

**U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT**

Action Id. SAW-2013-02202 County: Beaufort U.S.G.S. Quad: NC-HACKNEY

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Permittee: NC Department of Transportation

Address: Richard Hancock  
1598 Mail Service Center

Raleigh, NC, 27699-1598

Telephone Number:

Size (acres) 8.5 acres  
Nearest Waterway Chapel Branch  
USGS HUC 3020104

Nearest Town Chocowinity  
River Basin Pamlico, North Carolina.  
Coordinates Latitude: 35.4912670451807  
Longitude: -77.1061329411386

Location description: Facility located on US 17 North, south of Chocowinity, Beaufort County, NC

Description of projects area and activity: REVISED: Construct a new rest area on an 8.5 acres parcel adjacent to US 17, near Chocowinity, NC. 296 linear feet of permanent intermittent stream impacts, 60 linear feet of temporary stream impacts and 0.00 acres of wetland impacts are authorized by this verification.

Applicable Law:  Section 404 (Clean Water Act, 33 USC 1344)  
 Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number or Nationwide Permit Number: NWP 23 Approved Categorical

Exclusions.

*SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND SPECIAL CONDITIONS*

**Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated 06/19/2013. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order and/or appropriate legal action.**

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Quality (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management in Morehead City, NC, at (252) 808-2808.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Thomas Steffens at 910-251-4615 or Thomas.A.Steffens@usace.army.mil.

Corps Regulatory Official: STEFFENS, THOMAS ANGRUM 1284706273

Expiration Date of Verification: 03/18/2017  
2014.05.15 13:43:36 -04'00'

### Determination of Jurisdiction:

- A.  Based on preliminary information, there appear to be waters of the US including wetlands within the above described project area. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process ( Reference 33 CFR Part 331).
- B.  There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- C.  There are waters of the US and/or wetlands within the above described project area subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- D.  The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued . Action ID: **SAW-** .

**Basis For Determination:** This waterbody exhibits an Ordinary High Water Mark as indicated by changes in soil character and absence of terrestrial vegetation and is hydrologically connected to Maple Branch, a tributary of the Pamlico River, a TNW.

#### Remarks:

#### E. Attention USDA Program Participants

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

#### F. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B and C above).

This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers  
South Atlantic Division  
Attn: Jason Steele, Review Officer  
60 Forsyth Street SW, Room 10M15  
Atlanta, Georgia 30303-8801  
Phone: (404) 562-5137

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by .

\*\*It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.\*\*

Corps Regulatory Official: STEFFENS.THOMAS.ANCRUM.1284706273

Date of JD: 11/13/2013 2014.05.15 13:43:18 -04'00'

Expiration Date of JD:

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our customer Satisfaction Survey online at <http://per2.nwp.usace.army.mil/survey.html> .

## **SPECIAL CONDITIONS**

### **Revised 05-15-2014**

- 1. CONSTRUCTION PLANS:** All work authorized by this permit must be performed in strict compliance with the **revised plans received May 7, 2014**, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.
- 2. UNAUTHORIZED DREDGE OR FILL:** Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.
- 3. MAINTAIN CIRCULATION AND FLOW OF WATERS:** Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.
- 4. DEVIATION FROM PERMITTED PLANS:** The permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Tom Steffens, Washington Regulatory Field Office prior to any active construction in waters or wetlands.
- 5. PRECONSTRUCTION MEETING:** The Permittee shall schedule an onsite preconstruction meeting between its representatives, the contractor's representatives and the appropriate Corps of Engineers Project Manager prior to undertaking any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all terms and conditions contained within the Department of the Army permit. The Permittee shall notify the Corps of Engineers Project Manager a minimum of thirty (30) days in advance of the scheduled meeting in order to provide that individual with ample opportunity to schedule and participate in the required meeting.
- 6. SILT-FENCING:** The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).
- 7. REPORTING VIOLATIONS OF THE CLEAN WATER ACT AND RIVERS AND HARBORS ACT:** Violation of these conditions or violation of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

**8. COMPLIANCE INSPECTION:** A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

**9. PERMITTEE-RESPONSIBLE MITIGATION:**

The Permittee shall fully implement the compensatory mitigation plan, entitled “US 17 Rest Area Onsite Stream and Buffer Mitigation Plan”, and dated June 19, 2013. Activities prescribed by this plan shall be initiated prior to, or concurrently with, commencement of any construction activities within jurisdictional areas authorized by this permit.

