SITE DEVELOPMENT PLANS
FOR
EARLY HOPE BAPTIST ACTIVITY CENTER

0049-2400
1129 ROCKY PLAINS RD
COVINGTON, GA 30016
ZONING - A-R AGRICULTURAL RESIDENTIAL

GSWCC CHECKLIST NUMBER (TYP) #

S H E E T I N D E X

Sheet Number	Sheet Title
C-1.0	COVER SHEET
C-1.1	GENERAL NOTES
TS-1.0	EARLY HOPE BAPTSIT CHURCH SURVEY
C-2.0	DEMOLITION AND REMOVAL PLAN
C-2.1	LAYOUT & STAKING PLAN OVERALL VIEW
C-2.2	LAYOUT & STAKING PLAN
C-3.0	GRADING & DRAINAGE PLAN
C-4.0	UTILITY PLAN
C-5.0	EROSION CONTROL PLAN
C-6.0	SITE DETAILS

DOCUMENT ABBREVIATIONS

GENERAL

0	DIAMETER
AC	ACRES
APPRX	APPROXIMATE
ARCH	ARCHITECTURAL
BLDG	BUILDING
BM	BENCHMARK
BOC	BACK OF CURB
BSL	BUILDING SETBACK LINE
C	COMPACT PARKING SPACE
C&G	CURB & GUTTER
C.O.	CERTIFICATE OF OCCUPANCY
C/L	CENTERLINE
CF	CUBIC FEET
CFS	CUBIC FEET/SECOND
CL	CENTERLINE
CN	CURVE NUMBER
CONC	CONCRETE
CY	CUBIC YARD(S)
DEG	DEGREE(S)
DEMO	DEMOLITION
DIA	DIAMETER
E	EASTING
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EX	EXISTING
EXT	EXTENSION
FFE	FINISHED FLOOR ELEVATION
FOC	FACE OF CURB
FT	FOOT / FEET
FT/SEC	FEET PER SECOND
GA	GAUGE
GAB	GRADE AGGREGATE BASE
GAL	GALLON(S)
GPM	GALLONS PER MINUTE
GSF	GROSS SQUARE FOOTAGE
H	HEIGHT
H:V	HORIZONTAL : VERTICAL
HC	HANDICAP PARKING SPACE
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
LF	LINEAR FOOT
MAX	MAXIMUM
ME	MATCH EXISTING
MEP	MECHANICAL, ELECTRICAL, AND PLUMPING
MIN	MINIMUM
N	NORTHING
NTS	NOT TO SCALE
OC	ON CENTER
OSSA	OPEN SOIL SURFACE AREA
PR	PROPOSED
PSI	POUNDS PER SQUARE FOOT
Q	FLOW RATE,
Q#	#YEAR FLOW RATE
R/W	RIGHT-OF-WAY
REV	REVISION
ROW	RIGHT-OF-WAY
SF	SQUARE FOOT
SR	STATE/SERVICE LINE
SRV	SERVICE/SERVICE LINE
STD	STANDARD
SVC	SERVICE/SERVICE LINE
SY	SQUARE YARD
TBA	TO BE ABANDONED
TBF	TO BE FILLED
TBR	TO BE REMOVED
TCO	TEMPORARY CERTIFICATE OF OCCUPANCY
TEMP	TEMPORARY
TH	THICKNESS
TPF	TREE PROTECTION FENCING
TYP	TYPICAL
VERT	VERTICAL
W	WIDTH
WSE	WATER SURFACE ELEVATION
YR	YEAR
ZDL	ZONING DEMARCATION LINE

SURVEY

ARC	LENGTH OF CURVE
CH	LENGTH OF CHORD
CMF	CONCRETE MONUMENT FOUND
DB	DEED BOOK
IPF	IRON PIN FOUND
IPS	IRON PIN SET - 1/2" REBAR
LL	LAND LOT
OTP	OPEN TOP PIPE
P/L	PROPERTY LINE
PB	PLAT BOOK
PL	PROPERTY LINE
POB	POINT OF BEGINNING
R	RADIUS OF CURVE

UTILITY-GENERAL

CATV	CABLE TELEVISION
DIP	DUCTILE IRON PIPE
FO	FIBER OPTIC
IE	INVERT ELEVATION
INV	INVERT ELEVATION
LPL	LIGHT POLE
PP	POWER POLE
PT	POWER TELEPHONE POLE
PVC	POLYVINYL
SIG	TRAFFIC SIGNAL
T	TELECOMMUNICATIONS
TP	TELEPHONE POLE
TPED	UNDERGROUND CABLE TELEVISION LINE
TRANS	TRANSFORMER
UGC	UNDERGROUND CABLE TELEVISION LINE
UGP	UNDERGROUND POWER LINE
UGT	UNDERGROUND TELEPHONE
VCP	VITRIFIED CLAY PIPE

UTILITY-SANITARY SEWER

CO	CLEAN OUT
FM	FORCEMAIN
SAN	SANITARY SEWER
SS	SANITARY SEWER MANHOLE
SSMH	SANITARY SEWER MANHOLE

UTILITY STORM

ACCMP	ALUMINUM COATED CORRUGATED METAL PIPE
BCCMP	BITUMINOUS COATED CORRUGATED METAL PIPE
DI	DROP INLET
DWCB	DOUBLE WING CATCH BASIN
FES	FLARED END SECTION
GI	GRATE INLET
HDPE	HIGH DENSITY POLYETHYLENE
HGI	HOODED GRATE INLET
HGL	HYDRAULIC GRADE LINE
HW	HEADWALL
JB	JUNCTION BOX
LWCB	LEFT WING CATCH BASIN
OCS	OUTLET CONTROL STRUCTURE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RWCB	RIGHT WING CATCH BASIN
SD	STORM DRAIN

UTILITY-WATER

FDC	FIRE DEPARTMENT CONNECTION
BFP	BACKFLOW PREVENTER
DDC	DOUBLE DETECTOR CHECK VALVE
FH	FIRE HYDRANT
GV	GATE VALVE
HYD	FIRE HYDRANT
PIV	POST INDICATOR VALVE
WM	WATER METER
WV	WATER VALVE

EASEMENT

DE	DRAINAGE EASEMENT
SSE	SANITARY SEWER EASEMENT
UE	UTILITY EASEMENT

SPOT ELEVATIONS

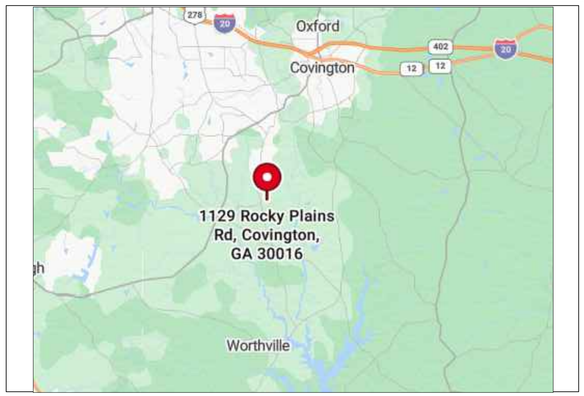
BC	BOTTOM OF CURB
BW	BOTTOM GRADE AT WALL
HP	HIGH POINT
LP	LOW POINT
P	PAVEMENT
TC	TOP OF CURB
TW	TOP OF GRADE AT WALL

EROSION CONTROL AND WATER QUALITY

BMP	BEST MANAGEMENT PRACTICE
d50	AVERAGE RIP-RAP STONE DIAMETER
dmax	MAXIMUM RIP-RAP STONE DIAMETER
dmin	MINIMUM RIP-RAP STONE DIAMETER
Tc	TIME OF CONCENTRATION

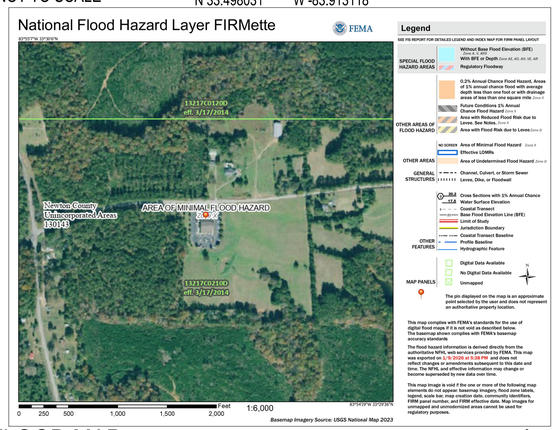
DEPARTMENTS / PERMITS / LICENSURE

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ADA	AMERICAN WITH DISABILITIES ACT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
DNR	DEPARTMENT OF NATURAL RESOURCES
EIT	ENGINEER IN TRAINING
EPA	ENVIRONMENT PROTECT AGENCY
EPD	ENVIRONMENT PROTECT DIVISION
F.I.R.M.	FLOOD INSURANCE RATE MAP
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
FIS	FLOOD INSURANCE STUDY
GDOT	GEORGIA DEPARTMENT OF TRANSPORTATION
GPS	GLOBAL POSITION SYSTEM
GRTA	GEORGIA REGIONAL TRANSPORTATION AUTHORITY
GSWCC	GEORGIA SOIL AND WATER CONSERVATION COMMISSION
LDP	LAND DISTURBANCE PERMIT
LLC	LIMITED LIABILITY CORPORATION
LOD	LIMITS OF DISTURBANCE
MUTCO	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NFIP	NATIONAL FLOOD INSURANCE PROGRAM
NFPA	NATIONAL FIRE PROTECTION AGENCY
NRCS	NATIONAL RESOURCE CONSERVATION SERVICE
PE	PROFESSIONAL ENGINEER
PLA	PROFESSIONAL LANDSCAPE ARCHITECT
RLS	REGISTERED LAND SURVEYOR
USGS	UNITED STATED GEOLOGICAL SURVEY



VICINITY MAP
NOT TO SCALE

GPS COORDINATES
N 33° 29' 52.9116" W - 83° 54' 47.2248"
N 33.498031 W -83.913118



FLOOD MAP
NOT TO SCALE

LEGEND

STANDARD ABBREVIATIONS

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

SS	= SANITARY SEWER	TP	= TELE PEDESTAL
SSMH	= SANITARY SEWER MANHOLE		= TRAFFIC WIRE
SWCB	= SINGLE WING CATCH BASIN	TC	= TRANSFORMER
TC	= TRAFFIC CONTROL BOX	TMP	= TAX MAP PARCEL
TMP	= TAX MAP PARCEL	W	= WATER
W	= WATER	WM	= WATER METER
WM	= WATER METER	WV	= WATER VALVE
WV	= WATER VALVE		

STANDARD SYMBOLS

BM	= BM	FH	= FH	GP	= GP
BM	= BM IDENTIFICATION	FO	= FO	GUY WIRE	= GUY WIRE
CO	= CO	GAS	= GAS LINE	H/C PARKING	= H/C PARKING
DS	= DS	GM	= GAS METER	ICV	= ICV
FDC	= FDC	GV	= GAS VALVE	IPF	= IPF
FENCE	= FENCE	GATE	= GATE	LB	= LIGHT BOX

LP	= LP	SIGN	= SIGN
POWER (OVERHEAD)	= POWER (OVERHEAD)	SMH	= SMH
POWER (UNDERGROUND)	= POWER (UNDERGROUND)	SS LINE	= SS LINE
POWER BOX	= POWER BOX	SSMH	= SSMH
POWER METER	= POWER METER	TC	= TC
PP	= PP	TELECOMM STRUCTURE	= TELECOMM STRUCTURE

TP	= TELE PEDESTAL		= TRAFFIC WIRE
	= TRANSFORMER	WATER LINE	= WATER LINE
WM	= WM	WV	= WV

BRAVO SITE SET 08-26-2026

SITE INFORMATION

PROJECT CONSISTS OF THE DEMO OF A SECTION OF THE PARKING LOT FOR THE CONSTRUCTION OF A NEW ACTIVITY CENTER .	
ZONING (PER LOCAL JURISDICTION)	AR - AGRICULTURAL RESIDENTIAL (OVERLAY DISTIRCT = NONE)
LOCAL JURISDICTION	NEWTON COUNTY
PROPERTY AREA	25.3 AC
DISTURBED AREA	0.84 AC
MINIMUM LOT SIZE	1.00 AC
MINIMUM LOT WIDTH	150' PROPOSED= 1106'
MINIMUM FRONT SETBACK	60' PROPOSED= 136.5'
MINIMUM SIDE SETBACK	15' PORPOSED= 70.2'
MINIMUM REAR SETBACK	40' PROPOSED= 758.88'
MINIMUM OPEN SPACE	N/A
MAXIMUM IMPERVIOUS	20% PROPOSED: 6.63% (1.68 AC) PREVIOUS: 6.71% (1.7 AC)

MISCELLANEOUS INFORMATION

SIGNAGE	NO NEW SIGNAGE PROPOSED
SITE LIGHTING	NO EXTERIOR PARKING LOT LIGHTING EXISTS AND NO NEW LIGHTING PROPOSED.
SOIL SERIES	PER NRCS MAPS SOILS ARE SHOWN AS: CeB Cecil sandy loam, 2%-6% slope CfC2: Cecil sandy clay loam, 6%-10% slope CfB2: Lloyd clay loam, 2%-6% slope PfD2: Pacolet sndy clay loam, 10%-15% slope PfC2: Pacolet sandy clay loam, 2%-10% slope PfE2: Pacolet sandy clay loam, 15%-25% slope PaD: Pacolet sandy loam, 10%-15% slope
FLOOD PLAIN	THERE IS NO FLOODPLAIN ON THIS PROPERTY AS PER FIRM PANEL 13217C021D DATED 9/17/2014, 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 NO STATE WATERS PRESENT WITHIN 200' OF THIS SITE THERE ARE NO STREAM BUFFERS ON THIS PROPERTY
HYDROLOGY	IMPERVIOUS DECREASES, REFER TO PREVIOUS HYDROLOGY REPORT FOR THIS SITE.
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: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

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 MCCRORY
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 fails 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. PE024859 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER
1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title
COVER SHEET

Sheet Number
C-1.0

GENERAL NOTES:

1. ALL UTILITY INSTALLATION SHALL BE IN ACCORDANCE WITH NEWTON COUNTY WATER AND SEWER STANDARDS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND REVIEWING SAID STANDARDS AND SPECIFICATIONS.
2. NOTIFY NEWTON COUNTY 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 BY 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 NEWTON COUNTY MINIMUM STANDARDS AND SPECIFICATIONS.
6. CONTRACTOR SHALL ADHERE TO NORMAL WORKING HOURS AS PER NEWTON COUNTY ORDINANCES. CONSTRUCTION OUTSIDE OF NORMAL WORKING HOURS, MAY BE ALLOWED UPON PRIOR APPROVAL BY NEWTON COUNTY .
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 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 THIS 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 NEWTON COUNTY 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 OF THE CONTRACTING INDUSTRY. EACH CONTRACTING ENTITY SHALL BE RESPONSIBLE FOR ALL OF THE WORK RELATED TO THEIR TRADES WHEREVER IT MAY BE SHOWN WITHIN THE CONTRACT DOCUMENT PACKAGES.
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 AT 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 INSPECTION 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 THE AUTHORITY HAVING JURISDICTION. 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 SAVED 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 GENERAL 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 NEWTON COUNTY, 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 NEWTON COUNTY 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 LICENSED 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 NEWTON COUNTY.
7. THE CONTRACTOR (UNLESS OTHERWISE INSTRUCTED BY THE OWNER) SHALL PROVIDE STAKING AND LAYOUT SERVICES, INCLUDING BUT NOT LIMITED TO, CENTERLINE STAKES, ADDITIONAL LINES, CONNECTIONS, RAMPS, SLOPE STAKES, 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 OR HAVING ANY 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 NEWTON COUNTY 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 TRENCH 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 IN "2" 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 FILLS REMAINING. AT SUBGRADE 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 AND LAWN 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, FROZEN MATERIALS, CONTAMINATED MATERIALS, DEBRIS AND ANY ROCKS LARGER THAN 4 INCHES. FOR FILL PLACEMENT WITHIN 1 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 6 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 DRAINAGE, DEWATERING AND SEALING DISTURBED AREAS WITH A STEEL DRUM ROLLER PRIOR TO INCLEMENT WEATHER.
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 OR 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 SIDE 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 NEWTON COUNTY. IF NO GUIDELINES FROM NEWTON COUNTY EXIST, THE FOLLOWING SHALL BE USED: (FOR PIPES 36 INCHES OR LESS THE TRENCH WIDTH SHALL BE THE DIAMETER PLUS 2 FEET), (FOR PIPES 36 INCHES OR GREATER 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 BACKFILLING AROUND PIPES PROVIDE UNIFORM SUPPORT AT INVERT AND PROPER COMPACTION UNDER, ALONG AND OVER THE PIPE. CARE SHALL BE GIVEN WHILE BACKFILLING AROUND PIPES TO PREVENT DAMAGE TO THE PIPES INCLUDING: PLACING BACKFILL/BEDDING 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 NOT RELIEVED IN THESE AREAS AND SHALL REMAIN AS STATED ON THE DRAWINGS 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 DOZIER 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 THE BLAST 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, I.E., LUMBER, LOGS, BRUSH, OR ANY OTHER ORGANIC MATERIALS OR RUBBISH SHALL BE REMOVED FROM AREAS TO RECEIVE COMPACTED FILL. UNSUITABLE MATERIALS, SUCH AS TOPSOIL, WEATHERED BEDROCK, ETC., SHALL BE REMOVED AS REQUIRED BY GEOTECHNICAL ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED) FROM AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURE(S). CONSTRUCT FILL TO GRADES OR SUBGRADES AS SHOWN WITH SELECT FILL MATERIAL COMPACTED TO 95% STANDARD PROCTOR (UNLESS OTHERWISE NOTED). PLACE AND COMPACT IN 6 INCH LIFTS. ALL SOILS WITHIN 12 INCHES OF PAVEMENT SUBGRADE SHALL BE COMPACTED TO AT LEAST 98% OF THEIR STANDARD PROCTOR MAXIMUM DRY DENSITY.
20. GRADED AREAS TO BE LANDSCAPED OR GRASSED SHALL BE BROUGHT TO THE ELEVATIONS SHOWN ON THE GRADING PLAN(S).
21. CONTRACTOR SHALL VERIFY DIMENSIONS, GRADES AND BENCHMARK(S) BEFORE BEGINNING ANY WORK.
22. THERE SHALL BE NO DISTURBANCE BEYOND PROPERTY LINES, UNLESS WRITTEN PERMISSION FROM ADJACENT PROPERTY OWNERS IS OBTAINED. EXISTING GRADES ALONG PROPERTY LINES SHALL BE MAINTAINED (UNLESS OTHERWISE NOTED).
23. THE MAX. SLOPES FOR CUT OR FILL SHALL BE 2H:1V, UNLESS OTHERWISE NOTED ON THE PLANS AND EXCEPT EARTHEN DAM EMBANKMENTS SHALL BE 3H:1V AND AS NOTED BELOW. THE SLOPE OF CUT OR FILL SHALL BE UNIFORM THROUGHOUT FOR EACH SECTION OF CUT OR FILL EXCEPT WHEN BENCHING IS APPROVED BY NEWTON COUNTY. WHEN A CUT IS MADE IN ROCK THAT REQUIRES BLASTING, THE SLOPE MAY BE STEEPER IF PRE-SPLITTING IS EMPLOYED AND UPON SUBMISSION OF A GEOTECHNICAL REPORT WHICH SUBSTANTIATES THE INTEGRITY OF THE ROCK IN THE STEEPER CONDITION, SUBJECT TO THE REVIEW AND APPROVAL OF NEWTON COUNTY AND/OR SITE DESIGN PROFESSIONAL. (NOTE: NO BLASTING SHALL OCCUR WITHOUT A VALID PERMIT ISSUED BY NEWTON COUNTY AND THE OWNER HAS SIGNED OFF.)
24. EMBANKMENTS SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED A COMPACTED THICKNESS OF 6 INCHES PER LAYER AND SHALL BE COMPACTED TO A DENSITY OF 98% OF THE MAX. LABORATORY DRY WEIGHT PER CUBIC FOOT AS DETERMINED BY AASHTO METHOD T-99 IN AREAS WHERE STRUCTURES, PARKING LOTS AND DRIVES, STREETS AND UTILITIES ARE TO BE PLACED ABOVE OR BELOW THESE SLOPES.
25. CONTOURS AND SPOT ELEVATIONS SHOWN ARE ONLY CONTROLS AND THE PROFILES THEY FORM SHALL BE SMOOTH AND CONTINUOUS (PARTICULARLY IN PARKING AREAS AND DRIVES).
26. GRADING SHALL BE PERFORMED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER WHO SHALL CERTIFY THAT FILL HAS BEEN PROPERLY PLACED AND WHO SHALL SUBMIT A FINAL COMPACTION REPORT FOR FILLS OVER 1' DEEP.
27. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING(S) AT ALL TIMES.
28. ANALYTICAL COMPACTION RESULTS SHALL BE SUBMITTED TO NEWTON COUNTY ENGINEERING DEPARTMENT (OR SIMILAR DEPARTMENT) AND TO THE GEOTECHNICAL ENGINEER OF RECORD.
29. ALL GRADING AND PIPE BED PREPARATION SHALL BE PERFORMED ACCORDING TO REQUIREMENTS SET FORTH BY THE GEOTECHNICAL ENGINEER OF RECORD.
30. CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL RECOMMENDATIONS OF THE REPORT WHEN PERFORMING SITE WORK.
31. AT A MINIMUM, FOR TRENCH CONSTRUCTION, BACKFILL UNDER PERMANENT CONCRETE OR BITUMINOUS PAVEMENT AND AS ELSEWHERE SPECIFIED OR INDICATED ON THE PLANS, TRENCHES 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 TRENCH TOP. MECHANICAL VIBRATING EQUIPMENT SHALL BE USED TO ACHIEVE THE REQUIRED COMPACTION. PAVEMENT SHALL BE REPLACED IMMEDIATELY AFTER THE BACKFILLING IS COMPLETED.
32. 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.
33. 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.

