



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JOSH STEIN  
GOVERNOR

J.R. "JOEY" HOPKINS  
SECRETARY

September 5, 2025

MEMORANDUM TO: Division Environmental and Construction Units

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

SUBJECT: Environmental Permits for the Replacement of Bridge 56 on NC 275 over  
South Fork Catawba River in Gaston County, Division 12, **TIP: BR-0019.**

Please find enclosed the following permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Regional General Permit 50	May 25, 2030
NC Division of Water Resources Section 401 Water Quality Certification	General Certification No. 7679 [RGP 50] [non-notifying]	May 25, 2030

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/](https://xfer.services.ncdot.gov/pdea/PermIssued/_General_Conditions_and_Certifications/)

The Project Commitments "Greensheet" is located on the Preconstruction SharePoint Dashboard at:  
<https://connect.ncdot.gov/site/preconstruction>



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT  
CHARLOTTE REGULATORY OFFICE  
8430 UNIVERSITY EXECUTIVE PARK DRIVE, SUITE 615  
CHARLOTTE NORTH CAROLINA 28262

September 2, 2025

Regulatory Program/Division  
SAW-2025-01368

Sent Via Email: wabarrett@ncdot.gov

William Barrett, ECAP Environmental Coordinator  
NCDOT Environmental Analysis Unit  
1598 Mail Service Center  
Raleigh, NC 27699-1598

Dear Mr. Barrett:

This letter is in response to the application you submitted to the Wilmington District - WRDA/Transportation Branch on July 16, 2025, for a Department of the Army general permit verification. This project has been assigned the file number SAW-2025-01368 and is known as NCDOT / BR-0019 / Br 56 / NC 275 / Gaston / Div 12. This file number should be referenced in all correspondence concerning this project.

A review of the information provided indicates that the proposed work would include the temporary placement of fill material in 141 lf of South Fork Catawba River from the placement of causeways/construction areas to demolish existing bridge and supports, place new bridge support piers, and construct the new NC 275 bridge. In addition, this project will include additional temporary placement a total of 76 lf (approximately 41 lf of this impact will overlap with the impact area for the construction of the new bridge and 35 lf will be downstream and under the footprint of the temporary detour bridge) of causeways/construction areas for placement/removal of a temporary detour roadway bridge across South Fork of Catawba River directly downstream of the existing NC 275 Bridge. This project will also include the temporary impact to 32 lf of South Fork Catawba River for placement of construction access causeway upstream of the NC 275 Bridge for the construction and stabilization of a stormwater ditch outlet into the South Fork of Catawba River. The project area for this determination includes a 3.3 acres area which is illustrated on the enclosed site plans/maps. The project/review area is located across South Fork Catawba River on NC 275 (Dallas Stanley Highway) across South Fork of Catawba River approximately 400 feet southwest of the intersection of NC 275 (Dallas Stanley Highway) and Old Willis School Road, at Latitude 35.330320 and Longitude -81.132610; near Dallas, Gaston County, North Carolina.

We have determined that the proposed work is authorized by Regional General Permit 50 (RGP-50) pursuant to authorities under Section 404 of the Clean Water Act (33 U.S.C § 1344). The proposed work must be accomplished in strict accordance with

the enclosed general permit conditions, any regional conditions, the special conditions listed in this letter, the application materials, and the enclosed plans NCDOT Project: BR-0019, Bridge No. 350056 on NC 275 over S. Fork Catawba River, Gaston County. If the extent of the project area and/or nature of the authorized impacts to waters are modified, a revised application must be submitted to this office for written approval before work is initiated. Any deviation from the terms and conditions of the permit, or your submitted plans, may subject the permittee to enforcement action.

This verification is valid until May 25, 2030, unless the subject general permit(s) is suspended, revoked, or is modified prior to that date such that the activity no longer complies with the terms and conditions of the general permit.

**Project Specific Special Conditions:**

1. All work must be performed in strict compliance with (a) the description of work in the PCN and (b) the Wetlands and Surface Water Impact Permit Drawing(s) (Permit Plans) in the application dated July 10, 2025. Any modification to the description of work and/or the permit plans must be approved by the USACE prior to implementation.
2. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this authorization letter in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this authorization letter, all conditions, and any authorized modifications. A copy of this authorization letter, all conditions, and any authorized modifications, shall be available at the project site during construction and maintenance of this project.
3. Temporary Causeways Project Specific Special Conditions:
  - a. The permittee shall ensure that no more than 50% of river flow is constricted by the causeway(s) at any time.
  - b. The permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, causeways, fill pads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization by the USACE.

- c. The permittee shall ensure that any equipment that is placed on the causeways is removed when either of the following situations is forecasted or anticipated: (1) the water level will rise to a point where the equipment could be flooded (even during work days), and/or (2) the water level is expected to rise overnight, or over a non-work period of time, to a point where the equipment could be flooded.
- d. The permittee shall ensure that staff working on the bridge (1) are aware that river users may occasionally pass under the overhead construction area, (2) watch the area for river users, (3) halt work if someone is seen approaching the bridge, and (4) pause all overhead work until river users safely leave the area.
- e. Upon completion of work that requires the causeways to be in the river, the permittee shall remove all readily detectible causeway material, to the extent practicable, while removing as little of the original riverbed as possible.

