into account the profile of the product for use on the site.

Sediment Barriers should also provide a rip-rap splash pad or other outlet protection device for any point where flow may overtop the sediment barrier. Ensure that the maximum height of the barrier at a protected, reinforced outlet does not exceed 1' and that the support spacing does not exceed 4'.

Where all runoff is to be stored behind the sediment barrier (where no storm water disposal system is present), maximum continuous slope length behind a sediment barrier shall not exceed those shown in Table 6-27.1. For longer slope lengths, slope interrupters must be used. The drainage area shall not exceed ¼ acre for every 100' of sediment barrier.

Table 6-27.1 Criteria for Sediment Barrier

Land Slope	Maximum Slope Length Above Fence
Percent	Feet
< 2	100
2 to 5	75
5 to 10	50
10 to 20	25
>20 *	15

*In areas where the slope is greater than 20%, a flat area length of 10' between the toe of slope to the barrier should be provided.

Placement
The type of sediment barrier dependents on whether the area is sensitive or non-sensitive. Sensitive areas can be defined as any area that needs additional protection. These areas include, but are not limited to, state waters, wetlands, or any area the design professional designates as sensitive. When using multiple types of sediment barriers on a site in a single run, the barriers must be overlapped 18" or as specified by the design professional. See Figure 6-27.5.

CONSTRUCTION SPECIFICATIONS
Sediment barriers being used as Type NS (Non-sensitive Areas *) shall have a support spacing of no greater than 6' on center, with each being driven into the ground a minimum of 18".

*As of January 1, 2016, in the existing Georgia Department of Transportation Qualified Products List #56 (QPL- 36), Type A or Type B will fall under non-sensitive applications and be classified as non-sensitive. Refer to Appendix A-2 and the Equivalent BMP List.

PRACTICE CLASSIFICATIONS
For silt fence Type A and Type B, refer to Table 6-27.4.

Type A Silt Fence
This 36" wide filter fabric shall be used on dewaterings where the life of the project is greater than or equal to 6 months. **Type A is classified as non-sensitive application.**

Type B Silt Fence
Though only 22" wide, this filter fabric allows the same flow rate as Type A silt fence, Type B silt fence shall be limited to use on minor projects, such as residential home sites or small commercial developments where permanent stabilization will be achieved in less than 6 months. **Type B is classified as non-sensitive application.**

Installation
Sediment barriers should be installed along the contour. Temporary sediment barriers shall be installed according to the following specifications as shown on the plans or as directed by the design professional. For installation of non-sensitive barriers, see Figure 6-27.1 and 6-27.5.

Post installation shall start at the center of a low point (if applicable) with the remaining posts spaced no greater than 6' apart for Type NS sediment barriers. For post size requirements, see Table 6-27.2. Fasteners for wood posts are listed in Table 6-27.3.

Static Slicing Method
The static slicing machine pulls a narrow blade through the ground to create a slit 12" deep, and simultaneously inserts the silt fence fabric into this slit behind the blade. The blade is designed to slightly disrupt soil upward next to the slit and to minimize horizontal compaction, thereby creating an optimum condition for compacting the soil vertically on both sides of the fabric. Compaction is achieved by rolling a tractor wheel along both sides of the slit in the ground 2 to 4 times to achieve nearly the same or greater compaction as the original undisturbed soil. This vertical compaction reduces the air spaces between soil particles, which minimizes infiltration. Without this compaction, infiltration can saturate the soil, and water may find a pathway under the fence. When a silt fence is holding back several tons of accumulated water and sediment, it needs to be supported by posts that are driven 18" into the soil. Driving in the posts and attaching the fabric to them completes the installation.

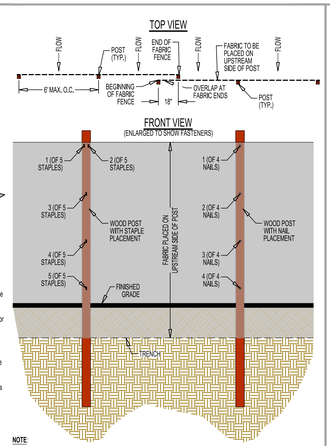
Trenching Method
Trenching machines have been used for over 25 years to dig a trench for burying part of the filter fabric underground. Usually the trench is about 2"-6" wide with a 6" excavation. Post setting and fabric installation often precede compaction, which make effective compaction more difficult to achieve. EPA supported an independent technology evaluation (ASCE 2001), which compared 3 progressively better variations of the trenching method with static slicing. The static slicing method performed better than 2 lower performance levels of the trenching method, and was as good as or better than the trenching method's highest performance level. The best trenching method typically required nearly triple the time and effort to achieve results comparable to the static slicing method.

Along all State Waters and other sensitive areas, 2 rows of Sensitive Area(s) Sediment Barrier (Type C Silt Fence) shall be used. The 2 rows of Sensitive Area(s) Sediment Barrier (Type C Silt Fence) shall be placed a minimum of 36" apart.

MAINTENANCE
Sediment shall be removed once it has accumulated to ½ the original height of the barrier. Sediment barriers shall be replaced whenever they have deteriorated to such an extent that the effectiveness of the product is reduced (approximately 6 months) or the height of the product is not maintaining 90% of its properly installed level. Temporary sediment barriers shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulated at the barrier shall be removed and properly disposed of before the barrier is removed.

NON-SENSITIVE AREA(S) SEDIMENT BARRIER (TYPE A AND TYPE B SILT FENCE) - (Sd1-NS)

N.T.S.



NOTE

1. THE FABRIC AND WIRE SHALL BE SECURELY FASTENED TO POSTS AND FABRIC ENDS.
2. MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE CONTINUOUS FABRIC BARRIER.

Figure 6-27.5

Table 6-27.2 Post Size

Type	Min. Length	Type of Post	Size of Post
NS	4'	Soft Wood	3" dia. or 2x4
		Oak	1.5" x 1.5"
		Steel	1.15lb./ft. min.

Table 6-27.3 Fasteners for Wood Posts

Type	Gauge	Crown	Legs	Staples per Post
Wire Staples	17 min.	¾" wide	½" long	5 min.
Type	Gauge	Length	Button Heads	Nails per Post
Nails	14 min.	1"	¾"	4 min.

Note: Filter Fabric may also be attached to the post by wire, cords, and pockets.

Table 6-27.4

	Type A Fabric Fence	Type B Fabric Fence
Tensile Strength (Lbs. Min.)[1] (ASTM D-4632)	Warp - 120 Fill - 100	Warp - 120 Fill - 100
Elongation (% Max.) (ASTM D-4632)	40	40
AOS (Apparent Opening Size) (Max. Sieve Size) (ASTM D-4751)	#30	#30
Flow Rate (Gal/Min/Sq. Ft.) (GDT-87)	25	25
Ultraviolet Stability[2] (ASTM D-4632 after 300 hours weathering in accordance with ASTM D-4355)	80	80
Bursting Strength (PSI Min.) (ASTM D-3786 Diaphragm Bursting Strength Tester)	175	175
Minimum Fabric Width (Inches)	36	22

[1] Minimum roll average of five specimens.
[2] Percent of required initial minimum tensile strength.