PAVEMENT AND STRUCTURAL BASE REQUIREMENTS:

1. THE TYPE OF SUBBASE REQUIRED FOR EACH USE SHALL BE CALLED OUT ON THE DRAWINGS. IF NO REFERENCE IS MADE ON THE DRAWINGS OR DETAILS TO THE TYPE OF SUBBASE REQUIRED THE FOLLOWING SHALL BE USED. THE SOURCE OF THE MATERIAL SHALL BE ONE OF APPROVED FOR USE BY THE GEORGIA DEPARTMENT OF TRANSPORTATION. THE MATERIAL SHALL BE A CRUSHED STONE CONFORMING TO AASHTO M 147-65 (1980 OR LATEST REVISION), GRADE A. GRAVEL OR OTHER MATERIALS CAN ONLY BE SUBSTITUTED FOR CRUSH STONE WHEN APPROVED IN WRITING BY THE OWNER AND SITE DESIGN PROFESSIONAL. MATERIAL SUPPLIED FOR USE AS SUBBASE SHALL HAVE 100% PASSING THE 2 INCH SIEVE, 30% TO 65% PASSING THE 3/8 INCH SIEVE, 25% TO 55% PASSING THE NO.4 SIEVE, 15% TO 40% PASSING THE NO. 40 SIEVE AND 2% TO 10% PASSING THE NO. 200 SIEVE.
2. SUBBASE SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES AND COMPACTED TO THE REQUIREMENTS STATED IN THE GEOTECHNICAL REPORT. IF NOT STATED, THE COMPACTION REQUIREMENT SHALL BE 95% OF MAXIMUM DRY DENSITY PER ASTM D1557 (MODIFIED PROCTOR).
3. FINAL GRADING OF SUBBASE SHALL BE TO +/- 1 INCH OF THAT DESIGNATED ON THE DRAWINGS AND +/- 1 INCH OF THE REQUIRED THICKNESS OF 8 INCHES OR GREATER AND +/- 1/2 INCH FOR THICKNESS LESS THAN 8 INCHES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN PREPARING THE SUBGRADE TO RECEIVE SUBBASE. THIS SHALL INCLUDE FINE GRADING AND COMPACTING AS NECESSARY TO MEET THE REQUIREMENTS STATED HERE AND UNDER "GRADING / EARTHWORK REQUIREMENTS".
5. THE AMOUNT OF TESTING REQUIRED TO VERIFY THE COMPACTION SHALL BE THE SAME AS STATED UNDER "GRADING / EARTHWORK REQUIREMENTS".
6. IF REQUIRED, STABILIZING FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS "MODULUS (LOAD AT 10% ELONGATION) = 115LB PER ASTM D1682-64", "GRAB TENSILE STRENGTH 200LB PER ASTM D 1682-64"," MULLEN BURST STRENGTH = 400PSI PER ASTM D 3786-87","TRAPEZOID TEAR STRENGTH WHEN APPLICABLE = 115LB PER ASTM D 1117-80","COEFFICIENT OF PERMEABILITY K (CM/SEC) = 0.015 PER ASTM D 4491-85","WATER FLOW RATE (GPM/SF)= 60 PER ASTM D 4491-85". WHEN STABILIZING FABRIC IS USED IT SHALL BE PULLED TIGHT AND ALL WRINKLES REMOVED. OVERLAPS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
7. IF REQUIRED, FILTER FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS "GRAB TENSILE ELONGATION = 50% PER ASTM D1682-64", "GRAB TENSILE STRENGTH 70LB PER ASTM D 1682-64","MULLEN BURST STRENGTH = 200PSI PER ASTM D 3786-87","TRAPEZOID TEAR STRENGTH WHEN APPLICABLE = 35 LB PER ASTM D 1117-80","COEFFICIENT OF PERMEABILITY K (CM/SEC) = 0.2 PER ASTM D 4491-85","WATER FLOW RATE (GPM/SF) = 180 PER ASTM D 4491-85". WHEN FILTER FABRIC IS USED IT SHALL BE PULLED TIGHT AND ALL WRINKLES REMOVED. OVERLAPS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

TRAFFIC SIGNAGE AND PAVEMENT MARKINGS:

1. PAVEMENT MARKINGS SHALL BE THE TYPE, COLOR, SIZE AND LOCATIONS SHOWN ON THE PLANS. IF THE INFORMATION ON THE PLANS IS NOT COMPLETE AND AUTHORITY HAVING JURISDICTION DOES NOT HAVE REQUIREMENTS REGARDING THIS, USE THE FOLLOWING. PAINT SHALL BE SUPPLIED IN ACCORDANCE WITH AASHTO: M 248 LATEST ADDITION. COLORS SHALL BE AS FOLLOWS (YELLOW- PARKING STALLS, HANDICAP PARKING AND CHARACTERS, PARKING ISLANDS, TRAFFIC CONTROL LETTERING AND CHARACTERS AND FIRE LANES) (WHITE - STOP BARS, PEDESTRIAN CROSSINGS AND STOP LETTERING).
2. THE PAVEMENT SHALL BE CLEAN AND FREE OF DIRT, DUST, MOISTURE, OILS AND OTHER FOREIGN MATERIALS. ANY OLD PAVEMENT MARKINGS SHALL BE REMOVED UNLESS PAINTS ARE COMPATIBLE AND OVERLAY IDENTICALLY. THE SURFACE OF THE PAVEMENT PRIOR TO APPLICATION SHALL BE 45 DEGREES F AND RISING UNLESS MANUFACTURE'S RECOMMENDATIONS ARE GREATER.
3. THE SIGNAGE SHALL BE THE TYPE AND LOCATED PER THE DRAWINGS. THE SIGNAGE SHALL BE PROVIDED IN ACCORDANCE WITH THE LOCAL HIGHWAY, COUNTY HIGHWAY AND STATE DEPARTMENT OF TRANSPORTATION. IF LOCAL, COUNTY OR STATE CODES DO NOT EXIST USE AASHTO: M268.
4. POSTS, BRACKETS AND FRAMES SHALL BE STEEL PER ASTM A-36, A-242, A-441, A-572, A588, GRADE 50 AND HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. ALL CUTTING, DRILLING OR OTHER POLE MODIFICATIONS SHALL BE PAINTED WITH GALVANIZING PAINT. ALL BOLTS, NUTS AND WASHERS SHALL BE STAINLESS STEEL.
5. POST HOLES SHALL BE A MINIMUM OF FOUR FEET DEEP AND 12 INCHES IN DIAMETER UNLESS POOR SOILS OR FROST CONDITIONS REQUIRE GREATER DEPTH. SIGN POSTS SHALL BE KEPT PLUMB, 6 INCHES OFF BOTTOM AND CENTERED AS 3000 PSI CONCRETE IS PLACED AROUND THE POST. THE OVERALL SIGN AND POST SYSTEM SHOULD BE ABLE TO WITHSTAND 33 POUNDS PER SQUARE FOOT.
6. CONTRACTORS CAN PLACE SIGNS ON POSTS AFTER CONCRETE HAS CURED FOR SEVEN DAYS OR ¾ STRENGTH IS ACHIEVED.
7. ALL HANDICAP STRIPING AND SIGNAGE SHALL MEET THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. FIRE LANE STRIPING AND SIGNAGE SHALL MEET THE REQUIREMENTS OF THE LOCAL BUILDING INSPECTOR AND FIRE DEPARTMENT.
8. OULD HAVE TOOLED OR CUT JOINTS TO 1/3 THE DEPTH IN SQUARES OR AS CLOSE TO SQUARE AS POSSIBLE NOT EXCEEDING 5FT X5FT.

SITE CONCRETE - INCLUDING CURB, SIDEWALKS & GUTTERS:

1. THE DIMENSIONS SHALL BE THOSE SHOWN ON THE DRAWINGS. THE CONCRETE MIX SHALL BE 4000 PSI AT 28 DAYS MADE WITH TYPE I OR TYPE II CEMENT, PER ASTM C 150, AND AGGREGATES MEETING STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. SLUMP FOR SLIP FORMING SHALL BE 1 INCH +/- ½ INCH AND FOR FORMED CONCRETE THE SLUMP SHALL BE 3 INCH +/- 1 INCH. AIR ENTRAINMENT MIXTURE SHALL MEET THE REQUIREMENTS OF ASTM C 260 4% +/- 1 ½% FOR SLIP FORM WORK AND 6% +/- 1 ½% FOR FORMED AND PLACED CONCRETE. WATER REDUCING AGENT SHALL CONFORM TO ASTM C 494, TYPE A. CURING COMPOUNDS SHALL CONFORM TO ASTM C309, TYPE I, CLASS A MOISTURE LOSS OF NOT MORE THAN .055 GR/SQ CM WHEN APPLIED AT 200 SQ FT PER GALLON.
2. CURBS AND GUTTERS SHALL BE PLACED ON COMPACTED SUBBASE, CONSISTENT WITH THE PAVEMENT SUBBASE, AS SHOWN ON THE DRAWINGS. WHEN SUBBASE DETAILS ARE MISSING AND NO AGENCY HAS JURISDICTION USE THE FOLLOWING: CURBS AND GUTTERS SHALL BE PLACED ON A MINIMUM OF 6 INCHES OF GAB ON 98% STANDARD PROCTOR SUBGRADE.
3. ALL FORMING, PLACEMENT, MATERIALS AND CURING SHALL CONFORM TO THE LATEST ADDITION OF ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ALL SIMILAR STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
4. REINFORCING SHALL BE IN ACCORDANCE WITH THAT SPECIFIED ON THE DRAWINGS AND THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICES". REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60, DEFORMED. WELDED WIRE FABRIC SHALL BE ASTM A 185, WELDED WIRE STEEL FABRIC.
5. SIDEWALKS AND GUTTERS SHALL HAVE A BROOM FINISH PERPENDICULAR TO FLOW WITH A PICTURE FRAME EDGE JOINT ALL THE WAY AROUND. CURBS SHALL HAVE A SMOOTH FINISH OR LIGHT RUB FINISH, BUT CONSISTENT THROUGH OUT THE PROJECT.
6. EXPANSION JOINTS SHALL BE PLACED EVERY 40 FEET AND AT ADJOINING STRUCTURES SUCH AS WALLS, MANHOLES AND VAULTS. EXPANSION JOINT MATERIAL SHALL BE PREMOLDED, ½ INCH MATERIAL WITH ½ INCH CAP IN ACCORDANCE WITH ASTM D1751. AFTER CONCRETE HAS SET, THE CAP SHOULD BE REMOVED AND VOID FILLED WITH WATERPROOF JOINT FILLER. CURB AND GUTTER SHALL BE CUT OR TOOL JOINTED TO 1/3 THE DEPTH EVERY 10 FEET. SIDEWALKS SHOULD HAVE TOOLED OR CUT JOINTS TO 1/3 THE DEPTH IN SQUARES OR AS CLOSE TO SQUARE AS POSSIBLE NOT EXCEEDING 5FT X5FT.

ASPHALT PAVEMENT REQUIREMENTS:

1. ASPHALT SHALL BE THE TYPE(S) SPECIFIED ON THE DRAWINGS. REFER TO PAVING LEGEND AND PAVING DETAILS PROVIDED. ALL ASPHALT SHALL BE PRODUCED IN STATE APPROVED PLANTS WITH STATE APPROVED PRODUCTS.
2. ASPHALT SHALL ONLY BE PLACED WHEN THE OUTSIDE TEMPERATURE IS 45°F AND RISING. ASPHALT SHALL NEVER BE PLACED ON FROZEN MATERIAL, DURING ANY TYPE OF PRECIPITATION OR WHEN PRECEDING PRECIPITATION HAS SATURATED ANY PORTION OF THE SUBBASE AND/OR SUBGRADE.
3. SURFACES ABUTTING THE NEW ASPHALT SHALL BE TACK COATED PRIOR TO PLACEMENT OF ASPHALT INCLUDING CURBS, GUTTER, EXISTING AND NEW STRUCTURES. TACK COAT SHALL BE APPLIED NEATLY TO MATCH THE LINES AND GRADES OF THE PROPOSED ABUTTING ASPHALT AT A RATE OF 0.05 TO 0.15 GALLONS PER SQUARE YARD.
4. ASPHALT SHALL BE PLACED IN LAYERS EQUAL TO THOSE SPECIFIED ON THE PLANS. THE THICKNESS OF EACH LAYER OR THE THICKNESS OF ALL LAYERS COMBINED SHALL NOT VARY MORE THAN 1/4 INCH FOR THICKNESS OF 0 TO 4 INCHES AND 1/2 INCH FOR THICKNESS OF 4 INCHES OR GREATER, FROM THOSE SPECIFIED ON THE DRAWINGS. IF MORE THAN 60% OF TEST CORES SAMPLED FAIL TO EQUAL OR EXCEED THE REQUIRED DEPTH, THE PAVEMENT SHALL BE CONSIDERED FAILED AND BE SUBJECT TO REPAIRS, REPLACEMENT OR REASONABLE COMPENSATION OF WHICH THE CONTRACTOR SHALL BEAR ALL COSTS. THE ASPHALT SHALL ALSO BE TESTED FOR SMOOTHNESS BY LAYING A 16 FOOT STRAIGHT EDGE ON THE PAVEMENT AND VERIFYING THAT THERE ARE NO GAPS GREATER THAN 1/4 INCH IN ANY DIRECTION.
5. PLACEMENT AND COMPACTION REQUIREMENTS SHALL BE THE SAME AS THOSE SPECIFIED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION. THE ROLLING SHALL BE DONE IN SUCH A MANNER THAT WILL MATCH JOINTS AND LEAVE A SMOOTH UNIFORM SURFACE, WHILE PROVIDING THE PROPER COMPACTION, WHICH SHALL BE 95% OF THE LABORATORY DENSITY.
6. WHEN MATCHING INTO EXISTING PAVEMENT ALL MATCH JOINTS SHALL BE SAW CUT TO PROVIDE A STRAIGHT SMOOTH JOINT. THE ASPHALT DEPTH AT THE MATCH POINT SHALL BE EQUAL TO THAT OF THE PROPOSED OR EXISTING WHICH EVER IS GREATER.
7. PAVING EQUIPMENT SHALL BE OF GOOD CONDITION AND QUALITY. ASPHALT SHALL BE PLACED BY MECHANICAL EQUIPMENT EXCEPT IN SMALL AREAS THAT ARE INACCESSIBLE TO A PAVER. ASPHALT SHALL BE TRANSPORTED IN COVERED TRUCKS AND SCHEDULED IN SUCH A MANNER THAT SHALL MAINTAIN ASPHALT TEMPERATURE. ASPHALT SHALL BE REJECTED WHEN THE TEMPERATURES FALL BELOW 250 DEGREES F OR THE MINIMUM TEMPERATURES SPECIFIED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION, WHICHEVER IS HIGHER.
8. THE TYPE OF SUBBASE REQUIRED FOR EACH USE SHALL BE CALLED OUT ON THE DRAWINGS. IF NO REFERENCE IS MADE ON THE DRAWINGS OR DETAILS TO THE TYPE OF SUBBASE REQUIRED THE FOLLOWING SHALL BE USED. THE SOURCE OF THE MATERIAL SHALL BE ONE APPROVED FOR USE BY THE APPLICABLE STATE'S "DEPARTMENT OF TRANSPORTATION". THE MATERIAL SHALL BE A CRUSHED STONE CONFORMING TO AASHTO M 147-65 (1980 OR LATEST REVISION), GRADE A. GRAVEL OR OTHER MATERIALS CAN ONLY BE SUBSTITUTED FOR CRUSH STONE WHEN APPROVED IN WRITING BY THE OWNER AND ENGINEER. MATERIAL SUPPLIED FOR USE AS SUBBASE SHALL HAVE 100% PASSING THE 2 INCH SIEVE, 30% TO 65% PASSING THE 3/8 INCH SIEVE, 25% TO 55% PASSING THE NO. 4 SIEVE, 15% TO 40% PASSING THE NO. 40 SIEVE AND 2% TO 10% PASSING THE NO. 200 SIEVE.
9. SUBBASE SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES AND COMPACTED TO THE REQUIREMENTS STATED IN THE SOILS REPORT. IF NOT STATED, THE COMPACTION REQUIREMENT SHALL BE 95% OF MAXIMUM DRY DENSITY PER ASTM D1557 (MODIFIED PROCTOR).
10. FINAL GRADING OF SUBBASE SHALL BE TO +/- 1 INCH OF THAT DESIGNATED ON THE DRAWINGS AND +/- 1 INCH OF THE REQUIRED THICKNESS FOR THICKNESS OF 8 INCHES OR GREATER AND +/- ½ INCH FOR THICKNESS LESS THAN 8 INCHES.
11. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS IN PREPARING THE SUBGRADE TO RECEIVE SUBBASE. THIS SHALL INCLUDE FINE GRADING AND COMPACTING AS NECESSARY TO MEET THE REQUIREMENTS STATED HERE AND UNDER "EARTHWORK".
12. THE AMOUNT OF TESTING REQUIRED TO VERIFY THE COMPACTION SHALL BE THE SAME AS STATED UNDER "EARTHWORK".
13. IF REQUIRED, STABILIZING FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS "MODULUS (LOAD AT 10% ELONGATION) =115LB PER ASTM D1682-64", "GRAB TENSILE STRENGTH 200LB PER ASTM D 1682-64", "MULLEN BURST STRENGTH = 400PSI PER ASTM D 3786-87", "TRAPEZOID TEAR STRENGTH WHEN APPLICABLE = 115LB PER ASTM D1117-80", "COEFFICIENT OF PERMEABILITY K CM/SEC = .015 PER ASTM D 4491-85", "WATER FLOW RATE GPM/SF= 60 PER ASTM D 4491-85". WHEN STABILIZATION FABRIC IS USED IT SHALL BE PULLED TIGHT AND ALL WRINKLES REMOVED. OVERLAPS SHALL BE IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
14. IF REQUIRED, FILTER FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS "GRAB TENSILE ELONGATION =50% PER ASTM D1682-64", "GRAB TENSILE STRENGTH 70LB PER ASTM D 1682-64", "MULLEN BURST STRENGTH = 200PSI PER ASTM D 3786-87", "TRAPEZOID TEAR STRENGTH WHEN APPLICABLE = 35LB PER ASTM D1117-80", "COEFFICIENT OF PERMEABILITY K CM/SEC = .2 PER ASTM D 4491-85", "WATER FLOW RATE GPM/SF= 180 PER ASTM D 4491-85". WHEN FILTER FABRIC IS USED IT SHALL BE PULLED TIGHT AND ALL WRINKLES REMOVED. OVERLAPS SHALL BE IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
15. DEBRIS AND OTHER FOREIGN MATTER. THE CONTRACTOR SHALL CLEAN ANY SECTIONS REQUIRING SUCH AT NO ADDITIONAL COST TO THE CONTRACT.

