



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

May 7, 2014

U.S. Army Corps of Engineers
Regulatory Field Office
2407 West 5th Street
Washington, NC 27889

Attention: Mr. Tom Steffens
NCDOT Coordinator

Dear Sir:

Subject: **Permit Modification Request for Section 404 Nationwide 23, Section 401 Water Quality Certification and Tar-Pamlico Buffer Authorization** for the construction of a new rest area along US 17 near Chocowinity in Beaufort County; TIP Project K-3800; Federal Project No. NHS-17(32); WBS No. 38748.1.1.

References: Permit application dated 6/19/2013, Permit modification request dated 3/13/14
404 issued 11/13/13, Action Id. SAW-2013-02202
401 issued 8/9/13, DWR Project No. 20130649.

The North Carolina Department of Transportation (NCDOT) applied for permit authorizations for the subject project on June 19, 2013. This application indicated that there were no expected impacts to streams or buffers due to utilities. Modifications have been made to the utility plans for the project which now involve installation of a 6” water line, which will increase impacts to buffer zones 1 and 2. NCDOT requested a modification to the permits to account for these additional impacts on March 13, 2014. Following additional coordination, the project plans have been further revised. The water line will now be installed by a directional bore method. The change to directional bore methods eliminated the utility impacts proposed in our March 13 permit modification request.

As a result of the stream’s jurisdictional starting point now at the pipe outfall, additional stream impacts (Site 3) and buffer impacts (Site 4) are now proposed. Buffer Site 4 will have impacts to buffers in both Zone 1 and Zone 2:

Site	Zone 1 (sq. ft.)	Zone 2 (sq. ft.)	Total (sq. ft.)
Buffer Drawing Site 4	914	564	1,478

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1548

TELEPHONE: 919-707-6000
FAX: 919-212-5785
WEBSITE: NCDOT.GOV

LOCATION:
CENTURY CENTER, BUILDING B
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

This increases the overall project buffer impacts to a total of 12,935 sq. ft. in Zone 1 and 9,291 sq. ft. in Zone 2, totaling 22,226 sq. ft. of buffer impacts for the project. Permanent stream impacts have also increased by 27 ft now totaling 296 ft. Revised permit drawings are included with this modification request.

The additional mitigation required for these new impacts can be accommodated by the onsite mitigation plan, so no changes to the mitigation proposal are anticipated. An updated copy of the US 17 Rest Area K-3800 debit ledger is included with this modification request.

Regulatory Approvals

Section 404 Permit: NCDOT requests that the U.S. Army Corps of Engineers (USACE) issue a modification for the Section 404 Nationwide Permit 23 (Categorical Exclusion) issued November 13, 2013, as required for the above-described activities.

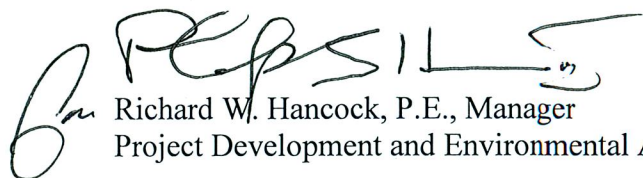
Section 401 Certification: NCDOT requests that the NCDWR issue a modification for the General 401 Water Quality Certification issued August 9, 2013, as required for the above-described activities.

Tar-Pamlico Riparian Buffer Authorization: NCDOT requests that the NCDWR issue a modification for the Tar-Pamlico Riparian Buffer Authorization issued August 9, 2013, as required for the above-described activities.

A copy of this modification request will be posted on the NCDOT Website at <https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>, under *Quick Links > Permit Applications*.

If you have any questions or need additional information, please contact Gordon Cashin at (919) 707-6107 or gcashin@ncdot.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Hancock', is written over the typed name.

Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit

cc

NCDOT Permit Application Standard Distribution List.

US 17 Rest Area
 K-3800
 WM 007-002

HUC	Mitigation Type	Starting Amount	Additional Notes
3020105	Stream Restoration	815	1.5:1ratio (ACOE stated the ratio for this project)
3020105	Stream Preservation	623	
3020105	Buffer Restoration	81457.2	

Mitigation Type	Debit Amount (Ln. Ft.)	Status	Site TIP	Action ID#	Notes
Stream Restoration	403.5	Permit	K-3800	SAW-2013-02202	Permit 12/3/2013 269 Ln ft @1.5:1 ratio
Stream Restoration	40.5	Permit	K-3800 Mod	SAW-2013-02202	Permit Mod 27Ln Ft @1.5:1 ratio

Mitigation Type	Debit Amount (Ln. Ft.)	Status	Site TIP	Action ID#	Notes
Stream Preservation	0	Permit		SAW-2013-02202	No Debits as of 4/30/2014

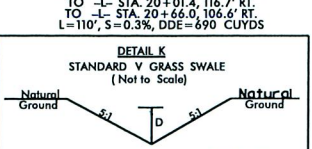
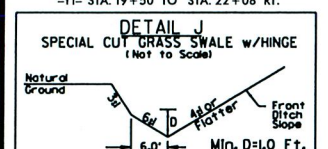
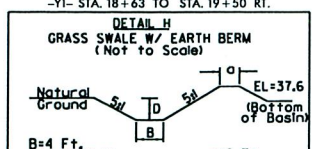
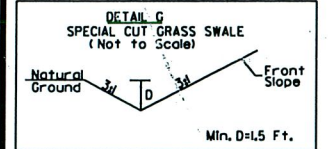
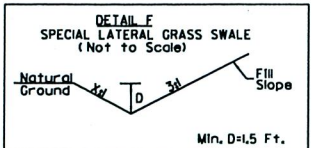
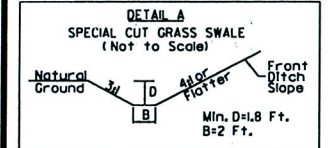
Mitigation Type	Debit Amount (Sq. Ft.)	Status	Site TIP	Action ID#	Notes
Buffer Restoration	49153.5	Permit	K-3800	SAW-2013-02202	Permit 12/3/2013 Zone 1(3:1) 12021sqft Zone2(1.5:1) 8727sqft
Buffer Restoration	3591	Permit	K-38000 Mod	SAW-2013-02202	Permit Mod Zone1(3:1) ---915sqft Zone 2(1.5:1)-564sqft

8/17/99

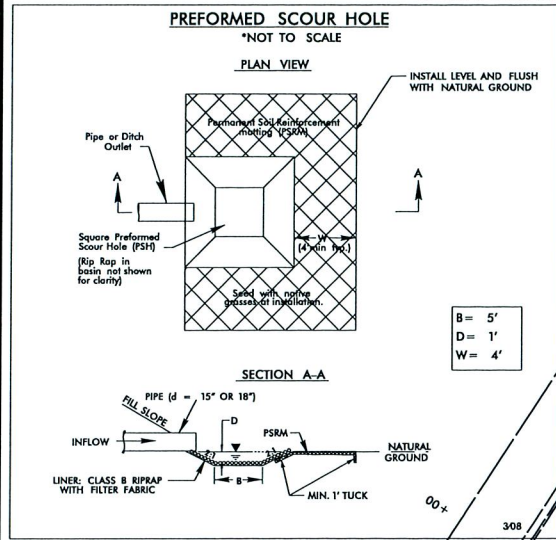
PROJECT REFERENCE NO. K-3800	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Permit Drawing	
Sheet 2 of 10	
Revised 4/14/14	

WETLAND AND SURFACE WATER IMPACTS PERMIT

PERMIT DRAWING SHEET 2 OF 10



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



GRASS SWALE DATA
-L- STA. 21+00 - 21+60 LT
DA=0.20ac
L REQ'D=20H
L PROP.=50H
Q2=0.9cfs
Y2=0.91ps
Q10=1.1cfs
V10=1.1fps

GRASS SWALE DATA
-L- STA. 20+80 RT.
DA=20ac
L REQ'D=12H
L PROP.=35H
Q2=0.9cfs
Y2=0.91ps
Q10=1.2cfs
V10=0.9fps

GRASS SWALE DATA
-Y2- STA. 16+67.42, 71.7' LT.
TO -L- STA. 19+77.6, 102.2' RT.
TO -L- STA. 20+40.4, 94' RT
DA=1.98ac
L REQ.=0H
L PROP.=198H
Q2=6cfs
Y2=1.61ps
Q10=8cfs
V10=1.81ps

GRASS SWALE DATA
-L- STA. 26+77 RT, L=50'
-Y2- STA. 18+20.56 LT, L=50'

GRASS SWALE DATA
-L- STA. 18+63 - 21+00 RT
DA=0.21ac
L REQ'D=21H
L PROP.=50H
Q2=0.7cfs
Y2=0.81ps
Q10=0.9cfs
V10=0.9fps

GRASS SWALE DATA
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DA=1.7ac
L REQ'D=170H
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Y2=1.5fps
Q10=5.5cfs
V10=1.5fps

GRASS SWALE DATA
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Q10=2.5cfs
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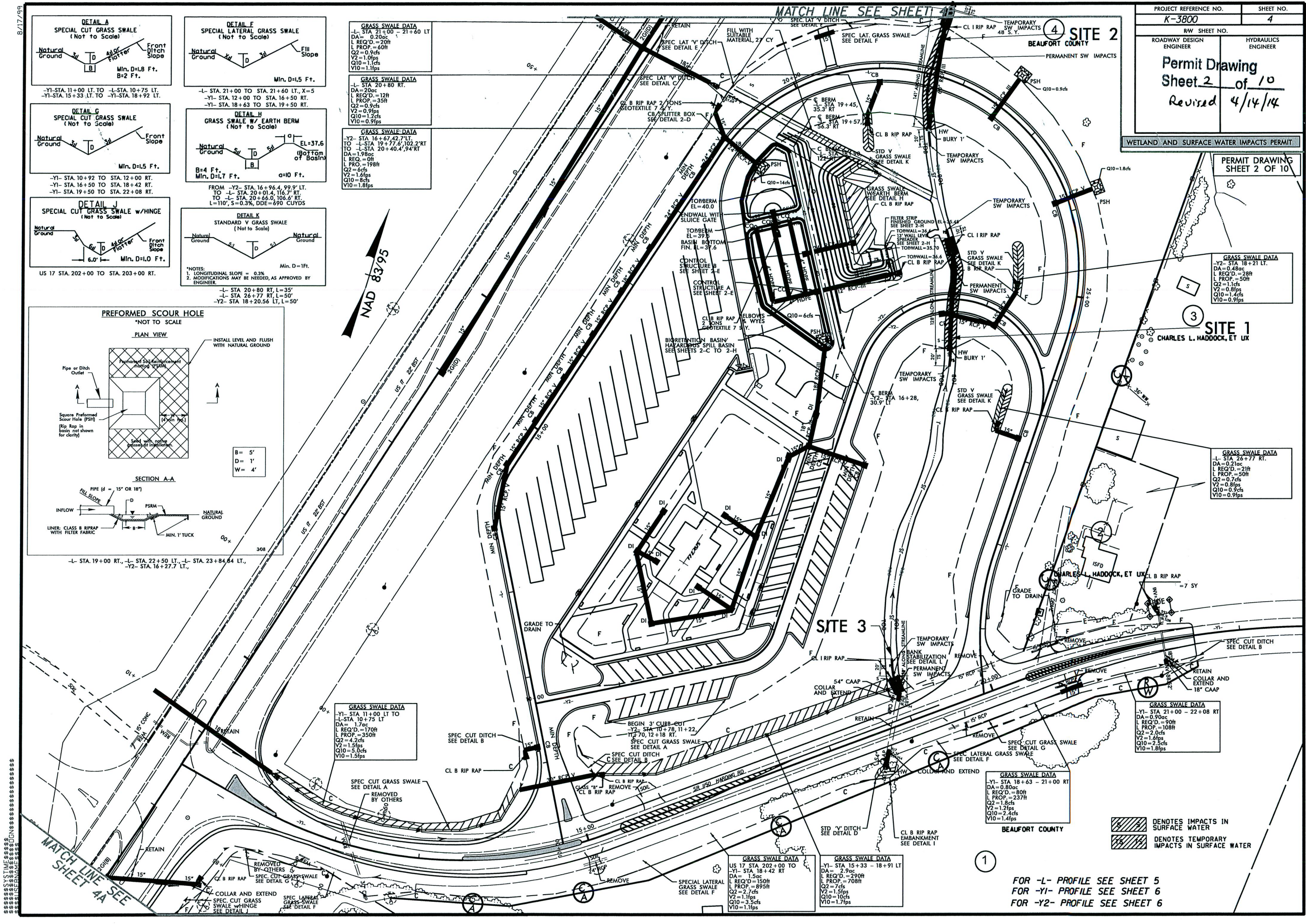
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Q10=2.4cfs
V10=1.4fps

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-Y1- STA. 15+33 - 18+91 LT
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L REQ'D=290H
L PROP.=708H
Q2=7cfs
Y2=1.51ps
Q10=10cfs
V10=1.71ps

GRASS SWALE DATA
US 17 STA. 202+00 TO -Y1- STA. 18+42 RT
DA=1.5ac
L REQ'D=150H
L PROP.=895H
Q2=2.7cfs
Y2=1.11ps
Q10=3.5cfs
V10=1.11ps

GRASS SWALE DATA
-Y1- STA. 18+20.56 - 22+08 RT
DA=0.90ac
L REQ'D=90H
L PROP.=108H
Q2=2.0cfs
Y2=1.6fps
Q10=2.5cfs
V10=1.8fps

GRASS SWALE DATA
-L- STA. 26+77 RT, L=50'
-Y2- STA. 18+20.56 LT, L=50'

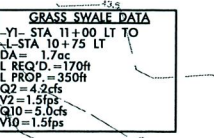
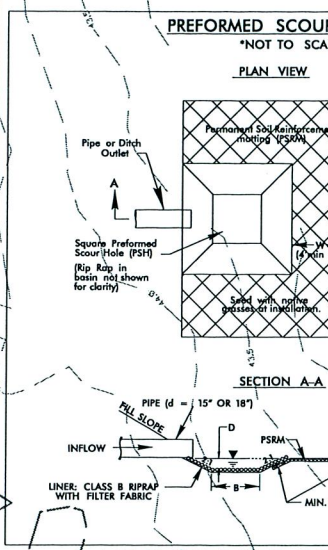
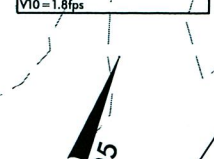
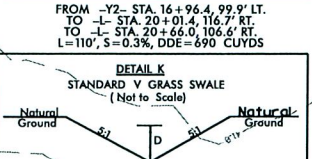
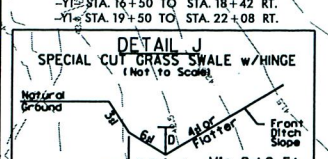
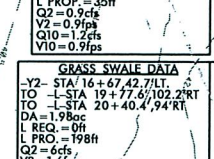
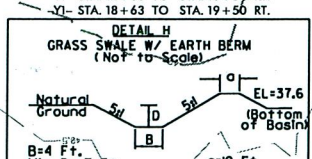
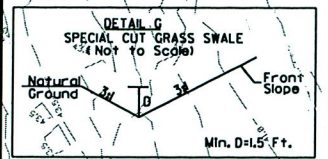
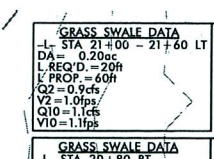
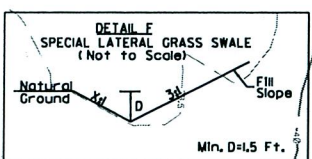
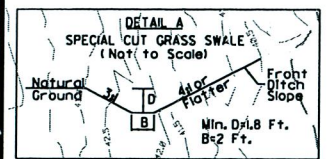
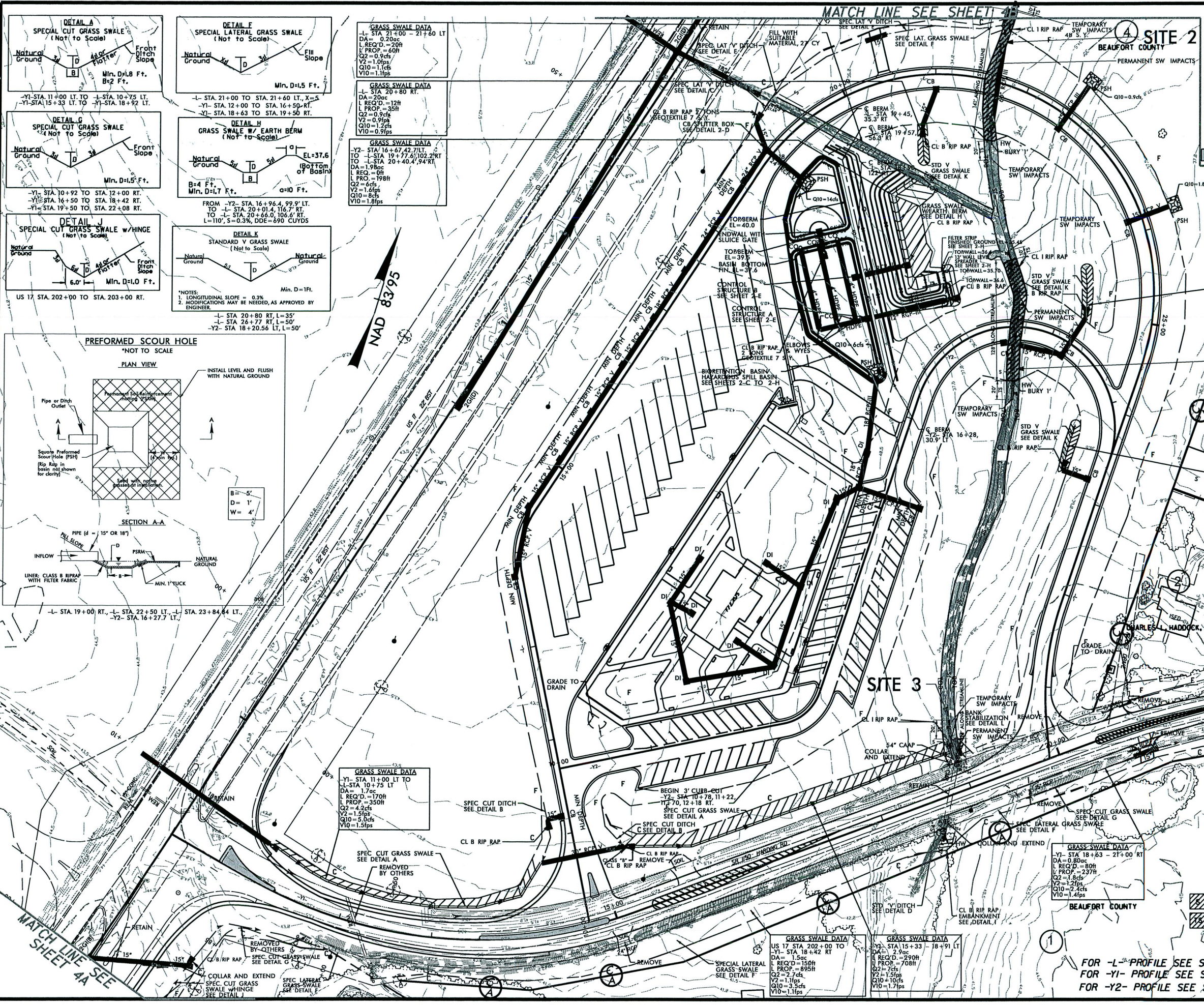


BEAUFORT COUNTY

CHARLES L. HADDOCK, ET UX

FOR -L- PROFILE SEE SHEET 5
FOR -Y1- PROFILE SEE SHEET 6
FOR -Y2- PROFILE SEE SHEET 6

WETLAND AND SURFACE WATER IMPACTS PERMIT
PERMIT DRAWING SHEET 3 OF 10



FOR -L- PROFILE SEE SHEET 5
FOR -Y1- PROFILE SEE SHEET 6
FOR -Y2- PROFILE SEE SHEET 6

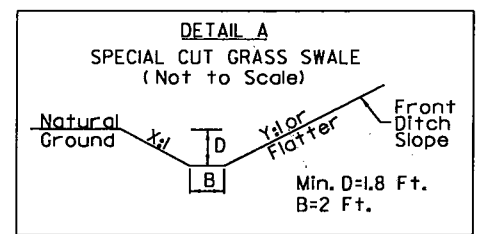
DENOTES IMPACTS IN SURFACE WATER
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

8/17/99

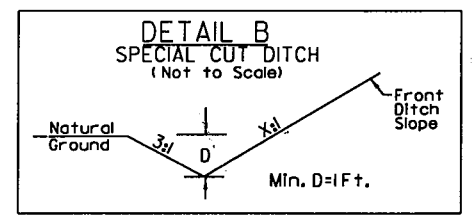
PROJECT REFERENCE NO. K-3800	SHEET NO. 2-F
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING SHEET 7 OF 10

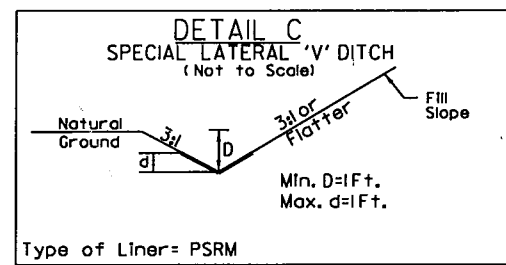
Permit Drawing Sheet 7 of 10
Revised 4/14/14



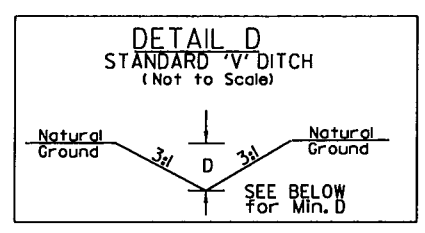
-Y1- STA. 11+00 LT. TO -L- STA. 10+75 LT., X=3, Y=4
 -Y1- STA. 15+33 LT. TO -Y1- STA. 18+92 LT., X=5, Y=5



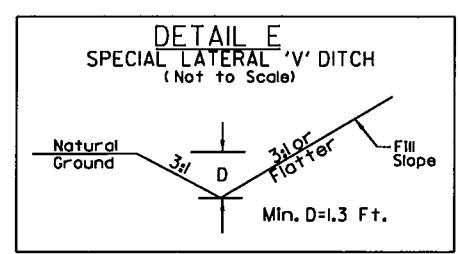
-L- STA. 10+75 TO STA. 11+50 LT., X=4
 -L- STA. 10+75 TO STA. 11+22.5 RT., X=4
 -Y1- STA. 22+08 TO STA. 22+54 RT., X=3



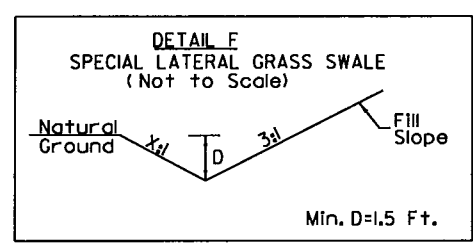
-L- STA. 19+13 TO STA. 19+36.74 LT.



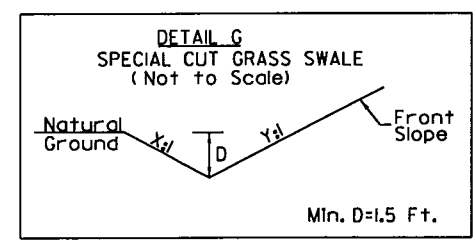
-Y1- STA. 18+37.49' TO STA. 18+54.38' RT.,
 D=1.5', L=20', s=5.15%, DDE=40 CY
 -Y1- STA. 18+97.6, 35' TO STA. 18+97.4, 55' LT.,
 D=1.8', L=20', s=0.75%, DDE=11 CY



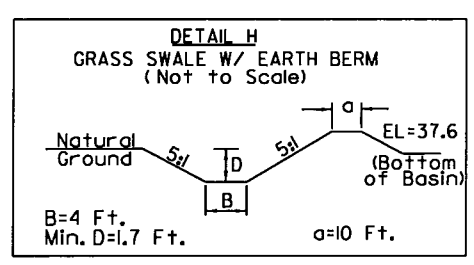
-L- STA. 19+36.74 TO STA. 21+00 LT.



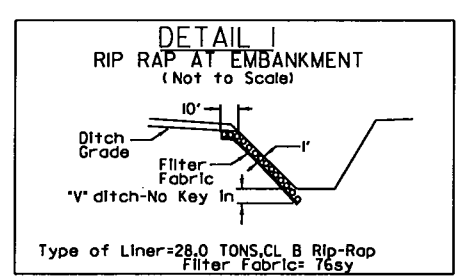
-L- STA. 21+00 TO STA. 21+60 LT., X=5
 -Y1- STA. 12+00 TO STA. 16+50 RT., X=3
 -Y1- STA. 18+63 TO STA. 19+50 RT., X=3



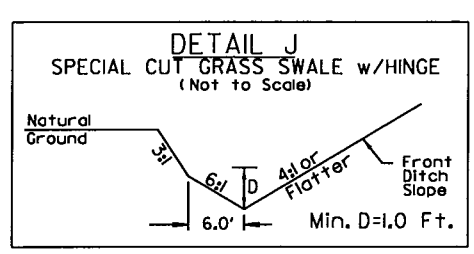
-Y1- STA. 10+92 RT. TO -Y1- STA. 12+00 RT., X=3, Y=4
 -Y1- STA. 16+50 TO STA. 18+42 RT., X=3, Y=3
 -Y1- STA. 19+50 TO STA. 22+08 RT., X=3, Y=3



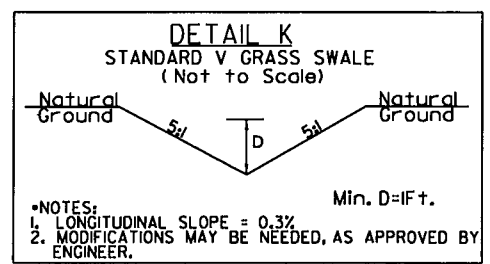
FROM -Y2- STA. 16+96.4, 99.9' LT.
 TO -L- STA. 20+01.4, 116.7' RT.
 TO -L- STA. 20+66.0, 106.6' RT.
 L=110', S=0.3%, DDE=690 CUYDS



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

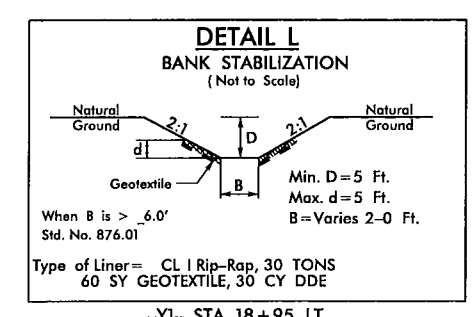


US 17 STA. 202+00 TO STA. 203+00 RT.

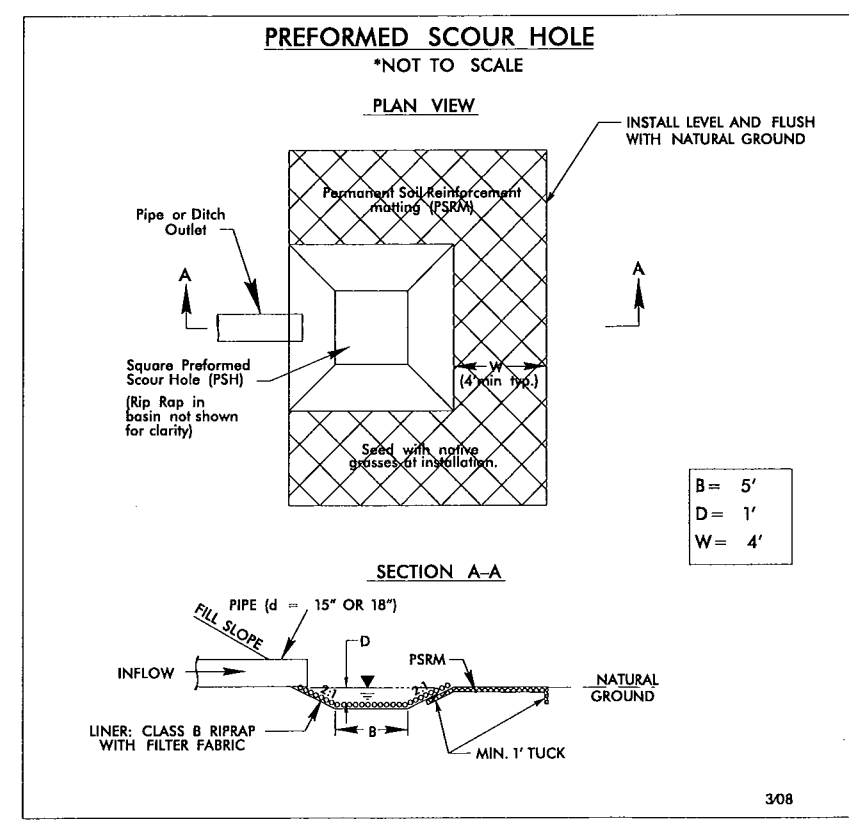


*NOTES:
 1. LONGITUDINAL SLOPE = 0.3%
 2. MODIFICATIONS MAY BE NEEDED, AS APPROVED BY ENGINEER.

-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.

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WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-Y2- 17+59	60" RCP	-	-	-	-	-	< 0.01	< 0.01	128	30	
2	-L- 21+68	60" RCP	-	-	-	-	-	< 0.01	< 0.01	141	30	
3	-Y1- 18+96 Lt.	54" CMP	-	-	-	-	-	< 0.01	< 0.01	27	20	
TOTALS:								0.01	< 0.01	296	80	

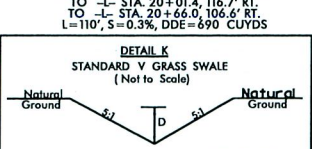
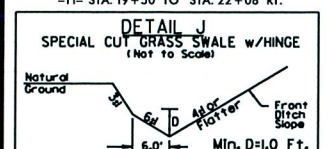
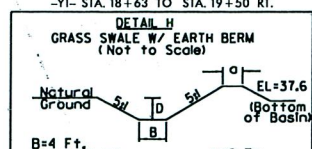
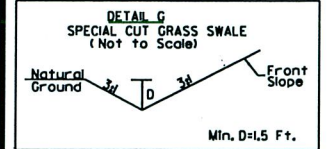
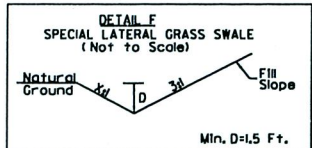
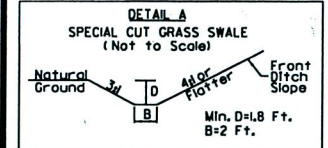
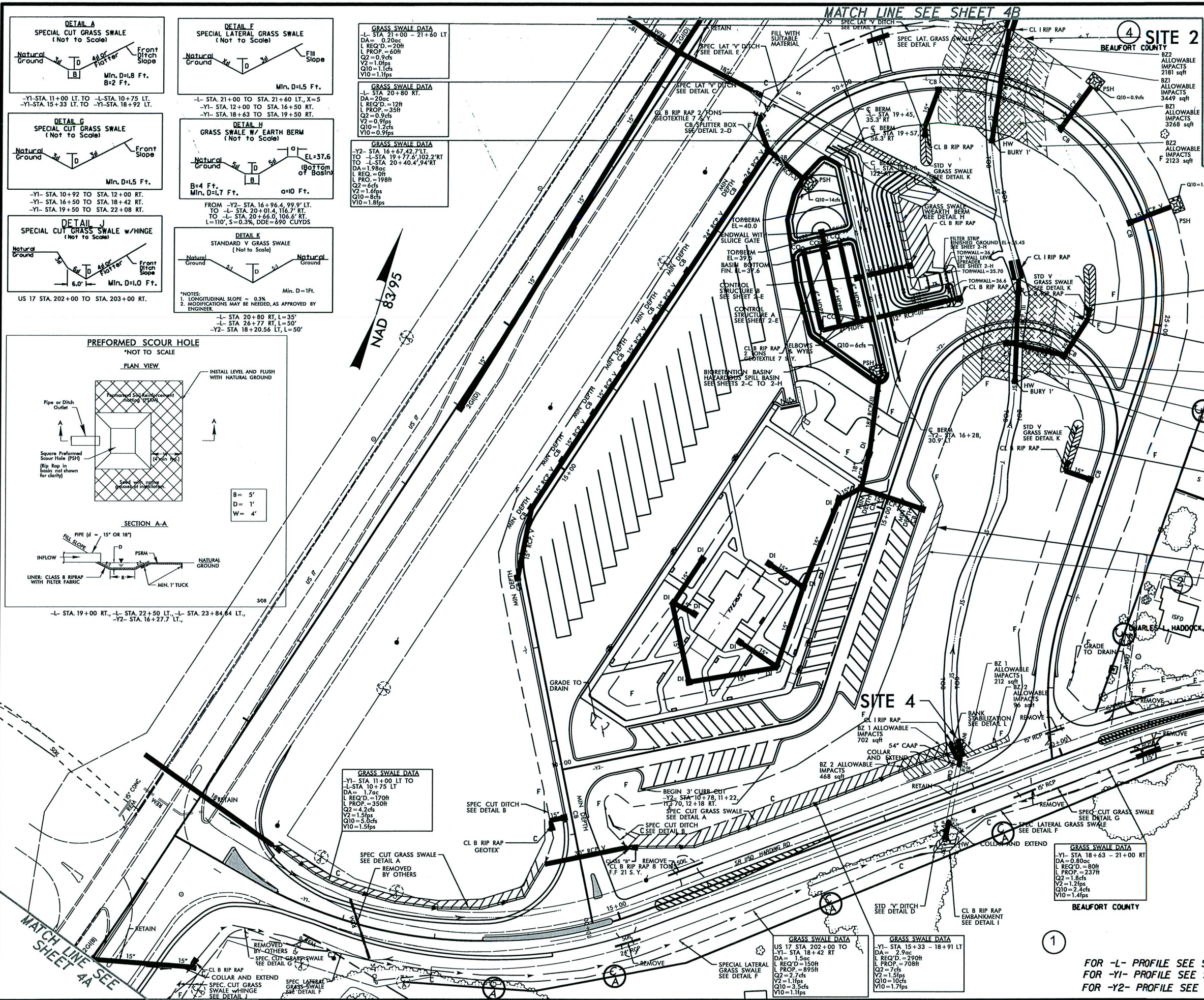
18 If BANK STABILIZATION

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 BEAUFORT COUNTY
 WBS - 38748.1.1 (K-3800)
 4/14/2014
 SHEET 10 OF 10

ATN Revised 3/31/05

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



GRASS SWALE DATA
-L- STA 21+00 - 21+60 LT
DA=0.20oc
L REQ'D.=20ft
L PROP.=60ft
Q2=0.9cfs
V2=1.0fps
Q10=1.1cfs
V10=1.1fps

GRASS SWALE DATA
-L- STA 20+80 RT.
DA=20oc
L REQ'D.=12ft
L PROP.=35ft
Q2=0.9cfs
V2=0.9fps
Q10=1.2cfs
V10=0.9fps

GRASS SWALE DATA
-Y2- STA 16+67.42, 71.7' LT TO -L- STA 19+77.5, 102.2' RT TO -L- STA 20+40.4, 94' RT
DA=1.98oc
L REQ.=0ft
L PRO.=198ft
Q2=6cfs
V2=1.6fps
Q10=8cfs
V10=1.8fps

GRASS SWALE DATA
-L- STA 11+00 LT TO -L- STA 10+75 LT
DA=1.7oc
L REQ'D.=170ft
L PROP.=350ft
Q2=4.2cfs
V2=1.5fps
Q10=5.0cfs
V10=1.5fps

GRASS SWALE DATA
-Y1- STA 21+00 - 22+08 RT
DA=0.90oc
L REQ'D.=21ft
L PROP.=50ft
Q2=2.0cfs
V2=1.8fps
Q10=2.4cfs
V10=1.8fps

GRASS SWALE DATA
-L- STA 26+77 RT.
DA=0.21oc
L REQ'D.=21ft
L PROP.=50ft
Q2=0.7cfs
V2=0.8fps
Q10=0.9cfs
V10=0.9fps

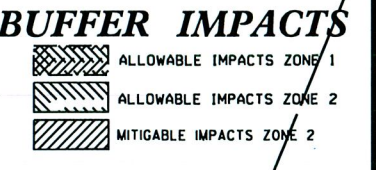
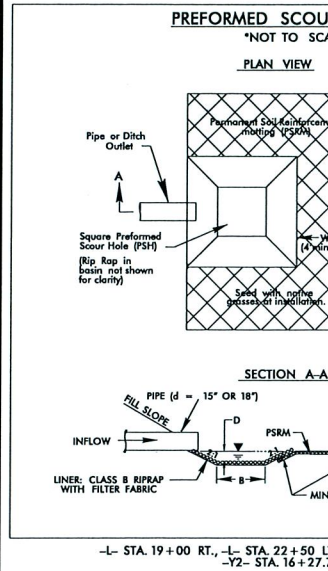
GRASS SWALE DATA
-Y1- STA 11+00 LT TO -L- STA 10+75 LT
DA=1.7oc
L REQ'D.=170ft
L PROP.=350ft
Q2=4.2cfs
V2=1.5fps
Q10=5.0cfs
V10=1.5fps

GRASS SWALE DATA
-Y1- STA 21+00 - 22+08 RT
DA=0.90oc
L REQ'D.=21ft
L PROP.=50ft
Q2=2.0cfs
V2=1.8fps
Q10=2.4cfs
V10=1.8fps

GRASS SWALE DATA
-Y1- STA 18+63 - 21+00 RT
DA=0.80oc
L REQ'D.=80ft
L PROP.=237ft
Q2=1.8cfs
V2=1.2fps
Q10=2.4cfs
V10=1.4fps

GRASS SWALE DATA
US 17 STA 202+00 TO -Y1- STA 18+42 RT
DA=1.5oc
L REQ'D.=150ft
L PROP.=895ft
Q2=2.7cfs
V2=1.1fps
Q10=3.5cfs
V10=1.1fps

GRASS SWALE DATA
-Y1- STA 15+33 - 18+91 LT
DA=2.9oc
L REQ'D.=290ft
L PROP.=708ft
Q2=7cfs
V2=1.5fps
Q10=10cfs
V10=1.7fps



FOR -L- PROFILE SEE SHEET 5
FOR -Y1- PROFILE SEE SHEET 6
FOR -Y2- PROFILE SEE SHEET 6

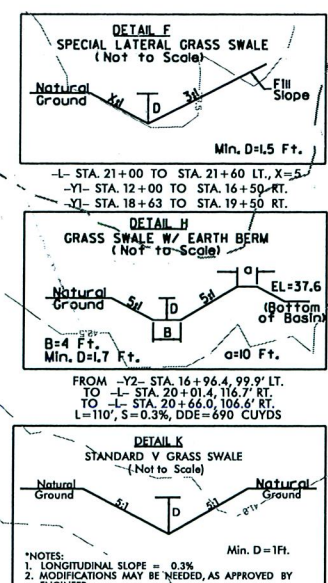
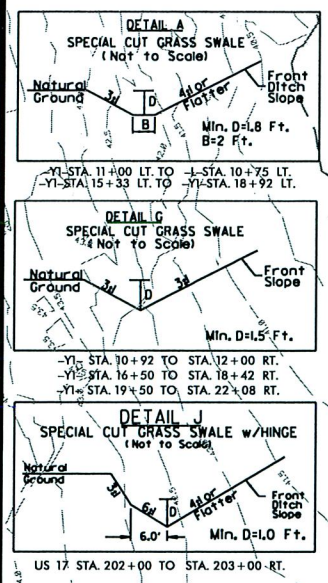
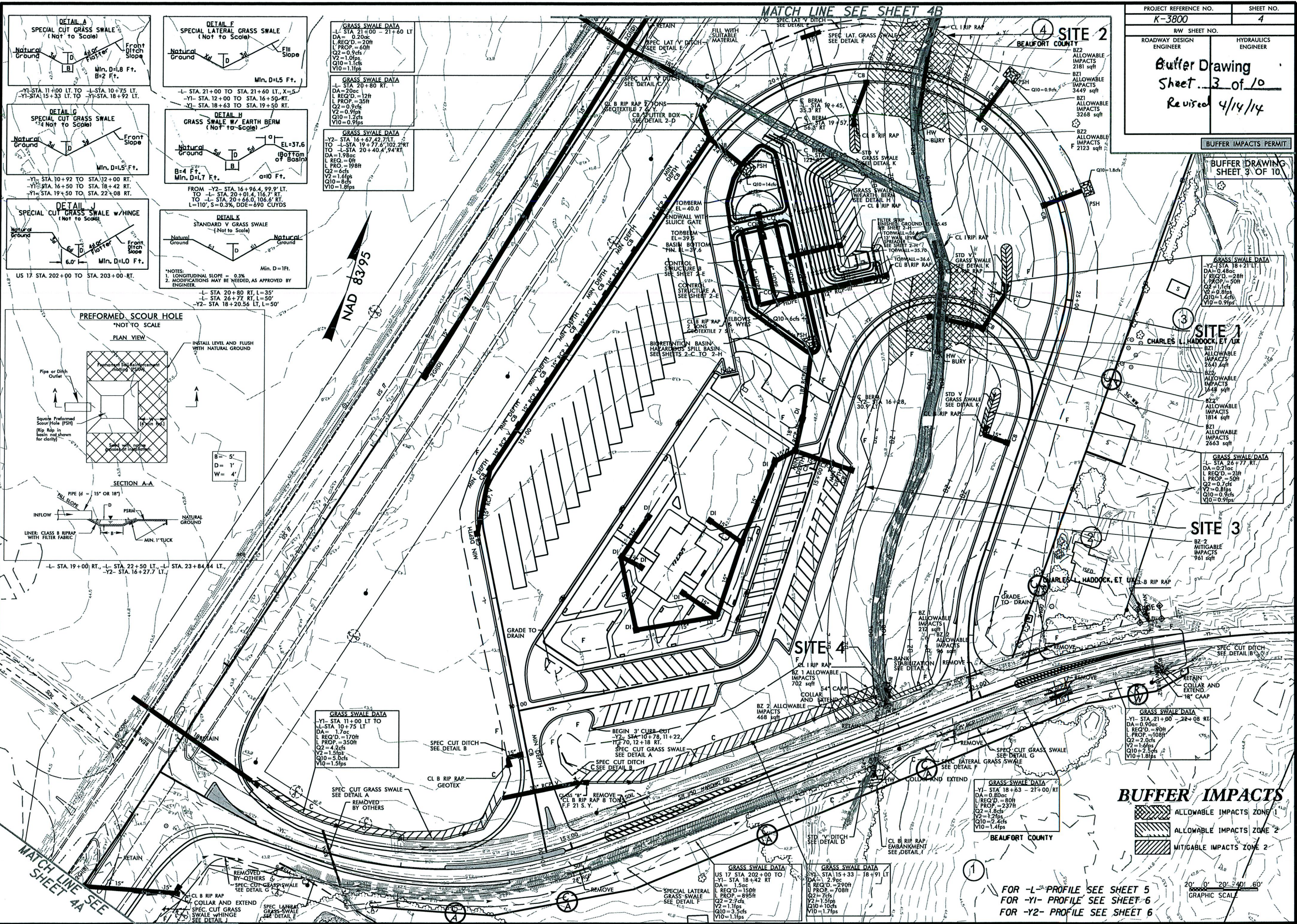
20' 0' 20' 40' 60'
GRAPHIC SCALE

8/17/99
 4/14/2014
 C:\Users\jgibson\Documents\Drawings\Permit Acad -11-A\3800_hyd_perm_buf.dgn
 jgibson
 R:\Hydraulics\PERMITS_Environmental\Drawings\Permit Acad -11-A\3800_hyd_perm_buf.dgn

PROJECT REFERENCE NO. K-3800	SHEET NO. 4
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Buffer Drawing	
Sheet 3 of 10	
Revised 4/14/14	

BUFFER IMPACTS PERMIT

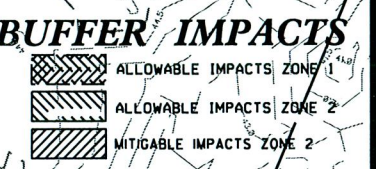
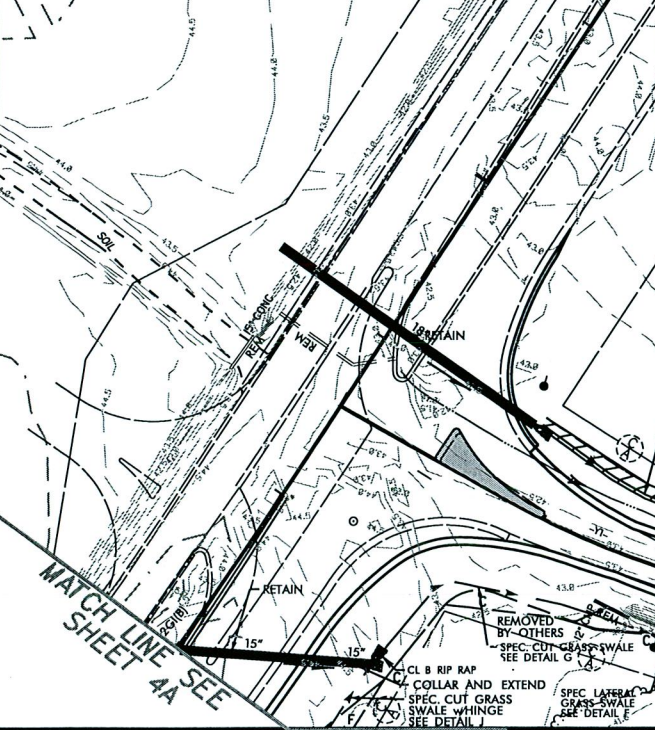
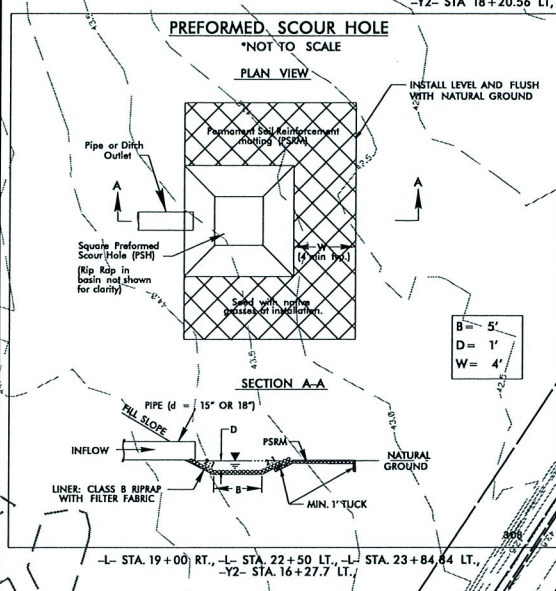
BUFFER DRAWING SHEET 3 OF 10



GRASS SWALE DATA
-L STA 21+00 - 21+60 LT
DA=0.20ac
L REQ'D=20H
L PROP=60H
Q2=0.9cfs
V2=0.9fps
Q10=1.4cfs
V10=1.1fps

GRASS SWALE DATA
-L STA 20+80 RT
DA=20ac
L REQ'D=12H
L PROP=35H
Q2=0.9cfs
V2=0.9fps
Q10=1.2cfs
V10=0.9fps

GRASS SWALE DATA
-Y2 STA 16+67.42, 7.17 LT TO -L STA 19+77.6, 103.2 RT TO -L STA 20+40.4, 94 RT
DA=1.98ac
L REQ'D=19H
L PROP=19H
Q2=6cfs
V2=1.6fps
Q10=8cfs
V10=1.8fps



FOR -L- PROFILE SEE SHEET 5
FOR -Y1- PROFILE SEE SHEET 6
FOR -Y2- PROFILE SEE SHEET 6

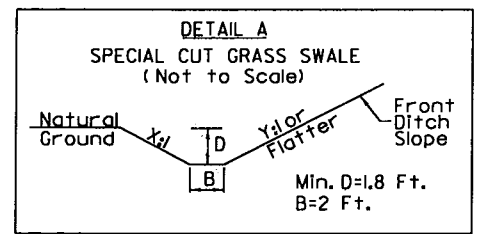
4/16/2014 11:58:58 AM C:\HYDRAULIC\PERMITS\Environmental\Drawings\Permit Mod 4-11-A\K3800_jrd_jm_buf.dgn

8/17/99

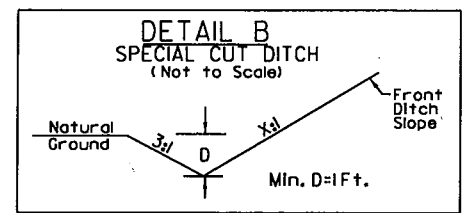
PROJECT REFERENCE NO. K-3800	SHEET NO. 2-F
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING
SHEET 7 OF 10

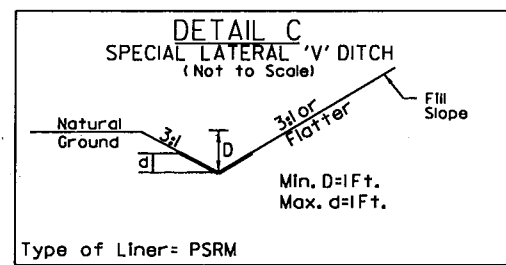
Buffer Drawing
Sheet 7 of 10
Revised 4/14/14



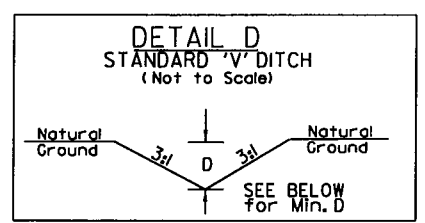
-Y1- STA. 11+00 LT. TO -L- STA. 10+75 LT., X=3, Y=4
-Y1- STA. 15+33 LT. TO -Y1- STA. 18+92 LT., X=5, Y=5



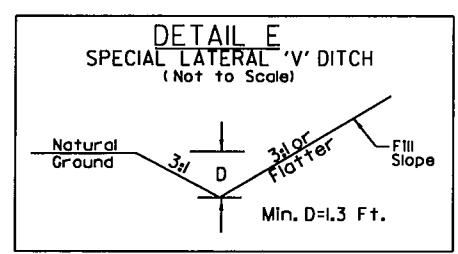
-L- STA. 10+75 TO STA. 11+50 LT., X=4
-L- STA. 10+75 TO STA. 11+22.5 RT., X=4
-Y1- STA. 22+08 TO STA. 22+54 RT., X=3



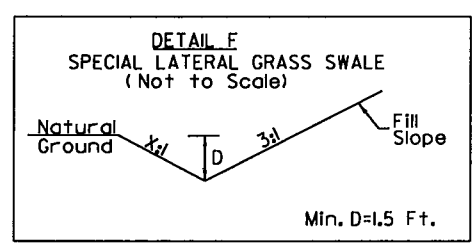
-L- STA. 19+13 TO STA. 19+36.74 LT.



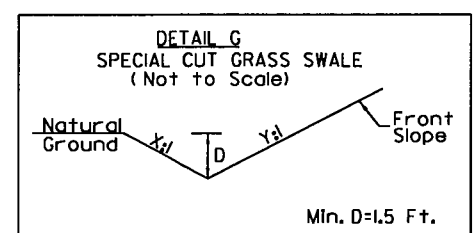
-Y1- STA. 18+37.49' TO STA. 18+54.38' RT.,
D=1.5', L=20', s=5.15%, DDE=40 CY
-Y1- STA. 18+97.6, 35' TO STA. 18+97.4, 55' LT.,
D=1.8', L=20', s=0.75%, DDE=11 CY



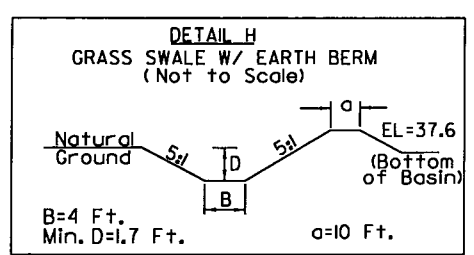
-L- STA. 19+36.74 TO STA. 21+00 LT.



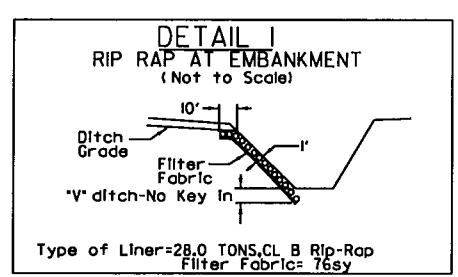
-L- STA. 21+00 TO STA. 21+60 LT., X=5
-Y1- STA. 12+00 TO STA. 16+50 RT., X=3
-Y1- STA. 18+63 TO STA. 19+50 RT., X=3



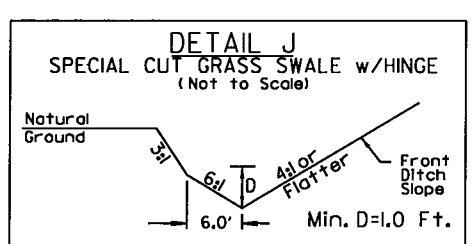
-Y1- STA. 10+92 RT. TO -Y1- STA. 12+00 RT., X=3, Y=4
-Y1- STA. 16+50 TO STA. 18+42 RT., X=3, Y=3
-Y1- STA. 19+50 TO STA. 22+08 RT., X=3, Y=3



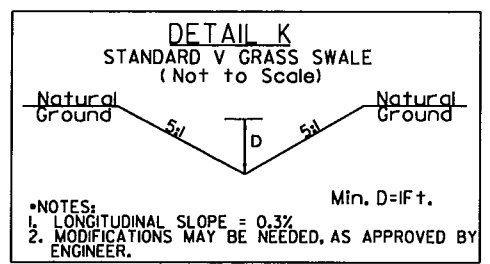
FROM -Y2- STA. 16+96.4, 99.9' LT.
TO -L- STA. 20+01.4, 116.7' RT.
TO -L- STA. 20+66.0, 106.6' RT.
L=110', S=0.3%, DDE=690 CU YDS



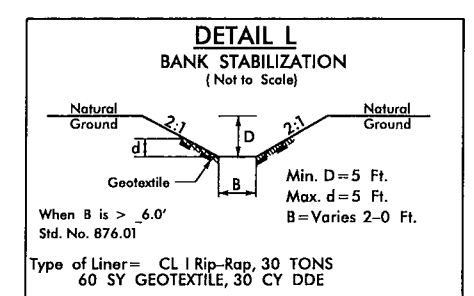
Type of Liner=28.0 TONS, CL B Rip-Rap
Filter Fabric= 76sy
-Y1- STA. 18+31 TO STA. 18+73 RT.



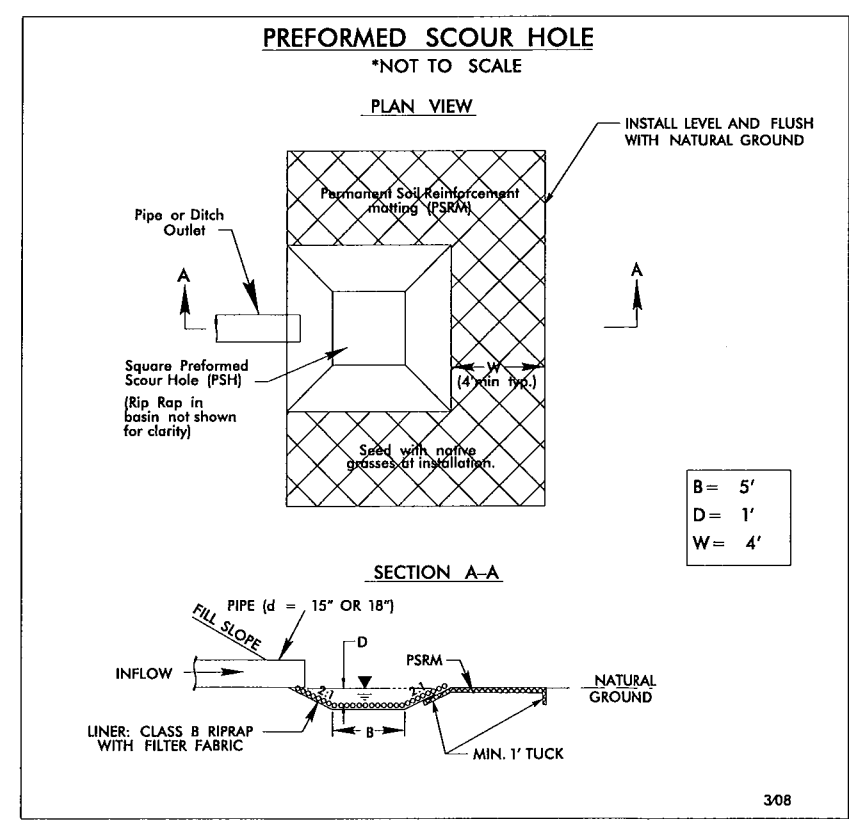
US 17 STA. 202+00 TO STA. 203+00 RT.



*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.



-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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BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT									BUFFER REPLACEMENT	
			TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft ²)	ZONE 2 (ft ²)
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)		
1	60" RCP	-Y2- 17+59	X			5304	3462	8766					
2	60" RCP	-L- 21+66	X			6717	4304	11021					
3	Roadway Fill in BZ 2	-Y2- 13+81 to 15+29, Rt			X					961	961		
4	Grass Swale & Roadway Fill	-Y1- 18+96 Lt.	X			914	564	1478					
TOTAL:						12,935	8,330	21,265		961	961		

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

BEAUFORT COUNTY
PROJECT: 38748.1.1 (K-3800)

4/14/2014
SHEET 10 OF 10

Rev. May 2006

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