The mitigation project proposes to restore 815 linear feet of intermittent stream by removing the [stream] degrading factors on the site and preserve an additional 623 feet of intermittent stream downstream from the project as onsite mitigation for impacts associated with the project. In review of the mitigation plan, the Corps finds removing the stream degrading factors without modifying the channel profile and dimension to be enhancement rather than restoration. As such, the proposed work is inappropriate as stream restoration and finds stream enhancement a better description of the proposed mitigation project.

**To compensate for an additional 27 linear feet of unavoidable impacts to original 269 linear feet of intermittent stream impacts associated with this project, the permittee shall enhance 444 linear feet of intermittent stream (1.5:1 ratio) as reflected in the modification request of May 7, 2014.** The remaining 371 linear feet of intermittent stream enhancement and 623 linear feet of intermittent stream preservation as mitigation assets may be available, subject to Corps and agency approval. The permittee will, in accordance with the plan, adhere to the following conditions:

1) The permittee, NCDOT, is the party responsible for the implementation, performance and long term management of the compensatory mitigation project.

2) Any changes or modifications to your mitigation plan shall be approved by the Corps.

3) The permittee shall maintain the entire mitigation site in its natural condition, as altered by the work in the mitigation plan, in perpetuity. Prohibited activities within the mitigation site specifically include, but are not limited to: Filling; grading; excavating; earth movement of any kind; construction of roads, walkways, buildings, signs, or any other structure; any activity that may alter the drainage patterns on the property; the destruction, cutting, removal, mowing, or other alteration of vegetation on the property; disposal or storage of any garbage, trash, debris or other waste material; graze or water animals, or use for any agricultural or horticultural purpose; or any other activity which would result in the property being adversely impacted or destroyed, except as specifically authorized by this permit.

4) In accordance with the mitigation plan, the permittee will identify the proposed preservation mechanism to be used to maintain the entire mitigation site in perpetuity, subject to the approval of the Wilmington District. The District considers preservation of property for compensatory mitigation purposes to consist of maintaining the property in its natural condition, or, if restoration, creation, or enhancement work has been performed on the property, in its mitigated condition. The permittee shall not sell or otherwise convey any interest in the mitigation property used to satisfy the mitigation requirements for this permit to any third party, without prior written approval from the Wilmington District Corps of Engineers.

5) All mitigation areas shall be monitored for a minimum of 3 years or until deemed successful by the Corps in accordance with the monitoring requirements included in the mitigation plan.

6) **REMEDIAL MITIGATION PLAN:** If the compensatory mitigation fails to meet the performance standards 3 years after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the compensatory mitigation is unsuccessful, the Permittee shall submit to the Corps an alternate compensatory mitigation proposal to fully offset the functional loss that occurred as a result of the project. The alternate compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland function associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.

**10. INSTALLATION OF CULVERTS:** For construction of culverts, measures will be included in the construction that will promote the safe passage of fish and other aquatic organisms. For all culvert construction activities, the dimension, pattern, and profile of the stream, (above and below a pipe or culvert), should not be modified by widening the stream channel or by reducing the depth of the stream. Culvert inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, culverts must be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert.

STEFFENS.THOMAS.ANCRUM.1284706

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2014.05.15 13:43:02 -04'00'

Action ID Number: SAW-2013-02202 County: Beaufort

Permittee: NC Department of Transportation  
Richard Hancock

Project Name: NCDOT K-3800 SR 1150 US 17 Rest Stop UT to Maple Branch

Date Verification Issued: 11/13/2013 STEFFENS.THOMAS.ANCRUM.1284706273

Project Manager: Thomas Steffens 2014.05.15 13:42:31 -04'00'

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT  
Attn: Thomas Steffens  
Washington Regulatory Field Office  
2407 West 5th Street  
Washington, North Carolina  
27889

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

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Signature of Permittee

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Date



North Carolina Department of Environment and Natural Resources  
 Division of Water Resources  
 Water Quality Programs