SEEDING & LANDSCAPING:

1. TOPSOIL SHALL BE REMOVED FROM STOCKPILES AND SPREAD IN THE AREAS SHOWN ON THE PLANS. THE DEPTH OF TOPSOIL SHALL BE AS SHOWN ON THE PLANS. IF THE DEPTH OF TOPSOIL IS NOT GIVEN THE FOLLOWING SHALL BE USED: "A MINIMUM OF 4 INCHES IN LAWN AREAS" AND "A MINIMUM OF 12 INCHES IN LANDSCAPE PLANTING AREAS".
2. AFTER THE TOPSOIL IS IN PLACE IT SHALL BE FINE GRADED REMOVING ALL ROOTS, STICKS, STONES AND DEBRIS GREATER THAN 2 INCHES IN ANY DIMENSION. THE TOPSOIL SHALL BE FINE GRADED TO THE LINES AND GRADES SHOWN ON THE PLANS.
3. THE TOPSOIL SOIL SHALL HAVE A PH OF 5.5 TO 7.6 AND AN ORGANIC CONTENT OF 3 TO 20%. THE GRADATION OF THE TOPSOIL SHALL BE 100% PASSING 2" SIEVE, 85 TO 100% PASSING THE 1 INCH SIEVE, 65 TO 100% PASSING THE ¼ INCH SIEVE AND 20 TO 80% PASSING THE NO. 200 SIEVE.
4. LIME OF TYPE RECOMMENDED FOR SOIL CONDITIONING SHALL BE USED TO TREAT ACIDIC SOILS.
5. LAWN FERTILIZER SHALL BE 55% NITROGEN, 10% PHOSPHORUS AND 10% POTASH WHERE 50% OF THE NITROGEN IS DERIVED FROM UREAFORM SOURCE.
6. LAWN SEED (WHEN NOT GIVEN ON THE PLANS) SHALL BE "50% BY WEIGHT, 85% PURITY, 85% GERMINATION OF PENNFINE PERENNIAL RYE"; "30% BY WEIGHT, 97% PURITY, 85% GERMINATION OF PENNLAWN RED FESCUE"; "20% BY WEIGHT, 85% PURITY, 80% GERMINATION OF COMMON KENTUCKY BLUEGRASS".
7. WHEN PLACING BY HYDROSEEDING, APPLICATION FERTILIZER SHALL BE PLACED AT 80 POUNDS PER ACRE, HYDROMULCH AT 1,200 POUNDS PER ACRE, WATER AT 500 GALLONS PER ACRE AND SEED AT A MINIMUM OF 220 POUNDS PER ACRE. ALL OVER SPRAY AREAS SHALL BE PROPERLY CLEANED AND RESTORED AT NO EXPENSE TO THE CONTRACT.
8. IF PLACING BY MECHANICAL MEANS, FERTILIZER SHALL BE PLACED AT 25 POUNDS PER 1,000 SQUARE FEET, SEED AT 5 POUNDS PER 1,000 SQUARE FEET, AND STRAW MULCH AT 2 TONS PER ACRE. PLACE FERTILIZER AND SEED, THEN LIGHTLY RAKE AND THE ROLL WITH 200 POUND ROLLER. MULCH THE AREA AND THEN WATER. STRAW MAY NEED TO BE SECURED TO PREVENT IT BLOWING AWAY.
9. WATER LAWN AREAS AS NEEDED TO PROMOTE GROWTH. THE CONTRACTOR WILL BE RESPONSIBLE TO WATER, RESEED OR WORK WHEN NECESSARY TO INSURE THE GROWTH OF THE LAWN UNTIL A COMPLETE AND UNIFORM STAND OF GRASS HAS GROWN AND BEEN CUT AT LEAST TWICE.
10. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL AREAS NOT RECEIVING STRUCTURES, PAVEMENT, RIP RAP, LANDSCAPING OR OTHER IMPROVEMENTS OR FUTURE IMPROVEMENTS SHALL BE CONSIDERED LAWN AREAS AND RECEIVE TOPSOIL AND SEEDING PER DRAWINGS AND ABOVE STATED REQUIREMENTS.
11. PLANTINGS SHALL BE SUPPLIED IN ACCORDANCE WITH THE PLANS AND ANSI 260.1 "AMERICAN STANDARD FOR NURSERY STOCK" IN GOOD HEALTH, VIGOROUS, AND FREE OF INSECTS, LARVAE, EGGS, DEFECTS AND DISEASE.
12. PLANTING BEDS SHALL BE PREPARED BY LOOSENING THE TOP 1 FOOT OF TOPSOIL. PLANTS SHALL BE LOCATED PER THE PLANS. THE HOLES SHALL BE EXCAVATED (PER THE DETAILS ON THE DRAWINGS) WITH THE CENTER SLIGHTLY HIGHER TO PROMOTE DRAINAGE. USE A TOPSOIL BACKFILL MIX OF 4 PARTS TOPSOIL, 1 PART PEAT MOSS, 1/2 PART WELL ROTTED MANURE, AND 10 POUNDS 5-10-5 PLANTING FERTILIZER AND PROPERLY MIXED PER CUBIC YARD. BERM AROUND PLANTS TO FORM A BOWL SHAPE.
13. WEED BARRIER MADE FROM FIBERGLASS AND ULTRA-VIOLET LIGHT RESISTANT SHALL BE PLACE UNDER ALL PLANTING BEDS PRIOR MULCHING.
14. ALL TREES AND SHRUBS SHALL BE STAKED AS DETAILED ON THE DRAWINGS. TREE WRAPPING WILL BE PROVIDED AT THE BASE OF ALL TREES AS DETAILED.
15. MULCH SHALL BE 50% SHREDDED BARK AND 50% WOOD CHIPS, ¾ TO 2 INCH IN SIZE, UNIFORMLY MIXED AND FREE OF ELM WOOD. MULCH SHALL BE PLACED UNIFORMLY OVER THE PLANTING BED ALLOWING NO WEED BARRIER TO BE SEEN.
16. ALL LANDSCAPING SHALL BE GUARANTEED FOR ONE YEAR AFTER FINAL ACCEPTANCE. ANY PLANTINGS IN NEED OF REPLACEMENT WILL BE GUARANTEED FROM THE TIME OF REPLACEMENT IF AFTER FINAL ACCEPTANCE.

UTILITY REQUIREMENTS:

1. ALL REQUIRED R/W ENCROACHMENT PERMITS SHALL BE SECURED, BEFORE PROCEEDING WITH WORK.
2. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS/HER OPERATION PLAN IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THAT THEY PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
3. UNLESS OTHERWISE NOTED, UTILITY OWNERS ARE TO RESET, RELAY OR READJUST PUBLIC AND PRIVATE UTILITIES CONFLICTING WITH PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH THE OWNERS OF LOCAL UTILITIES IN THE ADJUSTMENT OF THEIR FACILITIES WHERE THEY INTERFERE WITH CONSTRUCTION. THE COSTS FOR THE WORK SHALL BE AT THE CONTRACTORS EXPENSE. CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING GAS AND WATER METERS, VALVES, LINES, POWER, TELEPHONE, CABLE LINES, ETC. THAT SERVICE THE EXISTING BUILDINGS WITH THE APPROPRIATE UTILITY COMPANIES.
4. UTILITIES SHOWN ARE TO ASSIST THE CONTRACTOR IN LOCATING UTILITIES. ITEMS ARE SHOWN SCHEMATICALLY AND NEITHER THE ARCHITECT, SITE DESIGN PROFESSIONAL, NOR THE OWNER ASSUMES ANY RESPONSIBILITY FOR VARIANCES IN THEIR ACTUAL LOCATION. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF UTILITIES PRIOR TO EXCAVATION OR DEMOLITION. ADDITIONAL UTILITIES MAY NOT BE SHOWN ON THESE PLANS. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION WHETHER SHOWN OR NOT IN THE SITE WORK CONSTRUCTION DRAWINGS, HE/SHE SHALL, AT HIS/HER EXPENSE, IMMEDIATELY REPLACE OR REPAIR THE UTILITIES TO THEIR ORIGINAL CONDITION AND QUALITY, AS APPROVED BY NEWTON COUNTY AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY UTILITY PROVIDER AND THE SITE DESIGN PROFESSIONAL OF RECORD PRIOR TO PROCEEDING.
5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITY PROVIDERS PRIOR TO SUBMITTING HIS/HER BID IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENT WILL AFFECT THE SCHEDULING OF WORK FOR THE PROJECT. SOME UTILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTORS OPERATIONS, WHILE SOME WORK MAY BE REQUIRED "AROUND" UTILITIES THAT REMAIN IN PLACE. THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY THE UTILITY ADJUSTMENTS.
6. MATERIAL AND INSTALLATION SHALL BE IN COMPLIANCE WITH NEWTON COUNTY REQUIREMENTS.
7. REFER TO ARCHITECTURAL AND M.E.P. PLANS FOR LOCATION OF WATER, SEWER AND GAS LINES WITHIN PROPOSED BUILDINGS. CONTRACTOR SHALL COORDINATE TIE-IN OF UTILITIES WITH ARCHITECTURAL PLANS AND M.E.P. REPRESENTATIVE.
8. EARTHWORK OPERATIONS SHALL COMPLY WITH REQUIREMENTS OF O.S.H.A. CONSTRUCTION STANDARDS, PART 1926, SUBPART P, EXCAVATIONS, TRENCHING, AND SHORING AND SUBPART O, MOTOR VEHICLES, MECHANIZED EQUIPMENT, AND MARINE OPERATIONS, AND SHALL BE CONDUCTED IN A MANNER ACCEPTABLE TO THE SITE DESIGN PROFESSIONAL.
9. A MINIMUM HORIZONTAL SEPARATION OF 10' SHALL BE MAINTAINED BETWEEN WATER LINES AND SANITARY SEWERS. AN 18 INCH MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS. WHEN CROSSING A WATERLINE OR SEWER LINE, PIPE JOINTS SHALL BE PLACED AS FAR AWAY AS POSSIBLE FROM THE OTHER PIPE.
10. PEDESTRIAN AND LOCAL VEHICULAR TRAFFIC SHALL BE MAINTAINED FOR UTILITY WORK WITHIN PUBLIC RIGHT-OF-WAYS. SAFETY DEVICES AND FLAG MEN SHALL BE PROVIDED BY THE CONTRACTOR AT HIS/HER EXPENSE. WRITTEN PERMISSION TO CLOSE THE CONSTRUCTION AREA TO TRAFFIC SHALL BE OBTAINED FROM THE APPROPRIATE GOVERNMENT AGENCY PRIOR TO THE CLOSING.
11. CONTRACTOR SHALL MEET LOCAL UTILITY COMPANY REGULATIONS IN ANY READJUSTMENT OR RELOCATION OF EXISTING SERVICES. WHEN CONSTRUCTION INVOLVES THE REMOVAL OF FENCE, POLES, SIDEWALKS, DRIVE, TEMPORARY OR FIXED STRUCTURES; THE CONTRACTOR AT HIS/HER EXPENSE SHALL PROVIDE FOR TEMPORARY SERVICE OR CONTAINMENT TO THE AFFECTED PROPERTY, AND SHALL REPLACE SUCH ITEMS WITH SIMILAR OR BETTER MATERIALS AS SOON AS PRACTICAL OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE FOLLOWING UTILITY INSTALLATION.
12. USE OF PRECAST INVERT MANHOLES IS ACCEPTABLE PROVIDED INVERTS ARE NOT FIELD MODIFIED.
13. EXISTING PIPE CAN ONLY BE CUT IN THE PRESENCE OF NEWTON COUNTY REPRESENTATIVE(S). CUT-IN MANHOLE IS REQUIRED UNLESS DOGHOUSE MANHOLE IS SPECIFICALLY APPROVED BY NEWTON COUNTY PRIOR TO CONSTRUCTION.
14. NO TREES OR PERMANENT STRUCTURES SHALL BE ALLOWED IN SANITARY SEWER EASEMENT, UNLESS OTHERWISE APPROVED BY NEWTON COUNTY.
15. SEWER MAINS AND LATERAL(S) SHALL HAVE TRACER WIRE INSTALLED TO THE STRUCTURE FOUNDATION, UNLESS OTHERWISE APPROVED BY NEWTON COUNTY.
16. ALL UTILITIES, INCLUDING BUT NOT LIMITED TO WATER AND SANITARY SEWER UTILITIES AND STORM DRAIN FACILITIES SHALL BE INSTALLED AND THE TRENCHES BACKFILLED AND THOROUGHLY COMPACTED BEFORE ANY PAVEMENT OR BASE IS INSTALLED.
17. AUTHORIZED PUBLIC UNDERGROUND UTILITIES SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR WITHIN AN EASEMENT DESIGNATED FOR SUCH USE. WITHIN PUBLIC STREET RIGHT-OF-WAY, PLACEMENT OF THE VARIOUS AUTHORIZED UTILITIES (POWER, GAS, CABLE TV, WATER AND SEWER) SHALL CONFORM TO THE SPECIFIC LOCATIONS DESIGNATED FOR SUCH USE BY NEWTON COUNTY.
18. NO OTHER UNDERGROUND UTILITIES, SUCH AS PRIVATE LAWN SPRINKLER SYSTEMS, YARD LIGHTING, ETC., SHALL BE INSTALLED WITHIN A PUBLIC RIGHT-OF-WAY OR EASEMENT EXCEPT BY AUTHORIZATION OF NEWTON COUNTY. SUCH AUTHORIZATION, IF ISSUED, SHALL REQUIRE THE APPLICANT TO ASSUME ALL REPAIR COSTS OF THE APPLICANT'S FACILITIES SHOULD THEY BE DAMAGED DURING THE COURSE OF INSTALLATION, MAINTENANCE OR REPAIR OF ANY OF THE PUBLIC UTILITIES AUTHORIZED TO OCCUPY SAID RIGHT-OF-WAY OR EASEMENT.
19. 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 NO ADDITIONAL COST TO THE CONTRACT.
20. IF UNDERGROUND ABANDONED PIPES ARE DISCOVERED DURING CONSTRUCTION, CONTRACTOR SHALL REFER TO NEWTON COUNTY FOR REMOVAL OR ABANDONMENT REQUIREMENTS. AT A MINIMUM, CONTRACTOR SHALL REMOVE OR ADEQUATELY PLUG ABANDONED UNDERGROUND PIPES, OR A COMBINATION OF BOTH, IF THESE MEASURES ARE APPROVED BY NEWTON COUNTY.
21. CONTRACTOR SHALL SAWCUT ASPHALT ONLY IN SITUATIONS THAT DO NOT ALLOW FOR JACK AND BORE (CONTRACTOR SHALL OBTAIN NECESSARY PERMITS TO SAWCUT STREETS). CONTRACTOR MAY BE REQUIRED TO BACK TAP EXISTING WATER MAIN WITH DOMESTIC SERVICE TAP OR FIRE SERVICE TAP, IF SUFFICIENT CLEARANCE IS NOT AVAILABLE (SO THAT CURB AND GUTTER IS NOT DAMAGED). IF CURB AND GUTTER IS DAMAGED, CONTRACTOR SHALL REPLACE IT TO ORIGINAL CONDITION AT NO COST TO THE OWNER.
22. CONTRACTOR SHALL CONTACT NEWTON COUNTY WATER DEPARTMENT AND HAVE NEWTON COUNTY DEPARTMENT INSPECTOR PRESENT DURING TAPS.

EARTHWORK GENERAL NOTES – SOFT SOIL AND UNDERCUT

1. SUBGRADE PROTECTION: THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXPOSED SUBGRADES FROM MOISTURE INTRUSION AND DEGRADATION. PROPER DRAINAGE AND SOIL PROTECTION MEASURES SHALL BE MAINTAINED AT ALL TIMES.
2. MOISTURE ADJUSTMENT: CONTRACTOR SHALL SCARIFY, AERATE, AND RECOMPACT WET OR UNSTABLE SOILS AS NEEDED TO ACHIEVE SPECIFIED COMPACTION AND STABILITY. MOISTURE CONDITIONING OF SOILS IS CONSIDERED INCIDENTAL TO EARTHWORK AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.
3. PROOF-ROLLING: PROOF-ROLLING OF SUBGRADES IS REQUIRED PRIOR TO PLACEMENT OF BASE MATERIAL OR PAVEMENT. AREAS EXHIBITING RUTTING, PUMPING, OR DEFLECTION DURING PROOF-ROLLING SHALL BE REWORKED BY THE CONTRACTOR AT NO ADDITIONAL COST.
4. UNDERCUT PROCEDURE: IF, AFTER SCARIFYING AND DRYING EFFORTS, SUBGRADES REMAIN UNSTABLE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER'S REPRESENTATIVE IMMEDIATELY. NO UNDERCUTTING OR REPLACEMENT SHALL BE PERFORMED WITHOUT PRIOR WRITTEN APPROVAL.
5. PAYMENT FOR UNDERCUT: UNDERCUT AND REPLACEMENT WITH GRADED AGGREGATE BASE (GAB) OR APPROVED MATERIAL WILL ONLY BE PAID IF AUTHORIZED IN WRITING BY THE ENGINEER OR OWNER. PAYMENT WILL BE BASED ON UNIT PRICES INCLUDED IN THE CONTRACT, APPROVED ALLOWANCE ITEMS, OR NEGOTIATED CHANGE ORDER.
6. FORESEEABLE CONDITIONS: SUBGRADES THAT BECOME UNSTABLE DUE TO NORMAL WEATHER CONDITIONS, EXPOSURE, OR LACK OF PROTECTION ARE CONSIDERED FORESEEABLE AND ARE THE CONTRACTOR'S RESPONSIBILITY TO CORRECT WITHOUT ADDITIONAL PAYMENT.
7. DOCUMENTATION: THE CONTRACTOR SHALL DOCUMENT AND REPORT ANY SUSPECTED UNSUITABLE SUBGRADE CONDITIONS PROMPTLY, INCLUDING PHOTOGRAPHS, WEATHER CONDITIONS, AND OBSERVED FIELD CONDITIONS, TO SUPPORT ANY REQUEST FOR ADDITIONAL WORK AUTHORIZATION.
8. OWNER'S RIGHT TO DIRECT MEANS: THE OWNER AND/OR ENGINEER RESERVES THE RIGHT TO DIRECT SCARIFYING, DRYING, OR OTHER REMEDIAL MEASURES IN LIEU OF UNDERCUTTING IF DEEMED FEASIBLE TO RESTORE SUBGRADE STABILITY.

PROPERTY LINE IDENTIFICATION

CONTRACTOR SHALL RETAIN A GEORGIA REGISTERED LAND SURVEYOR TO LOCATE AND MARK ALL PROPERTY AND EASEMENT LINES PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE CONSTRUCTION OCCURS WITHIN 25 FEET OF A PROPERTY LINE, THE LINE SHALL BE FIELD MARKED AT INTERVALS NOT TO EXCEED 50 FEET. THE CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE AND RETURN ANY UNINTENTIONALLY DISTURBED AREAS TO EQUAL OR BETTER CONDITION.

FENCE PROTECTION AND RESTORATION

CONTRACTOR SHALL PROTECT ALL EXISTING FENCING WITHIN THE PROJECT LIMITS. WHERE TEMPORARY REMOVAL IS REQUIRED FOR ACCESS OR GRADING, CONTRACTOR SHALL REINSTALL FENCE IN ORIGINAL LOCATION USING EXISTING MATERIALS WHERE SALVAGEABLE. DAMAGED OR MISSING SECTIONS SHALL BE REPLACED TO MATCH EXISTING CONDITIONS OR AS DIRECTED BY OWNER. ALL COSTS TO BE INCLUDED IN THE BASE CONTRACT.

CONCRETE JOINT CONTROL

CONTRACTOR SHALL PROVIDE CONSTRUCTION JOINTS BETWEEN CONCRETE POUR SECTIONS, EXPANSION JOINTS BETWEEN CONCRETE POURS AND ANY ABUTTING STRUCTURAL ELEMENTS SUCH AS BUILDINGS, CURBING, WALLS, ETC., AND CONTROL JOINTS PER THE DETAILS ON THE DRAWINGS. FOR CONCRETE PAVING AREAS,, NOT INCLUDING SIDEWALKS, CONTRACTOR SHALL, CONTRACTOR SHALL SUBMIT TO ENGINEER A SUGGESTED JOINT PLAN FOR REVIEW AND COMMENTS/APPROVAL, PRIOR TO INSTALLATION OF PAVING.

STORM STRUCTURE ALIGNMENT

ALL CURB INLET OPENINGS SHALL ALIGN WITH THE FACE OF CURB. GRATES FOR COMBINATION CURB INLET STRUCTURES SHALL BE CENTERED WITHIN THE GUTTER FLOW LINE. END SECTIONS AND HEADWALLS SHALL BE INSTALLED RECESSED INTO THE SIDESLOPE OF DITCHES OR CHANNELS. CONTRACTOR SHALL COORDINATE STRUCTURE PLACEMENT TO MATCH GRADES AND DRAINAGE FLOWLINES IN THE FIELD.

SANITARY SEWER SYSTEM REQUIREMENTS:

1. THE SANITARY SEWER SYSTEM SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL (HAVING JURISDICTION) REQUIREMENTS.
2. ALL SANITARY SEWER MATERIALS, SIZES, TYPES AND SPECIFICS ARE LISTED ON THE DRAWINGS. IF THE PLANS DO NOT LIST ALL INFORMATION OR ARE UNCLEAR, USE THE FOLLOWING:
   - SANITARY PIPE AND FITTINGS SHALL BE POLYVINYL CHLORIDE (PVC) PER ASTM D 3034, SDR 35, WITH GASKETS PER ASTM D 3212, ELASTOMERIC SEAL. THE PIPE SHALL BE BED 6 INCHES BELOW AND UP HALF ITS DIAMETER WITH CLEAN STONE OF A UNIFORM MIX RANGING IN SIZE OF 1/4 TO 3/4 INCH.
   - FORCEMAIN PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PER ASTM D 2241, SDR 21 OR LOWER IF PRESSURES ARE HIGH IN SYSTEM WITH GASKETS PER ASTM D 3139, AND ELASTOMERIC SEAL. THE PIPE SHALL BE ENCLOSED IN A RUN OF CRUSH STONE GRAVEL MATERIAL WITH 100% PASSING THE 2" SIEVE AND 2 TO 10% PASSING THE 200 SIEVE.
   - MANHOLES SHALL BE PROVIDED PER ASTM C 478 WITH STEEL CORE POLYETHYLENE STEPS. GASKETS BETWEEN RISERS SHALL BE RUBBER PER ASTM C 443 AND MORTARED WATER TIGHT WITH A WATERPROOF/PLUG MORTAR. THE INVERT SHALL BE MADE WITH CONCRETE OR 1/2 ROUND SECTION OF PIPE. PIPE JOINTS SHALL BE PRESS WEDGE OR CAST IN PLACE BOOT. BOTH SHALL HAVE ADDITIONAL VOIDS FILLED WITH WATERPROOF/PLUG MORTAR. ADJUSTMENT RINGS SHALL BE PRECAST CONCRETE 4000 PSI AND 5 TO 8% AIR ENTRAINMENT. EXTERIOR MANHOLES SHALL BE COATED WITH A SEAL COAT ACCEPTABLE TO NEWTON COUNTY.
   - CLEANOUTS SHALL BE MADE OF THE SAME PIPE MATERIAL AS THE CARRIER PIPE. A CAST IRON FRAME AND COVER SHALL BE PROVIDED FOR ACCESS AT GRADE AND DESIGNED FOR H-20 LOADING. THE CLEANOUT SHALL BE ENCASED IN STONE OF THE SAME TYPE AS THE BEDDING FOR THE FULL DEPTH OF THE CLEANOUT. CLEANOUTS SHALL BE NO MORE THAN 90 FEET APART ON LATERALS.
   - MANHOLE FRAMES AND COVERS SHALL BE PER ASTM A 48, CLASS 30B, FULLY COATED WITH THE LETTERING "SANITARY" CAST INTO IT. THE MINIMUM SIZE SHALL BE A 24 INCH INSIDE OPENING AND DESIGN FOR A MINIMUM OF H-20 LOADING.
3. ALL PIPE SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. CARE SHALL BE GIVEN DURING BACKFILL OPERATIONS NOT TO MOVE OR DAMAGE PIPE OR APPURTENANCES WHILE ACHIEVING THE APPROPRIATE COMPACTION REQUIREMENTS.
4. ALL SYSTEMS SHALL BE VISUALLY INSPECTED FOR ALIGNMENT AND WORKMANSHIP. ALL DEBRIS, DIRT OR OTHER FOREIGN OBJECTS SHALL BE REMOVED AND THE SYSTEM FLUSHED CLEAN.
5. ALL TAPS TO MAIN LINES SHALL BE MADE WITH SADDLES WHEN THE TAP IS 1/2 THE DIAMETER OR LESS OF THE EXISTING PIPE BUT MADE WITH A SLEEVE WHEN THE TAP IS GREATER THAN 1/2 THE DIAMETER OR EQUAL TO THE EXISTING PIPE. IF CONNECTIONS ARE REQUIRED TO EQUAL SIZE PIPES OF 8 INCHES OR GREATER, A MANHOLE SHALL BE INSTALLED OVER THE CONNECTION POINT AND INVERTS FORMED. WHEN CONNECTING TO AN EXISTING MANHOLE, THE CONNECTING PIPE HOLE SHALL BE CORED AND A PRESS WEDGE INSTALLED. THE CONNECTION SHALL BE MORTARED UP WITH WATERPROOF/PLUG MORTAR. INSIDE THE EXISTING MANHOLE, THE EXISTING INVERT SHALL BE BROKE OUT IN A MANNER THAT PROTECTS FROM DEBRIS ENTERING THE LIVE SYSTEM, WHILE A NEW INVERT IS FORMED.
6. SANITARY MANHOLES SHALL BE VISUALLY LAMPED AFTER BACKFILL TO VERIFY ALIGNMENT, CLEANLINESS, AND THERE IS NO DAMAGE TO THE SYSTEM. AFTER THE SYSTEM HAS BEEN BACKFILLED FOR 30 DAYS, THE SYSTEM SHALL BE RELAMPED AND TESTED WITH A MANDREL SIZED AT 95% OF THE INTENDED INSIDE DIAMETER.
7. GRAVITY SYSTEMS SHALL BE AIR TESTED BETWEEN MANHOLES TO 3.5 PSI FOR 5 MINUTES PER ASTM F 1417 FOR PLASTIC PIPES.
8. MANHOLES SHALL BE TESTED SEPARATELY FOR LEAKAGE OR INFILTRATION USING ASTM C 969. THE ALLOWED LEAKAGE = 0.1 GALLONS / {(FEET OF DIAMTER)(FEET OF HEAD)(#OF HOURS)} AND THE TEST SHALL RUN FOR 24 HOURS.
9. WHEN NECESSARY TO VERIFY THE SYSTEM INTEGRITY, THE ENTIRE SYSTEM MAY BE TESTED FOR INFILTRATION AND EXFILTRATION USING ASTM C 969. THE SYSTEM SHALL BE BROKEN UP INTO SECTIONS WHEN NECESSARY TO CONSIDER GROUNDWATER DEPTH, LENGTH AND ELEVATION DIFFERENCES.
10. FAILURE OF ANY TESTING SHALL REQUIRE THE CONTRACTOR TO REPAIR OR REPLACE THE FAILED SECTION AT NO ADDITIONAL EXPENSE TO THE CONTRACT.
11. AFTER ALL TESTING IS COMPLETE AND BEFORE THE SYSTEM IS TURNED OVER TO NEWTON COUNTY, THE SYSTEM SHALL BE CHECKED TO VERIFY IT IS CLEAN AND FREE OF DIRT, DEBRIS AND OTHER FOREIGN MATTER. THE CONTRACTOR SHALL CLEAN ANY SECTIONS REQUIRING SUCH AT NO ADDITIONAL COST TO THE CONTRACT.