Tp
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DEFINITION
Stripping off the more fertile top soil, storing it, then spreading it over the disturbed area after completion of construction activities.

PURPOSE
To provide suitable soil medium for vegetative growth on areas where other measures will not produce or maintain a desirable stand.

CONDITIONS
The practice is recommended for sites of 2:1 or flatter slopes where:

1. The texture of the exposed subsoil or parent material is not suitable to produce adequate vegetative growth
2. The soil material is so shallow that the rooting zone is not deep enough to support plants with continuing supplies of moisture and food.
3. The soil to be vegetated contains material toxic to plant growth.

CONSTRUCTION SPECIFICATIONS

MATERIALS
Topsoil should be friable and loamy, free of debris, objectionable weeds, and stones and contain no toxic substances that may be harmful to plant growth. A pH range of 5.0-7.5 is acceptable. Soluble salts shall not exceed 500 ppm.

TESTING
Field exploration should be made to determine whether the quantity and quality of surface soil justifies stripping.

STRIPPING
Stripping should be confined to the immediate construction area.

A 4 to 6 inch stripping depth is common but may vary depending on the particular soil.

TOPSOIL pH
If the pH value is less than 6.0, lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoil containing soluble salts greater than 500 ppm shall not be used.

STOCKPILES
The location of topsoil stockpiles should not obstruct the natural drainage or cause off-site environmental damage.

STABILIZATION
Stockpiles shall be contained by sediment barriers to prevent sedimentation on adjacent areas. Stockpiles shall be stabilized in accordance with specifications **Ds1 and Ds2 - Disturbed Area Stabilization (with Mulching) and (with Temporary Grassing), respectively or Tac-Tackifers.**

SITE PREPARATION
(Where topsoil is to be added)

TOPSOILING
When topsoiling, maintain needed erosion control practices such as diversions, grade stabilization structures, berms, dikes, level spreaders, waterways, sediment basins, etc.

GRADING
Grades on the areas to be topsoiled that have been previously established shall be maintained.

LIMING
Soil tests should be used to determine the pH of the soil. Where the pH of the subsoil is 5.0 or less or composed of heavy days, agricultural limestone shall be spread at the rate of 100 pounds per 1,000 square feet. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the next paragraph.

Bonding - Use one of the following methods to insure bonding of topsoil and subsoil:

1. Tilling. After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or scarifying to a depth of at least 3 inches to permit bonding of the topsoil and subsoil.
2. Tracking. Passing a bulldozer over the entire surface are of the slope to leave horizontal depressions.

APPLYING TOPSOIL

1. Topsoil should be handled only when it is dry enough to work without damaging soil structure.
2. A uniform application of 5 inches (unsettled) is recommended, but may be adjusted at the discretion of the design professional.

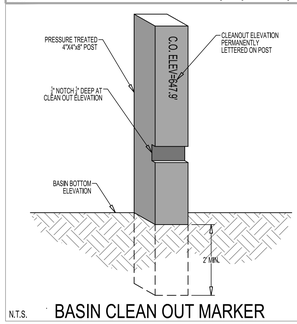
Figure 6-37.1 - Fabric and Supporting Frame For Inlet Projection

CUBIC YARDS OF TOPSOIL REQUIRED FOR APPLICATION TO VARIOUS DEPTHS

Depth (inches)	Per 1,000 SF	Per Acre
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806

TOPSOILING - (Tp)

N.T.S.



Cd-S
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A = TOE OF UPSTREAM CHECK DAM
B = TOP OF THE DOWNSTREAM CHECK DAM
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

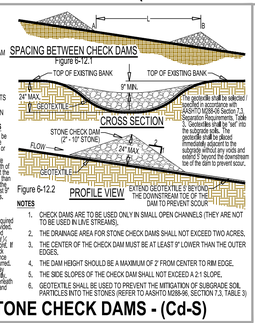


Figure 6-12.2

NOTES

1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9" LOWER THAN THE OUTER EDGES.
4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2' FROM CENTER TO RIM EDGE.
5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
6. GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-06, SECTION 7.3, TABLE 3)

CONSTRUCTION SPECS
Stone check dams should be constructed of graded size 2"-15" stone. Mechanical or hand placement shall be required to insure complete interlock of the stones. Care shall be taken so that the center of the dam is lower than the edges. The center of the check dam must be at least 9" lower than the outer edges.

MAINTENANCE
Periodic inspection and required maintenance must be provided. Sediment shall be removed when it reaches a depth of ½ original depth (height) of barrier. If ends is to be moved, check dams shall be removed once the area above the check has filled. Otherwise check dams may remain in place permanently. After removal, the area beneath the dam shall be seeded and mulched immediately.

STONE CHECK DAMS - (Cd-S)

N.T.S.

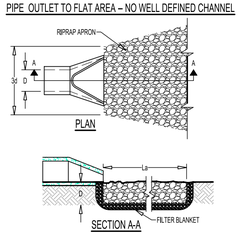
BASIN CLEAN OUT MARKER

N.T.S.

St

STORM DRAIN OUTLET PROTECTION (USING RIP-RAP)

PIPE OUTLET TO FLAT AREA – NO WELL DEFINED CHANNEL



PIPE OUTLET TO WELL DEFINED CHANNEL

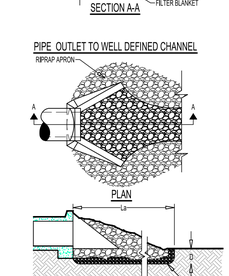


Figure 6-34.3 - Riprap Outlet Protection

NOTES:

1. La IS THE LENGTH OF THE RIP-RAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

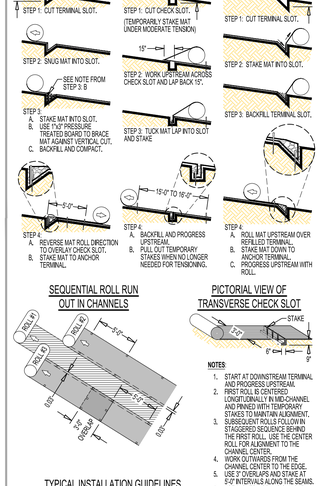
CONSTRUCTION SPECIFICATIONS

1. Ensure that the subgrade for the filter and rip-rap follows the required lines and grades shown in the plan. Compact any fill required in the subgrade to the density of the surrounding undisturbed material. Low areas in the subgrade or undisturbed soil may also be filled by increasing the rip-rap thickness.
2. The rip-rap and gravel filter must conform to the specified grading limits shown on the plans.
3. Geotextile must meet design requirements and be properly protected from punching or tearing during installation. Repair any damage by removing the rip-rap and placing another piece of filter fabric over the damaged area. All connecting joints should overlap a minimum of 1 ft. If the damage is extensive, replace the entire filter fabric.
4. Rip-rap may be placed by equipment, but take care to avoid damaging the filter.
5. The minimum thickness of the rip-rap should be 1.5 times the maximum stones diameter.
6. Construct the apron on zero grade with no overfall at the end. Make the top of the rip-rap at the downstream end level with the receiving area or slightly below it.
7. Ensure that the apron is properly aligned with the receiving stream and preferably straight throughout its length. If a curve is needed to fit site conditions, place it in the upper section of the apron.
8. Immediately after construction, stabilize all disturbed areas with vegetation.
9. Stone quality - Select stone for rip-rap from field stone or quarry stone. The stone should be hard, angular, and highly weather-resistant. The specific Gravity of the individual stones should be at least 2.5.
10. Filter - Install a filter to prevent soil movement through the openings in the rip-rap. The filter should consist of a graded gravel layer or a synthetic filter cloth.