This general permit verification and any associated authorizations does not preclude the necessity to obtain any other Federal, State, or local permits, licenses, and/or certifications, which may be required.

If you have any questions related to this verification or have issues accessing documents referenced in this letter, please contact Steve Brumagin, WRDA/Transportation Project Manager of the Charlotte Field Office at 704-798-6471, by mail at the above address, or by email at [stephen.a.brumagin@usace.army.mil](mailto:stephen.a.brumagin@usace.army.mil). Please take a moment to complete our customer satisfaction survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,

A handwritten signature in black ink that reads "M. Scott Jones". The signature is written in a cursive, flowing style.

M. Scott Jones  
WRDA/Transportation Branch Chief

Enclosures

Permit Plans  
401 WQC-GC 7679  
RGP-50

cc (w/enclosures):

Erin Cheely, NCDOT EAU (via [ekcheely@ncdot.gov](mailto:ekcheely@ncdot.gov))

<b>U.S. Army Corps of Engineers (USACE)</b> <b>CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT</b> For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.		<i>Form Approved -</i> <b>OMB No. 0710-0003</b> <i>Expires 2027-10-31</i>
<b>The Agency Disclosure Notice (ADN)</b>		
<p>The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at <a href="mailto:whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil">whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil</a>. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>		
<p><b>PURPOSE:</b> This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.</p> <p>Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.</p>		
<p>Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, Wilmington District, Regulatory Office.</p> <p>The certification can be submitted by email at <a href="mailto:stephen.a.brumagin@usace.army.mil">stephen.a.brumagin@usace.army.mil</a> or by mail at the below address:</p> <div style="text-align: center; margin-top: 20px;">       U.S. Army Corps of Engineers        Wilmington District, Charlotte Field Office        Street Address: 8430 University Executive Park Drive,        City: Charlotte      State: North Carolina      Zip Code: 28262     </div>		
<b>COMPLETED BY THE CORPS</b>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Corps Action Number:</div> <div style="width: 70%; border-bottom: 1px solid black;">SAW-2025-01368</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;">Permit Type:</div> <div style="width: 70%; border-bottom: 1px solid black;">General Permit</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;">General Permit Number and Name (if applicable):</div> <div style="width: 70%; border-bottom: 1px solid black;"></div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;">Name of Permittee:</div> <div style="width: 70%; border-bottom: 1px solid black;">NCDOT- William Barrett</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;">Project Name:</div> <div style="width: 70%; border-bottom: 1px solid black;">NCDOT / BR-0019 / Br 56 / NC 275 / Gaston / Div 12</div> </div> <div style="margin-top: 10px;">       Project Location (physical address): on NC 275 (Dallas Stanley Highway) across South Fork of Catawba River approximately 400 feet southwest of the intersection of NC 275 (Dallas Stanley Highway) and Old Willis School Road near Dallas, North Carolina     </div>		
<b>PERMITTEE'S CERTIFICATION</b>		
<div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 30%;">Date Work Started:</div> <div style="width: 70%; border-bottom: 1px solid black;"></div> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 30%;">Date Work Completed:</div> <div style="width: 70%; border-bottom: 1px solid black;"></div> </div> <p>Enclose photographs showing the completed project (if available).</p> <p>I _____ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.</p>		
Name	Date	Signature



North Carolina Department of Transportation  
Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN  
FOR NCDOT PROJECTS



(Version 3.00; Released August 2021)

WBS Element: 67019.1.1 TIP/Proj No: BR-0019 County(ies): Gaston Page 1 of 2

General Project Information

WBS Element:		67019.1.1	TIP Number:	BR-0019	Project Type:	Bridge Replacement	Date:	8/22/2023
NCDOT Contact:		David Stutts, PE			Contractor / Designer:	Seth Jones, EI - RK&K		
	Address:	Structures Management Unit 1581 Mail Service Center Raleigh, NC 27699-1581				Address:	Forum I 8601 Six Forks Road, Suite 700 Raleigh, NC	
	Phone:	919-707-6442				Phone:	984-238-7216	
	Email:	<a href="mailto:dstutts@ncdot.gov">dstutts@ncdot.gov</a>				Email:	<a href="mailto:sjones@rkk.com">sjones@rkk.com</a>	
City/Town:		Dallas			County(ies):	Gaston		
River Basin(s):		Catawba		CAMA County?	No			
Wetlands within Project Limits?		No						

Project Description

Project Length (lin. miles):	0.38	Surrounding Land Use:	Low density residential, commercial, and agricultural; woods along floodplain					
	Proposed Project				Existing Site			
Project Built-Up Area (ac.)	1.9	ac.		1.4	ac.			
Typical Cross Section Description:	2 lane highway with 12' lanes and 4' paved shoulders. Detour: 2 lane highway with 12' lanes and 2' paved shoulders.				2 lane highway with 12' lanes and no paved shoulders.			
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	11,500	Year:	2045	Existing:	9,400 / 8,700	Year:	2018 / 2020