STORM WATER SYSTEM:

1. THE STORM WATER SYSTEM SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE LOCAL STORM WATER AUTHORITY FOR THIS PROJECT IS NEWTON COUNTY AND THE EROSION CONTROL AND RUN-OFF AUTHORITY IS NEWTON COUNTY.
2. STORM DESIGN INCLUDES MANY VARIABLES, SUCH AS PIPE ROUGHNESS COEFFICIENT, THAT CAN AFFECT THE ACTUAL FINAL RUN-OFF. IF NO ALTERNATIVE MATERIALS ARE LISTED ON THE UTILITY DRAWINGS NO SUBSTITUTIONS MAY BE MADE BY THE CONTRACTOR UNLESS FIRST REVIEWED AND ACCEPTED BY THE ENGINEER.
3. ALL STORM MATERIAL SIZES, TYPES AND SPECIFICS ARE LISTED ON THE DRAWINGS.
4. WHENEVER CLEAN STONE IS USED FOR BEDDING, BACKFILL OR ENCASEMENT, FILTER FABRIC SHALL BE PLACED BETWEEN THE NATURAL AND BACKFILL SOILS TO PREVENT MIGRATION OF FINES INTO THE VOIDS, AS NECESSARY. ANTI-SEEP COLLARS SHALL ALSO BE INCORPORATED AT THE PROJECT LIMIT AND ALONG THE PIPE TO PREVENT WATER FLOW WITHIN THE STONE BEDDING OR ENCASEMENT. ANTI-SEEP COLLARS MAY NOT BE REQUIRED WHEN USING PERFORATED PIPE. ANTI-SEEP COLLARS SHALL BE INCORPORATED AT POND AND BASIN OUTLETS TO PREVENT WATER MIGRATION ALONG PIPE BEDDING OR ENCASEMENT MATERIAL.
5. END SECTIONS SHALL BE THE SAME MATERIAL AS THE PRECEDING PIPE AND APPROPRIATE COLLAR.
6. MANHOLES SHALL BE PROVIDED PER ASTM C 478 WITH STEEL CORE POLYETHYLENE STEPS. THE MANHOLE SHALL BE SIZED TO A MINIMUM OF 2 FOOT GREATER THAN THE LARGEST DIAMETER PIPE ENTERING OR EXISTING. INCREASE SIZE OF MANHOLE IF, IN THE SAME HORIZONTAL PLANE, THERE ARE TWO AREAS WHERE THE AREA BETWEEN TWO PIPES IS LESS THAN 8 INCHES OR HALVE OR THE CIRCUMFERENCE IS SUPPORTED BY LESS THAN 1/2 OF THE DIAMETER OF THE MANHOLE. INVERTS SHALL BE SMOOTH CAST IN PLACE CONCRETE. UNLESS OTHERWISE INDICATED, COVER 4 INCH WEEPS WITH FILTER FABRIC. 2 INCH STONE SHALL BE PROVIDED AT THE CROWN OF PIPES AND AT SUBGRADE ELEVATION. GASKETS BETWEEN RISERS SHALL BE RUBBER PER ASTM C 443. ADJUSTMENT RINGS SHALL BE PRECAST CONCRETE 4000 PSI AND 5 TO 8% AIR ENTRAINMENT.
7. INLETS SHALL MEET THE SAME REQUIREMENTS AS THOSE LISTED FOR MANHOLES.
8. GRATES SHALL BE RETICULINE AND GALVANIZED PER ASTM A123. MINIMUM GRATE OPENING SIZE WILL BE 18" X 24" AND DESIGN FOR A MINIMUM OF H-20 LOADING.
9. MANHOLE FRAMES AND COVERS SHALL BE PER ASTM A 48, CLASS 30B, FULLY COATED WITH THE LETTERING "STORM" CAST INTO IT. THE MINIMUM SIZE WILL BE A 24 INCH INSIDE OPENING AND DESIGN FOR A MINIMUM OF H-20 LOADING.
10. CLEANOUTS SHALL BE MADE OF THE SAME PIPE MATERIAL AS THE CARRIER PIPE. A CAST IRON FRAME AND COVER SHALL BE PROVIDED FOR ACCESS AT GRADE AND DESIGNED FOR H-20 LOADING. THE CLEANOUT SHALL BE ENCASED IN STONE OF THE SAME TYPE AS THE PIPE BEDDING FOR THE FULL DEPTH OF THE CLEANOUT.
11. RIP RAP SHALL BE PLACED AT THE END OF ALL OUTFALL STRUCTURES. UNLESS OTHERWISE NOTED, THE RIP RAP SHALL BE A CLEAN DURABLE STONE WITH AVERAGE WEIGHTS OF 100 POUNDS. THE RIP RAP SHALL BE PLACED ON 1 FOOT OF GRAVEL SUBBASE OR STABILIZING FABRIC.
12. DRY WELLS SHALL MEET THE SAME REQUIREMENTS AS THOSE LISTED FOR MANHOLES WITH THE ADDITION OF OPENINGS OF APPROXIMATELY 15% OF THE RINGS INTERIOR SURFACE. THE OPENINGS SHALL BE 1 X 3 INCH SLOTS OR 1 INCH DIAMETER ON THE INSIDE SURFACE. DRY WELLS SHALL BE BACKFILLED WITH A MINIMUM OF 1 FOOT OF CLEAN STONE SIZED BETWEEN 3 AND 4 INCHES. OUTSIDE THE STONE THE ENTIRE STRUCTURE SHALL BE WRAPPED IN FILTER FABRIC TO PREVENT OUTSIDE SOILS FROM ENTERING THE STONE AND DRY WELL.
13. UNLESS OTHERWISE NOTED, TRENCH DRAINS SHALL BE MADE WITH 4 INCH PERFORATED CORRUGATED POLYETHYLENE PIPE ENCASED IN CLEAN STONE SIZED BETWEEN 2 INCH AND ¼ INCH AND THEN WRAPPED IN FILTER FABRIC. OUTSIDE DIMENSIONS OF THE TRENCH DRAIN WILL NOT BE LESS THAN 1 FOOT.
14. ALL JOINTS BETWEEN PIPES AND PRECAST STRUCTURES SHALL BE MORTARED TIGHT.
15. ALL PIPE SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATION AND TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. CARE SHALL BE GIVEN DURING BACKFILL OPERATIONS NOT TO MOVE OR DAMAGE PIPE OR APPURTENANCES WHILE ACHIEVING THE APPROPRIATE COMPACTION REQUIREMENTS.
16. ALL SYSTEMS SHALL BE VISUALLY INSPECTED FOR ALIGNMENT AND WORKMANSHIP. ALL DEBRIS, DIRT OR OTHER FOREIGN OBJECTS SHALL BE REMOVED AND THE SYSTEM FLUSHED CLEAN.
17. ANY PIPES FOUND WITH DIAMETER DEFLECTIONS GREATER THAN 5% OF THE SPECIFIED PIPE DIAMETER WILL BE REPAIRED OR REPLACED. ANY ALIGNMENT DIFFERENTIALS GREATER THAN 5% OF THE DIAMETER OF THE PIPE WILL BE CORRECTED OR REPLACED.
18. ANY CLEANING, REPAIRS OR REPLACEMENT REQUIRED, DUE TO FAILURE OF TESTING OR POOR WORKMANSHIP, SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE CONTRACT.

WATER SYSTEM AND SERVICES REQUIREMENTS:

1. THE WATER SYSTEMS AND SERVICES SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL (HAVING JURISDICTION) REQUIREMENTS.
2. IF NEWTON COUNTY DOES NOT HAVE SPECIFIC REQUIREMENTS REGARDING MATERIALS AND PLACEMENT, THE FOLLOWING SHALL BE USED:
   - ALL WATER PIPING, FITTINGS AND APPURTENANCES SHALL BE PLACED A MINIMUM OF 6 INCHES BELOW FROST LINE OR 5 FEET WHICH EVER IS GREATER. PIPE SIZES 4 INCHES AND UP SHALL BE DUCTILE IRON OR POLYVINYL CHLORIDE AS INDICATED ON THE DRAWINGS (IF NOT SHOWN USE DUCTILE IRON). PIPE SIZES BELOW 4 INCHES SHALL BE COPPER OR POLYETHYLENE AS INDICATED ON THE DRAWINGS (IF NOT SHOWN USE COPPER).
   - THE MINIMUM SEPARATION BETWEEN WATER MAINS AND SERVICES AND SEWER MAINS AND LATERALS SHALL BE 18 INCHES MEASURED VERTICALLY FROM OUTSIDE TO OUTSIDE OF PIPES AT THE CROSSING. A STANDARD LENGTH OF WATER PIPE SHALL BE CENTERED AT THE CROSSING TO MAXIMIZE THE DISTANCE BETWEEN THE CROSSING AND THE NEAREST WATER MAIN OR SERVICE PIPE JOINT. WHEN THE WATER MAIN OR SERVICE RUNS UNDER THE SEWER LINE, A GRAVEL OR CRUSH STONE BACKFILL MEETING THE REQUIREMENTS OF SUBBASE SHALL BE PLACED AND COMPACTED AROUND THE WATER PIPE (UP TO HALF THE DIAMETER OF THE SEWER PIPE) TO PROVIDE ADEQUATE SUPPORT TO THE SEWER LINE. WATER MAINS AND SERVICES AND SEWER MAINS AND LATERALS RUNNING PARALLEL SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
   - DUCTILE IRON PIPE SHALL BE PROVIDED IN ACCORDANCE WITH AWWA C151, (6 INCH DIAMETER AND GREATER SHALL BE CLASS 50) AND (SMALLER THAN 6" SHALL BE CLASS 51). DUCTILE IRON PIPE SHALL BE LINED WITH A CEMENT MORTAR AND SEAL COATED IN ACCORDANCE WITH AWWA C104. GASKETS SHALL BE PROVIDED IN ACCORDANCE WITH AWWA C111. FITTINGS SHALL BE DUCTILE IRON IN ACCORDANCE WITH AWWA C153 COMPACT FITTINGS WITH A PRESSURE RATING OF 350 PSI.
   - STANDARD DUCTILE IRON OR CAST IRON FITTINGS SHALL BE SUPPLIED IN ACCORDANCE WITH AWWA C110 WITH A PRESSURE RATING OF 250 PSI. THE LINING AND GASKETS FOR THE FITTING SHALL MEET THE SAME REQUIREMENTS AS THE PIPE. PLASTIC WRAP PIPES IN ACCORDANCE WITH AWWA C105 AND TAR COAT ALL FITTING BOLTS WHEN EVER SOILS ARE PRIMARILY CLAY OR NOT PH BALANCED. SEE GEOTECHNICAL REPORT FOR SOILS TYPE AND RECOMMENDATIONS.
   - PVC (POLYVINYL CHLORIDE) PIPE SHALL BE FURNISHED IN ACCORDANCE WITH AWWA C900 FOR PIPE 4 INCHES OR GREATER AND ASTM D 1785, SCHEDULE 40, GASKETS PER ASTM F 477- ELASTOMERIC SEAL, SOLVENT CEMENT PER ASTM D 2564 FOR PIPES SMALLER THAN 4 INCHES. TEN GAUGE COPPER TRACE WIRE SHALL BE PLACED WITH ALL PIPE.
   - THRUST RESTRAINTS SHALL BE USED AT ALL FITTINGS, PLUGS, AND APPURTENANCES THAT CAUSE A CHANGE IN DIRECTION, FLOW OR ARE SUBJECT TO THRUST OR HAMMERING BY WATER FLOW. THRUST RESTRAINTS INCLUDE CONCRETE THRUST BLOCKS (3000 PSI), ANCHORING JOINTS AND TIE RODS. CONCRETE THRUST BLOCKS SHALL BE USED UNLESS SPACE, ACCESS OR MAINTENANCE PROHIBIT THEIR USE.
   - COPPER WATER PIPE SHALL BE SUPPLIED IN ACCORDANCE WITH ASTM B 88-TYPE K, SEAMLESS WITH FITTINGS PER AWWA C800.
   - PE (POLYETHYLENE) PIPE SHALL BE FURNISHED IN ACCORDANCE WITH AWWA C9010 AND ASTM D2737.
   - GATE VALVES SHALL BE NONRISING STEM, DOUBLE DISC, BRONZE DISC RESILIENT SEATED, CAST IRON OR DUCTILE IRON BODY AND BONNET IN ACCORDANCE WITH AWWA C509 AND PRESSURE RATED FOR 250 PSI. TEN GAUGE COPPER TRACER WIRE SHALL BE PLACED WITH ALL PIPES.
   - VALVE BOX SHALL BE CAST IRON WITH A BASE COMPATIBLE WITH VALVE, 5 INCHES IN DIAMETER, SCREW TYPE EXTENSION AT TOP AND A COVER THAT READS "WATER".
   - CURB STOPS SHALL HAVE A BRONZE BODY, GROUND KEY PLUG OR BALL WITH WIDE TEE HEAD. THE CURB STOP SHALL BE COMPATIBLE WITH ADJOINING PIPES. THE SERVICE BOX SHALL HAVE A TELESCOPING TOP SECTION WITH A LENGTH THAT PLACES THE ADJUSTMENT CENTERED WHEN BURIED TO THE APPROPRIATE DEPTH. THE SERVICE BOX SHALL BE OF A SIZE AND TYPE THAT IS COMPATIBLE WITH THE CURB STOP. THE COVER SHALL HAVE THE LETTERING "WATER".
3. ALL METERS, VAULTS AND BACKFLOW SHALL MEET THE REQUIREMENTS OF NEWTON COUNTY.
4. FIRE HYDRANTS SHALL CONFORM TO THE REQUIREMENTS OF NEWTON COUNTY AND AWWA C502. DRAIN STONE SHALL HAVE 100% PASSING THE 1-1/2 INCH SIEVE, 90-100% PASSING THE 1 INCH SIEVE, 35-95% PASSING THE 1/2 INCH SIEVE AND 0-15% PASSING THE 1/4 INCH SIEVE. ALL HYDRANTS SHALL INCLUDE A GATE VALVE AND BOX LOCATED AT THE HYDRANT BRANCH TO SHUT OFF THE HYDRANT LINE.
5. DUCTILE IRON PIPE SHALL BE INSTALLED IN ACCORDANCE WITH AWWA C600 AND BE ENCASED IN SELECT BACKFILL WHICH MEANS NO STONE OR OTHER MATERIAL GREATER THAN 2 INCHES IN ANY DIRECTION.
6. PVC, PE AND COPPER PIPE SHALL BE PLACED PER MANUFACTURERS RECOMMENDATIONS AND EMBEDDED IN A 6 INCH SAND ENCASEMENT MEASURED FROM OUTSIDE SURFACE OF THE PIPE TO THE OUTSIDE OF SAND ENCASEMENT.
7. ALL BEDDING AND ENCASEMENTS SHALL BE COMPACTED WITH CARE TO ACHIEVE PROPER COMPACTION WITHOUT DAMAGING THE PIPE, FITTINGS OR APPURTENANCES.
8. ALL WATER MAIN FITTINGS AND VALVES SHALL BE TESTED FOR PRESSURE AND LEAKAGE IN ACCORDANCE WITH AWWA C600. TEST WATER SHALL BE POTABLE. TEST PRESSURE SHALL NOT BE LESS THAN 1.25 TIMES THE WORKING PRESSURE AT THE HIGHEST POINT AND 1.5 TIMES THE WORKING PRESSURE AT THE TESTING POINT. THE PRESSURE MAY NOT DROP MORE THAN 5 PSI DURING THE 2 HOUR TEST. LEAKAGE SHALL NOT EXCEED MORE THAN (L=(SD(P)^0.5)/133,200) WHERE "L= ALLOWABLE LEAKAGE, IN GALLONS PER HOUR" " S= LENGTH OF PIPE TESTED, IN FEET" " D= NOMINAL DIAMETER OF PIPE, IN INCHES" "P=AVERAGE TEST PRESSURE DURING TEST, IN POUNDS PER SQUARE INCH (GAUGE) DURING THE SAME 2 HOUR DURATION.
9. ALL TAP AND/OR CONNECTION MATERIAL AND WORK SHALL BE DONE IN ACCORDANCE WITH AND COORDINATED WITH NEWTON COUNTY. WHEN THE AUTHORITY SO REQUIRES, THE TAPS AND/OR CONNECTIONS SHALL BE DONE BY THE AUTHORITY THEMSELVES AND PAID FOR BY THE CONTRACTOR.
10. OTHER FITTING AND APPURTENANCES NOT PART OF THE MAIN LINE TESTING SHALL BE TESTED BY VISUAL INSPECTION FOR LEAKAGE UNDER NORMAL WORKING PRESSURES.
11. ALL MAIN LINES AND APPROPRIATE APPURTENANCES SHALL BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH AWWA C651 AND THE REQUIREMENTS OF THE APPROPRIATE HEALTH DEPARTMENT.
12. THE CONTRACTOR SHALL COORDINATE ALL TESTING AND DISINFECTING WITH NEWTON COUNTY. IF PROFESSIONAL ENGINEER CERTIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AT LEAST TEN DAYS PRIOR TO THE START OF WORK.
13. FAILURE OF ANY TESTING SHALL REQUIRE THE CONTRACTOR TO REPAIR OR REPLACED THE FAILED SECTION AT NO ADDITIONAL EXPENSE TO THE CONTRACT.

MINIMUM STORM PIPE COVER

UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPING SHALL BE INSTALLED WITH A MINIMUM OF 24 INCHES OF COVER. MINIMUM COVER SHALL BE MEASURED TO THE TOP OF PIPE EXCLUDING FLEXIBLE PAVEMENT (ASPHALT) THICKNESS. COMPACTED ROADWAY BASE MATERIAL AND CONCRETE MAY BE COUNTED TOWARD COVER DEPTH.

STORM SYSTEM CLEANING PRIOR TO ACCEPTANCE

CONTRACTOR SHALL THOROUGHLY CLEAN THE STORM DRAINAGE SYSTEM, INCLUDING ALL PIPING, INLETS, JUNCTION BOXES, AND OUTLET STRUCTURES PRIOR TO FINAL ACCEPTANCE. SEDIMENT, DEBRIS, AND POLLUTANTS SHALL BE REMOVED PRIOR TO REMOVAL OF TEMPORARY EROSION CONTROL MEASURES. STORM PONDS SHALL BE CLEANED OF CONSTRUCTION SEDIMENT PRIOR TO FINAL INSPECTION.

