

Water Supply Construction Permit Bureau of Water



SRF No. 2620004-24

The issuance of this permit does not relieve projects pursuing funding under the State Revolving Fund (SRF) program of responsibility to fulfill SRF program requirements. All construction will be at the sponsor's own funding risk prior to completion and approval of SRF requirements.

Permission is Hereby Granted To:

**GRAND STRAND WATER & SEWER AUTHORITY
166 JACKSON BLUFF RD
CONWAY SC 29526-8750**

for the construction of a distribution system in accordance with the construction plans, specifications, design calculations and the SCDHEC Construction Permit Application signed by Eric Sanford, Professional Engineer, S.C. Registration Number: 29814.

Project Name: HWY 701 TO HWY 544 48" WATER TRANSMISSION LINE IMPROV. PROJ.

County: Horry

Location: At the intersection of US Hwy 707 & Bucksville Drive in Bucksport, SC then northeast along Bucksville Dr. 2.5 miles to power line then south along the southside of power line across Waccamaw River to Hwy 544.

Project Description: Construction of approximately 28,050+/- lf of 48" PVC, DIP or HDPE equivalent water line, 3-16" blow-offs and all necessary appurtenances.

Service By: Water will be provided by the Grand Strand Water & Sewer Authority (System Number: 2620004).

Special Conditions:

1. All materials/products that contact potable water must be third party certified as meeting the specifications of ANSI/NSF Standard 61. The certifying party shall be accredited by the American National Standards Institute.
2. Water/sewer line separation shall be in accordance with Section R.61-58.4D(12) of Reg. 61-58.
3. All construction and materials for this project must conform to the Standard Specifications for Grand Strand Water & Sewer Authority
4. The fire hydrant(s) shall be flowed, tested and the results submitted with the cert. letter from the engineer. Adequate flow and residual pressure must be maintained or the hydrant(s) must be removed and replaced with an equivalent blowoff.
5. Before an approval to "Place Into Operation" can be issued for the proposed construction, an operation and maintenance (O&M) manual must be developed. This must be a comprehensive O&M manual developed for all facility processes. The complete O&M manual must be available for review at the time of final inspection. Note that if an O&M manual already exists for a facility then only an addendum for the proposed work is required.

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

NOTE: This is a permit for construction only and does not constitute State Department of Health and Environmental Control approval, temporary or otherwise, to place the system in operation. An Approval to Place in Operation is required and can be obtained following the completion of construction by contacting the MYRTLE BEACH EQC OFFICE at 843-238-4378. Additional permits may be required prior to construction (e.g., stormwater).

Permit Number: 33593-WS

Date of Issue: June 07, 2019

Expiration Date: Construction must be completed and the Approval to Place in Operation granted prior to **June 07, 2022** or this permit will expire.

A handwritten signature in blue ink that reads "SM Clarke".

*Shawn M. Clarke P.E, Director
Water Facilities Permitting Division*

WSR



P-17010E

August 6, 2019

Christy Everett
Grand Strand Water & Sewer Authority
PO Box 2368
Coway, SC 29528

RE: Hwy 701 to Hwy 544 48" Water Transmission Line Project, Horry County
NPDES Coverage Number: SCR10Z3Z6

Dear Christy Everett:

The Department of Health and Environmental Control (Department or DHEC) has received approval of and the Notice of Intent for the above-referenced project from **Horry County MS4**. Based on your submission of this documentation and in accordance with the NPDES General Permit for Stormwater Discharges from Construction Activities SCR100000 (CGP), this project has been granted coverage under the CGP on **August 6, 2019**. This project's general permit coverage number is **SCR10Z3Z6**. The total disturbed area for this site is **13.1 acres**.

See attached DHEC Office of Ocean and Coastal Resource Management (DHEC-OCRM) certification dated July 2, 2019 for additional conditions related to the Coastal Zone Consistency determination.

An as-built survey(s), signed and sealed by a S.C. Licensed Land Surveyor or Professional Engineer, should be submitted to **Horry County MS4** for all detention structure(s) on this site. The survey(s) should show grades, contours, and depths for all structure(s) and should include the elevations and dimensions of all outlet structures, including but not limited to pipes, orifices, risers, weirs, and emergency spillways. A statement signed by the project's S.C. Registered Engineer indicating that the structure(s) was installed and is operating as shown on approved plans and in approved calculations is required. If the elevations or dimensions of the structures listed above do not match those used in the approved plans, provide a certification statement signed by the project's S.C. Registered Engineer indicating that the structure, as built, will function as shown in approved calculations. A new analysis of the structure (routing) may be necessary.

The CGP can be downloaded at the following website: <http://www.scdhec.gov/Environment/docs/CGP-permit.pdf> or you may request a copy from us via email (stormwatercgp@dhec.sc.gov). You are responsible for ensuring your contractor(s) complies with the approved SWPPP and the minimum requirements of the CGP. Also, you are responsible for overall compliance with the Storm Water Management and Sediment Reduction Act of 1991 (1991 Act), SC Pollution Control Act, and the Federal Clean Water Act (CWA). Failure to comply with the approved SWPPP or applicable statutes and regulations may result in enforcement actions.

You must notify the local DHEC EA office prior to starting any land-disturbing activity. The address and telephone number are as follows:

Pee Dee EA Myrtle Beach
927 Shine Avenue
Myrtle Beach, SC 29577
843-238-4378

Inspections of this site must be performed by qualified personnel as described in Section 4.2.E of the CGP.

You should be aware that this approval is only applicable for the Stormwater Pollution Prevention Plan (SWPPP) that was submitted for this project. Any additional construction or land disturbing activity beyond the scope of the approved plans is not authorized. Any future work for this project not shown on the stamped, approved plans will require that you submit another site plan for review and approval. All major modifications require review and approval by **Horry County MS4**; the Department must be notified in writing by **Horry County MS4** of the approval of major modifications if the disturbed area changes. Minor modifications to the approved SWPPP may be made by the SWPPP preparer and do not require review and approval by the Department; these changes should be signed and dated by the SWPPP preparer. If you have a question about whether a modification is major or minor, contact the Coastal Stormwater Permitting Section at (843) 953-0200.

A copy of the stamped, approved SWPPP (including a copy the CGP, contractor certifications, inspection records, rainfall data, etc), NOI, and CGP coverage letter from DHEC must be retained and available at the construction site (or accessible within 30 minutes during normal business hours) from the date of commencement of construction activities to the date of final stabilization. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance at the construction site.

All contractors who will conduct land-disturbing activities at the site must complete a Contractor Certification Form. You are also responsible for listing all contractors in the SWPPP and for holding a pre-construction conference with each contractor before they can conduct land-disturbing activity at the site.

The Department may conduct periodic inspections of your site. Any violations found during these inspections may result in enforcement action.

This NPDES coverage should be terminated by the permittee when one of the conditions listed in Section 5.1 of the CGP has been met. You must submit a Notice of Termination (NOT) to cancel your NPDES coverage under the CGP. Please see section 5.1 of the CGP for additional information required to be submitted with the NOT.

You are responsible for obtaining any other federal, state, or local permit that may be required for this project. In particular, any permits through the U.S. Army Corps of Engineers for the placement of fill material in Waters of the United States. Please note we have not sent a copy of this letter to any county or city building official. You must send a copy of this letter to these agencies, if necessary.

If material excavated during construction activities leaves the site, a mine operating permit may be needed. You are responsible for contacting the Mining and Reclamation Section to determine if a mining permit is required for the site. The Mining and Reclamation Section can be reached at (803)898-1362 or via e-mail at AskMines@dhec.sc.gov.

Please see the enclosed "Notice of Appeal Procedure" document for information about the procedures for appealing this NPDES coverage.

If you have any questions or cannot access the referenced websites, please call me at 843-953-1594.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gagan Brar', with a stylized flourish at the end.

Gagan Brar
Coastal Stormwater Permitting Section

CC: Eric K. Sanford, DDC Engineers, Inc.

EC: Shauna Stevens, Pee Dee EA Myrtle Beach
Thomas Roth, Horry County MS4

**INFRASTRUCTURE &
REGULATION DIVISION -
STORMWATER DEPARTMENT**

4401 Privetts Road
Conway, South Carolina 29526



Post Office Box 1236
Conway, South Carolina 29528-1236

Phone: (843) 915-5160
Fax: (843) 365-2208
www.horrycounty.org

August 01, 2019

Eric Sanford
DDC Engineers Inc.
1298 Professional Drive
Myrtle Beach, SC 29577

US HWY 701 TO SC HWY 544 48" WATER TRANSMISSION LINE IMPROVEMENT PROJECT
Parent PIN - 43000000023

Dear Eric Sanford:

I am pleased to inform you Horry County Stormwater Management plan approval has been given to the above referenced project on 08/01/2019. The developer may now apply to DHEC for their NPDES Permit.

Upon approval and receipt of the NPDES Permit, an Horry County Stormwater Permit will be issued. **No site work shall take place until the Horry County Stormwater Permit has been issued.**

If you have questions regarding this matter, please call our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Roth".

Thomas Roth
Deputy Stormwater Manager



NOTICE OF INTENT (NOI)
For Coverage(s) of Primary Permittees
Under South Carolina NPDES General Permit
For Stormwater Discharges From Construction Activities (SCR1000000)
(Maintain As Part of Construction File)

For Official Use Only

File Number: _____
Permit Number: SCR10 _____
Submission Package Complete: _____

Submission of this Notice of Intent constitutes notice that the Applicant identified in Section II intends to be authorized as a Primary Permittee in the state of South Carolina under NPDES General Permit SCR1000000. Fees required for review and NPDES coverage of each application type are as listed on page 2 of the Instructions.

SOUTH CAROLINA
DEPT. OF HEALTH AND ENVIRONMENTAL CONTROL
DAM SAFETY AND STORMWATER PERMITTING DIVISION
CONSTRUCTION STORMWATER PERMITTING
APPROVED - FOR CONSTRUCTION ONLY
DHEC PERMIT #: SCR102326
DATE ISSUED: 8/6/2019
Gagan Brar

STORMWATER
PERMIT
APPROVED

APPROVED
Berleim, 8/1/2019, 12:30:48 pm

Date: 04/25/2019

Project/Site Name: US Hwy. 701 to SC Hwy. 544 48' Waterline Project County: Horry

(Modification or Change of Information Only) Prior Approved NPDES Permit or File Number: _____

Do you want this project to be considered for the Expedited Review Program (ERP)? ☐ Yes or ☒ No (See Instructions)

I. Notice of Intent (NOI) Application Type(s)

A. Project (Application/Review) Type(s) (Select ALL that apply):

- ☒ New Project (Initial Notification) Ongoing Project: ☐ Permitted or ☒ Un-Permitted
☐ Late Notification ☐ Low Impact Development (LID) or Project Design Above Regulatory Requirements
☐ New Owner/Operator or Company Name Change (see Instructions, attach Form A (Transfer of Ownership))
☐ Major Modification: (see Instructions, attach Form B (Major Modifications))
☒ MS4 Project Review
☐ Ocean and Coastal Resource Management (OCRM) Review
☐ Change of Information/Other (Specify): _____

B. If Applicable, identify the entity designated as MS4 Reviewer and MS4 Operator (i.e., Lexington County, City of Greer, etc.): MS4 Reviewer Horry MS4 Operator Horry

II. Primary Permittee Information

☐ Person or ☒ Company

If a Company, are you a ☐ Lending Institution or ☒ Government Entity?
Company EIN (if applicable): EIN: _____

A. Primary Permittee Name: Grand Strand Water & Sewer Authority

Mailing Address: P.O. Box 2368 City: Conway State: SC Zip: 29528-2368

Phone: (843) 443-8293 Fax: (843) 347-4680 Email Address: ceverett@gswsa.com

B. Contact /ODSA Name (if different from above OR if owner is a company): Chrisly Everett, P.E.: GSW&SA

Mailing Address: P.O. Box 2368 City: Conway State: SC Zip: 29528-2368

Phone: (843) 443-8293 Fax: (843) 347-4680 Email Address: ceverett@gswsa.com

C. Property Owner Name (if different from above): N/A - In existing R.O.Ws and Adjacent Easements

Mailing Address: _____ City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email Address: _____

III. Comprehensive Stormwater Pollution Prevention Plan (C-SWPPP) Preparer Information ☐ Change of Information

A. C-SWPPP Preparer Name: Eric K. Sanford, P.E.

B. Registered Professional ☒ Engineer ☐ Landscape Architect ☐ Tier B Land Surveyor S. C. Registration #: 29814

C. Company/Firm Name: DDC Engineers, Inc. S. C. COA #: C00036

Mailing Address: 1298 Professional Drive City: Myrtle Beach State: SC Zip: 29577

Phone: (843) 692-3200 Fax: (843) 692-3210 Email Address: eks@ddcinc.com

IV. Project/Site Information

A. Type of Construction Activity(ies) (Select ALL that apply):

- ☐ Commercial ☐ Industrial ☐ Institutional ☐ Mass Grading ☒ Linear ☒ Utility/Infrastructure
☐ Residential: Single-family ☐ Residential: Multi-family ☐ Multi-use (Commercial & Residential)
☐ Site Preparation (No New Impervious Area) ☐ Other (Specify) _____

B. Site Address/Location (street address, nearest intersection, etc.) US Hwy. 701 & Bucksville Dr. to SC Hwy. 544 in Socastee

City/Town (if in limits): Bucks Township and Socastee Township Zip Code: 29528

Latitude: 33° 42' 49" N Longitude: - 79° 03' 05" W (Source): ☐ GPS ☒ Web site: Google Earth

Tax Map Number (s) (List all): N/A - Work to be performed in existing R.O.Ws and adjacent easements.

- C. Is this site located on Indian Land? ☐ Yes ☒ No
- D. Proposed Start Date: 03/01/2019 Proposed Completion Date: 3/31/2020
- E. Disturbed Area (nearest tenth of an acre): 13.1 Total Area (acres): 13.1
- F. Modification Only: (nearest tenth of an acre): Disturbed Area: Current (Approved) Area: _____
Disturbed Area Change (Increase Only): _____ Total Disturbed Area (After Change): _____
- G. Is this project part of a Larger Common Plan for Development or Sale (LCP)? ☐ Yes ☒ No
LCP/ Overall Development Name: _____ Check here if this is the First Phase. ☐
- Previous State Permit/File Number: _____ Previous NPDES Coverage Number: SCR10 _____
- H. Any Flooding Problems exist downstream of or adjacent to this site? ☐ Yes ☒ No (If yes, provide detailed description of flooding problems and applicable floodway/flood zone information in the C-SWPPP).
- I. Active S.C. DHEC Warning Notice, Notice to Comply or Notice of Violation for this site or LCP? ☐ Yes ☒ No
- J. List Relevant State and Federal Environmental Permits or Approvals applied for or obtained for this site (e.g., RCRA, USACOE, Nationwide, etc.). If None, list None.
NWP12-PCN, BOW GP98-002 OCRM Certification Stormwater CZC
- K. Any Waiver(s)/Variances/Exceptions Requested for this Project? (If yes, identify below and include Waiver Request and Justifications in the C-SWPPP for each proposed request).
- | | |
|--|---------------------------|
| 1. Small Construction Activity Waiver(s) From NPDES permitting (Section 1.4 & Appendix B)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, identify requested waiver: <input type="checkbox"/> Rainfall Erosivity Waiver <input type="checkbox"/> TMDL Waiver <input type="checkbox"/> Equivalent Analysis Waiver | |
| 2. Detention Waiver (72-302(B))? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 3. Other (Specify): _____ |

V. **Waterbody Information** (Attach additional sheet(s) as needed) ☐ Change of Information

- A. Receiving Waterbody(s) (RWB) Information (List the nearest and next nearest receiving waterbodies to which the sites stormwater discharges will drain. If stormwater discharges drain to multiple waterbodies, list all such waterbodies).

1. Name of Receiving Waterbodies (RWB)	2. Distance to RWB (feet)	3. Classification of RWB
a. Nearest: <u>Waccamaw River (adjacent)</u>	0	FW'
b. Next Nearest: <u>Winvah Bay</u>	60,720	SB'
c. Coastal Zone ONLY: Coastal Receiving Water (CRW): <u>Waccamaw River</u>	0	Not Applicable
d. Other Waterbodies: _____		

B. Waters of the U.S. / State Information (Attach additional sheet(s) as needed)

Waters of the U.S. / State	1. On the site?	2. Delineated/ Identified?	3. Impacts?	4. Amount of impacts
a. Jurisdictional wetlands	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.36 Ac. Temporary
b. Non-jurisdictional wetlands	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ Ac
c. Other Water(s): <u>Waccamaw River</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____ Ac _____ Feet
d. Coastal Zone ONLY: Direct Critical Area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ Ac _____ Feet

5. If yes for Impacts in B.3, describe each impact and activity, and list all permits (e.g., USACOE Nationwide Permit, DHEC General Permit) and certifications that have been applied for or obtained for each impact:

C. **S.C. Navigable Waters (SCNW) Information (Section 2.6.5)** The Department will address any issues related to State Navigable Waters' Program under SC Regulation 19-450 during the review of the C-SWPPP for activities that will NOT require a 404 permit or a 401 certification. (Attach additional sheet(s) as needed).

1. Are S. C. Navigable Waters (SCNW) on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a. If no, do not complete this question. Proceed to Section D (Impaired Waterbodies).		
b. If yes, provide the name of S.C. Navigable Waters (SCNW) on the site: <u>Waccamaw River</u>		
2. If yes for C.1, will construction activities cross over or occur in, under, or thru the SCNW? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe SCNW activities (e.g., road crossing, sub-aqueous utility line, temporary or permanent structures, etc.) and proceed to Section C.3: <u>Direct Bore of sub-aqueous utility line under the Waccamaw River</u>		
3. Identify permits providing coverage of SCNW activities proposed for your site. If NONE, list none.		
Permits/Certifications	Permit or Certification No.	Corresponding Covered SCNW Activity(ies)
a. DHEC General/ Other DHEC Permit	GP 98-002	Direct Bore of Waccamaw River
b. USACOE 404 Permit or 401 Certification	NWP 12 PCN	Non-SCNW areas of the project.
c. SCNW Permit If applied for or issued, identify Date applied for or issued:	GP 98-002 Oct. 19, 2017	<input type="checkbox"/> All Activities or <input checked="" type="checkbox"/> Some Activities (Describe): Direct Bore of the Waccamaw River
d. If a SCNW Permit has <u>NOT</u> been applied for provide an additional plan sheet that shows plan and profile views (drawn to scale) of the SCNW and associated activities. Include a description of all proposed activities on this plan.		

D. Impaired Waterbodies Information (Attach additional sheet(s) as needed)

1. 303(d) Listed Impaired Waterbodies

a. Name of Nearest DHEC Water Quality Monitoring Stations (WQMS)(s) that receives stormwater from your construction site and/or thru an MS4 and the Name of the Corresponding Waterbody?		b. Is this WQMS(s) listed on the <u>most current</u> 303(d) list? If No, proceed to Section 2 of this table. If Yes, complete items c thru f.	c. List the pollutant(s) identified as "CAUSES" of the impairment	d. Will any pollutants causing the impairment be present in your site's construction stormwater discharges?	e. If yes for d, list the "USE SUPPORT" Impairment(s) affected by the pollutant(s) identified in c.
Nearest DHEC WQMS(s)	Corresponding Waterbody				
MD-145	Waccamaw River	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Hg	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
MD-136	Waccamaw River	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Hg	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	

f. If yes for d above, will use of the BMPs proposed for your project ensure the site's discharges will NOT contribute to or cause further WQS violations for the impairment(s) listed in c? ☐ Yes ☐ No
(NOTE: If no for f, this site is NOT eligible for coverage under the CGP). See Instructions.

2. TMDL Impaired Waterbodies

a. Name of Nearest DHEC Water Quality Monitoring Stations (WQMS)(s) that receives stormwater from your construction site and/or thru an MS4?	b. Has a TMDL(s) been developed for this WQMS(s)? If No, identify as such below and proceed to Section VI. If Yes, complete items c thru f of this table.	c. If yes for b, what pollutants are listed as "CAUSES" or causing the impairment?	d. If yes for b, has the standard been "ATTAINED" or "Fully Supported" for the impairment(s)?	e. If no for d (Not Attained), will any pollutants causing the impairment be present in your site's construction stormwater discharges?
MD-145	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	DO	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
MD-136	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	DO	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

f. If yes for e above, are your discharges consistent with the assumptions and requirements of the TMDL(s)? ☐ Yes ☐ No
(NOTE: If no for f, this site is NOT eligible for coverage under the CGP). See Instructions.

VI. Signatures and Certifications DO NOT SIGN IN BLACK INK! Read the Certifications below (in entirety). Provide date, printed name, and signatures below. If you are a New Owner/Operator, as Primary Permittee you must also sign and date the applicable Comprehensive SWPPP Acceptance & Compliance Agreement below.

C-SWPPP PREPARER: "One copy of the C-SWPPP, all specifications and supporting calculations, forms, and reports are herewith submitted and made a part of this application. 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 SCR100000." (This should be the person identified in Section III).

Eric K. Sanford, P.E.

Printed Name of C-SWPPP Preparer

Signature of C-SWPPP Preparer

29814

S. C. Registration #

PRIMARY PERMITTEE: "I or I (on behalf of my company and its contractors and agents), as the case may be, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that DHEC enforcement actions may be taken if the terms and conditions of the C-SWPPP are not met and I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

"I or I (on behalf of my company and its contractors and agents), as the case may be, also hereby certify that all land-disturbing construction and associated activity pertaining to this site shall be accomplished pursuant to and in keeping with the terms and conditions of the approved plans and SCR100000. I also certify that a responsible person will be assigned to the project for day-to-day control. I hereby grant authorization to the to S. C. Department of Health and Environmental Control (DHEC) and/or the local implementing agency the right of access to the site at all times for the purpose of on site inspections during the course of construction and to perform maintenance inspections following the completion of the land-disturbing activity." (See Section 122.22 of S.C. Reg. 61-9 for signatory authority information.) Having understood the above information, I am signing this certification as Primary Permittee to the aforementioned NPDES general permit."

Christy Everett, P.E.

Printed Name of Primary Permittee

Signature of Primary Permittee

Chief Operations Officer - GSW&SA

Title/Position

5-7-19

Date Signed



July 2, 2019

Christy Everett
Grand Strand Water & Sewer Authority
PO Box 2368,
Coway, SC 29528

Re: SAC-2017-01687, HNP-787Y-9W4MG, Hwy 701 to Hwy 544 48" Water Transmission Line Project
Horry County,

Dear Christy Everett:

The US Army Corps of Engineers (Corps) issued a final notice in the Federal Register on March 19, 2017 reissuing the Corps' Nationwide Permits (NWP). The NWP program authorizes activities that have minimal individual and cumulative adverse effects on the aquatic environment. On March 7, 2017, the South Carolina Department of Health and Environmental Control (Department) certified thirty-nine NWP's with and without conditions in accordance with Section 401 of the Clean Water Act and the S.C. Coastal Tidelands and Wetlands Act (48-39-10 et seq.).

Coastal Zone Consistency staff has determined the work, consisting of temporary impacts to 4.36 acres of waters of the U. S. for utility line activities, to be in accordance with the March 19, 2017, Department certification for Section 404 of the Clean Water Act and consistency with the S. C. Coastal Zone Management Program provided the applicant adheres to all conditions of the NWP.

This letter serves as our final Consistency Determination for the work, as described. Additional certifications may be required on-site for land disturbing activities that will could be subject to NPDES or other state permitting requirements.

Sincerely,

Sara Carper
Coastal Zone Consistency Project Manager
843-953-0221
carpersl@dhec.sc.gov

cc: Mr. T. Brian Hardee, US Army Corps of Engineers
Mr. Tyler West, DHEC Bureau of Water
Mr. Eric Sanford, P.E., DDC Engineers, Inc.

Nationwide Permit 401 WQA and CZC Conditions
Certified March 7, 2017

NWP 12: Utility Line Activities

Conditions of the 401 Water Quality Certification:

1. If the utility line activity involves more than 10 aquatic site crossings (not including directionally bored crossings), the utility line activity will not be certified under this NWP and will require separate approval through SCDHEC's individual certification process.
2. This NWP is not certified for activities located in or adjacent to (as determined by SCDHEC) waters defined (as per Regulation 61-68) as Outstanding National Resource Waters (ONRW), Outstanding Resource Waters (ORW), or Trout Waters.
3. This NWP is not certified for activities that cause the loss of more than 300 linear feet of stream bed.

