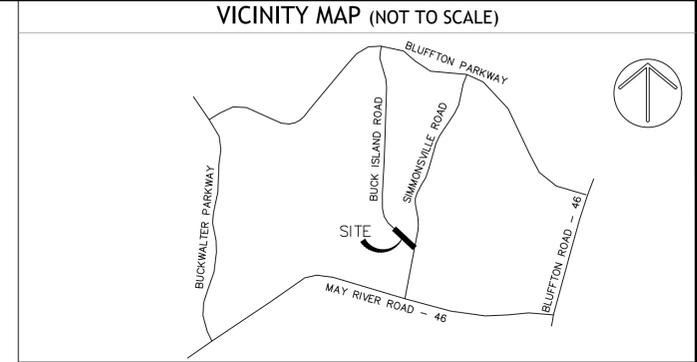


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# SITE DEVELOPMENT PLANS FOR

# BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3

## TOWN OF BLUFFTON, SOUTH CAROLINA



### GENERAL NOTES:

- BOUNDARY INFORMATION PROVIDED BY ASBUILT TREE & TOPOGRAPHIC SURVEY OF A PORTION OF BUCK ISLAND ROAD, DATED 1-4-2017, BY SURVEYING CONSULTANTS.
- TOPOGRAPHIC DATA PROVIDED BY SURVEYING CONSULTANTS, DATED 1-4-2017.
- APPROXIMATE LOCATION OF CERTAIN EXISTING UNDERGROUND UTILITY LINES AND STRUCTURES ARE SHOWN ON THE PLANS FOR INFORMATION ONLY. ADDITIONAL UNDERGROUND LINES OR STRUCTURES MAY EXIST THAT ARE NOT SHOWN. CALL SOUTH CAROLINA 811 AT 811 OR 1-888-721-7877 BETWEEN THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THRU FRIDAY AT LEAST THREE WORKING DAYS BEFORE COMMENCING CONSTRUCTION. REQUEST UNDERGROUND UTILITIES TO BE LOCATED AND MARKED WITHIN AND NEAR THE CONSTRUCTION SITE.
- COMPLY WITH "SOUTH CAROLINA UNDERGROUND FACILITY DAMAGE PREVENTION ACT (EFFECTIVE JUNE 7, 2012), NOTIFICATION OF INTENT TO EXCAVATE MAY BE GIVEN BY CALLING THE TOLL FREE NUMBER: 1-800-922-0963.
- PROTECT BENCH MARKS AND PROPERTY MONUMENTS FROM DAMAGE DURING CONSTRUCTION OPERATIONS. REPLACE ANY BENCH MARKS OR MONUMENTS DAMAGED OR DESTROYED AS A RESULT OF CONTRACTOR'S OPERATIONS, AT NO COST TO THE OWNER, BY A LICENSED SURVEYOR IN THE STATE OF SOUTH CAROLINA.
- OFF-STREET PARKING FOR THE CONTRACTOR'S EMPLOYEES AND AUTHORIZED VISITORS TO THE SITE MUST BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO WEIGHT LIMITS PRESCRIBED FOR ALL PUBLIC ROADS WHEN HAULING EQUIPMENT AND MATERIALS TO AND FROM THE PROJECT SITE. DAMAGES TO EXISTING PAVEMENT DUE TO THE CONTRACTOR'S CONSTRUCTION OPERATIONS OR IMPROPER TRANSPORTATION OF MATERIALS AND EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- AT LEAST ONE DRIVING LANE ON PUBLIC ROADS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. TRAFFIC LANES WILL ONLY BE CLOSED WITH THE EXPRESS WRITTEN CONSENT OF THE AGENCY HAVING JURISDICTION OVER THE ROADWAY. NOTIFY AGENCY HAVING JURISDICTION AT LEAST 5 DAYS BEFORE CLOSING ANY DRIVING LANES TO TRAFFIC. PROVIDE TRAFFIC CONTROL DEVICES, SIGNS AND FLAGMEN AS REQUIRED TO ENSURE PUBLIC SAFETY.
- CONTRACTOR SHALL COORDINATE DEMOLITION, CLEARING AND CONSTRUCTION OF IMPROVEMENTS TO MINIMIZE INTERFERENCE WITH VEHICULAR AND PEDESTRIAN TRAFFIC AND WITH OPERATIONS OF EXISTING FACILITIES.

### WATER AND SEWER LINE CONSTRUCTION:

- ALL WATER AND SEWER LINE CONSTRUCTION SHALL CONFORM TO APPLICABLE STATE AND BEAUFORT JASPER WATER SEWER AUTHORITY (BWSA) REQUIREMENTS, STANDARDS AND SPECIFICATIONS.
- BWSA WILL BE RESPONSIBLE FOR INSPECTION AND APPROVAL OF ALL WATER AND SEWER SYSTEM CONSTRUCTION AND FOR ACCEPTANCE FOR OPERATION AND MAINTENANCE.
- ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION OF ALL UTILITY OWNERS AND FOR FIELD VERIFICATION OF BOTH HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO COMMENCING CONSTRUCTION. ANY DAMAGES TO EXISTING UTILITIES DUE TO THIS CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- NOTIFY THE PROJECT ENGINEER, IF CONFLICTS WITH EXISTING STRUCTURES REQUIRE THAT PROPOSED UTILITIES BE RELOCATED.
- THE CONTRACTOR MUST NOTIFY BWSA FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION, INSPECTION OR TESTING OF THE WATER DISTRIBUTION SYSTEM.
- PIPE, FITTINGS, VALVES AND APPURTENANCES FOR WATER AND SEWER LINES SHALL ALL BE IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN THE BWSA TECHNICAL SPECIFICATIONS.
- INSTALLATION OF WATER AND SEWER LINES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE BWSA STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
- CONTRACTOR SHALL INSTALL MECHANICAL RESTRAINTS ON ALL BENDS, PLUGS AND TEES, 2" OR LARGER, ON WATERLINES AND SANITARY SEWER FORCE MAINS.
- ALL WATER MAINS SHALL BE STERILIZED AND PRESSURE TESTED IN ACCORDANCE WITH BWSA SPECIFICATIONS.
- SEPARATION OF WATER MAINS AND SEWERS:
  - PARALLEL INSTALLATION: UNLESS OTHERWISE SPECIFICALLY SHOWN IN A SPECIAL DETAIL ON THE PLANS, INSTALL WATER MAINS AT LEAST 10'-FT. HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY SEWER OR SANITARY SEWER FORCE MAIN, THE DISTANCE BEING MEASURED IN A HORIZONTAL PLANE BETWEEN THE OUTSIDE SURFACES OF THE PIPES.
  - CROSSINGS: UNLESS OTHERWISE SPECIFICALLY SHOWN IN A SPECIAL DETAIL ON THE PLANS, INSTALL WATER LINES CROSSING SANITARY SEWERS OR SANITARY SEWER FORCE MAINS TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18-INCHES BETWEEN THE OUTSIDE SURFACES OF THE PIPES. THIS SHALL BE THE CASE WHETHER THE WATER LINE IS ABOVE OR BELOW THE SANITARY SEWER LINE. WHENEVER POSSIBLE LOCATE THE WATER LINE ABOVE THE SEWER LINE. WHERE A NEW WATER LINE CROSSES A NEW SEWER LINE, PLACE A FULL LENGTH OF DUCTILE IRON PIPE FOR WATER LINE AT THE CROSSING WITH PIPE POSITIONED SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING. WHERE A NEW WATER LINE CROSSES AN EXISTING SEWER LINE, PLACE ONE FULL LENGTH OF DUCTILE IRON PIPE WATER LINE SO THAT THE JOINTS ARE AS FAR FROM THE POINT OF CROSSING AS POSSIBLE.
- THE CONTRACTOR SHALL CUT AND PATCH EXISTING PAVEMENT AS REQUIRED FOR THE INSTALLATION OF UTILITY LINES.
- SANITARY MANHOLE RIM GRADES SHOWN ARE APPROXIMATE. ADJUST RIM ELEVATIONS TO BE FLUSH WITH FINISHED GRADE.
- CONSTRUCTION UNDER THIS CONTRACT SHALL NOT MAKE ANY CONNECTIONS TO THE EXISTING WATER OR SANITARY SEWER SYSTEMS UNLESS EXPRESSLY AUTHORIZED TO DO SO BY THE BWSA. ALL WATER AND SEWER IMPROVEMENTS UNDER THIS CONTRACT MUST BE CONSTRUCTED COMPLETELY, TESTED, INSPECTED AND APPROVED BY THE BWSA BEFORE ANY AUTHORIZATION TO CONNECT WILL BE GIVEN. COORDINATION OF TESTING, INSPECTIONS WITH THE BWSA IS THE RESPONSIBILITY OF THE CONTRACTOR UNDER THIS CONTRACT.
- ALL WATER MAINS SHALL BE INSTALLED WITH THIRTY-SIX (36") MINIMUM COVER (FROM FINISHED GRADE). MAXIMUM DEPTH SHALL BE FIVE FEET (5'). WHERE WATER MAINS MAY CONFLICT WITH OTHER UTILITIES, THE WATER MAIN CROSSING SHALL BE CONSTRUCTED WITH DUCTILE IRON PIPE, MECHANICAL JOINT 45-DEG. BENDS AND MECHANICAL RESTRAINTS.

### WORK ON SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY:

- CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS AND SPECIAL PROVISIONS CONTAINED IN THE SCDOT ENCROACHMENT PERMIT(S) ISSUED FOR THIS PROJECT.
- CONTRACTOR IS RESPONSIBLE FOR SUBMITTING CONSTRUCTION NOTIFICATION FORM (48 HOUR MINIMUM) AND COORDINATION OF ALL WORK WITHIN SCDOT RIGHTS-OF-WAY WITH THE LOCAL AND/OR DISTRICT SCDOT ENGINEERING REPRESENTATIVE.
- CONTRACTOR IS RESPONSIBLE FOR PREPARING AND SUBMITTING A TRAFFIC CONTROL PLAN TO SCDOT FOR APPROVAL MINIMUM 48 HOURS PRIOR TO CONDUCTING WORK IN THE RIGHT-OF-WAY. ALL TRAFFIC CONTROL PLANS SHALL CONFORM TO MUTCD AND SCDOT GUIDELINES AND SPECIFICATIONS.
- ALL SIGNAGE, PAVEMENT MARKINGS, AND MARKERS SHALL CONFORM TO MUTCD GUIDELINES AND SCDOT STANDARD SPECIFICATIONS AND DRAWINGS.
- ALL PAVING AND DRAINAGE CONSTRUCTION SHALL CONFORM TO SCDOT STANDARD SPECIFICATIONS AND DRAWINGS.
- ALL PAVEMENT MARKINGS IN SCDOT RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND CONFORM TO MUTCD GUIDELINES AND SCDOT STANDARD SPECIFICATIONS AND DRAWINGS.
- REMOVAL OF PAVEMENT MARKINGS SHALL CONFORM TO SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SECTION 609-4.1.2.