STORM POND MAINTENANCE

OPERATION AND MAINTENANCE OF ALL PRIVATE STORMWATER FACILITIES, INCLUDING PONDS, DRAINAGE STRUCTURES, RIPRAP, AND PIPES OUTSIDE THE PUBLIC RIGHT-OF-WAY, SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. CONTRACTOR SHALL INFORM OWNER OF THIS RESPONSIBILITY PRIOR TO FINAL ACCEPTANCE.
FINAL GRADING TO PREVENT STANDING WATER
UPON COMPLETION OF FINAL GRADING AND PRIOR TO PERMANENT STABILIZATION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE TO REVIEW THE PREPARED SURFACE. THIS REVIEW IS TO OCCUR BEFORE ANY GRASSING OR STABILIZATION BEGINS. THE CONTRACTOR REMAINS FULLY RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE AND PREVENTING STANDING WATER OUTSIDE OF DESIGNATED PONDING AREAS. NO FINAL ACCEPTANCE WILL BE GRANTED UNTIL POSITIVE DRAINAGE IS VERIFIED.

BACKFILL AND GENERAL FILL MATERIAL STANDARDS

ON-SITE MATERIALS USED FOR GENERAL FILL SHALL CONTAIN NO ROCK OR LUMPS GREATER THAN 6 INCHES. BACKFILL MATERIALS SHALL CONTAIN NO ROCK OR LUMPS GREATER THAN 1.5 INCHES. ALL FILL MATERIALS SHALL BE FREE OF ORGANIC MATTER, DEBRIS, METAL, PLASTIC, GLASS, WOOD, OR ANY OTHER NON-SOIL MATERIAL. FILL OR BACKFILL IMPORTED FROM OFF-SITE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO DELIVERY. THE OWNER RESERVES THE RIGHT TO REJECT ANY MATERIAL THAT FAILS TO MEET THESE REQUIREMENTS.

BRAVO SITE SET 08-26-2026

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. PE031684 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER
1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS	
DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title

GENERAL NOTES

Sheet Number

C-1.1

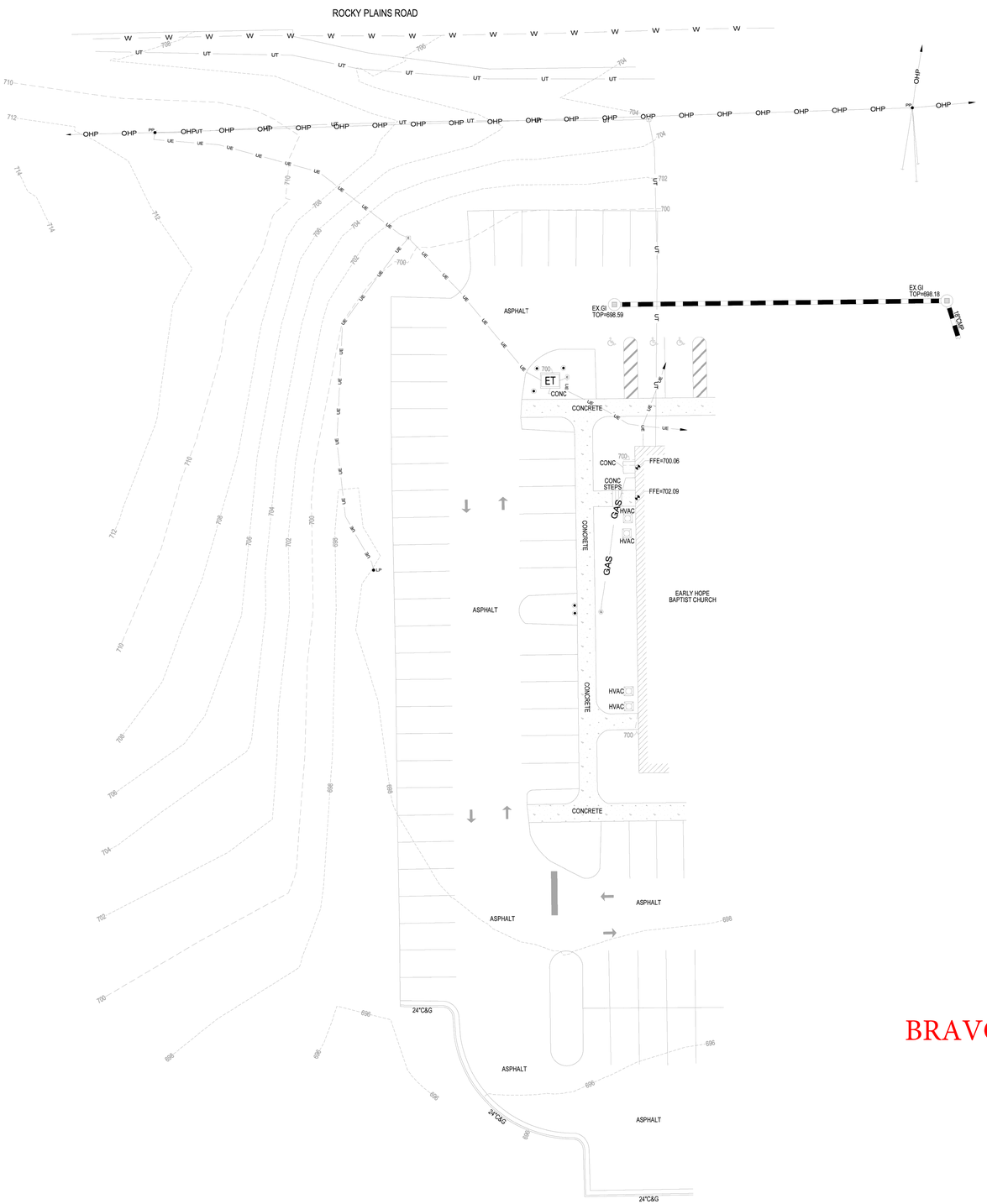
TOPOGRAPHICAL SURVEY

1129 ROCKY PLAINS RD, COVINGTON, GA 30016

NOT FOR RECORDING

THIS BLOCK RESERVED FOR THE CLERK OF THE SUPERIOR COURT.

THIS PLAT CONSTITUTES A TOPOGRAPHICAL SURVEY ONLY AND DOES NOT CONSTITUTE A BOUNDARY SURVEY. THE SURVEYOR'S CERTIFICATION EXTENDS ONLY TO THE TOPOGRAPHIC ASPECTS. THIS PLAT SHALL NOT BE RECORDED NOR USED TO CONVEY PROPERTY.





SITE MAP
N.T.S.

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. STRUCTURES VISIBLE ON THE DATE OF THE SURVEY ARE AS SHOWN HEREON. ALL LOCATIONS ARE ACCURATE ONLY WHERE DIMENSIONED.
5. THIS PROPERTY IS LOCATED IN ZONE "X" AND IS NOT 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. 13217C0210D, 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.
6. 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.
7. 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.
8. UTILITIES, AS SHOWN HEREON, ARE BASED ON ABOVE GROUND VISIBLE EVIDENCE ONLY-AND MARKINGS PROVIDED BY UNITED LINE SERVICES, LLC. DATED 08/26/2025. 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.
9. 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. 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 08/29/2025.
10. THIS PROPERTY IS SUBJECT TO ALL RIGHT OF WAYS AND EASEMENTS OF RECORD.
11. 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.
12. 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.
13. THE TOPOGRAPHICAL INFORMATION, SHOWN HEREON, IS BASED ON FIELD SURVEYED DATA, ELEVATIONS SHOWN ARE BASED ON NAVD88 (COMPUTED USING GEOID18).

LEGEND

	= AIR CONDITIONING UNIT
	= HANDICAP PARKING
T	= TELEPHONE JUNCTION BOX
G	= GAS VALVE
E	= ELECTRIC BOX
E	= ELECTRIC METER
LP	= LIGHT POLE
PP	= POWER POLE
	= GUY ANCHOR/WIRE
	= BOLLARD
ET	= ELECTRIC TRANSFORMER
	= DRAIN INLET
	= STORM PIPE
--GAS--	= GAS LINE
--OHP--	= OVERHEAD POWER
--UE--	= UNDERGROUND ELECTRIC/POWER
--UT--	= UNDERGROUND TELEPHONE
--W--	= WATER LINE
C&G	= CURB & GUTTER
CMP	= CORRUGATED METAL PIPE
CONC	= CONCRETE
FFE	= FINISH FLOOR ELEVATION
HVAC	= HEATING & AIR CONDITIONER UNIT

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

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
SCALE: 1" = 20'

BRAVO SITE SET 08-26-2026

GRID NORTH
GA WEST NAD 83

G. Brian Slate
GEORGIA PROFESSIONAL LAND SURVEYOR, RLS#2629

georgia civil
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
311 North Main Street, Unit C, Suite 101
P.O. Box 896 | Madison, GA 30650
P: 706.342.1104 | C: 706.201.0996
www.georgiacivil.com

GEORGIA PROFESSIONAL No. 2629 G. Brian Slate 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:
EARLY HOPE BAPTIST CHURCH
TMP: 0049000000240000
1129 ROCKY PLAINS ROAD, COVINGTON, GA 30016
LINE3
LINE4
LINE5

CREW CHIEF:	TG
SURVEYED:	08/29/2025
PROJECT #:	25SBB006
DRAWING DATE:	09/17/2025
DRAWN BY:	MP
CHECKED BY:	GBS

REVISIONS

DATE:	DESCRIPTION:
SCALE:	1" = 20'

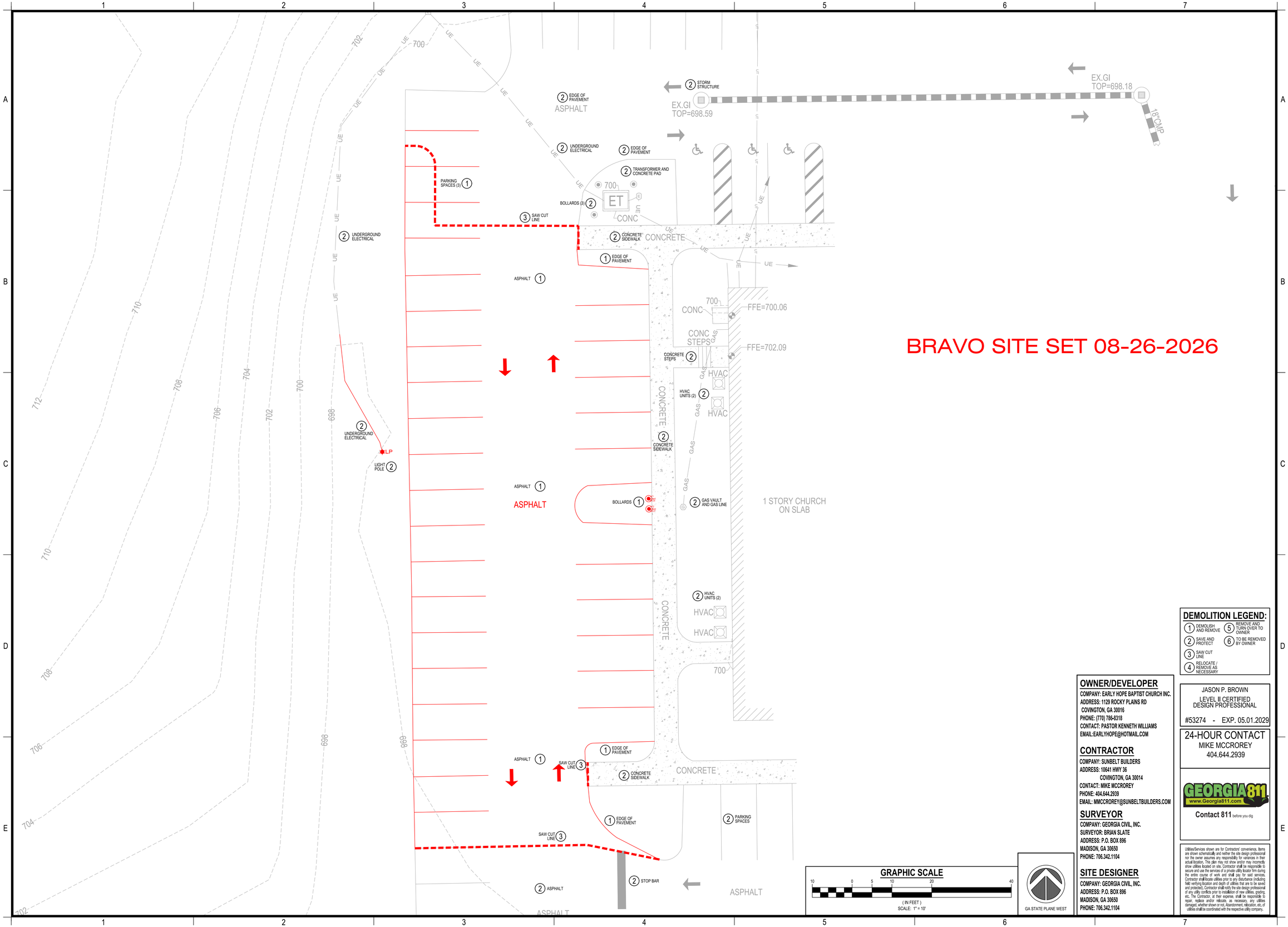
© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title

TOPOGRAPHICAL AND EXISTING CONDITIONS SURVEY

Sheet Number

TS-1



BRAVO SITE SET 08-26-2026

DEMOLITION LEGEND:

1. DEMOLISH AND REMOVE
2. SAVE AND PROTECT
3. SAW CUT LINE
4. RELOCATE / REMOVE AS NECESSARY
5. REMOVE AND TURN OVER TO OWNER
6. TO BE REMOVED BY OWNER

OWNER/DEVELOPER

COMPANY: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR

COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR

COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

SITE DESIGNER

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

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
SCALE: 1" = 10'

GA STATE PLANE WEST

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. PE024889 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER

1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENT
08/21/2026	REVISON 1

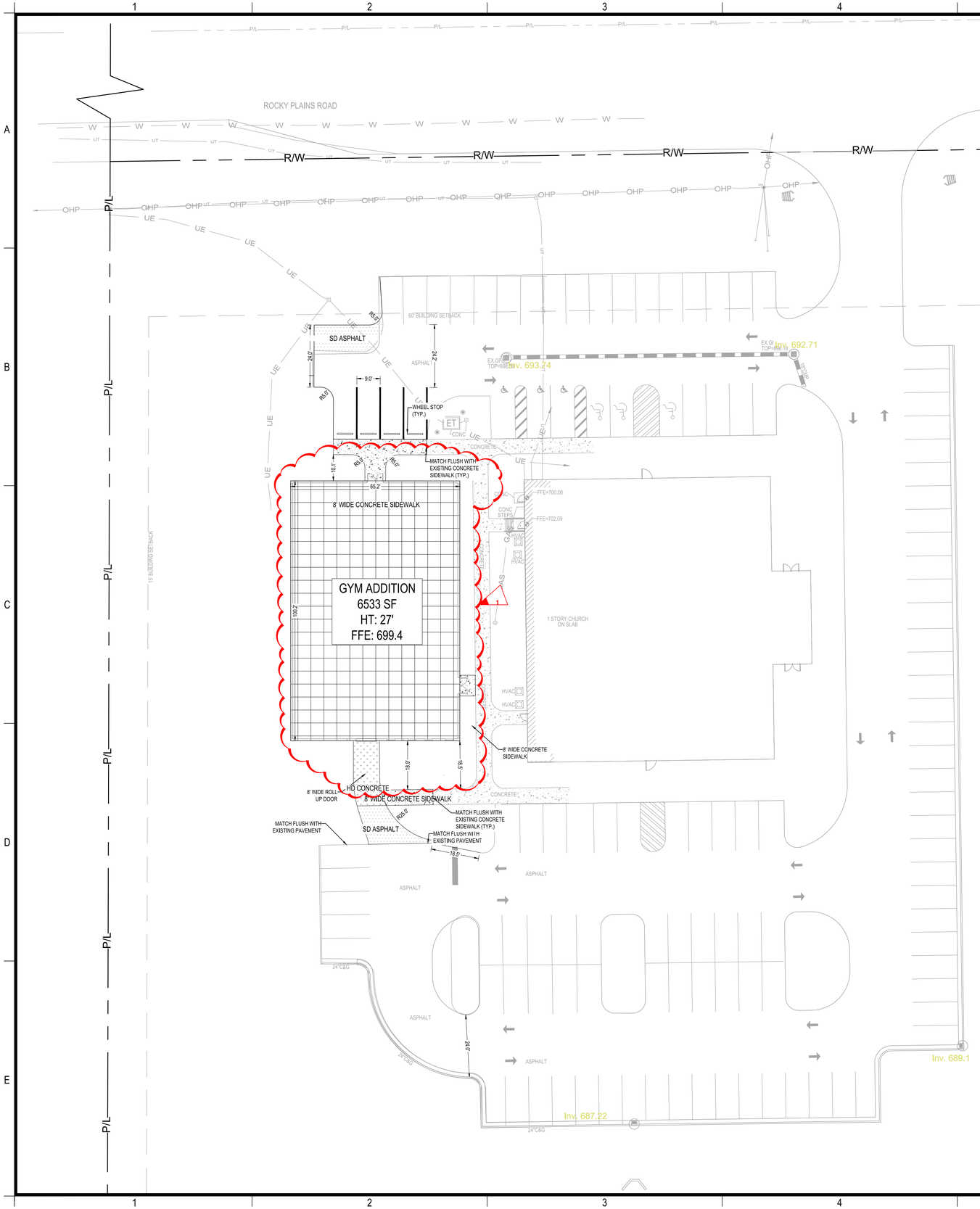
© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title

DEMOLITION AND REMOVAL PLAN

Sheet Number

C-2.0





GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)
SCALE: 1" = 150'

REQUIRED PARKING (1 SPOT PER 4 SEAT IN SANCTUARY)	153
EXISTING PARKING	145
PROPOSED PARKING TOTAL	117
ADA SPACES REQUIRED	XX
ADA SPACES PROVIDED	6

BRAVO SITE SET 08-26-2026

AT ALL LOCATIONS WHERE DIFFERENT PAVEMENT TYPES INTERSECT (SUCH AS CONCRETE ADJACENT TO ASPHALT), ENSURE EQUAL TOTAL SECTION DEPTHS (INCLUDING BASE MATERIAL) ARE MAINTAINED FOR A MINIMUM OF 5 FEET ON EITHER SIDE OF THE TRANSITION. THIS OVERLAP WILL PROVIDE CONSISTENT SUPPORT ACROSS THE JOINT. BEYOND THIS LIMIT, PAVEMENT SECTIONS MAY TRANSITION TO THEIR DESIGN THICKNESSES AS REQUIRED.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
SCALE: 1" = 20'

GA STATE PLANE WEST

PAVING LEGEND:

HD = HEAVY DUTY
SD = STANDARD DUTY

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.

NO LANDFILLS EXIST ON OR AROUND THE PROJECT LOCATION.

NO OUTDOOR STORAGE WILL BE PROVIDED ON THE SITE.

OWNER/DEVELOPER
COMPANY: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

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. PE024859 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER

1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

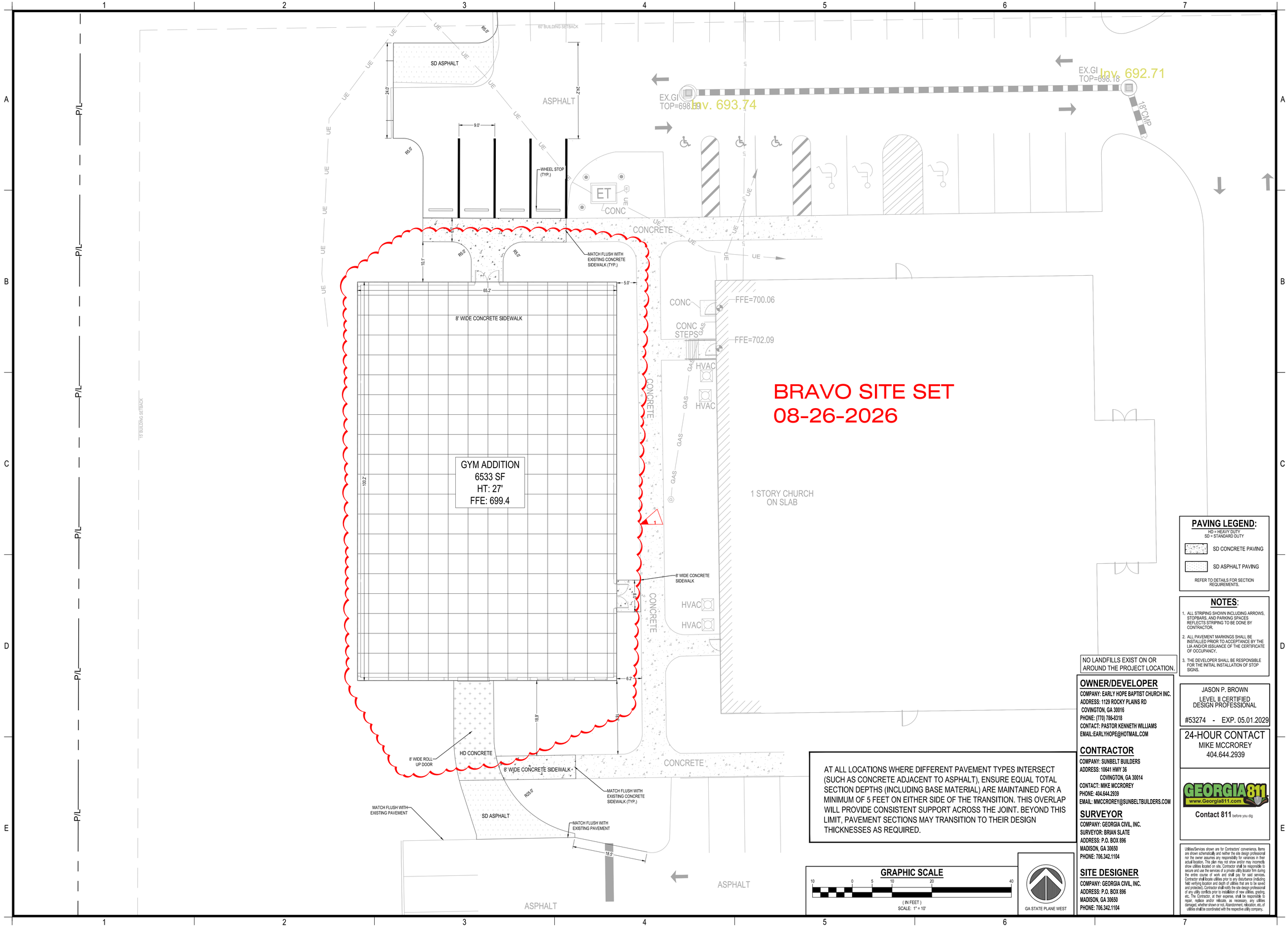
© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title

LAYOUT & STAKING PLAN OVERALL VIEW

Sheet Number

C-2.1



BRAVO SITE SET
08-26-2026

AT ALL LOCATIONS WHERE DIFFERENT PAVEMENT TYPES INTERSECT (SUCH AS CONCRETE ADJACENT TO ASPHALT), ENSURE EQUAL TOTAL SECTION DEPTHS (INCLUDING BASE MATERIAL) ARE MAINTAINED FOR A MINIMUM OF 5 FEET ON EITHER SIDE OF THE TRANSITION. THIS OVERLAP WILL PROVIDE CONSISTENT SUPPORT ACROSS THE JOINT. BEYOND THIS LIMIT, PAVEMENT SECTIONS MAY TRANSITION TO THEIR DESIGN THICKNESSES AS REQUIRED.