Conditions of the Coastal Zone Consistency Determination:

Provided all the conditions of the 401 Water Quality Certification, plus the following conditions are included, the NWP will be consistent with the S.C. Coastal Zone Management Program.

1. The use of multiple NWPs on one tract or land parcel is not approved in the Coastal Zone without SCDHEC OCRM concurrence.
2. Impacts to aquatic sites associated with the construction of temporary, permanent and maintenance easements must be limited to a total width of 50' (including filling, excavation and clearing) except where required for safety reasons.
3. A compensatory mitigation plan must be submitted and approved by the SCDHEC for projects with impacts exceeding 0.10 acres or 300 linear feet.

South Carolina Board of Health and Environmental Control

Guide to Board Review

Pursuant to S.C. Code Ann. § 44-1-60

The decision of the South Carolina Department of Health and Environmental Control (Department) becomes the final agency decision fifteen (15) calendar days after notice of the decision has been mailed to the applicant, permittee, licensee and affected persons who have requested in writing to be notified, unless a written request for final review accompanied by a filing fee in the amount of \$100 is filed with Department by the applicant, permittee, licensee or affected person.

Applicants, permittees, licensees, and affected parties are encouraged to engage in mediation or settlement discussions during the final review process.

If the Board declines in writing to schedule a final review conference, the Department's decision becomes the final agency decision and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court within thirty (30) calendar days after notice is mailed that the Board declined to hold a final review conference. In matters pertaining to decisions under the South Carolina Mining Act, appeals should be made to the South Carolina Mining Council.

I. Filing of Request for Final Review

1. A written Request for Final Review (RFR) and the required filing fee of one hundred dollars (\$100) must be received by Clerk of the Board within fifteen (15) calendar days after notice of the staff decision has been mailed to the applicant, permittee, licensee, or affected persons. If the 15th day occurs on a weekend or State holiday, the RFR must be received by the Clerk on the next working day. RFRs will not be accepted after 5:00 p.m.
2. RFRs shall be in writing and should include, at a minimum, the following information:
 - The grounds for amending, modifying, or rescinding the staff decision;
 - a statement of any significant issues or factors the Board should consider in deciding how to handle the matter;
 - the relief requested;
 - a copy of the decision for which review is requested; and
 - mailing address, email address, if applicable, and phone number(s) at which the requestor can be contacted.
3. RFRs should be filed in person or by mail at the following address:
South Carolina Board of Health and Environmental Control
Attention: Clerk of the Board
2600 Bull Street
Columbia, South Carolina 29201
Alternatively, RFR's may be filed with the Clerk by facsimile (803-898-3393) or by electronic mail (boardclerk@dhec.sc.gov).
4. The filing fee may be paid by cash, check or credit card and must be received by the 15th day.
5. If there is any perceived discrepancy in compliance with this RFR filing procedure, the Clerk should consult with the Chairman or, if the Chairman is unavailable, the Vice-Chairman. The Chairman or the Vice-Chairman will determine whether the RFR is timely and properly filed and direct the Clerk to (1) process the RFR for consideration by the Board or (2) return the RFR and filing fee to the requestor with a cover letter explaining why the RFR was not timely or properly filed. Processing an RFR for consideration by the Board shall not be interpreted as a waiver of any claim or defense by the agency in subsequent proceedings concerning the RFR.
6. If the RFR will be processed for Board consideration, the Clerk will send an Acknowledgement of RFR to the Requestor and the applicant, permittee, or licensee, if other than the Requestor. All personal and financial identifying information will be redacted from the RFR and accompanying documentation before the RFR is released to the Board, Department staff or the public.
7. If an RFR pertains to an emergency order, the Clerk will, upon receipt, immediately provide a copy of the RFR to all Board members. The Chairman, or in his or her absence, the Vice-Chairman shall based on the circumstances, decide whether to refer the RFR to the RFR Committee for expedited review or to decline in writing to schedule a Final Review Conference. If the Chairman or Vice-Chairman determines review by the RFR Committee is appropriate, the Clerk will forward a copy of the RFR to Department staff and Office of General Counsel. A Department response and RFR Committee review will be provided on an expedited schedule defined by the Chairman or Vice-Chairman.
8. The Clerk will email the RFR to staff and Office of General Counsel and request a Department Response within eight (8) working days. Upon receipt of the Department Response, the Clerk will forward the RFR and Department Response to all Board members for review, and all Board members will confirm receipt of the RFR to the Clerk by email. If a Board member does not confirm receipt of the RFR within a twenty-four (24) hour period, the Clerk will contact the Board member and confirm receipt. If a Board member believes the RFR should be considered by the RFR Committee, he or she will respond to the Clerk's email within forty-eight (48) hours and will request further review. If no Board member requests further review of the RFR within the forty-eight (48) hour period, the Clerk will send a letter by certified mail to the Requestor, with copy by

regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Final Review Conference. Contested case guidance will be included within the letter.

NOTE: If the time periods described above end on a weekend or State holiday, the time is automatically extended to 5:00 p.m. on the next business day.

9. If the RFR is to be considered by the RFR Committee, the Clerk will notify the Presiding Member of the RFR Committee and the Chairman that further review is requested by the Board. RFR Committee meetings are open to the public and will be public noticed at least 24 hours in advance.
10. Following RFR Committee or Board consideration of the RFR, if it is determined no Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Conference. Contested case guidance will be included within the letter.

II. Final Review Conference Scheduling

1. If a Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, informing the Requestor of the determination.
2. The Clerk will request Department staff provide the Administrative Record.
3. The Clerk will send Notice of Final Review Conference to the parties at least ten (10) days before the Conference. The Conference will be publically noticed and should:
 - include the place, date and time of the Conference;
 - state the presentation times allowed in the Conference;
 - state evidence may be presented at the Conference;
 - if the conference will be held by committee, include a copy of the Chairman's order appointing the committee; and
 - inform the Requestor of his or her right to request a transcript of the proceedings of the Conference prepared at Requestor's expense.
4. If a party requests a transcript of the proceedings of the Conference and agrees to pay all related costs in writing, including costs for the transcript, the Clerk will schedule a court reporter for the Conference.

III. Final Review Conference and Decision

1. The order of presentation in the Conference will, subject to the presiding officer's discretion, be as follows:
 - Department staff will provide an overview of the staff decision and the applicable law to include [10 minutes]:
 - Type of decision (permit, enforcement, etc.) and description of the program.
 - Parties
 - Description of facility/site
 - Applicable statutes and regulations
 - Decision and materials relied upon in the administrative record to support the staff decision.
 - Requestor(s) will state the reasons for protesting the staff decision and may provide evidence to support amending, modifying, or rescinding the staff decision. [15 minutes] *NOTE: The burden of proof is on the Requestor(s)*
 - Rebuttal by Department staff [15 minutes]
 - Rebuttal by Requestor(s) [10 minutes]

Note: Times noted in brackets are for information only and are superseded by times stated in the Notice of Final Review Conference or by the presiding officer.
2. Parties may present evidence during the conference; however, the rules of evidence do not apply.
3. At any time during the conference, the officers conducting the Conference may request additional information and may question the Requestor, the staff, and anyone else providing information at the Conference.
4. The presiding officer, in his or her sole discretion, may allow additional time for presentations and may impose time limits on the Conference.
5. All Conferences are open to the public.
6. The officers may deliberate in closed session.
7. The officers may announce the decision at the conclusion of the Conference or it may be reserved for consideration.
8. The Clerk will mail the written final agency decision (FAD) to parties within 30 days after the Conference. The written decision must explain the basis for the decision and inform the parties of their right to request a contested case hearing before the Administrative Law Court or in matters pertaining to decisions under the South Carolina Mining Act, to request a hearing before the South Carolina Mining Council. The FAD will be sent by certified mail, return receipt requested.
9. Communications may also be sent by electronic mail, in addition to the forms stated herein, when electronic mail addresses are provided to the Clerk.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, CHARLESTON DISTRICT
1949 INDUSTRIAL PARK ROAD, ROOM 140
CONWAY, SOUTH CAROLINA 29526

REPLY TO
ATTENTION OF:

NOV 13 2018

Regulatory Division

Ms. Christy Everett
c/o Mr. James Wooten
DDC Engineers, Inc
1298 Professional Drive
Myrtle Beach, South Carolina 29577

Dear Mr. Wooten:

This letter is in response to a Pre-Construction Notification (PCN) (SAC-2017-01687) which we received on October 23, 2017, and was considered complete on November 2, 2018. By submittal of the PCN, you requested verification that the proposed project is authorized by a Department of the Army (DA) Nationwide Permit (NWP).

The PCN contains the following identifying information for this project. The work affecting waters of the United States is part of an overall project known as the Bucksville Waterline Installation. The activities in waters of the United States include the installation of approximately 7 miles of a new 48" waterline within a 20' wide construction corridor located within an existing maintained right-of-way. The work will involve trenching and backfilling within freshwater wetlands and directional boring beneath the Waccamaw River. Construction mats will be used in wetlands and floodplain areas to facilitate access. The project involves impacts to not more than 4.36 acres of waters of the United States. Specifically, this letter authorizes temporary impacts to 4.36 acres of wetlands and/or other waters. The project starts near the intersection of U.S. Route 701 and Bucksville Drive and continues north east through existing right of way, the pipeline then travels east towards the Waccamaw River and ties into an existing waterline located at the Grand Strand Water & Sewer Plant west of S.C. Highway 544 in Horry County, South Carolina (Center Coordinates: Latitude: 33.7135 °N, Longitude: -79.0512 °W). The PCN also includes the following supplemental information:

- a. Drawing sheets 1-13 of 13 titled "SAC-2017-01687 / Bucksville Waterline Installation / Applicant: Grand Strand Water and Sewer Authority / Horry County, SC" and dated October 12, 2017, revised date October 30, 2018.
- b. A frac-out plan titled "FRAC-OUT RESPONSE PLAN / 48-in. (54-in. O.D.) Water Pipeline Connection Project / Bore Under the Waccamaw" and dated October 18, 2017, revised September 28, 2018.
- c. A delineation of wetlands, other special aquatic sites, and other waters

Based on a review of the PCN, including the supplemental information indicated above, it has been determined that the proposed activity will result in minimal individual and cumulative adverse environmental effects and is not contrary to the public interest. Furthermore, the activity meets the terms and conditions of NWP 12.

For this authorization to remain valid, the project must comply with the enclosed NWP General Conditions, Charleston District Regional Conditions, and the following special conditions:

- a. That prior to beginning the authorized work the permittee must obtain and provide the Corps with a copy of all appropriate state certifications and/or authorizations (e.g., 401 Water Quality Certification, Coastal Zone Management Act concurrence, State Navigable Waters Permit, etc.). This PROVISIONAL NWP is NOT VALID until the permittee obtains and provides the requisite state certification(s) and/or authorization(s) in accordance with this special condition.
- b. That impacts to aquatic areas do not exceed those specified in the above mentioned PCN, including any supplemental information or revised permit drawings that were submitted to the Corps by the permittee.
- c. That the construction, use, and maintenance of the authorized activity is in accordance with the information given in the PCN, including the supplemental information listed above, and is subject to any conditions or restrictions imposed by this letter.
- d. That the permittee shall submit the attached signed compliance certification to the Corps within 30 days following completion of the authorized work.
- e. Prior to beginning the authorized work, the permittee must coordinate with the local NFIP flood plain manager and comply with FEMA requirements. A list of NFIP floodplain managers may be found at:
<http://www.dnr.sc.gov/water/flood/index.html>.
- f. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- g. Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the U.S.
- h. The permittee must install and maintain, at their expense, any safety lights and signals prescribed by the U.S. Coast Guard (USCG), through regulations or otherwise, on authorized facilities. The USCG may be reached at the following address and telephone number: (as of February 2013) U. S. Coast Guard District Seven, Waterways Management Branch, 909 SE 1st Ave, Suite 406, Miami, FL. 33131, and 305-415-6755 or 305-415-6750.

- i. The National Ocean Service (NOS) has been notified of this authorization. The permittee must notify NOS and this office in writing, at least two weeks before beginning work and upon completion of the activity authorized by this permit. Notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). Notifications to NOS will be sent to the following address: National Oceanic and Atmospheric Administration, Office of Coast Survey, Marine Chart Division, Nautical Data Branch, NCS-26, 1315 East West Highway, Silver Springs, Maryland 20910-3282.
- j. In the event of a frac-out, the permittee will immediately implement and comply with the attached frac-out response plan titled "FRAC-OUT RESPONSE PLAN / 48-in. (54-in. O.D.) Water Pipeline Connection Project / Bore Under the Waccamaw" and dated October 18, 2017, revised September 28, 2018.
- k. If any previously unknown historic, cultural or archeological remains and artifacts are discovered while accomplishing the activity authorized by this permit, the permittee must immediately notify the district engineer of what has been found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

This verification is valid until March 18, 2022, unless the district engineer modifies, suspends, or revokes the NWP authorization in accordance with 33 CFR 330.5(d). If prior to this date, the NWP authorization is reissued without modification or the activity complies with any subsequent modification of the NWP authorization, the verification continues to remain valid until March 18, 2022. If you commence, or are under contract to commence, this activity before the NWP expires, or the NWP is modified, suspended, or revoked by the Chief of Engineers or division engineer in accordance with 33 CFR 330.5(b) or (c), respectively, so that the activity would no longer comply with the terms and conditions of the NWP, you will have 12 months after the date the NWP expires or is modified, suspended, or revoked, to complete the activity under the present terms and conditions of this NWP.

This NWP is being verified based on the information you have provided. It is your responsibility to read the attached NWP(s) along with the General, Regional, and Special Conditions before you begin work. If you determine that your project will not be able to meet the NWP and the conditions, you must contact the Corps before you proceed.

In all future correspondence concerning this matter, please refer to our file number SAC-2017-01687. A copy of this letter is being forwarded to certain State and/or Federal agencies

for their information. If you have any questions concerning this matter, please contact Erica L. Stone, Project Manager, at (843) 365-4239.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob Huff', written over a horizontal line.

Rob Huff
Watershed Manager

Enclosures
Permit Drawings
Compliance Certification Form

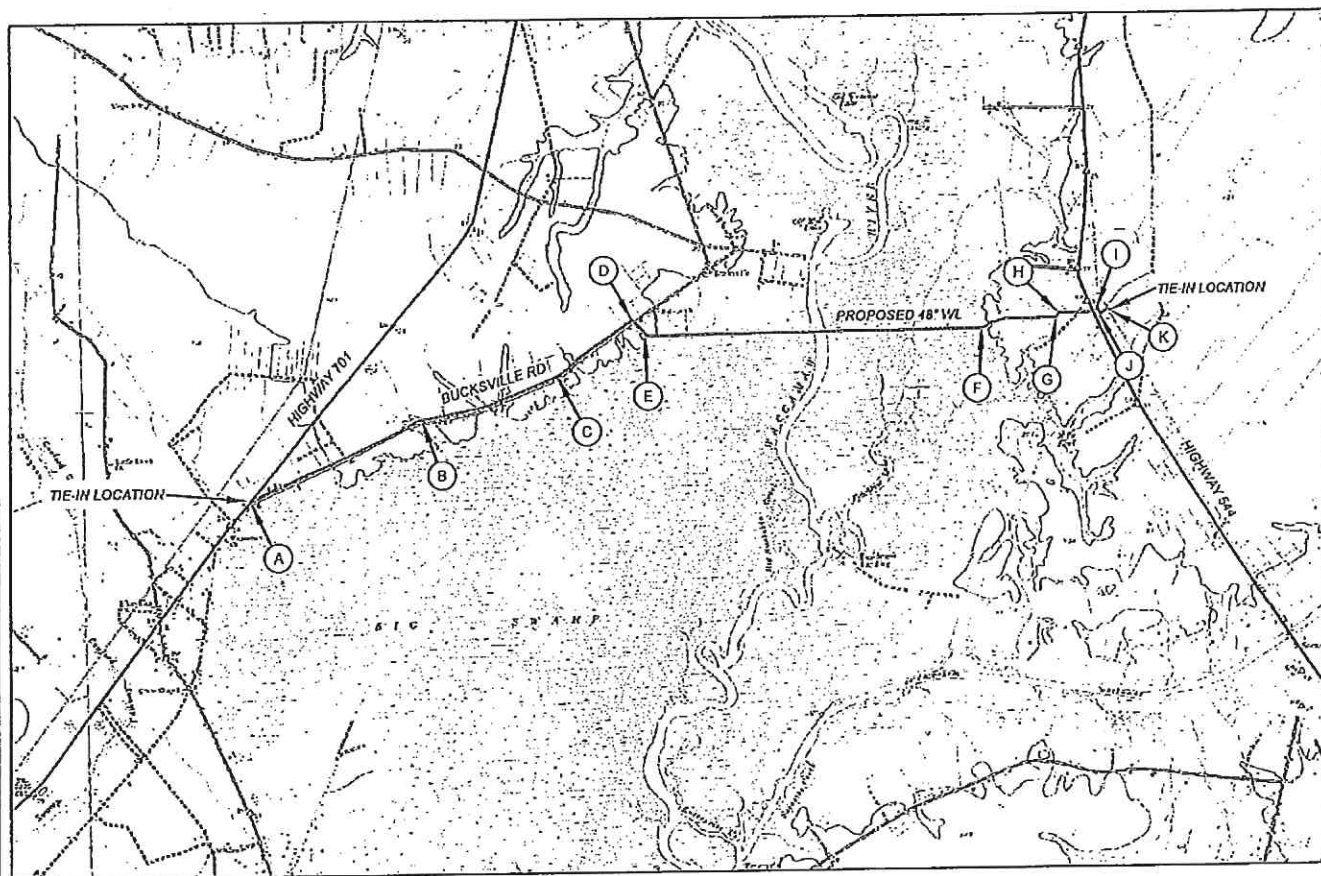
Copies Furnished:

Ms. Christy Everett
Grand Strand Water and Sewer
P.O. Box 2368
Conway, South Carolina 29528

South Carolina Department of
Health and Environmental Control
Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201

South Carolina Department of Health
and Environmental Control
Office of Ocean and Coastal
Resource Management
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

National Oceanic and Atmospheric Administration
Office of Coast Survey, Marine Chart Division
Nautical Data Branch, NCS-26
1315 East West Highway
Silver Springs, Maryland 20910-3282



**WATERLINE CONSTRUCTION COORIDOR
CENTERLINE COORDINATES**

Location	Latitude	Longitude
Location	Latitude	Longitude
A	33 Deg. 42' 1.7"	-79 Deg. 08' 31.6"
B	33 Deg. 42' 24.0"	-79 Deg. 05' 30.0"
C	33 Deg. 42' 35.7"	-79 Deg. 04' 40.8"
D	33 Deg. 42' 53.0"	-79 Deg. 04' 11.4"
E	33 Deg. 42' 48.8"	-79 Deg. 04' 6.4"
F	33 Deg. 42' 47.6"	-79 Deg. 02' 5.7"
G	33 Deg. 42' 49.3"	-79 Deg. 01' 40.0"
H	33 Deg. 42' 51.0"	-79 Deg. 01' 31.6"
I	33 Deg. 42' 51.2"	-79 Deg. 01' 24.8"
J	33 Deg. 42' 50.0"	-79 Deg. 01' 24.4"
K	33 Deg. 42' 51.7"	-79 Deg. 01' 19.9"

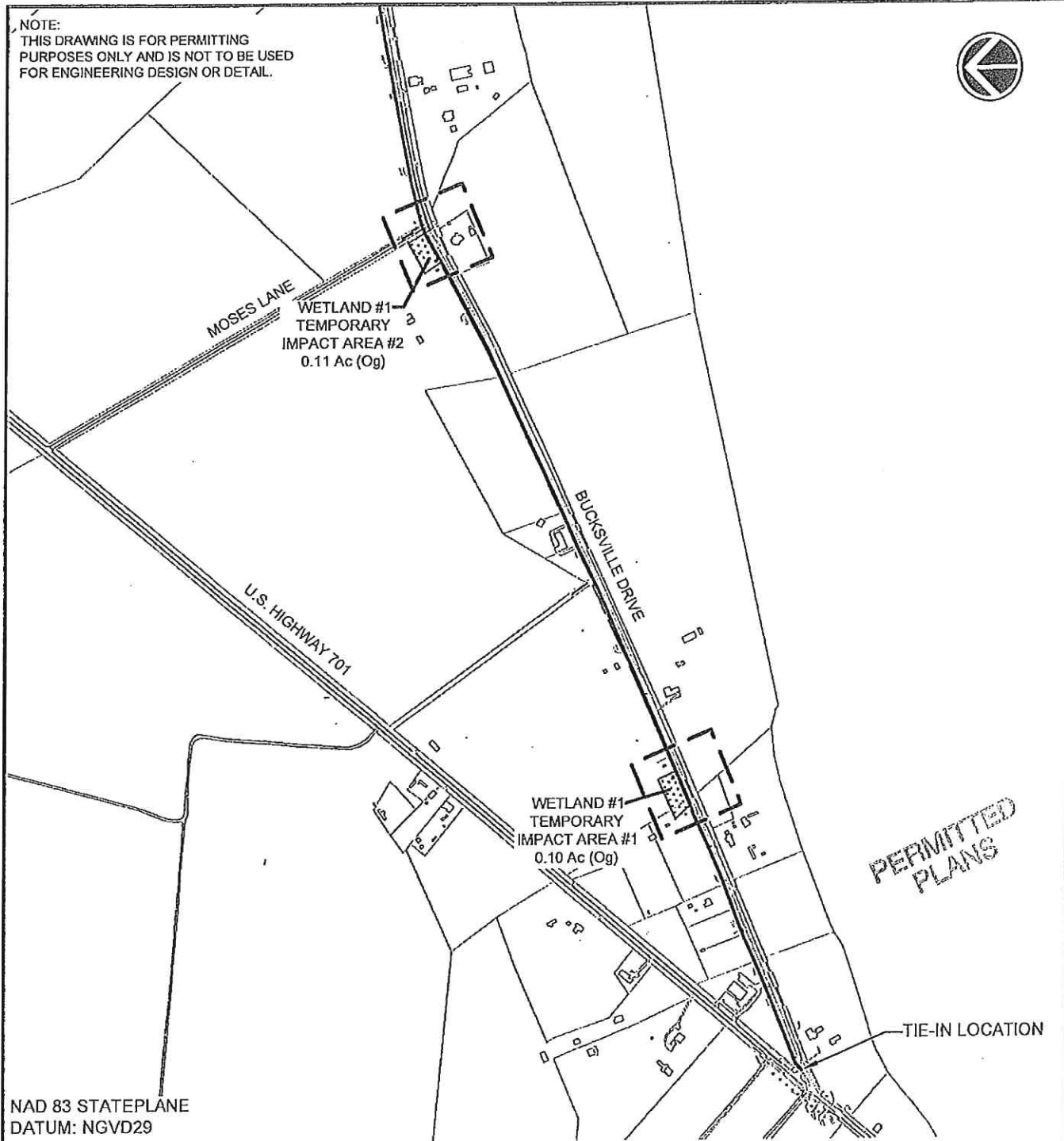
**PERMITTED
PLANS**

PROJECT CORRIDOR LOCATION MAP

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY
	PLAN VIEW		
SHEET 4 OF 49	DDC PN: 17010E	SCALE	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018 Sheet 1 of 13
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018	APPLICANT: GRAND STRAND V AND SEWER AUTHORITY		

NOTE:
THIS DRAWING IS FOR PERMITTING
PURPOSES ONLY AND IS NOT TO BE USED
FOR ENGINEERING DESIGN OR DETAIL.