### TREE PROTECTION-BLUFFTON

- ALL TREES HAVING A TRUNK DIAMETER OF 8-INCHES (dbh) OR LARGER, AND ENDANGERED OR VALUED TREES HAVING A TRUNK DIAMETER OF 4-INCHES (dbh) OR LARGER MUST BE PRESERVED UNLESS SPECIFICALLY APPROVED FOR REMOVAL IN ACCORDANCE WITH TOWN OF BLUFFTON DEVELOPMENT STANDARDS ORDINANCE AND INDICATED ON THE PLANS TO BE REMOVED.
- THE CONTRACTOR IS RESPONSIBLE FOR MARKING THE TREES DESIGNATED TO BE PRESERVED IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN THE TOWN OF BLUFFTON DEVELOPMENT STANDARDS ORDINANCE.
- PRIOR TO COMMENCING ANY CLEARING OR CONSTRUCTION OPERATIONS ON THE SITE, THE CONTRACTOR SHALL ERECT TREE PROTECTION BARRIERS AROUND EACH TREE OR GROUP OF TREES DESIGNATED FOR PRESERVATION IN ACCORDANCE WITH THE DETAILS ON THE PLANS AND THE REQUIREMENTS CONTAINED IN THE TOWN OF BLUFFTON UNIFIED ORDINANCE 6.1.6.
- A TREE PROTECTION ZONE SHALL BE ESTABLISHED IN ACCORDANCE WITH THE PROVISIONS CONTAINED IN THE TOWN OF BLUFFTON UNIFIED ORDINANCE 6.1.6 FOR EACH EXISTING TREE DESIGNATED FOR PRESERVATION. THE MINIMUM TREE PROTECTION ZONE AS DEFINED IN THE ORDINANCE IS A CIRCULAR AREA CENTERED ON THE TREE AND HAVING A RADIUS OF THE GREATER OF 5'-FT. OR ONE-HALF FOOT PER INCH dbh (DIAMETER AT BREAST HEIGHT). THE SIZE OR CONFIGURATION OF THE TREE PROTECTION ZONE MAY BE MODIFIED ONLY UPON APPROVAL BY TOWN OF BLUFFTON.
- THE AREA WITHIN THE TREE PROTECTION ZONE MUST REMAIN OPEN AND UNPAVED. NO CHANGE OF GRADE WILL BE ALLOWED WITHIN THE TREE PROTECTION ZONE EXCEPT FOR A 2-INCH CUT OR 2-INCH FILL OF TOPSOIL, SOIL OR MULCH. ANY ACTIVITY WITHIN THE TREE PROTECTION ZONE IS SUBJECT TO APPROVAL BY TOWN OF BLUFFTON. THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE TREE PROTECTION ZONE:
  - APLACEMENT OR STORAGE OF ANY SOIL, DEBRIS, OILS, FUEL, PAINTS, BUILDING MATERIALS OR ANY OTHER MATERIALS.
  - BURNING
  - VEHICLE PARKING
  - DRAWING
  - TRENCHING FOR UTILITIES
- WHERE UTILITY LINES MUST PASS THRU THE TREE PROTECTION ZONE, THEY SHALL BE INSTALLED BY HORIZONTAL BORING BENEATH THE ROOTS OF THE TREE.
- WHERE IT IS NECESSARY FOR MACHINERY AND EQUIPMENT TO PASS WITHIN THE TREE PROTECTION ZONE, APPROVAL MUST BE OBTAINED FROM TOWN OF BLUFFTON. SPECIAL MEASURES WILL BE REQUIRED TO PROTECT THE ROOTS FROM EXCESSIVE COMPACTON.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL TREE REMOVAL PERMITS AND FOR COORDINATING ALL INSPECTIONS REQUIRED BY TOWN OF BLUFFTON IN CONNECTION WITH TREE PRESERVATION AND REMOVAL ACTIVITIES. DURING CONSTRUCTION.

### SITE GRADING AND DRAINAGE:

- ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING 72-HOUR NOTICE TO ALL RESPECTIVE UTILITY COMPANIES FOR FIELD VERIFICATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGES TO EXISTING UTILITIES DUE TO THIS CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TEMPORARY CONTROL OF STORM WATER DRAINAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SEQUENCING AND CONSTRUCTION TECHNIQUES SHALL PREVENT OBSTRUCTION OF STORM SEWERS, PONDING IN GRADED AREAS OR RISING OF WATER LEVELS WHICH WOULD ENTER ADJACENT BUILDINGS OR STRUCTURES.
- FULL WIDTH OF STREET AND ROAD RIGHTS-OF-WAY MUST BE CLEARED AND TRAFFIC AS SHOWN IN THE DETAILS ON THE DRAWINGS.
- SUBGRADE PREPARATION: TOP SOIL SHALL BE REMOVED FROM PAVED AREAS TO A MINIMUM DEPTH AS RECOMMENDED IN THE PROJECTS GEOTECHNICAL REPORT. ALL EXCAVATION SHALL BE TO SUBGRADE LIMITS.
- ALL UTILITY PIPE LINES, CONDUITS AND SLEEVES UNDER PAVED AREAS MUST BE IN PLACE PRIOR TO COMPLETION OF THE ROADWAY SUBGRADE COMPACTION.
- FINISH GRADING SHALL INCLUDE THE PLACEMENT OF TOPSOIL OVER ALL UNPAVED AREAS NOT OCCUPIED BY BUILDINGS OR STRUCTURES AND FINE GRADING AROUND BUILDINGS, ADJACENT TO WALKS, CURBS, GUTTERS AND STRUCTURES TO ASSURE POSITIVE DRAINAGE.

### SCDHEC/OCRM SEDIMENT AND EROSION CONTROL STANDARD NOTES (REVISED DEC-2012):

- IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, WITH 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 CLEARED, 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 AREAS 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 SCRI00000.
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN 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 CANT 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 SOURCE OF 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 OF STORM WATER DISCHARGES IS COMPLETED.
- 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 NECESSARY, 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.
  - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- 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.

### DRY UTILITY CONDUITS FOR ELECTRIC, TELEPHONE AND CABLE TV:

- ALL DRY UTILITY CONDUIT ENDS SHALL BE CAPPED AND MARKED WITH A STEEL REBAR STAKE IMBEDDED ONE (1) FOOT BELOW GROUND SURFACE.
- 48" MINIMUM BURY DEPTH FOR ALL ELECTRICAL CONDUITS.
- MAINTAIN MINIMUM 12" VERTICAL CLEARANCE WHEN CROSSING WATER, SEWER, AND STORM DRAIN LINES.
- MAINTAIN MINIMUM 18" HORIZONTAL CLEARANCE WHEN PARALLELING WATER, SEWER AND STORM DRAIN LINES.
- EXTEND CONDUIT BEYOND PAVEMENT, CURB, AND SIDEWALKS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE INSTALLATION OF ALL UTILITY SERVICE CONNECTIONS. REFER TO APPROVED BUILDING PLANS IN THE TRACT RECORDS FOR DETAILS. THE CONTRACTOR MUST INSTALL ALL CONDUITS, AS SHOWN ON THE PLANS OR AS REQUIRED BY RESPECTIVE UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS WITH REGARDS TO THE INSTALLATION OF UTILITIES AND CONDUIT.
- LOCATIONS SHOWN ON THE PLANS FOR PROPOSED DRY UTILITY CONDUITS ARE APPROXIMATE ONLY. ALL DIMENSIONING AND STAKING SHOULD BE BASED ON ECONOMIC AND PRACTICAL CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE RESPECTIVE UTILITY REPRESENTATIVES, PRIOR TO ANY CONDUIT INSTALLATION.
- TRANSFORMER PADS SHALL BE LOCATED AS DIRECTED BY THE RESPECTIVE UTILITY REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE CODE REQUIREMENTS.
- NOTIFY THE ENGINEER IF CONFLICTS WITH EXISTING OR PROPOSED STRUCTURES REQUIRE PROPOSED UTILITIES BE RELOCATED.

### SITE CLEARING AND DEMOLITION:

- NO CLEARING SHALL OCCUR WITHIN DESIGNATED BUFFER ZONES, TREE PROTECTION ZONES, OUTSIDE OF THE PROPERTY LINES OR MATERIALS.
- ONLY THOSE TREES DESIGNATED ON THE DRAWINGS FOR REMOVAL ARE TO BE REMOVED AS PART OF THE SITE CLEARING OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING CONTIGUOUS LINE, FLAGGING, OR FENCING ALONG THE LIMITS OF CLEARING PRIOR TO COMMENCING ANY CLEARING, DEMOLITION, OR CONSTRUCTION WORK ON THE PROJECT.
- EXERCISE CAUTION DURING CLEARING OPERATIONS TO AVOID FELLING TREES INTO DESIGNATED TREE PROTECTION ZONES.
- NO BURNING WILL BE ALLOWED WITHIN 10 FEET OF A TREE PROTECTION ZONE OR TREE DRIP LINE. CONTRACTOR SHALL COORDINATE ANY BURNING OPERATIONS WITH LOCAL JURISDICTION AND FIRE DEPARTMENTS.
- SELECTIVE CLEARING AREAS SHALL BE CLEARED OF ALL BRUSH AND UNDERSTORY GROWTH.

### UTILITY CONTACTS:

PALMETTO ELECTRIC	843-208-5512	1 COOPERATIVE WAY, HARDEEVILLE, SC 29927
SC&G	843-525-7700	108 ROBERT SMALLS PKWY, BEAUFORT, SC 29906
BWSA	843-987-9292	6 SNAKE ROAD, OKATIE, SC 29909
BROAD CREEK PSD	843-785-7582	PO BOX 5878, HILTON HEAD, SC 29938
SOUTH ISLAND PSD	843-785-6224	PO BOX 5148, HILTON HEAD, SC 29938
HILTON HEAD ISLAND PSD	843-881-5525	PO BOX 21264, HILTON HEAD, SC 29925
HARGRAY COMMUNICATIONS	843-815-1675	PO BOX 3380, BLUFFTON, SC 29910
THE WARNER CABLE	843-913-7840	11 OFFICE PARK ROAD, HILTON HEAD, SC 29928
CENTURY LINK	843-525-0044	2127 BOUNDARY ST #16, BEAUFORT, SC 29902
SANTEC COOPER	843-761-8000	1 RIVERWOOD DRIVE, MONCK'S CORNER, SC 29461

### CONTRACTOR NOTE:

CONTRACTOR TO OBTAIN AND BECOME FAMILIAR WITH GEOTECHNICAL REPORT # \_\_\_\_\_ PREPARED BY \_\_\_\_\_



ALL WORK MUST CONFORM TO PROJECT TECHNICAL SPECIFICATIONS FOR OR FINDING PHASE 3 PREPARED BY WARD EDWARDS ENGINEERING. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE TECHNICAL SPECIFICATIONS IF NOT PROVIDED WITH THE DRAWINGS.