MAINTENANCE
Inspect rip-rap outlet structures after heavy rains to see if any erosion around or below the rip-rap has taken place or if stones have been dislodged. Immediately make all needed repairs to prevent further damage.

Ss
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TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)



SEQUENTIAL ROLL RUN OUT IN CHANNELS

PICTORIAL VIEW OF TRANSVERSE CHECK SLOT

NOTES

1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
5. USE 3" OVERLAPS AND STAKE AT 5'-0" INTERVALS ALONG THE SEAMS.
6. USE 3" OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

TYPICAL INSTALLATION GUIDELINES FOR MATTING AND BLANKETS
(Figure 6-10.1)

CONDITIONS
Slope stabilization can be applied to flat areas or slopes where the erosion hazard is high and slope protection is needed during the establishment of vegetation.

PLANNING CONSIDERATIONS
Care must be taken to choose the type of slope stabilization product that is most appropriate for the specific needs of a project. Two general types of slope stabilization products are discussed within this specification.

Rolled Erosion Control Products (RECP)
A natural fiber blanket with single or double photodegradable or biodegradable nets.

Hydraulic Erosion Control Products (HECP)
HECP shall utilize straw, cotton, wood, or other natural based fibers held together by a soil binding agent that works to stabilize soil particles. Paper mulch should not be used for erosion control.

CRITERIA
Rolled Erosion Control Products (RECPs) and Hydraulic Erosion Control Products (HECPs):

- Installation and stapling of RECPs and application rates for HECPs shall conform to manufacturer's guidelines for application.
- Short-Term RECPs as a minimum shall be used to stabilize concentrated flow areas with a velocity less than 5ft/sec on slopes 3:1 or greater with a height of 10' or greater.

MATERIALS

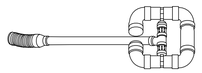
HECP
Hydraulic erosion control products shall be prepackaged from the manufacturer. Field mixing of

Sk

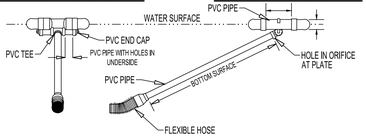
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NOTE:
SKIMMER CONFIGURATION SHOWN IS TYPICAL. THE DESIGNER/ENGINEER MAY SUBMIT AN ALTERNATE SKIMMER DETAIL FOR REVIEW.

SKIMMER PERSPECTIVE



SKIMMER FRONTAL SECTION VIEW



SKIMMER SIDE SECTION VIEW

Figure 6-31.4

TO BE SHOWN ON THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN
WHEN A FLOATING SURFACE SKIMMER IS USED, SHOW THE FOLLOWING INFORMATION ALONG WITH EACH SEDIMENT POND, TRAP OR BASIN BEING USED ON SITE

1. POND TRAP OR BASIN SIZE, LENGTH* (TOP AND BOTTOM), WIDTH* (TOP AND BOTTOM) AND DEPTH =
BASIN SIZE- 35, 632.98 CF

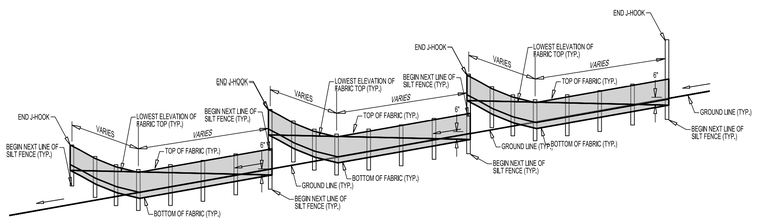
2. TIME TO DRAIN (HRS)= 72 HOURS

SKIMMER SIZE - 4"

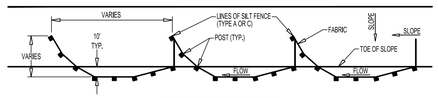
3. SKIMMER DIMENSIONS (ORIFICE AND HEAD SIZE) ORIFICE PERCENTAGE - 55%**

4. MANUFACTURER'S NAME FAIRCLOTH SKIMMER

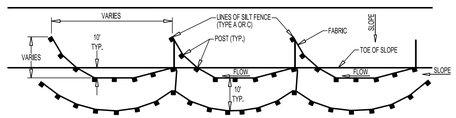
***FEET,**INCHES**



SECTION



SINGLE ROW SILT FENCE - PLAN



DOUBLE ROW SILT FENCE - PLAN

TYPICAL J HOOK SPACING		
SLOPE PERCENT	TYPE OF SILT FENCE	MIN. SPACING (FT)
1%-2%	TYPE A	100'+/-
2%-3%	TYPE A	50'+/-
3%-4%	TYPE C	50'+/-
4%-5%	TYPE C	25'+/-

NOTE:
1. IF THE GRADE IS BETWEEN 0 AND 1 PERCENT, THE SILT FENCE SHALL BE PLACED ACROSS THE DITCH.
2. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

J-HOOK DETAIL
N.T.S.

NOTE: CONTRACTOR SHALL PROVIDE PHYSICAL BARRIER SUCH AS PLASTIC SHEETING OR TEMPORARY ROOFS ON ALL BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER SUCH MATERIALS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND STORMWATER.

Fl-Co

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PURPOSE
To settle suspended sediment, heavy metals and hydrocarbons (TSS) in runoff water from construction sites for water clarification.

CONDITIONS
This standard applies to graded 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,

Water clarification and the removal of turbidity will usually require the addition of flocculants, polymers, polyacrylamides (PAM), chitosan and other chemicals that cause soil particles to bind together, become heavy and settle to the bottom of a sediment trap, sediment basin or become entrapped in other BMPs. This practice is not intended for application to surface waters of the state. It is intended for application within construction storm water ditches and storm drainages that feed into pre-constructed ponds or basins or other BMPs.

Federal and Local Laws
FlCo applications shall comply with all federal, local laws, rules or regulations governing FlCo. The operator is responsible for securing applicable required permits, if needed. This standard does not contain the text of the federal or local laws governing Flocculants/ Coagulants,

Planning Considerations
Since settling of flocculated soil particles requires very slow moving (still) water, chemicall additives should never be introduced into an outfall BMP where water leaves the property or enters state waters. In all cases where chemicall additives are used to reduce turbidity, it is essential to include a sediment basin or sediment trap unless using a "pump and treat" treatment system.