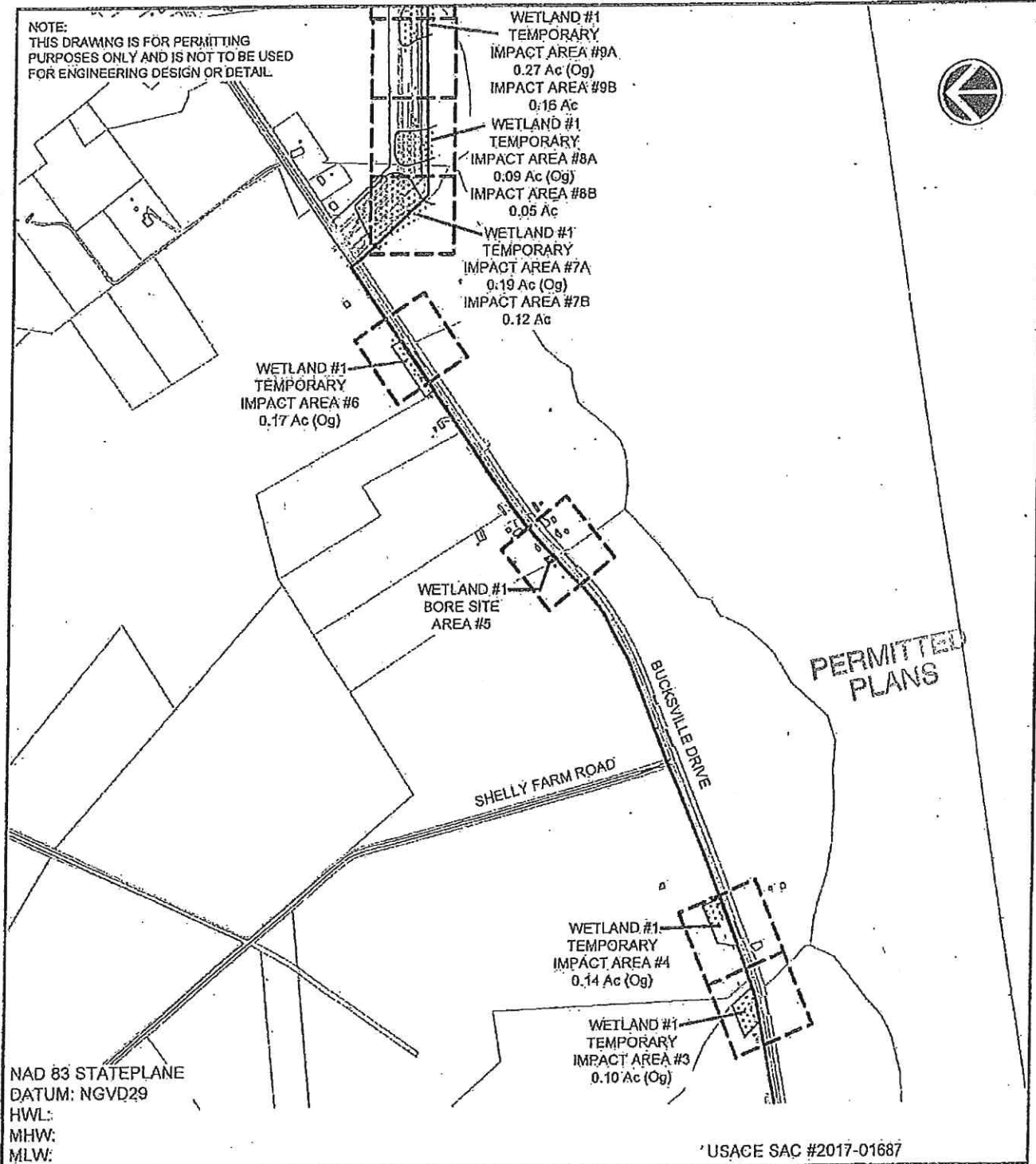


NAD 83 STATEPLANE
DATUM: NGVD29
HWL:
MHW:
MLW:

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: Horry STATE: SOUTH CAROLINA
	KEY MAP #1		
SHEET 5 OF 49	DDC PN: 17010E	SCALE:	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018	APPLICANT: GRAND STRAND AND SEWER AUTHORITY		

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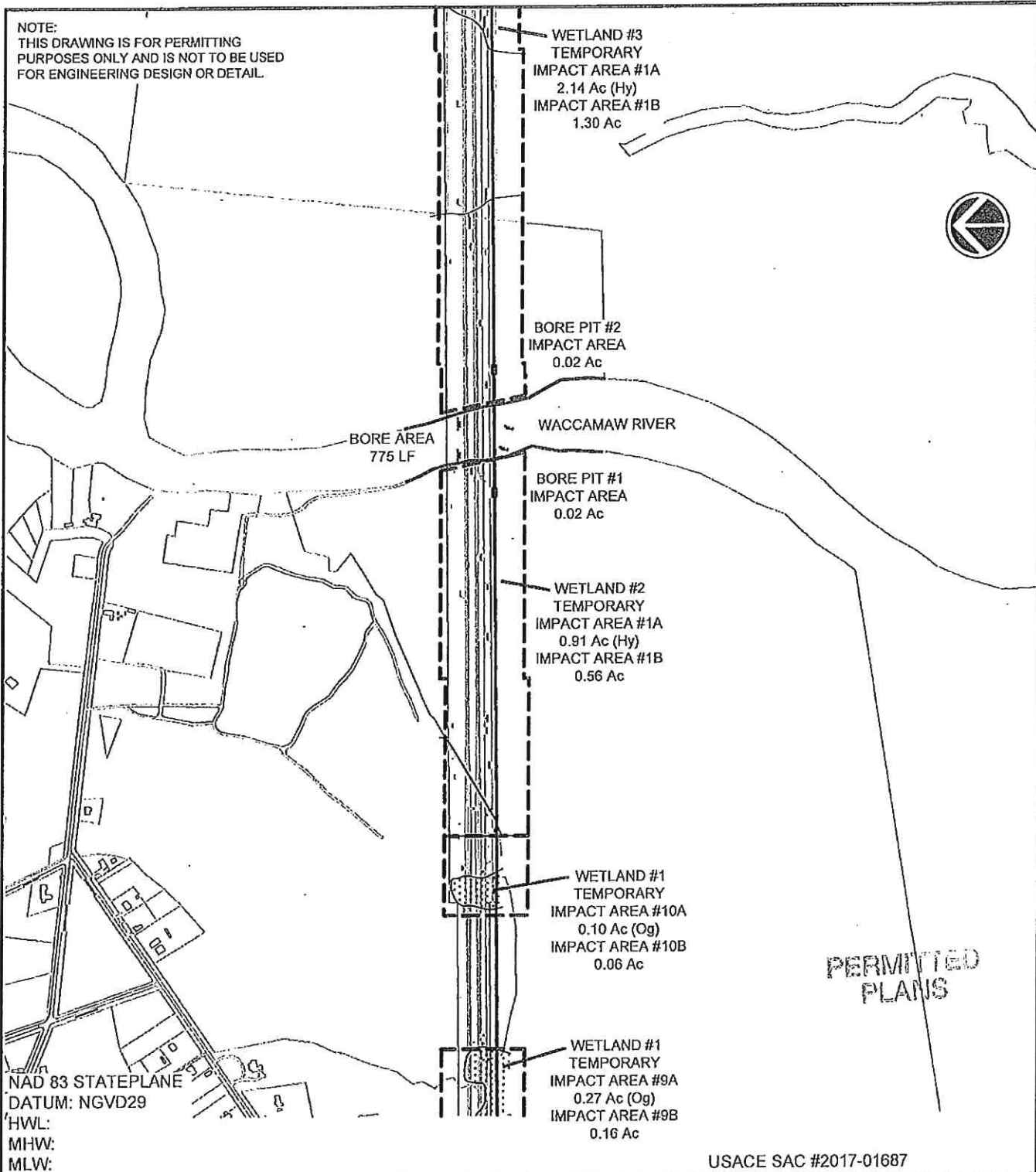


USACE SAC #2017-01687

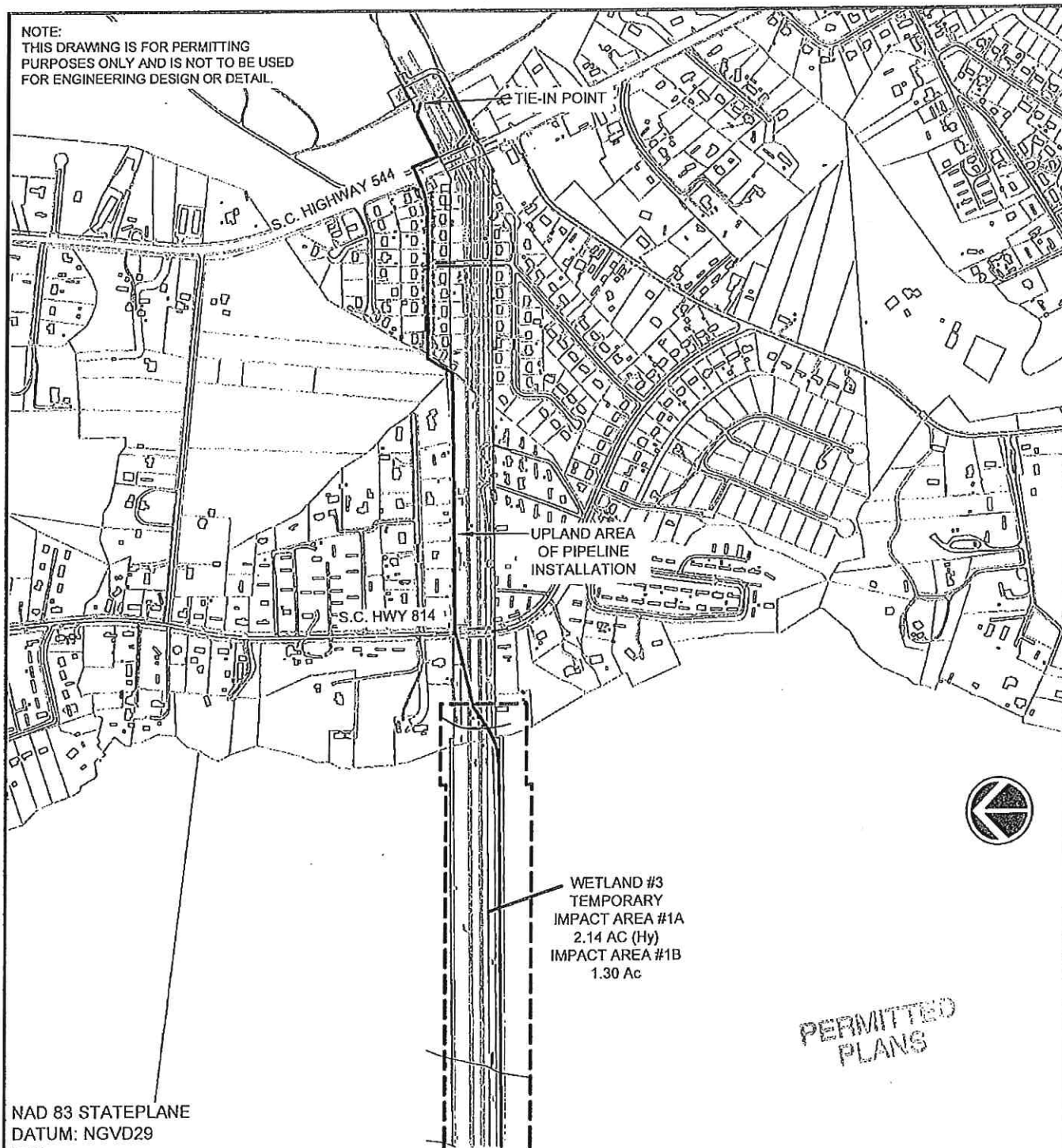
GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY STATE: SOUTH CAROLINA
	KEY MAP #2		
SHEET 6 OF 49	DDC PN: 17010E	SCALE:	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: OCT. 30, 2018	APPLICANT: GRAND STRAND V AND SEWER AUTHORITY		

SAC-2017-01687
Bucksville Waterline Installation
Applicant: Grand Strand Water and Sewer Authority
Horry County, SC
October 12, 2017, revised date October 30, 2018
Sheet 3 of 13

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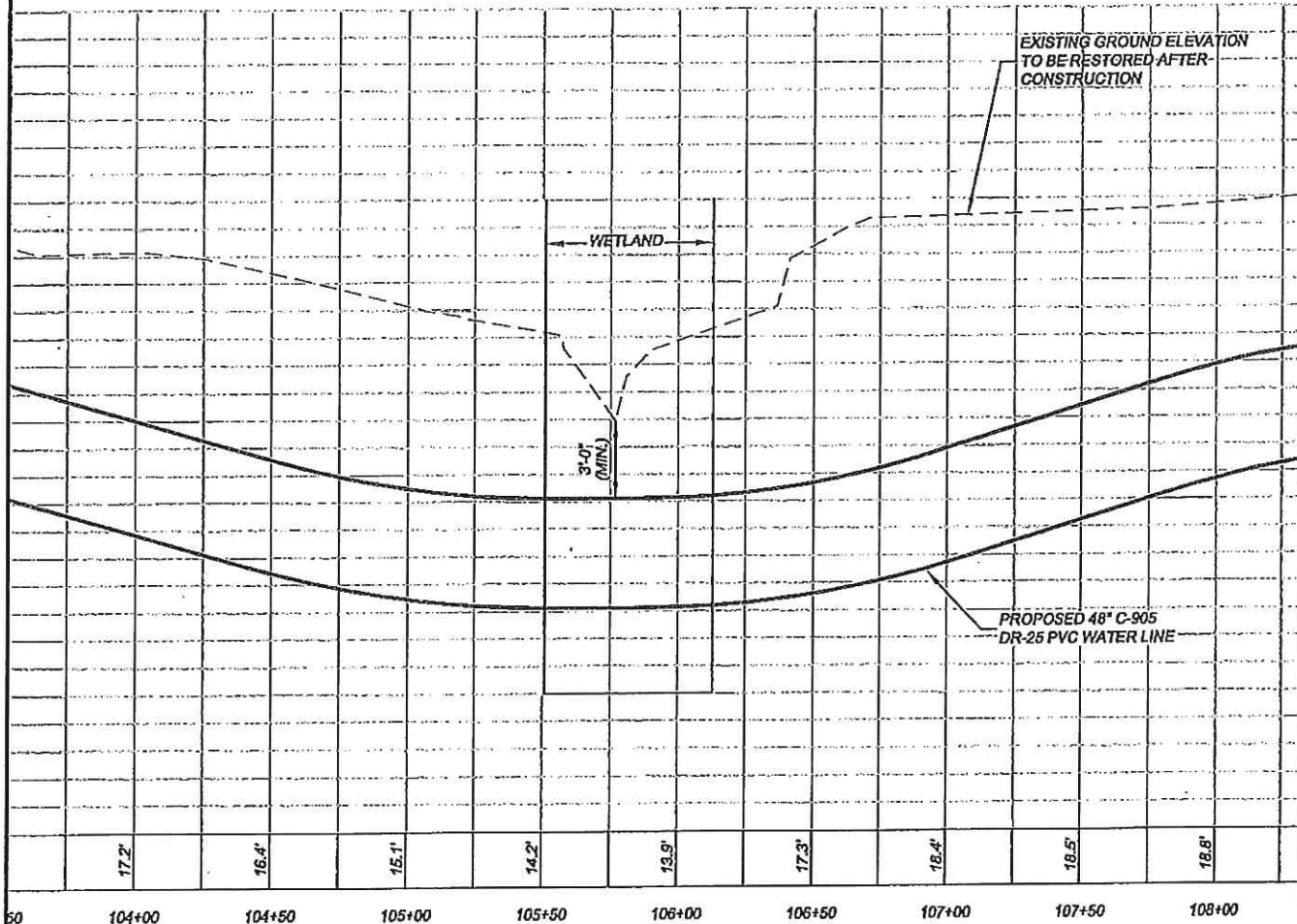
NAD 83 STATEPLANE
DATUM: NGVD29
HWL:
MHW:
MLW:

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY STATE: SOUTH CAROLINA
	KEY MAP #4		
SHEET 8 OF 49	DDC PN: 17010E	SCALE:	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018	APPLICANT: GRAND STRAND AND SEWER AUTHORITY		

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**TYPICAL OPEN CUT PROFILE
WETLAND #1
TEMPORARY IMPACT AREA #5**

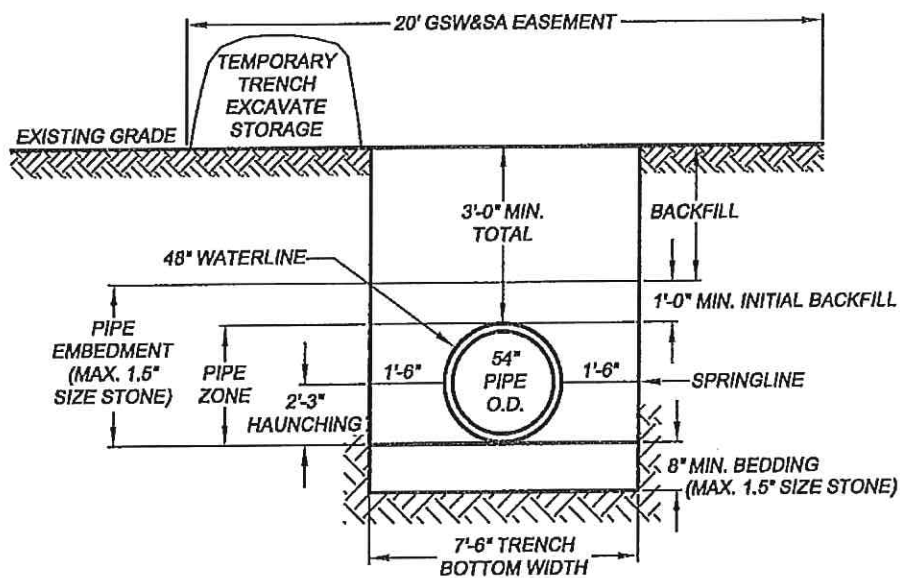


**PERMITTED
PLANS**

NAD 83 STATEPLANE
DATUM: NGVD29
HWL:
MHW:
MLW:

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY
	PROFILE VIEW		
SHEET 45 OF 49	DDC PN: 17010E	SCALE	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018 Sheet 6 of 13
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018	APPLICANT: GRAND STRAND AND SEWER AUTHORITY		



TYPICAL OPEN TRENCH DETAIL

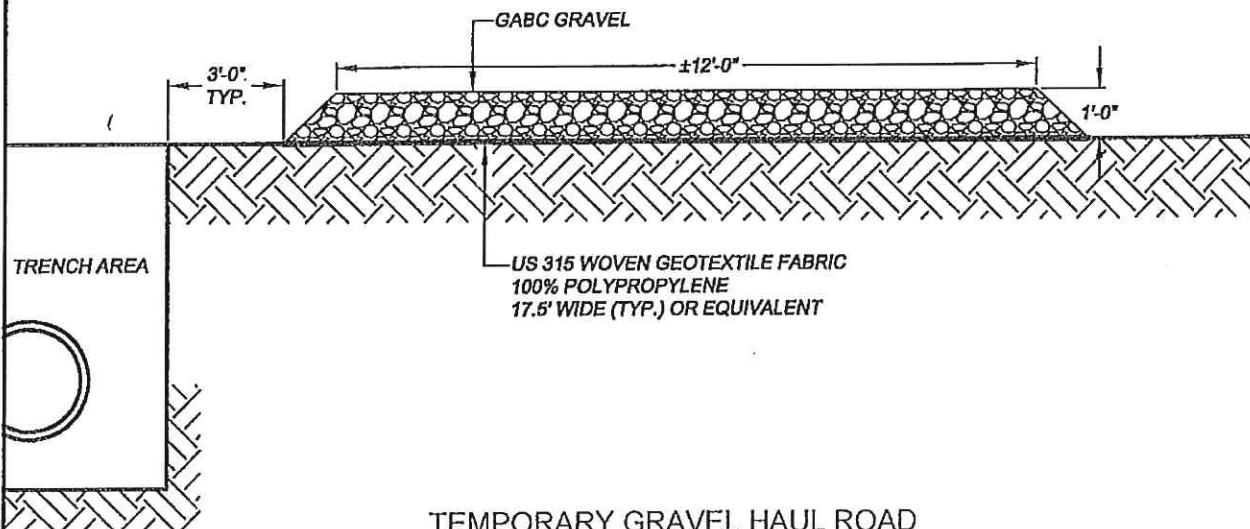
PERMITTED
PLANS

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY STATE: SOUTH CAROLINA
	DETAIL "A"		
SHEET 46 OF 49	DDC PN: 17010E	SCA	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018	APPLICANT: GRAND STRAND AND SEWER AUTHORITY		

SAC-2017-01687
Bucksville Waterline Installation
Applicant: Grand Strand Water and Sewer Authority
Horry County, SC
October 12, 2017, revised date October 30, 2018
Sheet 7 of 13

NOTE: TEMPORARY MATS TO BE USED
IN ALL WETLAND/FLOODPLAIN AREAS
DURING CONSTRUCTION.



TEMPORARY GRAVEL HAUL ROAD
S-C R.O.W. UPLAND EASEMENT AREAS ONLY

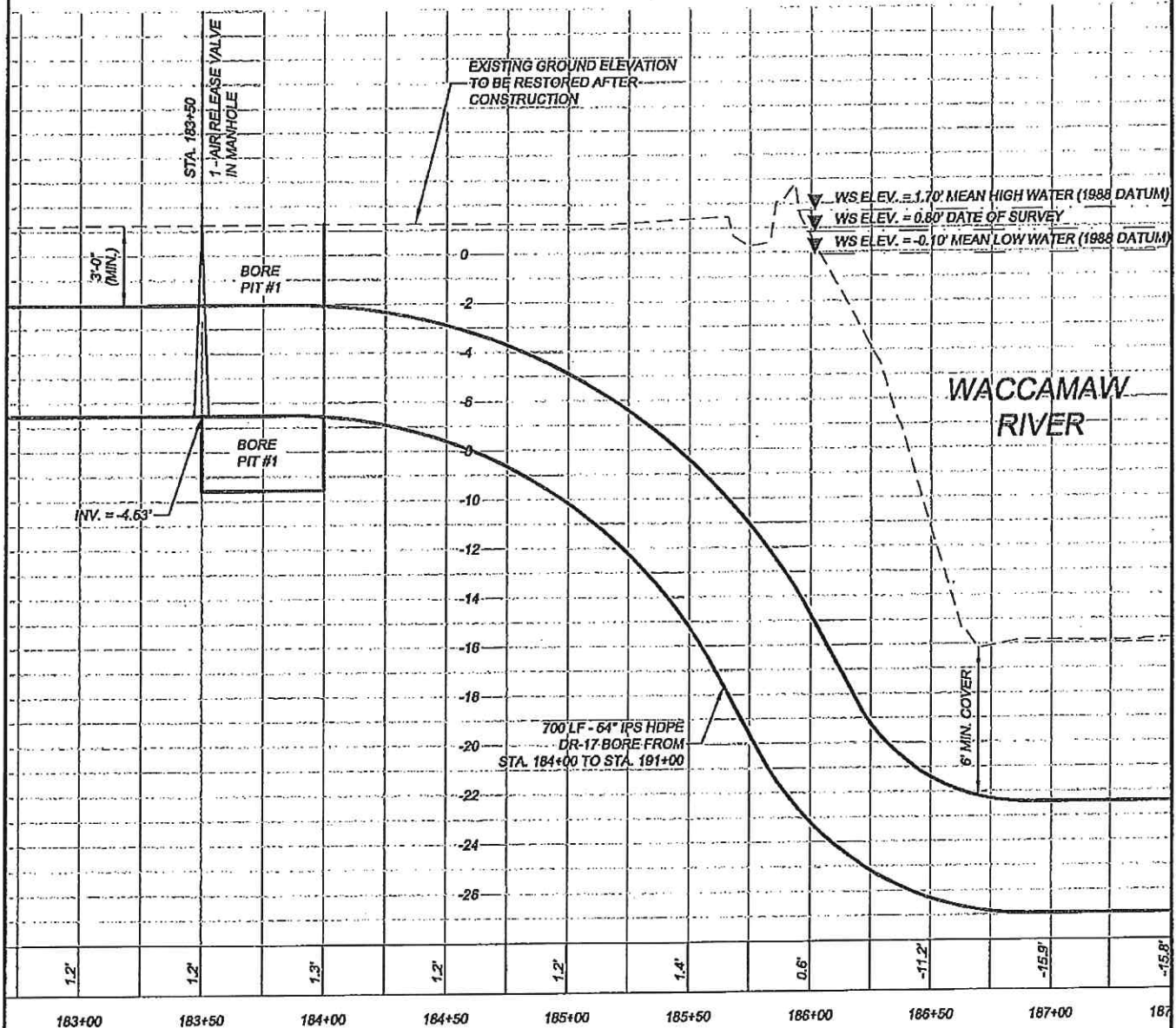
PERMITTED
PLANS

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT
	DETAIL "B"		COUNTY: HORRY
SHEET 47 OF 49	DDC PN: 17010E	SCA	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018 Sheet 8 of 13
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018	APPLICANT: GRAND STRAN AND SEWER AUTHORITY		

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BORE UNDER WACCAMAW RIVER (WEST)



