

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

January 24, 2023

MEMORANDUM TO: Division Environmental and Construction Units

FROM: Michael A. Turchy, ECAP Group Leader Environmental Analysis Unit

·

SUBJECT: Environmental Permits for the Replacement of Bridge 247 on SR 2555

over White Oak Creek, Wake County, Division 5. TIP B-5326.

Please find enclosed the following permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers	Nationwide 3	March 14, 2026
Section 404 Clean Water Act Permit	[non-notifying]	Waren 14, 2020
NC Division of Water Resources	Individual Water Quality Certification	March 14, 2026
Section 401 Water Quality Certification	individual water Quanty Certification	Waren 14, 2020
NC Division of Water Resources	Neuse River Riparian Buffer	December 16, 2027
Buffer Certification	Certification	December 16, 2027

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group or the Division Environmental Office must be consulted if any deviation from the permit(s) is required.

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at: https://xfer.services.ncdot.gov/pdea/PermIssued/_General_Conditions_and_Certifications/

PROJECT COMMITMENTS

Wake County
Bridge No. 247 on SR 2555 (Raynor Road)
Over White Oak Creek
Federal Aid Project No. BRZ-2555(1)
W.B.S. No. 46040.1.1
T.I.P. No. B-5326

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NES, Hydraulics Unit, Roadside Environmental, Division – Design Standards in Sensitive Watersheds

White Oak Creek and its tributaries are protected under provisions of the Neuse River Buffer Rules. Therefore, Design Standards in Sensitive Watersheds will be implemented during project construction.

Roadway Design/Program Development- Greenway and Sidewalks

The Town of Garner requests greenway access under the bridge. A cost share agreement has been prepared between NCDOT and the Town of Garner. NCDOT will grade the greenway as part of the bridge replacement project. The greenway will be paved and maintained by the Town of Garner. The Town of Garner will pay for a portion of cost for the increase in bridge length due to accommodating the greenway. A sidewalk will be included in the design along the east side of the bridge north of the bridge and will extend south of the bridge to April Court. The Town of Garner will participate in the cost of an accept maintenance and liability responsibilities of the new sidewalk. A municipal agreement will be prepared prior to project construction regarding the Town of Garner's participation in the cost of sidewalks.

Hydraulics Unit, Division Five Construction-FEMA

The Hydraulics Unit will coordinate with NC Floodplain Mapping Program (FMP) to determine the status of the project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

This project involves construction activities on or adjacent to a FEMA-regulated stream. Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon project completion certifying the drainage structure(s) and roadway embankment located within the 100-year floodplain were built as shown on the construction plans, both horizontally and vertically.

COMMITMENTS FROM PERMITTING

Environmental Analysis Unit

401 Condition #1: Compensatory mitigation for impacts to 775 square feet of protected riparian buffers in Zone 1 and 4372 square feet of protected riparian buffers in Zone 2 shall be required. We understand that you choose to perform compensatory mitigation for impacts to protected buffers through use of the Talecris Mitigation Site. Mitigation for unavoidable impacts to Neuse Riparian Buffers shall be provided via deduction of 8883 square feet of Buffer Credits at the Talecris Mitigation Site in accordance with 15ANCAC 28.0295, as stated in your application.

ROY COOPER Governor ELIZABETH S. BISER Secretary RICHARD E. ROGERS, JR. Director



December 16, 2022

Mr. Jamie J. Lancaster, PE Environmental Analysis Unit North Carolina Department of Transportation 1598 Mail Service Center Raleigh, North Carolina, 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with

ADDITIONAL CONDITIONS for Proposed Replacement of Bridge 247 on SR 2555 in Wake County,

TIP No. B-5326

NCDWR Project No. 20190109 ver 2.

Dear Mr. Lancaster:

Attached hereto is a copy of Certification No. 5361 issued to The North Carolina Department of Transportation (NCDOT) dated December 16, 2022.

This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)]. This Certification does not relieve the permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

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

Sincerely,

Omy Chapman Richard See Rogers, Ir, Director Division of Water Resources

DocuSigned by:

Attachments

Cc:

Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office Heather Montague, Division 5 Environmental Officer Jason Dilday, NC DOT, Environmental Analysis Unit File Copy



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 0.09 acres of jurisdictional wetlands and 215 linear feet of jurisdictional streams in Wake County. The project shall be constructed pursuant to the application dated received November 14, 2022. **This certification replaces the one issued January 28, 2019.** The authorized impacts are as described below:

Stream Impacts in the Neuse River Basin

Site	Bank Stabilization to Perennial	Temporary Impact to Perennial	Total Stream Impact
	Stream (linear ft)	Stream (linear ft)	(linear ft)
Total	180	35	215

Total Stream Impact for Project: 215 linear feet.

Wetland Impacts in the Neuse River Basin

Site	Permanent Fill (ac)	Mechanized Clearing (ac)	Total Wetland Impact (ac)
Total	0.03	0.06	0.09

Total Wetland Impact for Project: 0.09 acres.

The application provides adequate assurance that the discharge of fill material into the waters of the Neuse 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 application dated received November 14, 2022. 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 150 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.

This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded. Upon the presentation of proper credentials, the Division may inspect the property.



Conditions of Certification:

- 1. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species. [15A NCAC 02H .0506(b)(2)]
- 2. As a condition of this 401 Water Quality Certification, the bridge demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
- 3. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250 [delete if non-DOT project], please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
- 4. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from the NCDWR first. [15A NCAC 02H.0506(b)(2)]
- 5. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)]
- 6. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank, or during the removal of bents from an old bridge. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)]2
- 7. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
- 8. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
- 9. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
- 10. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
- 11. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
- 12. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
- 13. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
- 14. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]



- 15. For all streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
- 16. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
- 17. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
- 18. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
- 19. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
- 20. A copy of this Water Quality Certification shall be maintained on 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. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
- 21. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]
- 22. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
- 23. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
- 24. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
- 25. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
- 26. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3)]:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.



- c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Surface Mining Manual.
- d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
- 27. Sediment and erosion control measures shall not be placed in wetlands or surface waters, or within 5 feet of the top of bank, without prior approval from DWR. [15A NCAC 02H.0506(b)(3) and (c)(3)]
- 28. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506{b)(3) and (c)(3) and 15A NCAC 02B .0200]
- 29. Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*. All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractorowned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times. For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971. [15A NCAC 02H.0506(b)(3) and (c)(3); GC 4135]

This approval and its conditions are final and binding unless contested [G.S. 143-215.5]. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at http://www.ncoah.com/ or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on: William F. Lane, General Counsel Department of Environmental Quality 1601 Mail Service Center Raleigh, NC 27699-1601



If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This the 16th day of December 2022

DIVISION OF WATER RESOURCES

Docusigned by:
Omy Chapman
9C9886312DCD474...

Richard E. Rogers, Jr, Director

WQC No. 5361

ROY COOPER Governor ELIZABETH S. BISER Secretary RICHARD E. ROGERS, JR. Director



December 16, 2022

DWR # 20190109 ver 2 Wake County

Mr. Jamie J. Lancaster, PE Environmental Analysis Unit North Carolina Department of Transportation 1598 Mail Service Center Raleigh, North Carolina, 27699-1598

Subject: APPROVAL of NEUSE RIPARIAN BUFFER IMPACTS WITH ADDITIONAL CONDITIONS

Project: Bridge 247 on SR 2555, TIP# B-5326, Wake County

Dear Mr. Lancaster:

You have our approval for the impacts listed below for the purpose described in your application received by the NC Division of Water Resources November 14, 2022. These impacts are covered by the Neuse Buffer Rules and the conditions listed below. Please note that you should get any other federal, state or local permits before proceeding with your project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations. The following impacts are hereby approved, provided that all of the Conditions listed below and all of the conditions of the Neuse Buffer Rules are met. No other impacts are approved, including incidental impacts [15A NCAC 02B.0611(b)(2)].

Neuse Riparian Buffer Impacts

Site	Zone 1 Impact (sq ft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)	Zone 2 Impact (sq ft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
Bridge	9127	N/A	5432	N/A
Road	775	2325	4372	6558
Totals	9902	2325	9804	6558

^{*} n/a = Site Impact Type is Allowable; no mitigation required

Total Buffer Impact for Project: 19706 square feet.

This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Authorization Certificate. If you change your project, you must notify the Division and you may be required to submit a new application package. If the property is sold, the new owner must be given a copy of this Authorization Certificate and is responsible for complying with all conditions. [15A NCAC 02B.0611(b)(2)] If you are unable to comply with any of the conditions below, you must notify the DWR Transportation Permitting Branch within 24 hours (or the next business day if a weekend or holiday) from the time the permittee becomes aware of the circumstances.

This approval replaces the one issued on January 28, 2019.



The permittee shall report to the NC Division of Water Resources any noncompliance with the conditions of this Authorization Certificate and/or any violation of state regulated riparian buffer rules [15A NCAC 02B.0714].

Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the applicant became aware of the circumstances.

Additional Conditions:

- 1. Compensatory mitigation for impacts to 775 square feet of protected riparian buffers in Zone 1 and 4372 square feet of protected riparian buffers in Zone 2 shall be required. We understand that you have chosen to perform compensatory mitigation for impacts to protected buffers through use of the Talecris Mitigation Site. Mitigation for unavoidable impacts to Neuse Riparian Buffers shall be provided via deduction of 8883 square feet of Buffer Credits at the Talecris Mitigation Site in accordance with 15A NCAC 2B.0295, as stated in your application.
- 2. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. [15A NCAC 2B.0714]
- 3. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction. [15A NCAC 2B.0714]
- 4. Pursuant to 15A NCAC 2B.0714, sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWR. At this time, the NCDWR has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
- 5. Native riparian vegetation (i.e., trees and shrubs native to your geographic region) must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0714] & [15A NCAC 02B.0506(b)(2)]

This approval and its conditions are final and binding unless contested. [G.S. 143-215.5] This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at http://www.ncoah.com/ or by calling the OAH Clerk's Office at (919) 431-3000.



A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel Department of Environmental Quality 1601 Mail Service Center Raleigh, NC 27699-1601

If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This Authorization shall expire five (5) years from the date of this letter.

This letter completes the review of the Division under the Neuse Riparian Buffer Rules as described in 15A NCAC 02B.0714. Please contact Rob Ridings at rob.ridings@ncdenr.gov if you any questions or concerns.

Sincerely,

Docusigned by:
Omy Chapman
909886312D0D474...

Richard E. Rogers, Jr, Director Division of Water Resources

cc:

Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office Heather Montague, Division 5 Environmental Officer Jason Dilday, NC DOT, Environmental Analysis Unit File Copy

STATE OF NORTH CAROLINA See Sheet 1B For Conventional Symbols SR 2555 RAYNOR RD DIVISION OF HIGHWAYS WAKE COUNTY PROJECT LOCATION: REPLACE BRIDGE NO. 247 OVER WHITE OAK CREEK LOCATION ON SR 2555 (RAYNOR RD) M TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES PERMIT DRAWINGS: WETLAND & STREAM IMPACTS SR 2555 RAYNOR RD PROJEC **VICINITY MAP** BEGIN. BRIDGE RAYNOR RD SR 2555 END BRIDGE -L- STA. 18+45.00END TIP PROJECT B-5326/ -L- STA. 25 + 59.61BEGIN TIP PROJECT B-5326 -L- STA. 10 + 30.00

SHEET TOTAL SHEETS B-5326 BRZ-2555(1) 46040.1.1 PE

PERMIT DRAWING

SHEET 1 OF 8

WHITE OAK RD

DAVID STUTTS, PE NCDOT CONTACT:

STRUCTURES MANAGEMENT UNIT PREPARED IN THE OFFICE OF HYDRAULICS ENGINEER 434 Fayetteville Street, Suite 1500 Raleigh, NC 27601 Tel. (919) 836-4040 www.wsp-pb.com License No. F-0891 **SIGNATURE**: RONYELL A. THIGPEN, PE ROADWAY DESIGN PROJECT ENGINEER **ENGINEER**

SIGNATURE:

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL

UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES DESIGN DATA ADT 2019 = 4767

THIS PROJECT HAS NO CONTROL OF ACCESS.

PLANS

PROFILE (HORIZONTAL)

PROFILE (VERTICAL)

ADT 2040 = 6400K = 12 %D = 55 %T = 4 % *

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

THIS PROJECT IS PARTIALLY WITHIN THE TOWN OF GARNER MUNICIPAL LIMITS.

V = 50 MPH* (TTST = 1% + DUAL = 3%) FUNC CLASS = MAJOR COLLECTOR SUBREGIONAL TIER

PROJECT LENGTH

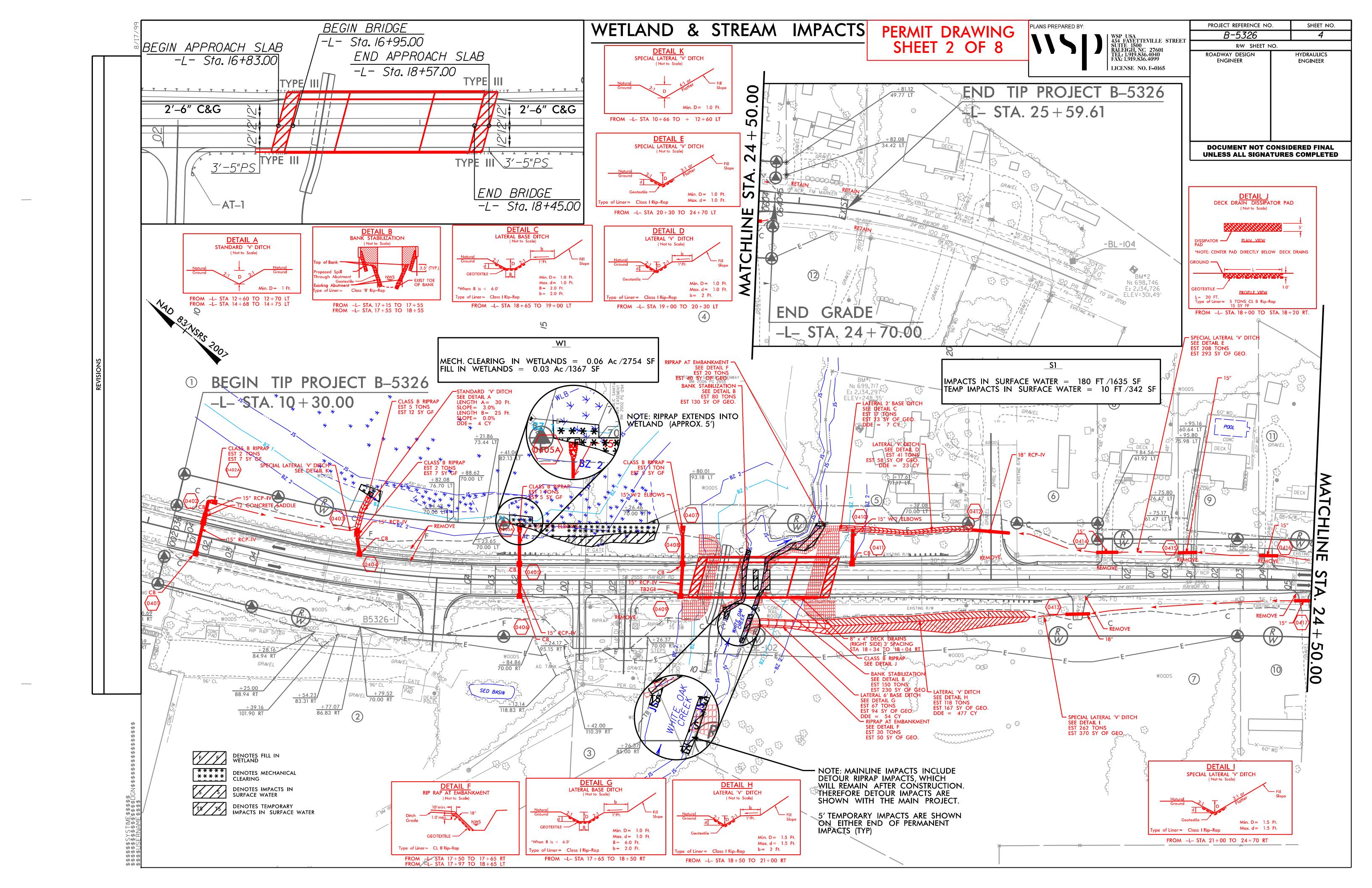
LENGTH ROADWAY PROJECT B-5326 = 0.262 MI LENGTH STRUCTURE PROJECT B-5326 = 0.028 MI = 0.290 MITOTAL LENGTH PROJECT B-5326

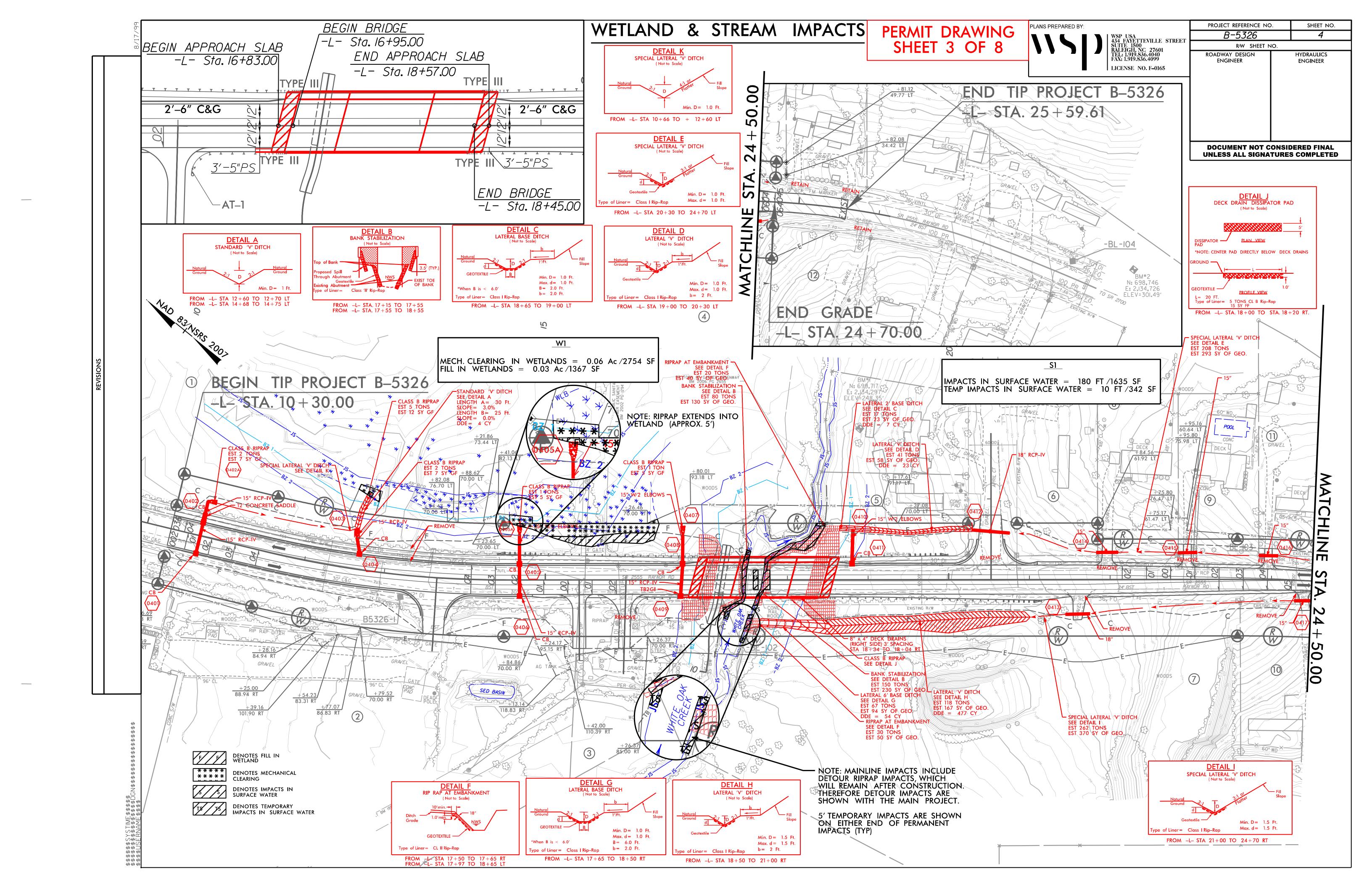
2018 STANDARD SPECIFICATIONS RIGHT OF WAY DATE: JUNE 22, 2018 LETTING DATE:

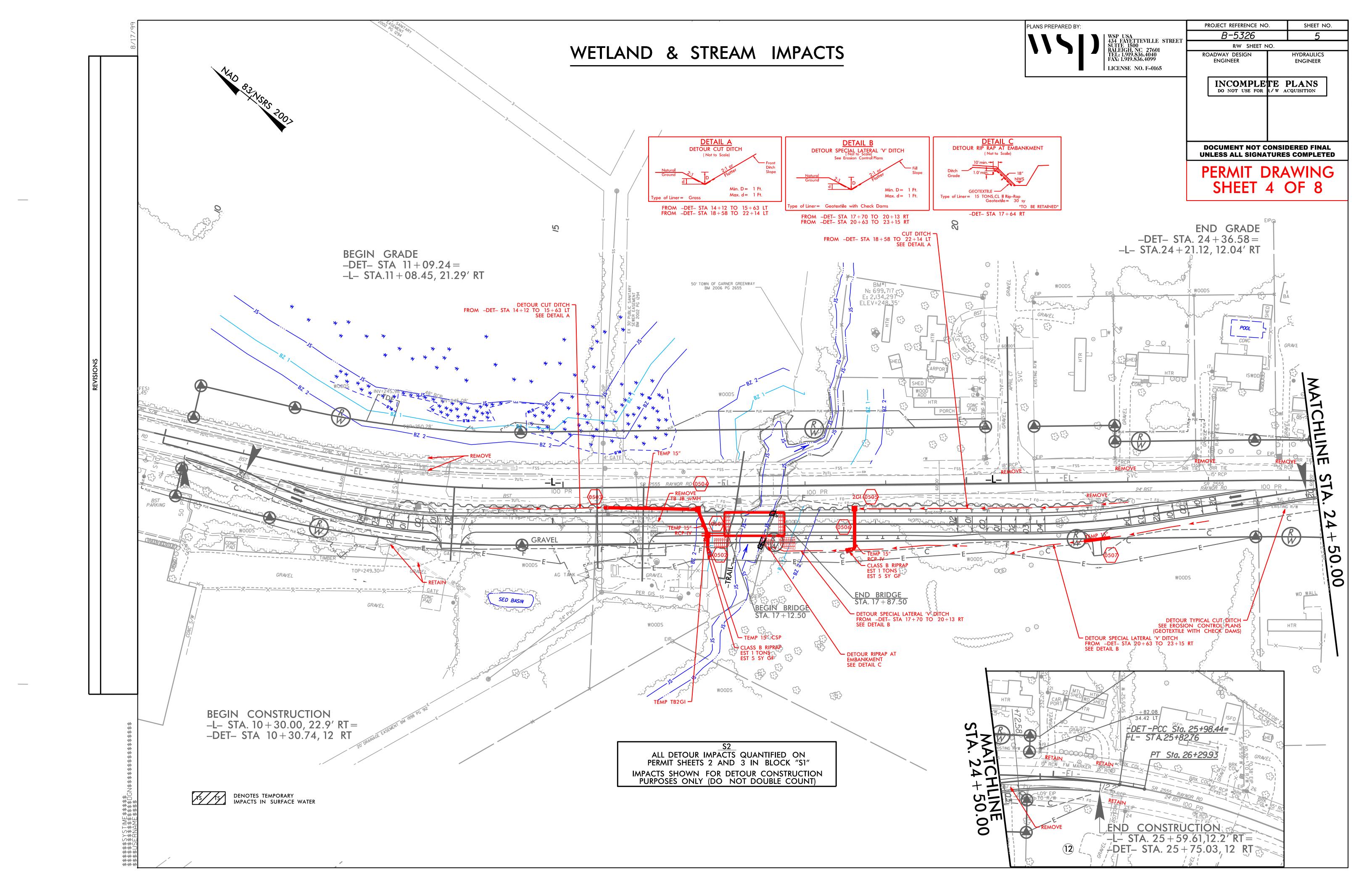
APRIL 16, 2019

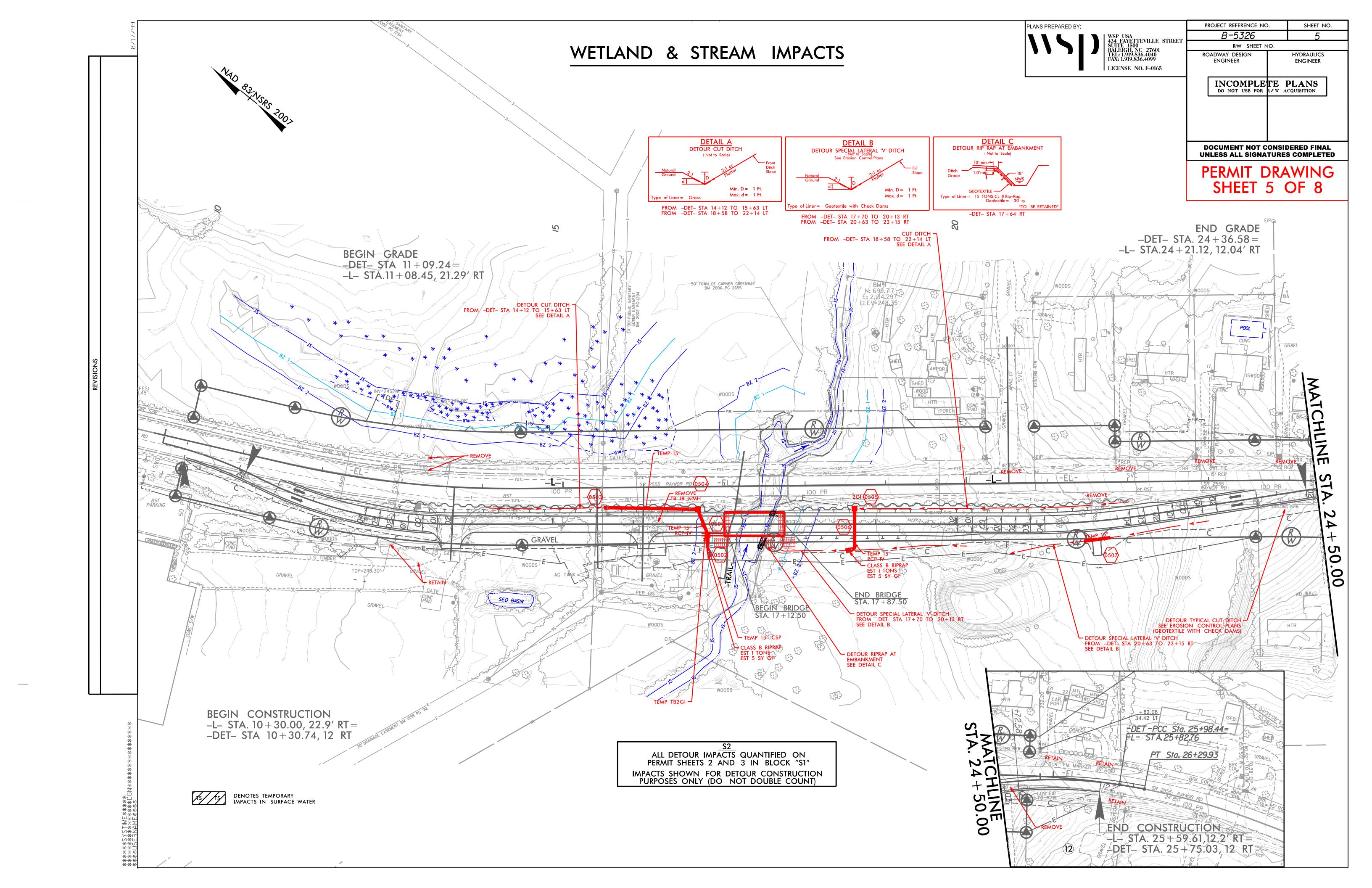
1151)

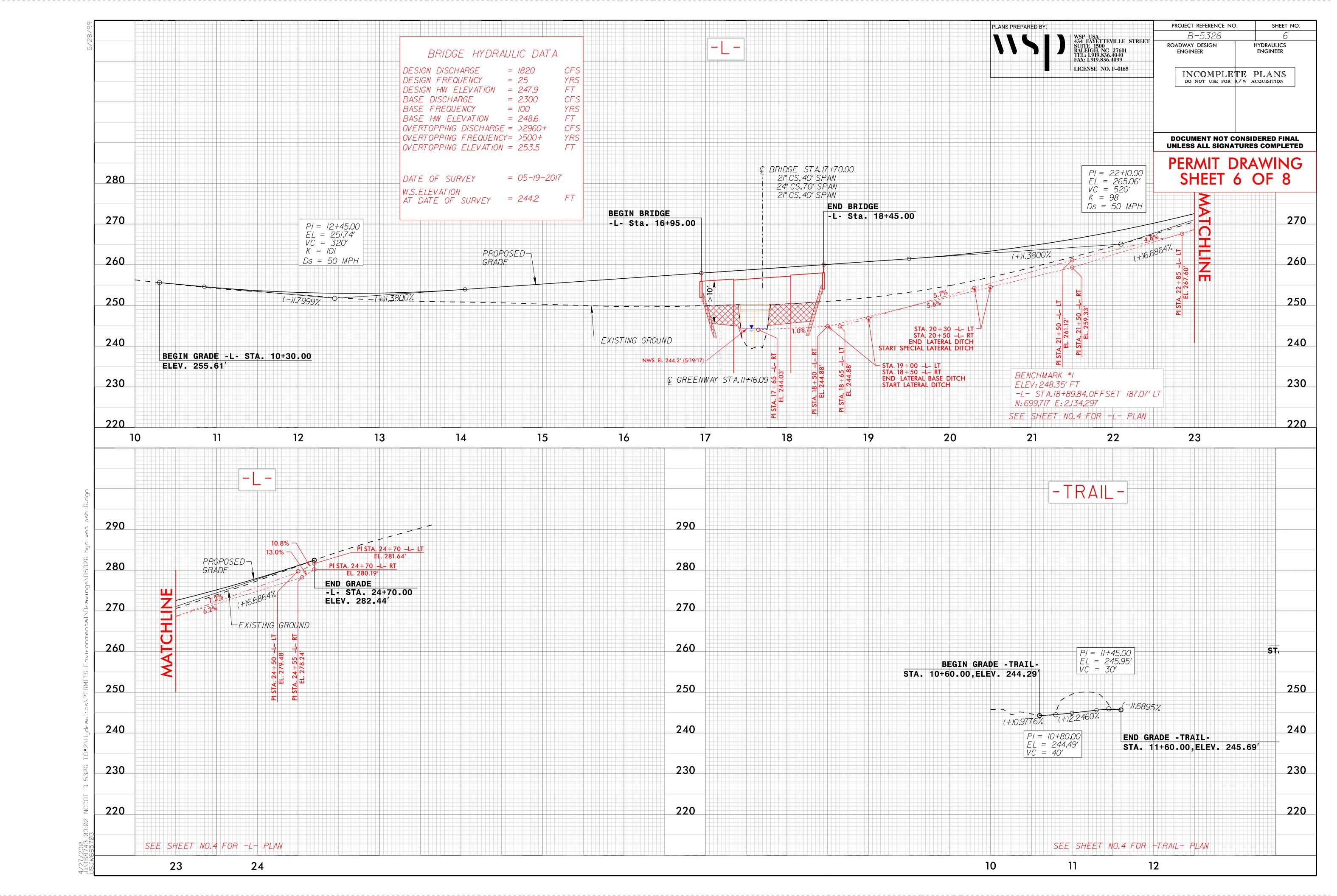
HOLLY CHRISTENBURY, PE PROJECT DESIGN ENGINEER

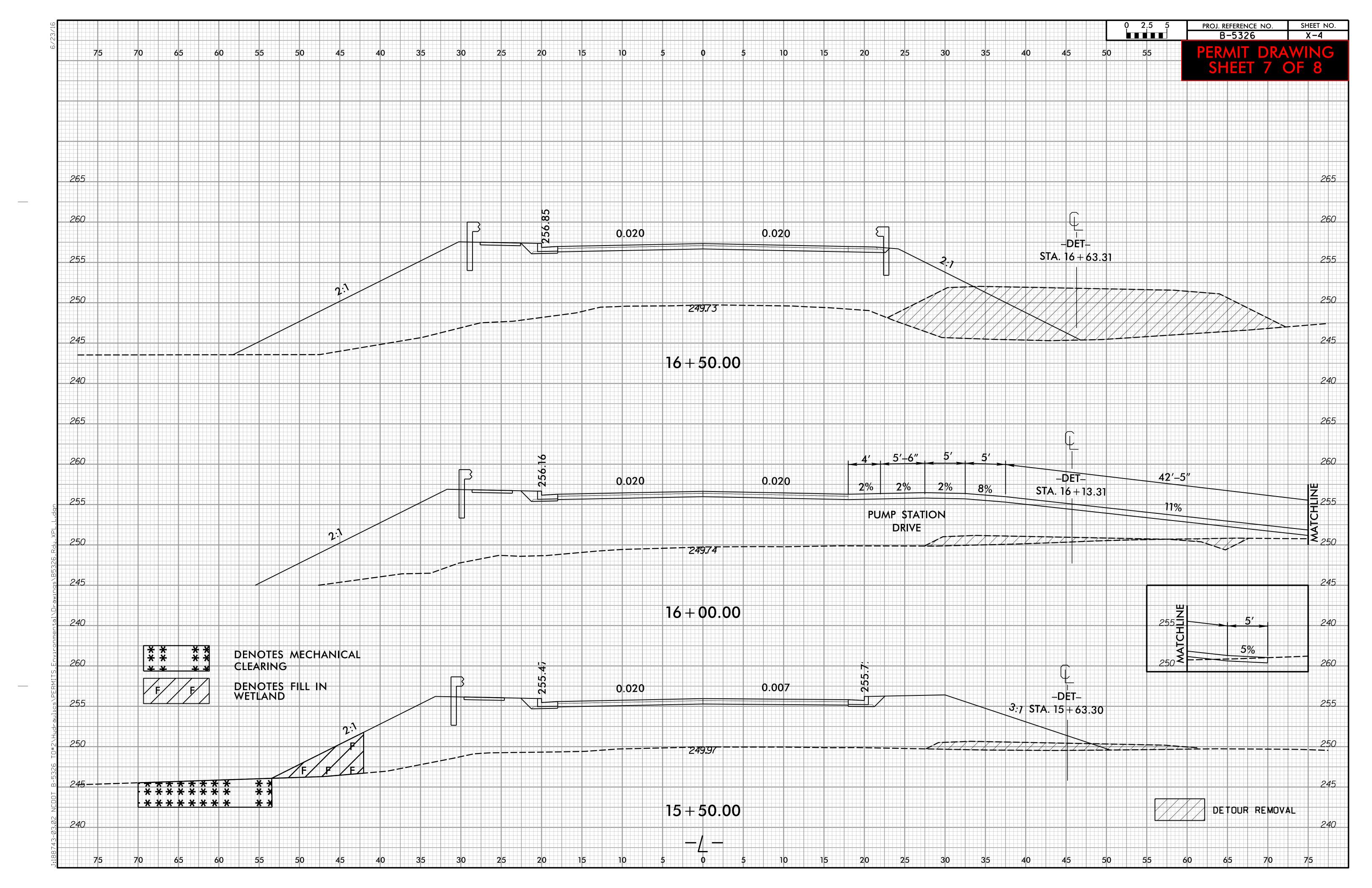












				WE	TLAND IMP	ACTS			SURFACE	WATER IM	PACTS	
Site	Station	Structure	Permanent Fill In	Temp. Fill In	in	Mechanized Clearing	Hand Clearing in	Permanent SW	Temp. SW	Existing Channel Impacts	Existing Channel Impacts	Natural Stream
No.	(From/To)	Size / Type	Wetlands (ac)	Wetlands (ac)	Wetlands (ac)	in Wetlands (ac)	Wetlands (ac)	impacts (ac)	impacts (ac)	Permanent (ft)	Temp. (ft)	Design (ft)
1	-L- Sta. 12+53 to 12+82 LT	RipRap Outlet	< 0.01			< 0.01						
	-L- Sta. 14+56 to 16+41 LT	Roadwy Fill Slope and RipRap	0.03			0.06						
	-L- Sta. 17+20 to 17+55	RipRap at Embankment						< 0.01	< 0.01	19		
	-L- Sta. 17+40 to 17+58 RT	RipRap at Embankment						< 0.01	< 0.01	26	5	
	-L- Sta. 17+58 to 17+64	Bridge Pier Removal							< 0.01			
	-L- Sta. 17+55 to 18+47	RipRap at Embankment						0.02	< 0.01	135	5	
TOTAL	S*:		0.03			0.06		0.04	< 0.01	180	10	0

^{*}Rounded totals are sum of actual impacts

NOTES:

All Surface Water Impacts (Detour and Mainline) are to remain after construction and therefore are all quantified and accounted for on sheets 2 & 3 and not quantified as detour impacts.

Linear Impacts are shown such that they do not double count due to impacts on both sides of the stream.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
1/22/2019
Wake County
B-5326

46040.1.1

8

SHEET

OF

8

STATE OF NORTH CAROLINA See Sheet 1B For Conventional Symbols SR 2555 RAYNOR RD DIVISION OF HIGHWAYS WAKE COUNTY 5326 PROJECT LOCATION: REPLACE BRIDGE NO. 247 OVER WHITE OAK CREEK LOCATION ON SR 2555 (RAYNOR RD) M TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES PERMIT DRAWINGS: BUFFER IMPACTS SR 2555 RAYNOR RD PROJEC **VICINITY MAP** BEGIN. BRIDGE RAYNOR RD SR 2555 END BRIDGE -L- STA. 18+45.00END TIP PROJECT B-5326/ -L- STA. 25 + 59.61BEGIN TIP PROJECT B-5326 -L- STA. 10 + 30.00

> INCOMPLETE PLANS
> DO NOT USE FOR R/W ACQUISITION DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SHEET TOTAL SHEETS

PE

B-5326

46040.1.1

BRZ-2555(1)

BUFFER DRAWING

SHEET 1 OF 5

WHITE OAK RD

THIS PROJECT HAS NO CONTROL OF ACCESS. THIS PROJECT IS PARTIALLY WITHIN THE TOWN OF GARNER MUNICIPAL LIMITS. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

NCDOT CONTACT:

PREPARED IN THE OFFICE OF HYDRAULICS ENGINEER 1151) 434 Fayetteville Street, Suite 1500 Raleigh, NC 27601 Tel. (919) 836-4040 www.wsp-pb.com

License No. F-0891 2018 STANDARD SPECIFICATIONS

LETTING DATE:

APRIL 16, 2019

RIGHT OF WAY DATE: RONYELL A. THIGPEN, PE JUNE 22, 2018

PROJECT DESIGN ENGINEER

SIGNATURE: ROADWAY DESIGN **ENGINEER**

GRAPHIC SCALES PLANS PROFILE (HORIZONTAL)

PROFILE (VERTICAL)

DESIGN DATA ADT 2019 = 4767

ADT 2040 = 6400K = 12 %D = 55 %T = 4 % *

V = 50 MPH* (TTST = 1% + DUAL = 3%) FUNC CLASS = MAJOR COLLECTOR

SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT B-5326 = 0.262 MI LENGTH STRUCTURE PROJECT B-5326 = 0.028 MI TOTAL LENGTH PROJECT B-5326

= 0.290 MI

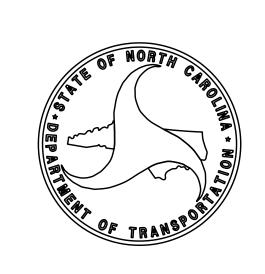
HOLLY CHRISTENBURY, PE

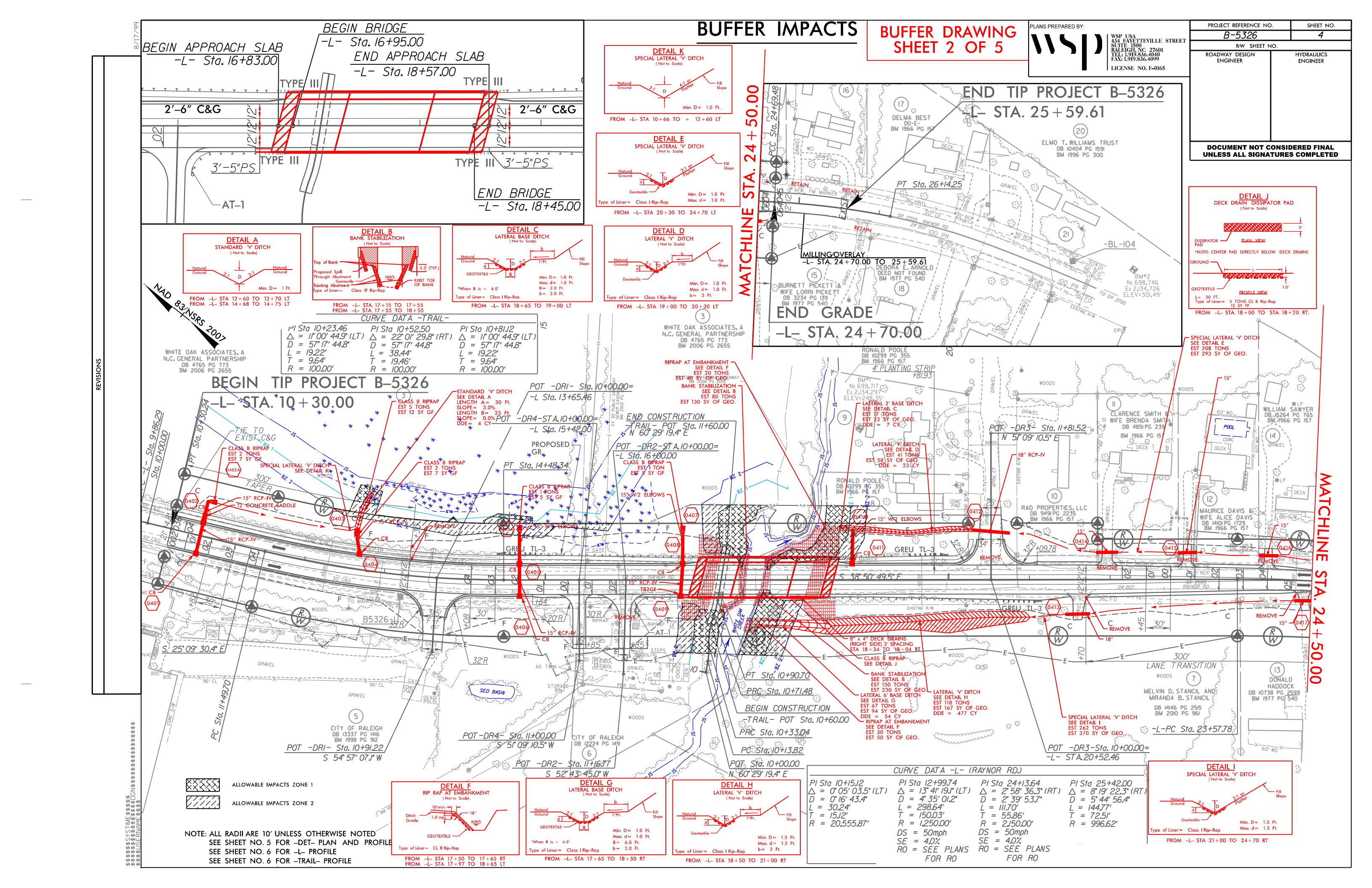
PROJECT ENGINEER

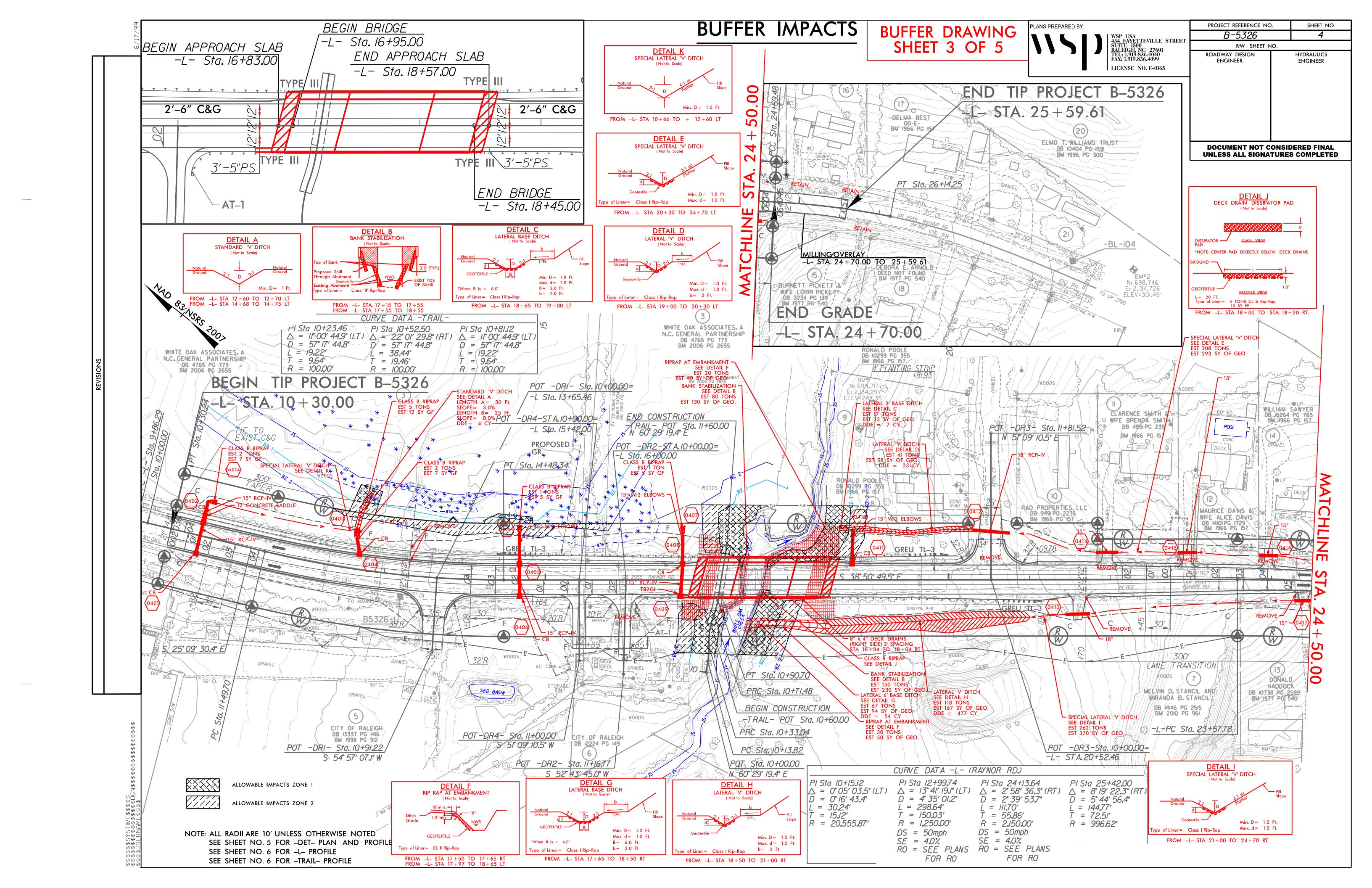
SIGNATURE:

DAVID STUTTS, PE

STRUCTURES MANAGEMENT UNIT







		•	RIPARIAN		/ 10 1 1		ACTS					DUE	FER
				TYPE		А	LLOWABL	.E	ı	MITIGABLI	Ē	REPLAC	
Site No.	Station (From/To)	Structure Size / Type	ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1	ZONE 2
1	-L- 12+24 to 15+83 LT				Х	` '			775	4372	5147	, ,	, ,
	-L- 16+60 to 16+95 RT	Dood Fill and Classing				576	1255	1831					
	-L- 16+94 to 16+95 LT	Road Fill and Clearing	X				15	15					
	-L- 18+45 to 18+99 LT					1746	1416	3162					
	-L- 16+95 to 17+27 RT					1121		1121					
	-L- 16+95 to 17+67 LT	Bridge Fill and Clearing		Х		2316	1273	3589					
	-L- 17+37 to 18+19 RT					2352	1473	3825					
	-L- 17+73 to 18+45 LT					1016		1016					
ΓΟΤΑL	.S*:					9127	5432	14559	775	4372	5147	0	0

NOTES:

Bridge Fill vs. Road Fill determind by begin end bridge station.

NC DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

1/22/2019 Wake County

B-5326 46040.1.1

SHEET 4

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OF

Revised 2018 Feb

		V	/ETLAN	DS IN B
				ANDS IN FERS
SITE NO.	STATION (FROM/TO)		ZONE 1 (ft ²)	ZONE 2 (ft ²)
1	-L- 12+53 LT	-L- 12+82 LT	270	0
	-L- 14+56 LT	-L- 15+83 LT	125	967
TOTAL:	l	l	395	967