CRITERIA
Application rates shall conform to manufacturer's guidelines for application. Only anionic forms of Fl-Co shall be used. Following are examples of Fl-Co applications within construction storm water ditches or drainageways that feed into sediment basins or other BMPs.
- Fl-Co Bags or Socs that are installed directly in a ditch, pipe or culvert.
- Fl-Co treated ditch checks (i.e. fiber rolls, wattles, or compost logs inoculated or used in conjunction with Fl-Co).
- Granulated Fl-Co treated rock ditch checks.
- Ditch checks with attached Fl-Co Bags or Socs.
- Addition of granular Fl-Co directly into a ditch.
- Erosion control blankets and turf reinforcement mats that have been inoculated with a Fl-Co .
- "Pump and Treat" systems that use mechanical mixing with a chemical treatment of a Fl-Co.

Operation and Maintenance
Application rates shall conform to manufacturer's guidelines for application. Maintenance shall consist of reapplying Fl-Co via one of means above when turbidity levels are no longer met or the Fl-Co is used up. Bricks, tblocks, socks,logs and bags shall be maintained when sediment sediment accumulates on the products.

FLOCCULANTS COAGULANTS - (Fl-Co)

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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
311 N. Main St, Ste. 101, Unit C
P.O. Box 896 | Madison, GA 30650
P: 706.342.1104
www.georgiacivil.com

Professional Seal



Project Information

COVINGTON FIRE STATION #23
9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS	
DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

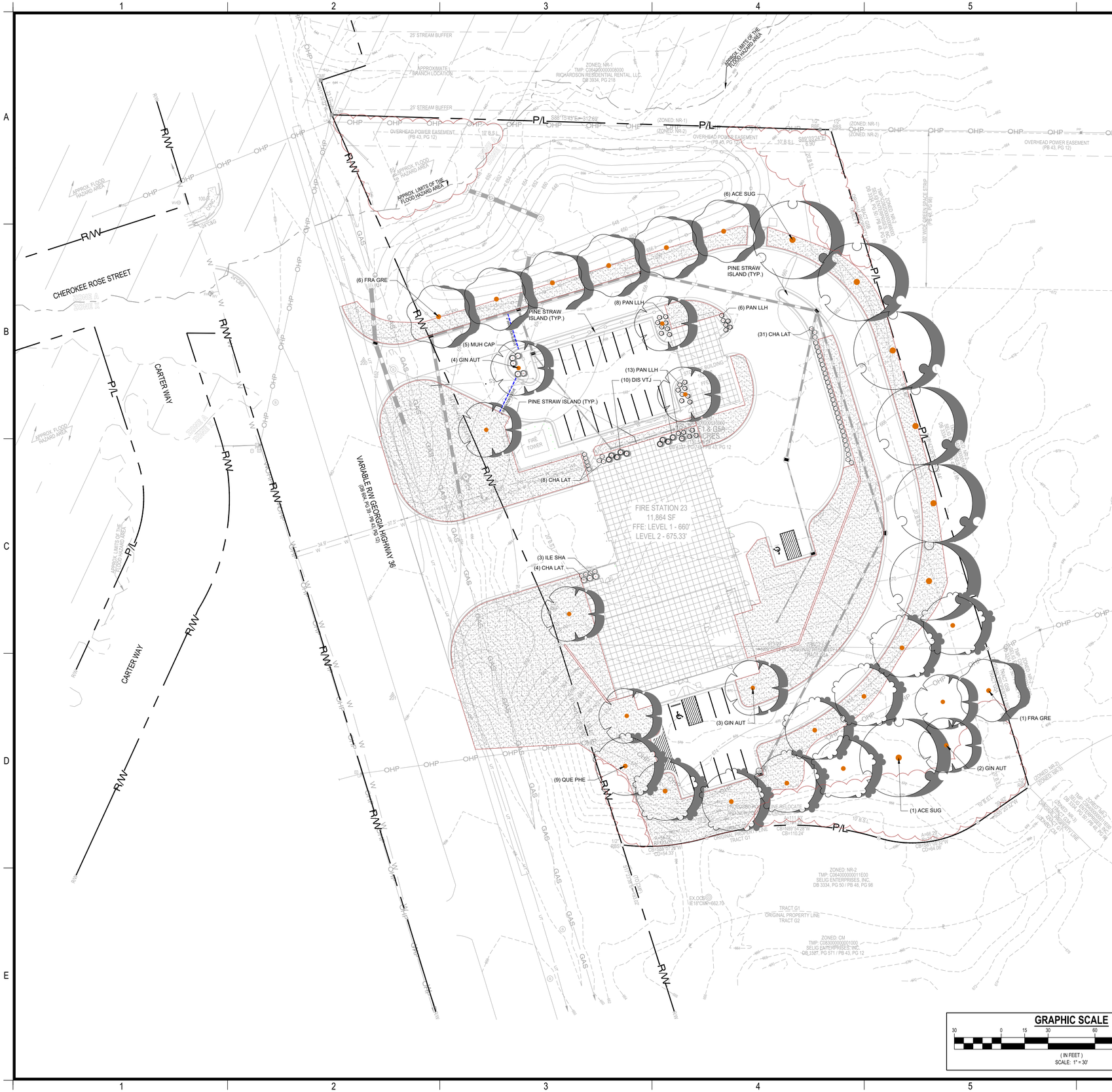
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Sheet Title

EROSION, SEDIMENTATION & POLLUTION CONTROL DETAILS

Sheet Number

C-6.7


CHEROKEE ROSE STREET
CARTER WAY
CARTER WAY
GEORGIA HIGHWAY 36
VARIABLE R/W GEORGIA HIGHWAY 36
(DB 891, PG 99 / PB 43, PG 12)
FIRE STATION 23
11,864 SF
FFE: LEVEL 1 - 660'
LEVEL 2 - 675.33'
(6) ACE SUG
(6) FRA GRE
(8) PAN LLH
(6) PAN LLH
(31) CHA LAT
(5) MUH CAP
(4) GIN AUT
(13) PAN LLH
(10) DIS VTJ
(8) CHA LAT
(3) ILE SHA
(4) CHA LAT
(3) GIN AUT
(1) FRA GRE
(2) GIN AUT
(9) QUE PHE
(1) ACE SUG
PINE STRAW ISLAND (TYP.)
PINE STRAW ISLAND (TYP.)
PINE STRAW ISLAND (TYP.)
25' STREAM BUFFER
25' STREAM BUFFER
APPROXIMATE LIMITS OF THE FLOOD HAZARD AREA
APPROX. LIMITS OF THE FLOOD HAZARD AREA
APPROX. FLOOD HAZARD AREA
APPROX. FLOOD HAZARD AREA
APPROX. FLOOD HAZARD AREA
APPROXIMATE LIMITS OF THE FLOOD HAZARD AREA
OVERHEAD POWER EASEMENT (PB 43, PG 12)
OVERHEAD POWER EASEMENT (PB 43, PG 12)
OVERHEAD POWER EASEMENT (PB 43, PG 12)
100' WIDE GREEN SPACE STRIP (PB 48, PG 98)
ZONED: NR-1
TMP: C064000000008000
RICHARDSON RESIDENTIAL RENTAL, LLC
DB 3934, PG 218
ZONED: NR-2
TMP: C064000000011E00
SELIG ENTERPRISES, INC.
DB 3334, PG 50 / PB 48, PG 98
ZONED: CM
TMP: C083000000001000
SELIG ENTERPRISES, INC.
DB 3507, PG 571 / PB 43, PG 12
TRACT G1
ORIGINAL PROPERTY LINE
TRACT G2
EX.OCS
IE18"CMP=662.70
S88°15'43"E - 312.69'
S88°03'24"E - 6.60'
P/L
R/W
OHP
GAS
W
S
UT
10' B.S.L.
30' B.S.L.
FIRE TOWER
BUILDING
CONCRETE PAD
GENERATOR
TRANSFORMER
ASPHALT
CONCRETE
CURB & GUTTER
CONCRETE
SIDEWALK
CONCRETE
CROSSWALK
CONCRETE
CURB RAMP

