



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

February 21, 2019

Regulatory Division/1200A

Action ID No. SAW-2008-03183

Mr. Philip S. Harris III, P.E., C.P.M.
Natural Environment Section Head
North Carolina Department of Transportation
Division of Highways
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Reference the Department of the Army (DA) permit issued on June 17, 2014, to Mr. Richard Hancock, of the North Carolina Department of Transportation for impacts associated with the new location project identified as U-2579B. The project, Winston-Salem Northern Beltway eastern section B, a 4.06 mile, six-lane divided facility, on new location, construction extending US 158 running southeast to a new interchange with I-40 Bus / US 421 that includes widening up-grades at the existing I-40 Bus / US 421 alignment associated with the proposed new interchange, located east of Winston-Salem, Forsyth County, North Carolina. Coordinates (in decimal degrees) for the site are 36.1178°N, -80.1380° W. The project area contains 7 unnamed tributaries (UT) to Lowery Mill Creek, Martin Mill Creek and 4 UTs to Martin Mill Creek, Kerners Mill Creek and 1 UT to Kerners Mill Creek, Smith Creek and 11 UTs to Smith Creek, and Fishers Branch and 2 UTs to Fishers Branch, 5 ponds, and 17 riparian wetlands located in the Yadkin River Basin (8-Digit Cataloging Unit 03040101).

Impacts authorized by the permit as well as a subsequent permit modification dated July 2, 2014 include: 1) the permanent placement of fill material into 10,140 linear feet of jurisdictional stream channel, 1.96 acres of riparian wetlands, and 4.36 acres of jurisdictional open waters and, 2) the temporary placement of fill material into 1,809 linear feet of jurisdictional stream channel. Mitigation was implemented for the unavoidable impacts by on-site mitigation as described in the August 22, 2013 mitigation plan, as well as payment into the North Carolina Division of Mitigation Services.

Also reference your letter to the Corps dated November 20, 2018, requesting modification of the permit for additional impacts to U-2579B at permit sites 23 and 28, the permanent discharge of fill material into 649 linear feet of stream channel and the temporary discharge of fill material into 159 linear feet of stream channel, associated with:


- 1) An additional 51 feet of permanent stream impacts for culvert installation and 32 linear feet of temporary stream impacts for dewatering at permit site 23.
- 2) An additional 598 linear feet of permanent stream impacts for culvert extension and 127 linear feet of temporary stream impacts for dewatering at permit site 28, due to stream migration to the toe of existing roadway fill leading to instability and safety concerns for the future long term stability of the proposed onramp.

After the completion of a 15-day Public Notice, the Corps completed the evaluation of your request and determined that it is appropriate and reasonable. Therefore, the permit is modified as listed and shown in the modified drawings in the November 20, 2018 modification request. In addition, the following special condition regarding compensatory mitigation has been incorporated:

In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

All other conditions of the permit, including the permit expiration date of December 31, 2019, remain in effect as written. If the permitted work is not completed on or before the date herein specified, the authorization, if not previously revoked or specifically further extended, will cease and become null and void. If additional time is required to complete the project, you should contact this office with a request for an additional time extension. Should you have questions, contact Mr. James Lastinger, Raleigh Regulatory Field Office at James.C.Lastinger@usace.army.mil or telephone (919) 554-4884, Extension 32.

FOR THE COMMANDER


for Robert J, Clark
Colonel, U.S. Army
District Commander

Copies Furnished with Attachment:

Ms. Amy Euliss
Division Environmental Officer, Division 9
North Carolina Department of Transportation
375 Silas Creek Parkway
Winston Salem, North Carolina 27127

Copies Furnished without Attachment:

Mr. Dave Wanucha
Transportation Permitting Unit
Division of Water Resources
North Carolina Department of
Environment and Natural Resources
450 West Hanes Mill Road, Suite 300
Winston-Salem, North Carolina 27105



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Interim Director

December 17, 2018

Ms. Amy Euliss Division Environmental Officer
NCDOT, Division 9
375 Silas Creek Parkway
Winston Salem, NC 27127

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for proposed improvements to Winston Salem Northern Beltway Eastern Section from US 158 to I-40 Bus/US 421 in Forsyth County, WBS Element No. 34839.1.2, TIP Project No. U-2579B; NCDWR Project No. 20140090 v5.

Dear Ms. Euliss:

Attached hereto is a modification of Certification No. 3987 issued to The North Carolina Department of Transportation (NCDOT) originally dated April 11, 2014 and modified (with revisions) dated July 28, 2014 (v2); subsequently field modified on June 11, 2015 (v3); and, again (via field modification) on August 8, 2017 (v4).