NAD 83 STATEPLANE
DATUM: NGVD29
HWL: 7.94'
MHW: 7.44'
MLW: 5.28'

PERMITTED
PLANS

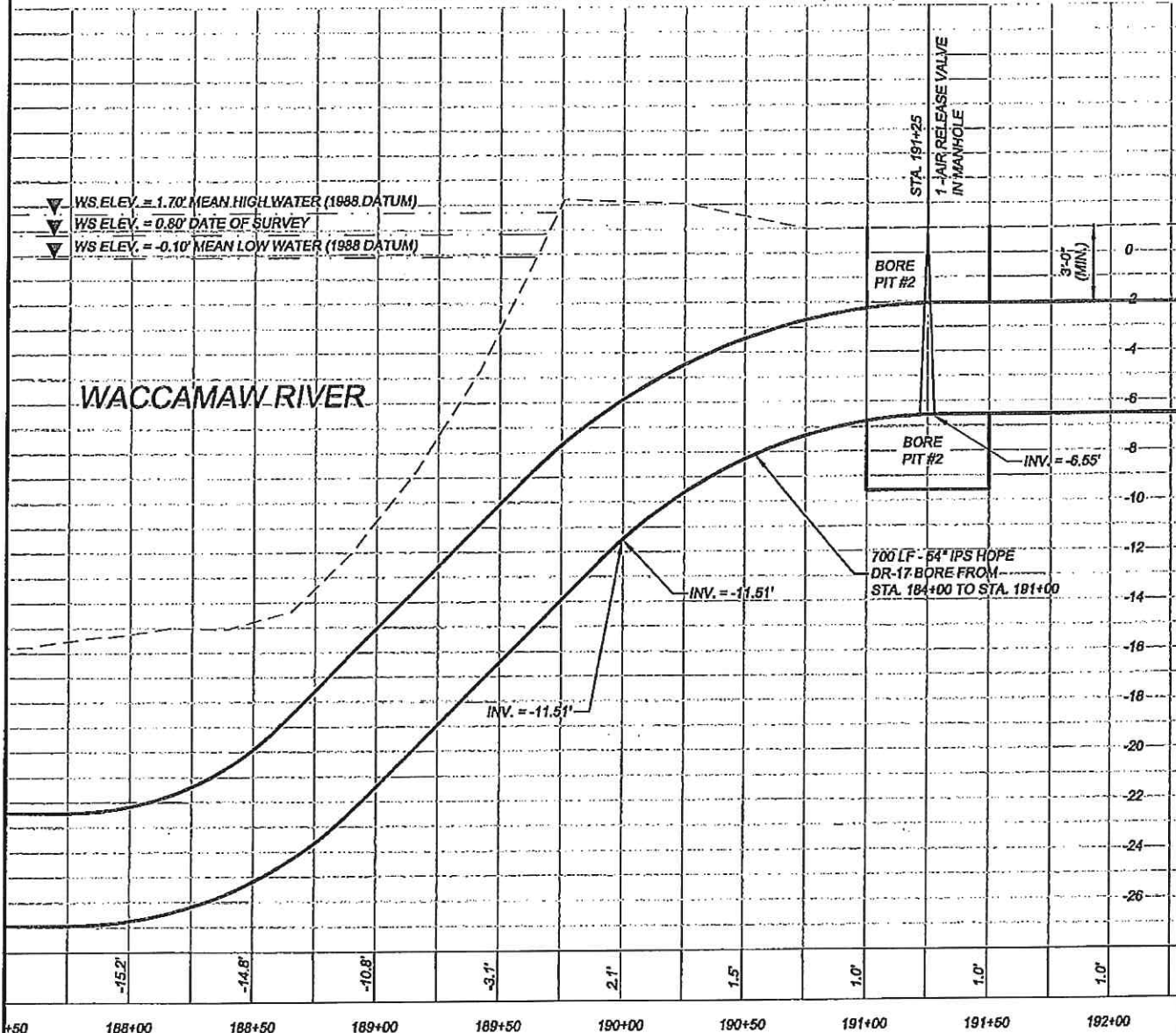
USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY STATE: SOUTH CAROLINA
	PROFILE VIEW		
SHEET 48 OF 49	DDC PN: 17010E	S	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018	APPLICANT: GRAND STRAND WATER AND SEWER AUTHORITY		

SAC-2017-01687
Bucksville Waterline Installation
Applicant: Grand Strand Water and Sewer Authority
Horry County, SC
October 12, 2017, revised date October 30, 2018
Sheet 9 of 13

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BORE UNDER WACCAMAW RIVER (EAST)



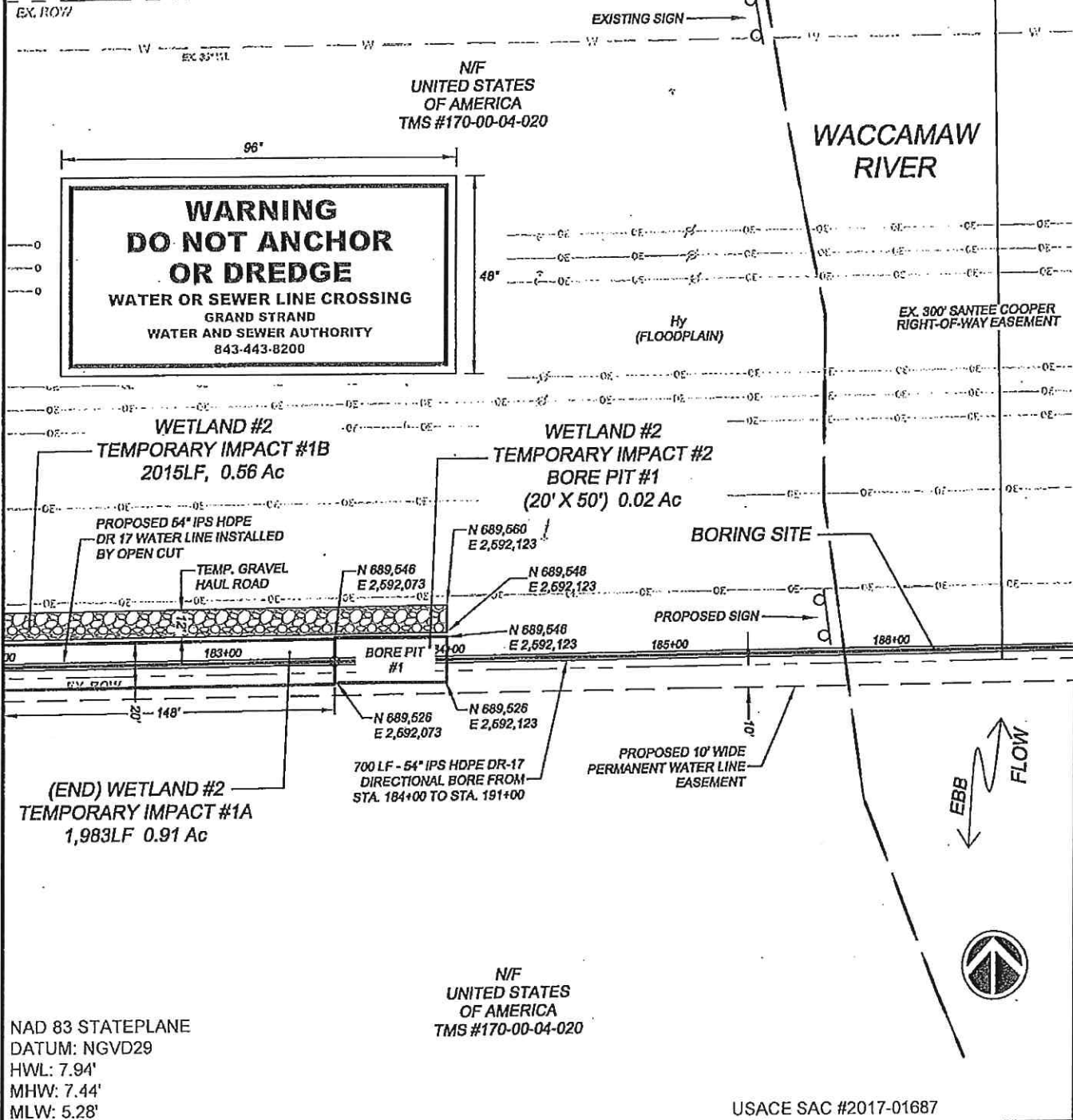
NAD 83 STATEPLANE
DATUM: NGVD29
HWL: 7.94'
MHW: 7.44'
MLW: 5.28'

PERMITTED
PLANS

USACE SAC #2017-01687

<p>GSW&SA 48" WATERLINE INSTALLATION</p>	<p>NWP #12 OPEN CUT/BORE</p>	<p>PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY STATE: SOUTH CAROLINA</p>
<p>SHEET 49 OF 49</p>	<p>DDC PN: 17010E</p>	<p>SCA</p>
<p>ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: SEPT. 24, 2018</p>	<p>APPLICANT: GRAND STRAI AND SEWER AUTHORITY</p>	<p>SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018 Sheet 10 of 13</p>

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FOR ENGINEERING DESIGN OR DETAIL.



NAD 83 STATEPLANE
DATUM: NGVD29
HWL: 7.94'
MHW: 7.44'
MLW: 5.28'

N/F
UNITED STATES
OF AMERICA
TMS #170-00-04-020

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY STATE: SOUTH CAROLINA
	PLAN VIEW		
SHEET 25 OF 49	DDC PN: 17010E	SCALE	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC October 12, 2017, revised date October 30, 2018
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: AUGUST 7, 2018	APPLICANT: GRAND STRAND AND SEWER AUTHORITY		

SAC-2017-01687
Bucksville Waterline Installation
Applicant: Grand Strand Water and Sewer Authority
Horry County, SC
October 12, 2017, revised date October 30, 2018
Sheet 11 of 13

NOTE:
THIS DRAWING IS FOR PERMITTING
PURPOSES ONLY AND IS NOT TO BE USED
FOR ENGINEERING DESIGN OR DETAIL.

PROPOSED SIGN

N/A (START) WETLAND #3
UNITED STATES OF AMERICA
TMS #170- 4686LF, 1.29 Ac

WACCAMAW
RIVER

96'
WARNING
DO NOT ANCHOR
OR DREDGE
WATER OR SEWER LINE CROSSING
GRAND STRAND
WATER AND SEWER AUTHORITY
843-443-8200
48'

EX. 300' SANTEE COOPER
RIGHT-OF-WAY EASEMENT

WETLAND #3
TEMPORARY IMPACT #2
BORE PIT #2
(20' X 50') 0.02 Ac

BORING SITE

H_y
(FLOODPLAIN)

TEMP. GRAVEL
HAUL ROAD

N 689,688
E 2,592,823

N 689,653
E 2,592,873

N 689,559
E 2,592,823

N 689,553
E 2,592,823

N 689,553
E 2,592,873

N 689,533
E 2,592,823

N 689,533
E 2,592,873

EXISTING SIGN

BORE PIT #2

700 LF - OF 64" HDPE DR-17
DIRECTIONAL BORE FROM
STA. 184+00 TO STA. 191+00

(START) WETLAND #3
TEMPORARY IMPACT #1A
4,663LF, 2.14 Ac

PROPOSED 10' WIDE
PERMANENT WATER LINE
EASEMENT

EBB
FLOW

NAD 83 STATEPLANE
DATUM: NGVD29
HWL: 7.94'
MHW: 7.44'
MLW: 5.28'

N/A
UNITED STATES
OF AMERICA
TMS #170-00-04-024



USACE SAC #2017-01687

GSW&SA
48" WATERLINE
INSTALLATION

NWP #12
OPEN CUT/BORE

PURPOSE: UTILITY LINE
REPLACEMENT

COUNTY: HORRY
STATE: SOUTH CAROLINA

SHEET 26 OF 49

DDC PN: 17010E

SCALE

ORIGINAL DATE: OCT. 12, 2017
REVISED DATE: AUGUST 7, 2018

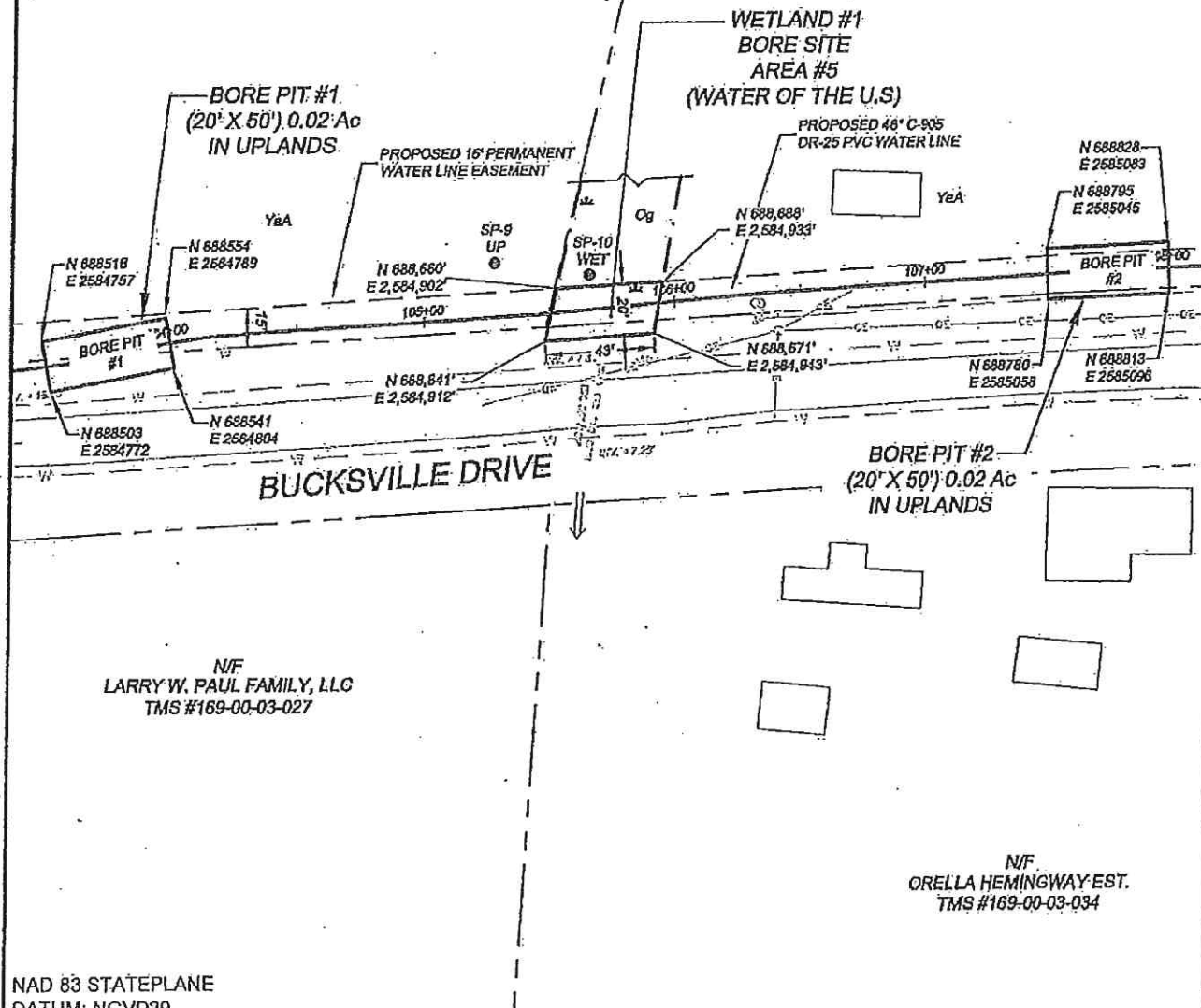
APPLICANT: GRAND STRAND
AND SEWER AUTHORITY

SAC-2017-01687
Bucksville Waterline Installation
Applicant: Grand Strand Water and Sewer Authority
Horry County, SC
October 12, 2017, revised date October 30, 2018
Sheet 12 of 13

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N/F
LARRY W. PAUL FAMILY, LLC
TMS #169-00-03-027

N/F
WILLIAM WENDELL MOSES
TMS #169-00-03-031



NAD 83 STATEPLANE
DATUM: NGVD29
HWL:
MHW:
MLW:

USACE SAC #2017-01687

GSW&SA 48" WATERLINE INSTALLATION	NWP #12 OPEN CUT/BORE		PURPOSE: UTILITY LINE REPLACEMENT COUNTY: HORRY STATE: SOUTH CAROLINA
	PLAN VIEW		
SHEET 13 OF 49	DDC PN: 17010E	SCALE	SAC-2017-01687 Bucksville Waterline Installation Applicant: Grand Strand Water and Sewer Authority Horry County, SC
ORIGINAL DATE: OCT. 12, 2017 REVISED DATE: OCT. 30, 2018	APPLICANT: GRAND STRAND AND SEWER AUTHORITY		

SAC-2017-01687
Bucksville Waterline Installation
Applicant: Grand Strand Water and Sewer Authority
Horry County, SC
October 12, 2017, revised date October 30, 2018
Sheet 13 of 13

Project Number: SAC-2017-01687

Name of Permittee: Grand Strand Water and Sewer

Date of Issuance: NOV 13 2018

Upon completion of the activity authorized by this Nationwide Permit/General Permit authorization letter, including any compensatory mitigation, sign this certification and return it to the following address:

U.S. Army Corps of Engineers
Regulatory Division – Northeast Branch
1949 Industrial Park Road, Suite 140
Conway, South Carolina 29526

Please note that the authorized activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of your Nationwide Permit authorization letter this office may suspend, modify, or revoke this authorization.

=====

I hereby certify that the work authorized by the above referenced Nationwide Permit/General Permit authorization letter has been completed in accordance with the terms and conditions of said authorization letter, including the performance of any required compensatory mitigation.

Signature of Permittee

Nationwide Permit 401 and CZC Specific Conditions
Certified March 7, 2017

NWP 12: Utility Line Activities

Conditions of the 401 Water Quality Certification:

1. If the utility line activity involves more than 10 aquatic site crossings (not including directionally bored crossings), the utility line activity will not be certified under this NWP and will require separate approval through SCDHEC's individual certification process.
2. This NWP is not certified for activities located in or adjacent to (as determined by SCDHEC) waters defined (as per Regulation 61-68) as Outstanding National Resource Waters (ONRW), Outstanding Resource Waters (ORW), or Trout Waters.
3. This NWP is not certified for activities that cause the loss of more than 300 linear feet of stream bed.

19-00198
68256**Application for Encroachment Permit**S.C. Department of Transportation
Form 637 (Rev 09/2015)PERMIT NUMBER: 19-00198
EXPIRATION DATE: 6-15-2020**Contact Information**

Applicant: Grand Strand Water and Sewer Authority
Street: 166 Jackson Bluff Road

City: Conway
State: SC **Zip Code:** 29528
Phone: (843)692-3200 **Fax:** (843)692-3210
Email: eks@ddcinc.com
Contact: Eric Sanford

Project Location**Primary County:**

County	Road Name
Horry	Hwy 701 Byp (US 701S) US-701S M.P. 3.77
Horry	Hwy 814 (S-814) S-814 M.P. 1.71
Horry	Bucksville Dr (S-475) S-475 M.P. 0.73-3.19
Horry	Dick Pond Rd (SC 544) SC-544 M.P. 6.80

1. Type of WATER**Encroachment:**

Request permission to install a 48" PVC of DIP water line in the right-of-way and along the edge of the right-of-way as shown on the attached plans.

2. Description of Location:

The project starts at the intersection of Highway 701 and Bucksville Drive, in Bucksville, South Carolina and runs along the northwest side of the right-of-way and in private easements of Bucksville Drive for approximately 2.4+/- miles and then turns to the southeast and runs along the southeast side of a Santee Cooper power line right-of-way in an easement for approximately 2.5+/- miles, across the Waccamaw River to the Socastee area of Horry County and then across the power line right-of-way at SC Highway 814 to the northeast side of the power line and then runs(CONTINUED ON ADDENDUM)

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and location of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)

42 INCHES COVER
REQUIRED ABOVE
UTILITY UNDER ROAD.

PRECONSTRUCTION MEETING REQUIRED AT SCDOT CONWAY OFFICE BEFORE STARTING WORK.
CALL 843-365-0001

APPLICANT IS REQUIRED TO PROVIDE COMPACTION ANALYSIS FROM A THIRD PARTY TESTER OR ALL SUBGRADE, BACKFILL, BASE AND ASPHALT LIFTS FOR ROADWAY CUTS AND REPAIRS.
NO WORK PERMITTED ON, UNDER, ABOVE ON US-701 OR SC-544 ON FRIDAYS, WEEKENDS, HOLIDAYS, OR IN INCLEMENT WEATHER.

NO LANE CLOSURES PERMITTED ON US-701/SC-544 WITHOUT EXPRESSED WRITTEN CONSENT FROM THE DEPARTMENT.

SEE SPECIAL PROVISIONS FOR DRIVEWAY OVERLAYS REQUIRED AND NO OPEN TRENCHING AROUND CROSS LINE PIPE

SP2.scdot.org/EncPermits/_layouts/15/scdot_encperappsp2.scdotencperappsp2.aspx

4-22-19

Customer Agreement

3. The undersigned applicant hereby requests the SCDOT to permit encroachment on the SCDOT right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof. The applicant agrees to comply with and be bound by the SCDOT's "A Policy for Accommodating Utilities on Highways Rights of way", "Standard Specifications for Highway Construction", the "General Provisions" and "Special Provisions", attached hereto or made a part hereof by reference, during the installation, operation and maintenance of said encroachment within the SCDOT's Right of Way. DISCHARGES OF STORM WATER AND NON-STORM WATER: Work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit(s) issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Work shall also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. The encroachment permit will not be issued until the applicant has received an NPDES construction permit from SC Department of Health and Environmental Control.

The applicant agrees to comply with all current SCDOT Standards Specifications for Highway Construction including all Supplemental Technical Specifications. The applicant hereby further agrees, and binds his/her/its heirs, personal representatives, successors, assigns, to assume any and all liability for accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing of the physical appurtenances contemplated herein.

Applicant's Name: Christy Everett

Date:

April 19, 2019

Applicant's Sig:

(Please print or type)
Christy Everett

Title: Chief Operations Officer

For Office Use Only

For Office Use Only

In accordance with your request and subject to all the provisions, terms, conditions, and restrictions stated in the application and the general and special provisions attached hereto, the SCDOT hereby approves your application for an encroachment permit. This permit shall become null and void unless the work contemplated herein shall have been completed prior to:

- ☐ See Attached Special Provision and/or Permit Requirements

NPDES Permit
Nbr:

4-22-19

(Date received by rec. Maint. Engr.)

Lindsey Schirra

(SCDOT Approval)

5-21-19

(Date)

Application for Encroachment Permit

General Provisions

1. **DEFINITIONS:** The word "Permittee" used herein shall mean the name of the person, firm, or corporation to whom this permit is addressed, his, her, its, heirs, personal representatives, successors and assigns. The word "DEPARTMENT" shall mean the South Carolina Department of Transportation.
2. **NOTICE PRIOR TO STARTING WORK:** Before starting the work contemplated herein within the limits of the highway right of way, the Department's Resident Maintenance Engineer in the county in which the proposed work is located shall be notified 24 hours in advance so that he may be present while the work is under way.
3. **PERMIT SUBJECT TO INSPECTION:** This permit shall be kept at the site of the work at all times while said work is under way and must be shown to any representative of the Department or law enforcement officer on demand.
4. **PROTECTION OF HIGHWAY TRAFFIC:** The applicant shall be responsible for the protection of the highway traffic at all times during the construction, maintenance, removing or moving of the encroachment permitted herein. Detours, barricades, warning signs and flagmen, as necessary, shall be provided by and at the expense of the Permittee and shall be in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD). The work shall be planned and carried out so that there will be the least possible inconvenience to the motoring public. The Permittee agrees to observe all rules and regulations of the Department while carrying on the work contemplated herein and take all other precautions that circumstances warrant.
5. **STANDARDS OF CONSTRUCTION:** All work shall conform to the Department's standards of construction and shall be performed in a workman-like manner. The applicant shall make adequate provisions for maintaining the proper drainage of the highway as it may be affected by the encroachment permitted herein. All work shall be subject to the supervision and satisfaction of the Department.
6. **FUTURE MOVING OF PHYSICAL APPURTENANCES:** If, in the opinion of the State Highway Engineer, it should ever become necessary to move or remove the physical appurtenances, or any part thereof contemplated herein, on account of change in location of the highway, widening of the highway, or for any other sufficient reason, such moving shall be done on demand of the Department at the expense of the Permittee.
7. **RESTORATION OF HIGHWAY FACILITIES UPON MOVING OR REMOVING OF PHYSICAL APPURTENANCES:** If, and when, the physical appurtenances contemplated herein shall be moved or removed, either on the demand of the Department or at the option of the Permittee, the highway and facilities shall immediately be restored to their original condition at the expense of the Permittee.
8. **COSTS:** All work in connection with the construction, maintenance, moving or removing of the physical appurtenances contemplated herein shall be done by and at the expense of the Permittee.
9. **ADDITIONAL PERMISSIONS:**
 - (a) It is distinctly understood that this permit does not in any way grant or release any rights lawfully possessed by the abutting property owners. The Permittee shall secure any such rights, as necessary, from said abutting property owners.
 - (b) The Permittee shall be responsible for obtaining all other approvals or permits necessary for installation of the encroachment from other government entities.