Pat McCrory  
 Governor

John E. Skvarla, III  
 Secretary

May 16, 2014  
 Beaufort County  
 DWR Project No. 20130649 v.2  
 TIP K-3800

**MODIFICATION of APPROVAL of 401 WATER QUALITY CERTIFICATION and TAR-PAMLICO BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS**

Richard W. Hancock, P.E., Manager  
 Project Development and Environmental Analysis  
 North Carolina Department of Transportation  
 1598 Mail Service Center  
 Raleigh, North Carolina, 27699-1598

Dear Mr. Hancock:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of constructing a new rest area along US 17 near Chocowinity in Beaufort County:

**Buffer Impacts in the Tar-Pamlico Basin**

Site:	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)	Zone 2 Impact (sq ft)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
1	5304	0	5304	15,912	3462	0	3462	5,193
2	6717	0	6717	20,151	4304	0	4304	6,456
3	0	0	0	0	961	0	961	1,442
4*	914	0	914	2,742	564	0	564	846
<b>Totals</b>	<b>12,935</b>	<b>0</b>	<b>12,935</b>	<b>38,805</b>	<b>9,291</b>	<b>0</b>	<b>9,291</b>	<b>13,937</b>

**Total buffer impacts: 22,226 sq ft. All buffer impacts are on the same stream. Impacts > 1/3 ac = mitigation required.**

**\*The additional buffer impacts authorized with this modification are located at buffer Site 4**

**Stream Impacts in the Tar-Pamlico Basin**

Site:	Stream Permanent (linear ft)	Stream Temporary (linear ft)	Permanent Surface Water Impacts (ac)	Temporary Surface Water Impacts (ac)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	128	30	<0.01	<0.01	158	128
2	141	30	<0.01	<0.01	171	141
3*	27	20	<0.01	<0.01	47	27
<b>TOTAL:</b>	<b>296</b>	<b>80</b>	<b>&lt;0.01</b>	<b>&lt;0.01</b>	<b>376</b>	<b>296</b>

**Total Stream Impact: 376 linear feet**

**\*The additional stream impacts authorized with this modification are located at stream Site 3**

This approval is only valid for the purpose and design that you submitted in your modified application dated received March 13, 2014 and revised application dated received May 8, 2014. All the authorized activities and conditions associated with the original Water Quality Certification dated August 9, 2013 still apply except where superseded by this certification. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3891. This certification corresponds to the Nationwide Permit 23 issued by the Corps of Engineers. This approval is also valid for the Tar-Pamlico Riparian Buffer Rules (15A NCAC 2B .0259). In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the DWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). Additionally, impacts to riparian buffers may require mitigation as described in 15A NCAC 2B .0259 (10). For this approval to remain valid, you must adhere to the conditions listed in the attached certification.

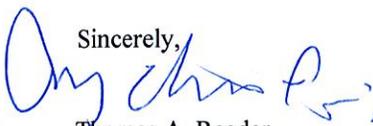
**Project Specific Conditions**

1. This modification authorizes an additional 27 linear feet of stream impact. This brings the total stream impact for the project to 296 linear feet. The on-site stream mitigation proposal included in your original application constitutes Enhancement Level II. Therefore, compensatory mitigation for impacts to 296 linear feet of stream is required at a replacement ratio of 1:1.5 or as directed by the U.S. Army Corps of Engineers per 15A NCAC 2H .0506(h)(1). The onsite stream mitigation shall be constructed in accordance with the design submitted in your June 19, 2013 application. All on-site mitigation sites shall be protected in perpetuity by a conservation easement or through NCDOT fee simple acquisition and recorded in the NCDOT Natural Environment Unit mitigation geodatabase. Please be reminded that as-builts for the completed streams shall be submitted to the North Carolina Division of Water Resources 401 Wetlands Unit with the as-builts for the rest of the project. If the parameters of this condition are not met, then the permittee shall supply additional stream mitigation for the 296 linear feet of impacts. To receive mitigation credit, a 50-foot wide native wooded buffer shall be planted on both sides of the stream unless otherwise authorized by this Certification.
2. This modification authorizes an additional 914 square feet of buffer impact in Zone 1 and an additional 564 square feet of buffer impacts in Zone 2. This brings the total impacts to protected riparian buffer to 12,935 square feet in Zone 1 and 9,291 square feet in Zone 2. Therefore, compensatory mitigation for impacts to 12,935 square feet of protected riparian buffers in Zone 1 and 9,291 square feet of protected riparian buffers in Zone 2 shall be required. The on-site buffer mitigation shall be constructed in accordance with the design submitted in your June 19, 2013 application. All on-site mitigation sites shall be protected in perpetuity by a conservation easement or through NCDOT fee simple acquisition and recorded in the NCDOT Natural Environment Unit mitigation geodatabase.
3. The permittee shall monitor the stream and buffer mitigation site. Monitoring shall consist of visual review and viable stem counts. An annual report shall be submitted to NCDWR for a period of 5 years showing monitoring results including: bank stability, survival rate/ success of tree and vegetation establishment, and that diffuse flow through the riparian buffer has been maintained. The first annual report shall be submitted within one year of final planting. Failure to achieve a buffer density of 320 trees per acre after 5 years will require the annual report to provide appropriate remedial actions to be implemented and a schedule for implementation. Approval of the final annual report, and a formal "close out" of the mitigation site by NCDWR is required.