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

A handwritten signature in blue ink that reads "Linda Culpepper".

Linda Culpepper, Director
Division of Water Resources

Attachments

Electronic copy only distribution:

James Lastinger, US Army Corps of Engineers, Raleigh Field Office
Colin Mellor, NC Department of Transportation
Carla Dagnino, NC Department of Transportation
Amanetta Somerville, US Environmental Protection Agency
Marella Buncick, US Fish and Wildlife Service
Marla Chambers, NC Wildlife Resources Commission
Beth Harmon, Division of Mitigation Services
File Copy



**Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act
with ADDITIONAL CONDITIONS**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact an additional 1,227 linear feet of jurisdictional streams Forsyth County. The project shall be constructed pursuant to the modification dated received November 20, 2018. The authorized impacts are as described below:

Stream Impacts in the Yadkin Pee Dee River Basin

Site	Permanent Fill in Perennial Stream (linear ft)		Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Additional Mitigation (linear ft)
	Bank Stabilization	Culvert	Dewatering		
Current impacts at Site 23	108	200	174	482	-
<i>New additional impacts at Site 23</i>	<i>36</i>	<i>151</i>	<i>121</i>	<i>308</i>	<i>51</i>
Current impacts at Site 28	390	-	376	766	-
<i>New additional impacts at Site 28</i>	<i>194</i>	<i>598</i>	<i>127</i>	<i>919</i>	<i>598</i>
Totals (for this modification)	230	749	248	1,227	649

Total Stream Impact: 1,227 linear feet

The application provides adequate assurance that the discharge of fill material into the waters of the Yadkin Pee Dee River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your modified application dated received November 20, 2018. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated April 11, 2014 and modified (with revisions) dated July 28, 2014; and, including subsequent field modifications on June 11, 2015 (v3); and, again on August 8, 2017 (v4) still apply except where superseded by this certification.

Should your project change, you are required to notify the NCDWR 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 any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 300 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

1. Compensatory mitigation for 649 linear feet of impact to streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Division of Mitigation Service (DMS), and that the DMS has agreed to implement the mitigation for the project. The DMS has indicated in a letter dated November 20, 2018 that they will assume responsibility

for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the DMS Mitigation Banking Instrument signed July 28, 2010.

2. This approval is only valid for the purpose and design that you submitted in your request for modification dated November 20, 2018.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

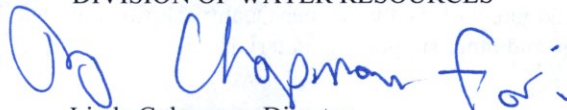
Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Bill F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center

This the 17th day of December 2018

DIVISION OF WATER RESOURCES


Linda Culpepper, Director

WQC No. 3987



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Interim Director

NCDWR Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____
Date _____



U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form

Permittee: NCDOT
Project Name: U-2579B

Action ID: SAW-2008-03183
County: Forsyth

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements

Permitted Impacts Requiring Mitigation*: **8-digit HUC and Basin: 03040101, Yadkin River Basin**

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
649						

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements: **8-digit HUC and Basin: 03040101, Yadkin River Basin**

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
1,298						

Mitigation Site Debited: NCDMS

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCDMS), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: NCDMS

Name of Sponsor's Authorized Representative: Beth Harmon

Beth Harmon
Signature of Sponsor's Authorized Representative

02/22/2019
Date of Signature

**USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2**

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. ***Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587 (email: todd.tugwell@usace.army.mil).*** Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

USACE Project Manager: James Lastinger
USACE Field Office: Raleigh Regulatory Field Office
US Army Corps of Engineers
3331 Heritage Trade Drive, Suite 105
Wake Forest, NC 27587

Email: James.C.Lastinger@usace.army.mil

LASTINGER.JAME
S.C.1363642400

Digitally signed by
LASTINGER.JAMES.C.1363642400
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI,
ou=USA, cn=LASTINGER.JAMES.C.1363642400
Date: 2019.02.21 13:26:09 -05'00'