(c) There shall be no excavation of soil nearer than two feet to any public utility line or appurtenant facility except with the consent of the owner thereof, or except upon special permission of this Department after an opportunity to be heard is given the owner of such line or appurtenant facility.

10. ADDITIONAL WORK PERFORMANCE:

(a) All crossings over the highway shall be constructed in accordance with "Specifications for Overhead Crossings of Light and Power Transmission Lines and Telegraph Lines over each other and over Highway Rights of Way in South Carolina," as approved by the Public Service Commission of South Carolina and effective as of date of this permit.

(b) All tunneling, boring, or jacking shall be done in such a way as not to disturb the highway surfacing.

(c) No pavement shall be cut unless specifically authorized herein.

(d) No excavation shall be nearer than three feet to the edge of pavement unless specifically authorized herein.

(e) Underground facilities will be located at minimum depths as defined in the "Utility Accommodations Manual" for the transmittant, generally as follows: 4 feet minimum for hazardous or dangerous transmittant, 3 feet minimum for other lines. The Department may approve shallower depths if adequate protection is provided. Such approval must be obtained in writing.

(f) Service and other small diameter pipes shall be jacked, driven, or otherwise forced underneath the pavements on any surfaced road without disturbing the pavement. The section under the highway pavement and within a distance of three (3) feet on either side shall be continuous without joints.

11. ACCESS:

(a) Permittee is responsible for maintaining reasonable access to private driveways during construction.

(b) It is expressly provided that, with respect to any limited access highway, the Permittee shall not have or gain access from the main traveled way of the highway, or the on or off ramps to such facility, except upon approval by the Department.

12. DRIVEWAYS:

(a) The existing crown of the highway shall be continued to the outside shoulder line of the highway.

(b) If the driveway or approach is concrete pavement, the pavement shall be constructed at least 6 inches thick and with a minimum of class 2500 concrete. There shall be a bituminous expansion joint, not less than 3/4 inches in thickness, placed between the highway paving and the paving of the approach for the full width of the approach.

13. BEAUTIFICATION:

(a) All trees, plants, flowers, etc. shall be placed in accordance with the provisions specifically stipulated herein.

(b) All trees, plants, flowers, etc. shall be maintained by, and at the expense of, the Permittee and the provisions of this permit shall become null and void, if and when said Permittee ceases to maintain aid trees, plants, flowers, etc.

14. AS-BUILT PLANS:

(a) The applicant shall provide the Department with survey-quality as-built plans in accordance with the requirements set forth in the Department's "A Policy for Accommodating Utilities on Highway Rights of Way".

Project Location/Type of Encroachment/Description of Location, addendum**1. Project Location:**

County	Road Name
--------	-----------

2. Type of Encroachment:**3. Description of Location:**

north across a couple of residential lots and enters the right-of-way of Peachtree Lane at the end of the roadway at the cul-de-sac and then runs down Peachtree Lane in the right-of-way then crosses Highway 544, turns south to the Santee Cooper power line where the water line ties into an existing 36" water line that runs along the northwest side of the Santee Cooper power line.

PATCH. OVERLAY/MILL WITH 2" OF TYPE B SURFACE COURSE HOT MIX ASPHALT THE ENTIRE ROADWAY FOR 50 FEET PAST EACH END OF THE CUT.

REPAIR ALL PAVEMENT MARKINGS IF DAMAGED DUE TO WORK PERFORMED UNDER THIS PERMIT. (THERMO PLASTIC/RPMS) NOTIFY SCDOT ENCROACHMENT OFFICE BEFORE SETTING UP A LANE CLOSURE. 843-365-0001

OPEN CUT REPAIR FOR CONCRETE PAVEMENT

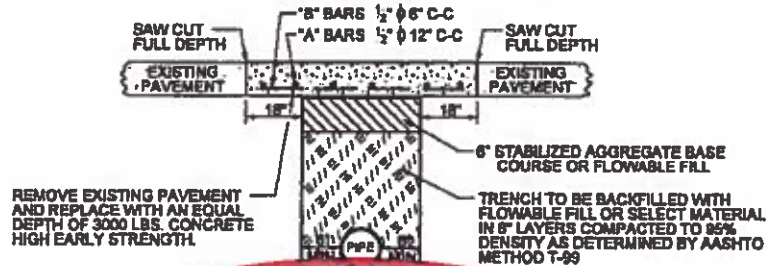


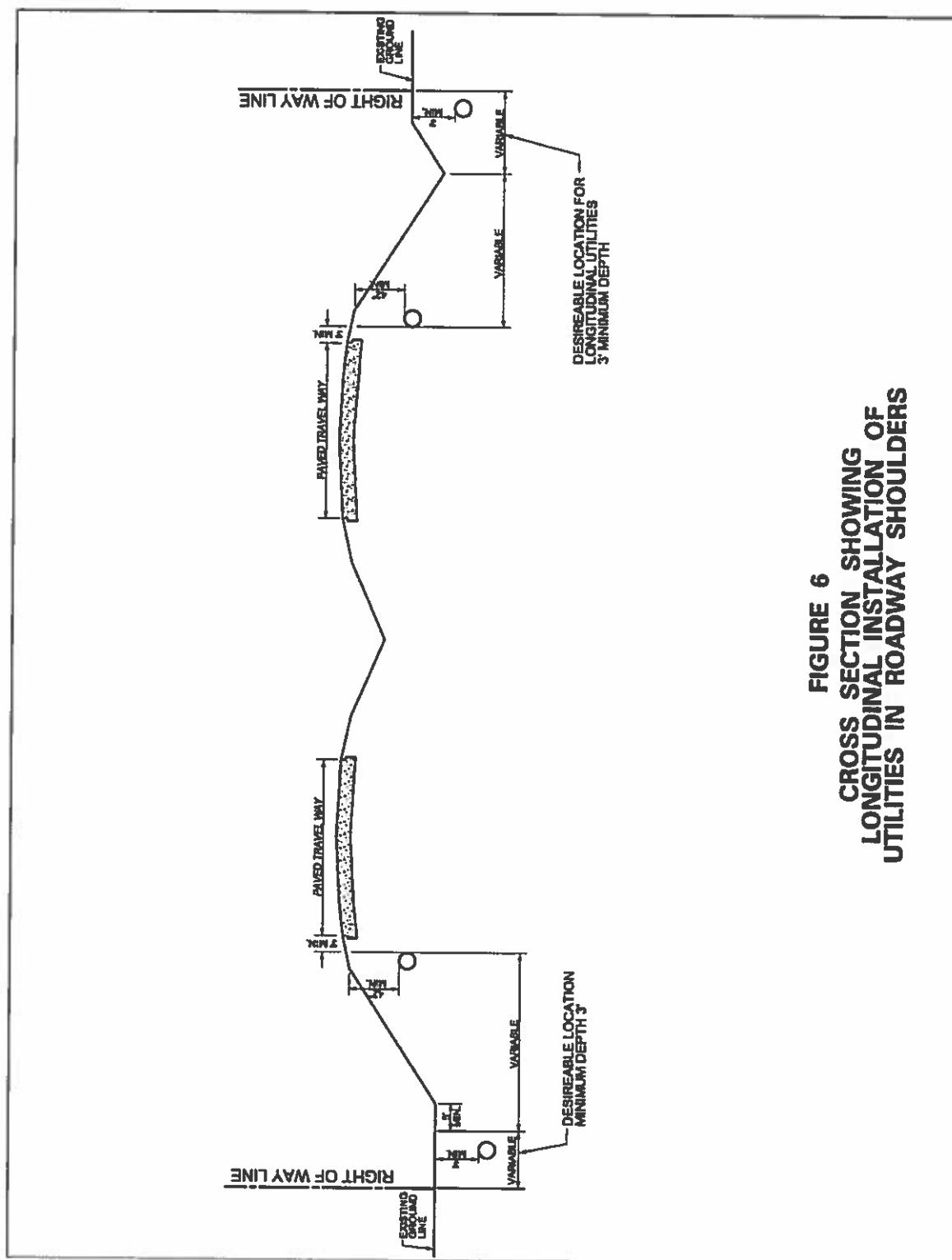
Diagram illustrating the cross-section of a trench repair structure. The diagram shows a central trench filled with backfill material, surrounded by a concrete surface course and existing pavement. The layers are labeled as follows:

- APPLY TACK
- 2" DEEP SAW CUT
- 2" CONCRETE SURFACE COURSE
- 2" DEEP SAW CUT
- EXISTING PAVEMENT
- 6" - 2500 LBS. CONCRETE
- 4" STABILIZED AGGREGATE BASE COURSE OR FLOWABLE FILL
- TRENCH TO BE BACKFILLED WITH FLOWABLE FILL OR SELECT MATERIAL IN 6" LAYERS COMPACTED TO 95% DENSITY AS DETERMINED BY GASTO METHOD T-89
- MINI PPE

FIGURE 4 PAVEMENT REPAIRS

Appendix B: Pipelines

Figure 6 – Longitudinal Installation of Utilities in Roadway Shoulders



Appendix B: Pipelines

Figure 1 – Example of Features for Encased Pipeline Crossings

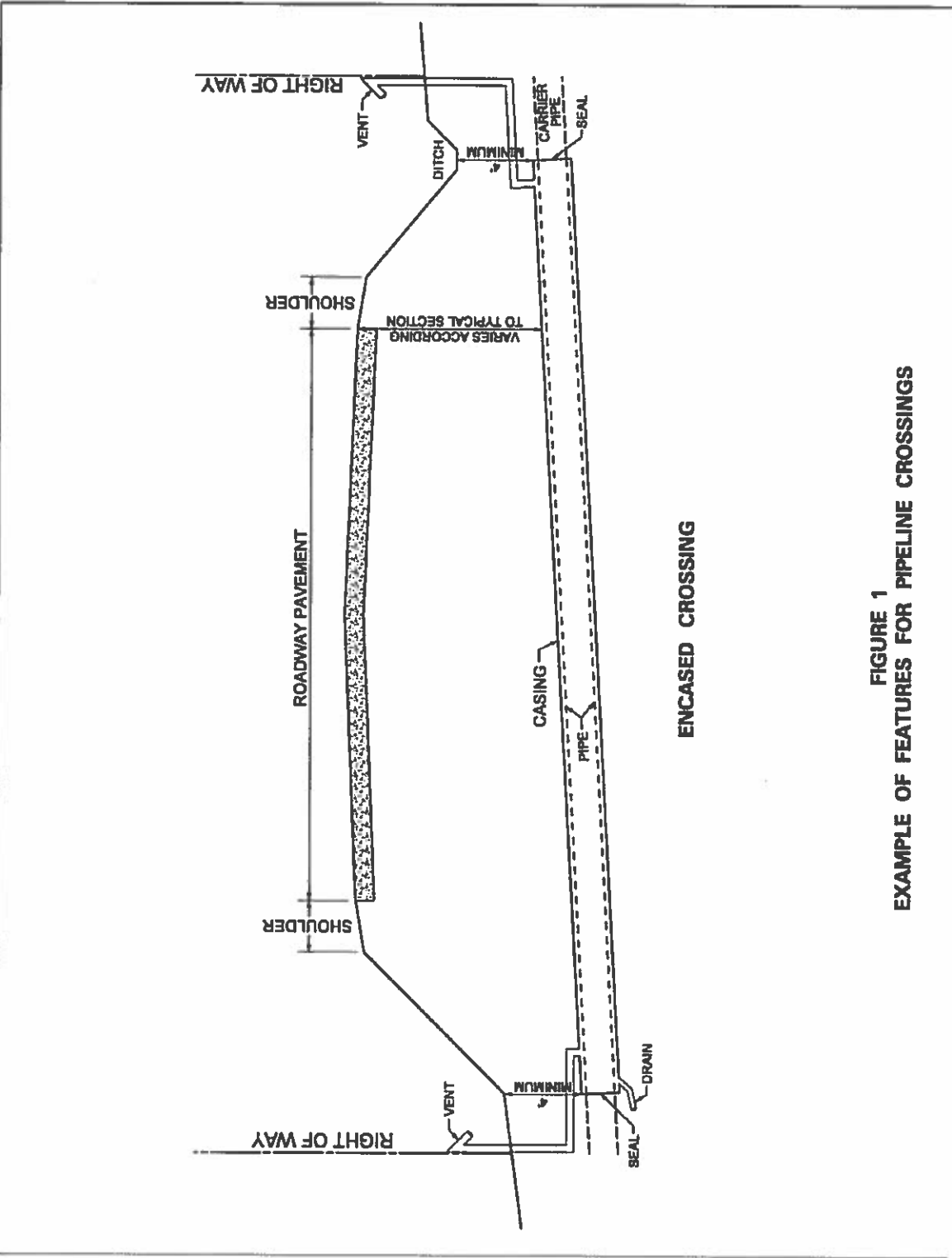


FIGURE 1
EXAMPLE OF FEATURES FOR PIPELINE CROSSINGS

10.2 CONSTRUCTION TECHNIQUES

10.2.1 Trenched Construction and Backfill

In trenched construction, bedding is the suitable soil or material which is prepared to support the pipe. Backfill is the material refilling the remainder of the trench which consists of suitable soil or roadway materials. Oftentimes, soils removed from the trench during excavation are not suitable for backfill soil. If the backfill soil is unsuitable, the RME can require the placement of flowable fill. From the highway viewpoint, the essential features for trench and backfill construction are: (a) restoration of the structural integrity of entrenched roadbed; (b) security of the pipe against deformation likely to cause leakage; (c) assurance against the trench becoming a drainage channel; and (d) assurance against drainage being blocked by the backfill. The integrity of the pavement structure, shoulders, and embankment slopes are of primary concern.

10.2.2 Controls for Trenched Construction

The trench shall be cut to adhere to the applicable Occupation, Safety, and Health Administration (OSHA) requirements. The vertical faces shall be shored to meet OSHA requirements, where necessary, and lateral and vertical support must be provided for all existing facilities and structures. Excavation methods shall follow the criteria outlined in Chapter 6. All fill soils and excavated soils shall be placed on the side of the trench away from the pavement. The pavement will be kept clean of mud, debris, etc.

- Bedding shall be provided for six (6) inches or $\frac{1}{2}$ the diameter of the pipe whichever is less. Bedding shall consist of granular material free of lumps, clods, stones, and frozen material and prepared to provide the pipe with uniform support throughout its length. Unstable soils and rock ledges should be sub-excavated from the bedding zone and replaced by suitable material.
- For excavations under the roadway through shoulders: Backfilling of trenches is to be accomplished immediately after placement of the pipe. Trenches will not be left open during hours of darkness. Backfill is to be placed in six (6) inch layers or less with each layer being thoroughly compacted. Care should be exercised to thoroughly compact the material around and over the pipe. Each layer will be compacted to a density of 95 percent as determined by AASHTO Method T-99. All work shall be performed to the satisfaction of the Department. Trench soil (or a substitute suitable material used for backfill) must be capable of producing required compaction.

10.2.3 Pavement Cuts

Open cuts in the pavement will be authorized only with permission of the Department. Where pavement is to be cut, the work shall be done in clear weather when traffic is lightest. Materials and methods of compaction shall be adapted to achieve prompt restoration of traffic service. Signing and warning devices will be supplied by the utility company or its contractor and will be in compliance with the [Manual on Uniform Traffic Control Devices \(MUTCD\)](#). Traffic will be maintained at all times and lane closures will only be permitted after a TCP is approved. Driveways will be maintained so as to permit ingress and egress to properties adjacent to the roadway. Blocking or closing of a driveway will not be permissible without the approval of the

property owner. Restoration will be performed as shown on Figure 4 of Appendix B or as specified by the Department.

10.2.4 Pavement Repairs

- The entire affected surface of asphalt roadways will be overlaid one year after initial restoration of pavement on all longitudinal cuts or if three (3) or more perpendicular cuts are made within a 200-foot section of roadway. Unless the road is scheduled to be resurfaced or in urgent need of resurfacing, the Department will determine the need and extent of resurfacing requested by the permittee at the time of the encroachment permit application. The age and condition of the road surface and the Department's schedule for resurfacing will be considered; however, the safety of the traveling public is a priority. Initial restoration shall be maintained in good condition by the permittee for the period prior to resurfacing and repairs as necessary shall be made immediately upon discovery. The Department will inspect the initial repair to ensure it is in satisfactory condition prior to resurfacing. Where the pavement cut is not to be resurfaced, it will be maintained for two (2) years or until the cut is satisfactorily restored.
- Base and surfacing for asphalt driveway repairs shall consist of six (6) inches of stabilized aggregate base course and 150 pounds of asphalt concrete surface course unless otherwise specified by the local RME.
- Techniques that may be used for installing pipeline under a highway without disturbing the surface are indicated below:
 - **Driving:** A small pipe with a pilot shoe can be driven through compressible soils by a steady thrust, hammering, or vibrating. A casing or corrosion resistance carrier must be used.
 - **Coring:** A small casing without pilot shoe can be drilled into more difficult soil, which enters the pipe as it advances. The core is removed by sluicing during or after drilling.
 - **Boring:** Larger pipes can be jacked through oversize bores carved progressively ahead of the leading edge of the advancing pipe as spoil is mucked back through the pipe.

10.2.5 Controls

- Un-trenched construction shall be required as described in the section on Encasement and Allied protection. ([See Chapter on Methods of Protection](#))
- Portal limits (temporary access points, bore pits, etc.) of pipeline crossings shall be established safely beyond the surfaced area of the highway so as to avoid impairing the roadway during installation of the pipeline. The near edge of portals shall be beyond the controlled access line on controlled access highways and no closer than five (5) feet on conventional highways. Adequate protection and warning devices will be provided while the portal is open. Bulk heading is required on any location nearer than five (5) feet or where the horizontal distance from the edge of pavement is less than the vertical



***** WATER AND SEWER SPECIAL PROVISIONS *****

SPECIAL PROVISION ID	SPECIAL PROVISIONS DESCRIPTION
1	THE DEPARTMENT SHALL BE HELD HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, DAMAGES AND LOSSES ASSOCIATED WITH WORK AS APPROVED UNDER THIS PERMIT APPLICATION. ANY SUCH DAMAGE CLAIMS RECEIVED BY THE DEPARTMENT SHALL BE THE RESPONSIBILITY OF THE APPLICANT TO PROCESS ACCORDINGLY. THE HOLD HARMLESS AGREEMENT SHALL BE FOR THE LIFE OF THE FACILITY, STRUCTURE(S) OR ENCROACHMENT AS IT REMAINS WITHIN PUBLIC RIGHT-OF-WAY.
4	SCDOT SHALL BE NOTIFIED WHEN WORK DEFINED IN THE PERMIT STARTS AS WELL AS WHEN THE WORK IS COMPLETED. REFERENCE SHALL BE MADE BY PERMIT NUMBER.
101	SHOULDER SOD DESTROYED BY THIS INSTALLATION TO BE REPLACED FOR THE ENTIRE AREA. THE AREA SHALL BE RE-SHAPED AND ROLLED TO THE CROSS SECTION EXISTING PRIOR TO THIS WORK.
103	THE PROPOSED ENCROACHMENT SHALL BE TRENCHED TO A MINIMUM DEPTH OF 42" BELOW THE CROSS SECTION AS ORIGINALLY CONSTRUCTED.
104	ALL VALVES AND MANHOLES SHALL CONFORM TO THE EXISTING ELEVATION OF THE ROADWAY OR SHOULDER AND CONFORM TO THE ACCEPTED STANDARD. THE VALVES WILL BE LOCATED OUT OF THE PAVEMENT. THEY SHALL NOT BE PLACED IN A DITCH FLOW LINE.
105	ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE SIDE OF THE TRENCH AWAY FROM THE TRAVELED ROADWAY, AND SHALL BE NO CLOSER THAN FIFTEEN (15) FEET TO THE EDGE OF PAVEMENT.
106	MANHOLES SHALL CONFORM TO THE ELEVATION OF THE EXISTING ROADWAY OR SHOULDER AND CONSTRUCTED IN ACCORDANCE WITH ACCEPTED PRACTICES.
107	TRENCH TO BE PROPERLY BACK-FILLED AND THOROUGHLY TAMPED. THE ENTIRE DISTURBED AREA SHALL BE RE-SHAPED AND DRESSED OUT IN A WORKMANSHIP LIKE MANNER.
112	ALL WATER METERS, AIR VALVES, ELECTRIC TRANSFORMERS, CATV CONNECTION BOXES, TELEPHONE PEDESTALS, VERTICAL MARKERS AND/OR OTHER UTILITY/SPLICE BOXES SHALL BE PLACED AT THE RIGHT-OF-WAY LINE.
113	FIRE HYDRANTS SHALL BE PLACED A MINIMUM OF TEN (10) FEET FROM THE EDGE OF THE PAVEMENT AND/OR BEHIND DITCH LINES.

120	RESTORATION OF PAVEMENT, SHOULDERS, DITCHES, ETC., TO BE PERFORMED AS SOON AS POSSIBLE AFTER CONSTRUCTION, OR SCHEDULED SO THAT THE CONSTRUCTION IS NO FURTHER THAN 2,000 L.F. AHEAD OF COMPLETE RESTORATION.
123	ALL WORK PERFORMED IN CONNECTION WITH THIS PERMIT SHALL CONFORM TO THE SCDOT "A POLICY FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHT-OF-WAY" MOST CURRENT EDITION.
205	WORK SHALL BE SCHEDULED SO THAT PERMANENT REPAIR OF THE ROAD WILL BE COMPLETED WITHIN 24 HOURS.
209	DISTURBED VEGETATION SHALL BE RESEEDDED ACCORDING TO THE SPECIFICATION FOR HIGHWAY CONSTRUCTION.
301	THE DITCHES AND/OR SHOULDERS DISTURBED DURING THE INSTALLATION SHALL BE RE-ESTABLISHED TO PROPER GRADE, ORIGINAL CROSS SECTION, STABILIZED, AND ALL DRAIN PIPES CLEARED.
302	NO EXCAVATION SHALL BE LEFT OPEN ALONG HIGHWAY.
303	THE ENTIRE DISTURBED AREA SHALL BE TOP-SOILED USING 3" OF SELECTED MATERIAL AND RE-GRASSED TO SCDOT SPECIFICATIONS.
305	FLASHING ARROW BOARDS SHALL BE USED FOR ALL LANE CLOSURES ON PRIMARY ROUTES AND/OR ROADS WITH HIGH TRAFFIC VOLUMES.
306	TRAFFIC CONTROL, LIGHTS, SIGNS AND FLAG-MEN WILL BE FURNISHED BY APPLICANT AND WILL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
310	FIELD CHANGES, IF NECESSARY, MUST BE APPROVED IN WRITING BEFORE ACTUAL CONSTRUCTION OF PROPOSED CHANGES.
311	SEDIMENT AND EROSION CONTROL DEVICES SHALL BE USED TO MINIMIZE THE MOVEMENT OF SEDIMENT.
312	THE PERMITTEE SHALL HOLD THE DEPARTMENT HARMLESS FOR DAMAGES TO BOTH UPSTREAM AND DOWNSTREAM PROPERTIES.
316	ALL NON-PERMITTED OBJECTS ON THE RIGHT-OF-WAY, WHICH MUST BE REMOVED, SHALL NOT BE REPLACED ON THE RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION OF THE DEPARTMENT.
317	THE APPLICANT IS TO PROVIDE ALL THE NECESSARY MAINTENANCE TO THE AREA BEAUTIFIED.
318	THE APPLICANT SHALL BE RESPONSIBLE FOR IMMEDIATE REMOVAL OF SUCH TRAFFIC HAZARDS AS MUD, DEBRIS, LOOSE STONE, AND TRASH AS MAY BE WASHED OR SPILLED ON THE TRAVELED ROADWAY AS A RESULT OF THE PROPOSED WORK.
321	ANY RIGHT-OF-WAY FENCES TO BE REMOVED AND REPLACED IN A CRAFTSMAN LIKE MANNER.
322	ALL TREES AND/OR UNDERGROWTH TO BE CUT TO GROUND LEVEL AND REMOVED FROM THE RIGHT-OF-WAY.