**General Conditions**

1. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions associated with the original Water Quality Certification dated August 9, 2013 and subsequent modifications still apply except where superseded by this certification.
2. A copy of this Water Quality Certification shall be maintained on site at the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699. This certification and its conditions are final and binding unless you ask for a hearing. This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Garcy Ward at (252) 948-3922.

Sincerely,  
  
for Thomas A. Reeder

Attachments (General Certification and Certificate of Completion form)

cc: Tom Steffens, US Army Corps of Engineers, Washington Field Office  
Jay Johnson, NC DOT, Division 2  
Garcy Ward, NC DWR, WaRO  
File Copy



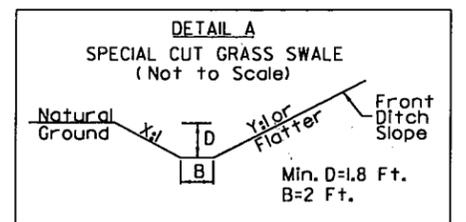


8/17/99

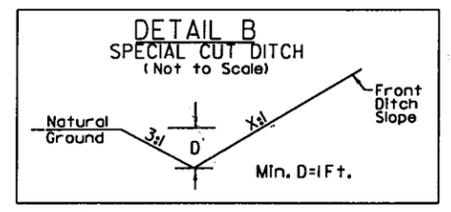
PROJECT REFERENCE NO. K-3800	SHEET NO. 2-F
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING SHEET 7 OF 10

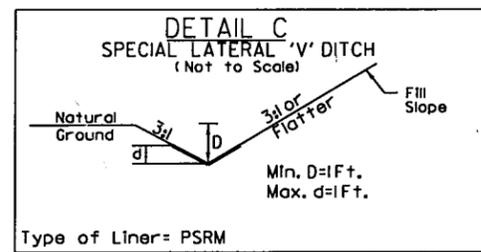
Permit Drawing Sheet 7 of 10  
Revised 4/14/14



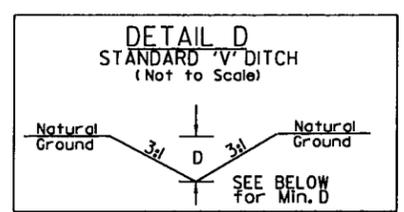
-Y1- STA. 11+00 LT. TO -L- STA. 10+75 LT., X=3, Y=4  
 -Y1- STA. 15+33 LT. TO -Y1- STA. 18+92 LT., X=5, Y=5



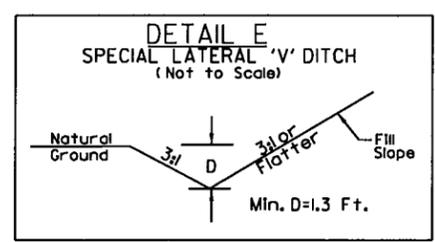
-L- STA. 10+75 TO STA. 11+50 LT., X=4  
 -L- STA. 10+75 TO STA. 11+22.5 RT., X=4  
 -Y1- STA. 22+08 TO STA. 22+54 RT., X=3



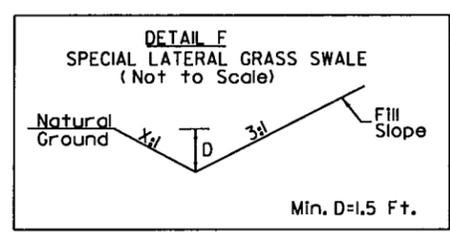
-L- STA. 19+13 TO STA. 19+36.74 LT.



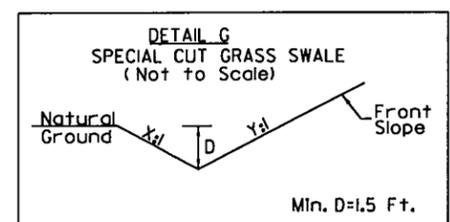
-Y1- STA. 18+37.49' TO STA. 18+54.38' RT.,  
 D=1.5', L=20', s=5.15%, DDE=40 CY  
 -Y1- STA. 18+97.6, 35' TO STA. 18+97.4, 55' LT.,  
 D=1.8', L=20', s=0.75%, DDE=11 CY



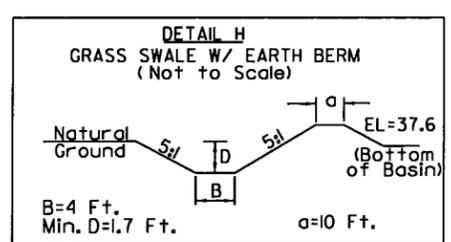
-L- STA. 19+36.74 TO STA. 21+00 LT.



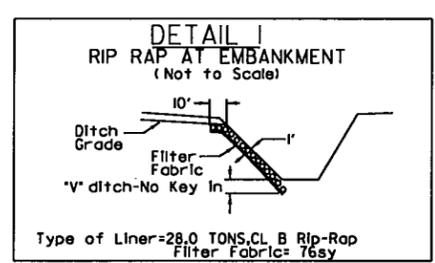
-L- STA. 21+00 TO STA. 21+60 LT., X=5  
 -Y1- STA. 12+00 TO STA. 16+50 RT., X=3  
 -Y1- STA. 18+63 TO STA. 19+50 RT., X=3



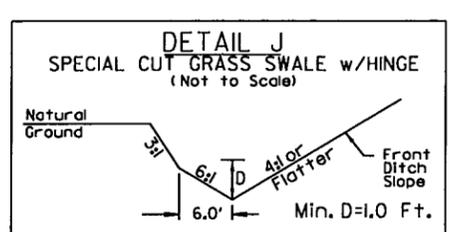
-Y1- STA. 10+92 RT. TO -Y1- STA. 12+00 RT., X=3, Y=4  
 -Y1- STA. 16+50 TO STA. 18+42 RT., X=3, Y=3  
 -Y1- STA. 19+50 TO STA. 22+08 RT., X=3, Y=3



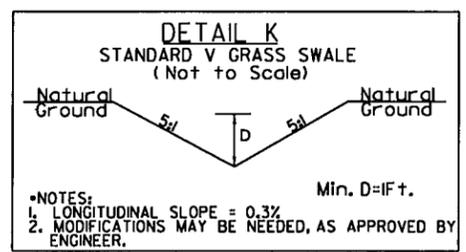
FROM -Y2- STA. 16+96.4, 99.9' LT.  
 TO -L- STA. 20+01.4, 116.7' RT.  
 TO -L- STA. 20+66.0, 106.6' RT.  
 L=110', s=0.3%, DDE=690 CUYDS



-Y1- STA. 18+31 TO STA. 18+73 RT.

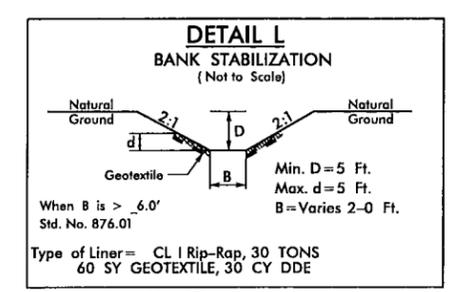


US 17 STA. 202+00 TO STA. 203+00 RT.

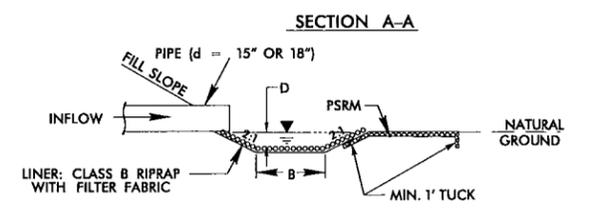
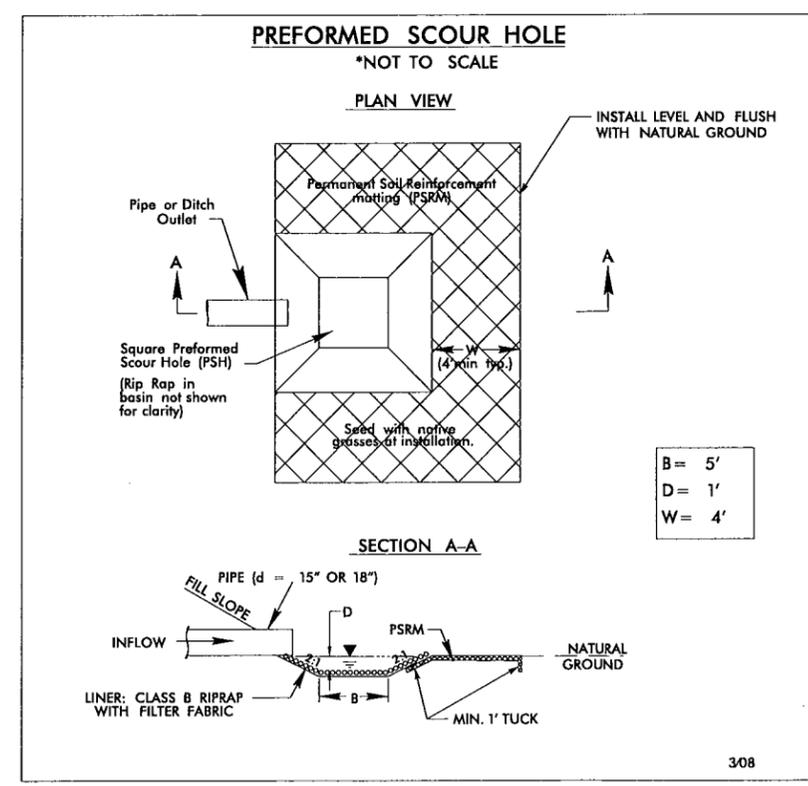


\*NOTES:  
 1. LONGITUDINAL SLOPE = 0.3%  
 2. MODIFICATIONS MAY BE NEEDED, AS APPROVED BY ENGINEER.

-L- STA 20+80 RT, L=35', DDE=7 CY  
 -L- STA 26+77 RT, L=50', DDE=9 CY  
 -Y2- STA 18+20.56 LT, L=50', DDE=9 CY



-Y1- STA. 18+95 LT.



-L- STA. 19+00 RT., -L- STA. 22+50 LT., -L- STA. 23+84.84 LT.,  
 -Y2- STA. 16+27.7 LT.

308





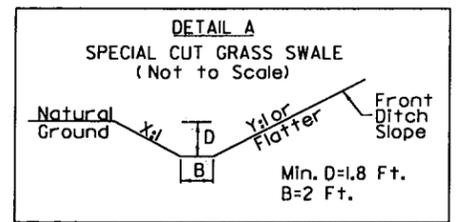


8/17/99

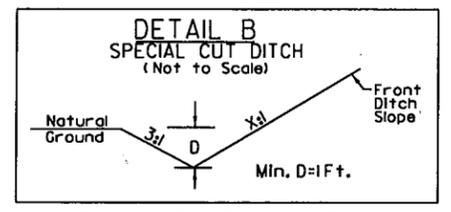
PROJECT REFERENCE NO. <b>K-3800</b>	SHEET NO. <b>2-F</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING  
SHEET 7 OF 10

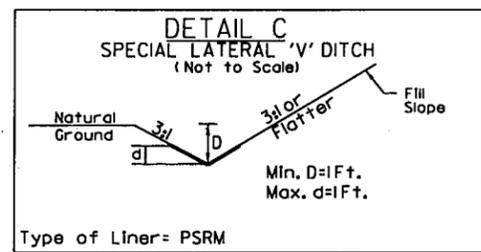
Buffer Drawing  
Sheet 7 of 10  
Revised 4/14/14



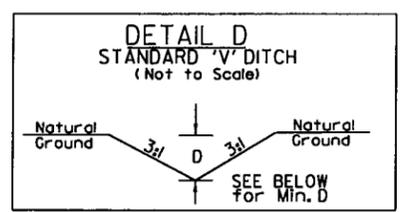
-Y1- STA. 11+00 LT. TO -L- STA. 10+75 LT., X=3, Y=4  
-Y1- STA. 15+33 LT. TO -Y1- STA. 18+92 LT., X=5, Y=5



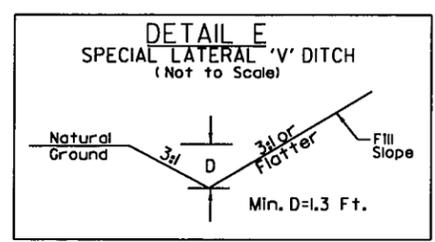
-L- STA. 10+75 TO STA. 11+50 LT., X=4  
-L- STA. 10+75 TO STA. 11+22.5 RT., X=4  
-Y1- STA. 22+08 TO STA. 22+54 RT., X=3



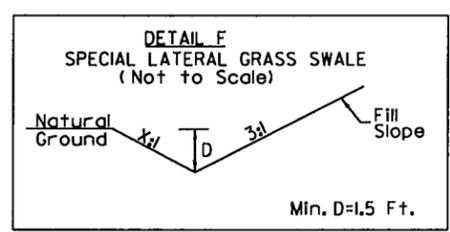
Type of Liner= PSRM  
-L- STA. 19+13 TO STA. 19+36.74 LT.



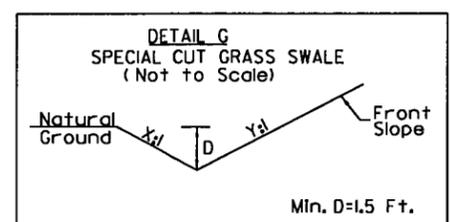
-Y1- STA. 18+37.49' TO STA. 18+54.38' RT.,  
D=1.5', L=20', s=5.15%, DDE=40 CY  
-Y1- STA. 18+97.6, 35' TO STA. 18+97.4, 55' LT.,  
D=1.8', L=20', s=0.75%, DDE=11 CY



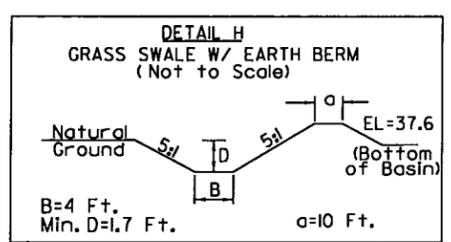
-L- STA. 19+36.74 TO STA. 21+00 LT.



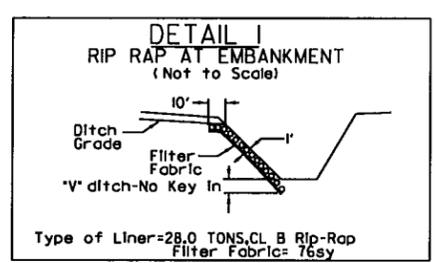
-L- STA. 21+00 TO STA. 21+60 LT., X=5  
-Y1- STA. 12+00 TO STA. 16+50 RT., X=3  
-Y1- STA. 18+63 TO STA. 19+50 RT., X=3



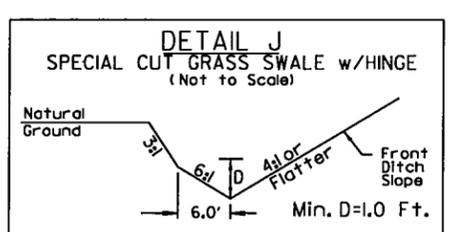
-Y1- STA. 10+92 RT. TO -Y1- STA. 12+00 RT., X=3, Y=4  
-Y1- STA. 16+50 TO STA. 18+42 RT., X=3, Y=3  
-Y1- STA. 19+50 TO STA. 22+08 RT., X=3, Y=3



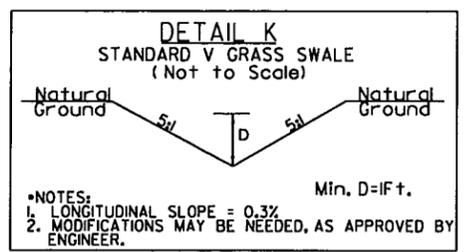
FROM -Y2- STA. 16+96.4, 99.9' LT.  
TO -L- STA. 20+01.4, 116.7' RT.  
TO -L- STA. 20+66.0, 106.6' RT.  
L=110', S=0.3%, DDE=690 CU YDS



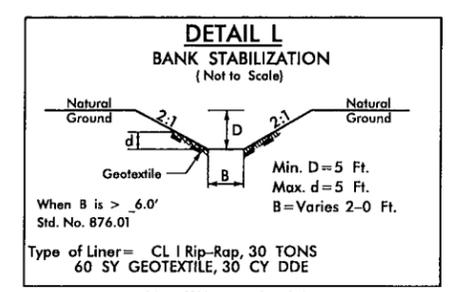
Type of Liner=28,0 TONS, CL B Rip-Rap  
Filter Fabric= 76sy  
-Y1- STA. 18+31 TO STA. 18+73 RT.



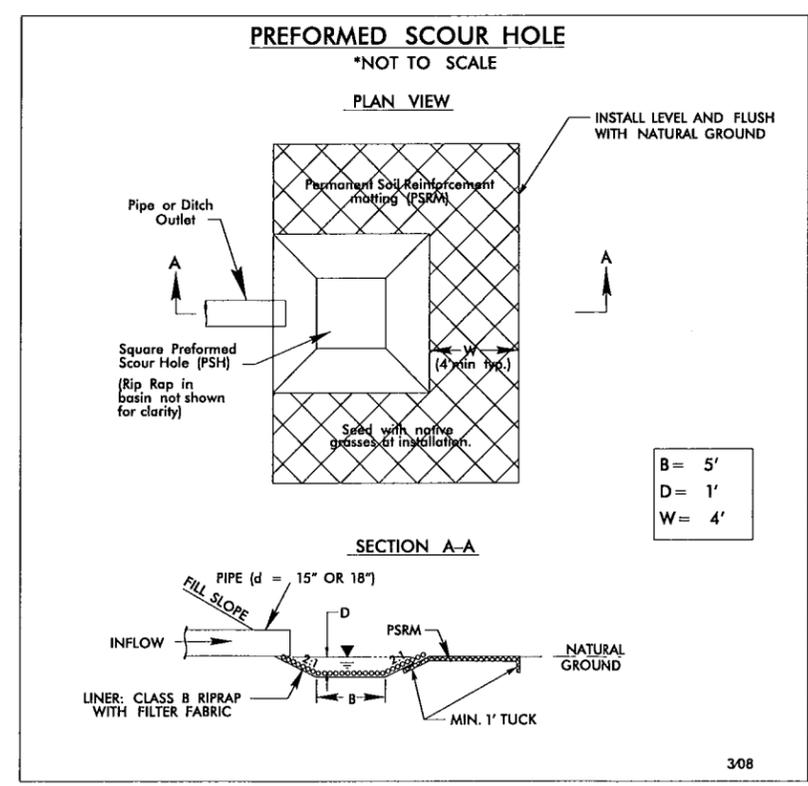
US 17 STA. 202+00 TO STA. 203+00 RT.



\*NOTES:  
1. LONGITUDINAL SLOPE = 0.3%  
2. MODIFICATIONS MAY BE NEEDED, AS APPROVED BY ENGINEER.  
-L- STA 20+80 RT, L=35', DDE=7 CY  
-L- STA 26+77 RT, L=50', DDE=9 CY  
-Y2- STA 18+20.56 LT, L=50', DDE=9 CY



When B is > .6.0'  
Std. No. 876.01  
Type of Liner= CL I Rip-Rap, 30 TONS  
60 SY GEOTEXTILE, 30 CY DDE  
-Y1- STA. 18+95 LT.



B = 5'  
D = 1'  
W = 4'

-L- STA. 19+00 RT., -L- STA. 22+50 LT., -L- STA. 23+84.84 LT.,  
-Y2- STA. 16+27.7 LT.

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