GENERAL PLANTING NOTES

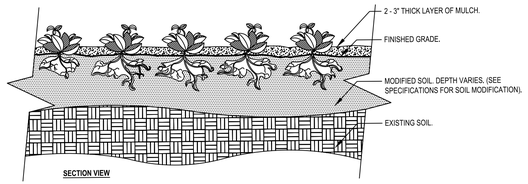
1. SELECTION:
   A. ALL PLANT MATERIALS TO BE (GEORGIA *1) OR BETTER (GEORGIA FANCY) DEFINED AND SPECIFIED ACCORDING TO GRADES AND STANDARDS FOR NURSERY STOCK PUBLISHED BY THE DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES DIVISION OF PLANT INDUSTRY UTILIZING THE LATEST UPDATED EDITION.
   B. ALL PLANT MATERIAL SHALL MEET THE MINIMAL SIZE REQUIREMENT AS STATED ON THE PLANT LIST.
   C. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY LOCATION. LANDSCAPE ARCHITECT WILL DECIDE FINAL APPROVAL OF ALL PLANT MATERIAL DELIVERED TO THE PROJECT SITE.
   D. THE LANDSCAPE ARCHITECT MAY MAKE SELECTION OF PLANT MATERIAL PROCURED UNDER THIS PROJECT AT THE PLACE OF CULTIVATION BEFORE THE CONTRACTOR PURCHASES AND PREPARES FOR DELIVERY TO PROJECT SITE. THE CONTRACTOR IS TO RETAIN AND SUBMIT CERTIFICATION TAGS VERIFYING TYPE AND PURITY OF LANDSCAPE MATERIAL.
   E. ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY. UNLESS OTHERWISE NOTED, PLANTS SHALL BE EXCEPTIONALLY DENSE WITH A NATURALISTIC BRANCHING CHARACTER AS INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT.
   F. LANDSCAPE CONTRACTOR SHALL REFER TO PLANTING PLAN AND PLANT LIST FOR MATERIAL PROCUREMENT. QUANTITY ESTIMATES ON THE PLANTING PLAN AND PLANT LIST ARE FOR REFERENCE ONLY.
   G. CONTRACTOR SHALL FURNISH ALL QUANTITIES NECESSARY TO COMPLETE THE PLANTING AREAS AS SHOWN ON THE DRAWING TO ACCEPTANCE AND SATISFACTION AT THE LANDSCAPE ARCHITECT.
   H. THE CONTRACTOR SHALL REPORT TO THE LANDSCAPE ARCHITECT SHOULD THERE BE CHANGES IN THE PLANTING AREAS ON SITE RESULTING IN SUBSTANTIAL DIFFERENCE IN QUANTITIES AND SPECIES REQUIRED.
   I. WARRANTY: ALL PLANTS SHALL BE WARRANTED TO REMAIN ALIVE AND HEALTHY AND IN VIGOROUSLY THRIVING CONDITION FOR PERIOD OF 1 YEAR FROM DATE OF FINAL ACCEPTANCE.

2. EXECUTION:
   A. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH DRAWINGS, SPECIFICATIONS AND INSTRUCTIONS PROVIDED BY LANDSCAPE ARCHITECT.
   B. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AS NECESSARY TO EXECUTE AND COMPLETE PROPOSED LANDSCAPE / IRRIGATION INSTALLATION IN A TIMELY MANNER COMPLYING WITH THE SCHEDULED COMPLETION DATE.
   C. WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE INTENTIONS OF THE SPECIFIED DRAWINGS. ALL WORK PERFORMED BY THE CONTRACTOR SHALL BE OF BEST QUALITY AND TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT.
   D. PLANTING PLANS INDICATE DIAGRAMMATIC LOCATION ONLY. SITE ADJUSTMENTS OF PLANTING DESIGN AND RELOCATION OF PLANT MATERIAL INSTALLED PRIOR TO LANDSCAPE ARCHITECT APPROVAL SHALL BE DONE WITHOUT PENALTY OR ADDITIONAL COST TO OWNER.
   E. LANDSCAPE CONTRACTOR SHALL STAKE AND/OR MARK ALL TREE AND PLANT LOCATIONS AT SITE AND NOTIFY LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PLANT INSTALLATION.
   F. UTILITIES: THE LANDSCAPE CONTRACTOR SHALL DETERMINE LOCATION OF ALL ABOVE GRADE AND UNDERGROUND UTILITIES PERFORM WORK THAT WILL AVOID DAMAGE TO UTILITIES. THE CONTRACTOR SHALL MAKE GOOD ALL DAMAGED UTILITIES AT NO COST TO OWNER.
   G. DRAINAGE: CONTRACTOR SHALL CONDUCT PERCOLATION TEST IN AREAS TO BE PLANTED: NOTIFY LANDSCAPE ARCHITECT OF ANY POOR DRAINAGE PROVIDE SUPPLEMENTAL PIT DRAINAGE AS REQUIRED TO ENSURE HEALTHY PLANT MATERIALS (SEE SPECIFICATIONS FOR DETAILS)
   IF DRAINAGE IS NOT SUFFICIENT NOTIFY LANDSCAPE ARCHITECT BEFORE INSTALLING THE PLANTS. OTHERWISE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE GUARANTEE AND LIVABILITY OF THE PLANT.

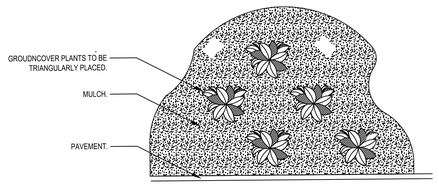
3. GENERAL PLANTING:
   A. THE CONTRACTOR'S FIELD SUPERVISOR SHALL ACCOMPANY LANDSCAPE ARCHITECT ON ALL PLANT TAGGING AND SITE VISITS.
   B. CONTRACTOR SHALL PLACE 2" DEPTH OF AGED MUSHROOM COMPOST IN ALL PLANTING BEDS THAT ARE WELL DRAINED. MUSHROOM COMPOST SHALL THEN BE THOROUGHLY TILLED INTO EXISTING SOIL TO A DEPTH OF 10"-12" PRIOR TO PLANTING.
   C. PLACE PLANTS UPRIGHT AND TURNED SO THAT THE MOST ATTRACTIVE SIDE VIEWED.
   D. PROVIDE 1" THICK MULCH (MEASURED AFTER WATERING IN) AT ALL PLANTS AND PLANTING BEDS. MULCH SHALL BE DOUBLE SHREDDED OR FINE HARDWOOD UNLESS OTHERWISE NOTED ON THE PLANS OR DETAILS.
   E. PROVIDE A CLEAN SHARP EDGING OF LANDSCAPE BEDS ADJACENT TO LAWN AREAS UNLESS OTHERWISE NOTED.
   F. CONTRACTOR SHALL BE RESPONSIBLE FOR "ROLLING" ALL SOD THAT IS INSTALLED (ON THE DAY THE SOD IS INSTALLED). HOWEVER, NO SOD SHALL BE LAID WHERE THE GRADE IS NOT CORRECT.