USACE Project Manager Signature

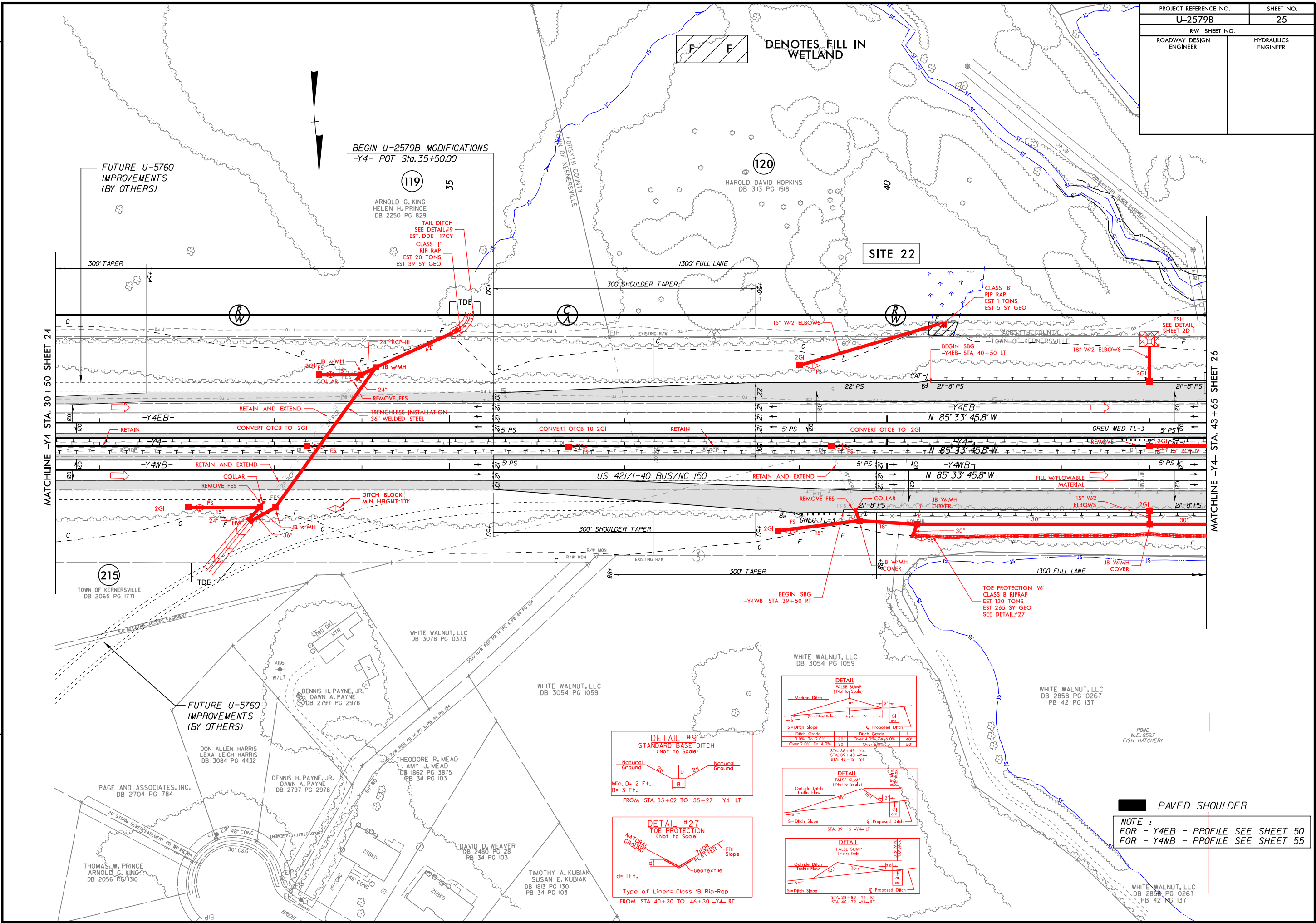
**February 21, 2019
Date of Signature**

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

PROJECT REFERENCE NO.	SHEET NO.
U-2579B	25
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS
 CONSTRUCTION REVISION - 11/19 - REVISED ROADWAY AND HYDRAULIC DESIGN TO ACCOUNT FOR FUTURE U-5760 PROJECT,
 BEGINNING AT -Y4- STA. 35+50.00 - RSH



BEGIN U-2579B MODIFICATIONS
 -Y4- POT Sta. 35+50.00

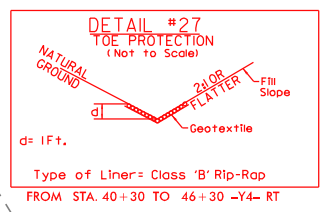
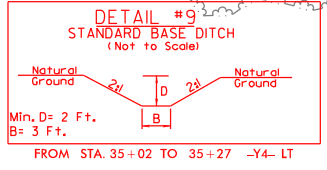
119 35
 ARNOLD G. KING
 HELEN H. PRINCE
 DB 2250 PG 829