### PROJECT INFORMATION

**DEVELOPER:**  
TOWN OF BLUFFTON  
20 BRIDGE STREET, BLUFFTON, SC  
24 HR CONTACT: JOHN HUTCHINSON  
843.706.4500  
JHUTCHINSON@TOWNOFBLUFFTON.COM

**PROPERTY OWNER:**  
SCDOT  
955 PARK STREET, COLUMBIA, SC  
855-467-2368  
EMAIL

### PROJECT STREET ADDRESS:

BUCK ISLAND ROAD,  
8/W SIMMONSVILLE ROAD AND KITTY ROAD

### LATITUDE / LONGITUDE:

N 32° 14' 42"  
W 80° 52' 44"

### DEVELOPMENT PERMIT JURISDICTION:

TOWN OF BLUFFTON

### FLOOD ZONE:

C (BASE FLOOD ELEV. XXXX)

### VERTICAL CONTROL DATUM:

NAVD88

### SITE AREA:

DISTURBED: 0.6 ACRES

### DESIGN TEAM

### LAND SURVEYOR:

WARD EDWARDS ENGINEERING  
843-815-3304

### SCHEDULE OF DRAWINGS

SHEET NO.	DESCRIPTION
C001	COVER SHEET & CONSTRUCTION NOTES
C002	OVERALL SITE PLAN
C101	EXISTING CONDITIONS PLANS
C201	EROSION CONTROL & DEMOLITION PLAN
C301	SITE LAYOUT PLAN
C401	PAVING, GRADING & DRAINAGE PLAN
C501-503	CONSTRUCTION DETAILS

### RELEASE SCHEDULE

RELEASE NO.	DESCRIPTION	DATE
A.	RELEASED FOR PERMITTING	02-02-17
B.	RESUBMITTAL TO SCDOT	03-13-17
C.	RESUBMITTAL TO SCDOT	04-21-17
D.	RESUBMITTAL TO SCDOT	04-27-17
E.	RELEASED FOR CONSTRUCTION	05-25-17

### SEQUENCE OF CONSTRUCTION ACTIVITIES

ESTIMATED START DATE: 07-01-17 ESTIMATED COMPLETION DATE: 09-30-17  
ITEMS MUST OCCUR IN THE ORDER LISTED; ITEMS CANNOT OCCUR CONCURRENTLY UNLESS SPECIFICALLY NOTED.

#### PHASE 1:

- RECEIVE NPDES COVERAGE FROM DHEC.
  - PRE-CONSTRUCTION MEETING (ON-SITE IF MORE THAN 10 DISTURBED & NON-LINEAR)
  - NOTIFY DHEC, EDC REGIONAL OFFICE OR OCROT OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.
  - INSTALLATION OF CONSTRUCTION ENTRANCE(S).
  - CLEARING & GRUBBING ONLY AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS.
  - INSTALLATION OF PERIMETER CONTROLS (E.G. SILT FENCE).
  - CLEARING & GRUBBING ONLY IN AREAS OF BASINS / TRAPS / PONDS.
  - INSTALLATION OF BASINS / TRAPS / PONDS AND INSTALLATION OF DIVERSIONS TO THOSE STRUCTURES (OUTLET STRUCTURES MUST BE COMPLETED AS SHOWN ON THE DETAILS BEFORE PROCEEDING TO NEXT STEP. AREAS DRAINING TO THESE STRUCTURES CANNOT BE DISTURBED UNTIL THE STRUCTURES & DIVERSIONS TO THE STRUCTURES ARE COMPLETELY INSTALLED).
- PHASE 2:**
- CLEARING & GRUBBING OF SITE OR DEMOLITION (SEDIMENT & EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED).
  - ROUGH GRADING.
  - INSTALLATION OF STORM DRAIN SYSTEM AND PLACEMENT OF INLET PROTECTION AS EACH INLET IS INSTALLED.
  - REMAINING SITE DEVELOPMENT ACTIVITIES (FINE GRADING, PAVING, ETC.).
- PHASE 3:**
- PERMANENT / FINAL STABILIZATION.
  - CLEAN-OUT OF DETENTION BASINS THAT WERE USED AS SEDIMENT CONTROL STRUCTURES AND RE-GRADING OF DETENTION POND BOTTOMS; IF NECESSARY, MODIFICATION OF SEDIMENT BASIN RE-CONVERT TO DETENTION BASIN OUTLET STRUCTURE.
  - REMOVAL OF TEMPORARY SEDIMENT & EROSION CONTROL MEASURES AFTER ENTIRE AREA DRAINING TO THE STRUCTURE IS FINALLY STABILIZED (THE DEPARTMENT RECOMMENDS THAT THE PROJECT OWNER / OPERATOR HAVE THE SWPPP PREPARED OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES).
  - PERFORM AS-BUILT SURVEYS OF ALL DETENTION STRUCTURES AND SUBMIT TO DHEC OR MS4 FOR ACCEPTANCE.
  - SUBMIT NOTICE OF TERMINATION (NOT) TO DHEC AS APPROPRIATE.

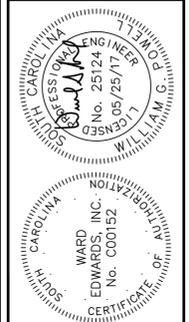
NOTE: MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND THE CONTROLS ARE REMOVED.

NOTE: ALL PUMPED DEWATERING SHALL BE PERFORMED USING AN APPROPRIATELY SIZED PUMP WATER FILTER BAG.

### SCDHEC-OCRM CERTIFICATION:

"I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCRI00000."

PROJECT NAME  
BWSA PROJECT #: 2017-XXX



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**Ward Edwards ENGINEERING**  
P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910  
PH: (843) 837-5555 FAX: (843) 837-2536  
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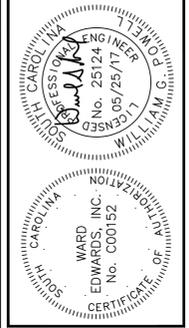
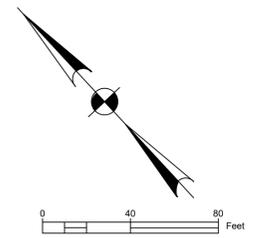
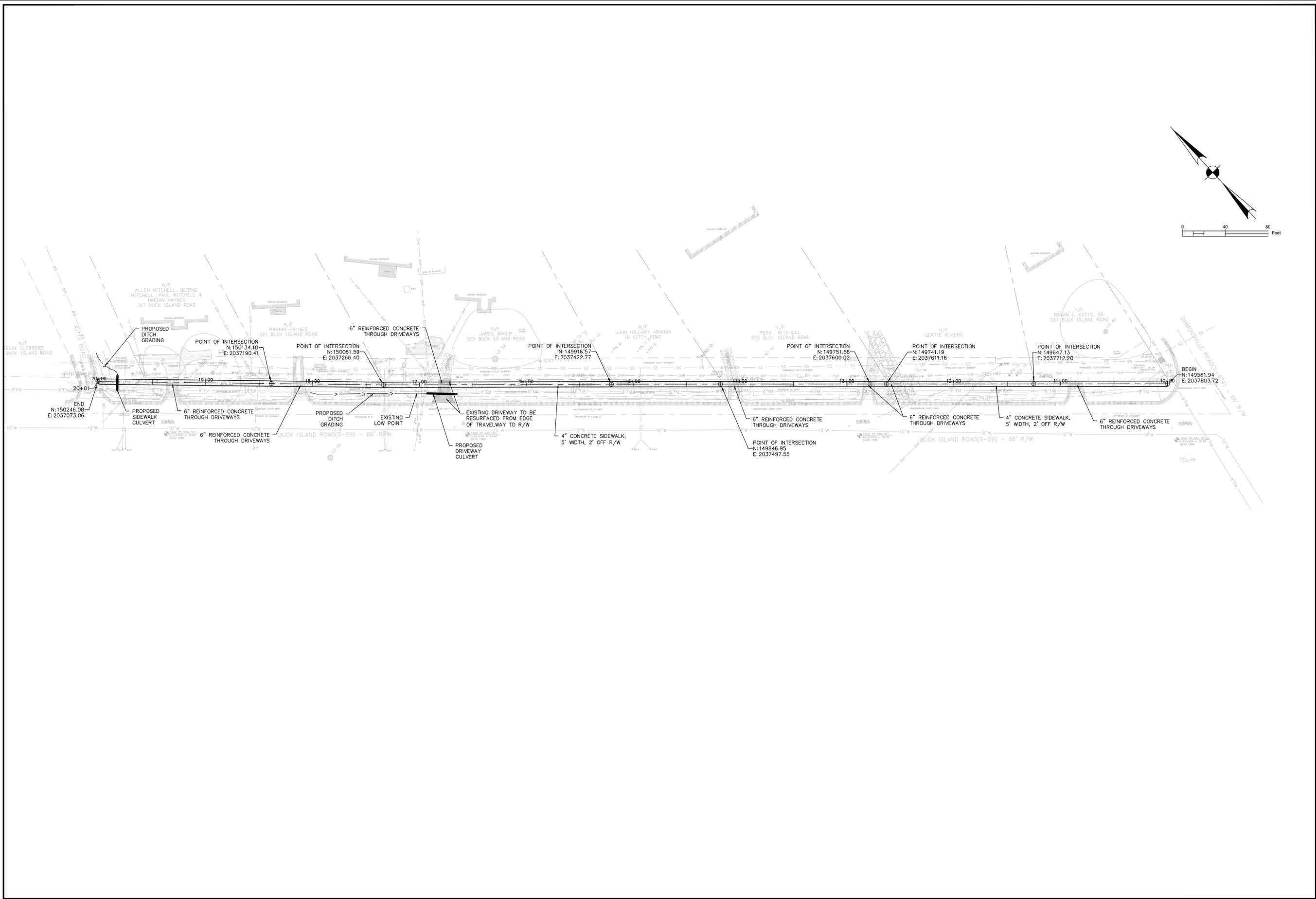
BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
TOWN OF BLUFFTON, SOUTH CAROLINA  
TOWN OF BLUFFTON  
Bluffton, South Carolina  
COVER SHEET & CONSTRUCTION NOTES

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #:	IS0604
DATE:	05/25/17
DESIGNED BY:	WGP
CHECKED BY:	HED
SCALE:	NO SCALE

SHEET  
**C001**

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ENGINEERING

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BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
TOWN OF BLUFFTON, SOUTH CAROLINA

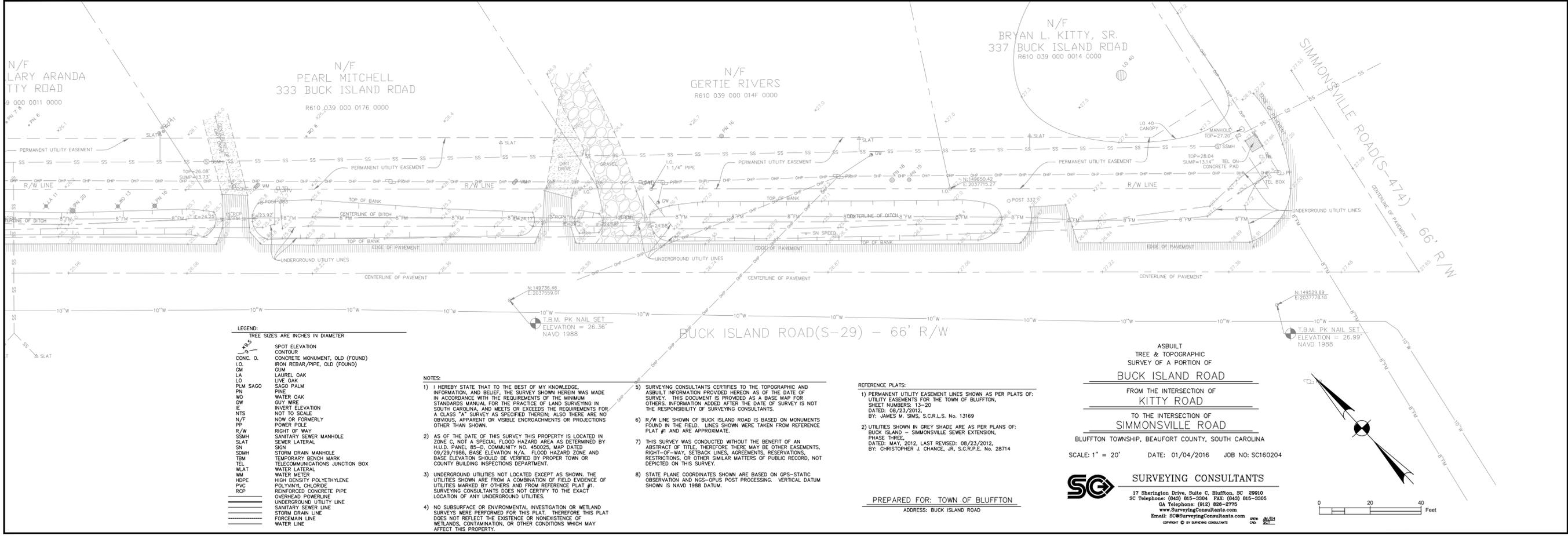
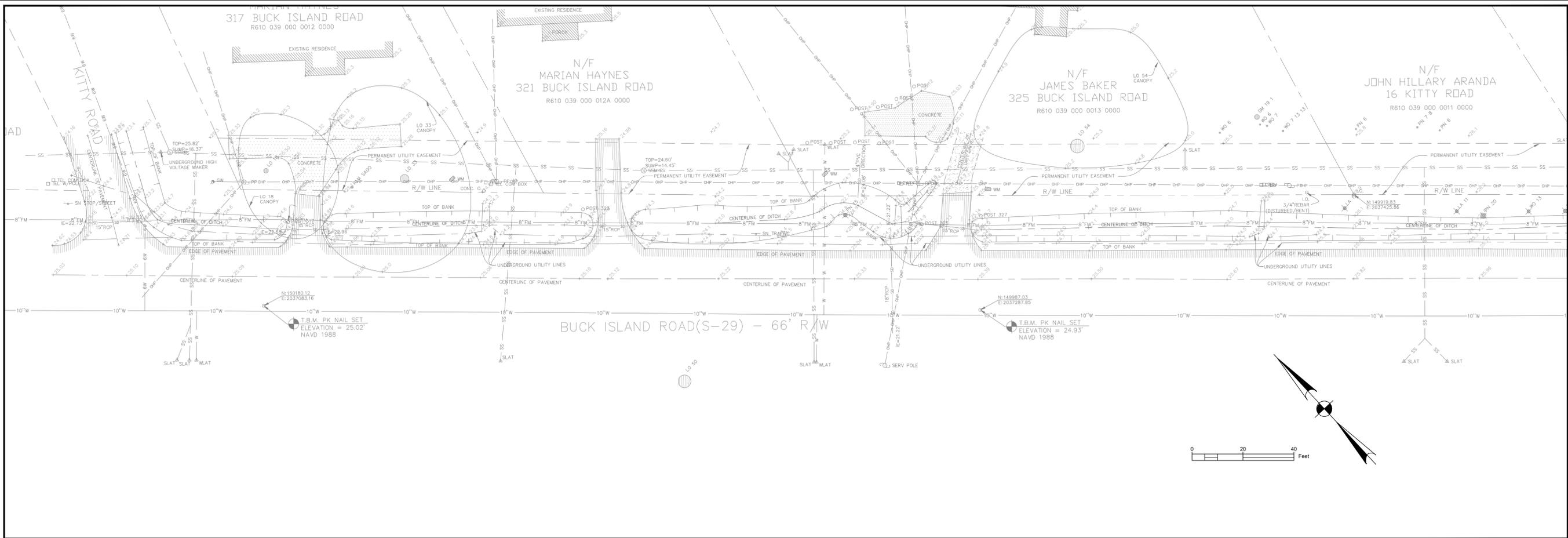
TOWN OF BLUFFTON  
Bluffton, South Carolina

**OVERALL SITE PLAN**

<input type="checkbox"/> NOT FOR CONSTRUCTION	<input checked="" type="checkbox"/> RELEASED FOR CONSTRUCTION
PROJECT #:	150604
DATE:	05/25/17
DESIGNED BY:	WGP
CHECKED BY:	HED
SCALE:	1"=40'

SHEET  
**C002**

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**LEGEND:**

TREE SIZES ARE INCHES IN DIAMETER

SPOT ELEVATION	CONTOUR
CONC. O.	CONCRETE MONUMENT, OLD (FOUND)
LO	IRON REBAR/PIPE, OLD (FOUND)
GM	GUM
LA	LAUREL OAK
LO	LIVE OAK
PLM	SAGO PALM
PN	WATER OAK
WO	GUY WIRE
OW	INVERT ELEVATION
IE	NOT TO SCALE
N/F	NOW OR FORMERLY
PP	POWER POLE
R/W	RIGHT OF WAY
SSMH	SANITARY SEWER MANHOLE
SLAT	SEWER LATERAL
SN	SIGN
SDMH	STORM DRAIN MANHOLE
TBM	TEMPORARY BENCH MARK
TEL	TELECOMMUNICATIONS JUNCTION BOX
WT	WATER LATERAL
WM	WATER METER
HOPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
UL	UNDERGROUND UTILITY LINE
SS	SANITARY SEWER LINE
SD	STORM DRAIN LINE
FM	FORMER MAIN LINE
WL	WATER LINE

- NOTES:**
- I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THIS SURVEY SHOWN HEREIN WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN; ALSO THERE ARE NO OBVIOUS, APPARENT OR VISIBLE ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.
  - AS OF THE DATE OF THIS SURVEY THIS PROPERTY IS LOCATED IN ZONE C, NOT A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY H.U.D. PANEL 85-D, COMMUNITY NO. 450225, MAP DATED 09/29/1988, BASE ELEVATION N.A. FLOOD HAZARD ZONE AND BASE ELEVATION SHOULD BE VERIFIED BY PROPER TOWN OR COUNTY BUILDING INSPECTIONS DEPARTMENT.
  - UNDERGROUND UTILITIES NOT LOCATED EXCEPT AS SHOWN, THE UTILITIES SHOWN ARE FROM A COMBINATION OF FIELD EVIDENCE OF UTILITIES MARKED BY OTHERS AND FROM REFERENCE PLAT #1. SURVEYING CONSULTANTS DOES NOT CERTIFY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES.
  - NO SUBSURFACE OR ENVIRONMENTAL INVESTIGATION OR WETLAND SURVEYS WERE PERFORMED FOR THIS PLAT. THEREFORE THIS PLAT DOES NOT REFLECT THE EXISTENCE OR NONEXISTENCE OF WETLANDS, CONTAMINATION, OR OTHER CONDITIONS WHICH MAY AFFECT THIS PROPERTY.
  - SURVEYING CONSULTANTS CERTIFIES TO THE TOPOGRAPHIC AND ASBLUIT INFORMATION PROVIDED HEREON AS OF THE DATE OF SURVEY. THIS DOCUMENT IS PROVIDED AS A BASE MAP FOR OTHERS. INFORMATION ADDED AFTER THE DATE OF SURVEY IS NOT THE RESPONSIBILITY OF SURVEYING CONSULTANTS.
  - R/W LINE SHOWN OF BUCK ISLAND ROAD IS BASED ON MONUMENTS FOUND IN THE FIELD. LINES SHOWN WERE TAKEN FROM REFERENCE PLAT #1 AND ARE APPROXIMATE.
  - THIS SURVEY WAS CONDUCTED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE, THEREFORE THERE MAY BE OTHER EASEMENTS, RIGHT-OF-WAY, SETBACK LINES, AGREEMENTS, RESERVATIONS, RESTRICTIONS, OR OTHER SIMILAR MATTERS OF PUBLIC RECORD, NOT DEPICTED ON THIS SURVEY.
  - STATE PLANE COORDINATES SHOWN ARE BASED ON GPS-STATIC OBSERVATION AND NGS-OPUS POST PROCESSING. VERTICAL DATUM SHOWN IS NAVD 1988 DATUM.