4. TREE PLANTING:
   A. REMOVE FIRST 8-10" OF WIRE BASKET FROM ROOTBALLS. IF REMOVAL WILL RESULT IN ROOTBALL INJURY, CUT AND REMOVE WIRES ONCE IN HOLE TO ALLOW FOR ROOT EXPANSION.
   B. MULCH SAUCERS TO BE 8' (MIN.) DIAMETER FOR ALL TREES NOT INCLUDED W/I A MULCH BED.
   C. STAKING AND GUYING DETAILS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE TO ADAPT STAKING AND GUYING METHOD ACCORDING TO SITE CONDITIONS.
   D. THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE STAKING AND GUYING PERIODICALLY AS NECESSARY OR AS INSTRUCTED BY LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL MAINTAIN PLANT MATERIAL IN AN UPRIGHT POSITION AT ALL TIMES DURING THE CONTRACT PERIOD.
   E. STAKING AND GUYING OF TREES SHALL BE FOR THE PURPOSE OF ESTABLISHMENT ONLY. STAKING AND GUYING DETAILS ARE NOT DESIGNED OR ENGINEERED TO WITHSTAND STRONG WIND OR WINDSTORM CONDITIONS.
   F. IF CONTRACTOR SEES ANY SITUATION ON THE SITE WHERE A TREE IS TO BE STAKED WITH ARBORTIES, BUT IT APPEARS TO PRESENT A SAFETY HAZARD TO RESIDENCE OF THE PROPERTY, THEIR CHILDREN OR THEIR GUEST, THE TREE SHALL NOT BE STAKED AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED.
   G. SPECIMEN TRANSPLANTED TREE PROTECTION IS THE OWNER'S RESPONSIBILITY.
   H. PROPER DRAINAGE FROM ROOTBALL IS THE RESPONSIBILITY OF THE CONTRACTOR
   I. USE ARBORGUARD WEBBING TO SECURE PLANT. SPACE STAKES EQUALLY AT 120° ANGLES AROUND TREE
   J. NYLON WEBBING SHOULD BE SECURED IN SUCH A WAY AS TO ALLOW SOME MOVEMENT OF TREE.
   K. PLANT TREE 2" ABOVE FINISHED GRADE IF MIXING SOIL TYPES, OTHERWISE PLANT AT FINISHED GRADE

5. PRUNING AND MAINTENANCE:
   A. PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES AND TO COMPENSATE FOR THE LOSS OF ROOTS AS A RESULT OF TRANSPLANTING OPERATION AND TO MAINTAIN SAFETY IN VEHICULAR AREAS.
   B. PRUNING SHALL BE DONE IN SUCH A MANNER AS TO NOT CHANGE THE NATURAL HABIT OR SHAPE OF THE PLANT. ALL CUTS SHALL BE MADE FLUSH, LEAVING NO STUBS ACCORDING TO A.N.A STANDARDS.
   C. THE LANDSCAPE ARCHITECT SHALL BE THE SOLE PARTY TO APPROVE ALL APPROPRIATE PRUNING.
   D. MAINTENANCE WORK AS DESCRIBED IN THE SPECIFICATIONS SHALL BE PERFORMED TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT AND UNTIL DATE OF THE FINAL ACCEPTANCE BY OWNER AND LANDSCAPE ARCHITECT.



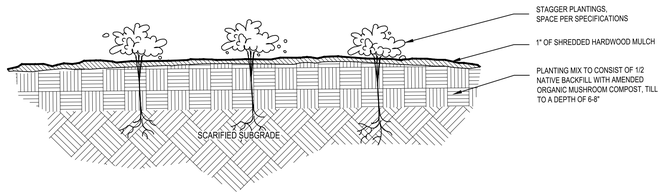
SECTION VIEW



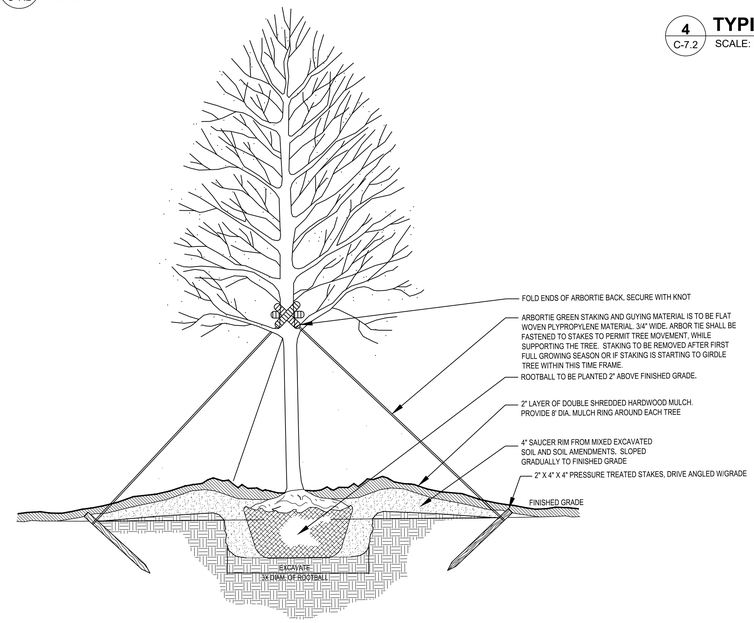
PLAN

Notes:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES , SIZE AND SPACING DIMENSION.
2- SMALL ROOTS (¼" 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 ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

1 C-7.2 GROUNDCOVER
SCALE: NTS

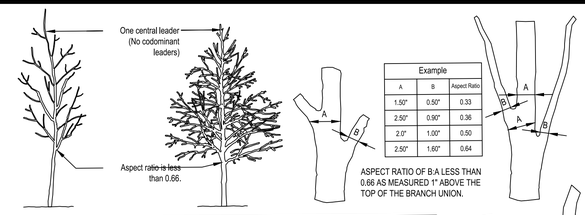


3 C-7.2 TYPICAL PLANTING DETAIL - CONTAINER OR PLUG
SCALE: NTS



5 C-7.2 TYPICAL TREE PLANTING DETAIL - BALL AND BURLAP
SCALE: NTS

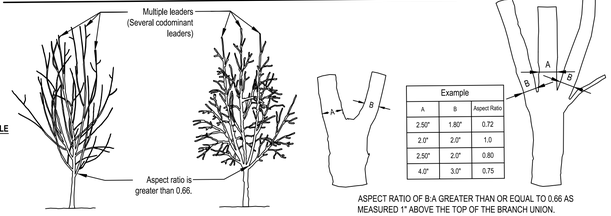
ACCEPTABLE



Example		
A	B	Aspect Ratio
1.50"	0.50"	0.33
2.50"	0.90"	0.36
2.0"	1.00"	0.50
2.50"	1.60"	0.64

ASPECT RATIO OF B:A LESS THAN 0.66 AS MEASURED 1" ABOVE THE TOP OF THE BRANCH UNION.