SP 1	PROPOSED UTILITY INSTALLATION SHALL BE A MINIMUM OF 5' OFF EXISTING EDGE OF PAVEMENT
SP 2	ANY REQUEST FOR REVISIONS AND/OR AMENDMENTS TO THIS PERMIT APPLICATION SHALL BE MADE IN WRITING FROM THE ENGINEER WITH PROPER SUPPORTING DOCUMENTATION. ALLOW A MINIMUM OF TWO WEEKS FOR REVIEW FOR THE DEPARTMENT RESERVES THE RIGHT (WITHOUT NOTICE) TO TEMPORARILY SUSPEND ALL WORK AS DEFINED UNDER THIS PERMIT APPLICATION IN THE EVENT OF INCLEMENT WEATHER OR OTHER CIRCUMSTANCES DEEM NECESSARY BY THE RESIDENT MAINTENANCE ENGINEER (RME). ANY SUCH SUSPENSION OF WORK SHALL BE INDICATED BY THE DEPARTMENT IN WRITTEN COMMUNICATION.
SP 3	
SP 4	A COPY OF THIS PERMIT APPLICATION WITH ALL SUPPORTING DOCUMENTATION SHALL BE ON SITE AT ALL TIMES WHEN CONSTRUCTION IS IN PROGRESS WITHIN SCDOT RIGHT-OF-WAY.
SP 5	SEE ATTACHED SPECIAL PROVISIONS, THE BACKSIDE/ATTACHED GENERAL PROVISIONS OF THIS PERMIT APPLICATION. THE APPLICANT, CONTRACTOR AND ENGINEER SHALL BE RESPONSIBLE FOR REVIEWING ALL PERTINENT INFORMATION RELATED TO THE WORK DEFINED UNDER THIS PERMIT APPLICATION.
SP 6	DRIVEWAY CUTS SHALL BE REPAVED FROM EDGE OF PAVEMENT TO BACKSIDE OF RIGHT OF WAY.
SP 7	PROPER TRAFFIC CONTROL SHALL BE MAINTAINED AT ALL TIMES WHILE CONSTRUCTION IS IN PROGRESS IN PUBLIC RIGHT-OF-WAY. SEE ATTACHED TRAFFIC CONTROL TYPICAL.
SP 8	PROPOSED UTILITY INSTALLATION LOCATED IN SHOULDER AREA SHALL HAVE A MINIMUM COVER OF 42" ACCORDING TO FIGURE 6 OF APPENDIX B. ANY EXPOSED ROOTS TO BE REMOVED OR TRIMMED FLUSH WITH SHOULDER/DITCH.
SP 9	ALL VERTICAL STRUCTURES SHALL BE LOCATED AT BACK SIDE OF RIGHT OF WAY.
SP 10	NO VALVES OR OTHER APPURTENANCES IN ROADWAY ASPHALT, WITHIN 5 FEET OF EDGE OF PAVEMENT, OR WITHIN DITCH LINE OR SWALE LINE. APPLICANT SHALL INSTALL 8-16 FEET OF NEW, UNDAMAGED RCP ON PROPER GRADE, FACING THE PROPER DIRECTION, MATCHING THE DIAMETER OF DRIVEWAY AND/OR CROSS LINE UPSTREAM IF THE ABOVE CANNOT BE AVOIDED. INSTALL RIP RAP AROUND ANY EXPOSED PIPES, COVER AND SOD TO MEET SCDOT MINIMUM STANDARDS. CALL SCDOT FOR INSPECTION OF PIPE BEFORE COVERING. 843-365-0001.
SP 11	NO STEEL TRACK VEHICLES ARE PERMITTED ON ROADWAY ASPHALT.
SP 31	KEEP ROADWAY SWEEPED OFF AT ALL TIMES. NO OFF ROAD VEHICLES PERMITTED ON SCDOT ROADWAY OR IN RIGHT OF WAY.
SP 12	70% GRASS REGROWTH AND 100% STABILIZATION IS REQUIRED IN ALL DISTURBED AREAS OF THE RIGHT OF WAY.
SP 13	PROPER TRAFFIC CONTROL SHALL BE SET UP AND TAKEN DOWN DAILY.

SP 14	100% STABILIZATION AROUND PIPE ENDS, DITCH AND SHOULDER REQUIRED. 70% GRASS REGROWTH REQUIRED IN ANY AREA DISTURBED BY THE INSTALLATION OF THIS UTILITY. KEEP PIPE ENDS CLEANED OUT. IF STABILIZATION CONTINUES TO BE A PROBLEM, INSTALL RIP RAP OR SOD WHERE NECESSARY.
SP 15	ANY DRAINAGE PIPE DAMAGED DUE TO THIS INSTALLATION SHALL BE REPLACED AT THE APPLICANT'S EXPENSE TO MEET THE STATE'S CURRENT MINIMUM STANDARDS. CONTACT SCDOT.
SP 16	NO PONDING IN ROADWAY, SHOULDER OR DRIVEWAY APRON PERMITTED. NO MORE THAN A 2" DROP OFF OR A 3:1 DITCH SLOPE IS PERMITTED ANYWHERE WITHIN CONSTRUCTION LIMITS OR IN AREAS DISTURBED DUE TO SCOPE OF WORK UNDER THIS PERMIT.
SP 17	APPLICANT IS RESPONSIBLE FOR REPAIRING ANY PAVEMENT MARKINGS DAMAGED DURING THE INSTALLATION. ALL PAVEMENT MARKINGS SHALL BE INSTALLED WITH THERMO PLASTIC, INCLUDING THE TWO FOOT WIDE STOP BAR TO BE INSTALLED WITHIN RIGHT OF WAY.
SP 18	APPLICANT/CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ANY ROADWAY ASPHALT, DRAINAGE, SHOULDER, DITCHLINE OR ANY OTHER STRUCTURES DAMAGED WITHIN THE RIGHT OF WAY DUE TO THE CONSTRUCTION OF THIS UTILITY. REPAIRS SHALL BE COMPLETED BEFORE RELEASE OF THE PERMIT AT NO COST TO THE DEPARTMENT.
SP 19	42" COVER REQUIRED IN BETWEEN ROADWAY AND DITCH. 36" OF COVER AT BOTTOM/BEHIND DITCH. ANY EXPOSED ROOTS TO BE REMOVED OR TRIMMED FLUSH WITH SHOULDER/DITCH.
SP 20	ANY ASPHALT DRIVEWAYS THAT ARE CUT WILL REQUIRE A LOW VOLUME ASPHALT PATCH AND A 2" OVERLAY OF TYPE C SURFACE COURSE HMA WITHIN THE ENTIRE STATE RIGHT OF WAY. COMMERCIAL/MEDIUM-HIGH VOLUME DRIVEWAYS SHALL BE REPAIRED WITH A HIGH VOLUME ASPHALT PATCH AND TOTAL 2" OVERLAY OF TYPE B SURFACE COURSE OVER THE ENTIRE DRIVEWAY APRON FROM THE EDGE OF PAVEMENT TO THE BACKSIDE OF THE STATE RIGHT OF WAY. MILLING MAY BE REQUIRED. ALL PAVEMENT MARKINGS SHALL BE REPLACED WITH THERMO PLASTIC TO MEET CURRENT STATE MINIMUM STANDARDS.
SP 21	ANY CONCRETE DRIVEWAYS THAT ARE CUT WILL REQUIRE SAWCUTTING AND INSTALLING 6" OF A MIN. 2500 PSI CLASS B CONCRETE TO REPAIR FROM THE EDGE OF THE ROADWAY TO THE BACK SIDE OF THE OPEN CUT.
SP 23	FOR ANY OTHER OBSTRUCTIONS SUCH AS TREES, FENCES, ETC, DO NOT OPEN CUT SCDOT ROADWAY. THE DEPARTMENT REQUIRES SUCH OBSTRUCTIONS TO BE DIRECTIONALLY BORED IN SHOULDER WITH A MINIMUM COVER DEPTH OF 42" LONGITUDINALLY.

SP 24	<p>ANY UTILITY LINE 4" IN DIAMETER OR LARGER THAT IS TO BE ABANDONED IN PLACE UNDER THE SCDOT ROADWAY OR IN THE SHOULDER SHALL BE BACKFILLED WITH FLOWABLE FILL AND CAPPED OFF. OTHERWISE THE UTILITY SHALL BE REMOVED COMPLETELY AND THE TRENCH SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN 6" LIFTS TO MEET 95% COMPACTION ACCORDING TO THE SCDOT UTILITY ACCOMODATION MANUAL. (CHAPTER 13)</p>
SP 26 7.2.3	<p>DO NOT REMOVE ANY SECTION OF EXISTING ROADWAY CROSS LINE PIPE OR DRAINAGE STRUCTURE WITHOUT EXPRESSED WRITTEN CONSENT OF THE DEPARTMENT. 36" OF SEPARATION IS REQUIRED AROUND MOST DRAINAGE STRUCTURES/CROSS LINE PIPES ON OR UNDER STATE ROADWAYS. CONDITIONS THAT ARE GENERALLY UNSUITABLE OR UNDESIRABLE FOR UNDERGROUND CROSSINGS SHALL BE AVOIDED. THESE INCLUDE LOCATIONS SUCH AS IN DEEP CUTS; NEAR FOOTINGS OR BRIDGES AND RETAINING WALLS; ACROSS AT GRADE INTERSECTIONS OR RAMP TERMINALS; AT CROSS DRAINS WHERE FLOW OF WATER, DRIFT, OR STREAM BED LOAD MAY BE OBSTRUCTED; WITHIN BASINS OF AN UNDERPASS DRAINED BY A PUMP; AND IN WET OR ROCKY TERRAIN WHERE IT WILL BE DIFFICULT TO ATTAIN MINIMUM BURY.</p>
SP 29	<p>THE DEPARTMENT SHALL NOT BE RESPONSIBLE FOR DAMAGE TO ANY UTILITY STRUCTURES LOCATED WITHIN THE RIGHT-OF-WAY AS A RESULT OF ROUTINE HIGHWAY MAINTENANCE OPERATIONS. THESE STRUCTURES INCLUDE BUT ARE NOT LIMITED TO ARV, METERS, VALVES, MANHOLES, ALL TYPE OF PEDESTALS AND UTILITY LINES (OVERHEAD AND/OR UNDERGROUND). THE APPLICANT SHOULD USE MECHANICAL MOWERS TO CUT AROUND THESE TYPE STRUCTURES TO INCREASE VISIBILITY FOR HIGHWAY MAINTENANCE WORKERS.</p>
SP 32	<p>NO PITS OR LANE CLOSURES SHALL BE LEFT UNATTENDED AT ANY TIME. NO WORK IS PERMITTED AT DURING NIGHT TIME HOURS WITHOUT PRIOR APPROVAL IN WRITING FROM THE DEPARTMENT. NO ROADWAY CLOSURES HAVE BEEN PERMITTED UNDER THIS PERMIT. NOTIFY SCDOT BEFORE SETTING UP ANY LANE CLOSURES. 843-365-0001.</p>
SP 36	<p>36" OF SEPARATION IS REQUIRED AROUND ANY NORMAL SIZED CROSS LINE PIPES UNDER STATE ROADWAYS.</p>
SP 37	<p>APPLICANT/PROPERTY OWNER IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH INSTALLATION, TRAFFIC CONTROL, MAINTENANCE, REPAIR OF ANY DAMAGES, USE AND/OR REMOVAL WITHIN THE STATE RIGHT OF WAY, UNDER A VALID APPROVED SCDOT ENCROACHMENT PERMIT.</p>
SP 38	<p>SEE SUMMER WORK RESTRICTIONS FOR NO WORK IN FRIDAYS, WEEKENDS OR HOLIDAYS ON PRIMARY ROUTES.</p>
SP 42	<p>APPLICANT SHALL OBTAIN ANY NECESSARY PERMITTING FROM OUTSIDE LAND OWNERS/PERMITTING AGENCIES/RAILROAD RIGHT OF WAY BEFORE STARTING ANY WORK.</p>
SP 43	<p>NO LONGITUDINAL OR PERPENDICULAR ASPHALT ROADWAY CUTS HAVE BEEN PERMITTED UNDER THIS PERMIT.</p>

SP 50	ALL DISTURBED DITCH OR SWALE LINES SHALL BE REGRADED TO THE ORIGINAL FLOW LINE, DEBRIS CLEANED OUT AND REMOVED FROM THE SCDOT RIGHT OF WAY, SHOULDERS REGRADED, ROADWAY EDGE OF PAVEMENT SHALL BE SAFETYED UP, ALL ROADWAY DAMAGES, IF ANY, AND ANY TEMPORARY DRIVEWAY MATERIALS SHALL BE REMOVED COMPLETELY FROM THE SCDOT RIGHT OF WAY UPON COMPLETION OF THE CONSTRUCTION ACTIVITIES.
SP 51	THE DEPARTMENT RESERVES THE RIGHT TO REQUIRE A FULL DEPTH PATCH AND TOTAL ROADWAY (ALL ADJACENT TRAVEL LANES) OVERLAY/MILL AND REPLACE DUE TO ANY DAMAGE CAUSED BY EQUIPMENT/TRUCKS IN ROADWAY/AND OR THE RIDEABILITY OF A ROADWAY CUT/ASPHALT PATCH. THE PROPERTY OWNER/APPLICANT AND/OR LOGGING COMPANY/CONSTRUCTION COMPANY WILL BE RESPONSIBLE FOR ANY AND ALL DAMAGE CLAIMS AS A RESULT OF ANY DAMAGES IN THE RIGHT OF WAY DUE TO THE PERMITTED OR UNPERMITTED WORK IN THE RIGHT OF WAY AND WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REPAIRS REQUIRED BY THE DEPARTMENT TO RESTORE THE RIGHT OF WAY TO PREVIOUS CONDITIONS. DISTANCE TO BE OVERLAID SHALL BE A MINIMUM, BUT NOT LIMITED TO, AT LEAST 50 FEET PAST THE EDGE OF THE DAMAGE/OPEN CUT, OR 50 FEET PAST EACH RADIUS OF THE CONSTRUCTION ENTRANCE OR PAVEMENT CUT/DAMAGE. ALL PAVEMENT MARKINGS SHALL BE REPLACED IN THERMO PLASTIC, BUTT JOINTS SHALL BE MILLED IN, AND THE APPLICANT/PROPERTY OWNER/CONTRACTOR ARE RESPONSIBLE FOR THE RIDEABILITY OF THE PATCH/OVERLAY.
SP 52	NO DEWATERING ACTIVITIES SHALL BE PERFORMED WITHIN SCDOT RIGHT OF WAY OR BRING WATER FORTH TO THE SCDOT RIGHT OF WAY BY DIRECT OR INDIRECT METHODS.
SP 53	THE APPLICANT MAY WRITE OR EMAIL THE DEPARTMENT REGARDING THE SPECIAL PROVISIONS OF THIS PERMIT APPLICATION AS NOTED HEREIN PRIOR TO STARTING CONSTRUCTION. IF WORK COMMENCES WITHOUT CORRESPONDENCE FROM THE APPLICANT, THE DEPARTMENT ASSUMES ALL WORK SHALL BE COMPLETED TO THESE CONDITIONS.
SP 54	APPLICANT SHALL OBTAIN ANY NECESSARY PERMITTING FROM OUTSIDE LAND OWNERS/PERMITTING AGENCIES/RAILROAD RIGHT OF WAY BEFORE STARTING ANY WORK.

**South Carolina Department of Transportation
Public Utility Encroachment // Application Checklist**

**THERE IS NO NEED TO HAND WRITE IN THIS CHECKLIST, PLEASE TAB OVER AND TYPE OR
DOUBLE CLICK EVERY FIELD. ☒ Check YES, NO or IF N/A PLEASE CHOOSE N/A.**

Submittal Date: 5/7/2019

Project Name: GSW&SA HWY 544 48"

WATER LINE

Engineers Name: DDC ENGINEERS, INC.

Road Name(s): Hwy 701 Byp, Hwy 814,
Bucksville Dr, Dick Pond Rd

Road Number(s): US 701S, S-814, S-475,
SC 544

Type of Encroachment:

(Check Appropriate Line(s))

Water Tap ☒ Sewer Tap ☐

Water Installation ☒

Sewer Installation ☐

Cable TV ☐ Fiber ☐ Telephone ☐

Electric ☐

Gas line Tap ☐ Gas line Installation ☐

Type of Construction:

(Check Appropriate Line)

☐ Commercial Installation

☐ Residential/Subdivision Installation

☒ Other, Specify Water Line

Utility Installation

This utility line installation will be **Underground**.

If underground and aerial are to be constructed on the same permit then plans must reflect the difference in the two.

48" & 54"

Size of utility line installation

≈ 27,800'

Total footage of utility line installation

VARIES

How far off edge of pavement will utility line be located

1

Total number of cross-line tiles throughout the construction limits

5

Total number of asphalt drives cut under this permit

4

Total number of state, city or county roadways cut under this permit

Y ☒ N ☐

Asphalt pavement repair detail included for repairs to driveways cut

Y ☒ N ☐

Asphalt pavement repair for roadway cuts included

Y ☐ N ☒

Traffic control plan submitted in accordance with MUTCD (current edition)

Site Plan

☒

Location of entry and exit points

☒

Access pit locations

☒

Equipment and pipe layout areas

☐

Locations and clearances of all existing utility crossings and structures.

Show all elevations

☒

Depth of cover over casing

☒

Show all R/W lines

☒

Show controlled access lines

☒

Property lines and all other utility R/W or easements indicated

5/7/2019

 Initials

☐ N/A

Utility Boring (REQUIRED FOR ROADWAY BORES ONLY)

Y ☒ N ☐

Bore & Jack detail for utility lines under primary roads included

Y ☒ N ☐

Directional bore detail included for driveway/secondary roads included

Y ☒ N ☐

Seeding schedule included

2

Total number of proposed bores under roadway

(TBD)

Name of anticipated boring company

160 FT

Anticipated Length

VARIES

Anticipated Product pipe diameter

DIP

Anticipated Pipe material

VARIES

Anticipated Pipe wall thickness

(TBD)

Anticipated pipe ream diameter for proposed directional drill

Y ☒ N ☐

A typical of detailed pipe calculations conforming ability of product pipe or casing pipe to withstand installation loads.

Y ☒ N ☐

Soil analysis included, USGS maps can be used for depths up to 6 feet.

(TBD)

Name of drilling fluids being used (Company Name),

(TBD)

Name of field representative (drilling fluids manufacturer) that will provide the technical support, fluid testing and recommendations if needed during the drilling process. Representative mobile # _____

(TBD)

Theoretical amount of drilling fluid to be used during the drilling operation.

(TBD)

Source of makeup water for the drilling fluids.

(TBD)

pH of makeup water for the drilling fluids.

(TBD)

Hardness of makeup water for the drilling fluids.

(TBD)

Anticipated drilling fluid pumping capacity in gallons per minute (gpm)

(TBD)

Anticipated gallons per rod (gpr),

(TBD)

Anticipated pressures

(TBD)

Anticipated flow rates proposed

(TBD)

Proposed density

(TBD)

Proposed Composition of drilling fluids, whether they are

(TBD)

Bentonite based (Based on soil sample).

☐

Polymer based. (Based on soil sample).

☐

(TBD)

Proposed construction method including diameter of pilot hole

(TBD)

Number and size of pre-reams.

When boring perpendicular to the roadway utility line depths under lowest point of road cross section shall be as follows:

2-6 inches shall be 4 feet

>6-14 inches shall be 10 feet

>14-24 inches shall be 15 feet

>24-48 inches shall be 25 feet

IF THIS PERMIT IS SUBMITTED BEFORE ALL INFORMATION IS OBTAINED FROM APPLICANT USING (TBD) IN ANY FIELD, THEN THE MISSING INFORMATION MUST BE PROVIDED WITHIN 4 DAYS OF OBTAINING SAID INFORMATION FROM BORING CONTRACTOR.

5/7/2019



Initials

☐ N/A
(TBD)

Drilling Equipment (REQUIRED FOR ROADWAY BORES ONLY)
Type and capacity of drilling machine to include

(TBD)

Manufacturer

(TBD)

Model number

(TBD)

Thrust/pullback (in lbs) maximum torque,

(TBD)

Drilling speed

(TBD)

Drill pipe length

(TBD)

Drilling distance

(TBD)

Power source

(TBD)

Type of tracking method/system

(TBD)

Operation range and accuracy

(TBD)

Type and capacity of mud mixing system

☐

A detailed plan for monitoring ground surface movement (settlement or heave) due to the drilling operation at the time of drilling, and subsequent to the drilling operation being completed.

☐

Confirm that the drilling equipment is equipped with an electrical strike safety package and a safety plan in the event of an electrical strike.

☐ N/A

Contingency plan in case of FRAC-OUT or Drilling Hole Failure
(REQUIRED FOR ROADWAY BORES ONLY)

Equipment available

Location of resources to make repairs.

Name of on-call contractor that will provide emergency repairs of shoulders / roadway if needed during the drilling process. Contractor mobile # _____

☐

Disposal Plan for Spent Drilling Fluids _____

☐ **Performance Bond**

Bond required for a period of 5 years from the completion date of installation to cover any roadway failures. The value of the bond shall be related to the pipe diameter installed and is shown in Table 1. Should the repairs exceed the value of the bond then the utility company is still responsible for the cost of the repairs, and no new permits shall be issued to the utility until the repair costs have been satisfied. The utility has the option to supply individual bonds, a yearly bond, or have SCDOT named as an additional insurer on their general liability insurance.

5/7/2019

 Initials

**As-Built Checklist Horizontal Directional Drilling for:
Perpendicular Crossing of Roadway.**

- ☒ **As-Built Plans to be submitted to the Utility Office within 30 days after completion of the bore.**

By checking each box you are acknowledging that you have read and understand each requirement.

☒ All lines under pressure or transporting a hazardous material will require a steel casing of approved equal with vents installed at the Right-of-Way limits

☒ Only perpendicular crossings will be allowed. Any other crossings will be evaluated on a case by case basis.

☒ Actual Drilling Data Log

Data sheet showing actual amount of drilling fluid used during the drilling operation

Complete testing logs verifying that the drilling fluids were maintained in accordance with the original mix or to demonstrate the reason for changing the drilling fluid mix during the completion of the pull.

Actual viscosity, density and composition of drilling fluids. Whether they are bentonite or polymer based.

Actual pumping rates observed.

As-Built Plans must include:

☒ Actual path alignment.

10' on Roadway Bores, and 250' on Longitudinal installations. Depth and Distance from Edge of Pavement must be shown.

☒ Actual Depth of cover.

☒ Actual length.

☒ Actual Product diameter.

☒ Actual Casing diameter.

☒ All final elevations.

☒ Actual viscosity, density and composition of drilling fluids.

☒ Actual fluid pumping capacity,

☒ Actual Pressure and flow rates,

As-Built Plans to be submitted to the Utility Office within 30 days after completion of the bore.

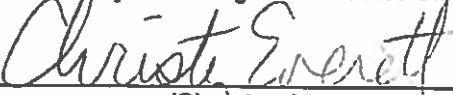
5/7/2019

 Initials

All comments must be addressed prior to SCDOT approving the encroachment permit. Place a check beside each comment indicating that you are aware that all items will be addressed in the planning and construction phases of this permit.

