

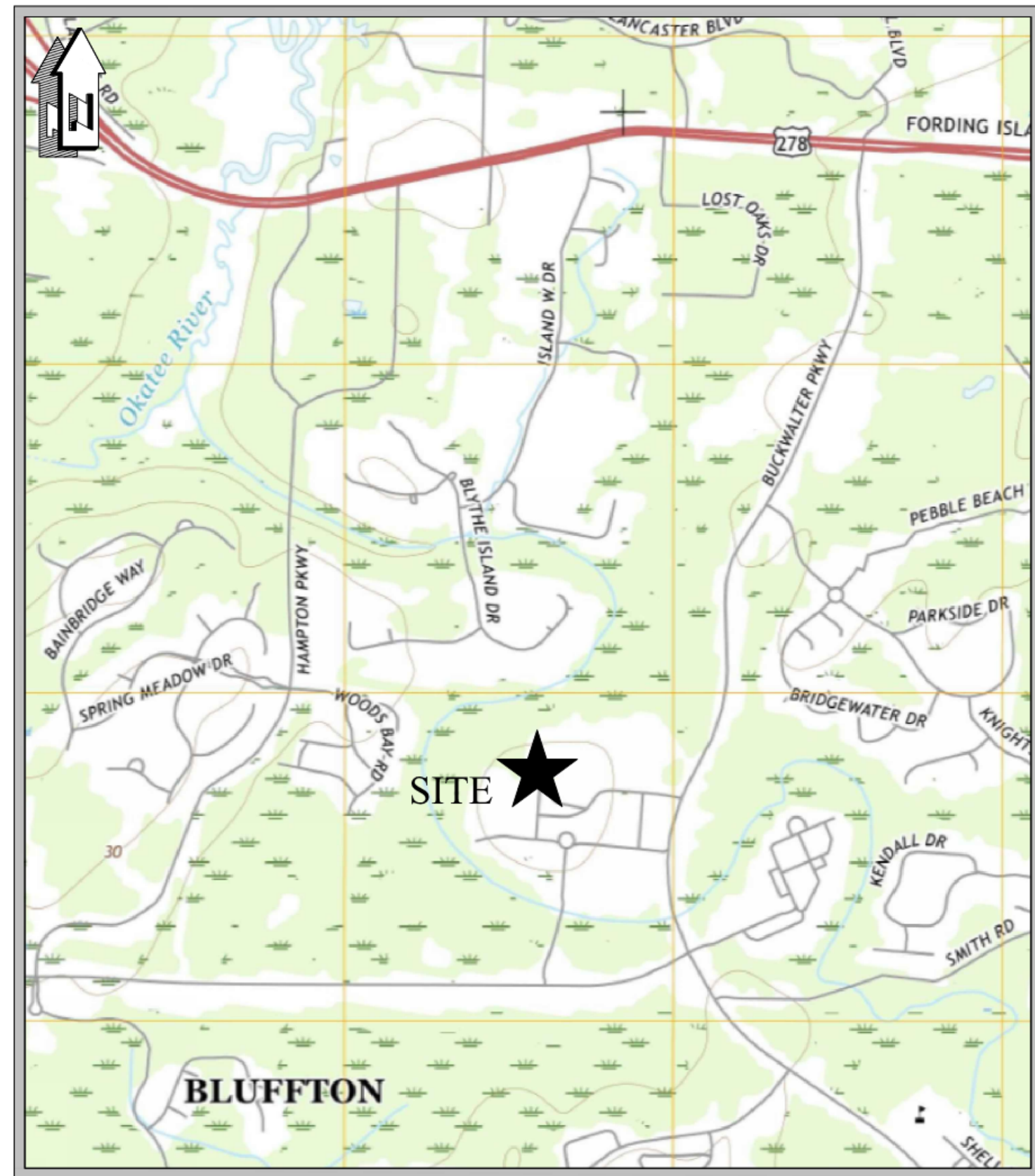
BID & PERMIT PLANS FOR

BUCKWALTER PLACE LEC EXPANSION - PHASE 1

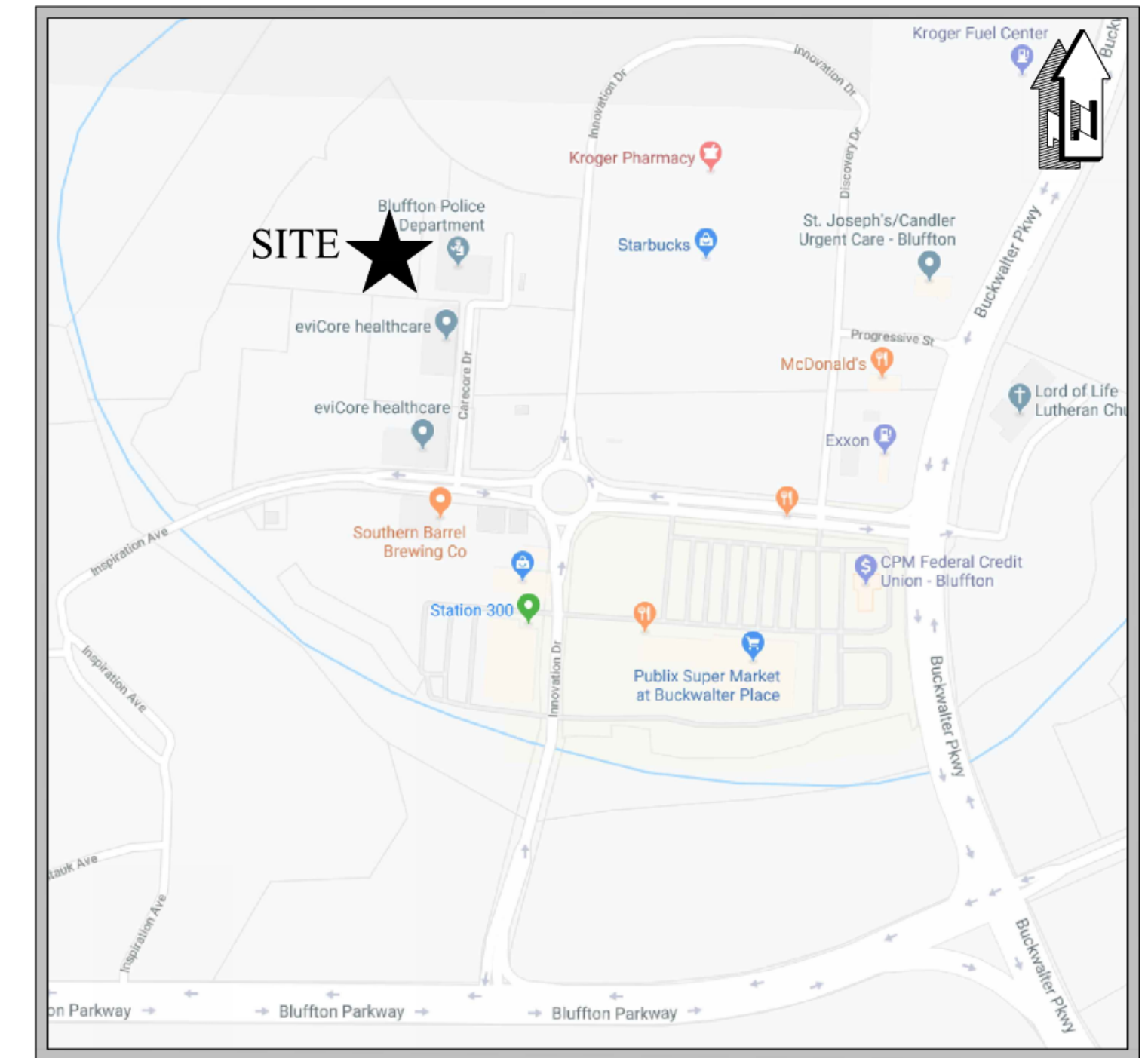
PREPARED FOR

TOWN OF BLUFFTON

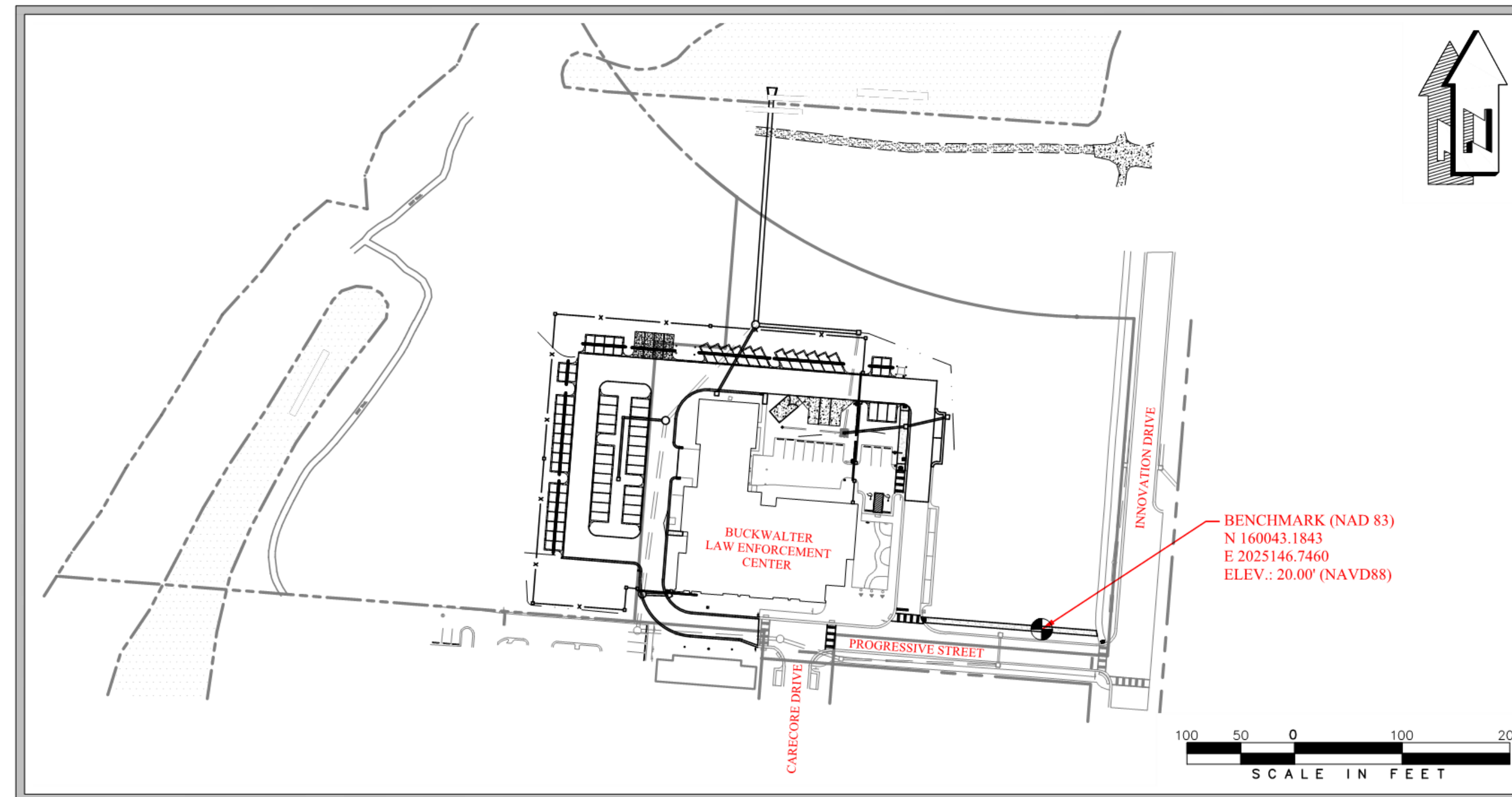
20 BRIDGE STREET
BLUFFTON, SC 29910



VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.



PROJECT DATA:

1. ACREAGE OF PROPERTY: 8.2 ACRES (TWO PARCELS)
2. ACREAGE OF DEVELOPMENT: 94.0 ACRES
3. OWNER/DEVELOPER: TOWN OF BLUFFTON
20 BRIDGE STREET
BLUFFTON, SC 29910
PHONE: (843) 706-4521
- 24 HOUR CONTACT:
NAME: PAT ROONEY
PHONE: (843) 706-4521
4. TAX MAP & PARCEL NUMBERS: R610 030 000 1649 0000 & R610 030 000 1848 000
5. ZONING: PUD
6. PROVIDED PARKING
PARKING REQUIRED PER BUCKWALTER PUD: 66 SPACES
PARKING PROVIDED: 96 SPACES
HANDICAP PARKING REQUIRED: 4 SPACES
HANDICAP PARKING PROVIDED: 4 SPACES
7. DISTURBED AREA: 2.6 ACRES
8. IMPERVIOUS AREA:
EXISTING: 1.30 ACRES
PROPOSED: 2.11 ACRES
9. PERVIOUS AREA:
EXISTING: 6.90 ACRES
PROPOSED: 6.09 ACRES
10. RECEIVING STREAM: TRIB TO OKATIE RIVER
11. ULTIMATE STREAM: OKATIE RIVER
12. EXISTING LAND USE: PUD
13. PROPOSED LAND USE: PUD

Sheet List Table

Sheet Number	Sheet Title
C1.0	TITLE SHEET
C2.0	GENERAL NOTES, LEGEND & SUMMARY OF QUANTITIES
C3.0	EXISTING CONDITIONS
C4.0	DEMOLITION PLAN
C5.0	SWPP PLAN
C5.1	SWPPP DETAILS
C5.2	SWPPP DETAILS
C6.0	SITE IMPROVEMENTS PLAN
C7.0	GRADING AND DRAINAGE PLAN
C8.0	SITE DETAILS
C8.1	SITE DETAILS
C8.2	SITE DETAILS
C8.3	SITE DETAILS
C9.0	UTILITY PLAN

PREPARED BY



ENGINEERS - PLANNERS - SURVEYORS

14 Westbury Park Way, Suite 202
Bluffton, South Carolina 29910
Telephone 849-815-3191
CranstonEngineering.com

07/06/2020



LEGEND

	MAJOR CONTOUR (EXISTING)
	MINOR CONTOUR (EXISTING)
	MAJOR CONTOUR (PROPOSED)
	MINOR CONTOUR (PROPOSED)
	EXISTING BOUNDARY
	EXISTING ADJOINER
	PERMANENT EASEMENT
	TEMPORARY EASEMENT
	25' BUFFER
	ENVIRONMENTALLY SENSITIVE AREA
	EDGE OF WATER
	TREE LINE
	EXISTING OVERHEAD UTILITY (UNSPECIFIED)
	EXISTING UNDERGROUND POWER
	PROPOSED UNDERGROUND POWER
	EXISTING OVERHEAD POWER
	PROPOSED OVERHEAD POWER
	EXISTING UNDERGROUND TELEPHONE
	PROPOSED UNDERGROUND TELEPHONE
	EXISTING OVERHEAD TELEPHONE
	PROPOSED OVERHEAD TELEPHONE
	EXISTING UNDERGROUND CABLE
	PROPOSED UNDERGROUND CABLE
	EXISTING FIBEROPTIC
	PROPOSED FIBEROPTIC
	EXISTING GAS
	PROPOSED GAS
	EXISTING WATER
	PROPOSED WATER
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	FENCE: EXISTING
	FENCE: PROPOSED
	FENCE: EXISTING CHAINLINK
	FENCE: PROPOSED CHAINLINK
	FENCE: EXISTING STONE
	FENCE: PROPOSED STONE
	FENCE: EXISTING WIRE
	FENCE: PROPOSED WIRE
	EXISTING GUARDRAIL
	PROPOSED GUARDRAIL
	ORANGE BARRIER FENCE OR C-POP SILT FENCE
	SILT FENCE
	EXISTING BUILDING
	PROPOSED BUILDING
	EXISTING CONCRETE/PAVING
	PROPOSED CONCRETE AND/OR PAVING
	EXISTING ASPHALT PAVING
	PROPOSED ASPHALT PAVING
	EXISTING GRAVEL PAVING OR RIP-RAP
	PROPOSED GRAVEL PAVING OR RIP-RAP
	EXISTING BRICK PAVING
	PROPOSED BRICK PAVING
	EXISTING UTILITY POLE
	PROPOSED UTILITY POLE
	EXISTING STRAIN POLE
	PROPOSED STRAIN POLE
	EXISTING GUY WIRE
	PROPOSED GUY WIRE
	EXISTING ELECTRIC LIGHT
	EXISTING LIGHT POLE
	PROPOSED LIGHT POLE
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING IRRIGATION VALVE
	PROPOSED IRRIGATION VALVE
	EXISTING WATER METER
	PROPOSED WATER METER

TREE LEGEND

ASH	ASH	JPH	JAPANESE HOLLY
BI	BIRCH	MAG	SOUTHERN MAGNOLIA
CA	CAMELLIA	MP	MAPLE
CE	CEDAR	MULTI	MULTI--TRUNK
CBR	CHINABERRY	OAK	OAK
CH	CHERRY	PA	PALMETTO
CHP	CHINESE PISTACHIO	PE	PECAN
CR	CRAPE MYRTLE	PERS	PERSIMMON
CYP	CYPRESS	PN	PINE
DW	DOGWOOD (FLOWERING)	PO	POPLAR
ERC	EASTERN RED CEDAR	PR	PEAR
FR	FRUIT TREE	SG	SWEETGUM
GBL	GINKO BILOBA	SUB	SUGARBERRY
GUM	GUM	SYC	SYCAMORE
HI	HICKORY	TA	TALLOW TREE
HKB	HACKBERRY	TREE	UNKNOWN TREE TYPE
HO	HOLLY	WAX	WAX MYRTLE
JAP	JAPANESE MAPLE		

PROJECT MANAGER

PATRICK M. ROONEY, ASLA
MANAGER OF CAPITAL IMPROVEMENTS PROGRAM
TOWN OF BLUFFTON, SC
(843) 706-4521

ENGINEER OF RECORD

ANDREW BAJOJCZYK, P.E.
CRANSTON ENGINEERING GROUP P.C.
(843) 352-7770

UTILITIES:

WATER AND SEWER
BEAUFORT-JASPER WATER & SEWER AUTHORITY
SERVICE CONTACT: 843-987-9200
REPORT OUTAGE: 843-987-3200

POWER

PALMETTO ELECTRIC
SERVICE CONTACT: 843-681-5551
REPORT OUTAGE: 866-445-5551

COMMUNICATION

HARGRAY
SERVICE CONTACT: 877-427-4729
REPORT OUTAGE: 843-686-1138

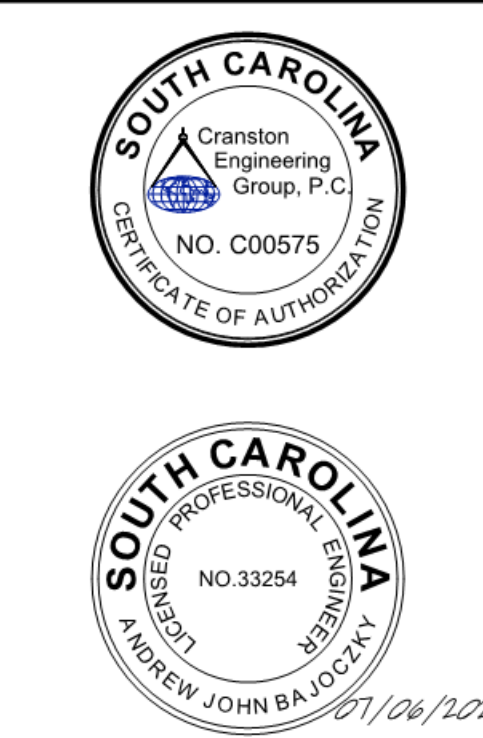
SPECTRUM

SERVICE CONTACT: 855-707-7328
REPORT OUTAGE: 833-267-6094

GENERAL NOTES:

- DATE OF SURVEY: 12/14/2018 & 9/16/2019 BY SEA ISLAND LAND SURVEY, LLC & GEL ENGINEERING, LLC, RESPECTIVELY.
- THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR INDICATED IN ANY WAY THEREBY, WHETHER BY DRAWINGS OR NOTES OR ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY AND ARE NOT GUARANTEED.
- ALL WORKMANSHIP AND MATERIALS WILL CONFORM TO TOWN OF BLUFFTON STANDARDS & SPECIFICATIONS, AS WELL AS THE PROJECT SPECIFICATIONS & EROSION CONTROL PLAN.
- THE CONTRACTOR SHALL VERIFY I.E. OF ALL EXISTING PIPES & ROAD GRADE ELEVATIONS OF EXISTING ROADS BEFORE BEGINNING CONSTRUCTION.
- NOTIFY TOWN ENGINEER'S OFFICE BEFORE STARTING CONSTRUCTION, DUMPING BASE, PAVING, POURING TRAP TOPS, OR MAKING TAPS TO EXISTING WATER OR SEWER LINES.
- ALL LOT CORNERS, SURVEY MARKER, OR MONUMENTS DISTURBED BY THE CONTRACTOR WILL BE REPLACED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL SILT BARRIERS MUST BE PLACED IMMEDIATELY FOLLOWING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER INSTALLATION IS COMPLETE.
- ALL SHOULDERS AND SLOPES TO BE GRASSED AS PER SCDOT SPECIFICATIONS AND SCHEDULE ON SHEET xxxxxx.
- SOURCE OF SURVEY DATUM: VERTICAL NAVD 1988.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE INSTALLATION.
- NO WORK SHALL BE DONE IN THE ROAD RIGHT-OF-WAY WITHOUT A VALID ENCROACHMENT PERMIT ISSUED BY SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION FOR STATE ROADS OR THE TOWN OF BLUFFTON DEPARTMENT OF ENGINEERING AND PUBLIC WORKS FOR TOWN ROADS AND STREETS.
- FILL MATERIALS SHALL CONTAIN NO SOD, BRUSH, ROOTS OR OTHER PERISHABLE MATERIALS.
- COMPACTION IN ALL FILL AREAS SHALL BE COMPACTED 95% MODIFIED PROCTOR MAXIMUM DENSITY.
- THE CONTRACTOR SHALL EMPLOY A SOIL TESTING FIRM TO PERFORM A SUFFICIENT NUMBER OF TESTS TO CERTIFY COMPACTION REQUIREMENTS HAVE BEEN MET; THESE TESTS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- FILL WITHIN THE RIGHT-OF-WAY SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY AT MODIFIED PROCTOR.
- ALL STRUCTURES, TREES AND SHRUBS WHICH ARE WITHIN THE DESIGNATED CONSTRUCTION AREAS, BUT OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
- APPROVAL IS FOR THE IMPROVEMENTS SHOWN ON THE PLAN, AND ANY VARIATION FROM THE APPROVED PLAN MUST BE APPROVED BY THE TOWN ENGINEER.
- THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE OWNER IN THE EVENT THAT PREVIOUSLY UNKNOWN HISTORICAL OR ARCHEOLOGICAL SITES ARE DISCOVERED DURING CONSTRUCTION. NO ADDITIONAL WORK IN SUCH AREAS WILL BE ALLOWED UNTIL AUTHORIZED IN WRITING.
- THE TOWN OF BLUFFTON ENGINEERING SHALL RECEIVE 24 HOUR ADVANCE NOTICE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROAD. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- MASS CLEARING IS NOT ALLOWED PRIOR TO INSTALLATION OF SEDIMENT CONTROL DEVICES EXCEPT IN A LIMITED AMOUNT TO ALLOW FOR INSTALLATION OF THESE DEVICES.
- LOCATION OF CABLE, POWER, AND NATURAL GAS WAS NOT DETERMINED AT THE TIME THIS PLAN WAS PREPARED. INSTALLATION OF THESE UTILITIES TO BE WITHIN THE PERMITTED LIMITS OF DISTURBANCE. INSTALLATION OUTSIDE OF THESE LIMITS WILL REQUIRE A MODIFICATION OF THE PERMIT WITH A \$125.00 FEE.
- THE LIGHTING PLAN FOR THIS SITE WILL BE PREPARED BY DOMINION ENERGY.
- ALL TREES ALONG THE EDGE OF THE RIGHT-OF-WAY AND NEAR PEDESTRIAN WALKWAYS SHALL BE DELIMBED TO 7 FEET. CLEARANCE HEIGHT IS TO BE MAINTAINED IN PERPETUITY.
- ANY DISCREPANCIES, ERRORS, OR OMISSIONS DISCOVERED ON THE PLANS OR IN THE SPECIFICATIONS SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S ATTENTION, NOTED ON THE CONTRACTOR'S PROPOSAL, AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO CORRECT THE SAME AND CONSTRUCT THE PROJECT AS DESIGNED.
- THE EXISTENCE, ABSENCE, LOCATION AND ELEVATION OF UNDERGROUND UTILITIES ON THE PLANS ARE NOT BASED ON FIELD MARKS, ARE NOT GUARANTEED, AND SHALL BE INVESTIGATED, UNEARTHED IF NECESSARY, AND VERIFIED BY CONTRACTOR BEFORE BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT SOUTH CAROLINA 811, "CALL BEFORE YOU DIG" SERVICE IN ORDER TO LOCATE UTILITIES PRIOR TO STARTING ANY EXCAVATION OR CONSTRUCTION.
- CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, ABOVE GROUND OR BELOW GROUND.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH APPROPRIATE UTILITIES PRIOR TO AND/OR DURING CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY BEFORE DIGGING NEAR WATER AND SANITARY SEWER LINES. NO EXTRA PAYMENT WILL BE MADE FOR REPAIRS TO DAMAGE OF EXISTING UTILITIES.
- THE CONTRACTOR WILL NOT BE PAID FOR DELAYS OR EXTRA EXPENSE CAUSED BY UTILITY FACILITIES, OBSTRUCTIONS, OR ANY OTHER ITEMS NOT REMOVED OR RELOCATED TO CLEAR CONSTRUCTION IN ADVANCE OF HIS WORK.

CRANSTON
ENGINEERING
ENGINEERS - PLANNERS - SURVEYORS
14 Westbury Park Way, Suite 202
Bluffton, South Carolina 29910
Telephone 849-815-3191
CranstonEngineering.com



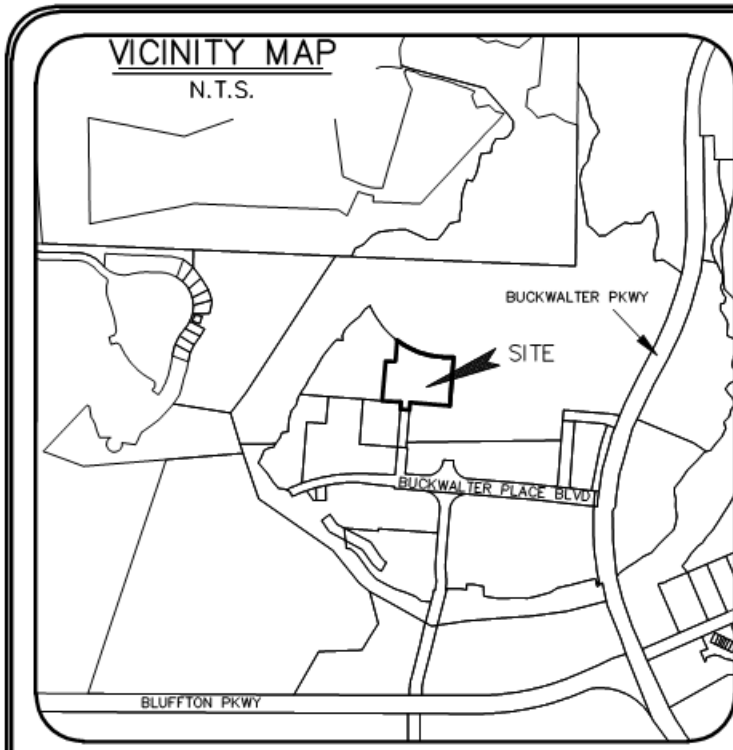
REV #	DATE	DESCRIPTION

BUCKWALTER PLACE LEC EXPANSION - PHASE 1
GENERAL NOTES, LEGEND & SUMMARY OF QUANTITIES

DRAWN BY:	NLS
CHECKED BY:	AJB
APPROVED BY:	AJB
DATE:	07/06/2020
SCALE:	NO SCALE
JOB No.	2019-0441
DRAWING No.	C2.0

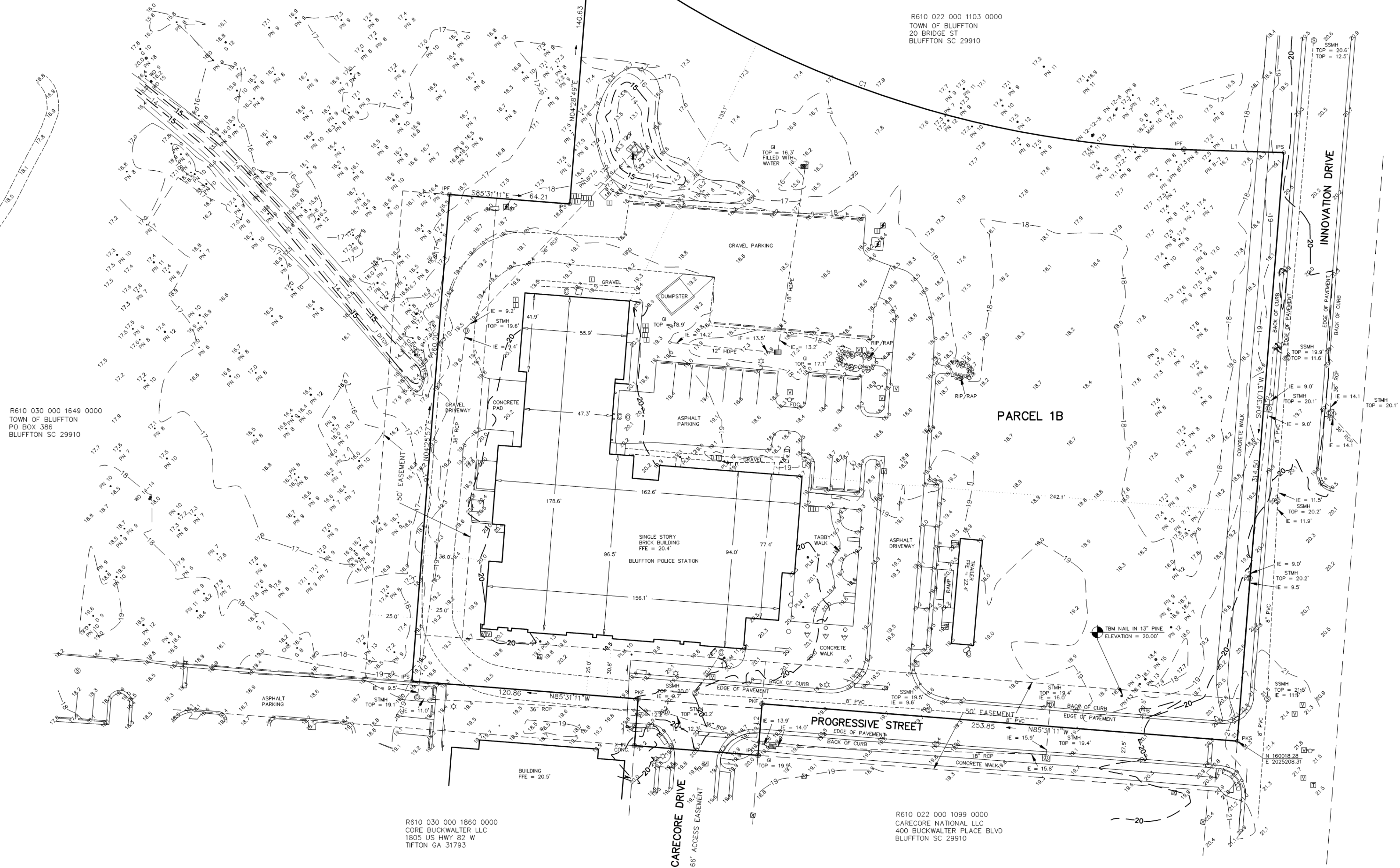


C:\G\AAA-ACTIVE_JOBS\2019\2019-0441_BUCKWALTER PLACE LEC EXPANSION.AA - DRAWINGS\CIVIL\2019-0441_OV.DWG 7/6/2020 12:00 PM



LINE	LENGTH	BEARING
L1	53.22	S 88°19'47" E
L2	27.50	N 04°30'13" E
L3	66.01	N 85°31'11" W
L4	25.00	N 04°30'13" E

CURVE	LENGTH	RADIUS	CHORD	BEARING	DELTA
C1	340.38	550.00	334.97	S70°36'02"E	35°27'30"



R610 030 000 1649 0000
TOWN OF BLUFFTON
PO BOX 386
BLUFFTON SC 29910

R610 022 000 1103 0000
TOWN OF BLUFFTON
20 BRIDGE ST
BLUFFTON SC 29910

R610 030 000 1860 0000
CORE BUCKWALTER, LLC
1805 US HWY 82 W
TIFTON GA 31793

R610 022 000 1099 0000
CARECORE NATIONAL LLC
400 BUCKWALTER PLACE BLVD
BLUFFTON SC 29910

REFERENCE PLAT
1) A SUBDIVISION PLAT OF 23.05 ACRES, BUCKWALTER PARKWAY, BLUFFTON TECH PARK, TOWN OF BLUFFTON, BEAUFORT COUNTY, S.C. DRAWN: 5/30/07, LAST REVISED: 7/18/07 RECORDED IN BOOK 120, PAGE 177, DATED 7/18/07 ROD. BEAUFORT COUNTY, SC BY: MICHAEL JIM GARDNER S.C.R.L.S. # 12239

PROPERTY AREA = 3.31 AC, 144,303 S.F.
ADDRESS: 101 PROGRESSIVE STREET
DISTRICT: 610, MAP: 30, PARCEL: 1848
THIS PROPERTY LIES IN F.E.M.A. ZONE C
BASE FLOOD ELEVATION = NO MINIMUM ELEVATION
COMMUNITY NO. 450251, MAP NO. 450025, PANEL 0085D, DATED: 9/29/86

LEGEND & SYMBOLS:	
TREE SIZES ARE INCHES IN DIAMETER	
9.5	SPOT ELEVATION
— 0.5	CONTOUR
IPF	1/2" IRON PIN FOUND
IPSO	1/2" IRON PIN SET
PKS	P.K. NAIL SET
TBM	TEMPORARY BENCH MARK
IE	INVERT ELEVATION
FFE	FINISHED FLOOR ELEVATION
PVC	POLYVINYL CHLORIDE
CPP	CORRUGATED PLASTIC PIPE
ROP	REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
LO	LIVE OAK
MAP	MAPLE
PN	PINE
FLM	PALM
WO	WATER OAK
G	GUM
TUP	TUPELO
⊕	ELECTRIC SERVICE
⊕	ELECTRIC TRANSFORMER
☎	TELEPHONE SERVICE
⊕	TELEVISION SERVICE
⊕	WATER METER
⊕	VALVE BOX
⊕	IRRIGATION CONTROL VALVE
⊕	SANITARY MANHOLE
⊕	STORM MANHOLE
⊕	FIRE HYDRANT
⊕	UTILITY POLE
→	GUY
—	SIGN
☆	LIGHT POLE
⊕	CATCH BASIN
⊕	MAIL BOX

- NOTES:
- UNDERGROUND UTILITIES NOT LOCATED EXCEPT AS SHOWN.
 - SEA ISLAND LAND SURVEY, LLC. CERTIFIES TO THE BOUNDARY, TOPOGRAPHIC AND ASBLUIT INFORMATION PROVIDED HEREON AS THE DATE OF THE SURVEY. THIS SURVEY MAY BE USED IN DIGITAL FORMAT AS A BASE FOR OTHERS AND ANY REVISIONS OR ADDITIONS MADE HEREAFTER IS NOT THE RESPONSIBILITY OF SEA ISLAND LAND SURVEY, LLC. A HARD COPY AVAILABLE FROM SEA ISLAND LAND SURVEY, LLC. WILL BE THE ONLY OFFICIAL DOCUMENT.
 - HORIZONTAL DATUM IS S.C. STATE PLANE NAD 83.
 - VERTICAL DATUM IS NAVD88.
 - CONTOUR INTERVAL IS 1'.
 - USE OF THIS PROPERTY MAY BE AFFECTED BY THE TERMS OF COVENANTS RELATING TO THIS PLANNED COMMERCIAL DEVELOPMENT.
 - BUILDING SETBACKS, WHETHER SHOWN OR NOT, SHOULD BE VERIFIED BY THE LOCAL BUILDING AUTHORITY OR ARCHITECTURAL REVIEW BOARD.
 - THIS SURVEY HAS BEEN PREPARED WITHOUT BENEFIT OF A COMPLETE TITLE SEARCH AND IS SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
 - THIS SURVEY DOES NOT CERTIFY TO THE EXISTENCE OR ABSENCE OF FRESHWATER WETLANDS.
 - IF IDENTIFICATION OF TREES IS CRITICAL TO DEVELOPMENT, AN ARBORIST SHOULD BE CONSULTED TO VERIFY SUCH TREE IDENTIFICATION.

**2019-0441 BUCKWALTER PLACE
LEC EXPANSION - PHASE 1
SHEET C3.0**

ASBLUIT, TREE AND TOPOGRAPHIC SURVEY OF:
PARCEL 1B, BLUFFTON TECH PARK,
BUCKWALTER PARKWAY, TOWN OF BLUFFTON,
BEAUFORT COUNTY, SOUTH CAROLINA
PREPARED FOR: THE TOWN OF BLUFFTON

DATE: 12/14/18 SCALE: 1" = 30'

SILS Sea Island Land Survey, LLC.
10 Oak Park Drive, Unit C1, Hilton Head Island, SC 29926
Tel (843) 681-3248 Fax (843) 689-3871
E-mail: sils@sprynet.com

FILE No.: 18245 DWG No.: 9-1745

COPYRIGHT © BY SEA ISLAND LAND SURVEY, LLC. CAD: BA, FLD: VRO

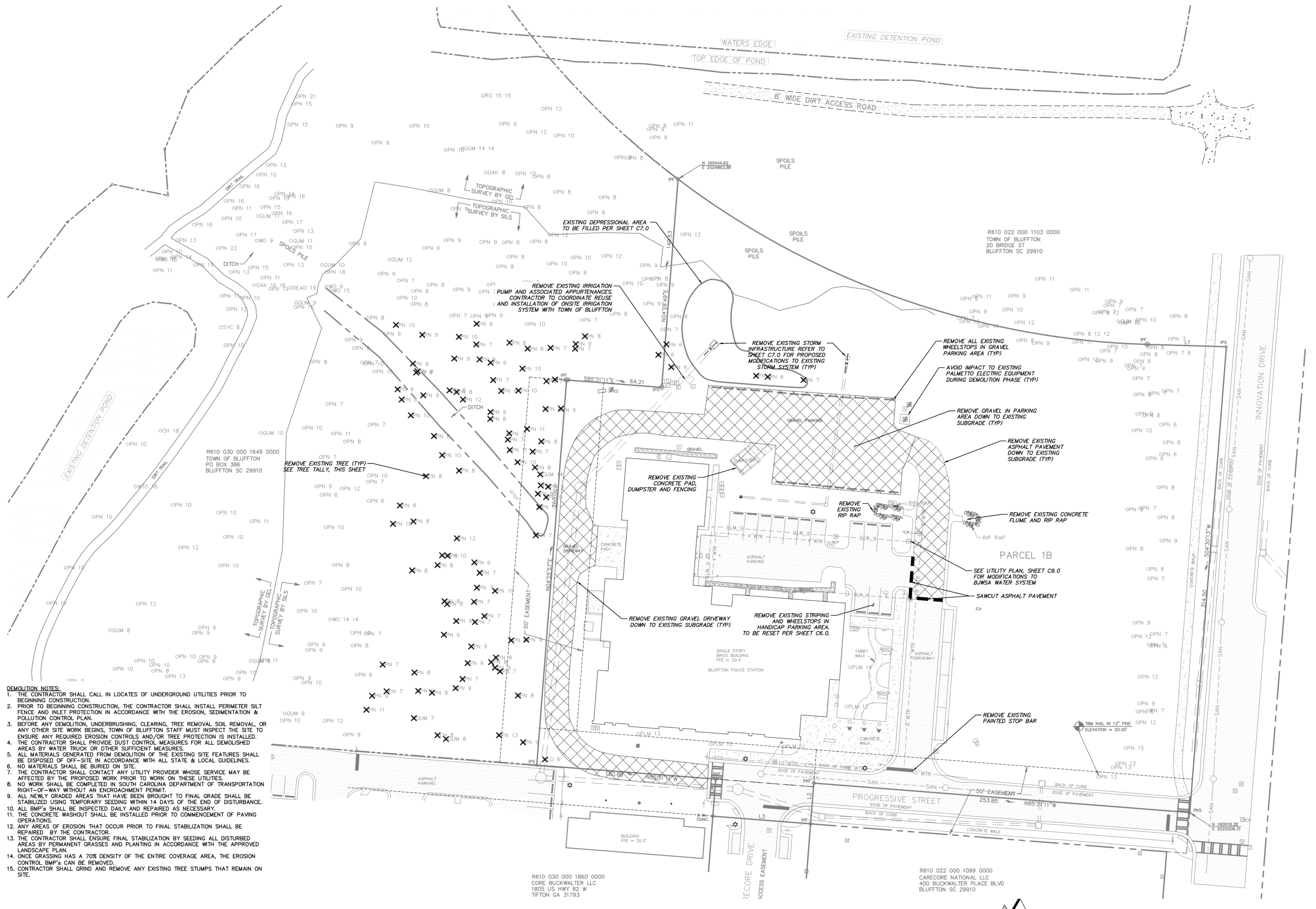
THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY MARK R. RENEW S.C.R.L.S. # 25437 THIS ELECTRONIC MEDIA SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT. A CERTIFIED HARDCOPY MAY BE OBTAINED FROM SEA ISLAND LAND SURVEY UPON REQUEST



REV #	DATE	DESCRIPTION

BUCKWALTER PLACE LEC EXPANSION - PHASE 1 DEMOLITION PLAN

DRAWN BY:	NLS
CHECKED BY:	AJB
APPROVED BY:	AJB
DATE:	07/06/2020
SCALE:	1" = 30'
JOB No.	2019-0441
DRAWING No.	C4.0

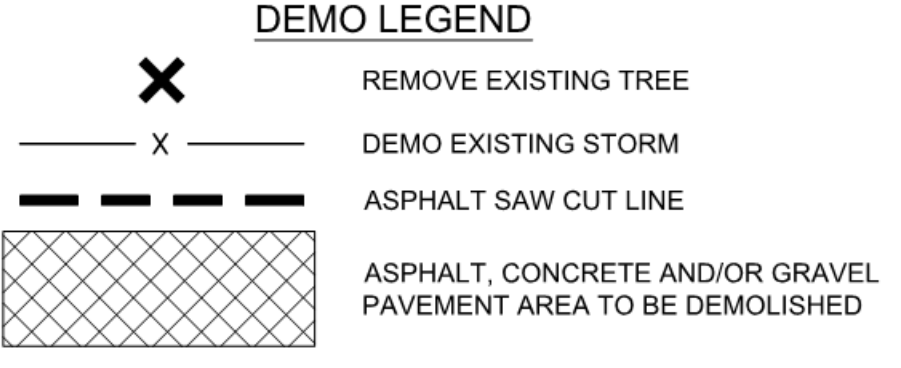


- DEMOLITION NOTES:**
1. THE CONTRACTOR SHALL CALL IN LOCATES OF UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
 2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL PERIMETER SILT FENCE AND INLET PROTECTION IN ACCORDANCE WITH THE EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN.
 3. BEFORE ANY DEMOLITION, UNDERBRUSHING, CLEARING, TREE REMOVAL SOIL REMOVAL, OR ANY OTHER SITE WORK BEGINS, TOWN OF BLUFFTON STAFF MUST INSPECT THE SITE TO ENSURE ANY REQUIRED EROSION CONTROLS AND/OR TREE PROTECTION IS INSTALLED.
 4. THE CONTRACTOR SHALL PROVIDE DUST CONTROL MEASURES FOR ALL DEMOLISHED AREAS BY WATER TRUCK OR OTHER SUFFICIENT MEASURES.
 5. ALL MATERIALS GENERATED FROM DEMOLITION OF THE EXISTING SITE FEATURES SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL STATE & LOCAL GUIDELINES.
 6. NO MATERIALS SHALL BE BURIED ON SITE.
 7. THE CONTRACTOR SHALL CONTACT ANY UTILITY PROVIDER WHOSE SERVICE MAY BE AFFECTED BY THE PROPOSED WORK PRIOR TO WORK ON THESE UTILITIES.
 8. NO WORK SHALL BE COMPLETED IN SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT.
 9. ALL NEWLY GRADED AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE SHALL BE STABILIZED USING TEMPORARY SEEDING WITHIN 14 DAYS OF THE END OF DISTURBANCE.
 10. ALL BMP'S SHALL BE INSPECTED DAILY AND REPAIRED AS NECESSARY.
 11. THE CONCRETE WASHOUT SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF PAVING OPERATIONS.
 12. ANY AREAS OF EROSION THAT OCCUR PRIOR TO FINAL STABILIZATION SHALL BE REPAIRED BY THE CONTRACTOR.
 13. THE CONTRACTOR SHALL ENSURE FINAL STABILIZATION BY SEEDING ALL DISTURBED AREAS BY PERMANENT GRASSES AND PLANTING IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
 14. ONCE GRASSING HAS A 70% DENSITY OF THE ENTIRE COVERAGE AREA, THE EROSION CONTROL BMP'S CAN BE REMOVED.
 15. CONTRACTOR SHALL GRIND AND REMOVE ANY EXISTING TREE STUMPS THAT REMAIN ON SITE.

PROPOSED TREE REMOVAL TALLY

TREE	DBH (INCHES)							COUNT	DBH
	8	9	10	11	12	13	14		
CHERRY	1	-	-	-	-	-	-	1	8
GUM	1	-	-	-	-	-	-	1	3
LIVE OAK	-	-	-	-	-	-	-	1	-
PINE	31	25	10	3	3	1	-	97	655
COUNT	33	25	10	3	3	1	1	102	
DBH	264	225	100	33	36	13	14	685	

- NOTES**
1. DBH = DIAMETER AT BREAST HEIGHT
 2. ONLY TREES 8" DBH AND GREATER WERE INCLUDED IN THE TOTAL REMOVAL COUNT.
 3. * DESIGNATES A SIGNIFICANT TREE PURSUANT WITH SECTION 5.3.3 OF THE TOWN OF BLUFFTON UNIFIED DEVELOPMENT ORDINANCE, AMENDED DATE 11/14/2017. REPLACEMENT TREES SHALL BE AT LEAST 12 FEET TALL AND HAVE A TRUNK DIAMETER OF NOT LESS THAN 6 INCHES WHEN PLANTED.



C:\GAAAA-ACTIVE\JOBS\2019\2019-0441\BUCKWALTER PLACE LEC EXPANSION.AA - DRAWINGS\CIVIL\2019-0441 - DV.DWG 7/6/2020 12:13 PM

DESCRIPTION	SYMBOL
TREE PROTECTION	(Symbol: Line with X)
SILT FENCE	(Symbol: X)
TURBIDITY CURTAIN	(Symbol: Arch)
TYPE A - INLET PROTECTION	(Symbol: A)
TYPE E - CURB INLET FILTER	(Symbol: E)
TYPE F - INLET TUBE	(Symbol: F)
DUST CONTROL	(Symbol: DC)
TEMPORARY SEEDING	(Symbol: TS)
PERMANENT SEEDING	(Symbol: PS)
CONCRETE WASHOUT	(Symbol: C)

STANDARD NOTES

- IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
 - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
 - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
 - ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREA AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT AS MAY BE REQUIRED.
- RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET SEQ. AND SCRI0000.
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR DIVERT SEDIMENT-LOADED WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CANNOT BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- A COPY OF THE SWPPP, INSPECTION RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPs (SEDIMENT BASIN, FILTER BAG, ETC.).
- THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
 - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.
 - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS.
 - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
 - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- IF EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPs MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

GRASSING REQUIREMENTS

- SEEDING SCHEDULE: TEMPORARY SEEDING: APRIL 15 - AUGUST 31, BROWNTOP MILLET @ 40 LBS./ACRE. SEPTEMBER 1, - DECEMBER 15, RYE GRAIN @ 56 LBS./ACRE. PERMANENT SEEDING: APRIL 1 - OCTOBER 15, A MIXTURE OF KENTUCKY 31 FESCUE @ 20 LBS./ACRE AND CREEPING RED FESCUE @ 20 LBS./ACRE. SEPTEMBER 1 TO OCTOBER 15, ADD A NURSE CROP OF ABRUZZI RYE @ 75 LBS./ACRE. OCTOBER 15 TO MARCH 30 SEED ABRUZZI RYE AT 100 LBS./ACRE.
- DOLOMITE LIME WILL BE INCORPORATED AT THE RATE OF 3000 POUNDS/ACRE.
- FERTILIZER WILL BE A COMMERCIAL GRADE 10-10-10 INCORPORATED INTO THE SOIL AT A RATE OF 1500 POUNDS/ACRE.
- FROM JUNE THROUGH AUGUST AND NOT LESS THAN 30 DAYS AFTER SEEDING, APPLY AMMONIUM NITRATE (NOT LESS THAN 20% NITRATE) AT A RATE EQUAL TO 60 POUNDS OF AVAILABLE NITROGEN/ACRE.
- ALL SEEDED AREAS WILL BE MULCHED WITH HAY OR STRAW AT A RATE OF 1500 POUNDS/ACRE.
- SEEDING AND MULCHING MAY BE ACCOMPLISHED IN A SINGLE HYDROSEEDING OPERATION. SEEDED AREAS WILL BE MULCHED WITH HAY, STRAW OR WOOD CELLULOSE AT A RATE OF 1500 LBS./ACRE.

% COMPLETE OF CONSTRUCTION ACTIVITIES

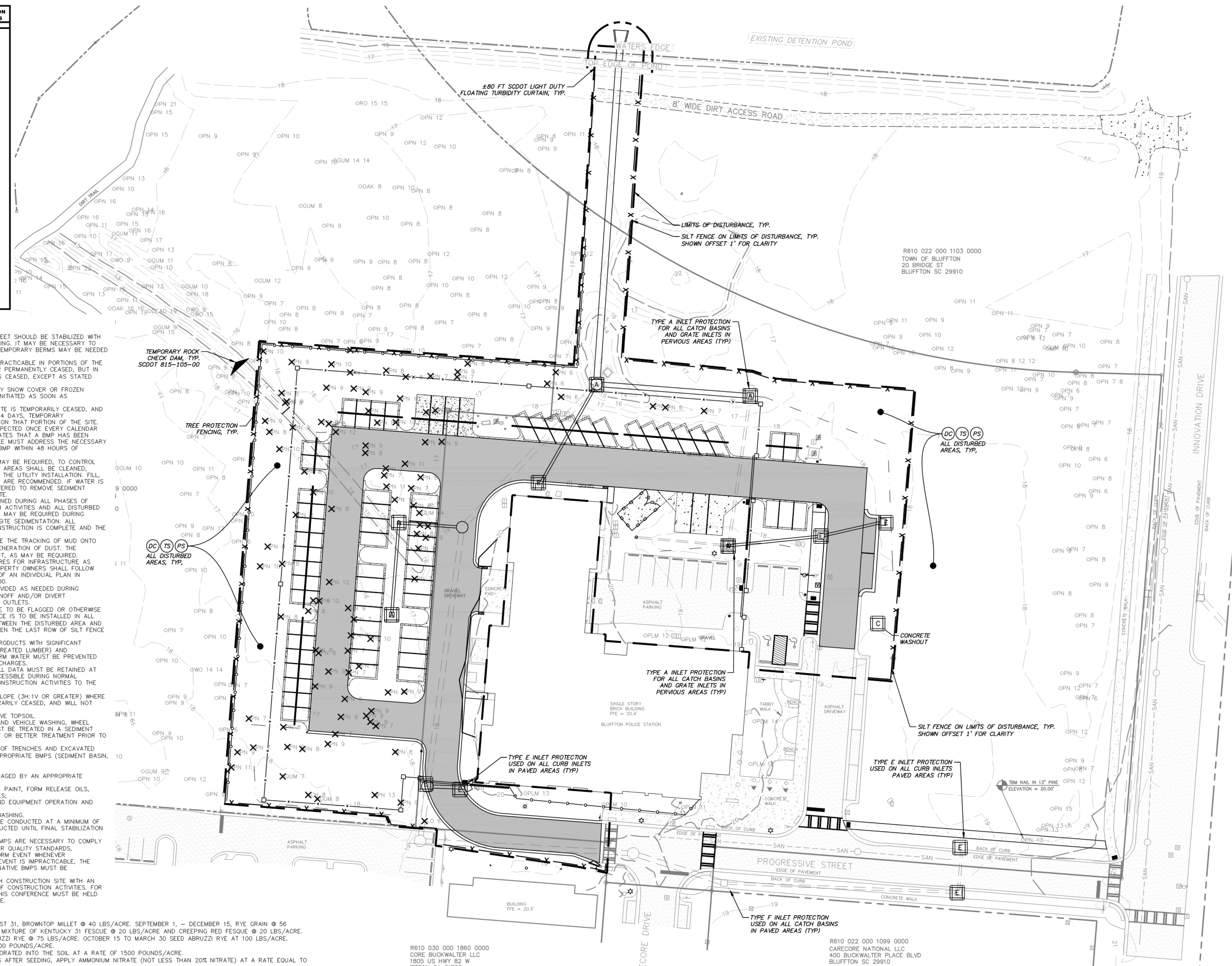
ACTIVITY	25%	50%	75%	100%
INSTALL SILT FENCE & TREE PROTECTION FENCE	█	█	█	█
INSTALL INLET PROTECTION & PERFORM SITE DEMOLITION	█	█	█	█
TREE REMOVAL	█	█	█	█
GRADING	█	█	█	█
PAVING	█	█	█	█
MAINTENANCE OF EROSION CONTROL BMP'S	█	█	█	█
TEMPORARY GRASSING	█	█	█	█
FINAL GRASSING	█	█	█	█
BUILDING CONSTRUCTION	█	█	█	█
REMOVAL OF SEDIMENT CONTROL STRUCTURES	█	█	█	█

- MARCH 1-AUGUST 14 SHALL BE PEARL MILLET 50 LBS./ACRE COVERED WITH HEAVY MULCH. AUGUST 15-FEBRUARY 28 SHALL BE RYE GRASS 40 LBS./ACRE AND RYE GRAIN SIMULTANEOUSLY.

- THE TIME AND PERIODS SHOWN ARE NOT EXACT OR READILY DETERMINABLE BUT IN ALL CASES SOIL EROSION AND SEDIMENT CONTROL STRUCTURES WILL BE INCORPORATED INTO THE CONSTRUCTION IN THE SEQUENCE AS SHOWN ABOVE AND/OR AS DIRECTED BY TOWN OF BLUFFTON OR SCDHEC.
- GRASSING WILL BE ACCEPTED WHEN A 95% COVER BY PERMANENT GRASSES IS OBTAINED AND WEEDS ARE NOT DOMINANT.
- GRASSING OF CONSTRUCTION AREAS WILL COMMENCE AT COMPLETION OF EACH PHASE OF CONSTRUCTION OR IN THE SEQUENCE AS SHOWN ABOVE. IN ANY CASE GRASSING OF ANY CONSTRUCTION AREA WILL BEGIN AT THE EARLIEST POSSIBLE DATE.

DISTURBED AREA = 2.60 AC

SEE SHEET C5.1 & C5.2 FOR SWPPP DETAILS



CRANSTON
ENGINEERING
ENGINEERS - PLANNERS - SURVEYORS
14 Westbury Park Way, Suite 202
Bluffton, South Carolina 29910
Telephone 849-815-3191
CranstonEngineering.com



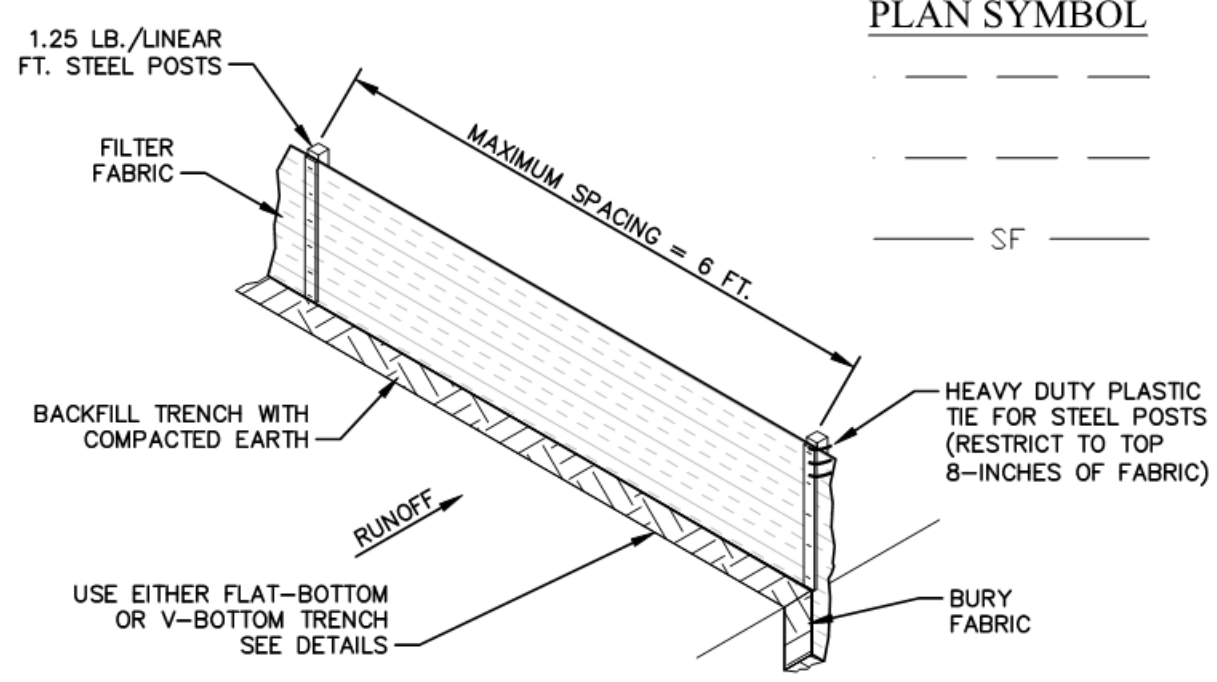
REV #	DATE	DESCRIPTION

BUCKWALTER PLACE LEC
EXPANSION - PHASE 1
SWPPP PLAN

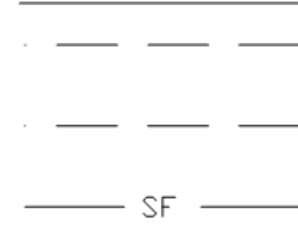
DRAWN BY:	NLS
CHECKED BY:	AJB
APPROVED BY:	AJB
DATE:	07/06/2020
SCALE:	1" = 30'
JOB No.	2019-0441
DRAWING No.	C5.0



SILT FENCE INSTALLATION



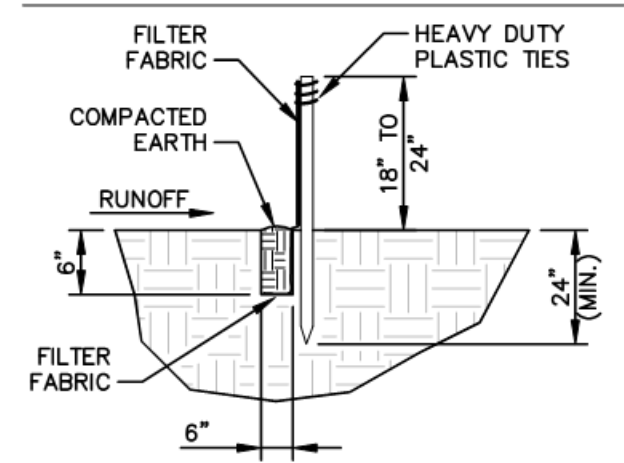
PLAN SYMBOL



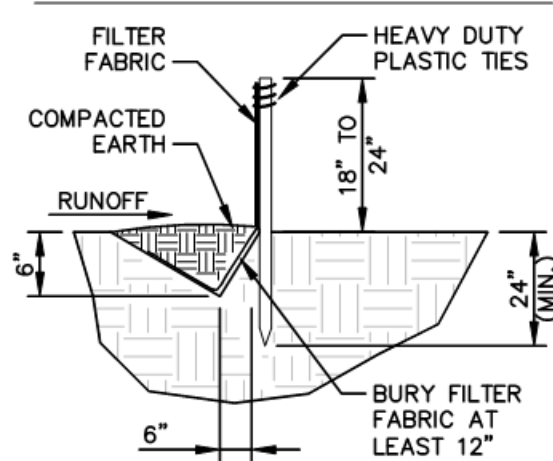
SILT FENCE - GENERAL NOTES

- 1. DO NOT PLACE SILT FENCE ACROSS CHANNELS OR IN OTHER AREAS SUBJECT TO CONCENTRATED FLOWS... 2. MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE SILT FENCE SHALL BE 100- FEET...

FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



SILT FENCE SOUTH CAROLINA DEPARTMENT OF PUBLIC HEALTH STANDARD DRAWING NO. SC-03 [PAGE 1] N.T.S.

SILT FENCE - POST REQUIREMENTS

- 1. SILT FENCE POSTS MUST BE 48-INCH LONG STEEL POSTS THAT MEET, AT A MINIMUM, THE FOLLOWING PHYSICAL CHARACTERISTICS... 2. POSTS SHALL BE EQUIPPED WITH PROJECTIONS TO AID IN FASTENING OF FILTER FABRIC...

SILT FENCE - INSPECTION AND MAINTENANCE

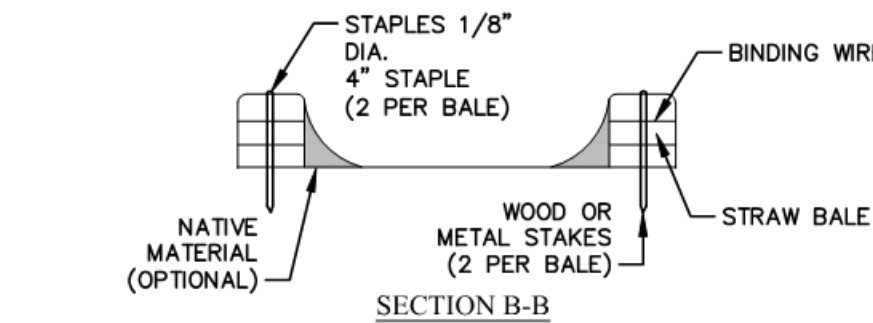
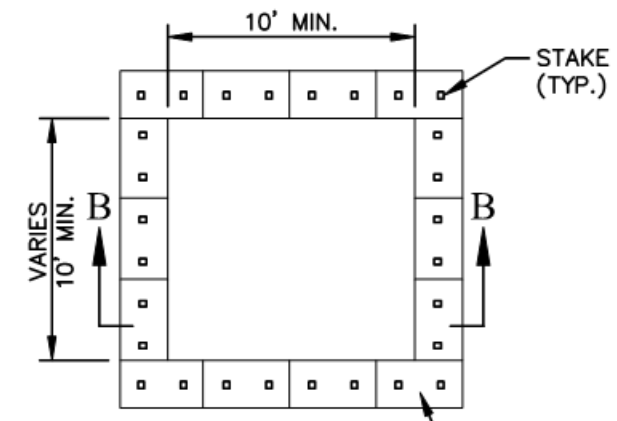
- 1. THE KEY TO FUNCTIONAL SILT FENCE IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL... 2. REGULAR INSPECTIONS OF SILT FENCE SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK...

SILT FENCE - FABRIC REQUIREMENTS

- 1. SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE FOLLOWING REQUIREMENTS... 2. USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (OPL)...

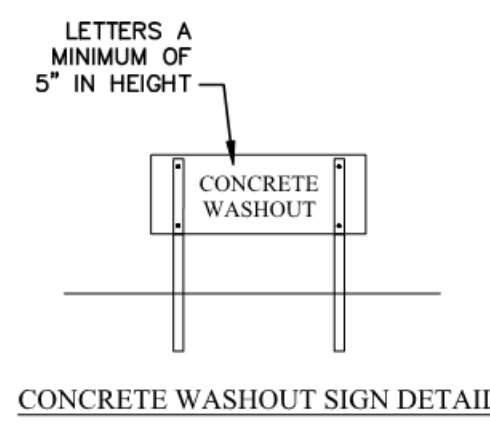
SILT FENCE SOUTH CAROLINA DEPARTMENT OF PUBLIC HEALTH STANDARD DRAWING NO. SC-03 [PAGE 2] GENERAL NOTES

STRAW BALE BARRIER CONCRETE WASHOUT



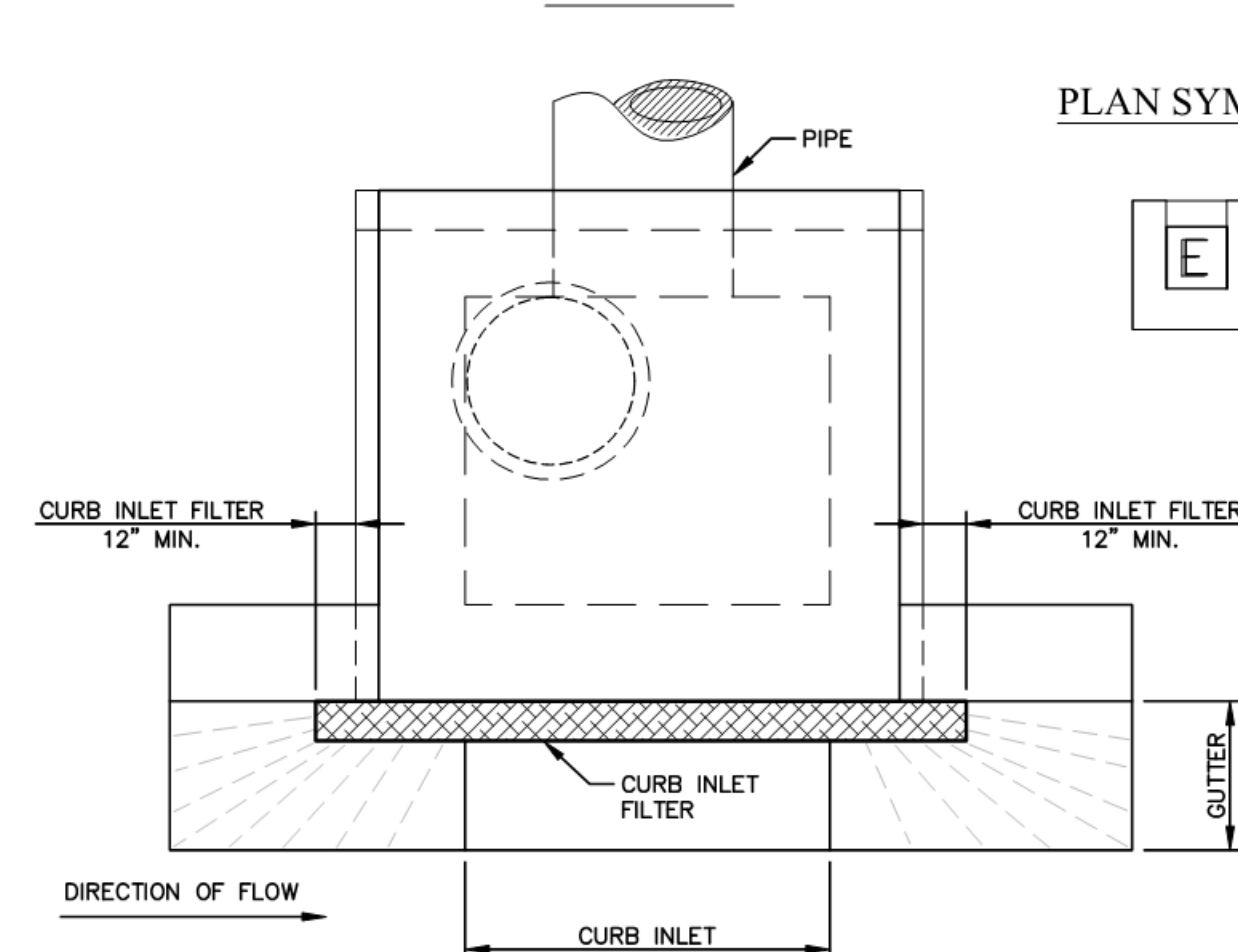
NOTES

- 1. ACTUAL LAYOUT DETERMINED IN FIELD... 2. INSTALL CONCRETE WASHOUT SIGN (24"x24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY...



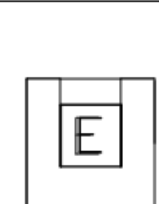
CONCRETE WASHOUT STRAW BALES OR ABOVE GROUND SOUTH CAROLINA DEPARTMENT OF PUBLIC HEALTH STANDARD DRAWING NO. RC-07 [PAGE 1] N.T.S.

TOP VIEW



TYPE E SURFACE COURSE CURB INLET FILTERS SOUTH CAROLINA DEPARTMENT OF PUBLIC HEALTH STANDARD DRAWING NO. SC-10 [PAGE 1] N.T.S.

PLAN SYMBOL



TYPE E - SURFACE COURSE CURB INLET FILTERS GENERAL NOTES

- 1. ONLY USE SURFACE CURB INLET FILTERS THAT HAVE A MINIMUM HEIGHT OR DIAMETER OF 9-INCHES AND HAVE A MINIMUM LENGTH THAT IS 2- FEET LONGER THAN THE LENGTH OF THE CURB OPENING... 2. SURFACE COURSE INLET FILTERS THAT ARE DESIGNED TO COMPLETELY BLOCK THE INLET OPENING ARE PROHIBITED...

TYPE E SURFACE COURSE CURB INLET FILTERS SOUTH CAROLINA DEPARTMENT OF PUBLIC HEALTH STANDARD DRAWING NO. SC-10 [PAGE 2] GENERAL NOTES

TREE PROTECTION FENCE DETAIL



NOTE: INSTALL TREE PROTECTION FENCE AROUND ALL TREES TO REMAIN

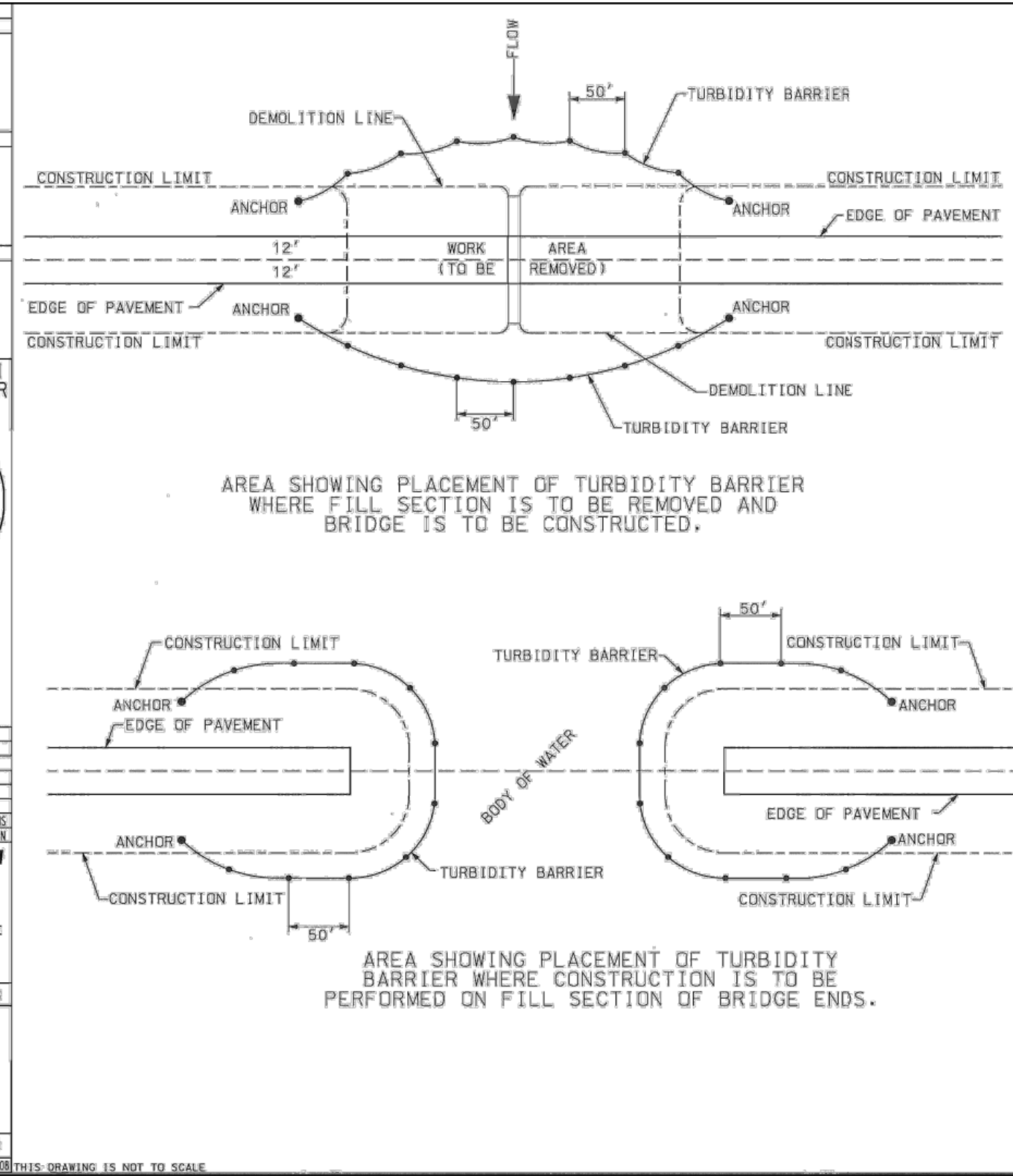
TYPE E - SURFACE COURSE CURB INLET FILTERS INSPECTION & MAINTENANCE

- 1. THE KEY TO FUNCTIONAL INLET PROTECTION IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL... 2. REGULAR INSPECTIONS OF ALL INLET PROTECTION SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK...

NOTES

- 1. THE PURPOSE OF THE FLOATING TURBIDITY BARRIER IS TO PROVIDE SEDIMENTATION OF FINE PARTICLES BY FILLING THE SPACE BETWEEN THE BARRIERS... MATERIAL USED IN THE FLOATING TURBIDITY BARRIER SHALL MEET THE FOLLOWING REQUIREMENTS:

Table with 4 columns: FABRIC POLYESTER REINFORCED VINYL (TYP.), FLOTATION ELEMENT, TOP LOAD CABLE, STRESS PLATES, ROPE RETAINER, etc. and 3 rows: LIGHT DUTY, MEDIUM DUTY, HEAVY DUTY.



- 2. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SILT FENCE... 3. CHECK FOR TEARS WITHIN THE SILT FENCE, AREAS WHERE SILT FENCE HAS BEGUN TO DECOMPOSE...

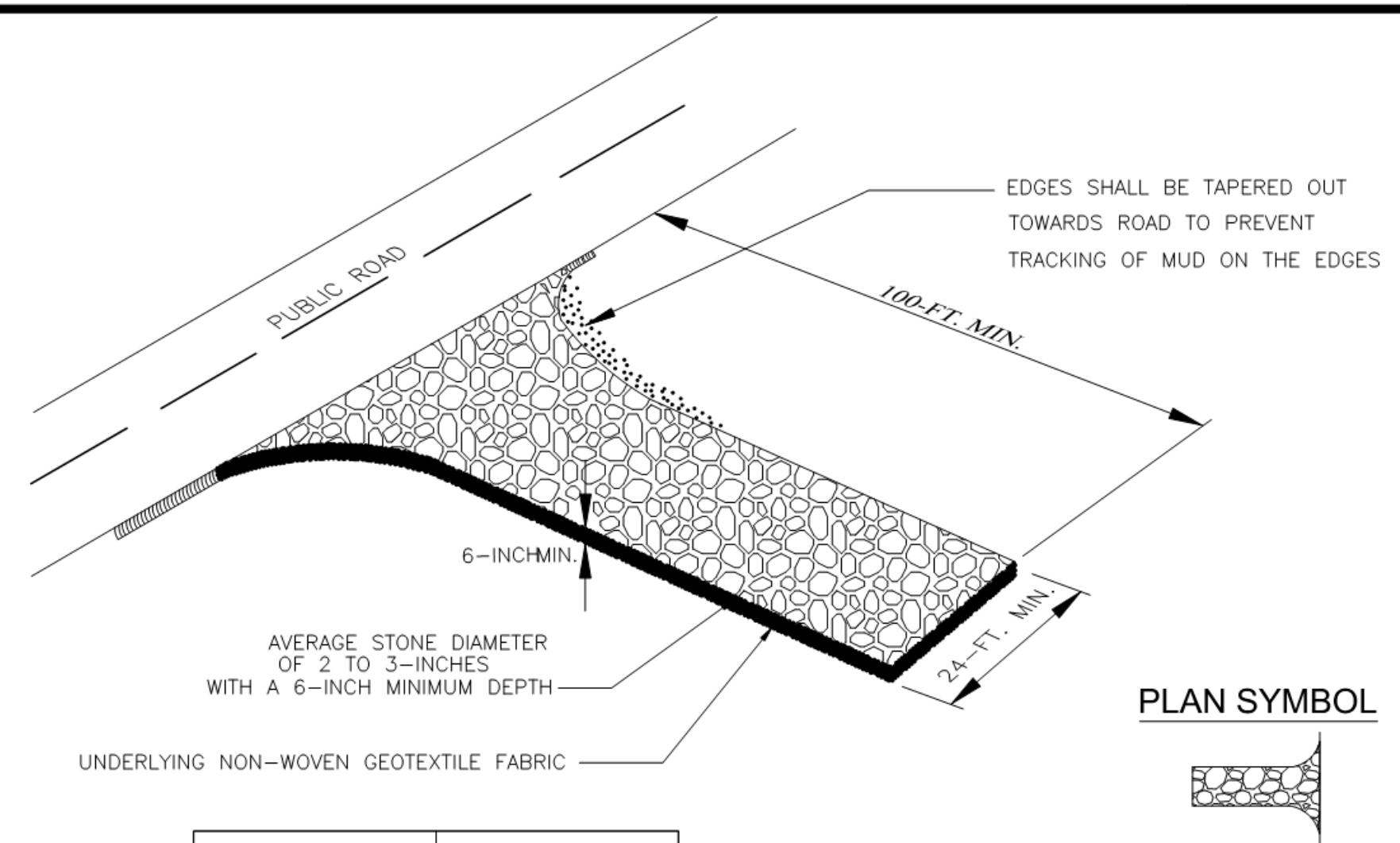
Cranston Engineering logo and contact information: CRANSTON ENGINEERING, ENGINEERS - PLANNERS - SURVEYORS, 14 Westbury Park Way, Suite 202, Bluffton, South Carolina 29910, Telephone 849-815-3191, CranstonEngineering.com

Professional Engineer seals for South Carolina: Cranstons Engineering Group, P.C. NO. C00575 and Cranstons Engineering Group, P.C. NO. 33254.

Table with 4 columns: REV #, DATE, DESCRIPTION. Contains revision records for the drawing.

Project title block: BUCKWALTER PLACE LEC EXPANSION - PHASE 1 SWPPP DETAILS. Includes fields for DRAWN BY, CHECKED BY, APPROVED BY, DATE, SCALE, JOB No., and DRAWING No. (C5.1).

C:\GAAA-ACTIVE\JOBS\2019\2019-0441-BUCKWALTER PLACE LEC EXPANSION.AIA - DRAWINGS\CIVIL\2019-0441 - DWG 7/6/2020 12:07 PM



SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2-3 INCHES

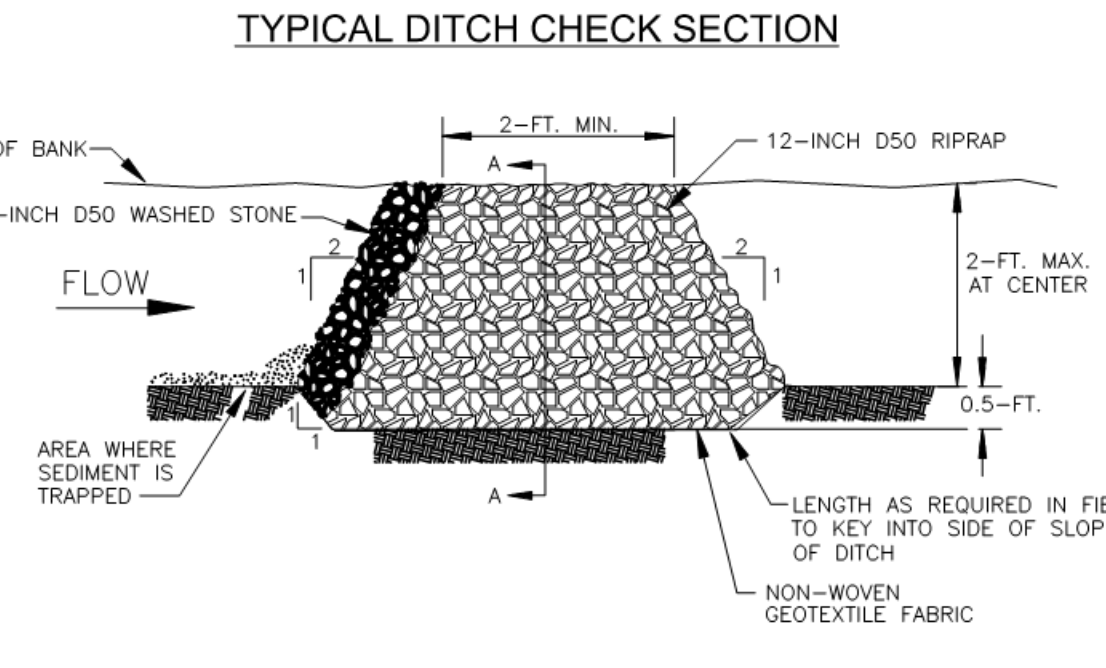
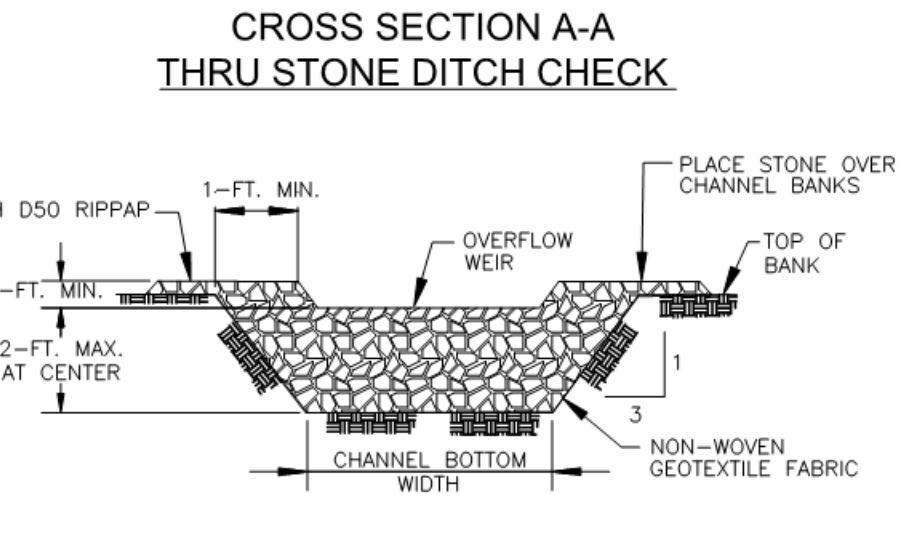
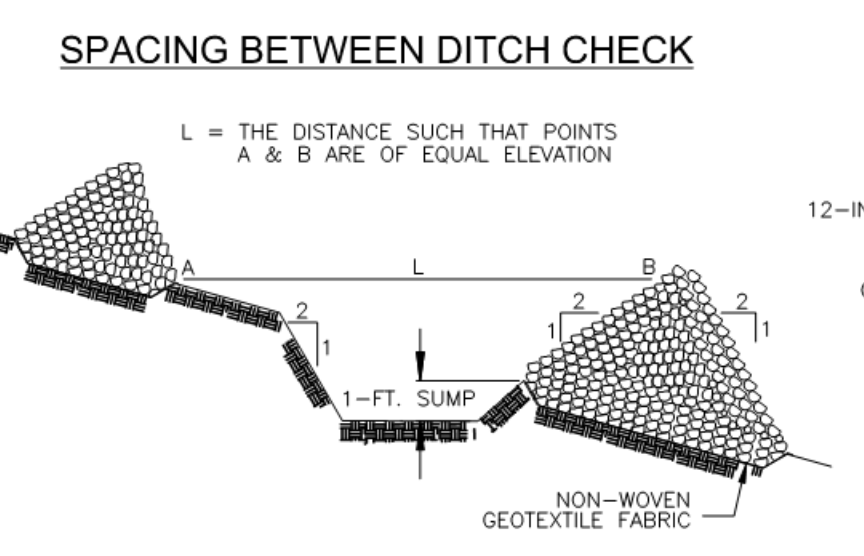
South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
 STANDARD DRAWING NO. SC-06 PAGE 1 of 2
 NOT TO SCALE FEBRUARY 2014 DATE

- CONSTRUCTION ENTRANCE - GENERAL NOTES**
1. Stabilized construction entrances should be used at all points where traffic will egress/ingress a construction site onto a public road or any impervious surfaces, such as parking lots.
 2. Install a non-woven geotextile fabric prior to placing any stone.
 3. Install a culvert pipe across the entrance when needed to provide positive drainage.
 4. The entrance shall consist of 2-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.
 5. Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
 6. The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.
 7. Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
 8. Limestone may not be used for the stone pad.

- CONSTR. ENTRANCE - INSPECTION & MAINTENANCE**
1. The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal.
 2. Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
 3. During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to be more frequent during long periods of wet weather.
 4. Reshape the stone pad as necessary for drainage and runoff control.
 5. Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone pad.
 6. Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.
 7. During maintenance activities, any broken pavement should be repaired immediately.
 8. Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed, unless area will be converted to an impervious surface to serve post-construction.

**** CONTRACTOR TO COORDINATE PLACEMENT OF STABILIZED CONSTRUCTION ENTRANCE WITH ENGINEER AND TOWN OF BLUFFTON STAFF DURING PRE-CONSTRUCTION MEETING. ****

South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
 STANDARD DRAWING NO. SC-06 PAGE 2 of 2
 GENERAL NOTES FEBRUARY 2014 DATE

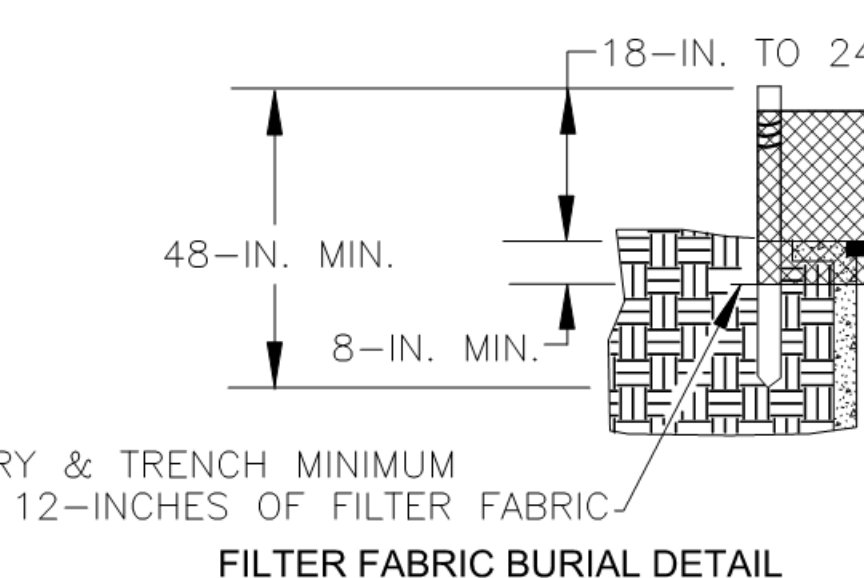
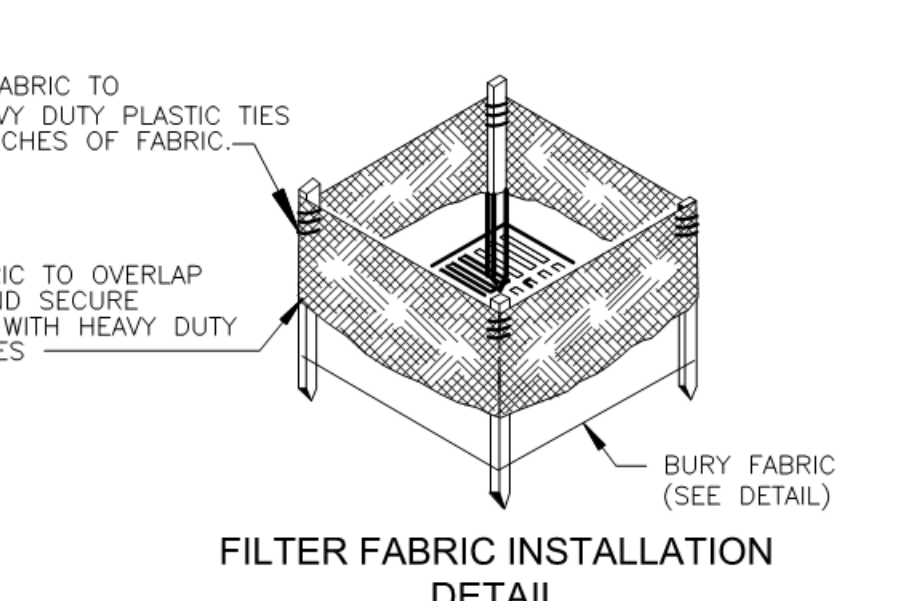
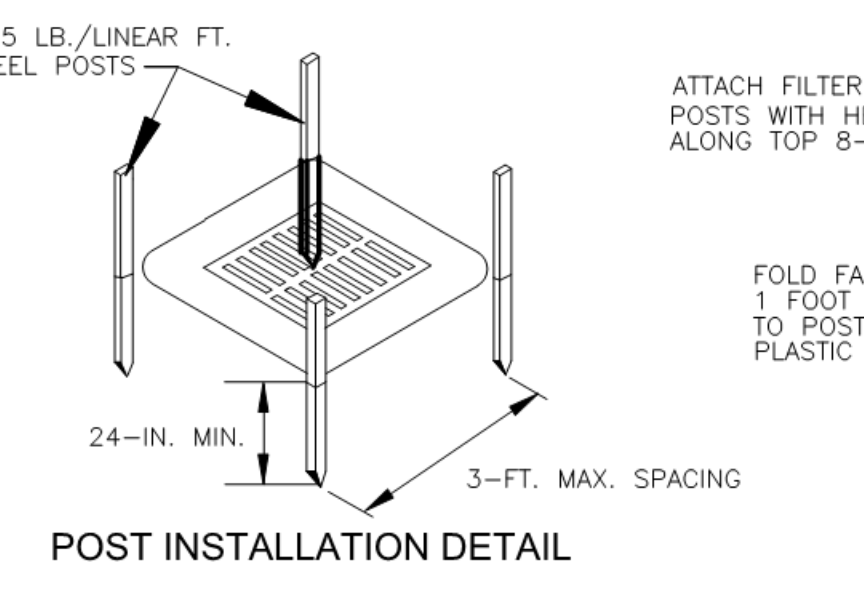


South Carolina Department of Health and Environmental Control
ROCK DITCH CHECK
 STANDARD DRAWING NO. SC-04 PAGE 1 of 2
 NOT TO SCALE FEBRUARY 2014 DATE

- ROCK DITCH CHECK - GENERAL NOTES**
1. Rock Ditch Checks should not be placed in Waters of the State or USGS blue-line streams (unless approved by Federal Authorities).
 2. Rock Ditch Checks should be installed in steeply sloped channels where adequate vegetation cannot be established. This BMP measure should only be used in small open channels.
 3. A non-woven geotextile fabric shall be installed over the soil surface where the rock ditch check is to be placed.
 4. The body of the rock ditch check shall be composed of 12-inch D50 Riprap. The upstream face may be composed of 1-inch D50 washed stone.
 5. Rock Ditch Checks should not exceed a height of 2-feet at the centerline of the channel.
 6. Rock Ditch Checks should have a minimum top flow length of 2-feet.
 7. Riprap should be placed over channel banks to prevent water from cutting around the ditch check.
 8. The riprap should be placed by hand or mechanical placement (no dumping of rock to form dam) to achieve complete coverage of the channel. Doing so will also ensure that the center of the check is lower than the edges.
 9. The maximum spacing between the dams should be such that the toe of the upstream check is at the same elevation as the top of the downstream check.

- ROCK DITCH CHECK - INSPECTION & MAINTENANCE**
1. The key to functional rock ditch check is weekly inspections, routine maintenance, and regular sediment removal.
 2. Regular inspections of rock ditch checks shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
 3. Attention to sediment accumulations in front of the rock ditch check is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
 4. Remove accumulated sediment when it reaches 1/3 the height of the rock ditch check.
 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
 6. Inspect Rock Ditch Checks' edges for erosion and evidence of runoff bypassing the installed check. If evident repair promptly as necessary to prevent erosion and bypassing.
 7. In the case of grass-lined ditches, channels, and swales, rock ditch checks should be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4%.
 8. After construction is completed and final stabilization is reached, the entirety of the rock ditch check should be removed if vegetation will be used for permanent erosion control measures. The area beneath the removed rock ditch check must be addressed with permanent stabilization measures.

South Carolina Department of Health and Environmental Control
ROCK DITCH CHECK
 STANDARD DRAWING NO. SC-04 PAGE 2 of 2
 GENERAL NOTES FEBRUARY 2014 DATE



South Carolina Department of Health and Environmental Control
Type A FILTER FABRIC INLET PROTECTION
 STANDARD DRAWING NO. SC-07 PAGE 1 of 2
 NOT TO SCALE FEBRUARY 2014 DATE

- TYPE A - FILTER FABRIC REQUIREMENTS**
1. Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
 - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
 - Free of any treatment or coating which might adversely alter its physical properties after installation;
 - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
 - Have a minimum width of 36-inches.
 2. Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
 3. 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
 4. Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
 5. Filter Fabric shall be installed at a minimum of 24-inches above the ground.
- TYPE A - POST REQUIREMENTS**
1. Silt Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
 - Include a standard "T" section with a nominal face width of 1.35-inches and a nominal "T" length of 1.48-inches.
 - Weigh 1.25 pounds per foot (± 8%).
 2. Posts shall be equipped with projections to aid in fastening of filter fabric.
 3. Install posts to a minimum of 24-inches. A minimum height of 1- to 2- inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
 4. Post spacing shall be at a maximum of 3-feet on center.

- TYPE A - INSPECTION & MAINTENANCE**
1. The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
 2. Regular inspections of inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
 3. Attention to sediment accumulations along the filter fabric is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
 4. Remove accumulated sediment when it reaches 1/3 the height of the filter fabric. When a sump is installed in front of the fabric, sediment should be removed when it fills approximately 1/3 the depth of the sump.
 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
 6. Check for areas where stormwater runoff has eroded a channel beneath the filter fabric, or where the fabric has sagged or collapsed due to runoff overtopping the inlet protection.
 7. Check for tears within the filter fabric, areas where fabric has begun to decompose, and for any other circumstance that may render the inlet protection ineffective. Removed damaged fabric and reinstall new filter fabric immediately.
 8. Inlet protection structures should be removed after all the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

South Carolina Department of Health and Environmental Control
Type A FILTER FABRIC INLET PROTECTION
 STANDARD DRAWING NO. SC-07 PAGE 2 of 2
 GENERAL NOTES FEBRUARY 2014 DATE

CRANSTON ENGINEERING
 ENGINEERS - PLANNERS - SURVEYORS
 14 Westbury Park Way, Suite 202
 Bluffton, South Carolina 29910
 Telephone 849-815-3191
 CranstonEngineering.com

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
 Cranston Engineering Group, P.C.
 NO. C00575

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
 JOHN BAJOCCO
 NO. 33254
 07/06/2020

REV #	DATE	DESCRIPTION

BUCKWALTER PLACE LEC EXPANSION - PHASE 1

SWPPP DETAILS

DRAWN BY: NLS
 CHECKED BY: AJB
 APPROVED BY: AJB
 DATE: 07/06/2020
 SCALE: 1" = 20'
 JOB No. 2019-0441
 DRAWING No. C5.2

C:\G\AAA-ACTIVE_JOBS\2019\2019-0441_BUCKWALTER PLACE LEC EXPANSION\AA - DRAWINGS\CIVIL\2019-0441_OV.DWG, 7/6/2020 12:08 PM



LEGEND

	PARKING LOT STRIPING
	NEW CONCRETE
	NEW MEDIUM DUTY ASPHALT PAVEMENT
	NEW RIP RAP

GENERAL NOTES:

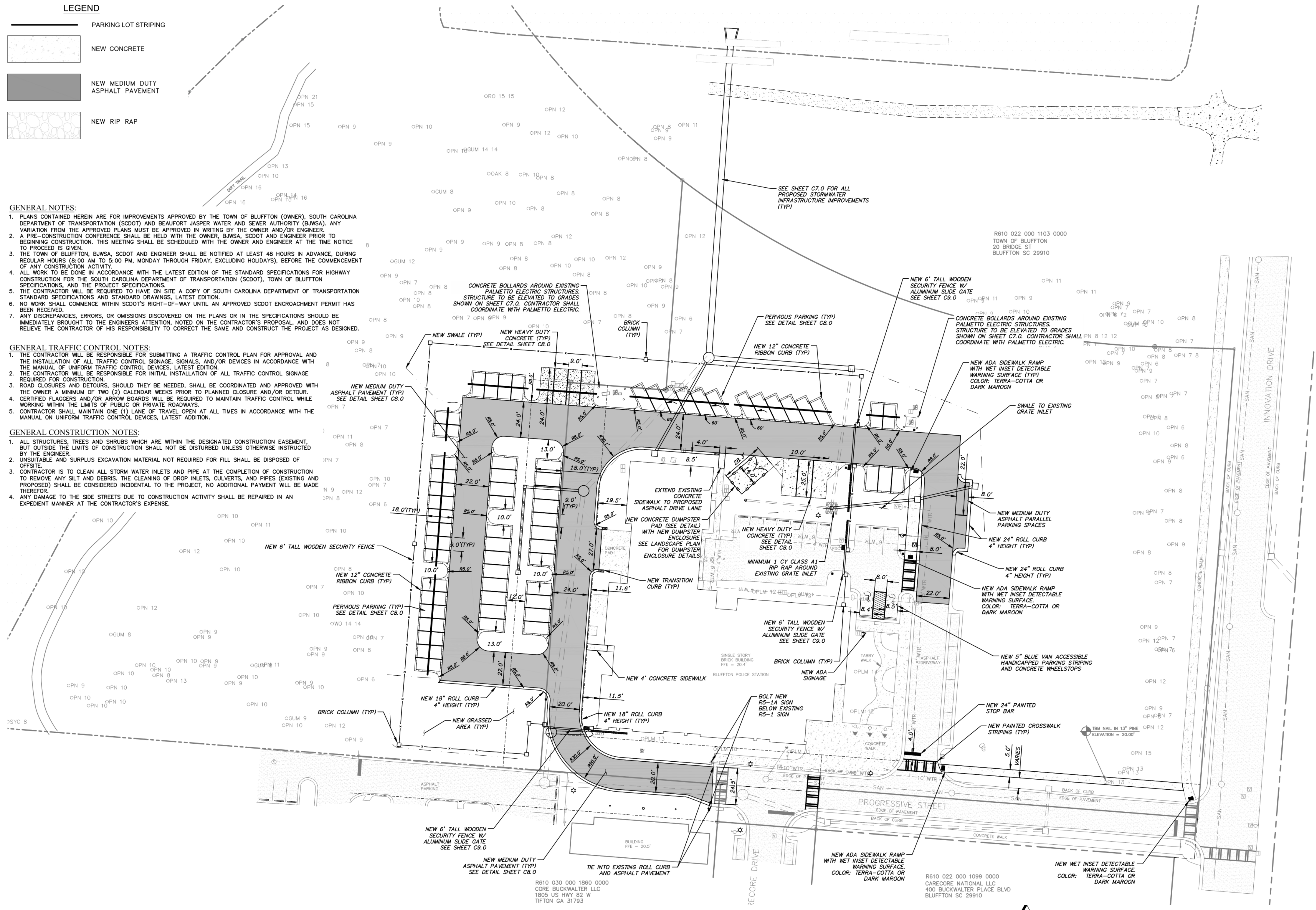
1. PLANS CONTAINED HEREIN ARE FOR IMPROVEMENTS APPROVED BY THE TOWN OF BLUFFTON (OWNER), SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT) AND BEAUFORT JASPER WATER AND SEWER AUTHORITY (BJWSA). ANY VARIATION FROM THE APPROVED PLANS MUST BE APPROVED IN WRITING BY THE OWNER AND/OR ENGINEER.
2. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE OWNER, BJWSA, SCDOT AND ENGINEER PRIOR TO BEGINNING CONSTRUCTION. THIS MEETING SHALL BE SCHEDULED WITH THE OWNER AND ENGINEER AT THE TIME NOTICE TO PROCEED IS GIVEN.
3. THE TOWN OF BLUFFTON, BJWSA, SCDOT AND ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE, DURING REGULAR HOURS (8:00 AM TO 5:00 PM, MONDAY THROUGH FRIDAY, EXCLUDING HOLIDAYS), BEFORE THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION FOR THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT), TOWN OF BLUFFTON SPECIFICATIONS, AND THE PROJECT SPECIFICATIONS.
5. THE CONTRACTOR WILL BE REQUIRED TO HAVE ON SITE A COPY OF SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND STANDARD DRAWINGS, LATEST EDITION.
6. NO WORK SHALL COMMENCE WITHIN SCDOT'S RIGHT-OF-WAY UNTIL AN APPROVED SCDOT ENCROACHMENT PERMIT HAS BEEN RECEIVED.
7. ANY DISCREPANCIES, ERRORS, OR OMISSIONS DISCOVERED ON THE PLANS OR IN THE SPECIFICATIONS SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEERS ATTENTION, NOTED ON THE CONTRACTOR'S PROPOSAL, AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO CORRECT THE SAME AND CONSTRUCT THE PROJECT AS DESIGNED.

GENERAL TRAFFIC CONTROL NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUBMITTING A TRAFFIC CONTROL PLAN FOR APPROVAL AND THE INSTALLATION OF ALL TRAFFIC CONTROL SIGNAGE, SIGNALS, AND/OR DEVICES IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR INITIAL INSTALLATION OF ALL TRAFFIC CONTROL SIGNAGE REQUIRED FOR CONSTRUCTION.
3. ROAD CLOSURES AND DETOURS, SHOULD THEY BE NEEDED, SHALL BE COORDINATED AND APPROVED WITH THE OWNER A MINIMUM OF TWO (2) CALENDAR WEEKS PRIOR TO PLANNED CLOSURE AND/OR DETOUR.
4. CERTIFIED FLAGGERS AND/OR ARROW BOARDS WILL BE REQUIRED TO MAINTAIN TRAFFIC CONTROL WHILE WORKING WITHIN THE LIMITS OF PUBLIC OR PRIVATE ROADWAYS.
5. CONTRACTOR SHALL MAINTAIN ONE (1) LANE OF TRAVEL OPEN AT ALL TIMES IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST ADDITION.

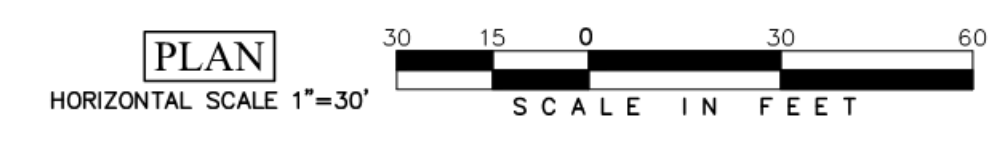
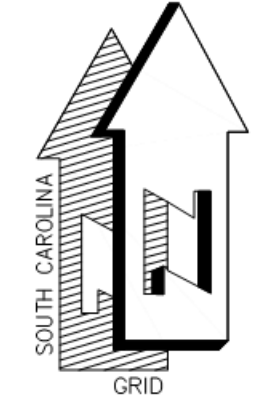
GENERAL CONSTRUCTION NOTES:

1. ALL STRUCTURES, TREES AND SHRUBS WHICH ARE WITHIN THE DESIGNATED CONSTRUCTION EASEMENT, BUT OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
2. UNSUITABLE AND SURPLUS EXCAVATION MATERIAL NOT REQUIRED FOR FILL SHALL BE DISPOSED OF OFFSITE.
3. CONTRACTOR IS TO CLEAN ALL STORM WATER INLETS AND PIPE AT THE COMPLETION OF CONSTRUCTION TO REMOVE ANY SILT AND DEBRIS. THE CLEANING OF DROP INLETS, CULVERTS, AND PIPES (EXISTING AND PROPOSED) SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, NO ADDITIONAL PAYMENT WILL BE MADE THEREFOR.
4. ANY DAMAGE TO THE SIDE STREETS DUE TO CONSTRUCTION ACTIVITY SHALL BE REPAIRED IN AN EXPEDITIOUS MANNER AT THE CONTRACTOR'S EXPENSE.



R610 030 000 1880 0000
CORE BUCKWALTER LLC
1805 US HWY 82 W
TIFTON GA 31793

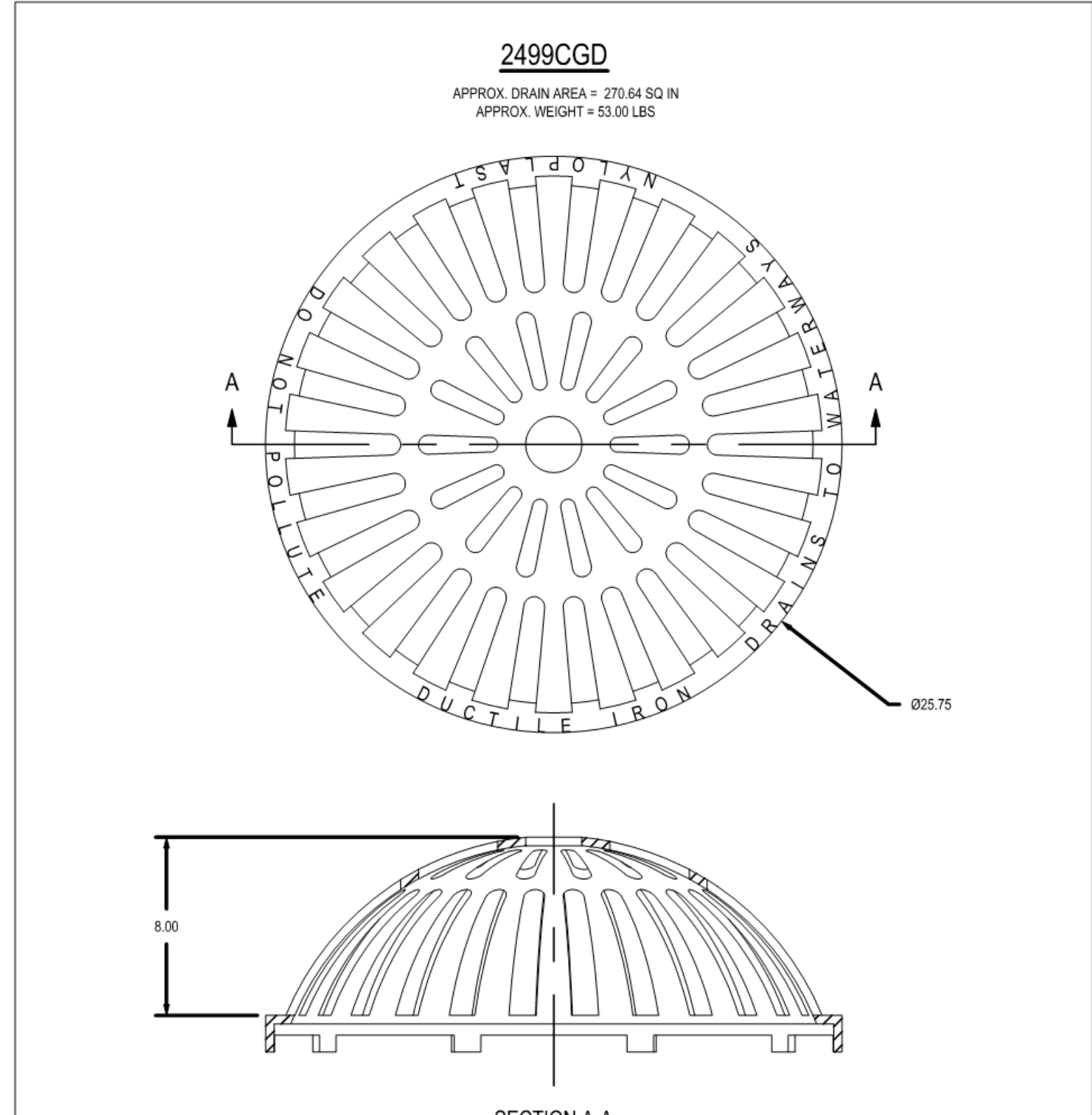
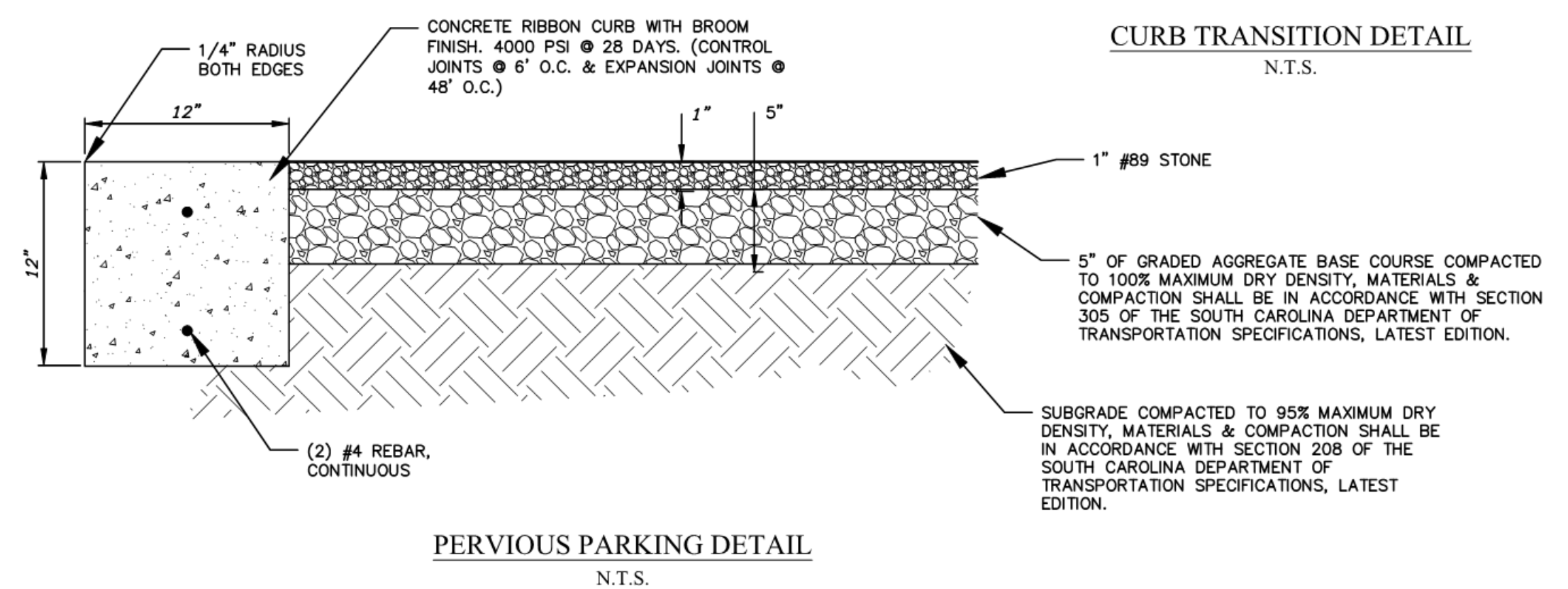
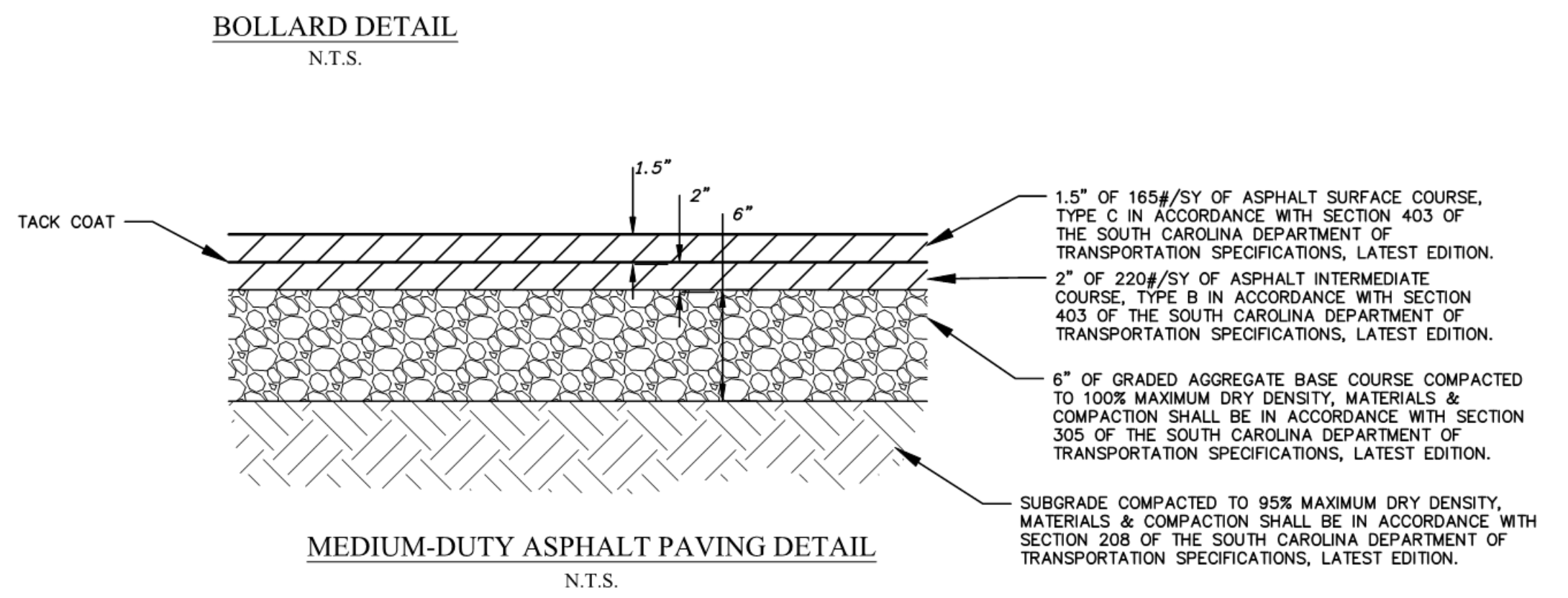
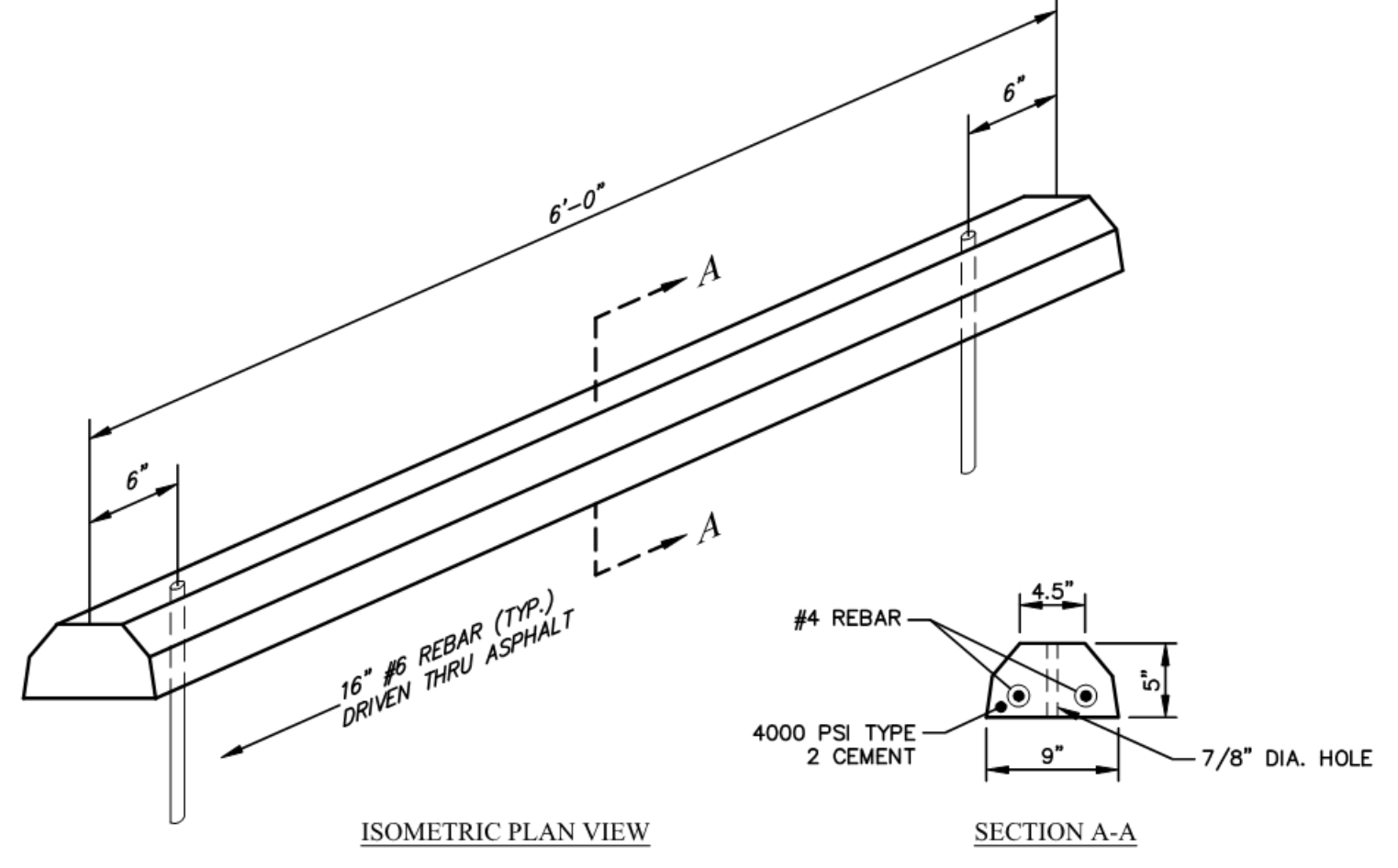
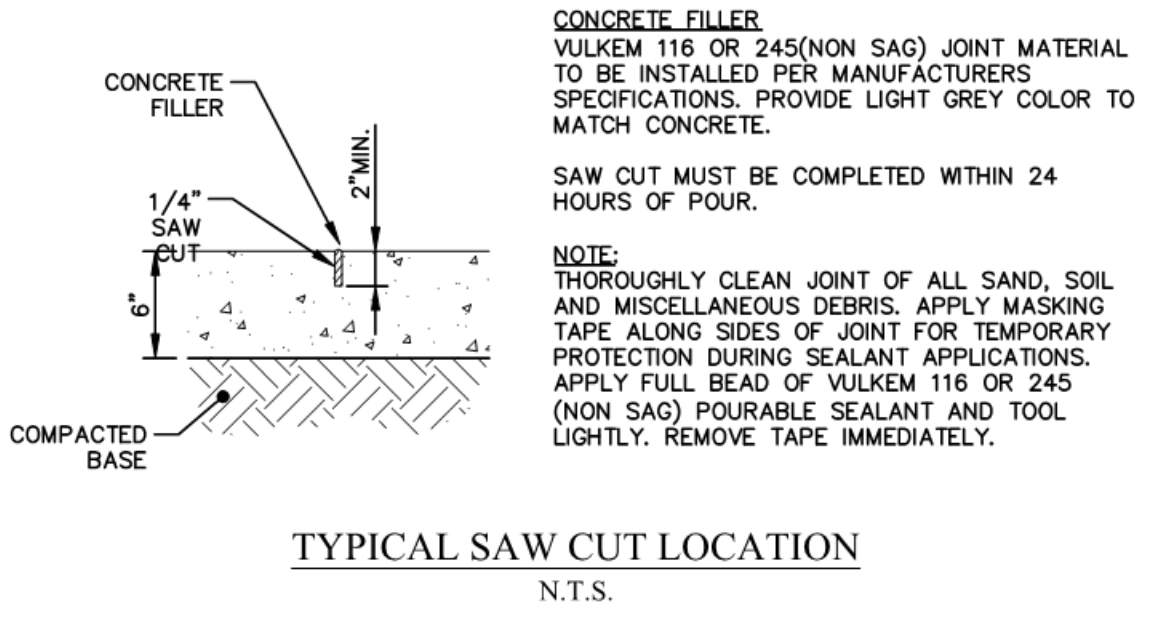
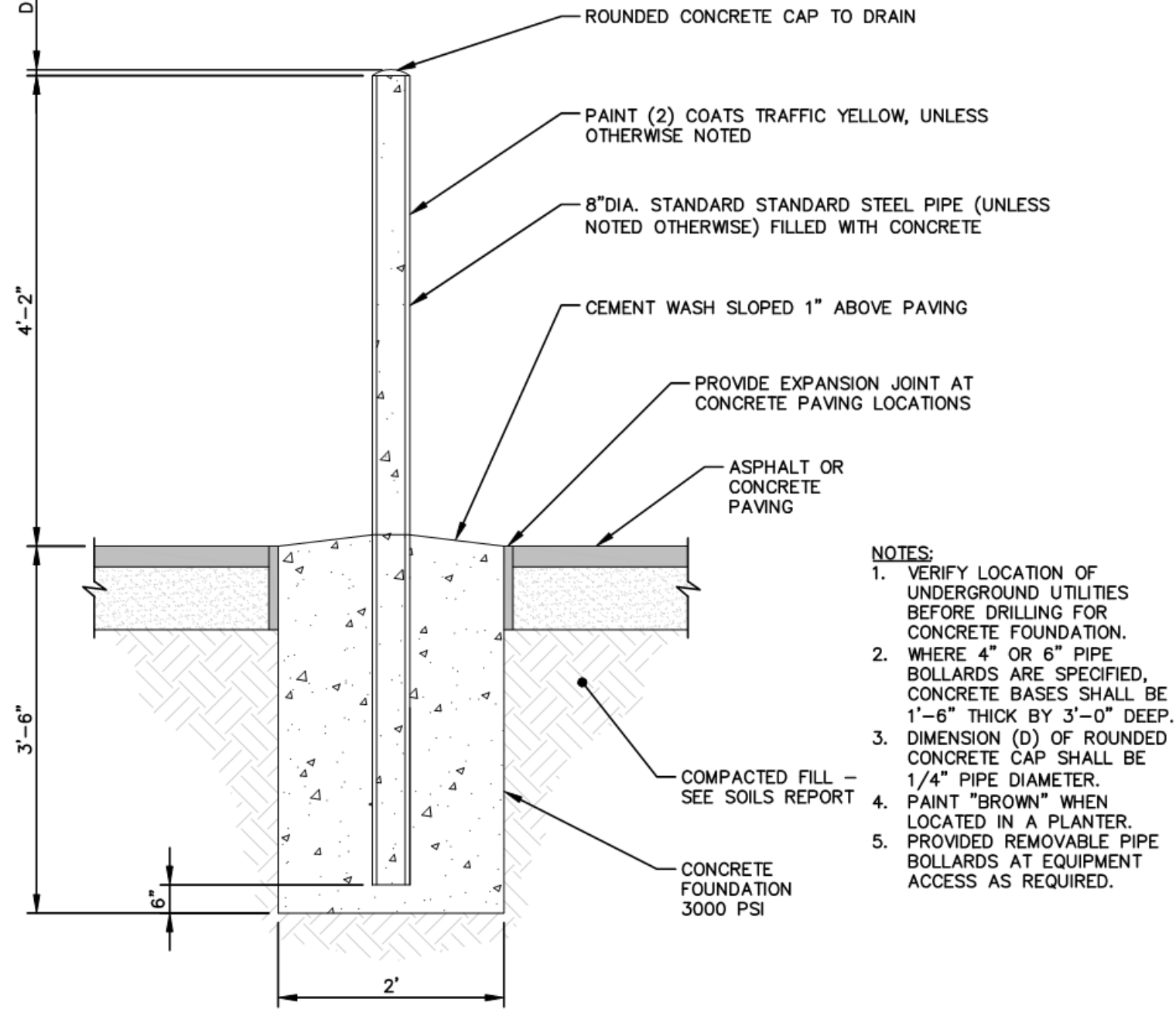
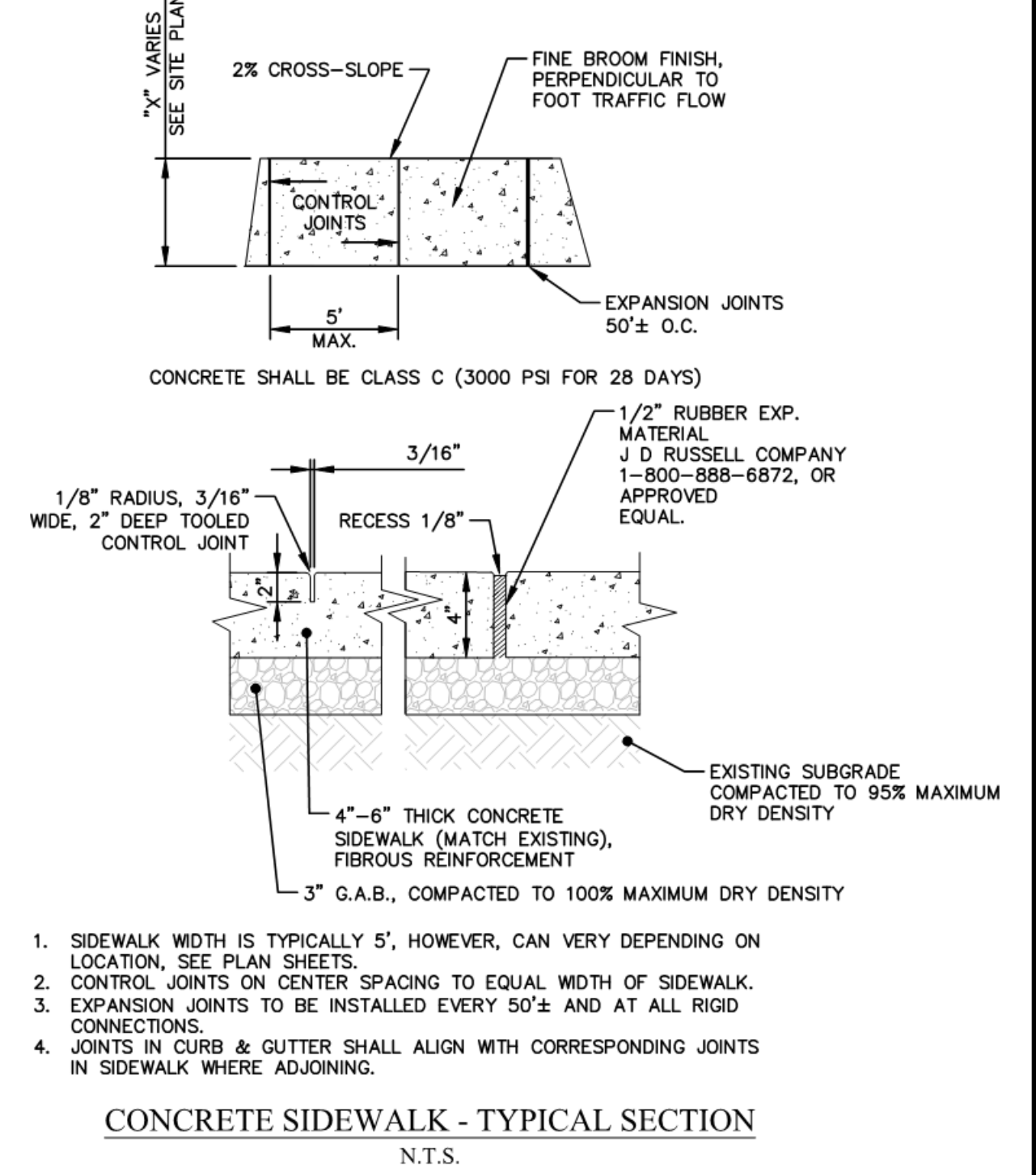
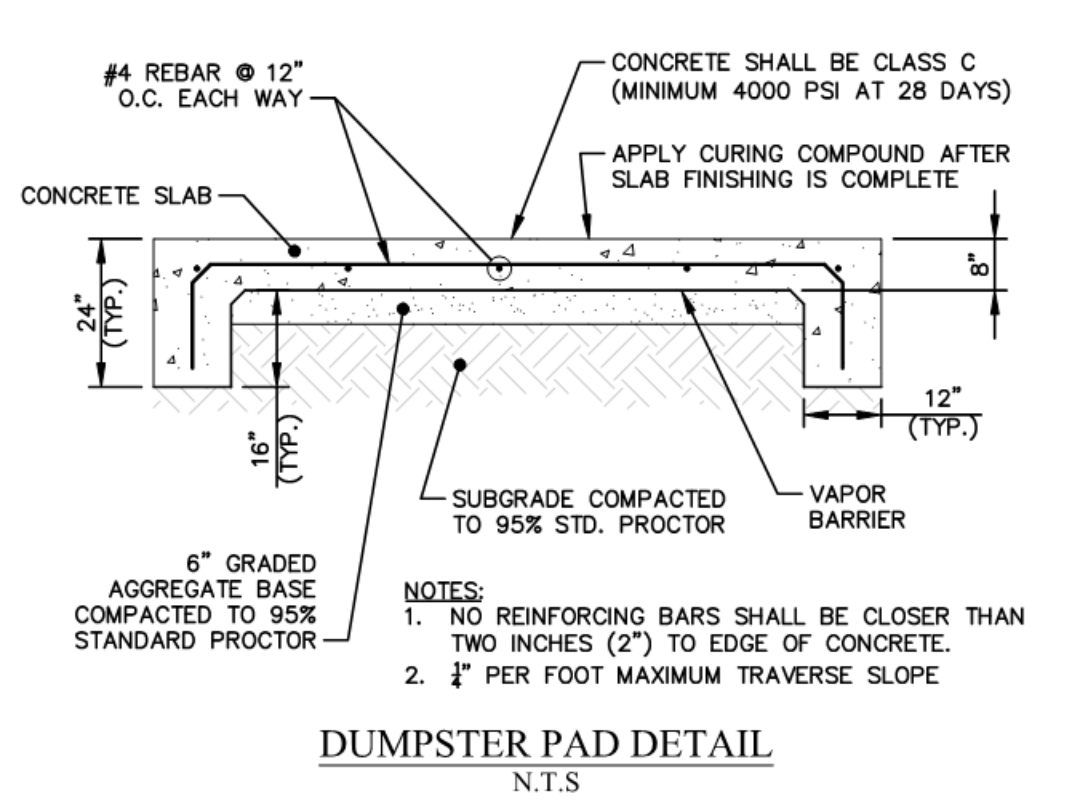
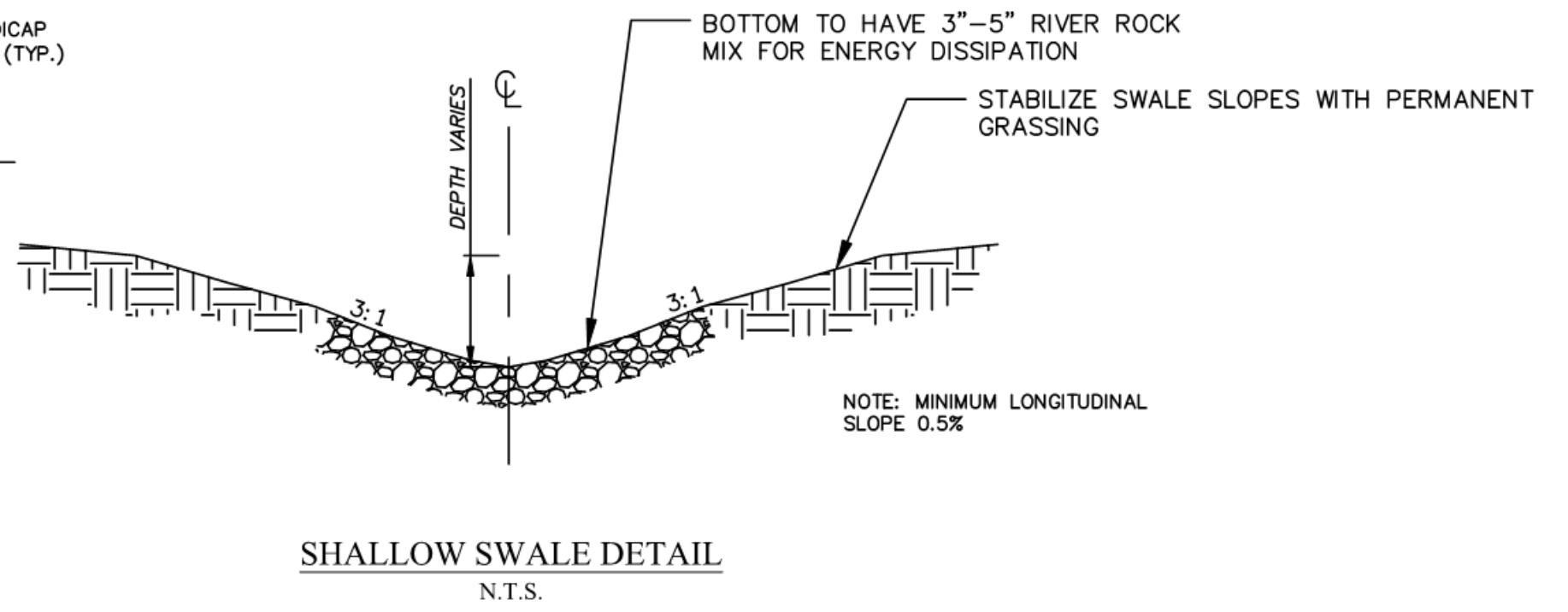
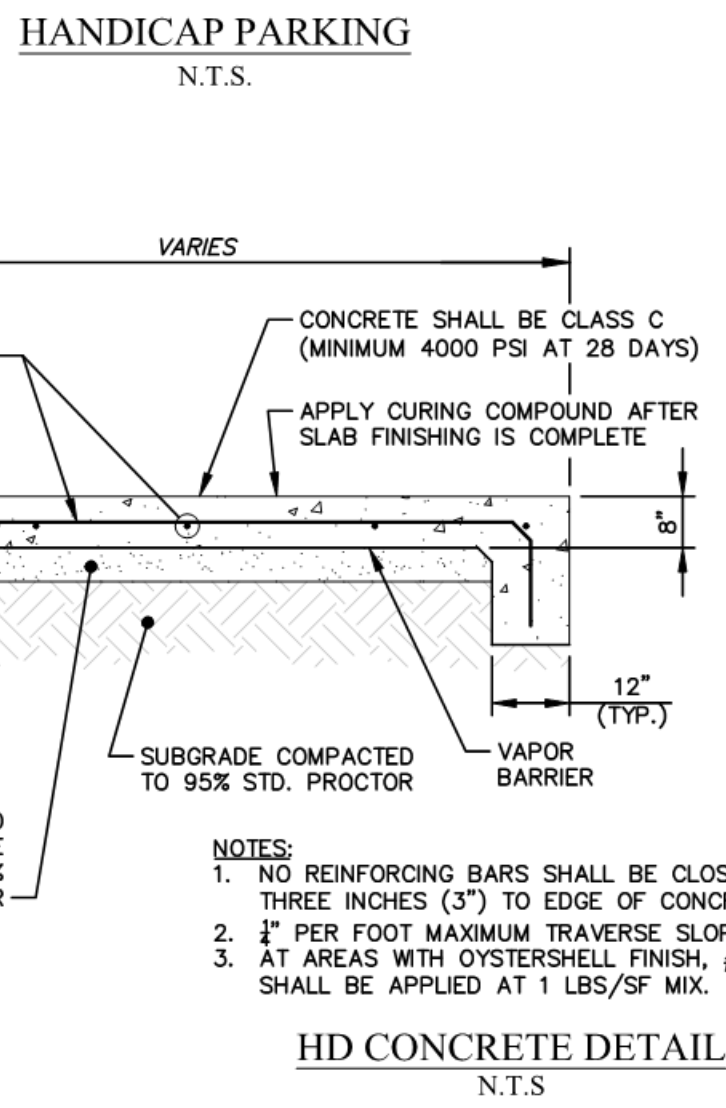
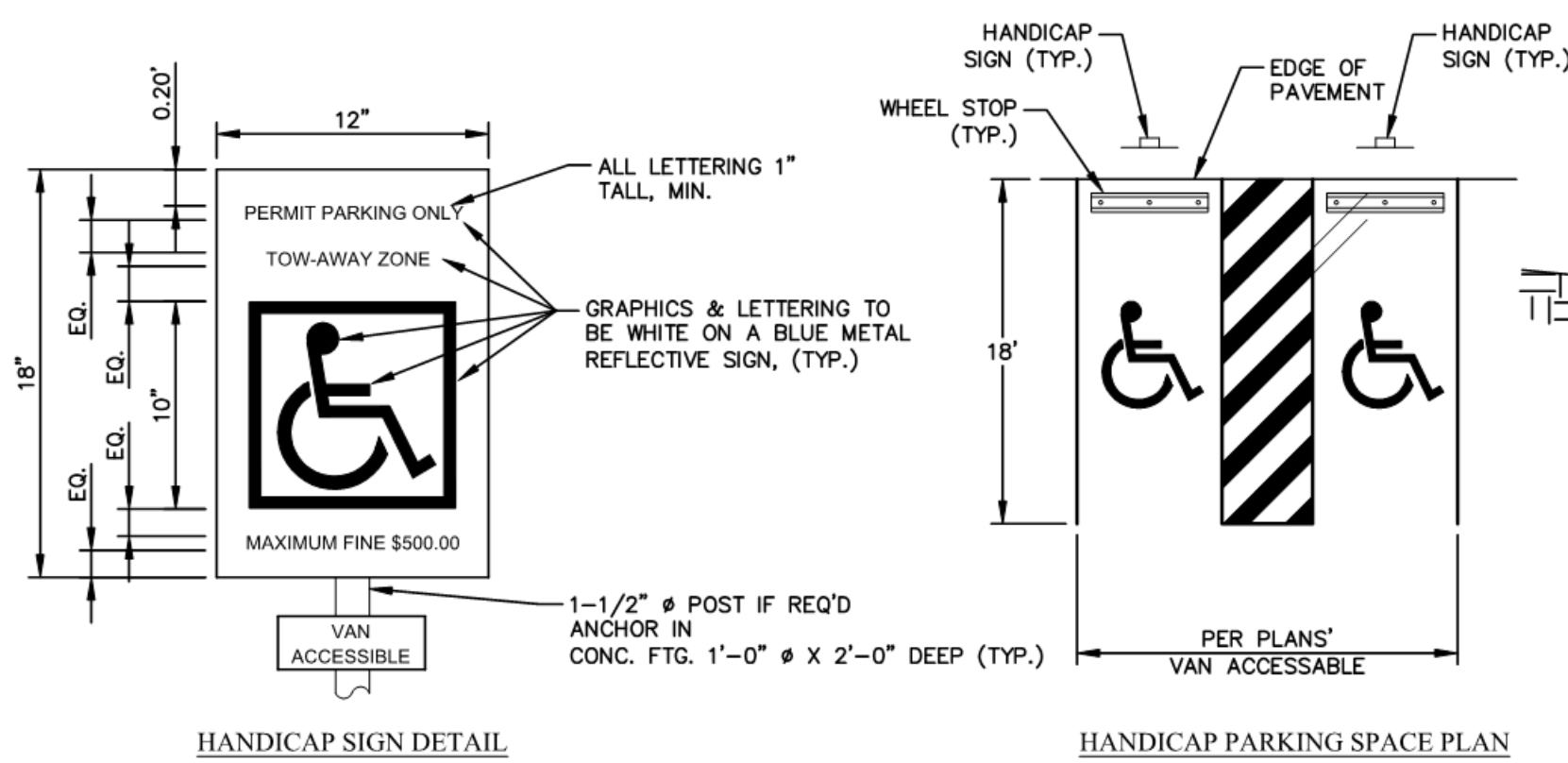
R610 022 000 1099 0000
CARECORE NATIONAL LLC
400 BUCKWALTER PLACE BLVD
BLUFFTON SC 29910



BUCKWALTER PLACE LEC EXPANSION - PHASE 1

SITE IMPROVEMENTS PLAN

DRAWN BY:	NLS
CHECKED BY:	AJB
APPROVED BY:	AJB
DATE:	07/06/2020
SCALE:	1" = 30'
JOB No.	2019-0441
DRAWING No.	C6.0



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.

DRAWN BY	ERC	MATERIAL	DUCTILE IRON	3130 VERONA AVE BURLING, GA 30618 PHN (770) 932-2443 FAX (770) 932-2489 www.nyloplast.com
DATE	3-4-06	PROJECT NO./NAME		
REVISED BY	ERC	TITLE	24 IN DOME GRATE	
DATE	3-24-11	DWG NO.	7091-116-219	REV D
DWG SIZE	A	SCALE	1:6	SHEET 1 OF 1

CRANSTON
 ENGINEERING

ENGINEERS - PLANNERS - SURVEYORS

14 Westbury Park Way, Suite 202
 Bluffton, South Carolina 29910
 Telephone 849-815-3191
 CranstonEngineering.com

SOUTH CAROLINA
 ENGINEERING GROUP, P.C.
 NO. C00575

SOUTH CAROLINA
 LICENSED PROFESSIONAL ENGINEER
 NO. 33254
 JOHN BAJOLO
 07/06/2020

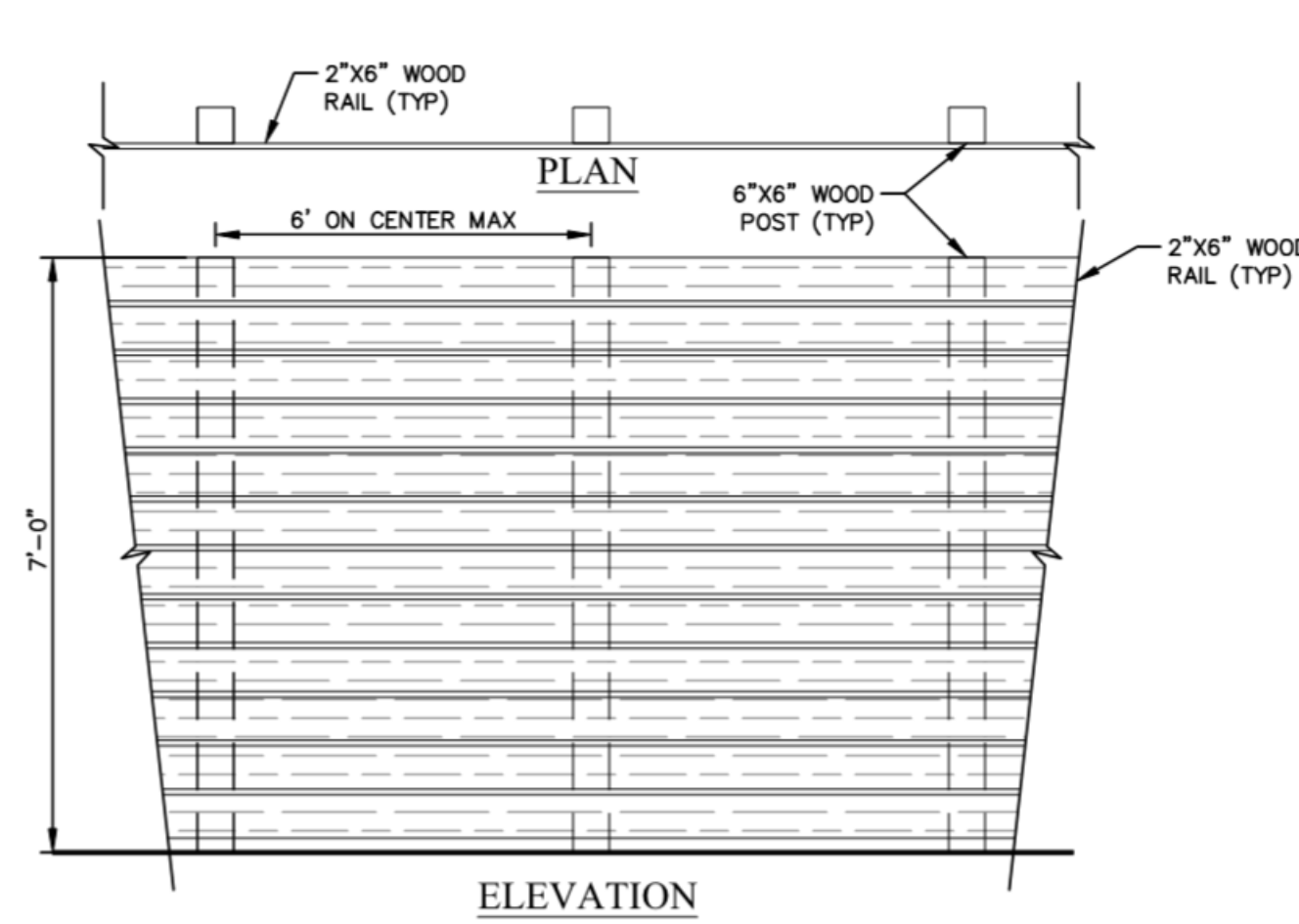
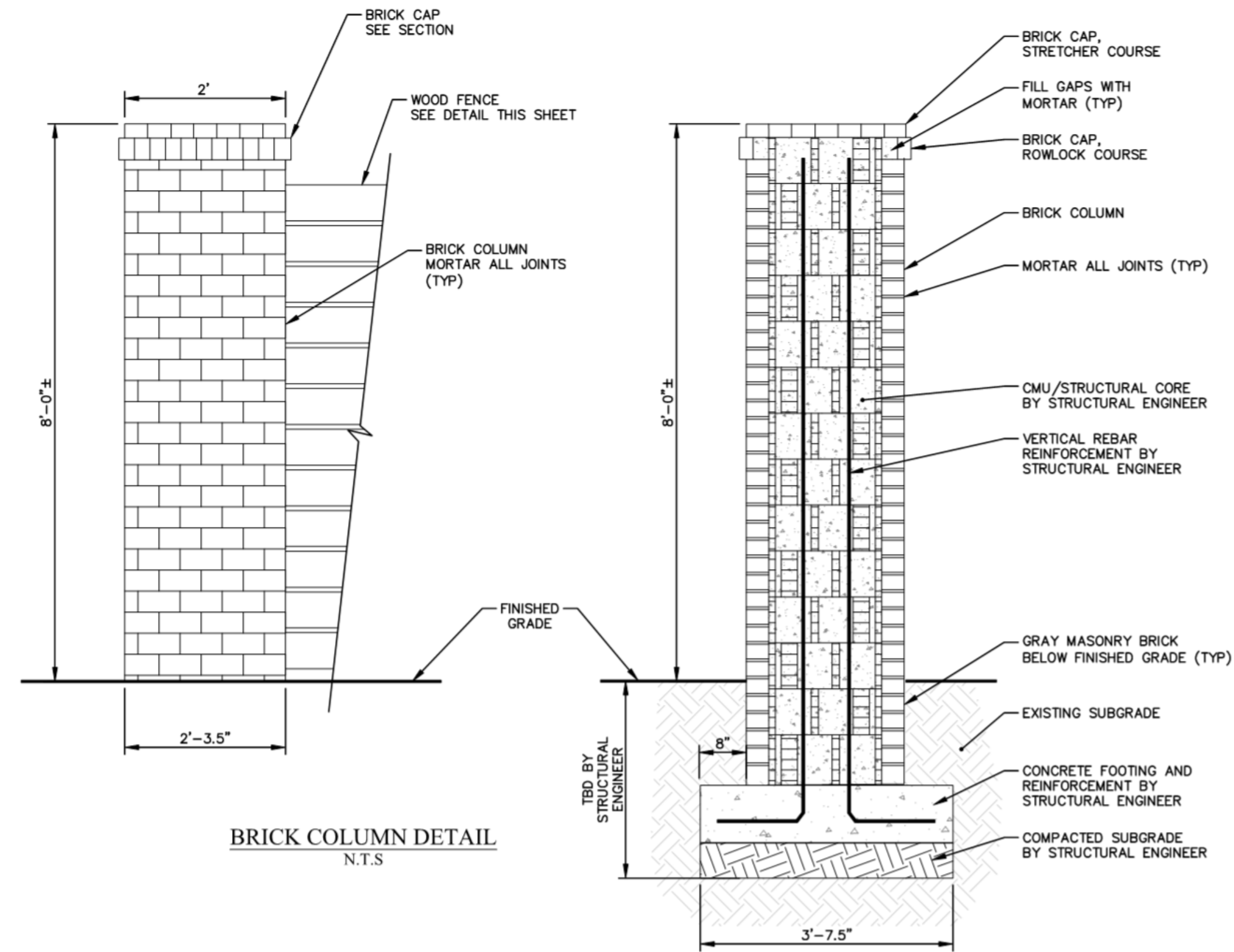
REV #	DATE	DESCRIPTION

**BUCKWALTER PLACE LEC
 EXPANSION - PHASE 1**

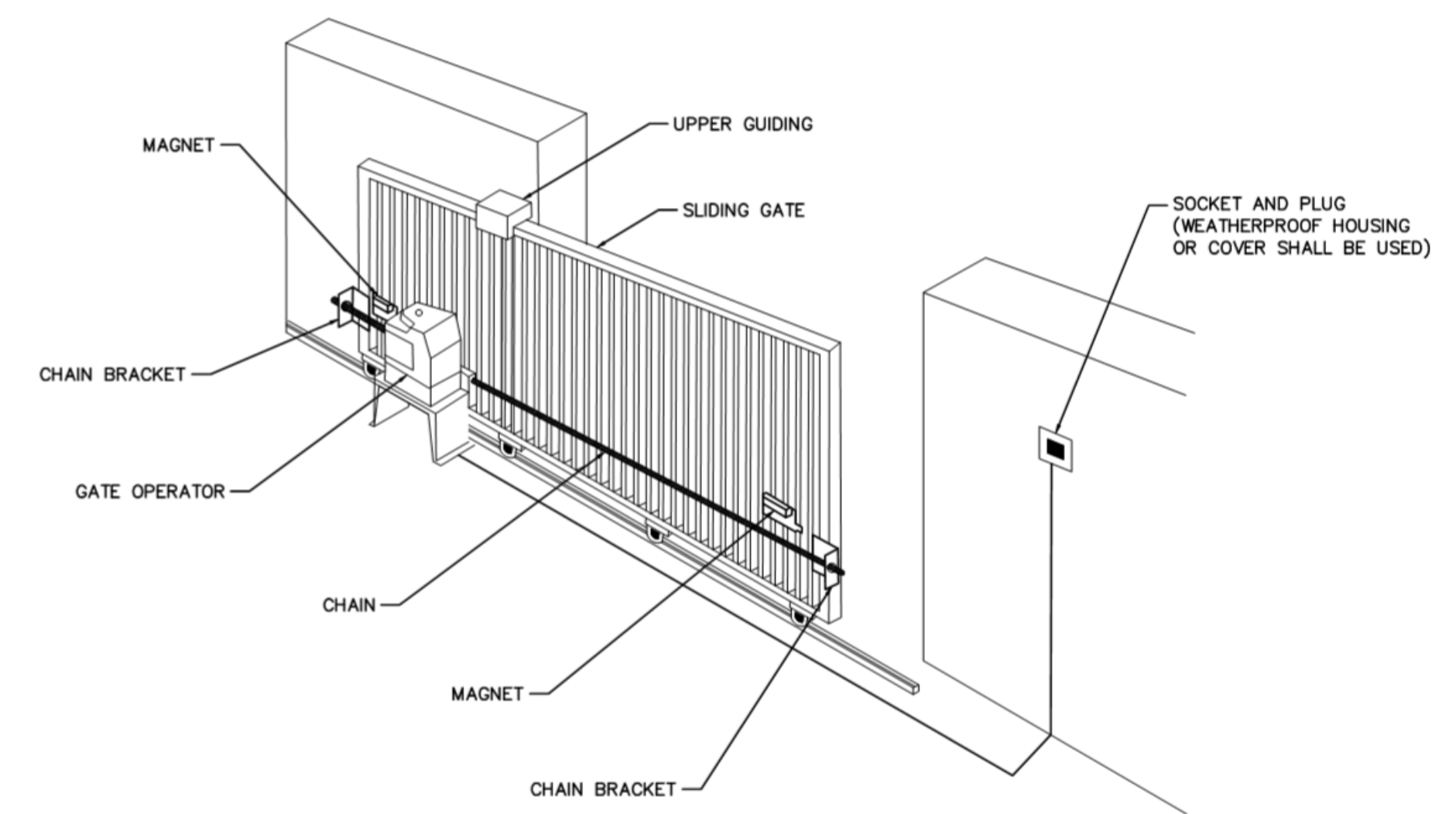
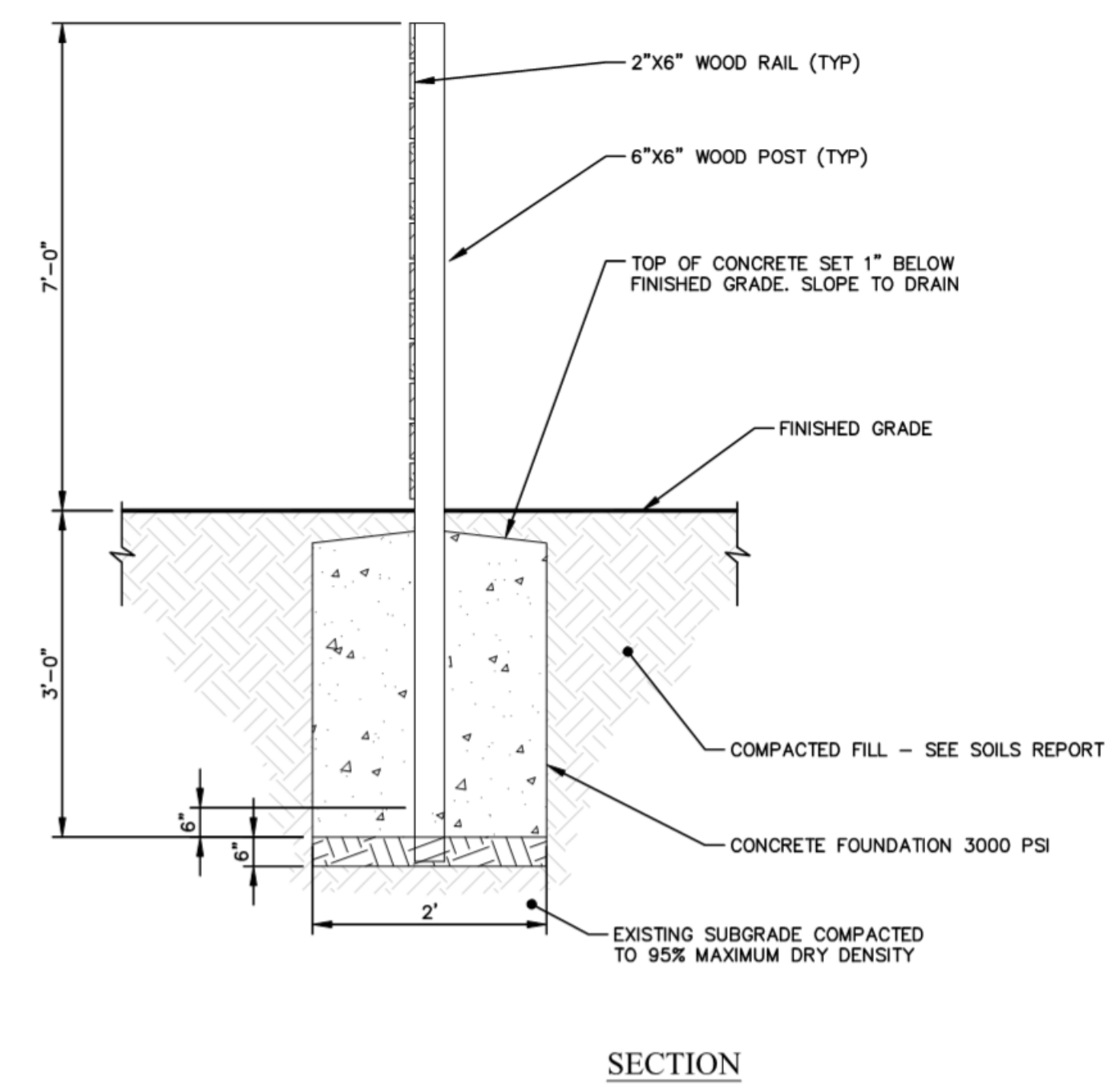
SITE DETAILS

DRAWN BY: NLS
 CHECKED BY: AJB
 APPROVED BY: AJB
 DATE: 07/06/2020
 SCALE: AS SHOWN
 JOB No. 2019-0441
 DRAWING No. C8.0

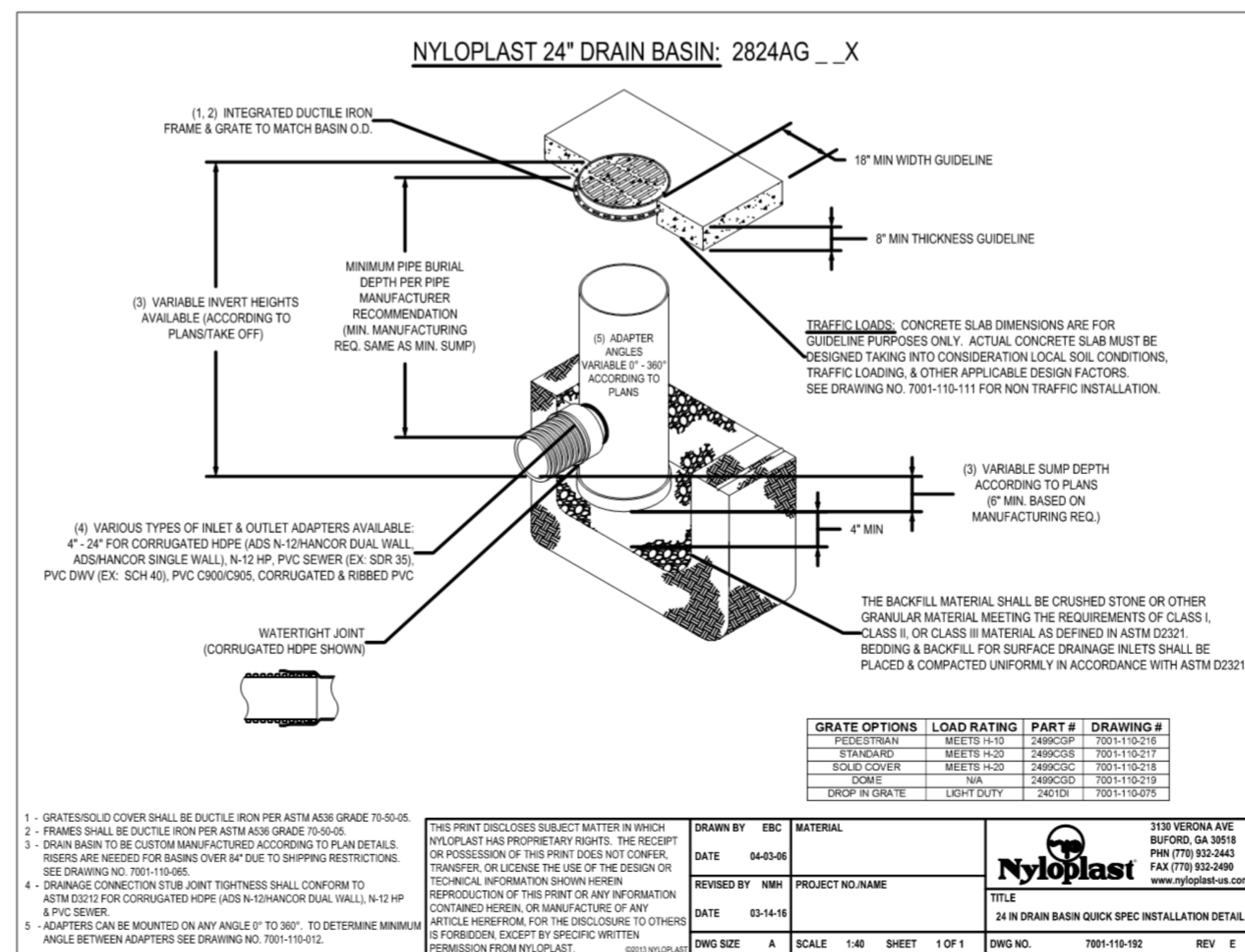
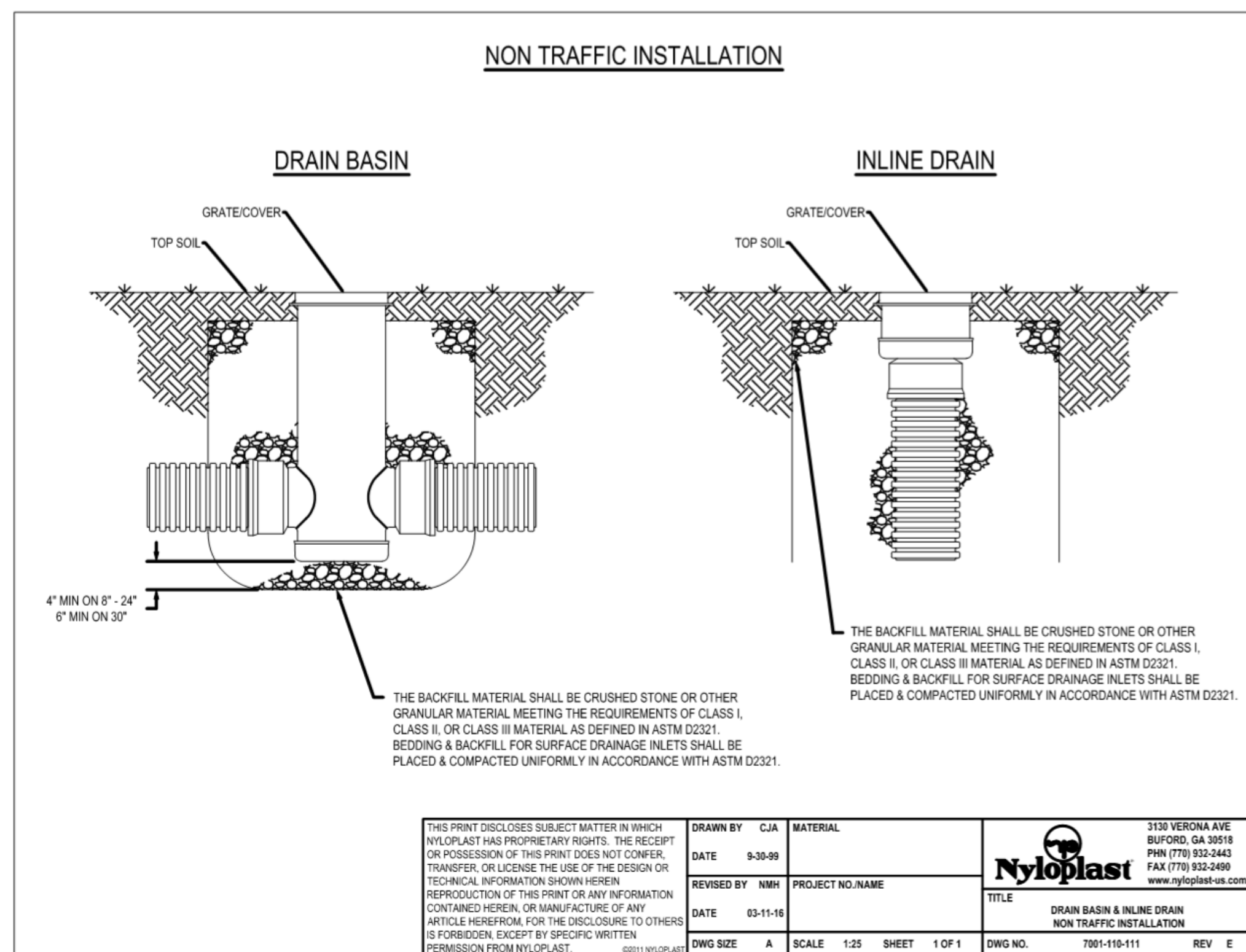
C:\GAAA-ACTIVE_JOBS\2019-0441-BUCKWALTER PLACE LEC EXPANSION.AA - DRAWINGS\CIVIL\2019-0441 DETAILS.DWG 7/6/2020 12:17 PM



NOTES:
 1. ALL LUMBER SHALL BE PRESSURE TREATED SOUTHERN YELLOW PINE.
 2. ALL ATTACHMENTS SHALL BE WITH STAINLESS STEEL SCREWS SUITABLE FOR PRESSURE TREATED WOOD, NO NAILS SHALL BE USED.
 3. CONTRACTOR SHALL SUBMIT COLOR SAMPLES TO OWNER FOR APPROVAL.



NOTES:
 1. CONTRACTOR SHALL COORDINATE PLACEMENT OF GATE, DIRECTION OF SLIDE ACTION, GATE MATERIAL/FINISH AND ALL OTHER COMPONENTS WITH OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
 2. CONTRACTOR SHALL SUBMIT CONDUIT PLAN AND ANTICIPATED POWER REQUIREMENTS FOR AUTOMATED GATES AND FOR LOCATIONS FOR REVIEW BY OWNER, PALMETTO ELECTRIC AND ENGINEER PRIOR TO CONSTRUCTION.



Signature: JAMES W. KENDALL, JR., No. 21242, ENGINEER, SOUTH CAROLINA PROFESSIONAL ENGINEER, LICENSE NO. 33254, EXPIRES 01/06/2020.

DATE: AUGUST 23, 2019

SCD
 DESIGN STANDARDS OFFICE
 955 PARK STREET
 ROOM 408
 COLUMBIA, SC 29201

STANDARD DRAWING
 CURB & GUTTER
 (CONCRETE)

720-105-01
 EFFECTIVE LIFTING DATE: JAN. 2013

CRANSTON
 ENGINEERING

ENGINEERS - PLANNERS - SURVEYORS
 14 Westbury Park Way, Suite 202
 Bluffton, South Carolina 29910
 Telephone 849-815-3191
 CranstonEngineering.com

SOUTH CAROLINA
 ENGINEERING GROUP, P.C.
 NO. C00575
 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
 LICENSED PROFESSIONAL ENGINEER
 NO. 33254
 EXPIRES 01/06/2020

REV #	DATE	DESCRIPTION

BUCKWALTER PLACE LEC EXPANSION - PHASE 1

SITE DETAILS

DRAWN BY: NLS
 CHECKED BY: A.J.B.
 APPROVED BY: A.J.B.

DATE: 07/06/2020
 SCALE: AS SHOWN
 JOB No. 2019-0441
 DRAWING No. C8.1

C:\G\AAA-ACTIVE_JOBS\2019\2019-0441_BUCKWALTER PLACE LEC EXPANSION.AA - DRAWINGS\CIVIL\2019-0441_DETAILS.DWG 7/6/2020 12:17 PM

C:\GAAA-ACTIVE\JOBS\2019\2019-041-Drawings\Civil\2019-041-DETAILS.DWG 7/6/2020 12:17 PM

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-610B
 RIPRAP PLACEMENT

TABLE 719-610B

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-610B
 RIPRAP PLACEMENT

TABLE 719-610B

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-505-03
 DRAINAGE ACCESS MANHOLE

TABLE 719-505-03

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-105-02
 DRAINAGE ACCESS MANHOLE

TABLE 719-105-02

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-505-02
 DRAINAGE ACCESS MANHOLE

TABLE 719-505-02

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-505-01
 DRAINAGE ACCESS MANHOLE

TABLE 719-505-01

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-505-01
 DRAINAGE ACCESS MANHOLE

TABLE 719-505-01

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

NOTES

FIGURE 719-505-01
 DRAINAGE ACCESS MANHOLE

TABLE 719-505-01

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

REFERENCES
 NATIONAL DOCUMENTS
 SCSDOT
 DESIGN STANDARDS OFFICE
 500 PARK STREET
 COLUMBIA, SC 29208

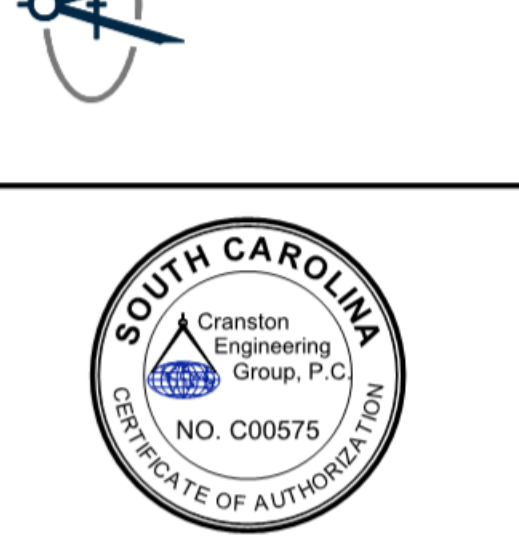
NOTES

FIGURE 719-505-01
 DRAINAGE ACCESS MANHOLE

TABLE 719-505-01

SLOPE	S		H	
	W	H	W	H
1:1	1	1	1	1
1.5:1	1.5	1.5	1.5	1.5
2:1	2	2	2	2
2.5:1	2.5	2.5	2.5	2.5
3:1	3	3	3	3
4:1	4	4	4	4
5:1	5	5	5	5
6:1	6	6	6	6
8:1	8	8	8	8
10:1	10	10	10	10

CRANSTON ENGINEERING
 ENGINEERS - PLANNERS - SURVEYORS
 14 Westbury Park Way, Suite 202
 Bluffton, South Carolina 29910
 Telephone 849-815-3191
 CranstonEngineering.com



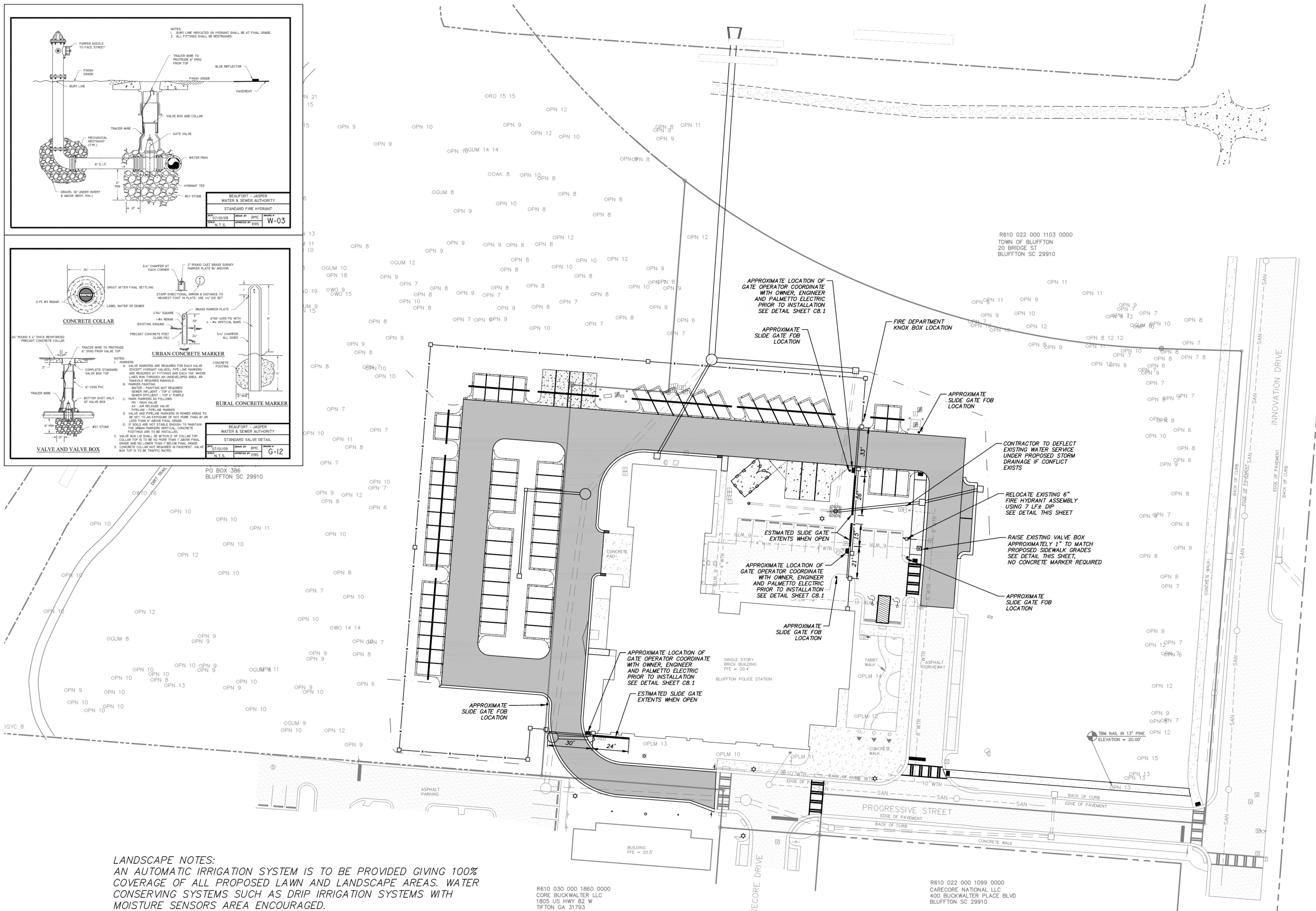
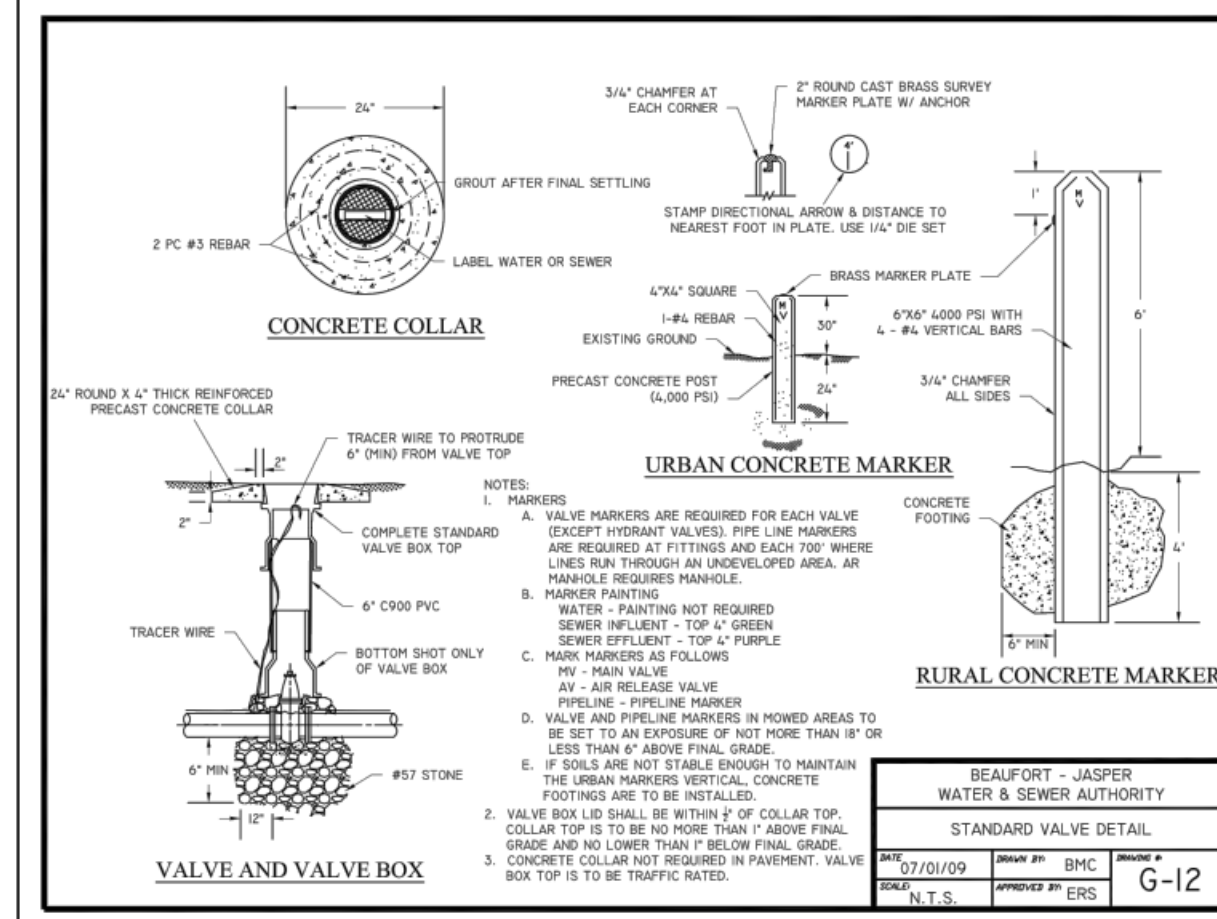
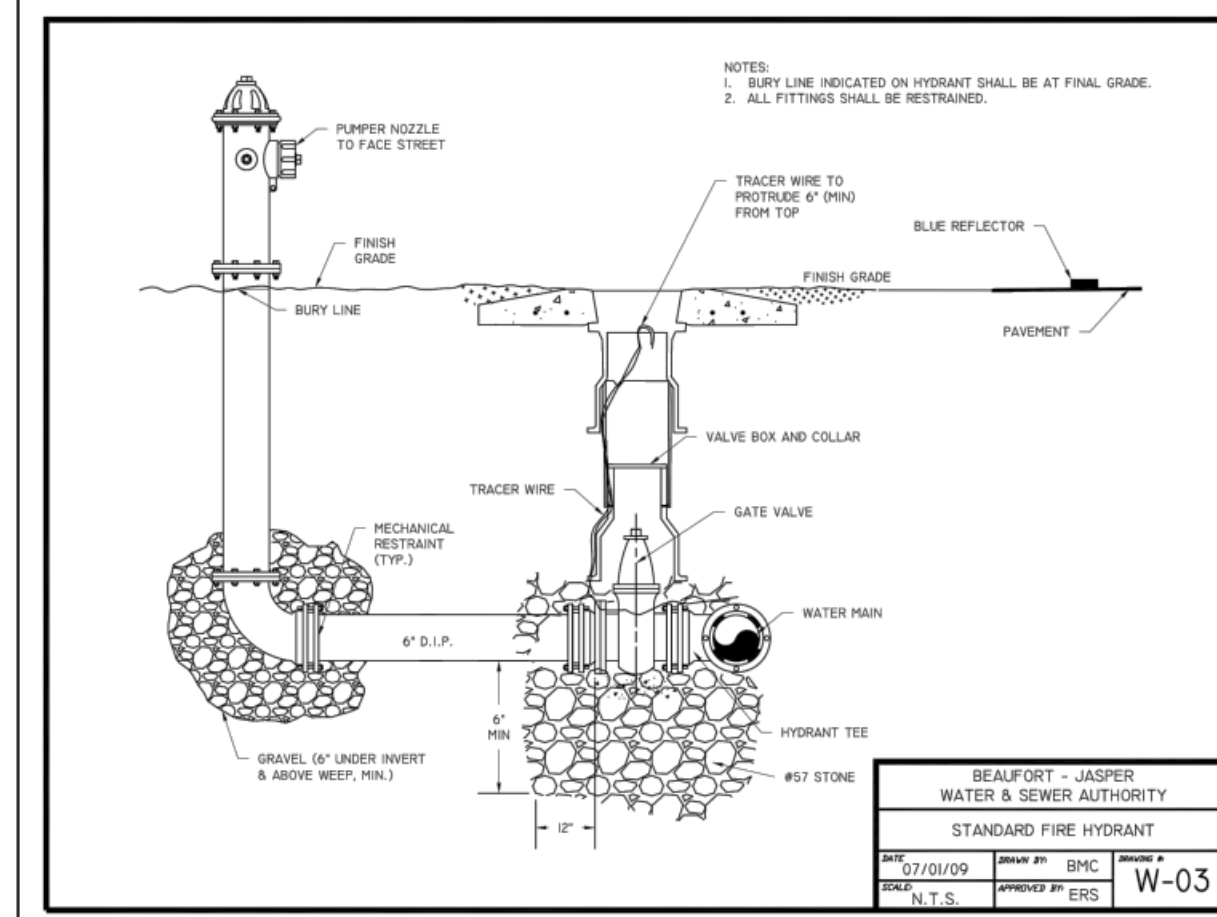
REV #	DATE	DESCRIPTION

BUCKWALTER PLACE LEC EXPANSION - PHASE 1

SITE DETAILS

DRAWN BY: NLS
 CHECKED BY: AJB
 APPROVED BY: AJB

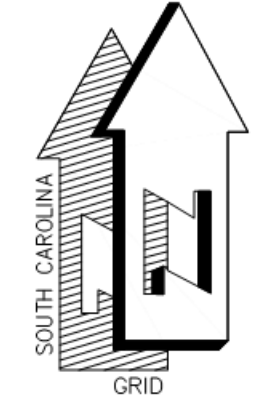
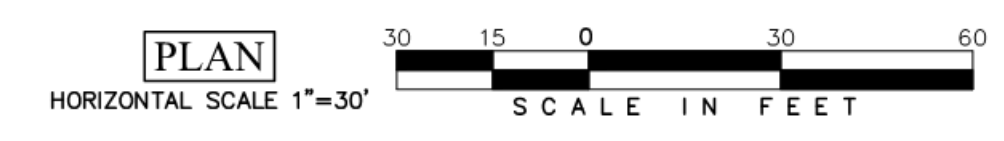
DATE: 07/06/2020
 SCALE: AS SHOWN
 JOB No. 2019-0441
 DRAWING No. C8.2



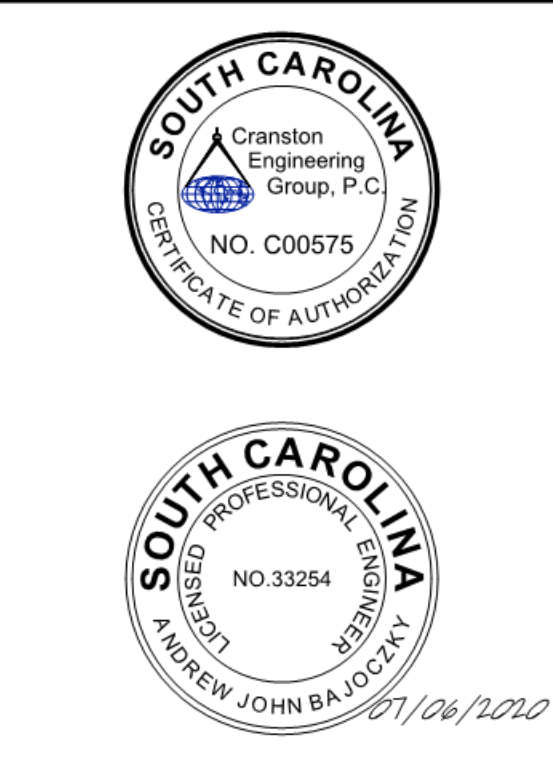
LANDSCAPE NOTES:
 AN AUTOMATIC IRRIGATION SYSTEM IS TO BE PROVIDED GIVING 100% COVERAGE OF ALL PROPOSED LAWN AND LANDSCAPE AREAS. WATER CONSERVING SYSTEMS SUCH AS DRIP IRRIGATION SYSTEMS WITH MOISTURE SENSORS AREA ENCOURAGED.

- SPRINKLERS TO BE SPACED AT A MAXIMUM OF 90% OF THEIR RADIUS OF THROW.
- DRIP TUBING TO BE INSTALLED IN ROWS 18" APART AND INTERCONNECTED WITH A SUPPLY HEADER.
- 24" MINIMUM COVER FOR MAINLINE PIPING.
- LANDSCAPE BEDS ARE TO BE ZONED SEPARATELY FROM TURF AREAS.

SEE FINAL PALMETTO ELECTRIC CONDUIT PLAN FOR ADDITIONAL CONDUIT ROUTING REQUIREMENTS



CRANSTON
 ENGINEERING
 ENGINEERS - PLANNERS - SURVEYORS
 14 Westbury Park Way, Suite 202
 Bluffton, South Carolina 29910
 Telephone 849-815-3191
 CranstonEngineering.com



REV #	DATE	DESCRIPTION

**BUCKWALTER PLACE LEC
 EXPANSION - PHASE 1**

UTILITY PLAN

DRAWN BY: NLS
 CHECKED BY: AJB
 APPROVED BY: AJB
 DATE: 07/06/2020
 SCALE: 1" = 30'
 JOB No. 2019-0441
 DRAWING No. C9.0

C:\GAAA-ACTIVE_JOBS\2019\2019-0441_BUCKWALTER PLACE LEC EXPANSION.AA - DRAWINGS\CIVIL\2019-0441 - DV.DWG 7/6/2020 12:11 PM