REJECTABLE

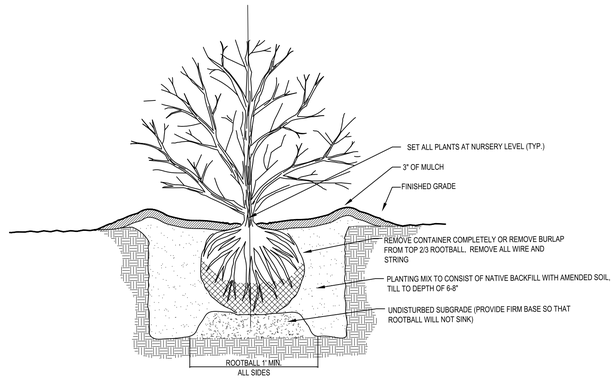


Example		
A	B	Aspect Ratio
2.50"	1.80"	0.72
2.0"	2.0"	1.0
2.50"	2.0"	0.80
4.0"	3.0"	0.75

ASPECT RATIO OF B:A GREATER THAN OR EQUAL TO 0.66 AS MEASURED 1" ABOVE THE TOP OF THE BRANCH UNION.

NOTES:
1- ASPECT RATIO SHALL BE LESS THAN 0.66 ON ALL BRANCH UNIONS. ASPECT RATIO IS THE DIAMETER OF BRANCH (B) DIVIDED BY THE DIAMETER OF THE TRUNK (A) AS MEASURED 1" ABOVE THE TOP OF THE BRANCH UNION.
2- ANY TREE NOT MEETING THE CROWN OBSERVATIONS DETAIL MAY BE REJECTED.

2 C-7.2 CROWN OBSERVATIONS - HIGH BRANCHED
SCALE: NTS



4 C-7.2 TYPICAL SHRUB PLANTING DETAIL - BALL AND BURLAP
SCALE: NTS

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.

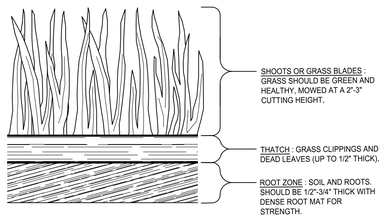
DIRECTIONS FOR INITIAL MAINTENANCE

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.

5 C-7.2 SOD MAINTENANCE AND INSTALLATION
SCALE: NTS

4" PVC CONDUIT SHOWN FOR IRRIGATION/UTILITY PURPOSES. CONTRACTOR SHALL REVIEW SLEEVING PLAN WITH ALL PARTIES PRIOR TO INSTALLATION TO MAKE ADJUSTMENTS AS NEEDED BASED ON PROJECT REQUIREMENTS.

OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL:
TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON, GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

JASON P. BROWN
LEVEL II CERTIFIED DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA 811 www.Georgia811.com
Contact 811 before you dig

Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including field verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not. Abandonment, relocation, etc, of utilities shall be coordinated with the respective utility company.

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Professional Seal

GEORGIA REGISTERED NO. PE024855 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

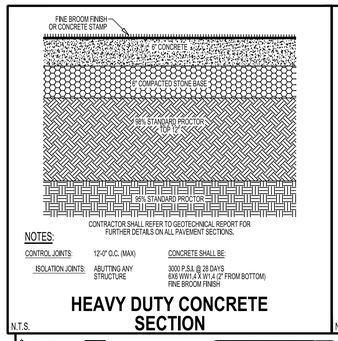
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Sheet Title

LANDSCAPE DETAILS

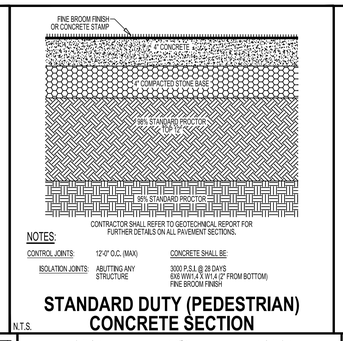
Sheet Number

C-7.1



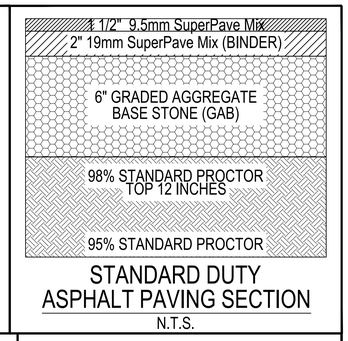
HEAVY DUTY CONCRETE SECTION

N.T.S.



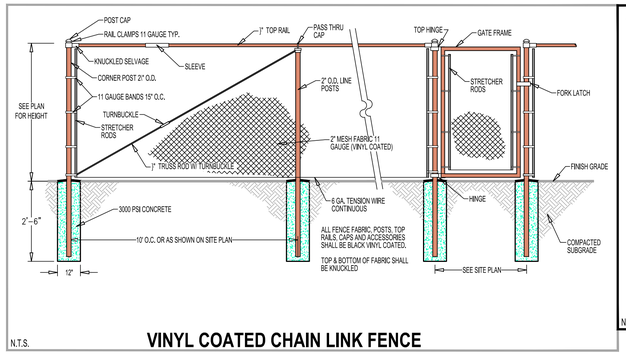
STANDARD DUTY (PEDESTRIAN) CONCRETE SECTION

N.T.S.



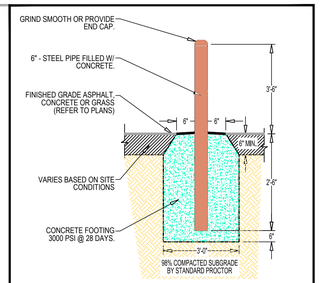
STANDARD DUTY ASPHALT PAVING SECTION

N.T.S.



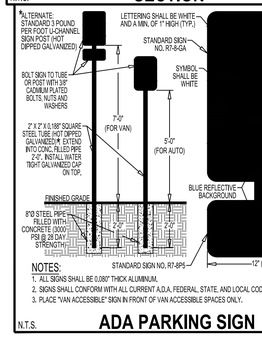
VINYL COATED CHAIN LINK FENCE

N.T.S.



PIPE BOLLARD DETAIL

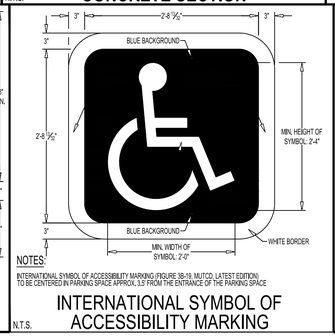
N.T.S.