- ☒ Utility line will have a minimum of 48" of earth cover in the shoulder and all Cross-line tiles shall have a minimum separation of 36".
 - ☒ All road signs and mailboxes removed as a result of this installation will be replaced without delay.
 - ☒ No bore pits will be allowed within five feet of edge of pavement. No bore pits will be left open overnight or unattended.
 - ☒ No meters or valves will be allowed in the ditch-line. All meters and valves will be flush with the existing grade of shoulder.
 - ☒ No utility installation will be allowed to continue past 1000' without completing shoulder and ditch-line grading.
 - ☒ All utility work within SCDOT right of way shall be in accordance with the Policy for Accommodating Utilities on Highway Rights-Of-Way.
 - ☒ SCDOT shall be notified 24 hours prior to work starting and shall also be notified when work is completed so that a final inspection of work performed under this permit can be released to the utility company.
 - ☒ SCDOT shall be notified 48 hours prior to performing any perpendicular directional drilling operation.
 - ☒ Applicant is aware that once release is issued, a warranty period of two years for all shoulder and roadway work will be mandatory.
 - ☒ Disposal Plan for Spent Drilling Fluids
 - ☒ Municipality Approval
-

Reviewed By Submitting Public Utilities Official


(Signature)

5/7/2019

 Initials

68256
19-00198

Application for Encroachment Permit

S.C. Department of Transportation
Form 637 (Rev 09/2015)

Contact Information

Applicant: Grand Strand Water and Sewer Authority
Street: 166 Jackson Bluff Road

City: Conway
State: SC **Zip Code:** 29528
Phone: (843)692-3200 **Fax:** (843)692-3210
Email: cks@ddcinc.com
Contact: Eric Sanford

Project Location

Primary County: Horry

County	Road Name
Horry	Hwy 701 Byp (US 701S)
Horry	Hwy 814 (S-814)
Horry	Bucksville Dr (S-475)
Horry	Dick Pond Rd (SC 544)

1. Type of Encroachment: WATER

Request permission to install a 48" PVC of DIP water line in the right-of-way and along the edge of the right-of-way as shown on the attached plans.

2. Description of Location:

The project starts at the intersection of Highway 701 and Bucksville Drive, in Bucksville, South Carolina and runs along the northwest side of the right-of-way and in private easements of Bucksville Drive for approximately 2.4 +/- miles and then turns to the southeast and runs along the southeast side of a Santee Cooper power line right-of-way in an easement for approximately 2.5 +/- miles, across the Waccamaw River to the Socastee area of Horry County and then across the power line right-of-way at SC Highway 814 to the northeast side of the power line and then runs north across a couple of residential lots and enters the right-of-way of Peachtree Lane at the end of the roadway at the cul-de-sac and then runs down Peachtree Lane in the right-of-way then crosses Highway 544, turns south to the Santee Cooper power line where the water line ties into an existing 36" water line that runs along the northwest side of the Santee Cooper power line.

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and location of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)

Customer Agreement

3. The undersigned applicant hereby requests the SCDOT to permit encroachment on the SCDOT right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof. The applicant agrees to comply with and be bound by the SCDOT's 'A Policy for Accommodating Utilities on Highways Rights of way', 'Standard Specifications for Highway Construction', the 'General Provisions' and 'Special Provisions', attached hereto or made a part hereof by reference, during the installation, operation and maintenance of said encroachment within the SCDOT's Right of Way. **DISCHARGES OF STORM WATER AND NON-STORM WATER:** Work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit(s) issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Work shall also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. The encroachment permit will not be issued until the applicant has received an NPDES construction permit from SC Department of Health and Environmental Control.

The applicant agrees to comply with all current SCDOT Standards Specifications for Highway Construction including all Supplemental Technical Specifications. The applicant hereby further agrees, and binds his/her/its heirs, personal representatives, successors, assigns, to

4/22/19

assume any and all liability for accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing of the physical appurtenances contemplated herein, and the applicant agrees to indemnify and hold SCDOT harmless from and against any and all claims for personal injury and/or property damage which may be sustained by person by reason of the construction, maintenance or existence of said encroachment on the SCDOT's right of way.

Applicant's Name: Christy Everett
(Please print or type)

Date:

Applicant's Sig:

Title: Chief Operations Officer

For Office Use Only

For Office Use Only

In accordance with your request and subject to all the provisions, terms, conditions, and restrictions stated in the application and the general and special provisions attached hereto, the SCDOT hereby approves your application for an encroachment permit. This permit shall become null and void unless the work contemplated herein shall have been completed prior to:

☐ See Attached Special Provision and/or Permit Requirements

NPDES Permit
Nbr: _____

(Date received by res. Maint. Engr.)

(SCDOT Approval)

(Date)

General Provisions

Application for Encroachment Permit General Provisions

1. **DEFINITIONS:** The word "Permittee" used herein shall mean the name of the person, firm, or corporation to whom this permit is addressed, his, her, its, heirs, personal representatives, successors and assigns. The word "DEPARTMENT" shall mean the South Carolina Department of Transportation.
2. **NOTICE PRIOR TO STARTING WORK:** Before starting the work contemplated herein within the limits of the highway right of way, the Department's Resident Maintenance Engineer in the county in which the proposed work is located shall be notified 24 hours in advance so that he may be present while the work is under way.
3. **PERMIT SUBJECT TO INSPECTION:** This permit shall be kept at the site of the work at all times while said work is under way and must be shown to any representative of the Department or law enforcement officer on demand.
4. **PROTECTION OF HIGHWAY TRAFFIC:** The applicant shall be responsible for the protection of the highway traffic at all times during the construction, maintenance, removing or moving of the encroachment permitted herein. Detours, barricades, warning signs and flagmen, as necessary, shall be provided by and at the expense of the Permittee and shall be in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD). The work shall be planned and carried out so that there will be the least possible inconvenience to the motoring public. The Permittee agrees to observe all rules and regulations of the Department while carrying on the work contemplated herein and take all other precautions that circumstances warrant.
5. **STANDARDS OF CONSTRUCTION:** All work shall conform to the Department's standards of construction and shall be performed in a workman-like manner. The applicant shall make adequate provisions for maintaining the proper drainage of the highway as it may be affected by the encroachment permitted herein. All work shall be subject to the supervision and satisfaction of the Department.
6. **FUTURE MOVING OF PHYSICAL APPURTENANCES:** If, in the opinion of the State Highway Engineer, it should ever become necessary to move or remove the physical appurtenances, or any part thereof contemplated herein, on account of change in location of the highway, widening of the highway, or for any other sufficient reason, such moving shall be done on demand of the Department at the expense of the Permittee.
7. **RESTORATION OF HIGHWAY FACILITIES UPON MOVING OR REMOVING OF PHYSICAL APPURTENANCES:** If, and when, the physical appurtenances contemplated herein shall be moved or removed, either on the demand of the Department or at the option of the Permittee, the highway and facilities shall immediately be restored to their original condition at the expense of the Permittee.
8. **COSTS:** All work in connection with the construction, maintenance, moving or removing of the physical appurtenances contemplated herein shall be done by and at the expense of the

Permittee.

9. **ADDITIONAL PERMISSIONS:**

(a) It is distinctly understood that this permit does not in any way grant or release any rights lawfully possessed by the abutting property owners. The Permittee shall secure any such rights, as necessary, from said abutting property owners.

(b) The Permittee shall be responsible for obtaining all other approvals or permits necessary for installation of the encroachment from other government entities.

(c) There shall be no excavation of soil nearer than two feet to any public utility line or appurtenant facility except with the consent of the owner thereof, or except upon special permission of this Department after an opportunity to be heard is given the owner of such line or appurtenant facility.

10. **ADDITIONAL WORK PERFORMANCE:**

(a) All crossings over the highway shall be constructed in accordance with "Specifications for Overhead Crossings of Light and Power Transmission Lines and Telegraph Lines over each other and over Highway Rights of Way in South Carolina," as approved by the Public Service Commission of South Carolina and effective as of date of this permit.

(b) All tunneling, boring, or jacking shall be done in such a way as not to disturb the highway surfacing.

(c) No pavement shall be cut unless specifically authorized herein.

(d) No excavation shall be nearer than three feet to the edge of pavement unless specifically authorized herein.

(e) Underground facilities will be located at minimum depths as defined in the "Utility Accommodations Manual" for the transmittant, generally as follows: 4 feet minimum for hazardous or dangerous transmittant, 3 feet minimum for other lines. The Department may approve shallower depths if adequate protection is provided. Such approval must be obtained in writing.

(f) Service and other small diameter pipes shall be jacked, driven, or otherwise forced underneath the pavements on any surfaced road without disturbing the pavement. The section under the highway pavement and within a distance of three (3) feet on either side shall be continuous without joints.

11. **ACCESS:**

(a) Permittee is responsible for maintaining reasonable access to private driveways during construction.

(b) It is expressly provided that, with respect to any limited access highway, the Permittee shall not have or gain access from the main traveled way of the highway, or the on or off ramps to such facility, except upon approval by the Department.

12. **DRIVEWAYS:**

(a) The existing crown of the highway shall be continued to the outside shoulder line of the highway.

(b) If the driveway or approach is concrete pavement, the pavement shall be constructed at least 6 inches thick and with a minimum of class 2500 concrete. There shall be a bituminous expansion joint, not less than 3/4 inches in thickness, placed between the highway paving and the paving of the approach for the full width of the approach.

13. **BEAUTIFICATION:**

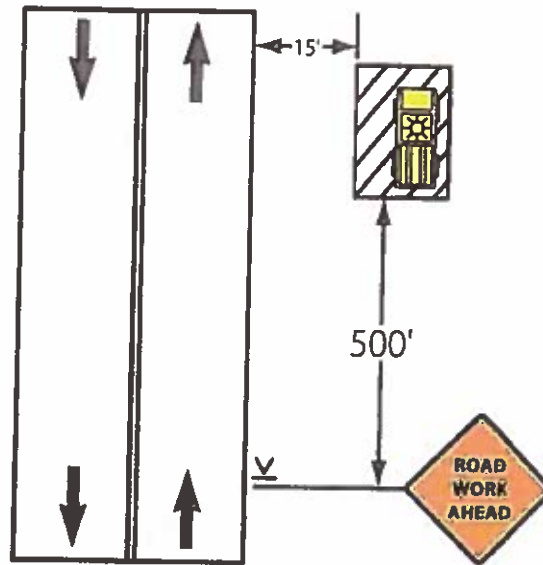
(a) All trees, plants, flowers, etc. shall be placed in accordance with the provisions specifically stipulated herein.

(b) All trees, plants, flowers, etc. shall be maintained by, and at the expense of, the Permittee and the provisions of this permit shall become null and void, if and when said Permittee ceases to maintain aid trees, plants, flowers, etc.

14. **AS-BUILT PLANS:**

(a) The applicant shall provide the Department with survey-quality as-built plans in accordance with the requirements set forth in the Department's "A Policy for Accommodating Utilities on Highway Rights of Way".

Shoulder Work (Beyond 15' From the Edge of Pavement)

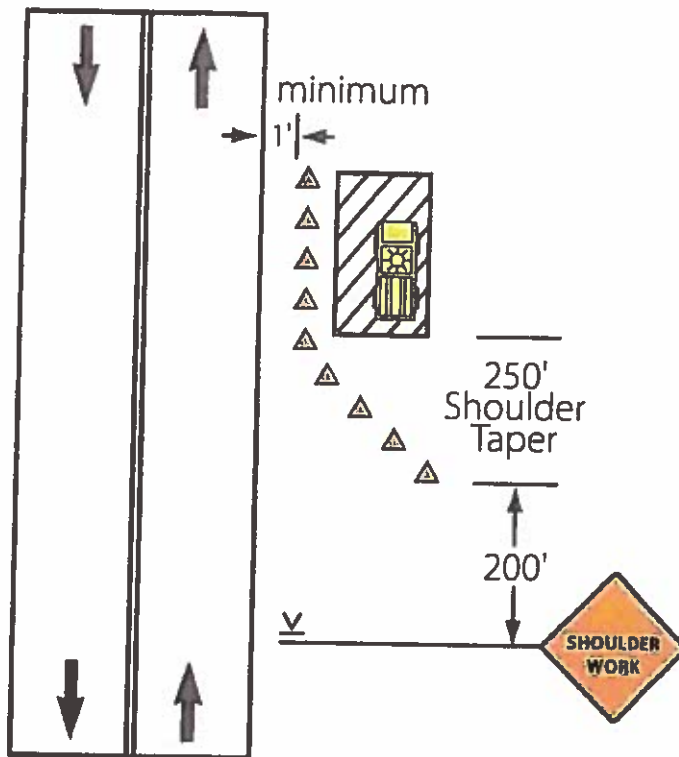


Notes:

1. For low speed conditions (35 MPH or less), a 200-foot sign spacing may be used. For speeds of 40 to 50 MPH a 350-foot sign spacing may be used.
2. For operations of 60 minutes or less, all signs and channelizing devices may be eliminated **if the work vehicles are equipped with an activated amber rotating, flashing, or strobe light mounted on top of each vehicle in accordance with the following conditions:**
If the vehicle and work activity are both behind guardrail or beyond 15' but within 30' of the near edge of an adjacent travel lane.
 Vehicle hazard warning signals are not an acceptable alternative.
3. An advance warning sign is required at all times during the performance of work within 30' of the near edge of an adjacent travel lane, if the vehicles or equipment will intermittently access the work space from the roadway during the performance of the work, if equipment will travel on or cross the highway, or if the activity may distract motorists.
4. Acceptable advance warning signs are those indicating "Shoulder Work", "Road Work Ahead", or "Utility Work Ahead".

Shoulder Work

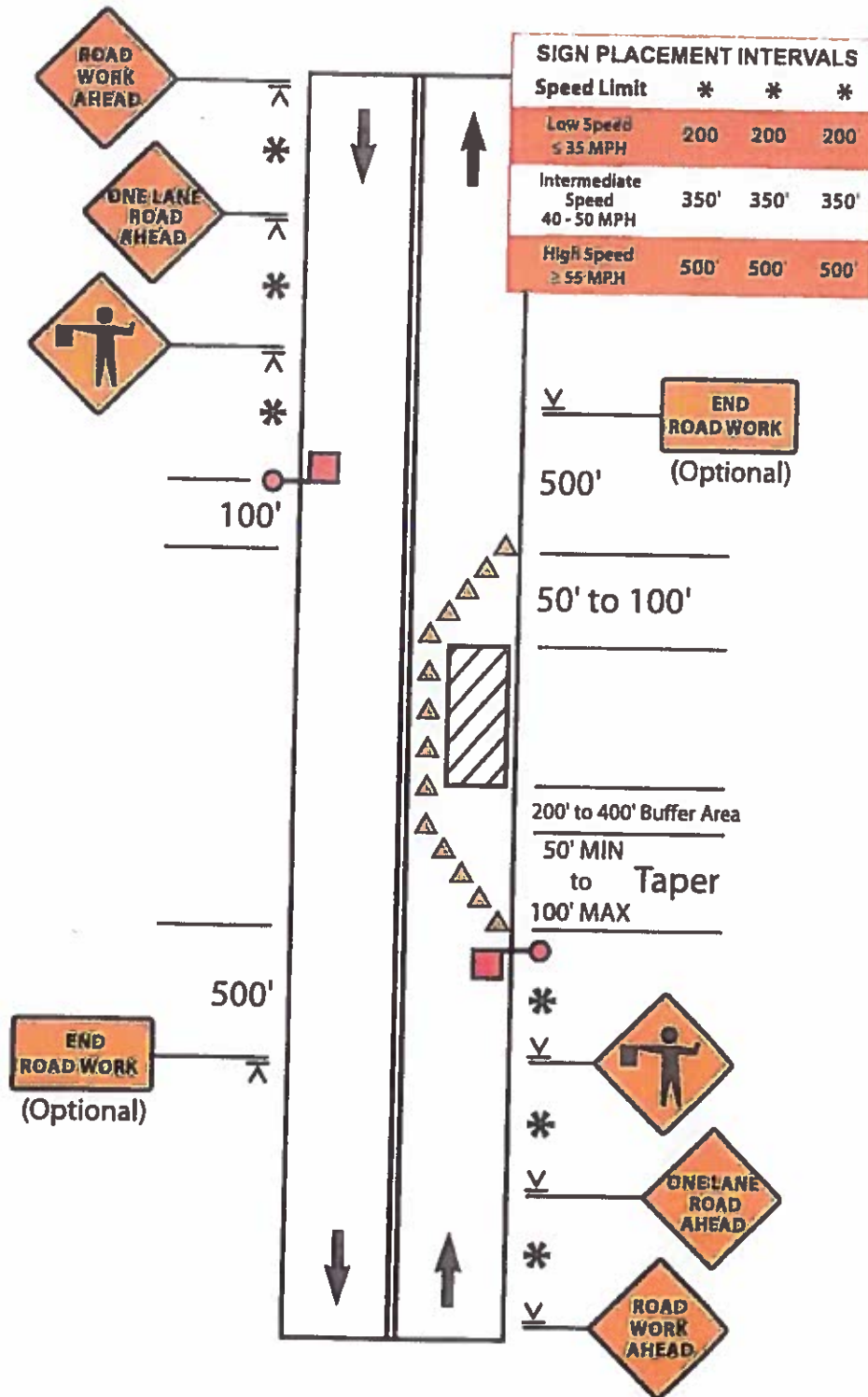
(1' – 15' From the Edge of Pavement)
(Short-Term Stationary — 1 to 2 Hours)



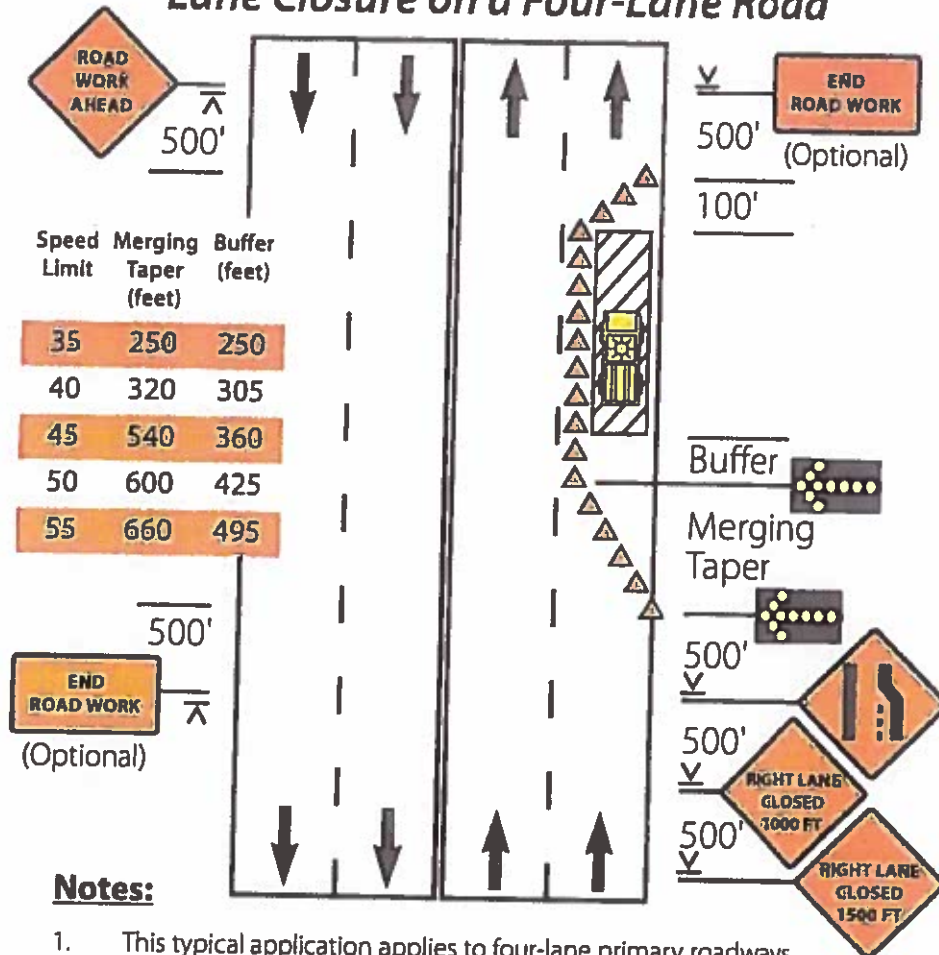
Notes:

1. For intermediate speed conditions (40 to 50 MPH), a 350-foot sign spacing may be used, and for high speed conditions (55 to 60 MPH), use a 500-foot sign spacing.
2. For short-term stationary work zones in a shoulder area, an array of advance warning signs is required. Install these advance warning sign arrays as follows:
 - a. Low Speed Conditions (35 MPH or less) – this sign array will include "Shoulder Work".
 - b. Intermediate Speed Conditions (40 to 50 MPH) – this sign array will include "Road Work Ahead", "Right (Left) Shoulder Closed Ahead", and "Shoulder Work".
 - c. High Speed Conditions (55 to 60 MPH) – this sign array will include "Road Work 1500 FT", "Right (Left) Shoulder Closed 1000 FT", and "Right (Left) Shoulder Closed 500 FT".
3. "Utility Work Ahead" or "Workers" symbol signs may be used instead of the "Shoulder Work" sign.

Lane Closure on a Two-Lane Road (Two-Flagger Operation – Daytime ONLY)



Lane Closure on a Four-Lane Road



**HORRY COUNTY
ENCROACHMENT PERMIT**

PERMIT NO. 2019.0169

EXPIRES 05/13/2020 GTT

Horry County Engineering Department
PO Box 1236

4401 Privetts Road

Conway, SC 29528

POC-Ron Freeman GSWSA 843-446-9597

Road Seg. No. 705

Tel. 843-915-5160

Fax 843-365-2170

Applicant: Grand Strand Water & Sewer Auth C/O Christy Everette	Road Name: Peachtree Lane
Address: P.O. Box 2368, Conway SC 29528	Location: Peachtree Lane
Tel. No. (843) 443-8293	

The undersigned applicant hereby applies to the County of Horry for permission for encroachment on County right-of-way or easement and agrees to comply with all conditions noted herein and all applicable Local, State and Federal laws.

Description: Request permission to install approximately 1070 +/- LF of 48" PVC or DIP Water line by open cut a minimum of 4' below the roadway surface from the end of the roadway to Highway 544 as shown of the attached sheets. Roadway to have a pavement repair and full width overlay as should on attached sheets.

GENERAL PROVISIONS

1. Notice shall be given at least 72 hours prior to starting work covered by this permit.
2. Upon completion of the work all County road right-of-way and easement areas disturbed shall be restored to at least as good a condition as existed prior to the start of work.
3. Work covered by this permit is subject to inspection for compliance with the terms of the permit. This permit may be revoked if the terms and conditions are not adhered to. A copy of this permit shall be kept on-site while work is underway.
4. Traffic control within the construction area shall be the responsibility of the Permittee and shall comply with State and local law and shall be as indicated in the current edition of the SCDOT Manual on Uniform Traffic Control Devices for Streets and Highways Through traffic to be maintained at all times with no trenches or excavations left open overnight. Traffic may be reduced to one lane during daylight hours if flagmen are utilized, however at the end of each workday traffic shall be returned to two lanes.
5. All materials and construction methods are to be in accordance with the current edition of the SCDOT Standard Specifications for Highway Construction.
6. Future moving of the encroachment : If in the opinion of Horry County, it becomes necessary to move, remove or relocate the encroachment permitted herein, all such work including restoration of the roadway, shall be done on demand of the County at the sole expense of the Permittee.
7. There shall be no excavation nearer than two feet of any other utility line or facility without the express permission of the owner of said line or facility.
8. All construction shall be subject to final inspection by the Horry County Engineer or his approved representative. The Permittee shall be subject to a warranty period of one (1) year from the date of final acceptance. Deficiencies such as settling of the roadbed, erosion, failure of grass to establish, etc. caused by the work permitted herein shall be repaired by the Permittee within 30days of notification by the County or sooner if a hazardous situation develops.
9. The Permittee agrees to hold Horry County, its officers and employees harmless from any liability for any accident, loss or damage as a result of any claim arising as a result of the work covered by this permit and that said liability is hereby assumed by the applicant.

This permit for installation shall expire six months from the date of approval shown below unless otherwise shown above.

APPLICANT:	APPROVED:
DATE: <u>5/7/19</u>	DATE: 05/14/19 Glenn Taylor

Permit reviewed with Andy Markunas and Kathleen Kelly. GTT

**HORRY COUNTY
ENCROACHMENT PERMIT**

SPECIAL PROVISIONS

1. Shoulders and ditches which are disturbed shall be replanted in accordance with section 810 of the SCDOT Standard Specifications noted above and a satisfactory stand of grass is required.
2. No obstructions or earth to be placed on pavement without permission.
3. Any areas disturbed beneath pavement or across driveways or within any portion of the traveled roadway shall be stabilized with an acceptable base material immediately after backfilling operations. Suitable material shall be defined as coquina (shell aggregate) or a suitable grade of crusher run stone (stabilized aggregate).
4. Any excess spoil material resulting from construction shall be removed immediately following backfilling operations. Horry County shall reserve the authority to halt all construction activities if spoil material prohibits proper road or ditch drainage, or creates any hazardous conditions that might endanger pedestrian or automobile traffic.
5. Roadbeds and drainage ditches shall be rebuilt to provide proper service after every 500 feet of construction, at the end of each day's work, or after County inspection of a major situation.
6. When County drain pipes or other facilities are damaged, the County should be notified immediately and the repairs or replacement made under County supervision.