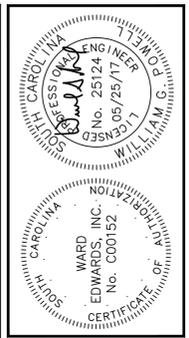
- REFERENCE PLATS:**
- PERMANENT UTILITY EASEMENT LINES SHOWN AS PER PLATS OF: UTILITY EASEMENTS FOR THE TOWN OF BLUFFTON, SHEET NUMBERS: 13-20 DATED: 08/24/2015, BY: JAMES M. SIMS, S.C.R.L.S. No. 13169
  - UTILITIES SHOWN IN GREY SHADE ARE AS PER PLANS OF: BUCK ISLAND - SIMMONSVILLE SEWER EXTENSION, PHASE THREE, DATED: MAY, 2012, LAST REVISED: 08/23/2012, BY: CHRISTOPHER J. CHANGE, JR., S.C.R.P.E. No. 28714

ASBLUIT  
TREE & TOPOGRAPHIC  
SURVEY OF A PORTION OF  
**BUCK ISLAND ROAD**  
FROM THE INTERSECTION OF  
**KITTY ROAD**  
TO THE INTERSECTION OF  
**SIMMONSVILLE ROAD**  
BLUFFTON TOWNSHIP, BEAUFORT COUNTY, SOUTH CAROLINA

SCALE: 1" = 20'      DATE: 01/04/2016      JOB NO: SC160204

**SC** SURVEYING CONSULTANTS  
17 Sherington Drive, Suite C, Bluffton, SC 29910  
SC Telephone: (843) 815-3304 FAX: (843) 815-3305  
GA Telephone: (912) 658-2775  
www.SurveyingConsultants.com  
Email: SC@SurveyingConsultants.com

PREPARED FOR: TOWN OF BLUFFTON  
ADDRESS: BUCK ISLAND ROAD



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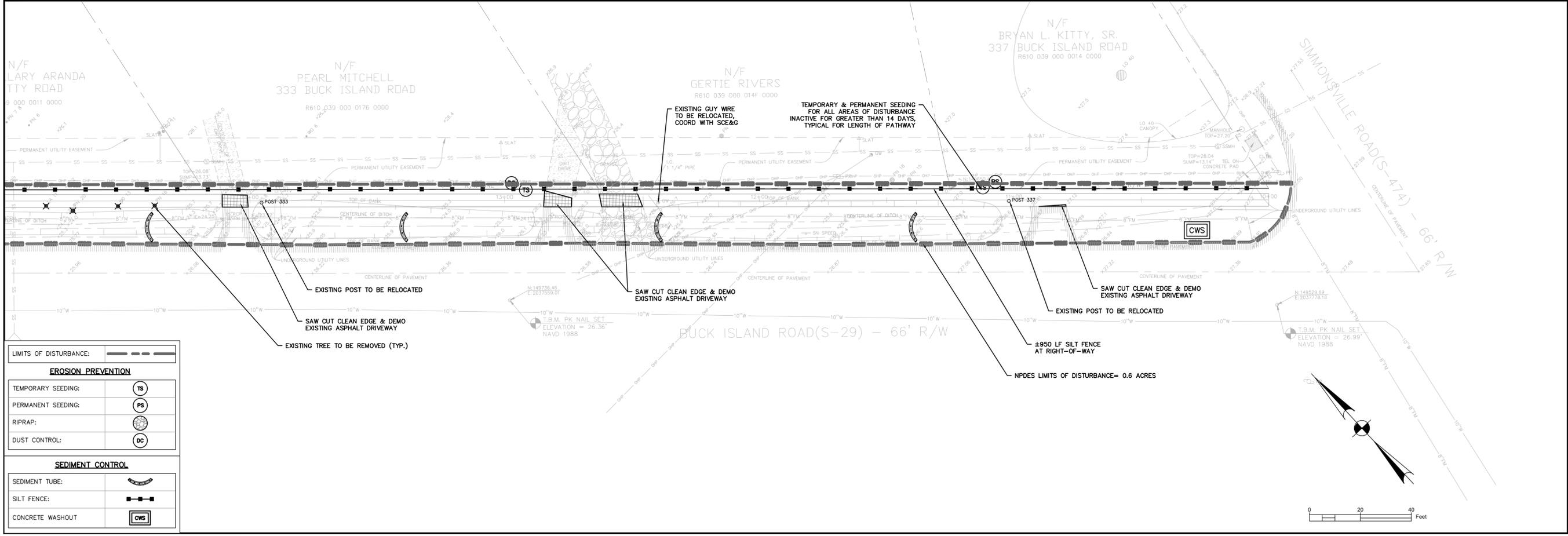
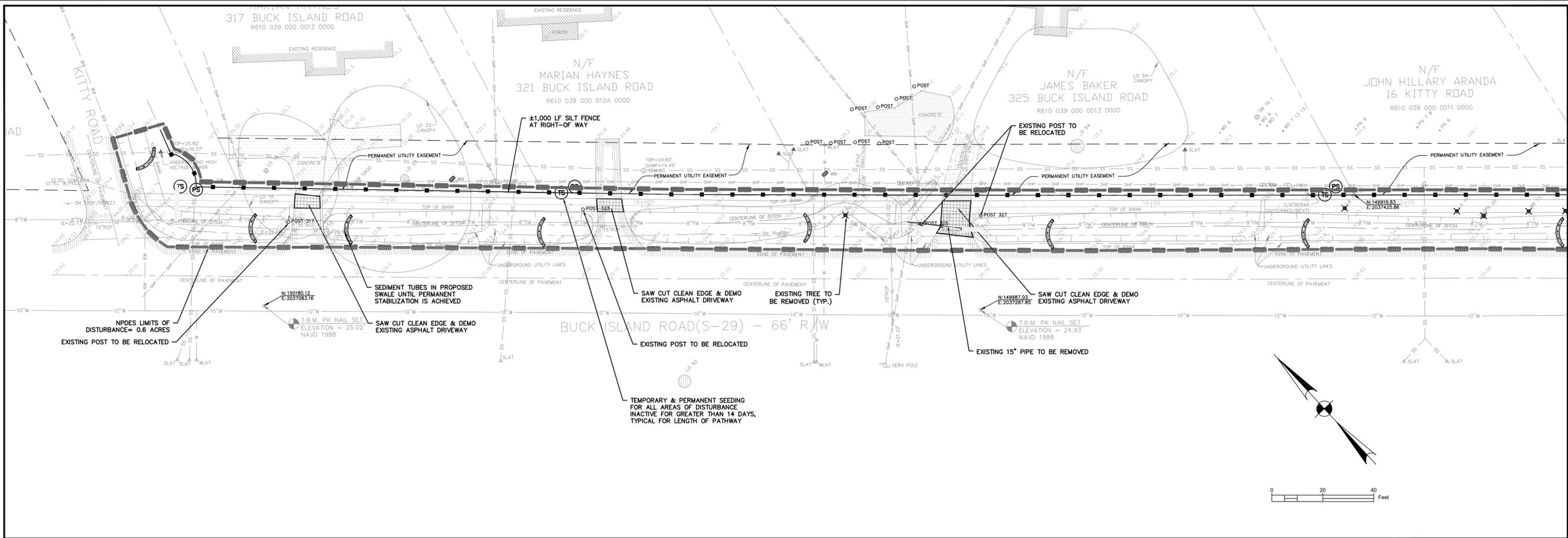
BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
TOWN OF BLUFFTON, SOUTH CAROLINA  
**TOWN OF BLUFFTON**  
Bluffton, South Carolina  
**EXISTING CONDITIONS PLAN**

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #:	15060A
DATE:	05/25/17
DESIGNED BY:	WGP
CHECKED BY:	HED
SCALE:	1"=20'

**SHEET C101**

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LIMITS OF DISTURBANCE:	
<b>EROSION PREVENTION</b>	
TEMPORARY SEEDING:	
PERMANENT SEEDING:	
RIPRAP:	
DUST CONTROL:	
<b>SEDIMENT CONTROL</b>	
SEDIMENT TUBE:	
SILT FENCE:	
CONCRETE WASHOUT:	

Professional Engineer Seal for Ward Edwards, Inc. License No. 25124, dated 05/25/17. State of South Carolina.

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 WWW.WARDEDWARDS.COM

BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
 TOWN OF BLUFFTON, SOUTH CAROLINA  
**TOWN OF BLUFFTON**  
 Bluffton, South Carolina  
**EROSION CONTROL & DEMOLITION PLAN**

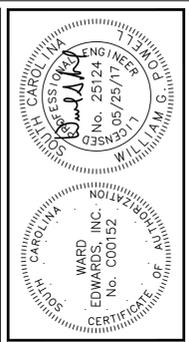
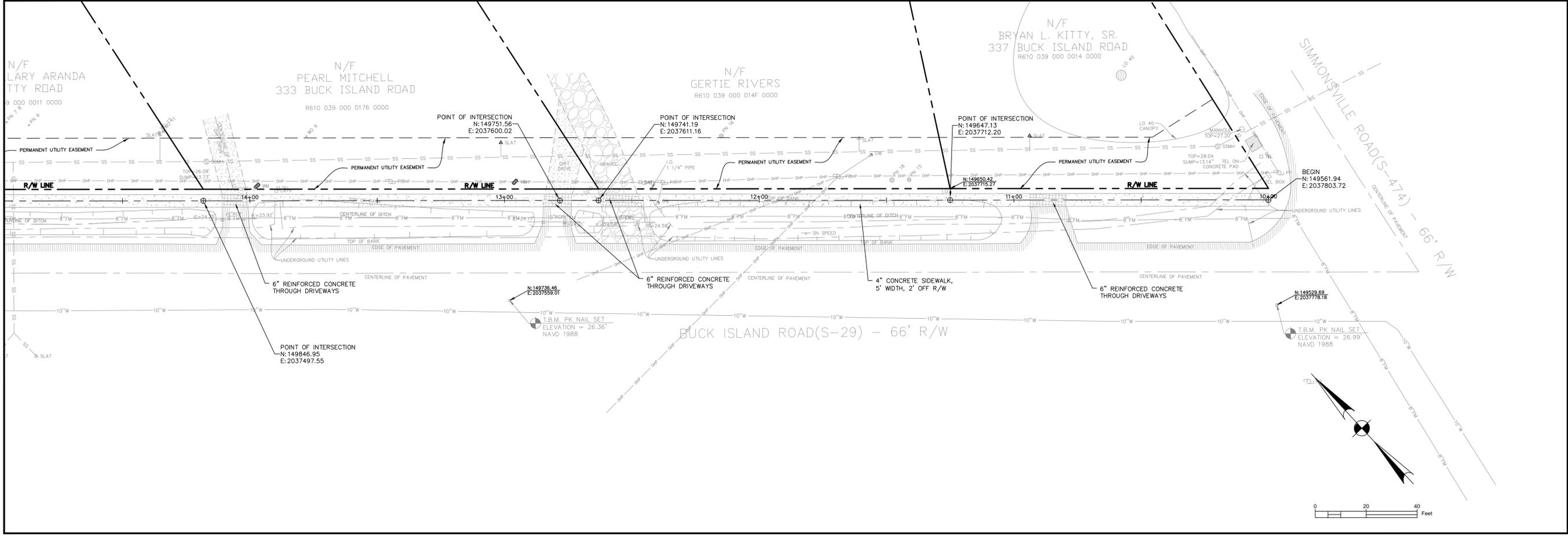
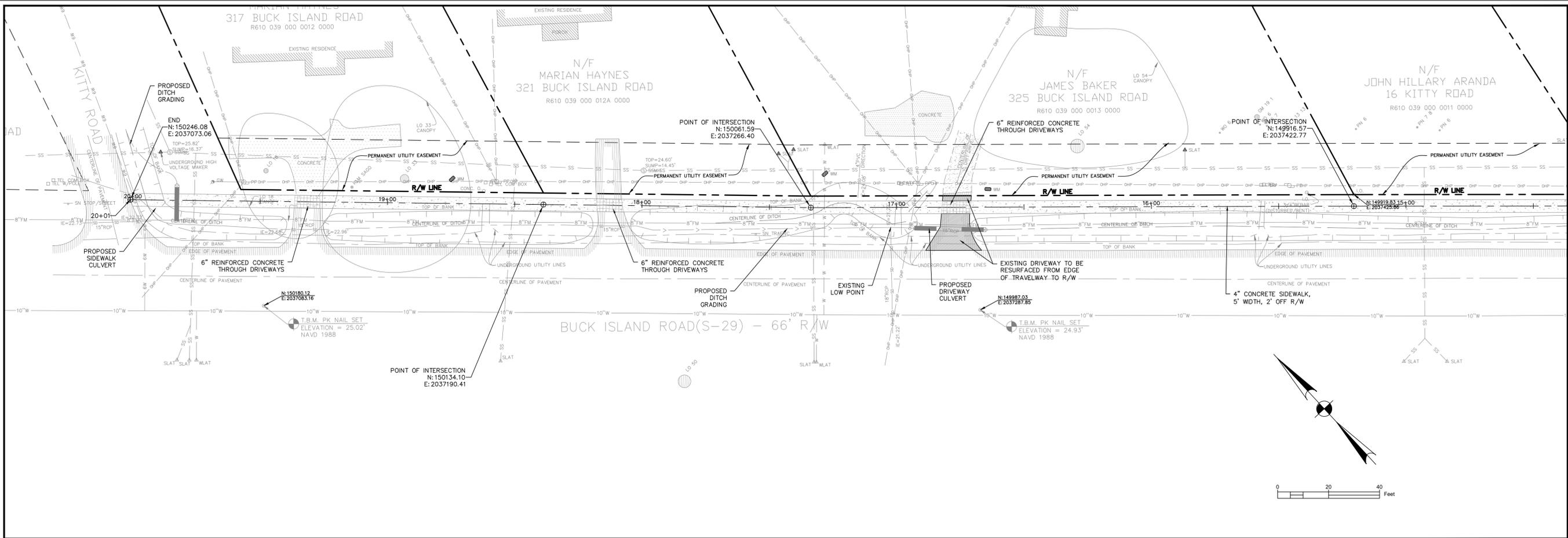
NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #: 150604  
 DATE: 05/25/17  
 DESIGNED BY: WGP  
 CHECKED BY: HED  
 SCALE: 1"=20'

**SHEET C201**

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ENGINEERING

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BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
TOWN OF BLUFFTON, SOUTH CAROLINA

**TOWN OF BLUFFTON**  
Bluffton, South Carolina

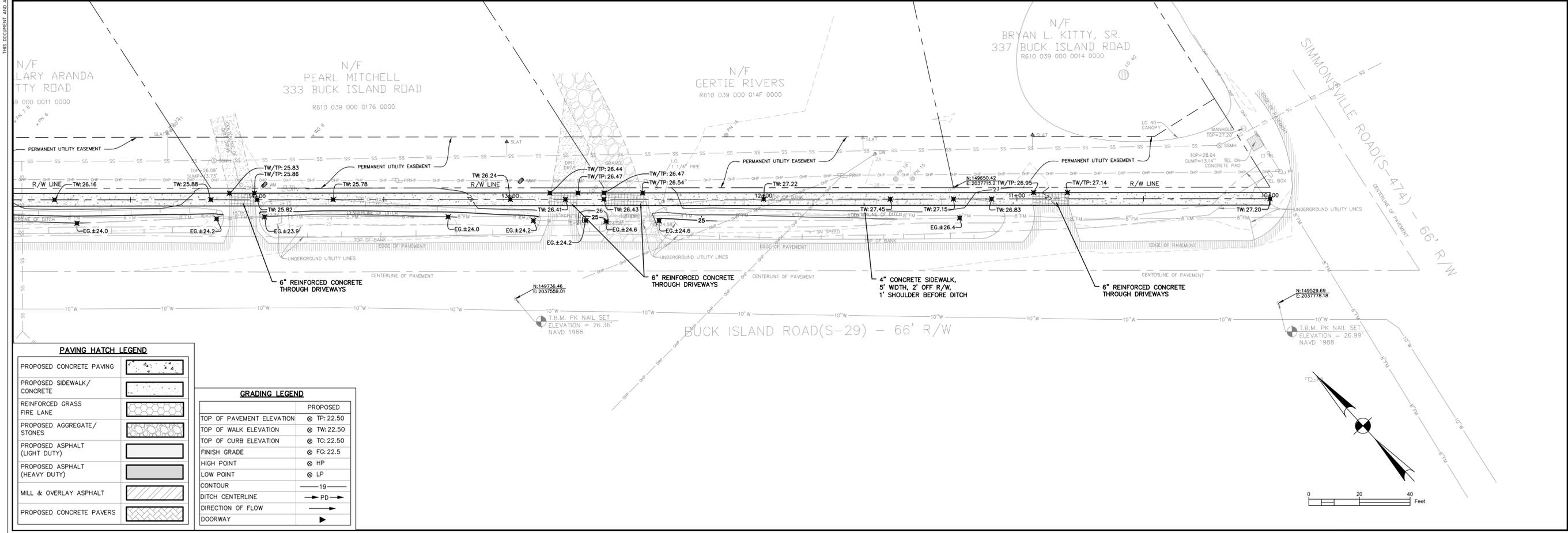
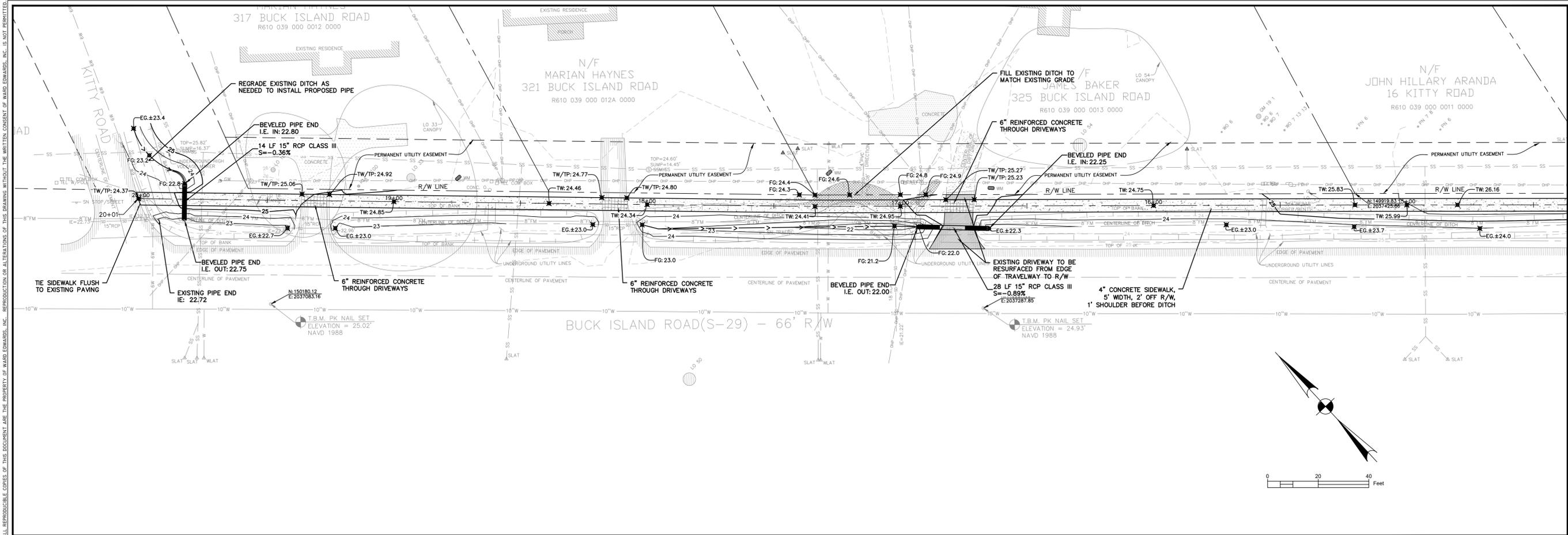
**SITE LAYOUT PLAN**

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #: 150604  
DATE: 05/25/17  
DESIGNED BY: WGP  
CHECKED BY: HED  
SCALE: 1"=20'

**SHEET C301**

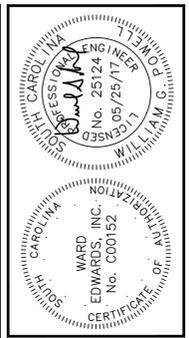
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PAVING HATCH LEGEND	
PROPOSED CONCRETE PAVING	
PROPOSED SIDEWALK/CONCRETE	
REINFORCED GRASS FIRE LANE	
PROPOSED AGGREGATE/STONES	
PROPOSED ASPHALT (LIGHT DUTY)	
PROPOSED ASPHALT (HEAVY DUTY)	
MILL & OVERLAY ASPHALT	
PROPOSED CONCRETE PAVERS	

GRADING LEGEND	
PROPOSED TOP OF PAVEMENT ELEVATION	TP: 22.50
PROPOSED TOP OF WALK ELEVATION	TW: 22.50
PROPOSED TOP OF CURB ELEVATION	TC: 22.50
FINISH GRADE	FG: 22.5
HIGH POINT	HP
LOW POINT	LP
CONTOUR	19
DITCH CENTERLINE	PD
DIRECTION OF FLOW	
DOORWAY	



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BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
TOWN OF BLUFFTON, SOUTH CAROLINA  
**TOWN OF BLUFFTON**  
Bluffton, South Carolina  
**PAVING, GRADING & DRAINAGE PLAN**

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #: 150604  
DATE: 05/25/17  
DESIGNED BY: WGP  
CHECKED BY: HED  
SCALE: 1"=20'

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PERMANENT SEEDING – COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	10 LBS/AC												
BAHIAGRASS	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BAHIAGRASS	30 LBS/AC												
SERICEA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
ATLANTIC COASTAL PANICGRASS	15 LBS/AC												
PLS													
BROWNTOP MILLET	10 LBS/AC												
SWITCHGRASS	8 LBS/AC												
(ALAMO)													
LITTLE BLUESTEM	4 LBS/AC												
SERICEA LESPEDEZA	20 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
WEeping LOVEGRASS	8 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET	10 LBS/AC												
BAHIAGRASS	40 LBS/AC												
RYE, GRAIN	10 LBS/AC												
BAHIAGRASS	40 LBS/AC												
CLOVER, CRIMSON (ANNUAL)	5 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BAHIAGRASS	30 LBS/AC												
SERICEA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BERMUDA, COMMON	10 LBS/AC												
SERICEA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BERMUDA, COMMON	12 LBS/AC												
KOBE LESPEDEZA	10 LBS/AC												
(ANNUAL)													
BROWNTOP MILLET	10 LBS/AC												
BAHIAGRASS	20 LBS/AC												
BERMUDA, COMMON	6 LBS/AC												
SERICEA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
SWITCHGRASS	8 LBS/AC												
LITTLE BLUESTEM	3 LBS/AC												
INDIANGRASS	3 LBS/AC												
PLS													

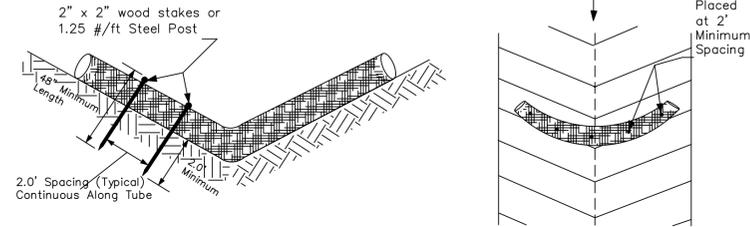
PS PERMANENT SEEDING - COASTAL  
DETAIL 02370-010

TEMPORARY SEEDING – COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	40 LBS/AC												
RYE, GRAIN	56 LBS/AC												
RYEGRASS	50 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET	40 LBS/AC												
OR JAPANESE MILLET													
RYE, GRAIN OR OATS	56 LBS/AC												
75 LBS/AC													
RYEGRASS	50 LBS/AC												

TS TEMPORARY SEEDING - COASTAL  
DETAIL 02370-011

SEDIMENT TUBE INSTALLATION



SEDIMENT TUBE SPACING

SLOPE	MAX. SEDIMENT TUBE SPACING
LESS THAN 2%	150-FEET
2%	100-FEET
3%	75-FEET
4%	50-FEET
5%	40-FEET
6%	30-FEET
GREATER THAN 6%	25-FEET

PLAN SYMBOL



South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

STANDARD DRAWING NO. SC-05 PAGE 1 of 2  
FEBRUARY 2014  
NOT TO SCALE DATE

SEDIMENT TUBES – GENERAL NOTES

- Sediment tubes may be installed along contours, in drainage conveyance channels, and around inlets to help prevent off-site discharge of sediment-laden stormwater runoff.
- Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled sediment tubes are not permitted.
- The outer netting of the sediment tube should consist of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable material.
- Sediment tubes, when used as checks within channels, should range between 18-inches and 24-inches depending on channel dimensions. Diameters outside this range may be allowed where necessary when approved.
- Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed.
- Sediment tubes should be staked using wooden stakes (2-inch X 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) at a minimum of 48-inches in length placed on 2-foot centers.
- Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's recommendations should always be consulted before installation.
- The ends of adjacent sediment tubes should be overlapped 6-inches to prevent flow and sediment from passing through the field joint.
- Sediment tubes should not be stacked on top of one another, unless recommended by manufacturer.
- Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.
- Sediment tubes should continue up the side slopes a minimum of 1-foot above the design flow depth of the channel.
- Install stakes at a diagonal facing incoming runoff.

SEDIMENT TUBES – INSPECTION & MAINTENANCE

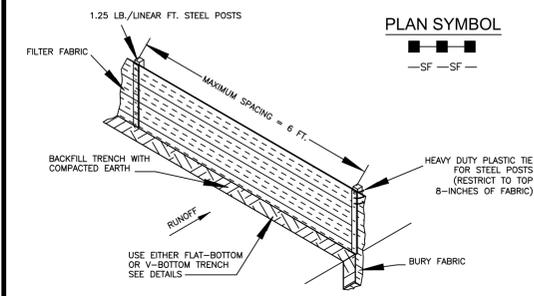
- The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the sediment tube.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Large debris, trash, and leaves should be removed from in front of tubes when found.
- If erosion causes the edges to fall to a height equal to or below the height of the sediment tube, repairs should be made immediately to prevent runoff from bypassing tube.
- Sediment tubes should be removed after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which sediment tubes have been removed.

South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

STANDARD DRAWING NO. SC-05 PAGE 2 of 2  
FEBRUARY 2014  
GENERAL NOTES DATE

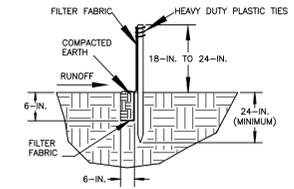
SILT FENCE INSTALLATION



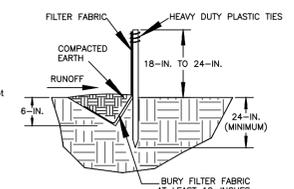
PLAN SYMBOL



FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 PAGE 1 of 2  
FEBRUARY 2014  
NOT TO SCALE DATE

SILT FENCE – GENERAL NOTES

- Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
- Maximum sheet or overlaid flow path length to the silt fence shall be 100-feet.
- Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
- Silt fence joints, when necessary, shall be completed by one of the following options:
  - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap;
  - Overlap silt fence by installing 3-foot passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties; or,
  - Overlap entire width of each silt fence roll from one support post to the next support post.
- Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
- Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
- Install Silt Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

SILT FENCE – POST REQUIREMENTS

- 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 1.38-inches and a nominal "T" length of 1.48-inches.
  - Weight 1.25 pounds per foot (± 8%).
- Posts shall be equipped with projections to aid in fastening of filter fabric.
- Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
- 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.
- Post spacing shall be at a maximum of 6-feet on center.

SILT FENCE – FABRIC REQUIREMENTS

- 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.
- 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.
- 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
- Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
- Filter Fabric shall be installed at a minimum of 24-inches above the ground.

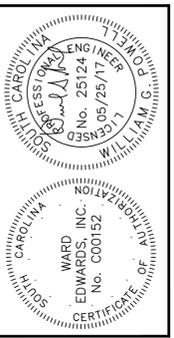
SILT FENCE – INSPECTION & MAINTENANCE

- The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of silt fence 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.
- Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, as necessary.
- Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
- Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 PAGE 2 of 2  
FEBRUARY 2014  
GENERAL NOTES DATE



NO.	DESCRIPTION	DATE
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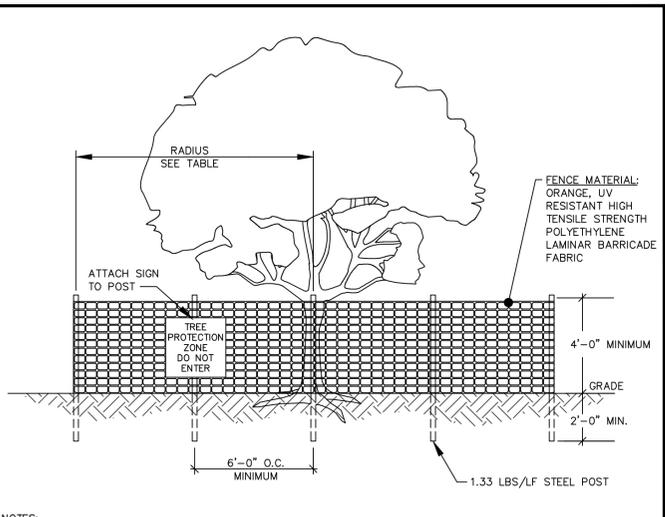
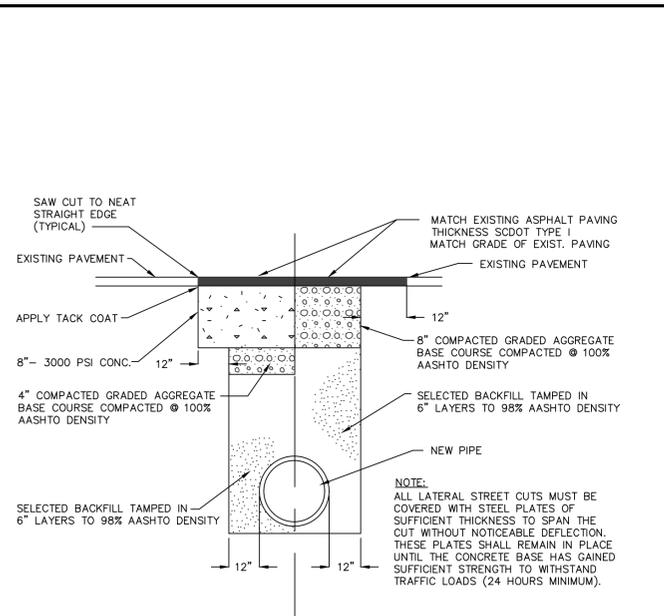
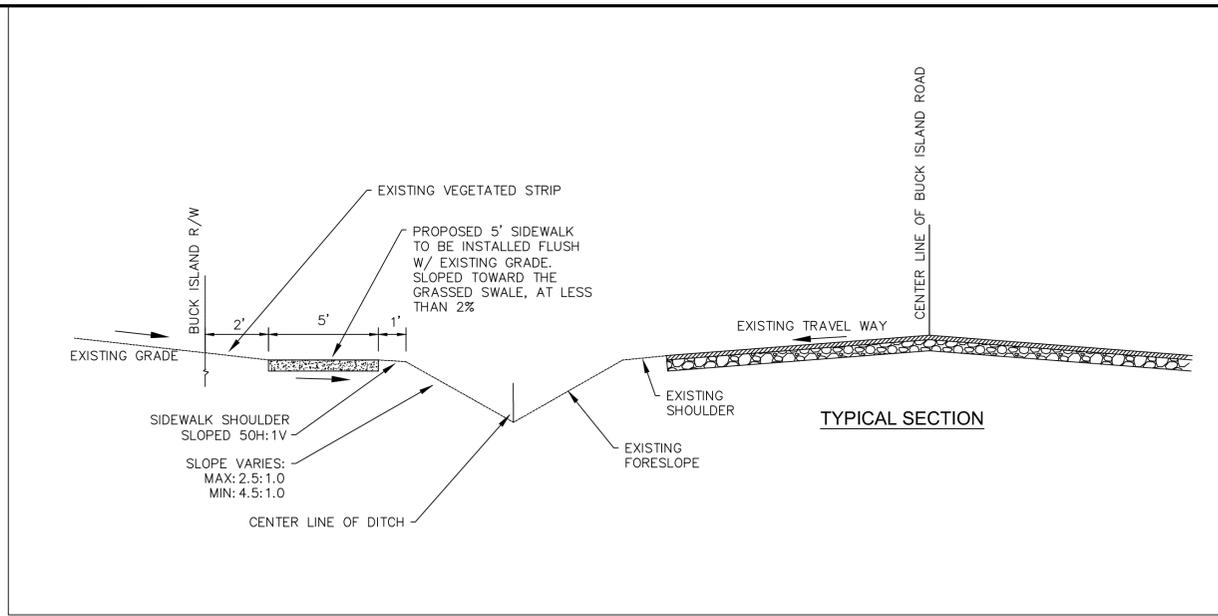
**Ward Edwards**  
ENGINEERING  
P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910  
PH: (843) 837-5555 FAX: (843) 837-2536  
WWW.WARDEDWARDS.COM

BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
TOWN OF BLUFFTON, SOUTH CAROLINA  
Bluffton, South Carolina  
**CONSTRUCTION DETAILS**

<input type="checkbox"/> NOT FOR CONSTRUCTION	
<input checked="" type="checkbox"/> RELEASED FOR CONSTRUCTION	
PROJECT #:	IS0606
DATE:	05/25/17
DESIGNED BY:	WGP
CHECKED BY:	HED
SCALE:	AS NOTED

SHEET  
**C501**

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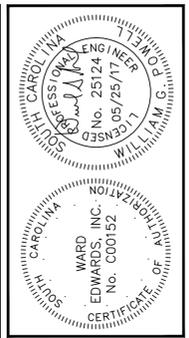


**NOTES:**

- ALL TREES DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING.
- INSTALL TREE PROTECTION FENCE TO RADIUS INDICATED IN TABLE UNLESS OTHERWISE INDICATED ON PLANS.
- WARNING SIGNS TO BE MADE OF DURABLE WATERPROOF MATERIAL.
- ALL WARNING SIGN LETTERS TO BE AT LEAST 3 INCHES HIGH, CLEARLY LEGIBLE AND SPACED A MINIMUM OF ONE EVERY 40 FT. FOR PROTECTION AREAS LESS THAN 40 FT IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER SIDE.
- THE SIZE OF EACH WARNING SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE.
- ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
- THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
- TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. FENCING MUST REMAIN UPRIGHT AND SLACK FREE.

JURISDICTION	RADIUS OF CIRCULAR TPZ
BEAUFORT COUNTY DSO 106-1846(b)(2)OR	1 FOOT PER INCH OF TRUNK DBH OR 5 FEET, WHICHEVER IS GREATER
TOWN OF BLUFFTON UDO 5.3.3, C(1)	1.5 FEET PER INCH OF TRUNK DBH
TOWN OF HILTON HEAD LMO 16-6-104, J	FENCING AT DRIP LINE FOR ALL TREES PROPOSED TO BE RETAINED
CITY OF BEAUFORT UDO 7.3, D(3)	0.5 FOOT PER INCH OF TRUNK DBH OR 5 FEET, WHICHEVER IS GREATER
JASPER COUNTY ZONING ORD. ART. 13	FENCING AT DRIP LINE FOR "SIGNIFICANT" AND "LANDMARK" TREES
CITY OF HARDEEVILLE MZDSO 4.8, F	FENCING AT DRIP LINE FOR "PROTECTED TREES", SEE PLANS FOR ALL OTHERS

DBH = TRUNK DIAMETER AT BREAST HEIGHT



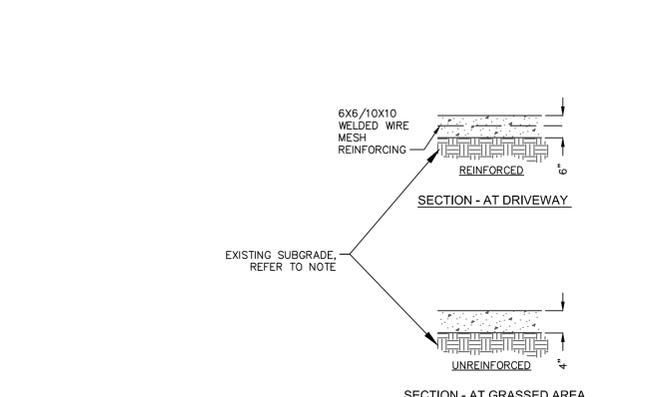
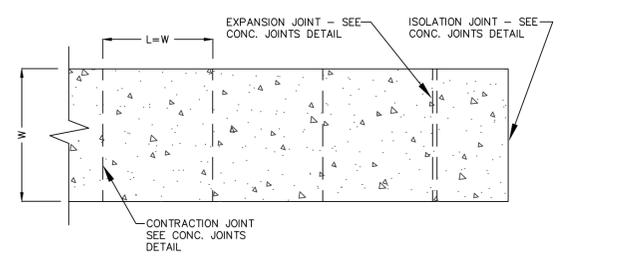
NO.	DESCRIPTION	DATE
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**ASPHALT CUT AND PATCH**

DETAIL 02740-003



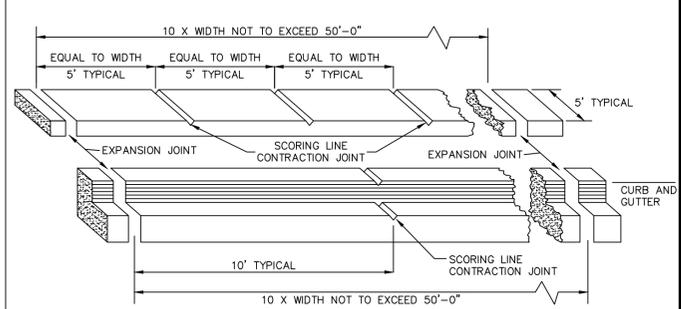
- NOTES:**
- w = VARIES, REFER TO STAKING PLAN.
  - L = WIDTH OF PAVING UNLESS OTHERWISE INDICATED ON PLAN.
  - SLOPE = AS INDICATED ON GRADING PLAN, NOT TO EXCEED 2% CROSS OR 8.33% LONGITUDINAL.
  - ALL CONCRETE SHALL BE CLASS A 3000 PSI.
  - FINISH: BROOM WITH HAND TOOLED JOINTS AND EDGES.
- EXISTING SUBGRADE PREP:**
- PROOF-ROLL EXISTING SUBGRADE TO CHECK FOR UNSTABLE AREAS AND NEED FOR ADDITIONAL COMPACTION
  - REMOVE LOOSE MATERIAL FROM PROOF-ROLLED SUBGRADE IMMEDIATELY BEFORE PLACING CONCRETE

**CONCRETE SIDEWALK**

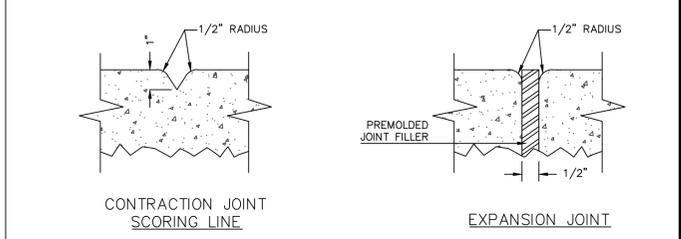
DETAIL 03300-022

**TREE PROTECTION FENCE**

DETAIL #02915-008



**ISOMETRIC**



- NOTES:**
- EXPANSION JOINTS, 1/2 INCH THICK, SHALL BE PLACED IN THE SIDEWALK AND CURBING AT THE POINT OF CURVATURE (PC) AND POINT OF TANGENCY (PT) OF ALL CURVES, AT THE OUTER EDGES OF DRIVEWAYS, AND AT UNIFORM INTERVALS AS SHOWN. EXPANSION JOINTS SHALL MEET SCOT SPECIFICATION SECTION 702.2.2.1.
  - TRANSVERSE SCORING LINES (CONTRACTION JOINTS) IN THE SIDEWALK SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM INTERVALS EQUAL TO THE WIDTH OF THE WALK AS SHOWN.
  - LONGITUDINAL SCORING LINES WILL BE REQUIRED IN WALKS WIDER THAN 5 FEET OR AS DIRECTED BY THE ENGINEER.
  - TRANSVERSE CONTRACTION JOINTS IN THE CURBING SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM 10' INTERVALS.
  - TRANSVERSE AND LONGITUDINAL SCORING LINES SHALL BE A DEPTH OF 1" AND NOT LESS THAN 1/4 INCH OR MORE THAN 1/2 INCH IN WIDTH. THE CORNERS OF THE SCORING LINES SHALL HAVE A 1/2 INCH MINIMUM RADIUS.
  - JOINTS IN THE CURB AND GUTTER SHALL ALIGN WITH CORRESPONDING JOINTS IN THE SIDEWALK.

**EXPANSION JOINTS AND SCORING LINES**

DETAIL 03300-007A

BUCK ISLAND - SIMMONSVILLE NEIGHBORHOOD SIDEWALKS, PHASE 3  
TOWN OF BLUFFTON, SOUTH CAROLINA

**TOWN OF BLUFFTON**  
Bluffton, South Carolina

**CONSTRUCTION DETAILS**

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #:	15060A
DATE:	05/25/17
DESIGNED BY:	WGP
CHECKED BY:	HED
SCALE:	AS NOTED

**SHEET C502**