TAIL DITCH
 SEE DETAIL#9
 EST. DDE 17CY
 CLASS 'I'
 RIP RAP
 EST 20 TONS
 EST 39 SY GEO

SITE 22

CLASS 'B'
 RIP RAP
 EST 1 TONS
 EST 5 SY GEO

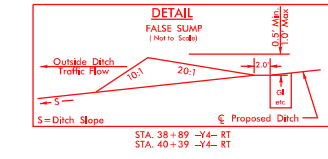
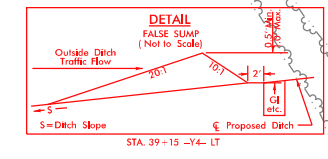
PAVED SHOULDER
 NOTE:
 FOR -Y4EB- PROFILE SEE SHEET 50
 FOR -Y4WB- PROFILE SEE SHEET 55



DETAIL FALSE SUMP (Not to Scale)

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0% To 8.0%	50'

STA. 36+49 -Y4-
 STA. 39+48 -Y4-
 STA. 43+13 -Y4-



FUTURE U-5760
 IMPROVEMENTS
 (BY OTHERS)

FUTURE U-5760
 IMPROVEMENTS
 (BY OTHERS)

215
 TOWN OF KERNERSVILLE
 DB 2065 PG 1771

DON ALLEN HARRIS
 LEXA LEIGH HARRIS
 DB 3084 PG 4432

DENNIS H. PAYNE, JR.
 DAWN A. PAYNE
 DB 2797 PG 2978

WHITE WALNUT, LLC
 DB 3078 PG 0373

WHITE WALNUT, LLC
 DB 3054 PG 1059

WHITE WALNUT, LLC
 DB 3054 PG 1059

WHITE WALNUT, LLC
 DB 2858 PG 0267
 PB 42 PG 137

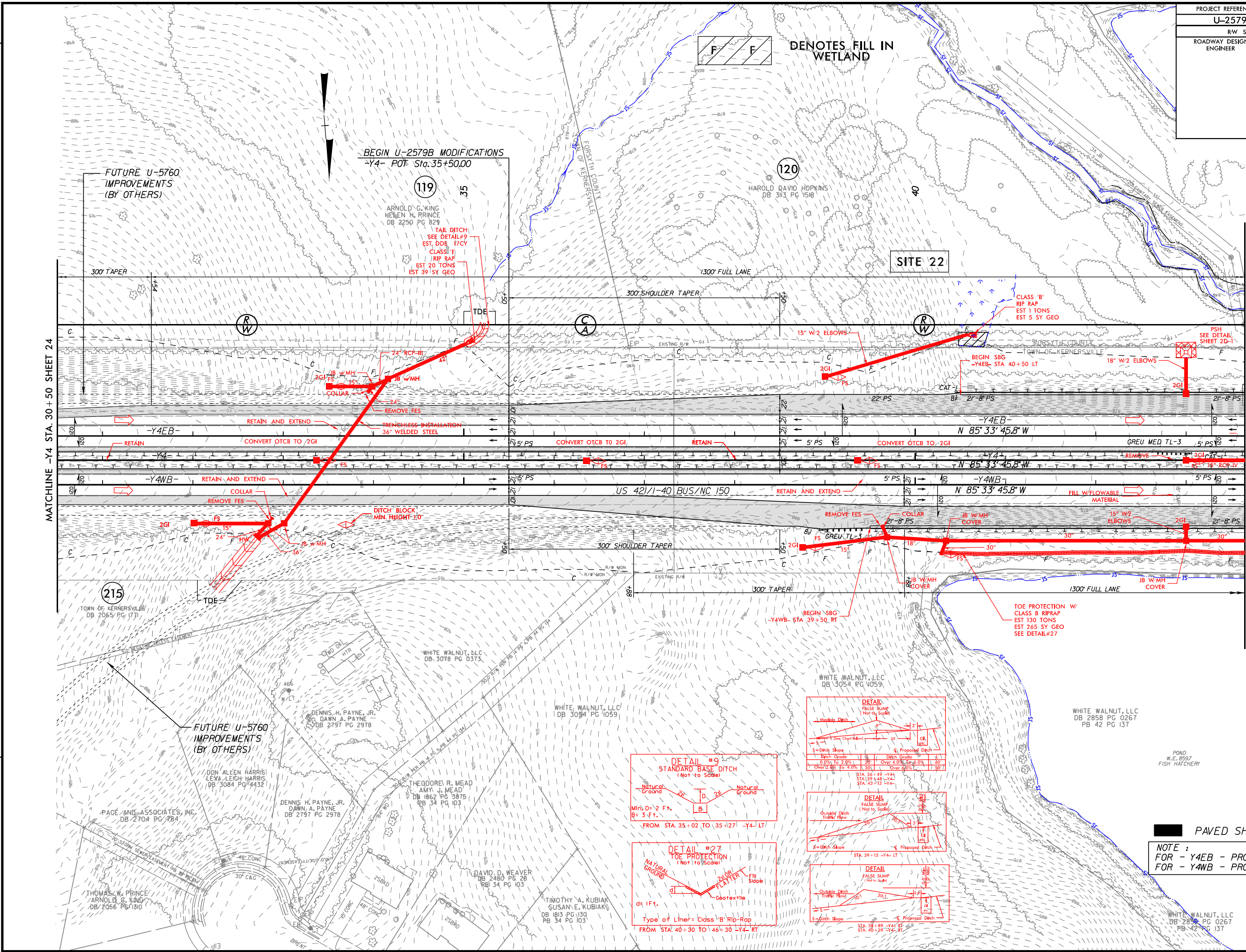
POND
 W.E. 8597
 FISH HATCHERY

WHITE WALNUT, LLC
 DB 2858 PG 0267
 PB 42 PG 137

PROJECT REFERENCE NO.	SHEET NO.
U-2579B	25
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

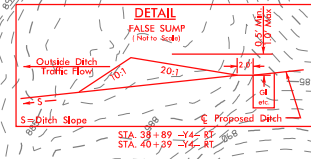
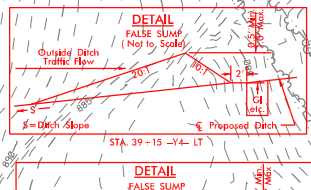
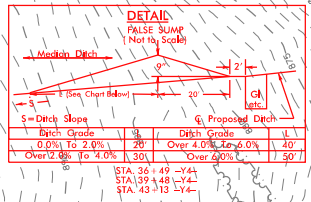
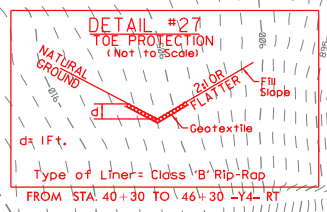
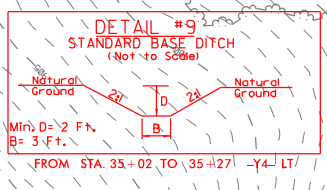
REVISIONS
 CONSTRUCTION REVISION - 11/19 - REVISED ROADWAY AND HYDRAULIC DESIGN TO ACCOUNT FOR FUTURE U-5760 PROJECT, BEGINNING AT -Y4- STA. 35+50.00 - RSH

8/17/99



MATCHLINE -Y4 STA. 30+50 SHEET 24

MATCHLINE -Y4- STA. 43+65 SHEET 26



■ PAVED SHOULDER
 NOTE:
 FOR -Y4EB- PROFILE SEE SHEET 50
 FOR -Y4WB- PROFILE SEE SHEET 55

F F DENOTES FILL IN WETLAND

BEGIN U-2579B MODIFICATIONS
-Y4- POT Sta. 35+50.00

FUTURE U-5760 IMPROVEMENTS (BY OTHERS)

FUTURE U-5760 IMPROVEMENTS (BY OTHERS)

SITE 22

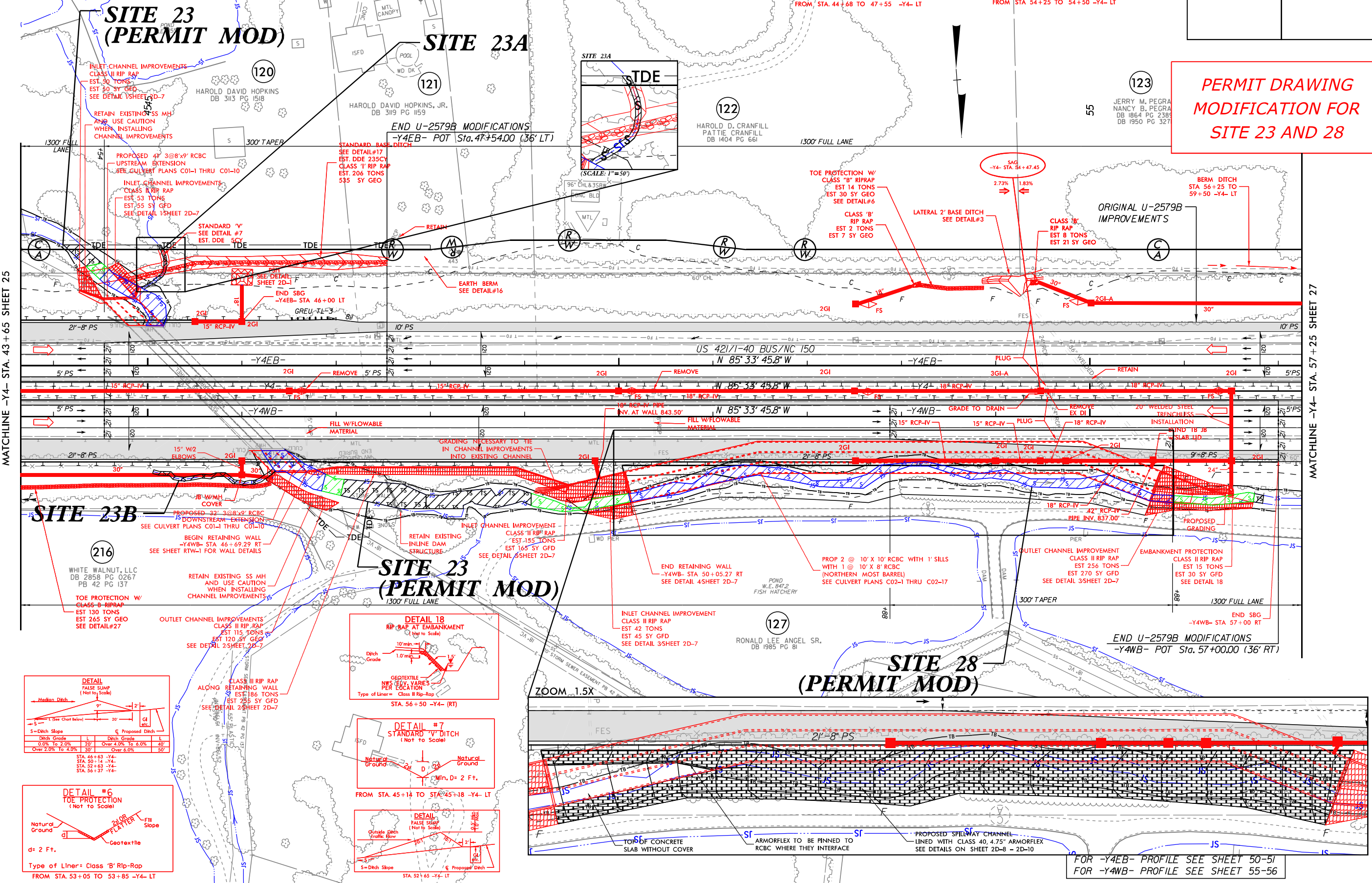
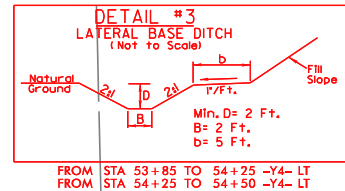
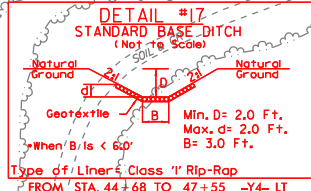
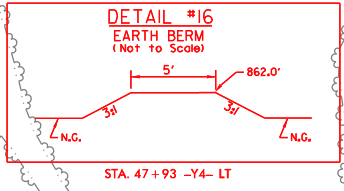
POND W.E. 8597 FISH HATCHERY

WHITE WALNUT, LLC DB 2858 PG 0267 PB 42 PG 137

**PERMIT DRAWING
MODIFICATION FOR
SITE 23 AND 28**

LEGEND

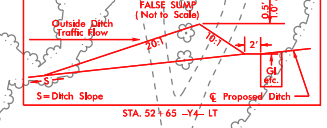
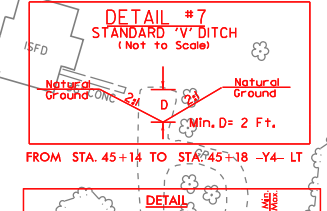
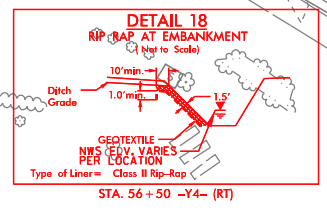
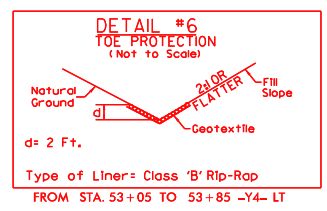
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER		DENOTES IMPACTS IN SURFACE WATER (CULVERT IMPACTS)		DENOTES IMPACTS IN SURFACE WATER (STREAMBANK STABILIZATION)
--	--	--	--	--	---



DETAIL #5
FALSE SUMP
(Not to Scale)

Ditch Slope	Ditch Grade
0.0% To 2.0%	20'
Over 2.0% To 4.0%	30'
Over 4.0% To 6.0%	40'
Over 6.0%	50'

STA. 46+63 -Y4-
STA. 50+14 -Y4-
STA. 52+63 -Y4-
STA. 56+37 -Y4-



CONSTRUCTION REVISION - 11/19 - REVISED ROADWAY AND HYDRAULIC DESIGN TO ACCOUNT FOR FUTURE U-5760 PROJECT, INCLUDING RETAINING WALL AND CULVERT ON NORTH SIDE OF -Y4-. MATCHLINE MOVED TO -Y4- STA 57+25 (FROM 56+61) TO ILLUSTRATE ALL CHANGES ON PLAN SHEET 26. - RSH

MATCHLINE -Y4- STA. 43+65 SHEET 25

MATCHLINE -Y4- STA. 57+25 SHEET 27

FOR -Y4EB- PROFILE SEE SHEET 50-51
FOR -Y4WB- PROFILE SEE SHEET 55-56

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	28+00 -Y1-	ROAD FILL	0.03		< 0.01	0.02		0.02	
2	16+00 -Y1RPD-	ROAD FILL - INTERMITTENT						0.01		109		
		ROAD FILL - PERENNIAL						0.02		208		
		STREAMBANK STABILIZATION						< 0.01	< 0.01	10	37	
3	21+56-25+22 -Y1-	2 @ 7'x6' RCBC						0.06	< 0.01	438	33	
3A	17+36-21+53 -Y1-	DETOUR - ROAD FILL							0.08		545	
3B	20+55-21+32 -Y1-	DETOUR - ROAD FILL							0.03		194	
4	501+51-503+21 -L-	ROAD FILL						0.03	< 0.01	493	18	
		STREAMBANK STABILIZATION						< 0.01	< 0.01	9	31	
5	503+85-507+80 -L-	ROAD FILL						0.05	< 0.01	740	22	
5A	507+39-509+64 -L-	ROAD FILL						0.01		306		
6	523+00 -L-	ROAD FILL	0.03			< 0.01		0.02	< 0.01	312	42	
7	527+00 -L-	ROAD FILL	0.52			0.01						
		ROAD FILL-POND						0.59				
8	559+75 -L-	2 @ 10'x6' RCBC						0.06	< 0.01	442	53	
		STREAMBANK STABILIZATION						< 0.01	< 0.01	58	44	
9	560+75 -L-	ROAD FILL	0.03			0.01						
10	560+50-568+74 -L-	ROAD FILL	0.01					0.07	< 0.01	783	22	
10A	566+84-572+75 -L-	ROAD FILL						0.05		684		
11	615+00 -L-	3 @ 10'x9' RCBC						0.43	0.02	808	57	
11A	19+76-21+44 -Y4RPBD-	CHANNEL CHANGE						0.08	0.01	223	41	
12	15+84-18+86 -Y4RPBD-	CHANNEL CHANGE						0.01	0.02	88	205	
SUBTOTALS*:			0.62		< 0.01	0.05		1.53	0.19	5853	1344	

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 6-2-14
 U-2579B FORSYTH COUNTY
 WINSTON SALEM NORTHERN BELTWAY
 (EASTERN SECTION) (FUTURE I-74)
 SHEET 62 OF 64

WETLAND PERMIT IMPACT SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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)
13	20+00-21+40 -Y4RPBD-	ROAD FILL	0.33									
14	629+95-635+90 -L-	ROAD FILL	0.04					0.05		688		
15	636+32-641+55 -L-	ROAD FILL	0.18					0.04		332		
		ROAD FILL-POND						2.38				
15A	644+00-645+00 -L-	ROAD FILL						< 0.01		108		
16	643+56-644+61 -L-	ROAD FILL						< 0.01		104		
		ROAD FILL-POND						0.16				
17	663+65-667+00 -L-	ROAD FILL	0.09			< 0.01		0.06		928		
18	667+15 -L-	3 @ 12'x10' RCBC						0.06	0.02	377	67	
		STREAMBANK STABILIZATION						0.02	0.01	80	59	
19	668+50 -L-	ROAD FILL	0.47			0.01						
20	687+80-691+59 -L-	ROAD FILL						0.03		163		
		ROAD FILL-POND						0.85				450
21	22+50 -Y1-	ROAD FILL	0.02									
22	40+50 -Y4-	OUTLET PAD	0.01									
23 *	45+65 -Y4-	CULVERT EXTENSION						0.06	0.01	100	32	
		STREAMBANK STABILIZATION						0.02	0.06	54	89	
23A	44+95-45+18 -Y4-	ROAD FILL						< 0.01		57		
23B	45+07-46+34 -Y4-	ROAD FILL						0.01		135		
24	80+73-81+57-Y4RPBD-	ROAD FILL						0.02		202		
24A	80+50-81+51-Y4RPBD-	ROAD FILL	0.06									
25	37+31 -Y4RPA-	30" RCP						< 0.01		73		
		STREAMBANK STABILIZATION						< 0.01	< 0.01	21	16	
SUBTOTALS*:			1.20			0.02		3.67	0.03	3268	142	450

*Rounded totals are sum of actual impacts

NOTES:

Revised: 5-18-14

SEE SHEET 64 FOR PERMIT IMPACTS QUANTITIES FOR SITES 23 AND 23A. PREVIOUS IMPACTS FOR SHEET 63 FOR PERMANENT SURFACE WATER IMPACTS: 3.77 AC, TEMP. SURFACE WATER IMPACTS: 0.9 AC, EXISTING CHANNEL IMPACTS PERMANENT: 3422 LF, EXISTING CHANNEL IMPACTS TEMP.: 263 LF

NC DEPARTMENT OF TRANSPORTATION
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 WINSTON SALEM NORTHERN BELTWAY
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WETLAND PERMIT IMPACT SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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)
26	29+16-31+12 -Y4RPC-	ROAD FILL-POND						0.38				
27A	104+62 - 107+53 -Y4-	ROAD FILL						0.02		205		
27B	107+60 -Y4-	42" WELDED STEEL	0.05					0.01	< 0.01	130	14	
27C	107+58 - 108+44 -Y4-	30" RCP						< 0.01		116		
28*	50+50 - 56+00 -Y4- Rt	STREAMBANK STABILIZATION						0.02	0.15	365	188	
29	145+62 -Y4-	ROAD FILL				< 0.01						
30	64+34 -Y4-	STREAMBANK STABILIZATION						< 0.01		28		
31	557+28 -L-	STREAMBANK STABILIZATION						< 0.01		21		
Permit Modifications*												
23	44+10 to 47+96 -Y4-	3 @ 8' x 9' RCBC Extension Streambank Stabilization						0.06 0.02	0.05	151 36	121	
28	47+96 to 56+85 -Y4-	2 @ 10' x 10' RCBC and 1 @ 10' x 8' RCBC Streambank Stabilization						0.12 0.04	<0.01	598 194	127	
SUBTOTALS*:			0.05			< 0.01		0.66	0.06	1479	262	
SUBTOTALS FROM PAGE 1*:			0.62		< 0.01	0.05		1.53	0.19	5853	1344	
SUBTOTALS FROM PAGE 2*:			1.20			0.02		3.67	0.03	3268	142	450
TOTALS*:			1.87		< 0.01	0.08		5.86	0.28	10600	1748	450

*Rounded totals are sum of actual impacts

NOTES:

Revised: 5-18-14

PREVIOUS IMPACTS FOR SHEET 64 FOR PERMANENT SURFACE WATER IMPACTS: 0.44 AC, TEMP. SURFACE WATER IMPACTS: 0.16 AC, EXISTING CHANNEL IMPACTS PERMANENT: 865 LF, EXISTING CHANNEL IMPACTS TEMP.: 202 LF

PREVIOUS TOTAL IMPACTS FOR SHEET 64 FOR PERMANENT SURFACE WATER IMPACTS: 5.73 AC, TEMP. SURFACE WATER IMPACTS: 0.44 AC, EXISTING CHANNEL IMPACTS PERMANENT: 10140 LF, EXISTING CHANNEL IMPACTS TEMP.: 1809 LF

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