DRIVEWAYS

1. Horry County is not responsible for maintenance or repair of driveways located within the road right of way. The driveway area within the right-of-way shall be maintained in a safe condition by the property owner or the County may require that it be removed.
2. The existing road crown slope shall be continued to the outside edge of the shoulder except in curb and gutter situations.
3. Concrete driveways shall be a minimum of 4 inches thick for single family residential use and a minimum of 6 inches thick for all other uses. Expansion joints shall be provided over drainage tiles to facilitate replacement or repair of the tile. These joints shall be located 12 inches on either side of the pipe.

UTILITY LINES

1. Pavement cuts are not allowed unless specifically permitted herein. Any pavement cuts which are permitted shall be saw cut and repaired as indicated in the approved plans or as ordered by Horry County.
2. No excavation shall closer than 3 feet from the edge of the pavement.
3. All underground lines shall be placed a minimum of 36 inches deep.

ENVIRONMENTAL REQUIREMENTS

The following is a general guideline for Stormwater, Erosion and Sediment Control:

1. The size of the disturbed area shall be kept to a minimum. Erosion and sediment control, and revegetation must be in accordance with The South Carolina Department of Transportation (SCDOT) specifications and Horry County ordinances. Adequate measures shall be taken to prevent erosion and to restore vegetation along the length of the construction area. Unsatisfactory restoration work shall be promptly corrected by the applicant. If necessary, unsatisfactory restoration work will be accomplished by the Division and billed to the permittee. Issuance of an Encroachment Permit does not relieve the Permittee from complying with other applicable Federal, State or Local laws, rules or regulations.
2. When land disturbance will be adjacent to wetlands or any waterbody silt fence shall be installed to protect the waterbody or wetland from any run off. Silt fence shall meet the requirements of SCDHEC's Best Management Practices.
3. All drainage inlets immediately down stream from the land disturbance shall be protected as per the requirements of SCDHEC's Best Management Practices Manual
4. Where sediment from the project site can enter into a drainage ditch the ditch shall be protected with an adequate check dam immediately downstream from the disturbed area and removed upon completion of final soil stabilization.
5. Stockpiles and spoil piles shall be kept off the pavement and protected with silt fence to contain any sediment runoff.

APPLICANT:	APPROVED:
DATE: 4/22/19	DATE: 05/14/19 Glenn Taylor

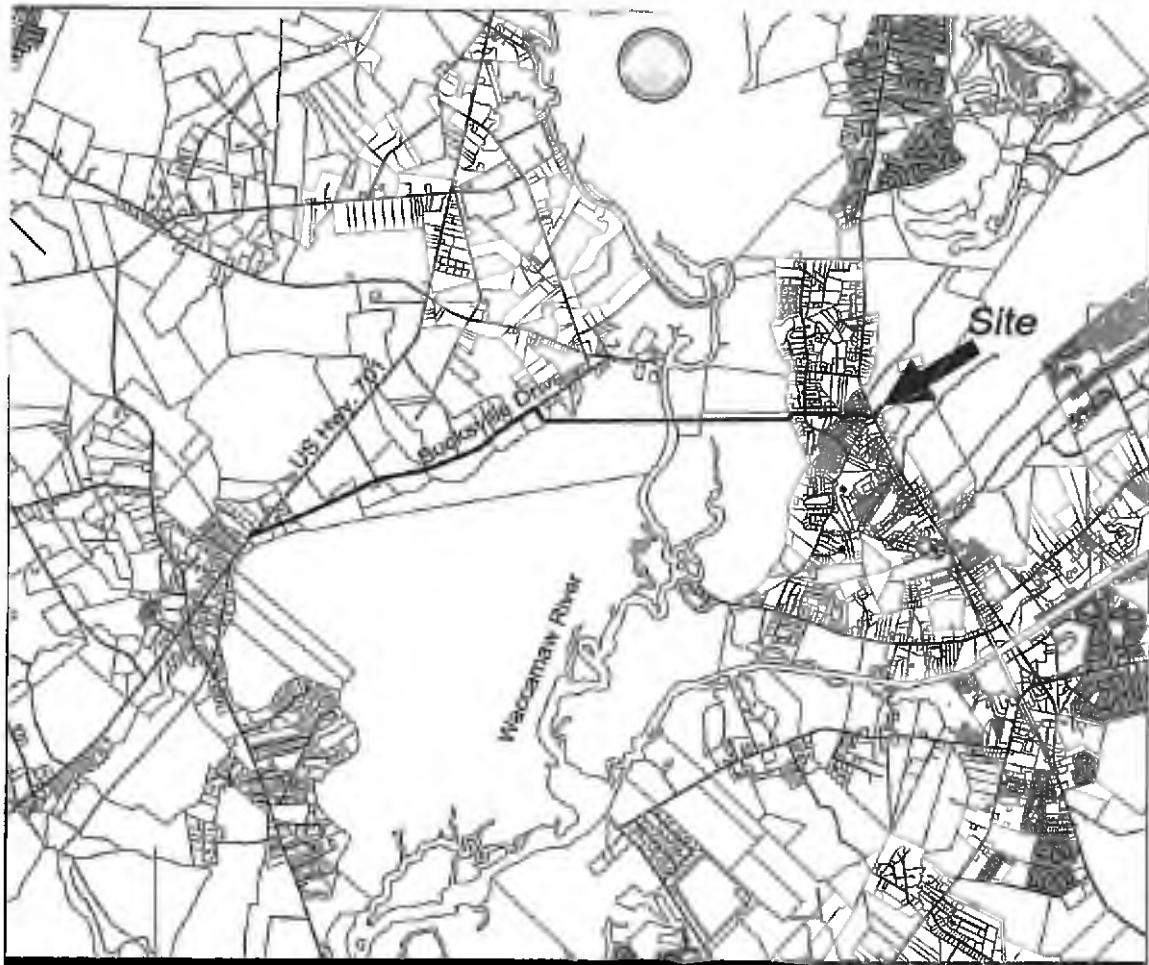
**HORRY COUNTY
ENCROACHMENT PERMIT**

PLAN

APPLICANT: Grand Strand Water & Sewer Auth	ROAD: Peachtree Lane LOCATION: Peachtree Lane
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The undersigned applicant hereby applies to the County of Horry for encroachment on County right-of-way as shown on the plan below.

(provide plans and details showing the work)



VICINITY MAP
N.T.S.

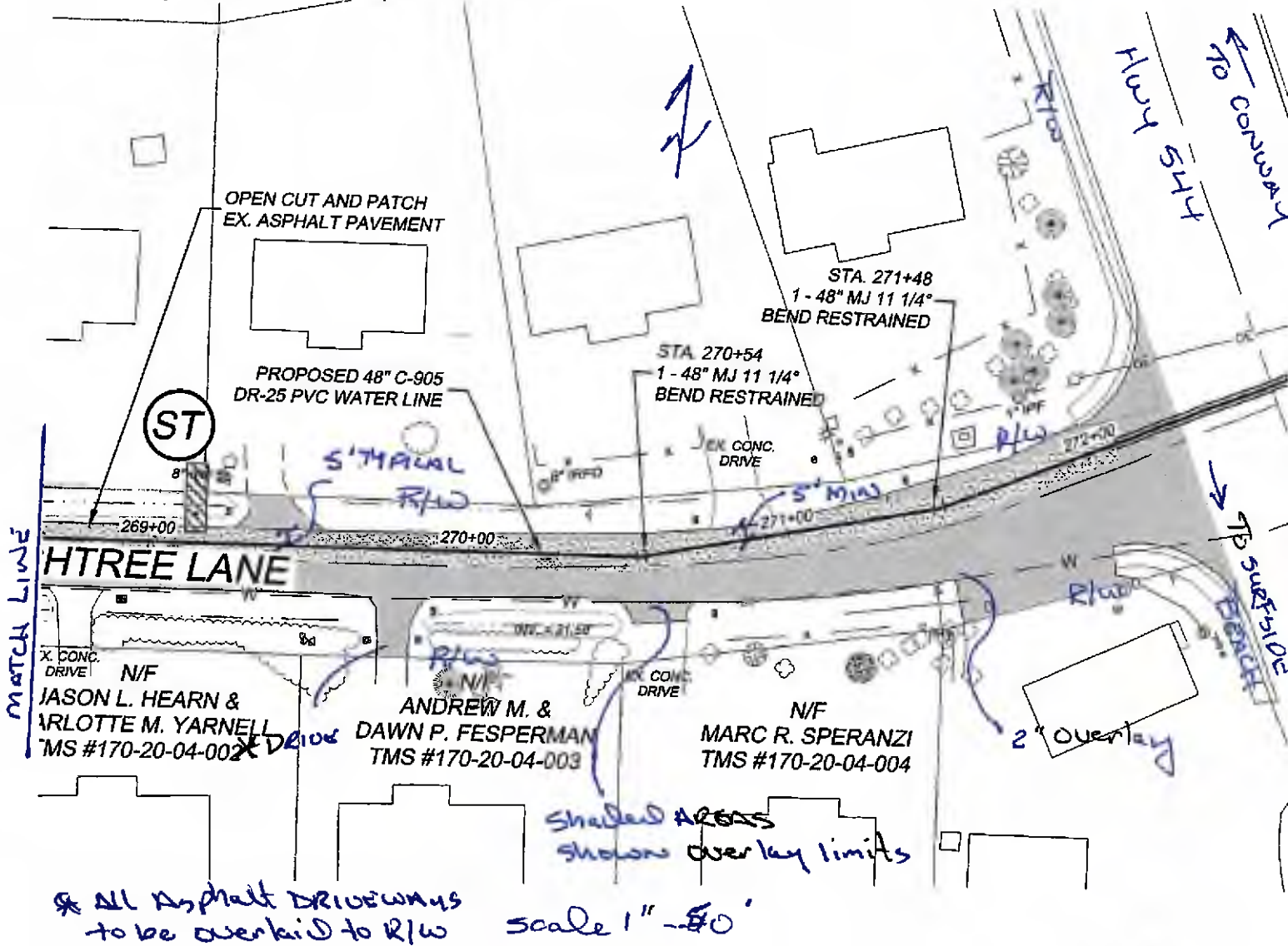
APPLICANT: DATE: 4/22/19	APPROVED: DATE: 05/14/19 Glenn Taylor
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**HORRY COUNTY
ENCROACHMENT PERMIT**

PLAN

APPLICANT: Grand Strand Water & Sewer Auth	ROAD: Peachtree Lane LOCATION: Peachtree Lane
--	--

The undersigned applicant hereby applies to the County of Horry for encroachment on County right-of-way as shown on the plan below.



APPLICANT: DATE:	APPROVED: 05/14/19 Glenn Taylor DATE:
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1. ***You are required to give a seven (7) day notice to all residents on Peachtree Lane that this construction is about to begin.
2. One lane of traffic has to be open at all times.
3. No open trenches will be left at the end of the workday.

Glenn Taylor

HORRY COUNTY
ENCROACHMENT PERMIT

PLAN

APPLICANT:

Grand Strand Water & Sewer Auth

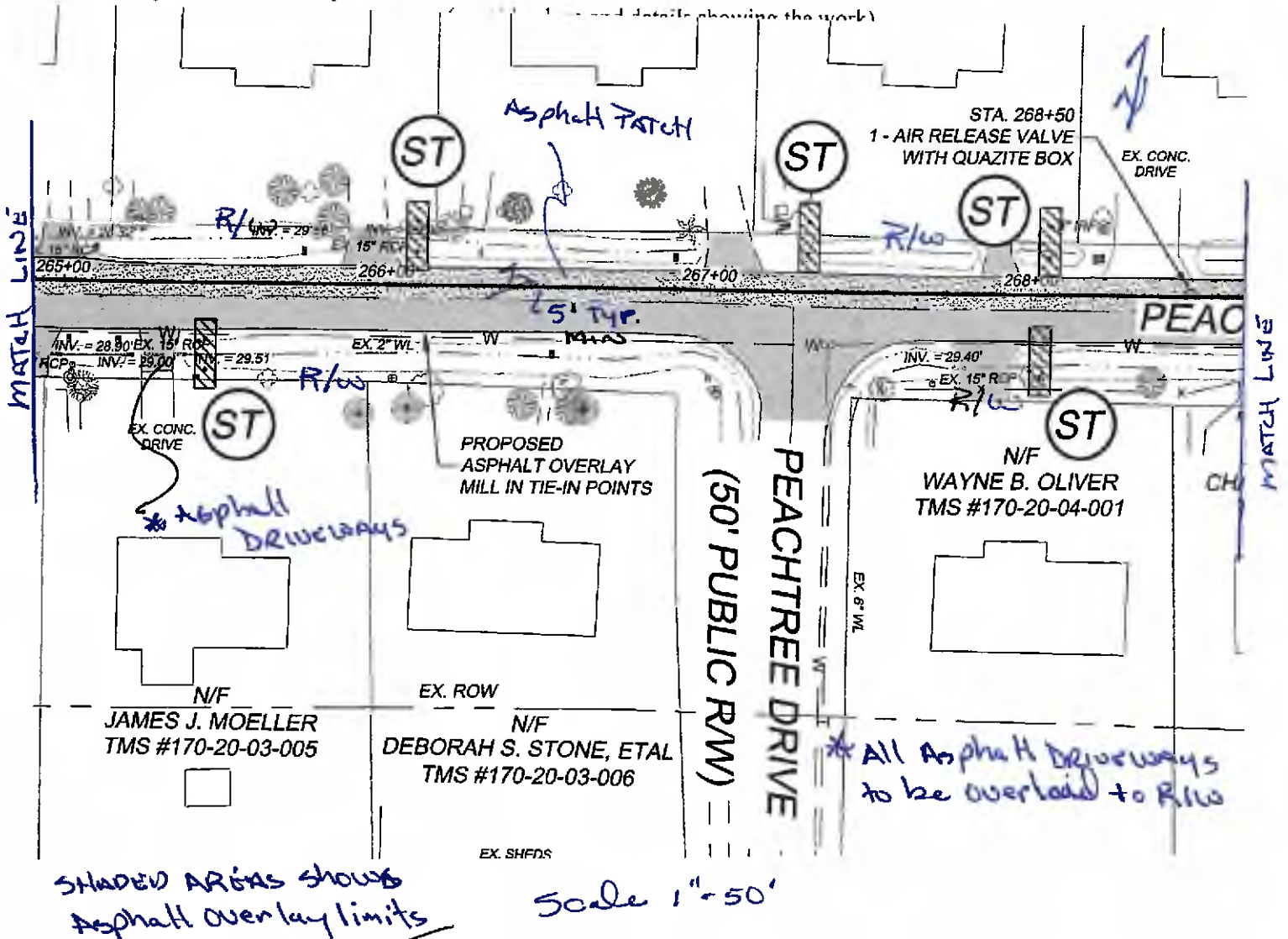
ROAD:

Peachtree Lane

LOCATION:

Peachtree Lane

The undersigned applicant hereby applies to the County of Horry for encroachment on County right-of-way as shown on the plan below.



APPLICANT:

DATE:

4/22/19

APPROVED:

DATE:

05/14/19 Glenn Taylor

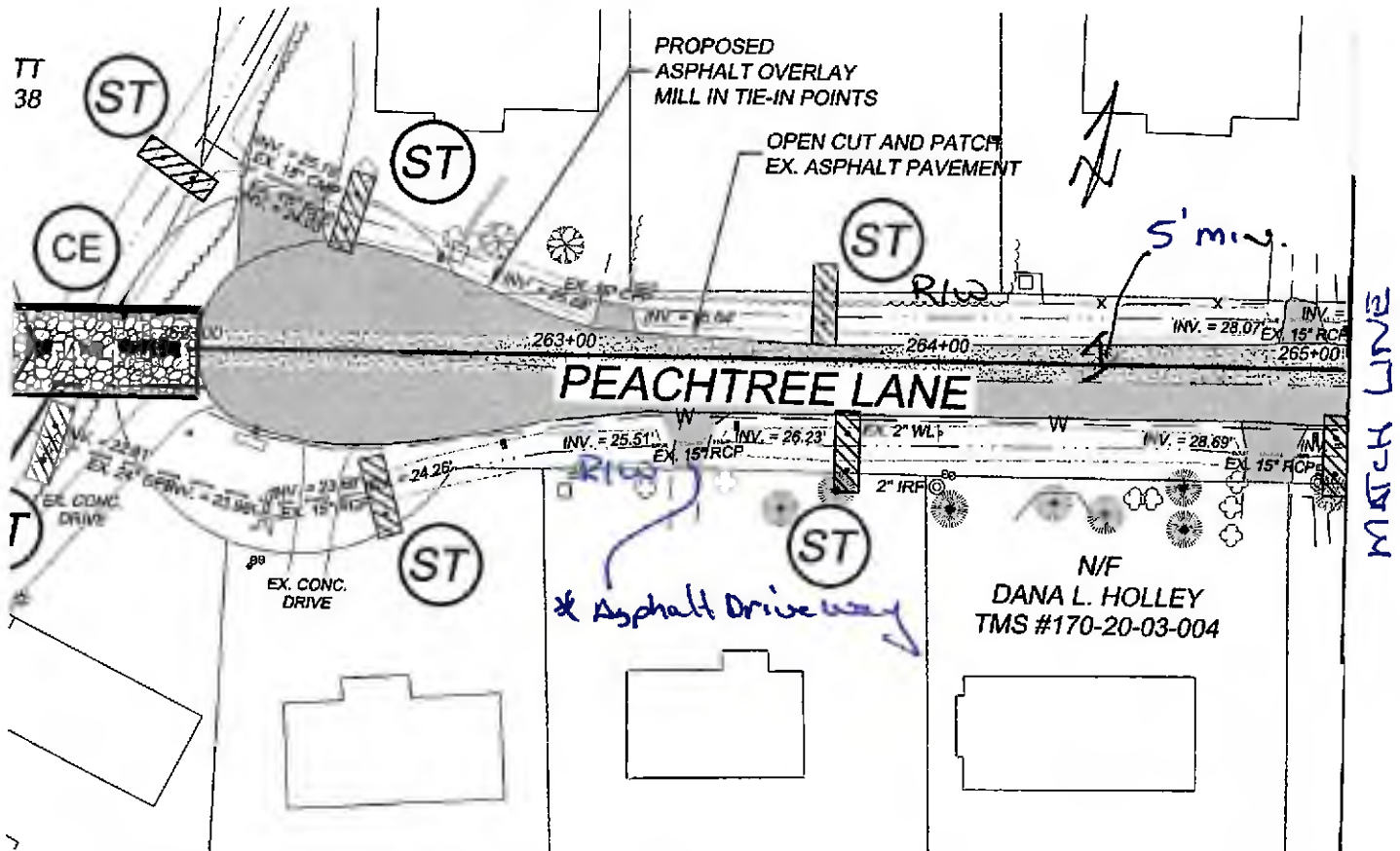
HORRY COUNTY ENCROACHMENT PERMIT

PLAN

APPLICANT:	ROAD:
Grand Strand Water & Sewer Auth	Peachtree Lane
	LOCATION:
	Peachtree Lane

The undersigned applicant hereby applies to the County of Horry for encroachment on County right-of-way as shown on the plan below.

(provide plans and details showing the work)



*All Asphalt Driveway
to be overlaid to R/W

Scale 1" = 50'

*Shaded Areas Shows
Asphalt overlay limits

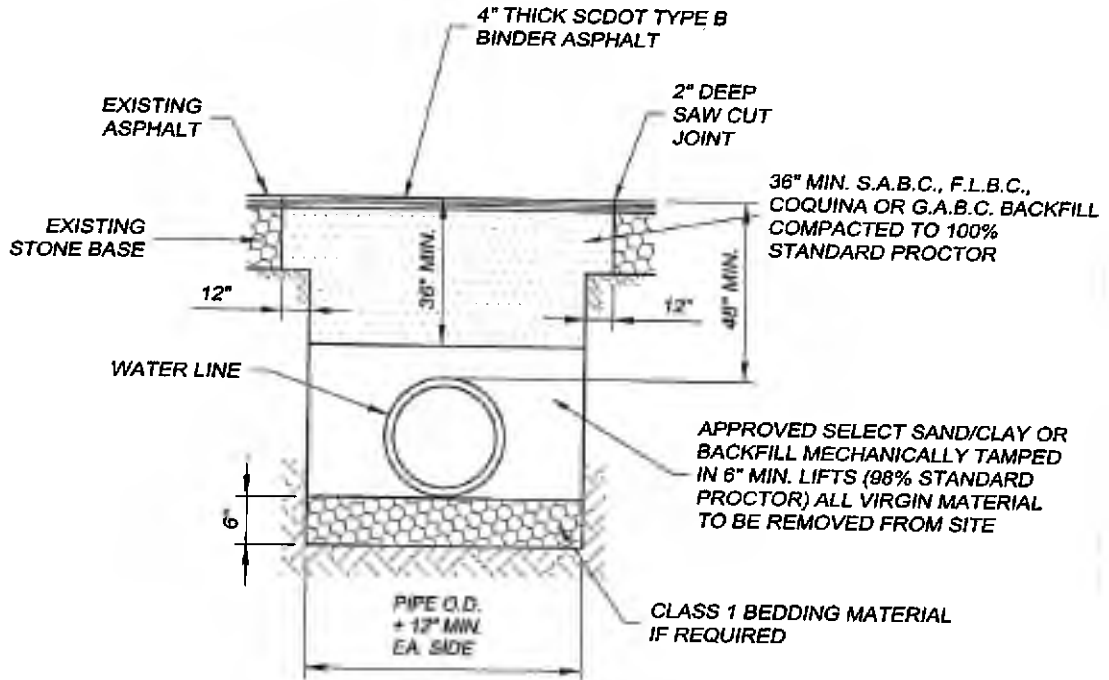
APPLICANT:	APPROVED:
DATE: 4/22/19	DATE: 05/14/19 Glenn Taylor

**HORRY COUNTY
ENCROACHMENT PERMIT**

LOCATION MAP

APPLICANT: Grand Strand Water & Sewer Auth	ROAD: Peachtree Lane
	LOCATION: Peachtree Lane

The undersigned applicant hereby applies to the County of Horry for encroachment on County right-of-way at the location shown on the map below.



**HORRY COUNTY ROAD
PAVEMENT REPAIR**

SCALE: N.T.S.

APPLICANT: DATE: 5/7/19	APPROVED: DATE: 05/14/19 Glenn Taylor
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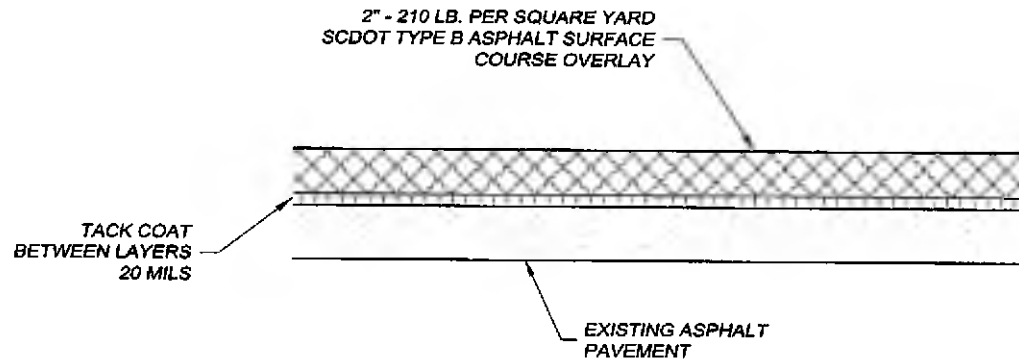
**HORRY COUNTY
ENCROACHMENT PERMIT**

LOCATION MAP

APPLICANT: Grand Strand Water & Sewer Auth	ROAD: Peachtree Lane LOCATION: Peachtree Lane
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The undersigned applicant hereby applies to the County of Horry for encroachment on County right-of-way at the location shown on the map below.


(provide a sketch or map of the location)



NOTE:
THE CONTRACTOR MUST MILL AND OVERLAY AREAS OF THE
PROJECT AS SHOWN ON THE PLANS.

**EXISTING
PAVEMENT OVERLAY**

SCALE: N.T.S.

APPLICANT: 	APPROVED: 05/14/19 Glenn Taylor
DATE: 4/22/19	DATE: