



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

November 17, 2017

Mr. Tom Steffens  
U.S. Army Corps of Engineers  
Regulatory Field Office  
2407 West 5<sup>th</sup> St  
Washington, NC 27889

Mr. Stephen Lane  
N.C. Dept. of Environmental Quality  
Division of Coastal Management  
400 Commerce Avenue  
Morehead City, NC 28557

Subject: **Permit Modification Request for the Section 404 Individual Permit, Section 401 Individual Water Quality Certification and CAMA Major Development Permit** for the proposed improvements to US 70 from existing four lanes at Radio Island to north of Olga Road (SR 1426), Carteret County, State Project No. 8.1162501, Federal Aid Project STPNHF-70(43), TIP R-3307, Debit \$570 (NCDWR) and \$100 (NCDCM) from WBS 34528.1.1

References: Section 404 Permit No. SAW-2010-02125, issued September 27, 2013  
Section 401 Permit No. 3195, issued April 30, 2012  
CAMA Major Development Permit No. 37-12, issued May 3, 2012  
Section 401 Permit Modification 20111003v3, issued October 2, 2014  
CAMA Major Development Permit Modification, issued October 1, 2014  
Section 404 Permit Modification, issued October 6, 2014  
Section 404 Permit Modification, issued March 31, 2015  
CAMA Major Development Letter of Refinement, issued September 8, 2015  
Section 404 Permit Modification, issued January 11, 2016  
Section 401 Permit Modification, issued January 8, 2016  
CAMA Major Development Letter of Refinement, issued March 1, 2016  
Section 401 Permit Modification issued October 7, 2016  
CAMA Major Development Letter of Refinement, issued November 9, 2016

Dear Sirs:

Please see the enclosed revised permit drawings and impact summary sheet for the above referenced project.

Due to erosion from wave action, the grass swale at Permit Site 7 (-Y2- Sta. 20+00 LT) is modified with placement of Class I riprap on its top berm, raising the elevation to 3.0 feet and the addition of a 22 foot outlet weir. Geotextile fabric will be placed along the outlet weir. This proposed change will result in an additional 0.03 acre of permanent impact to coastal wetland.

The design of the outlets near Permit Site 7 (-Y2- Sta 24+50 RT) has been changed by eliminating the second channel that ran inside of the PDE. This channel was to provide an outlet swale for the drainage system that drains the southern portion of Turner Street. The current design uses one outlet channel for the

system draining the southern portion of Turner Street plus the cross drainage from the Housing Authority of the Town of Beaufort. This proposed change will result in an additional 77 linear feet of permanent stream impact.

Mitigation for the unavoidable impacts to 0.03 acre of coastal wetland and 77 linear feet of stream will be provided through the North Carolina Division of Mitigation Services (see attached acceptance letter).

Also included are updated Plan Sheets 9 and Plan Sheet 9 Enlargement showing the confluence of the yet-to-be-excavated ditch with the existing jurisdictional stream, as requested for your records. It was deemed that no new impacts to jurisdictional resources was to occur at this site. One minor change not shown on the drawings is that the 48-inch pipe under the sidewalk will be increased to a 54-inch pipe to allow it to be buried one foot. This change will be reflected in the as-built plans for the project.

Section 404: We are hereby requesting the modifications described above for the USACE Individual 404 Permit signed September 27, 2013 (SAW-2010-02125), for the above-described activities.

Section 401: We are hereby requesting a modification to the 401 Water Quality Certification from the NCDWR issued, April 30, 2012 (DWQ No. 3195). We are providing \$570 to act as payment for processing the permit modification (see subject line).

CAMA: We are hereby requesting a modification to the Coastal Area Management Act Major Permit issued May 3, 2012. We are providing \$100 to act as payment for processing the permit modification (see subject line).

As you are aware, this project is currently under construction. Therefore, the Department requests that your agency expedite your review and approval to avoid delay.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Jason Dilday at [jldilday@ncdot.gov](mailto:jldilday@ncdot.gov) or (919) 707-6111.

Sincerely,



Philip S. Harris III, P.E., C.P.M., Unit Head  
Environmental Analysis Unit

cc:

NCDOT Permit Application Standard Distribution List



November 13, 2017

Mr. Philip S. Harris, III, P.E., CPM  
 Manager, Project Development and Environmental Analysis Branch  
 North Carolina Department of Transportation  
 1598 Mail Service Center  
 Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Subject: DMS Mitigation Acceptance Letter:

**R-3307**, US 70 from Existing 4 Lanes at Radio Island to US 70 North of Beaufort near SR 1429 (Olga Road), Carteret County

References: USACE 404 Individual Permit issued September 27, 2013 (USACE Action ID 2010-02125)

NCDWR 401 Water Quality Certification issued October 15, 2012 (NCDWR ID 2011-1003)

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the additional compensatory mitigation for the subject project. Based on the information supplied by you on November 13, 2017, the impacts are located in CU 03020106 of the White Oak River basin in the Southern Outer Coastal Plain (SOCP) Eco-Region, and are as follows:

**Table 1 – Additional Impacts (feet / acres)**

White Oak 03020106 SOCP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	100.0	0	0	0.03	0	0

\*NOTE: Some of the stream impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This additional impact and associated mitigation needs were not projected by the NCDOT in the 2017 impact data. DMS is currently providing stream, riparian and non-riparian wetland mitigation for the impacts associated with this project located in cataloging unit 03020106 of the White Oak River basin as required by the 404 and 401 permits issued in September 2013 and October 2012, respectively, as show in the below table (in mitigation credits)



Mr. Harris  
 TIP R-3307  
 November 13, 2017  
 Page Two

**Table 2 – Current Permitted Impacts and Associated Mitigation Requirements provided by DMS (based on 2012 and 2013 permits) and Revised Anticipated Impacts (based on mitigation request)**

Impact Type	Total Permitted Impacts (feet / acre / sq ft)	Mitigation Provided by DMS per Issued Permits (Credits)	Additional Impact (for approval)	Revised Total Impacts*
Stream (warm)	304.0	304.0	100.0	404.0
Riparian Wetland	1.78	1.78	0	0
Non-riparian Wetland	4.69	4.69	0	0
Coastal Marsh	0	0	0.03	0.03

\*Some of the additional stream and/or wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details. DMS will provide the amount of mitigation credits as determined by the regulatory agencies.

**This mitigation acceptance letter replaces the mitigation acceptance letters issued on July 27 and October 27, 2011, January 24, 2012 and August 30 and September 2, 2016. DMS currently does not have coastal marsh wetland mitigation credits available in White Oak 03020106 and request to utilize existing closed out coastal marsh wetland mitigation credits available in White Oak 03030001. DMS commits to implementing additional sufficient compensatory stream mitigation credits to offset the stream impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.**

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,



James B. Stanfill  
 Credit Management Supervisor

cc: Mr. Tom Steffens, USACE – Washington Regulatory Field Office  
 Ms. Amy Chapman, Division of Water Resources, Wetlands/401 Unit  
 File: R-3307 Additional



PROJECT REFERENCE NO.	SHEET NO.
R-3307	20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/2001

**PERMIT REVISION  
OCT 2017**

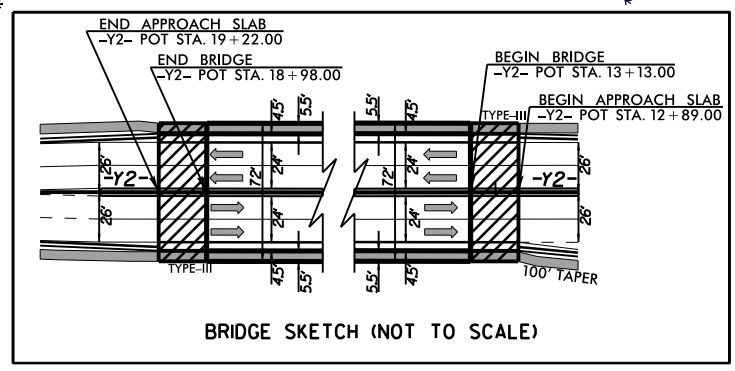
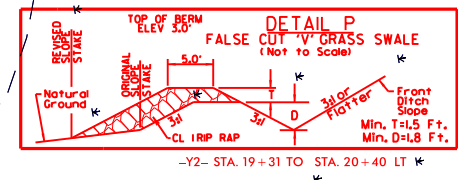
- The grass swale at -Y2- Sta 20+00 LT is modified with placement of CL I rip rap on its top berm, raising elevation to 3.0' and the addition of a 22' long outlet weir.
- The design of the outlets near -Y2- Sta 24+50 RT has been changed by eliminating the second channel that ran inside of the PDE. This channel was to provide an outlet swale for the drainage system that drains the southern portion of Turner Street. The current design uses one outlet channel for the system draining the southern portion of Turner Street plus the cross drainage from The Housing Authority of the Town of Beaufort.



RAISE TOP OF BERM TO ELEVATION OF 3.0'  
MAINTAIN TOP WIDTH OF 5.0'  
MAINTAIN SIDE SLOPES OF 3:1  
USE CLASS I RIP RAP  
DO NOT USE GEOTEXTILE

BUILD OVERFLOW WEIR  
TOP OF WEIR ELEVATION 2.1'

OVERFLOW WEIR CENTERED AT  
-Y2- STA 19+86 LT  
LENGTH OF OVERFLOW WEIR: 22 FT



- DENOTES CAUSEWAY REMOVAL
- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING

**NOTES:** (1) SEE SHEETS 35 & 36 FOR -Y2- PROFILE  
(2) SEE SHEET 2-E FOR DRAINAGE DETAILS  
(3) SEE SHEET 2-J FOR ROCK EMBANKMENT DETAIL  
(4) SEE SHEET 2-L FOR MIN. DEPTH CONCRETE CATCH BASIN DETAIL  
(5) SEE STRUCTURE PLANS

**LEGEND**

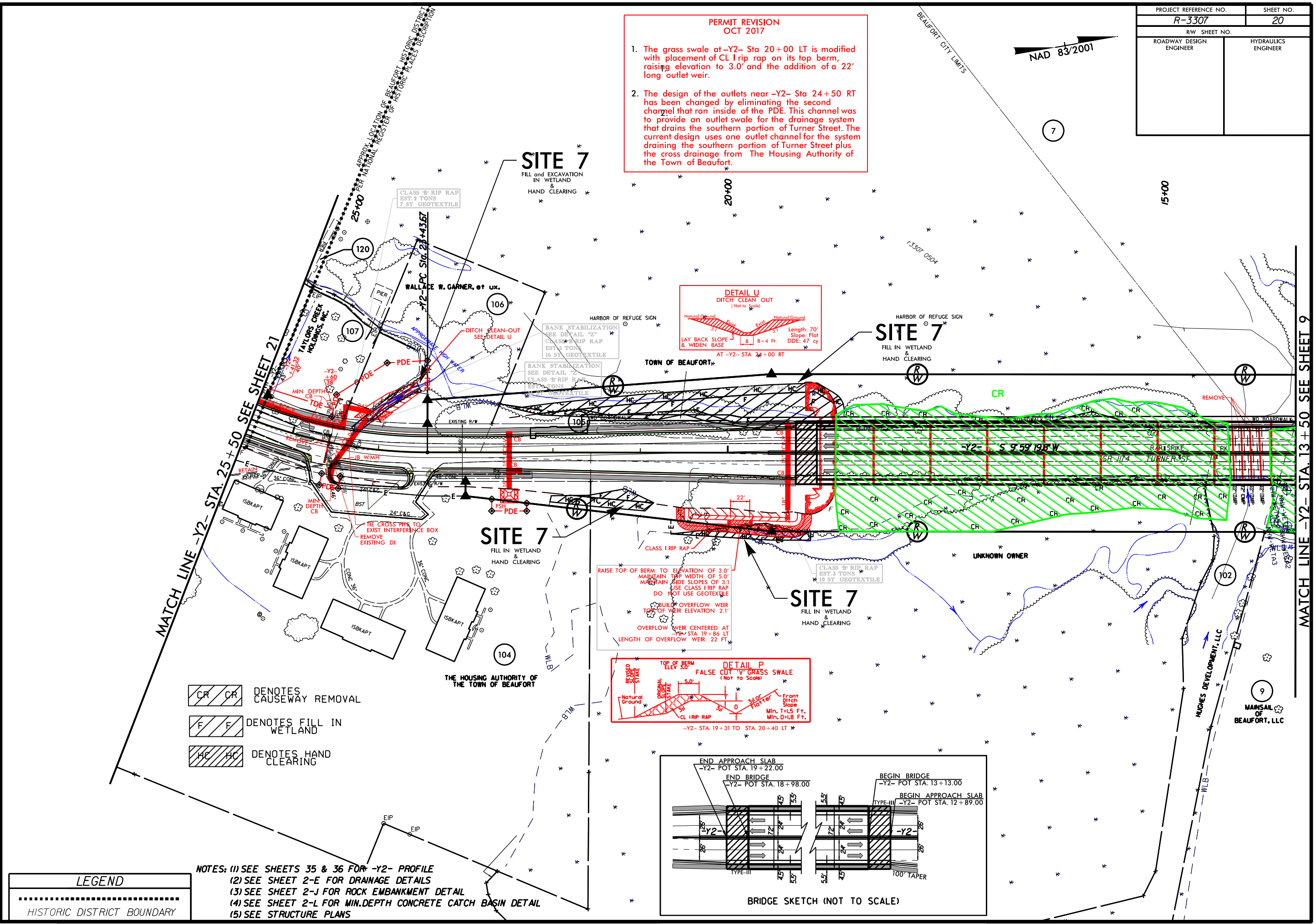
----- HISTORIC DISTRICT BOUNDARY

CONST. REV. 3/18/2016: REVISED DRAINAGE DESIGN FROM -Y2- STA. 24+50 TO STA. 28+00.

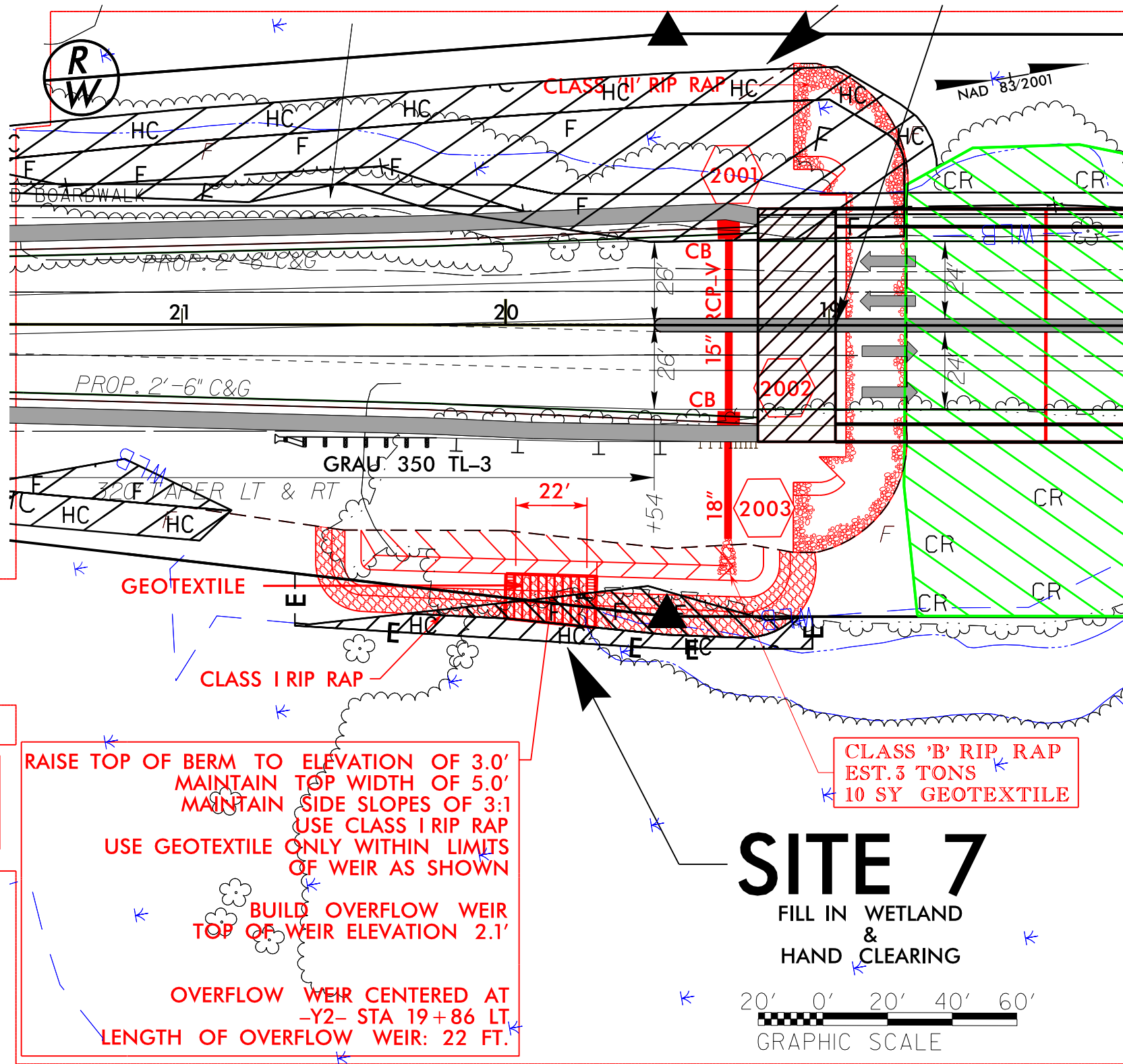
MATCH LINE -Y2- STA. 25+50 SEE SHEET 21

MATCH LINE -Y2- STA. 13+50 SEE SHEET 9

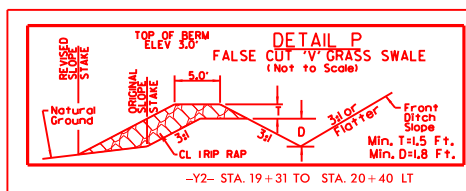
REVISIONS



PROJECT REFERENCE NO.	SHEET NO.
R-3307	20 (Enlargement A)
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



 DENOTES GEOTEXTILE



RAISE TOP OF BERM TO ELEVATION OF 3.0'  
 MAINTAIN TOP WIDTH OF 5.0'  
 MAINTAIN SIDE SLOPES OF 3:1  
 USE CLASS I RIP RAP  
 USE GEOTEXTILE ONLY WITHIN LIMITS  
 OF WEIR AS SHOWN

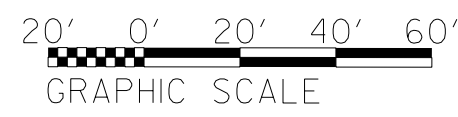
BUILD OVERFLOW WEIR  
 TOP OF WEIR ELEVATION 2.1'

OVERFLOW WEIR CENTERED AT  
 -Y2- STA 19+86 LT  
 LENGTH OF OVERFLOW WEIR: 22 FT.

CLASS 'B' RIP RAP  
 EST. 3 TONS  
 10 SY GEOTEXTILE

# SITE 7

FILL IN WETLAND  
 &  
 HAND CLEARING



\$\$\$\$\$\$ TIME \$\$\$\$\$\$  
 \$\$\$\$\$\$ STAFF \$\$\$\$\$\$  
 \$\$\$\$\$\$ DESIGN \$\$\$\$\$\$  
 \$\$\$\$\$\$ CHECK \$\$\$\$\$\$  
 \$\$\$\$\$\$ DATE \$\$\$\$\$\$



WETLAND PERMIT IMPACT SUMMARY														
Site No.	Station (From/To)	Structure Size / Type	Wetland Restoration (ac)	WETLAND IMPACTS						SURFACE WATER IMPACTS				
				CAMA Permanent Fill In Wetlands (ac)	404 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	-L- STA. 28+10 TO 29+47 LT	Roadway Fill		<0.01						0.02				
	-L- STA 28+99 TO 63+44	Bridge		0.02	<0.01	0.08	0.48*			1.02	0.03	0.06		
2	-L- STA. 62+82 TO 72+30 &	48" RCP &		0.27	1.38		<0.01	0.21	0.08	0.04	0.01	162	24	
	-Y1REV- STA. 15+74 TO 20+64	Roadway Fill											24	
		Bank Stabilization												
3	-L- STA. 78+58 TO 79+06 &	72" RCP								0.04	0.01	165	22	
	-Y2- STA. 10+78 TO 11+18 LT	Roadway Fill											24	
		Bank Stabilization												
4	-L- STA. 87+50 TO 92+56	Roadway Fill			**					0.16	<0.01	499	10	***
5	-L- STA. 171+47 TO 183+92	Roadway Fill			3.98			0.53						
6	-Y2- STA. 13+13 TO 18+77 ****	Bridge	1.46	<0.01		<0.01				<0.01	<0.01			
	-Y2- STA. 12+33 TO 13+48 RT	Roadway Fill		0.04										
7	-Y2- STA. 18+66 TO 24+34	Roadway Fill		0.22			0.01		0.13	0.01		77		
		Bank Stabilization										15		
TOTALS:			1.46	0.55	5.36	0.08	0.50	0.74	1.25	0.28	0.08	966	56	0.00

\* 0.16 ACRES of EXCAVATION IN CAMA WETLANDS AT END BENT 1 REQUIRED TO PROVIDE ACCESS FOR BRIDGE CONSTRUCTION AND MAINTENANCE / INSPECTION.  
0.32 ACRES OF EXCAVATION AT INTERIOR BENTS 11-15 and 25 REQ'D FOR CONSTRUCTION. TOTAL EXCAVATION: 0.48 ACRES.

\*\* 0.18 ACRES of ISOLATED WETLANDS

\*\*\* NEW BASE DITCH TO BE EXCAVATED PARALLEL TO EXISTING BASE DITCH. PROVIDES DRAINAGE FOR AIRPORT PROPERTY. MITIGATION NOT REQUIRED PER 4C MEETING ON 20 OCT 2010.

\*\*\*\* CAUSEWAY REMOVAL: SITE 6

**SEDIMENT & EROSION CONTROL MEASURES:**  
0.04 acres of Temporary Fill in CAMA Wetlands in the Hand Clearing areas for erosion control measures.

BRIDGE IMPACTS: Impacts for permanent and temporary bents are included in table above. Break-out for impacts are as follows:

**Gallants Channel Bridge**  
Perm. Fill in CAMA wetlands: 0.02 Ac  
Mech. Clr. in CAMA wetlands:  
Hand Clr. in CAMA wetlands: 0.99 Ac  
Perm. Fill in 404 wetlands: <0.01 Ac  
Hand Clr. in 404 wetlands: 0.08 Ac  
Perm. Fill in Surface Waters: 0.03 Ac  
  
Temp. Fill in wetlands: 0.07 Ac  
Temp. Fill in Surface Waters: 0.06 Ac.

**Turner Street Bridge**  
Perm. Fill in CAMA wetlands: <0.01 Ac  
Perm. Fill in 404 wetlands: 0 Ac  
Perm. Fill in Surface Waters: <0.01 Ac  
  
Temp. Fill in wetlands: <0.01 Ac  
Temp. Fill in Surface Waters: <0.01 Ac.

REVISION - DEC 2015: Revised Temp Work Pads under Gallant Channel Bridge. Added Rip Rap at inlet and outlet of 48" pipe, -L- Sta 68+79.  
The revision to the work pads do not change the impact to any jurisdictional feature.  
Also, three bridges and four pipes will be removed from the airport ditch. No impacts are shown for removal of these items.

REVISION - MAY 2016: Revised Temp Work Pads under Gallant Channel Bridge. Added Rip Rap inlet protection at the 48" pipe, -L- Sta 68+79.  
Revised work pads at bent 12, 14, and between bents 14 and 15.  
The revision to the work pads do not change the impact to any jurisdictional feature.

REVISION - AUG 2016: Revised impacts at pipe 0832 based on "As-Built" measurements by the Asst. Resident Engineer.

REVISION - OCT 2017: Revised impacts at two locations for Site 7:  
1. Swale at -Y2- Sta 20+00 Lt modified with rip rap and a weir overflow outlet.  
2. Swale at -Y2- Sta 24+50 Rt modified from two separate swales to only one.  
The one remaining swale enlarged with four foot base and 3:1 side slopes.

CONSTRUCTION REVISION  
27-Oct-17

N.C.D.O.T.  
DIVISION OF HIGHWAYS  
CARTERET COUNTY  
PROJECT: 34528.1.1 (R-3307)  
US 70 FROM EXISTING FOUR LANES  
AT RADIO ISLAND TO US 70 NORTH  
OF SR 1429 (OLGA ROAD)



**REVISIONS**

CONST. REV. #1 08/24/16 (JUG): MOVED PROPOSED SIDEWALK IN BETWEEN DITCH AND ROADWAY -L- STA. 48+56.40 LT. TO -L- STA. 77+00.00 LT.  
 CONST. REV. #2 2-20-2017 (BAM): ADDED 4' BASE DITCH -L- STA. 78+40 RT. TO -L- STA. 114+97 RT., REVISED CUL. DE SAC & SIDEWALK. REVISED ROW ON PARCELS 9Z(V), 11Z, 12Z, 13Z, 15Z, 17Z, 18Z & 19Z. ADDED TCE & PUE ON PARCEL 9Z(V).

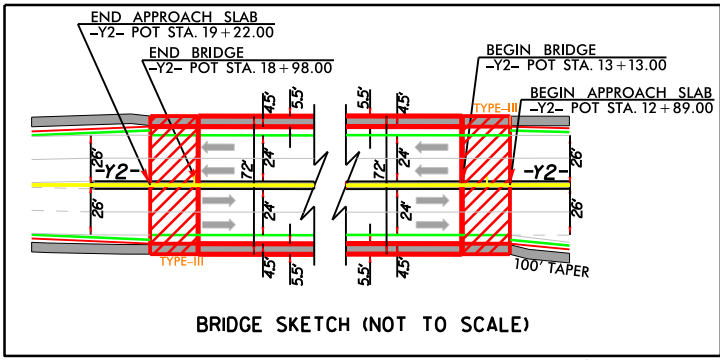
STANDARD TIME DESIGN, LLC  
 1223 Jones Franklin Rd. Suite 154  
 Raleigh, N.C. 27606  
 License No. 7-0377  
 Bus. 919.851.8077  
 Fax: 919.851.8107

**WETHERILL ENGINEERING**  
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

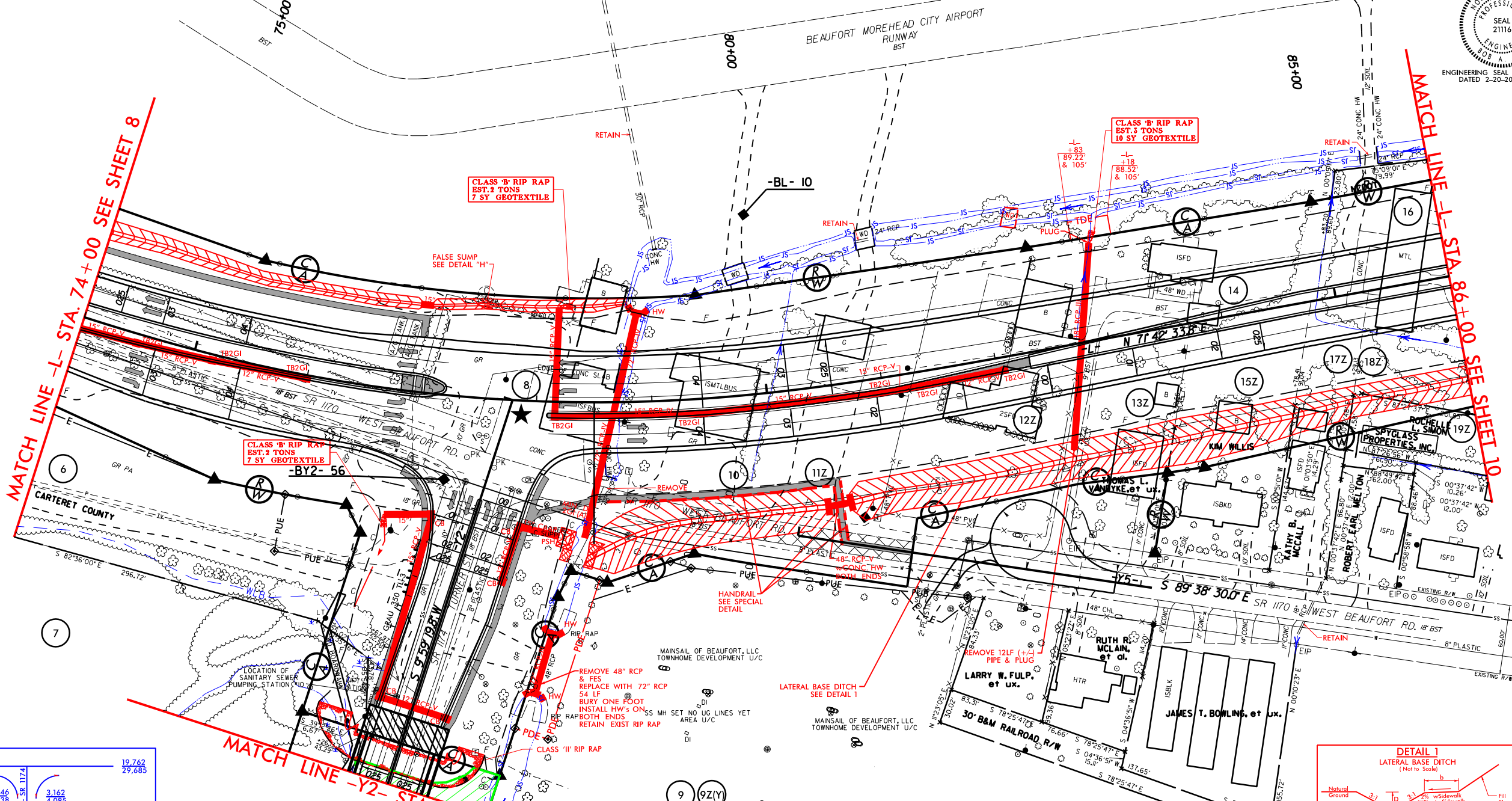
PROJECT REFERENCE NO. <b>R-3307</b>	SHEET NO. <b>9</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
NOT A CERTIFIED DOCUMENT AS TO THE ORIGINAL DOCUMENT BUT ONLY AS TO THE REVISIONS.	THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY
REKHA V. PATEL PE NO. 16378 ON 10-08-2013	
NOT A CERTIFIED DOCUMENT AS TO CONSTRUCTION REVISION #1.	
CONSTRUCTION REVISION #1 WAS ORIGINALLY ISSUED AND SEALED BY	
GARY R. LOVERING, PE NO. 25873 ON 8-16-2016	



NAD 83/2001



910  
 BEAUFORT-MOREHEAD CITY  
 AIRPORT AUTHORITY



MATCH LINE -L- STA. 74+00 SEE SHEET 8

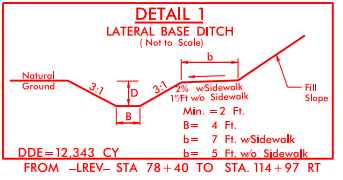
MATCH LINE -L- STA. 86+00 SEE SHEET 10

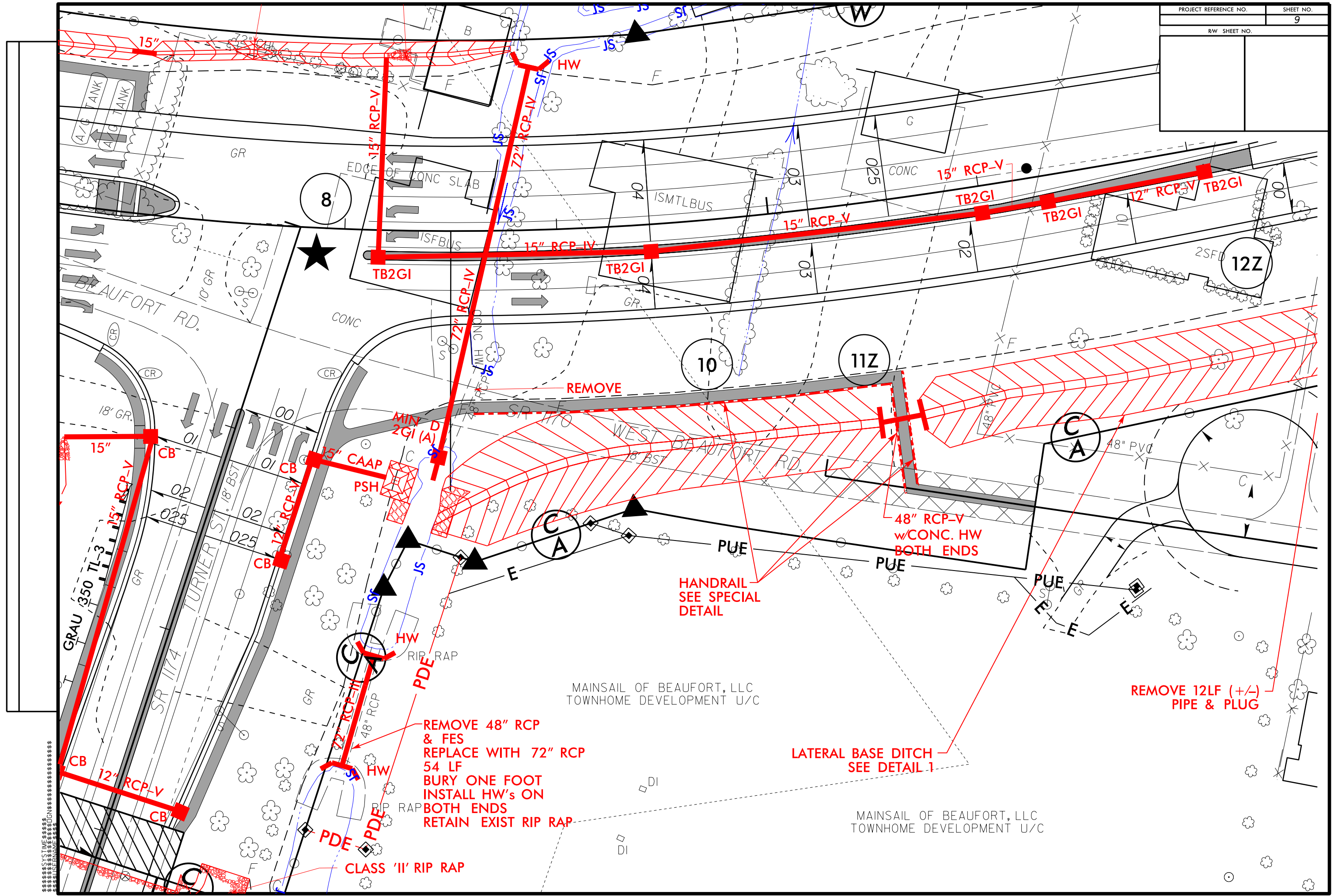
MATCH LINE -Y2- STA. 13+50 SEE SHEET 20

29.146 40.839	-L- US 70	19.762 29.685
12.546 15.238	-Y2- 38+117Z	3.162 4.085
15.208 19.323	-Y5-	

- NOTES:**
- (1) SEE SHEET 29 FOR -L- PROFILE
  - (2) SEE SHEET 29 FOR -LREV- PROFILE
  - (3) SEE SHEET 35 FOR -Y2- PROFILE
  - (4) SEE SHEET 37 FOR -Y5- PROFILE
  - (5) SEE SHEET 2-E FOR DRAINAGE DETAILS
  - (6) SEE SHEET 2-J FOR ROCK EMBANKMENT DETAIL
  - (7) SEE STRUCTURE PLANS

█ Causeway Removal  
 (App. 1.4 acres)  
 Grade to Target Elevation -0.2'  
 Limits and Elevations May Be Adjusted by Engineer  
 See Mitigation Plan





REMOVE 48" RCP  
& FES  
REPLACE WITH 72" RCP  
54 LF  
BURY ONE FOOT  
INSTALL HW'S ON  
BOTH ENDS  
RETAIN EXIST RIP RAP

HANDRAIL  
SEE SPECIAL  
DETAIL

LATERAL BASE DITCH  
SEE DETAIL 1

REMOVE 12LF (+/-)  
PIPE & PLUG

MAINSAIL OF BEAUFORT, LLC  
TOWNHOME DEVELOPMENT U/C

MAINSAIL OF BEAUFORT, LLC  
TOWNHOME DEVELOPMENT U/C

SYSTEMS  
 DESIGN  
 11/14/18