PAVING LEGEND:

HD = HEAVY DUTY
SD = STANDARD DUTY

- 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.

NO LANDFILLS EXIST ON OR AROUND THE PROJECT LOCATION.

OWNER/DEVELOPER
COMPANY: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

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

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
SCALE: 1" = 10'

GA STATE PLANE WEST

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. PE021455 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER

1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

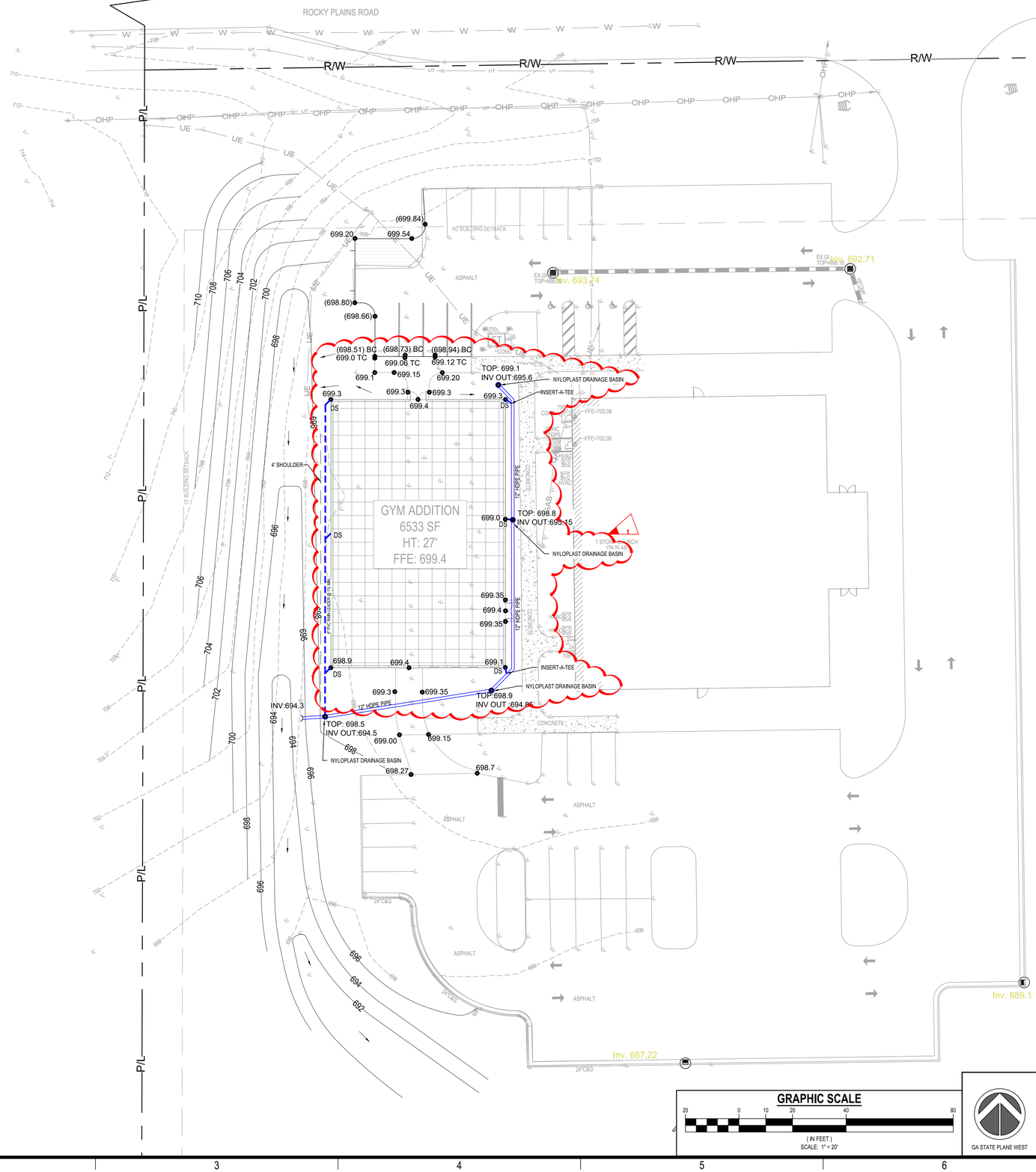
© Copyright 2025 georgia civil, inc
This document and its reproduction are the property of Georgia Civil, Inc, and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title

LAYOUT & STAKING PLAN

Sheet Number

C-2.2



BRAVO SITE SET
08-26-2026

STORMWATER NOTE:

THE PREVIOUS HYDROLOGY REPORT WAS REVIEWED. IT WAS CONFIRMED THAT THE PREVIOUSLY APPROVED IMPERVIOUS AREA WAS INCLUDED IN THE STUDY AND THAT THE PROPOSED IMPERVIOUS AREA REMAINS WITHIN THE LIMITS ANALYZED. SINCE THERE IS NO INCREASE IN IMPERVIOUS AREA, RUNOFF REDUCTION IS NOT REQUIRED.

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.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

SCALE: 1" = 20'

GA STATE PLANE WEST

OWNER/DEVELOPER
COMPANY: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

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. PE021459 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER

1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

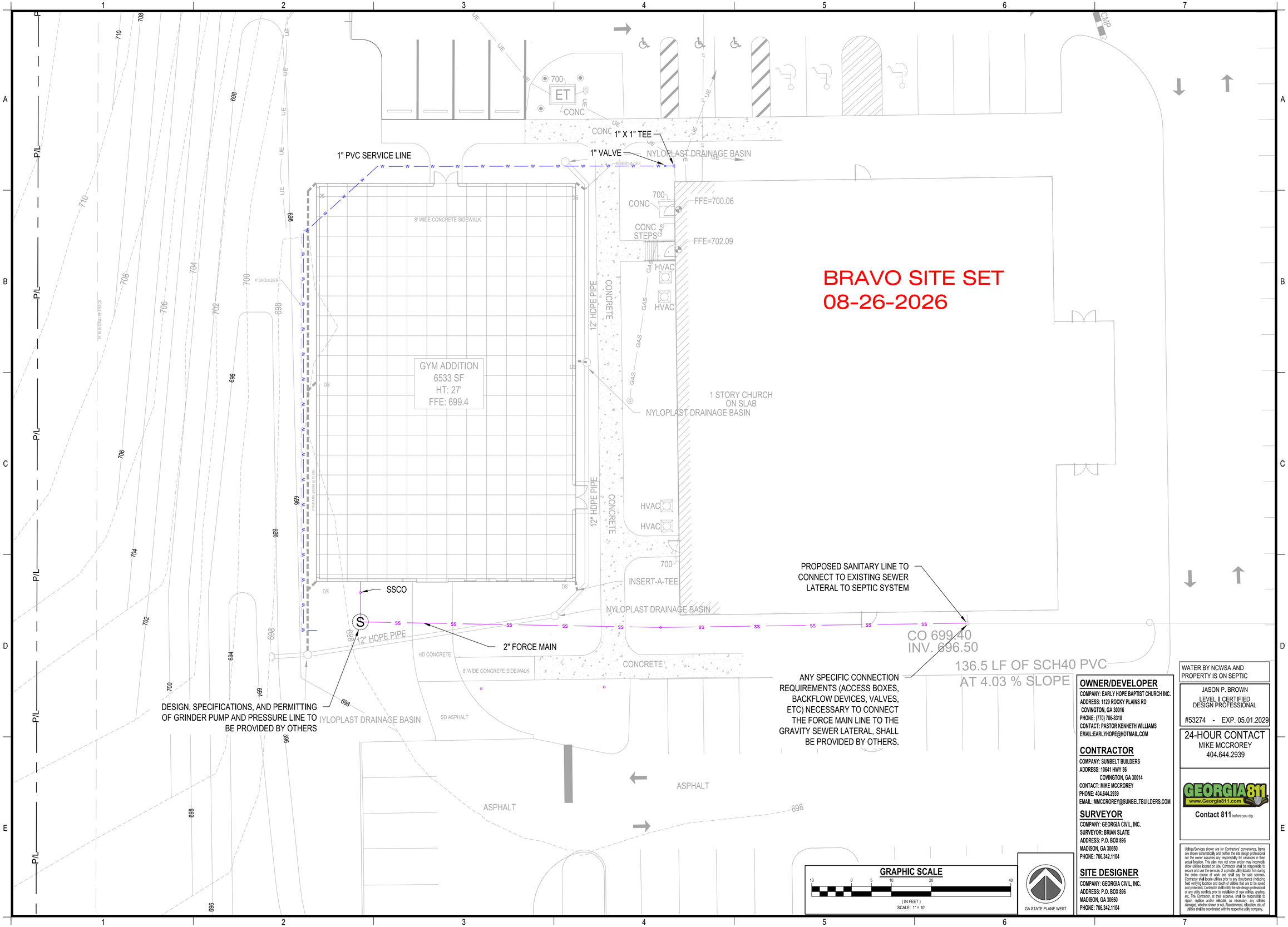
© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title

GRADING & DRAINAGE PLAN

Sheet Number

C-3.0



GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
SCALE: 1" = 10'

GA STATE PLANE WEST

OWNER/DEVELOPER
COMPANY: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

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

WATER BY NCWSA AND PROPERTY IS ON SEPTIC

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.

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. PE021459 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER

1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

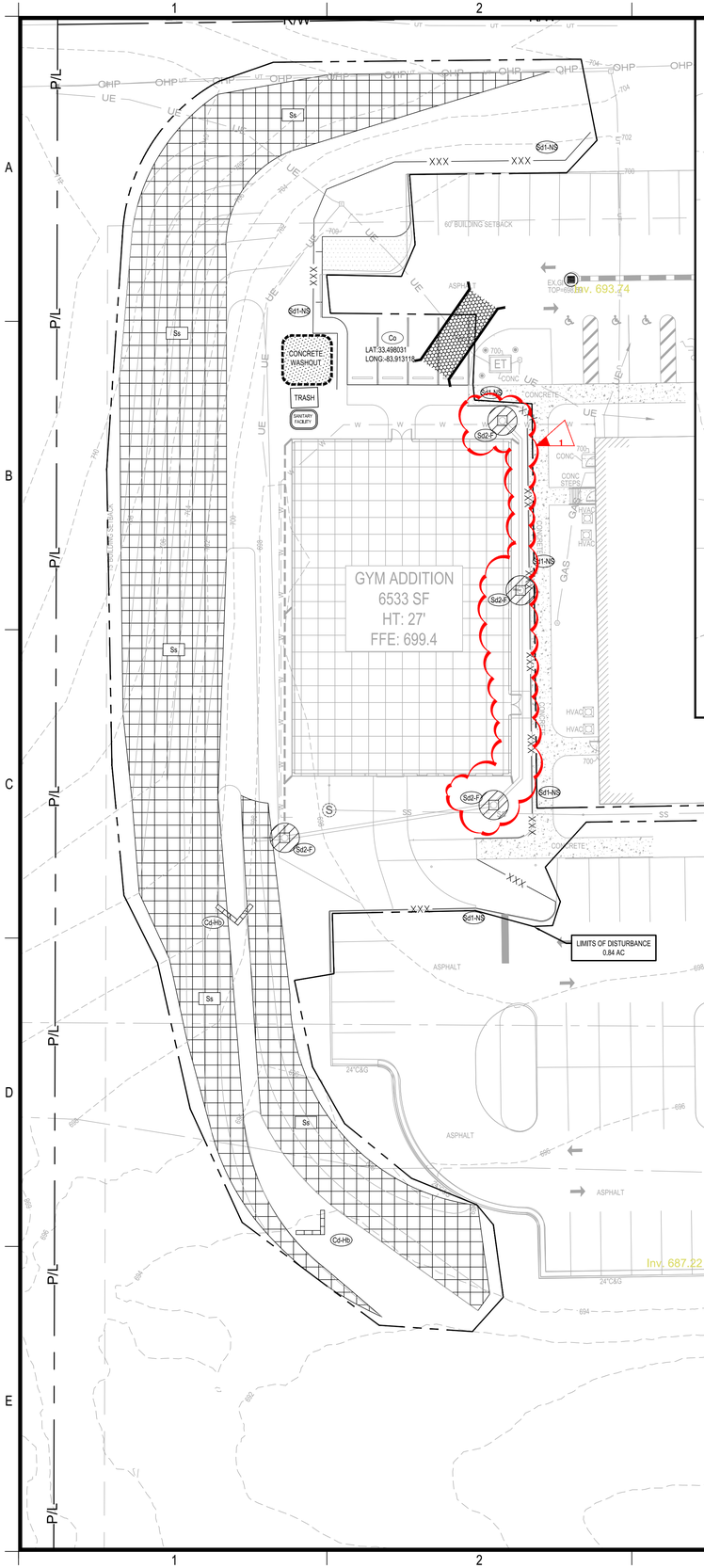
© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

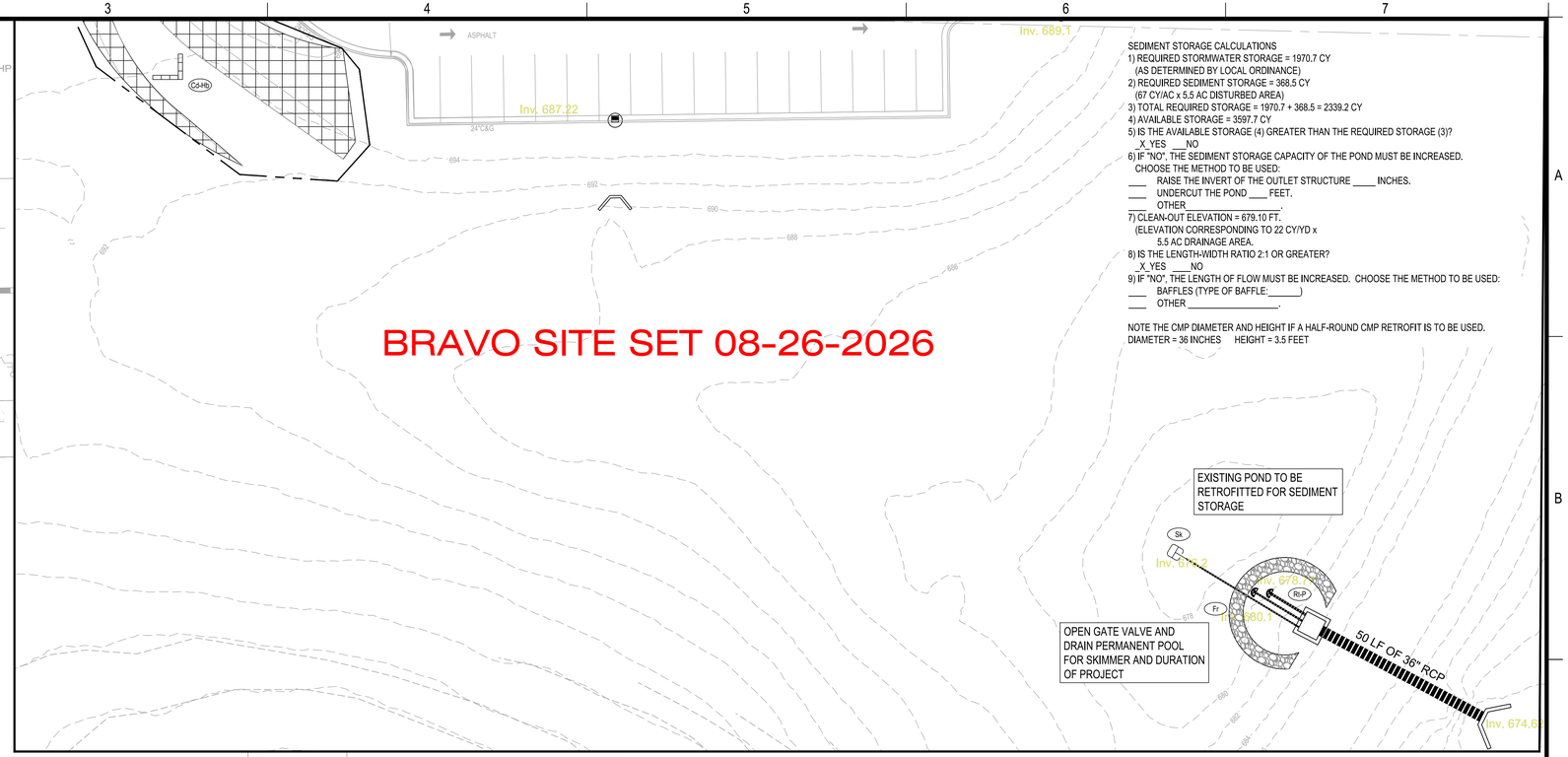
Sheet Title

UTILITY PLAN

Sheet Number

C-4.0





SEDIMENT STORAGE CALCULATIONS
1) REQUIRED STORMWATER STORAGE = 1970.7 CY
(AS DETERMINED BY LOCAL ORDINANCE)
2) REQUIRED SEDIMENT STORAGE = 368.5 CY
(67 CY/AC x 5.5 AC DISTURBED AREA)
3) TOTAL REQUIRED STORAGE = 1970.7 + 368.5 = 2339.2 CY
4) AVAILABLE STORAGE = 3597.7 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 = 679.10 FT.
(ELEVATION CORRESPONDING TO 22 CY/YD x
5.5 AC DRAINAGE 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 _____.

NOTE THE CMP DIAMETER AND HEIGHT IF A HALF-ROUND CMP RETROFIT IS TO BE USED.
DIAMETER = 36 INCHES HEIGHT = 3.5 FEET

GEORGIA UNIFORM CODING SYSTEM
SOIL EROSION & SEDIMENT CONTROL

STRUCTURAL PRACTICES

Code	Practice	Symbol	Code	Practice	Symbol
Cd-Fb	Compost Filter Sock	Cd-Fb	Sd2-D	Inlet Sediment Trap (Grated Drop Inlet Protection)	Sd2-D
Cd-Hb	Straw-Bale Check Dams	Cd-Hb	Sd2-F	Inlet Sediment Trap (Curb Inlet Protection)	
Cd-S	Stone Check Dams	Cd-S	Sd2-S	Inlet Sediment Trap (Sod Inlet Protection)	⊡Indicate type
Ch-1	Channel Stabilization - Category 1 (Vegetated/Sod)	Ch-1	Sd3	Temporary Sediment Basin	Sd3
Ch-2	Channel Stabilization - Category 2 (Rip-Rap, TRM)	Rip-Rap or TRM Ch-2	Sd4	Temporary Sediment Trap	Sd4
Ch-3	Channel Stabilization - Category 3 (Concrete)	Ch-3	Sk	Floating Filter Surface Skimmer	Sk
Co	Construction Exit	Co	SpB	Seep Berm	SpB
Cr	Construction Road Stabilization	Cr	Sr-B	Temporary Stream Crossing (Bridge)	Sr-B
Dc-A	Stream Diversion Channel (Geotextile, Sod, or Polyethylene film)	Dc-A	Sr-C	Temporary Stream Crossing (Culvert)	Sr-C
Dc-B	Stream Diversion Channel (Geotextile alone)	Dc-B	St	Storm Drain Outlet Protection	St
Dc-C	Stream Diversion Channel (Class I Rip-Rap and Geotextile)	Dc-C	Su	Surface Roughening	Su
Di	Diversion	Di	Tc-F	Turbidity Curtain (Floating)	Tc-Cf
Dn1	Temporary Downdrain Structure	Dn1	Tc-S	Turbidity Curtain (Staked)	⊡Indicate type
Dn2	Permanent Downdrain Structure	Dn2	Tp	Topsoiling	Tp
Fr	Filter Ring	Fr	Wt	Vegetated Waterway or Stormwater Conveyance Channel	Wt
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-Sg	Retrofit (Silt Control Gate)	Rt-Sg			
Sd1-BB	Sediment Barrier (Type = Brush Barrier)	Sd1-BB	Fl-Co	Flocculants Coagulants	Fl-Co
Sd1-NN	Sediment Barrier (Type = Non-Sensitive Areas)	Sd1-NN	Sb	Streambank Stabilization (Using Permanent Vegetation)	Sb
Sd1-S	Sediment Barrier (Type = Sensitive Areas)	Sd1-S	Ss	Slope Stabilization (Rolled Erosion Control Products (RECPs))	Ss
Sd1-Cf	Sediment Barrier (Type = Compost Filter Media Sock)	Sd1-Cf	Tac-1	Tackifiers: Type I (Synthetic Polymers)	Tac-1
Sd2-B	Inlet Sediment Trap (Baffle Box)	Sd2-D	Tac-2	Tackifiers: Type II (Organic Polymers)	Tac-2
Sd2-Bg	Inlet Sediment Trap (Block & Gravel Drop Inlet Protection)		Tac-3	Tackifiers: Type III (Synthetic/ Organic Blends)	Tac-3
Sd2-E	Inlet Sediment Trap (Excavated Inlet Sediment Trap)		Tac-4	Tackifiers: Type IV (Organic Tackifiers w/ Synthetic Fibers)	Tac-4
Sd2-F	Inlet Sediment Trap (Filter Fabric w/ Supporting Frame)	⊡ Indicate type	Tac-5	Tackifiers: Type V (Synthetic/Organic Blends w/ Synthetic Fibers)	Tac-5

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			

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'+/-

I, JASON P. BROWN, 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: X.X.XX
SIGNATURE OF PLAN PREPARER AND DATE

NATURE OF CONSTRUCTION ACTIVITY:

PROJECT LOCATION:	NEWTON COUNTY
PROJECT ADDRESS:	1129 ROCKY PLAINS RD COVINGTON, GA 30016
PROJECT TYPE:	ADDITION OF ACCESSORY STRUCTURE
IMPROVEMENTS TO BE MADE:	PART OF EXISTING PARKING LOT TO BE REPLCAED WITH AN ACTIVITY CENTER.
SITE ACREAGE:	25.3 ACRES
DISTURBED ACREAGE:	0.84 AC
STATE WATERS ON SITE:	NO
EPD BUFFER ENCROACH. PERMIT REQD	NO
STATE AND LOCAL BUFFERS ADHERED TO:	YES
WETLANDS OR WATERS OF US ON SITE:	NO
RECEIVING WATERS:	YELLOW RIVER (IMPAIRED)

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.