NOTES:
1. ALL SIGNS SHALL BE 0.080" THICK ALUMINUM.
2. SIGNS SHALL CONFORM WITH ALL CURRENT A.D.A. FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
3. PLACE "VAN ACCESSIBLE" SIGN IN FRONT OF VAN ACCESSIBLE SPACES ONLY.

N.T.S.

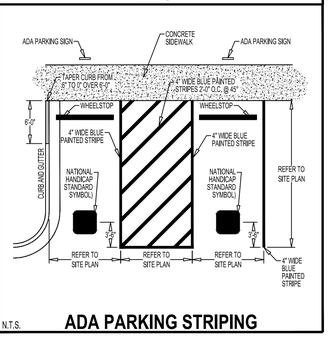
ADA PARKING SIGN



NOTES:
INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING (FIGURE 3B-19, MUTCD, LATEST EDITION) TO BE CENTERED IN PARKING SPACE APPROX. 3.5' FROM THE ENTRANCE OF THE PARKING SPACE

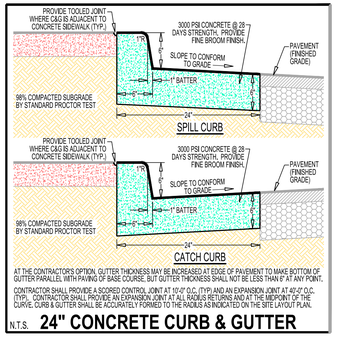
N.T.S.

INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



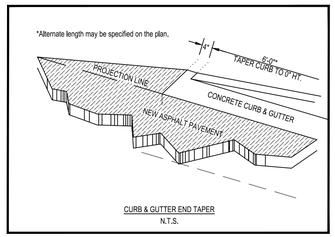
ADA PARKING STRIPING

N.T.S.



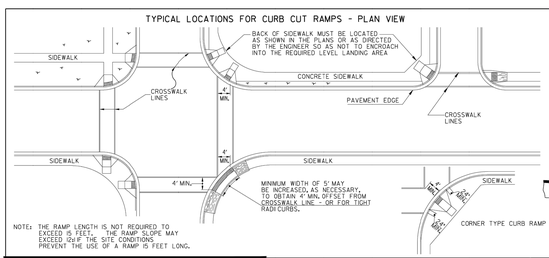
N.T.S.

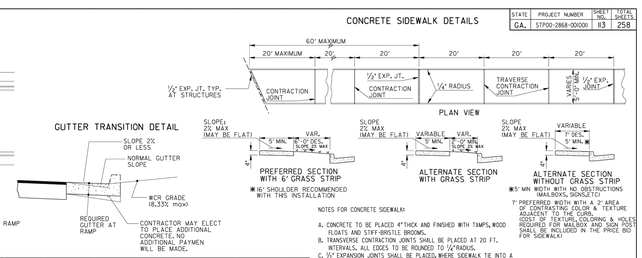
24" CONCRETE CURB & GUTTER



CURB & GUTTER END TAPER

N.T.S.





This Detail Replaces Ga Standard 9031W

Guidelines For Usage On Metric Projects

*When these details are incorporated into plans and or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following. * Rounded-OFF conversion factors: 1"=25mm, 4"=100mm, and 12" or 1'-0"=300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.*

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	STP00-2868-00(008)	113	258

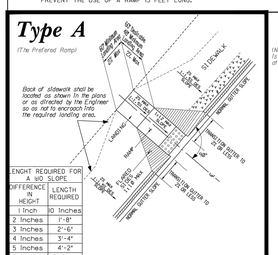
NO.	REVISION	DATE
6	REVISED	6-01-05
5	REVISED	5-20-04
4	REVISED	5-15-02
3	REVISED	5-15-02
2	REVISED	6-21-00
1	REVISED	4-7-00
0	REVISED	3-15-02

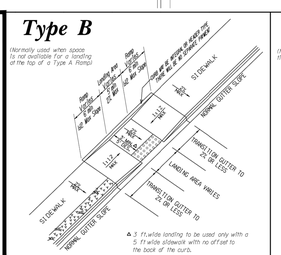
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

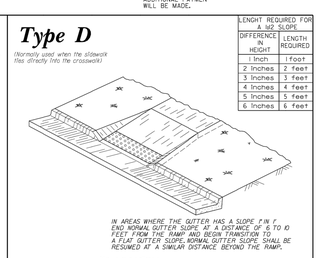
SPECIAL DETAIL
CONCRETE SIDEWALK DETAILS
CURB CUT (WHEELCHAIR) RAMPS

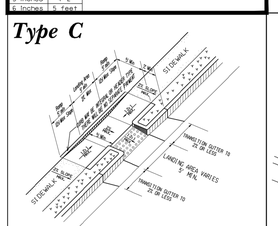
NO SCALE — MARCH 12, 2002

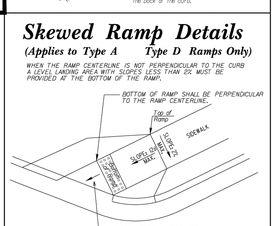
NUMBER A3

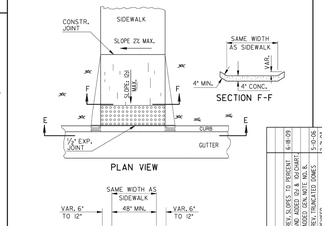












OWNER/DEVELOPER
COMPANY: CITY OF COVINGTON
ADDRESS: 11234 ALCOVY RD
COVINGTON, GA 30014
PHONE: 678-342-8790
CONTACT: TRUDY HENRY
EMAIL: TRUDY.HENRY@COVINGTON-NEWTON911.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HIGHWAY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404-644-2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896 MADISON, GA 30650 PHONE: 706.342.1104
CONTACT: BRIAN SLATE
EMAIL: BSLATE@GEORGIACIVIL.COM

SITE DESIGNER
COMPANY: GEORGIA CIVIL, INC.
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

JASON P. BROWN
LEVEL II CERTIFIED DESIGN PROFESSIONAL
#53274 - EXP. 05.01.2029

24-HOUR CONTACT
MIKE MCCROREY
404-644-2939

GEORGIA811 www.Georgia811.com
Contact 811 before you dig

Utilities/Services shown are for Contractors' convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for variances in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any disturbance (including field verifying location and depth of utilities that are to be saved and protected). Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor, at their expense, shall be responsible to repair, replace and/or relocate, as necessary, any utilities damaged, whether shown or not. Abandonment, relocation, etc. of utilities shall be coordinated with the respective utility company.

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Professional Seal

GEORGIA REGISTERED NO. PE024857 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

COVINGTON FIRE STATION #23

9155 HIGHWAY 36
COVINGTON, GA 30014
ZONING: CM - CORRIDOR MIXED USE

DRAWING DATE:	5/15/2026
DRAWN BY:	DLD
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
5/15/2026	ADD. COMMENTS

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Sheet Title

SITE DETAILS

Sheet Number

C-8.0