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

OWNER/DEVELOPER
COMPANY: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

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.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
SCALE: 1" = 20'

GA STATE PLANE WEST

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. PE021489 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER

1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

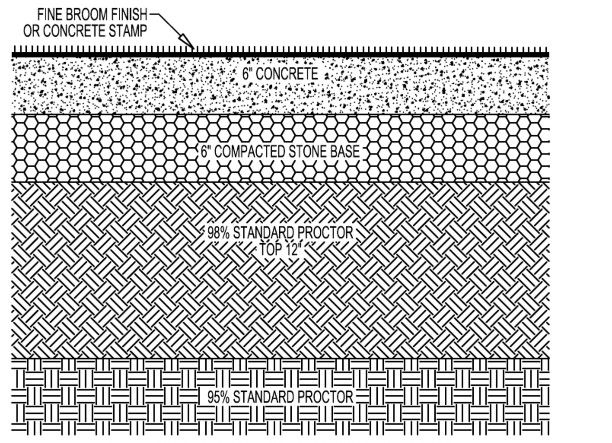
© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title

EROSION CONTROL PLAN

Sheet Number

C-5.0

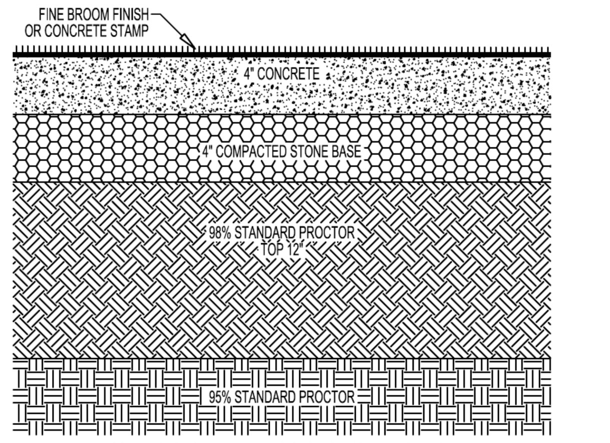


NOTES:

CONTROL JOINTS:	12'-0" O.C. (MAX)	CONCRETE SHALL BE:
ISOLATION JOINTS:	ABUTTING ANY STRUCTURE	3000 P.S.I. @ 28 DAYS 6X6 WW1.4 X W1.4 (2" FROM BOTTOM) FINE BROOM FINISH

N.T.S.

HEAVY DUTY CONCRETE SECTION

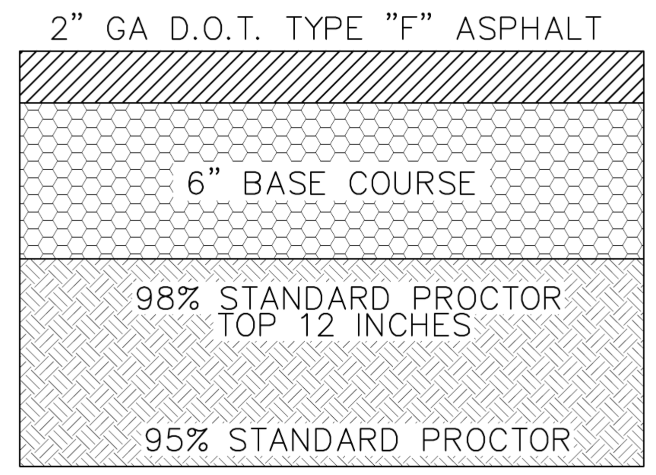


NOTES:

CONTROL JOINTS:	12'-0" O.C. (MAX)	CONCRETE SHALL BE:
ISOLATION JOINTS:	ABUTTING ANY STRUCTURE	3000 P.S.I. @ 28 DAYS 6X6 WW1.4 X W1.4 (2" FROM BOTTOM) FINE BROOM FINISH

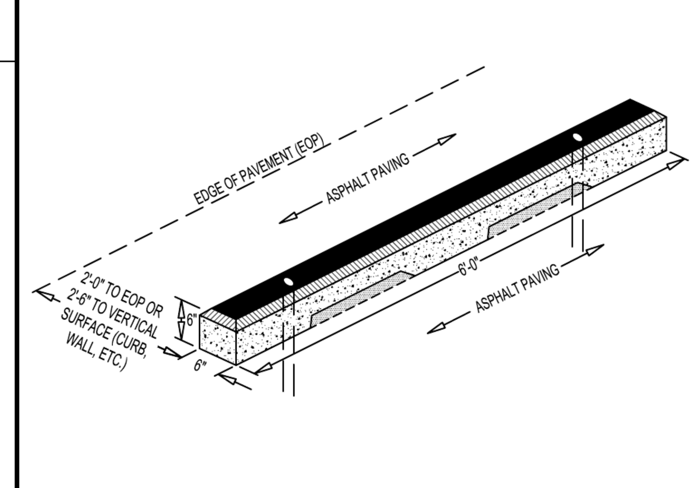
N.T.S.

STANDARD DUTY (PEDESTRIAN) CONCRETE SECTION



LIGHT DUTY ASPHALT PAVING SECTION

N.T.S.



NOTES:
1. PRECAST CONCRETE WHEELSTOPS SHALL BE CONSTRUCTED WITH 4,000 PSI CONCRETE @ 28 DAY STRENGTH WITH STEEL RE-BAR REINFORCING. PROVIDE STEEL ATTACHMENT SPIKES COUNTERSUNK INTO PAVING AND FLUSH WITH TOP OF WHEELSTOP.

N.T.S.

PRECAST WHEEL STOP

Cd-Hb
GSWCC 2016 Edition

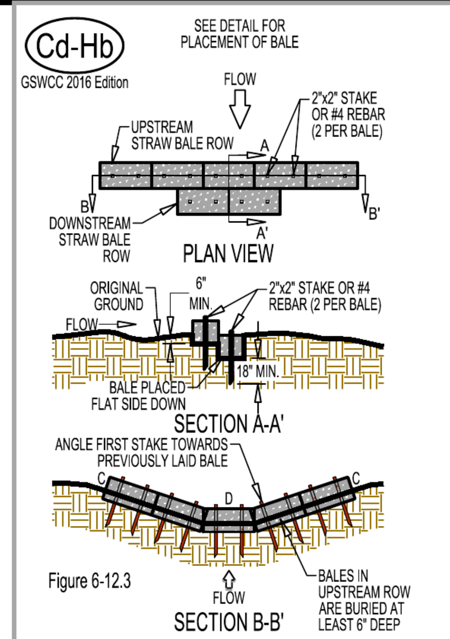


Figure 6-12.3

CONSTRUCTION SPECS
Staked and embedded straw-bales may be used as temporary check dams in concentrated flow areas while vegetation is becoming established. They shall not be used where the drainage area exceeds one acre. Straw-bales should be installed per Figure 6-12.3.

INSTALLATION
Bales should be bound with wire or nylon string. Twine bound bales are less durable. The bales should be placed in rows with bale ends tightly abutting the adjacent bales.

DOWNSTREAM ROW (REFER TO FIGURE 6-12.3)
Dig a trench across the small channel, wide enough and deep enough so that the top of the row of bales placed on their long, wide side is level with the ground. The tops of bales across the center of the channel should all be level and set at the same elevation. Place the bales in position and stake them according to the instructions below.

UPSTREAM ROW
Dig another trench across the small channel, upstream and immediately adjacent to the first row of bales. The trench should be wide enough to accommodate a row of bales set vertically on their long edge. The trench should be deep enough so that at least 6 inches of each bale is below ground starting with the bale in the channel bottom. The trench should be as level as possible so that the tops of the bales across the center of the channel are level and water can flow evenly across them. Continue this trench up the side slopes of the small channel to a point where the unburied bottom line of the highest bale (Point "C", Figure 6-12.3) is higher than the top of the bales that are in the center of the channel (Point "D", Figure 6-12.3).

ANCHORAGE
Drive standard 2 x 2 stakes or #4 rebar through the bales and into the ground 1 1/2 to 2 feet for anchorage. The first stake in each bale should be driven toward a previously laid bale to force the bales together (See Figure 6-12.3).

MAINTENANCE
Periodic inspection and required maintenance must be provided. Sediment shall be removed when it reaches a depth of ½ original dam height or before. If area is to be mowed, check dams shall be removed once final stabilization has occurred. Otherwise check dams may remain in place permanently. After removal, the area beneath the dam shall be seeded and mulched immediately.

NOTES
1. BALES SHOULD BE BOUND WITH WIRE OR NYLON STRING AND SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING ADJACENT BALES.
2. REMOVE #4 REBAR AFTER STRAW BALES ARE NO LONGER IN PLACE.
3. POINT "C" OF SECTION B-B' SHOULD ALWAYS BE HIGHER THAN POINT "D".
4. STRAW-BALE CHECK DAMS SHALL NOT BE USED WHERE THE DRAINAGE AREA EXCEEDS ONE ACRE.

N.T.S.

STRAW-BALE CHECK DAMS - (Cd-Hb)

OWNER/DEVELOPER
COMPANY: EARLY HOPE BAPTIST CHURCH INC.
ADDRESS: 1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PHONE: (770) 786-8318
CONTACT: PASTOR KENNETH WILLIAMS
EMAIL:EARLYHOPE@HOTMAIL.COM

CONTRACTOR
COMPANY: SUNBELT BUILDERS
ADDRESS: 10641 HWY 36
COVINGTON, GA 30014
CONTACT: MIKE MCCROREY
PHONE: 404.644.2939
EMAIL: MMCCROREY@SUNBELTBUILDERS.COM

SURVEYOR
COMPANY: GEORGIA CIVIL, INC.
SURVEYOR: BRIAN SLATE
ADDRESS: P.O. BOX 896
MADISON, GA 30650
PHONE: 706.342.1104

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

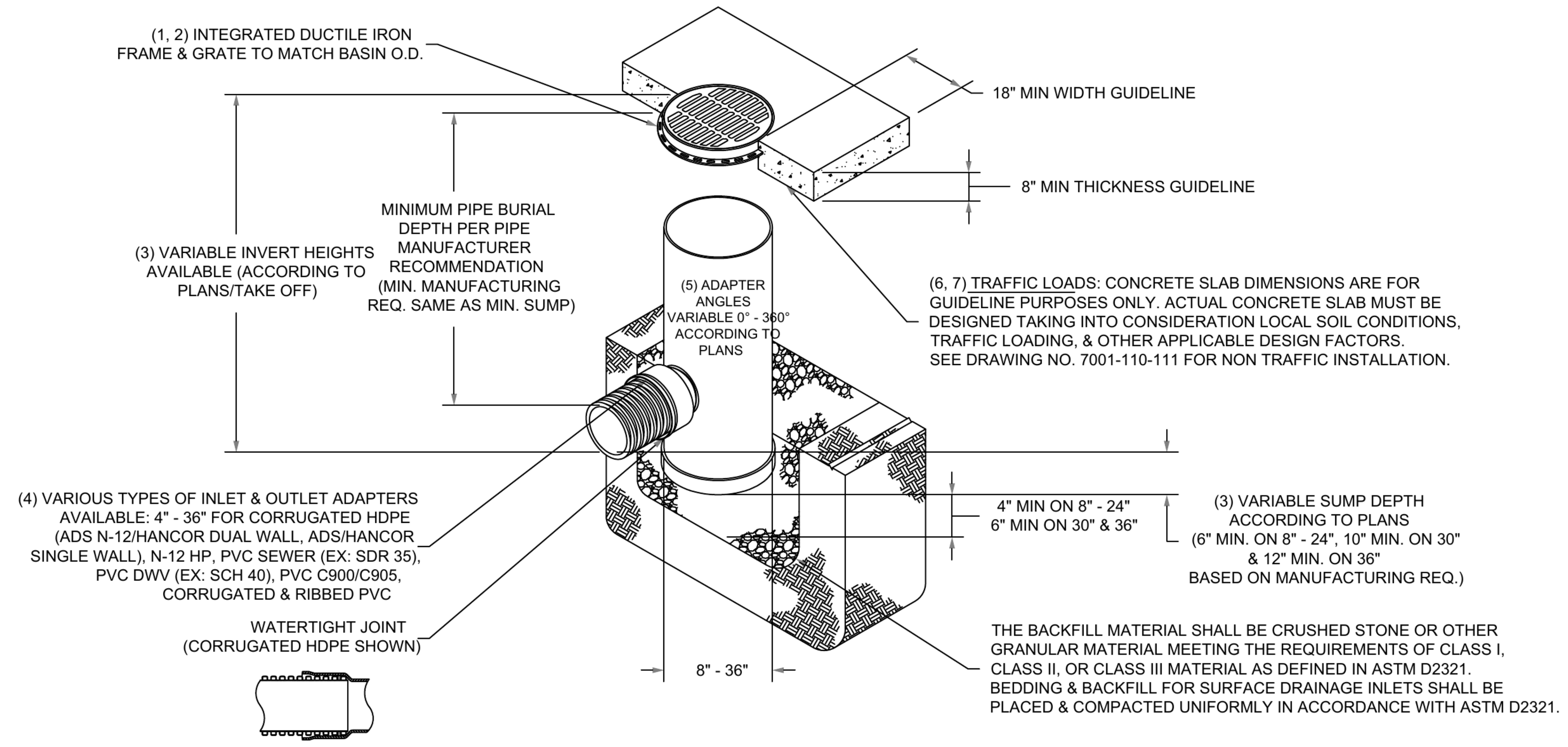
GEORGIA REGISTERED NO. PE031684 PROFESSIONAL ENGINEER JASON P. BROWN

Project Information

EARLY HOPE BAPTIST ACTIVITY CENTER

1129 ROCKY PLAINS RD
COVINGTON, GA 30016
PARCEL ID: 0049-2400
ZONING: A-R AGRICULTURAL RESIDENTIAL

NYLOPLAST DRAIN BASIN WITH STANDARD GRATE



1 - 8" - 30" STANDARD GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 8" & 10" STANDARD GRATES FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
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 (4" - 36").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 12" - 30" STANDARD GRATES SHALL MEET H-20 LOAD RATING.
7 - 8" & 10" STANDARD GRATES ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2011 NYLOPLAST

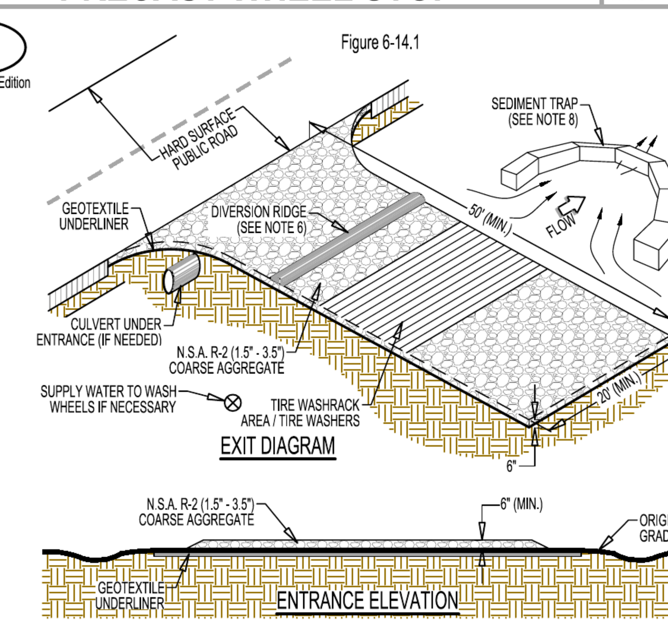
DRAWN BY EBC	MATERIAL	
DATE 1-23-06		
REVISED BY NMH	PROJECT NO./NAME	
DATE 06-12-18		
DWG SIZE A	SCALE 1:40	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490

TITLE: DRAIN BASIN WITH STANDARD GRATE QUICK SPEC INSTALLATION DETAIL
DWG NO. 7001-110-144 REV J

Co
GSWCC 2016 Edition

Figure 6-14.1



NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES. PIPE SHALL BE SIZED APPROPRIATELY TO HANDLE EXISTING AND/OR PROPOSED FLOWS.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVES MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

CONDITIONS
This practice is applied at appropriate points of construction egress. Geotextile underliners are required to stabilize and support the pad aggregates.

DESIGN CRITERIA
Formal design is not required. The following standards shall be used:
Aggregate Size / Pad Thickness / Pad Width - As noted above

Pad Length
The gravel pad shall have a minimum length of 50'. When the construction is less than 50' from the paved access, the length shall be from the edge of existing pavement to the permitted building being constructed.

Washing
If the action of the vehicle traveling over the gravel pad does not sufficiently remove the mud, the tires should be washed prior to entrance onto public rights-of-way. When washing is required, it shall be done as noted above.

Location
The exit shall be located or protected to prevent sediment from leaving the site.

CONSTRUCTION SPECIFICATIONS
It is recommended that the egress area be excavated to a depth of 3" and be cleared of all vegetation and roots.

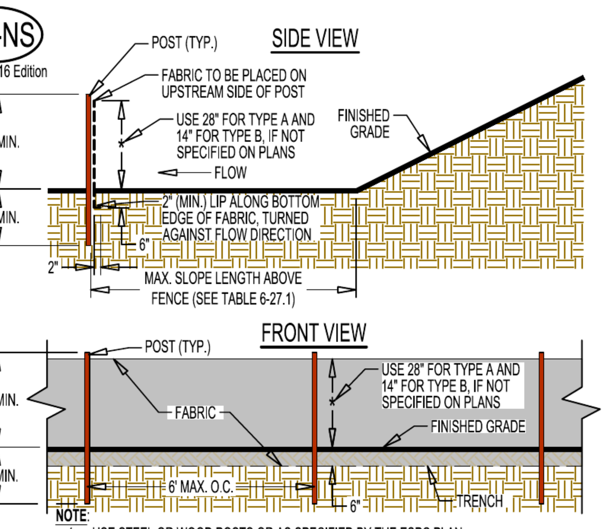
Diversion Ridge
On sites where the grade toward the paved area is greater than 2%, a diversion ridge 6" to 8" high with 3:1 side slopes shall be constructed across the foundation approximately 15' above the road.

Geotextile
Geotextile underliner must be placed the full length and width of the entrance. Geotextile selection shall be based on AASHTO M288-06 specification:
1. For subgrades with a CBR greater than or equal to 3 or shear strength greater than 90 kPa, geotextile must meet requirements of section AASHTO M288-06 Section 7.3, Separation Requirements.
2. For subgrades with a CBR between 1 and 3 or sheer strength between 30 and 90 kPa, geotextile must meet requirements of section AASHTO M288-06 Section 8, Geotextile Property Requirements for Subsurface Drainage, Separation, Stabilization, and Permanent Erosion Control (Geotextile Property Requirements).

MAINTENANCE
The exit shall be maintained in a condition that will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 1.5"-3.5" stone, as conditions demand, and repair and/or cleanout of any structures to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles or site onto roadways or into storm drains must be removed immediately.

N.T.S.

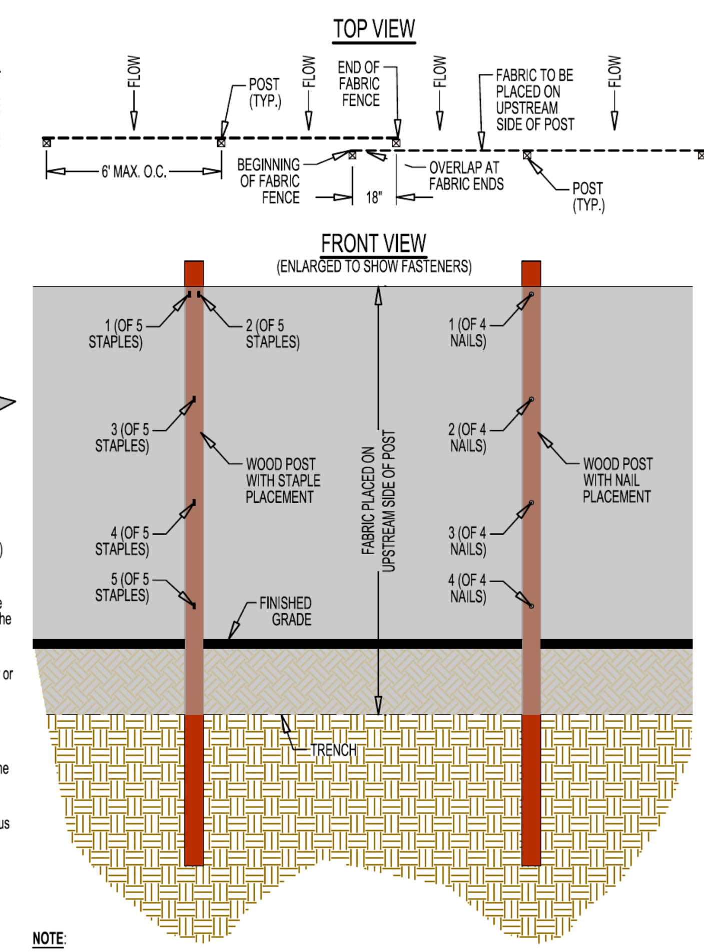
CONSTRUCTION EXIT - (Co)



Sd1-NS
GSWCC 2016 Edition

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



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

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 depends 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 #36 (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 developments 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 80% 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.

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

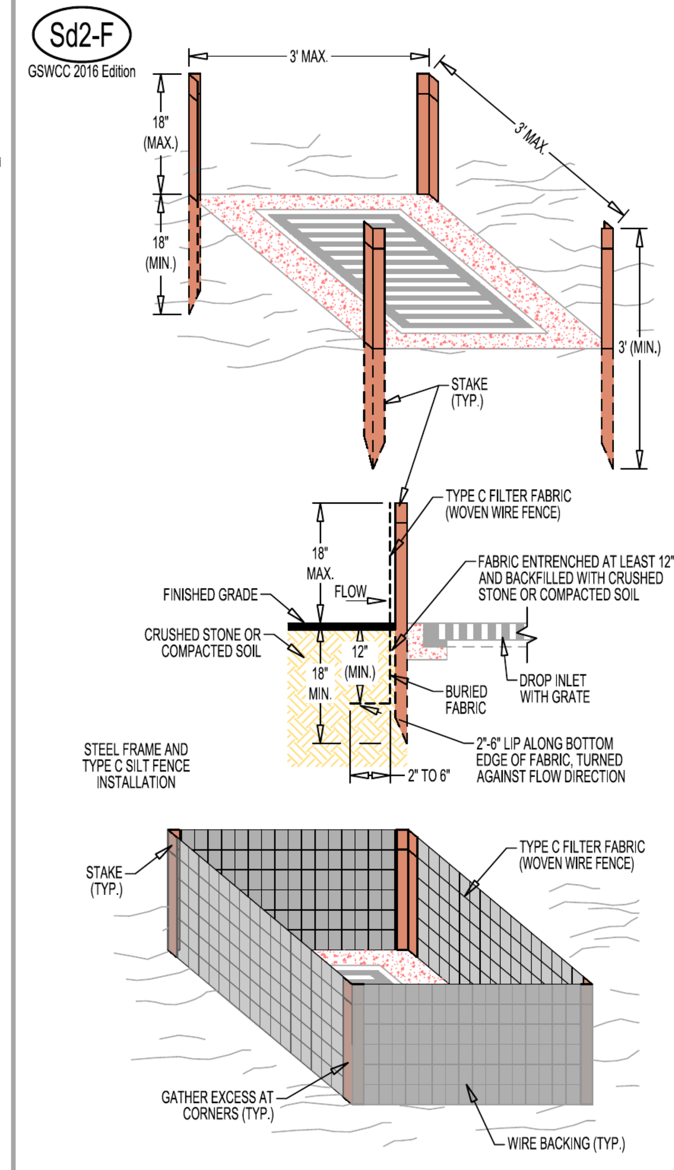
	Type A Fabric Fence	Type B Fabric Fence
Tensile Strength (Lbs. Min.)[1] (ASTM D-4632)	Warp - 120 Fill - 100	Warp - 120 Fill - 100
Elongation (% Max.) (ASTM D-4632)	40	40
AOS (Apparent Opening Size) (Max. Sieve Size) (ASTM D-4751)	#30	#30
Flow Rate (Gal/Min/Sq. Ft.) (GDT-87)	25	25
Ultraviolet Stability[2] (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.

N.T.S.

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

Sd2-F
GSWCC 2016 Edition



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.

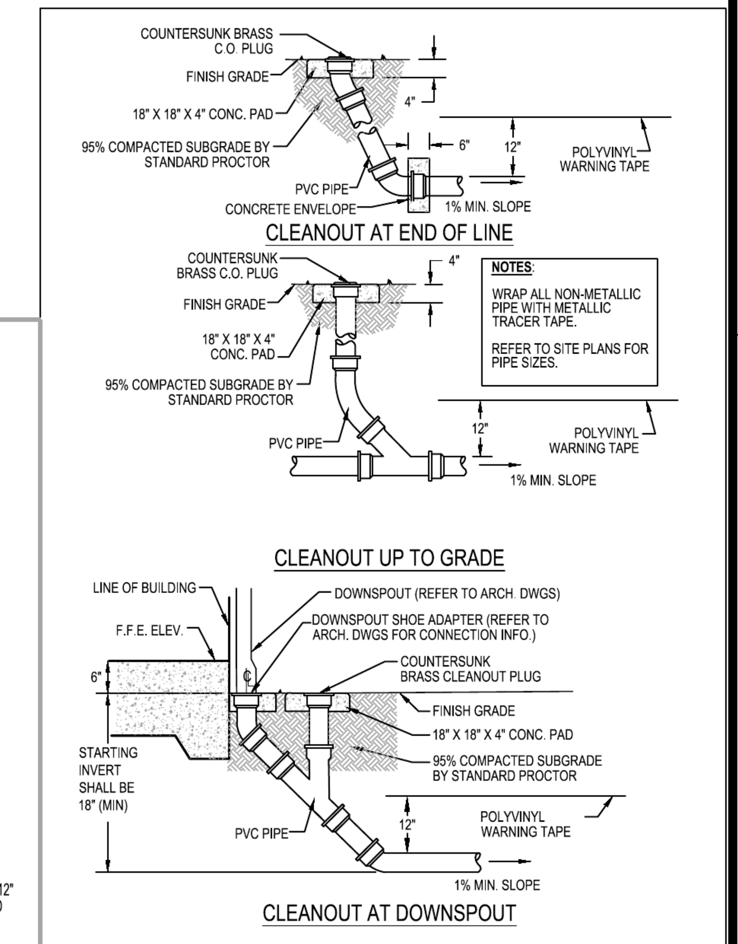
DESIGN CRITERIA
Through testing there are 2 different categories (high retention and high flow) supported. In areas where BMPs are being used on paved surfaces, or safety is a concern, the potentially negative effects of ponding should be taken into account. In such cases, a high flow BMP is preferred. 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 Fr-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.

N.T.S.

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



DOWNSPOUT/RAINLEADER CLEANOUT

N.T.S.

Rt-P
GSWCC 2016 Edition

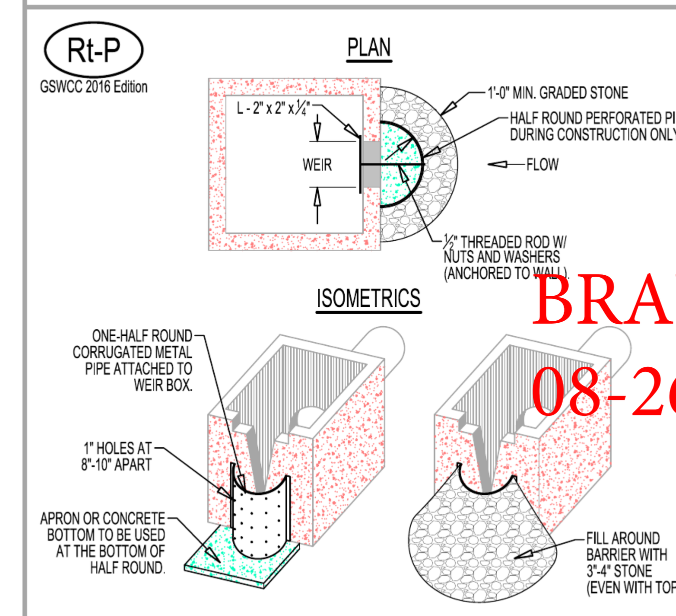


Figure 6-26.1

BRAVO SITE SET
08-26-2026

PURPOSE
Allows permanent stormwater detention basin structures to function as temporary sediment retention basins for land-disturbing projects, and allow roadway drainage to be used for temporary sediment storage.

CONDITIONS
This standard applies under the following conditions:
1. **Shall not be used in basins on live streams** or in basins with a total contributing drainage area of 100 acres or more.
2. Shall only be used in basins large enough to store 67 cubic yards of sediment per acre of disturbed area in the project.
3. Shall be considered a temporary structure and will be removed as soon as project is permanently stabilized. All accumulated sediment shall be removed, and the pond or basin shall be brought to final grade (if possible), prior to the removal of the retrofit.

DESIGN CRITERIA
1. The height of the retrofit should be approximately one-half the height of the structure.
2. **A retrofitted detention pond must be capable of storing the required volume of sediment in addition to the required stormwater volume.** The required sediment storage volume shall be achieved by either excavating the basin or raising the outlet structure's invert to achieve 67 cubic yards per acre of sediment storage. Remove sediment when ⅓ of the sediment storage capacity, not total pond capacity, is lost to sediment accumulation. This volume shall be marked on the riser or by setting a marked post near the riser.
3. For effective trapping efficiency, the sediment delivery inlets should be at the upper end of the basin.
4. For effective trapping efficiency, the length width ratio of the basin shall be at least 2:1. If the length-width ratio is not at least 2:1, the flow length shall be increased with the use of baffles installed within the basin.

CONSTRUCTION SPECIFICATIONS
a. Should be used only in detention ponds with less than 30 acre total drainage area.
b. Never to be used on exposed pipe end or winged headwall.
c. Diameter of half-round pipe should be 1.5 times the diameter of the principal pipe outlet or wider than the greatest width of the concrete weir.
d. Perforations and stone sizes are shown in Figure 6-26.1.
e. Shall be affixed by specified means (bolts, etc.) to concrete outlet structure.

All disturbed areas shall be vegetated immediately after construction with permanent vegetation. Refer to **Ds3** and **Ds4 - Disturbed Area Stabilization (With Permanent Vegetation)** and **Disturbed Area Stabilization (With Sodding)** and **Ss - Slope Stabilization.**

MAINTENANCE
Retrofit structures shall be kept clear of trash and debris. This will require continuous monitoring and maintenance, which includes sediment removal when ⅓ of the sediment storage capacity has been lost. *Structures are temporary and shall be removed when disturbed areas have been permanently stabilized.*

N.T.S.

PERFORATED HALF-ROUND PIPE WITH STONE FILTER - (Rt-P)

DRAWING DATE:	8/21/2026
DRAWN BY:	MCS
CHECKED BY:	JPB

REVISIONS

DATE:	DESCRIPTION:
3/23/2026	ADDRESSED COMMENTS
08/21/2026	REVISON 1

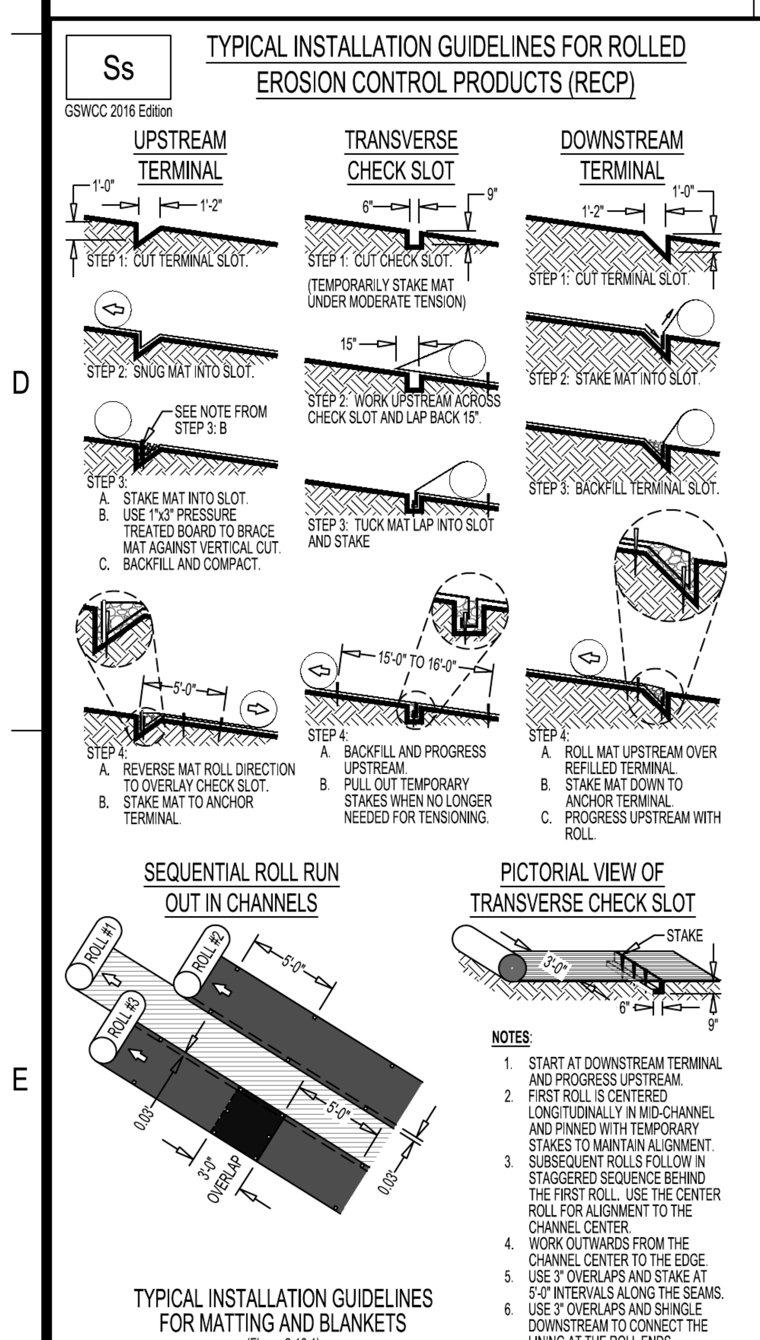
© Copyright 2025 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

Sheet Title
SITE DETAILS

Sheet Number
C-6.0

Ss
GSWCC 2016 Edition

TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)



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 performance enhancing additives will not be allowed. Fibrous components should be all natural or biodegradable. Products shall be determined to be non-toxic in accordance with EPA-821-R-02-012.

RECP
Blankets shall be non-toxic to vegetation, seed, or wildlife. Products shall be determined to be non-toxic in accordance with EPA821-R-02-012. At minimum, the plastic or biodegradable netting shall be stitched to the fibrous matrix to maximize strength and provide for ease of handling.

RECPs are categorized as follows:
a. **Short-Term** (functional longevity 12 mo.)
 i. Photodegradable
 Straw blankets with a top and bottom side photodegradable net. The maximum size of the mesh should be openings of ½" x ½". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.35" and minimum density should be 0.5 lbs per square yard.
 ii. Biodegradable
 Straw blanket with a top and bottom side biodegradable jute net. The top side net should consist of machine direction strands that are twisted together and then interwoven with cross direction strands (leno weave). The bottom net may be leno weave or otherwise to meet requirements. The approximate size of the mesh should be openings of 0.5" X 1.0". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.25" and minimum density should be 0.5 lbs per square yard.
b. **Extended-Term** (functional longevity 24 mo.)
 i. Photodegradable
 Blankets that consist of 70% straw and 30% coconut with a top and bottom side photodegradable net. The top net should have ultraviolet additives to delay breakdown. The maximum size of the mesh should be openings of 0.65" x 0.65". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.35" and minimum density should be 0.6 lbs per square yard.
 ii. Biodegradable
 Blankets that consist of 70% straw and 30% coconut with a top and bottom side biodegradable jute net. The top side net should consist of machine direction strands that are twisted together and then interwoven with cross direction strands (leno weave). The bottom net may be leno weave or otherwise to meet requirements. The approximate size of the mesh should be openings of 0.5" X 1.0". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.25" and minimum density should be 0.65 lbs per square yard.
c. **Long-Term** (functional longevity 36 mo.)
 i. Photodegradable
 Blankets that consist of 100% coconut with a top and bottom side photodegradable net. Each net should have ultraviolet additives to delay breakdown. The maximum size of the mesh should be openings of 0.65" X 0.65". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.3" and minimum density should be 0.5 lbs per square yard.
 ii. Biodegradable
 Blankets that consist of 100% coconut with a top and bottom side biodegradable jute net. The top side net should consist of machine direction strands that are twisted together and then interwoven with cross direction strands (leno weave). The bottom net may be leno weave or otherwise to meet requirements. The approximate size of the mesh should be openings of 0.5" X 1.0". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.25" and minimum density should be 0.5 lbs per square yard.

NOTES
It is the intention of this section to allow interchangeable use of RECPs and HECPs for erosion protection on slopes. The project engineer should select the type of erosion control product that best fits the need of the particular site.

SITE PREPARATION
After the site has been shaped and graded to the approved design, prepare a friable seedbed relatively free from clods and rocks more than 1" in diameter, and any foreign material that will prevent contact of the soil stabilization mat with the soil surface. Surface must be smooth to ensure proper contact of blankets or matting to the soil surface. If necessary, redirect any runoff from the ditch or slope during installation.

MAINTENANCE
All erosion control blankets and matting should be inspected periodically following installation, particularly after rainstorms to check for erosion and undermining. Any dislocation or failure should be repaired immediately. If washouts or breakage occurs, reinstall the material after repairing damage to the slope or ditch. Continue to monitor these areas until they become permanently stabilized.

N.T.S.

SLOPE STABILIZATION - (Ss)

Fr
GSWCC 2016 Edition

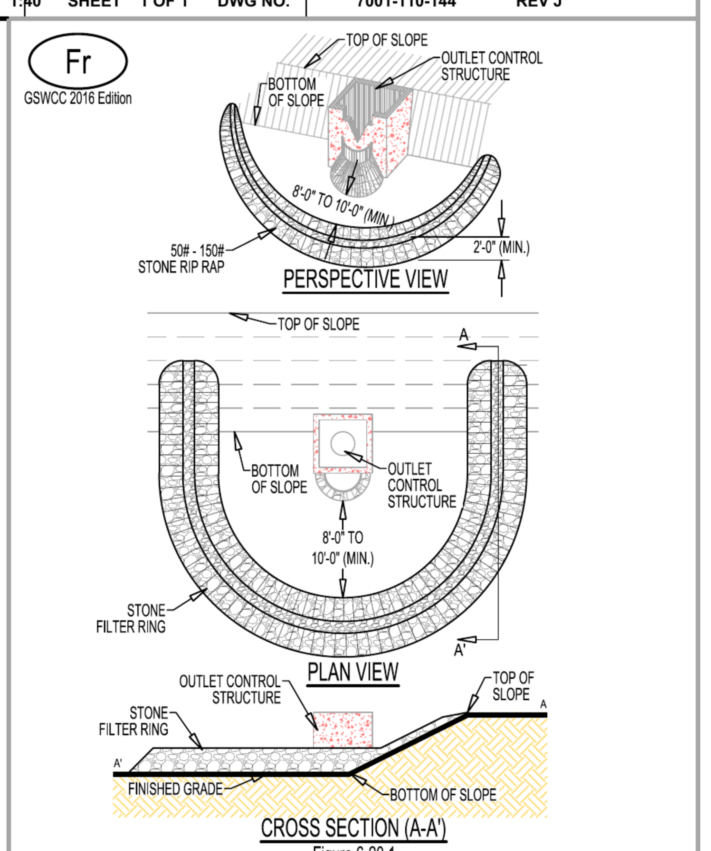


Figure 6-20.1

PURPOSE
This structure reduces flow velocities, preventing the failure of other sediment control devices. It also helps prevent sediment from leaving the site or entering drainage systems, prior to permanent stabilization of the disturbed area.

CONDITIONS
Filter rings shall be used in conjunction with other sediment control measures, except where other practices defined in this Manual are not appropriate (such as inlets to concrete fumes). They can be installed at or around devices such as inlet sediment traps, temporary downdrain inlets, and detention pond retrofits to provide additional sediment filtering capacity.

DESIGN CRITERIA
Formal design is not required. The following standards shall be used:

Location
The filter ring shall surround all sides of the structure receiving runoff from disturbed areas. It should be placed a minimum of 4' from the structure. The ring is not intended to substantially impound water, causing flooding or damage to adjacent areas. The filter ring may also be placed below storm drains discharging into detention ponds, creating a centralized area, or "forebay", for sediment accumulation. This provides for easier, more localized clean-out of the pond. If utilized above a retrofit structure, it should be a min. of 8' to 10' from the retrofit.

Stone Size
When utilized at inlets with diameters less than 12", the filter ring shall be constructed of stone no smaller than 3"-5" (15 - 30 lbs.). When utilized at pipes with diameters greater than 12", the filter ring shall be constructed of stone no smaller than 10"-15" (50 - 100 lbs.). The larger stone can be faced with smaller filter stone on the upstream side for added sediment filtering capabilities. However, the smaller filter stone is more prone to clogging, requiring higher maintenance.

Height
The filter ring shall be constructed at a height no less than 2' from grade.

CONSTRUCTION SPECIFICATIONS
Mechanical or hand placement of stone shall be required to uniformly surround the structure to be supplemented. Refer to Appendix C for rock riprap specifications. The filter ring may be constructed on natural ground surface, on an excavated surface, or on machine compacted fill. A common failure of a filter ring is caused by placing it too close to or too high above the structure it is enhancing. When utilized below a storm drain outlet, it shall be placed such that it does not create a condition causing water to back-up into the storm drain and inhibit the function of the storm drain system.

MAINTENANCE
The filter ring must be kept clear of trash and this will require continuous monitoring and maintenance, which includes sediment removal when one-half full. Structures are temporary and should be removed when the land disturbing project has been stabilized.

N.T.S.

FILTER RING - (Fr)