General Project Narrative:  
(Description of Minimization of Water  
Quality Impacts)

The North Carolina Department of Transportation (NCDOT) has proposed to replace Gaston County Bridge #350056 on NC 275 over the South Fork Catawba River. The existing structure is an 8-span, 370' bridge (2@35', 3@65', 3@35'), consisting of a reinforced concrete (RC) deck on I-beams, with RC caps on RC piers (channel) or H-piles (overbank). The existing structure will be removed and replaced with a 400' bridge consisting of 5 80' spans. The proposed bridge will utilize 45" girders on 4' caps and will feature a 3.5' concrete barrier rail and sloped (spill-through) abutments. There will be no deck drains on the bridge, thus eliminating direct discharge into the stream. Bridge stormwater will be picked up by drop inlets at each end of bridge and discharged onto a rip rap pad. Ditches have been designed to produce velocities below the permissible maximum of 3.5 fps (based on presence of Congaree Loam soils) at all proposed outfalls to the South Fork Catawba River.

Design mitigations (Avoidance/Minimization) for streams include:

1. Open shoulder sections were maximized to promote sheet flow from roadway.
2. Skimmer basins are provided at both proposed ditch outfalls to South Fork Catawba River during both Erosion Control phases. These basins will treat the majority of the project area runoff with regards to sediment prior to discharge to South Fork Catawba River.
3. Floating turbidity curtain is to be used in conjunction with temporary work pads to limit release of sediment during removal of existing interior bents and installation of proposed interior bents.

A detour bridge will be required due to the high volume of traffic and the length of an offsite detour. The detour bridge and fill will be removed after construction and will be seeded with a natural riparian vegetative seed mix. Temporary work pads in the stream are to be staged to avoid exceeding 50% blockage of the stream flow area at any one time.

NOTE: *Design Standards in Sensitive Watersheds* are to be implemented for this project.



North Carolina Department of Transportation  
Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN  
FOR NCDOT PROJECTS



(Version 3.00; Released August 2021)

WBS Element: 67019.1.1

TIP/Proj No.: BR-0019

County(ies): Gaston

Page 2 of 2

General Project Information

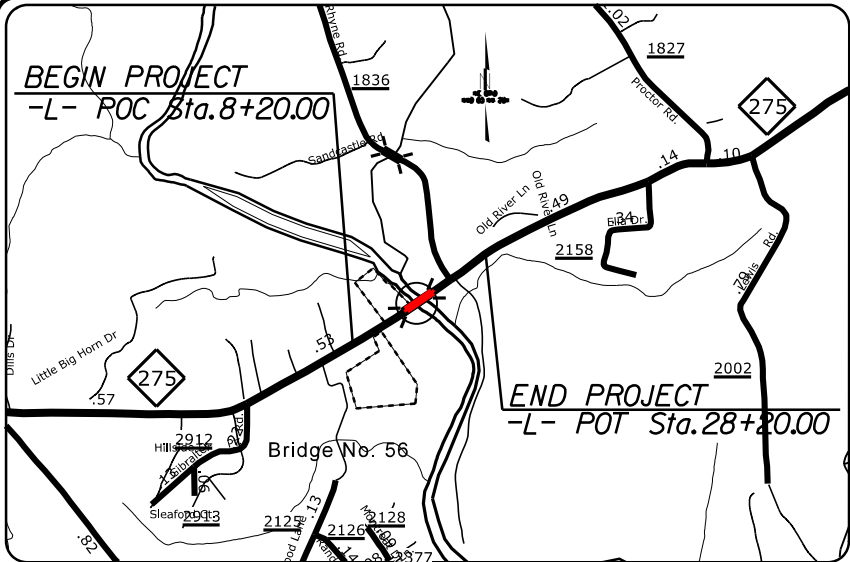
Waterbody Information

Surface Water Body (1):	South Fork Catawba River	NCDWR Stream Index No.:	11-129-(14.5)
NCDWR Surface Water Classification for Water Body	Primary Classification:	Water Supply IV (WS-IV)	
	Supplemental Classification:	None	
Other Stream Classification:	None		
Impairments:	None		
Aquatic T&E Species?	No	Comments:	
NRTR Stream ID:	S. Fork Catawba River	Buffer Rules in Effect:	N/A
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	N/A
Deck Drains Discharge Over Water Body?	No		
(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	

\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$DGN\$\$\$\$\$  
\$\$\$\$\$USERNAME\$\$\$\$\$

CONTRACT NO:

PROJECT: BR-0019



VICINITY MAP  
(NOT TO SCALE)

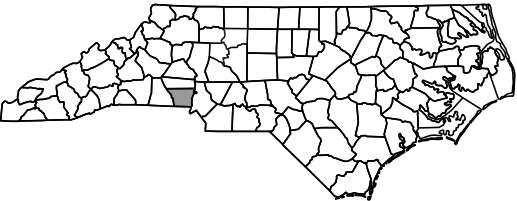
See Sheet 1A For Index of Sheets  
See Sheet 1B For Plan Sheet Symbols

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**GASTON COUNTY**

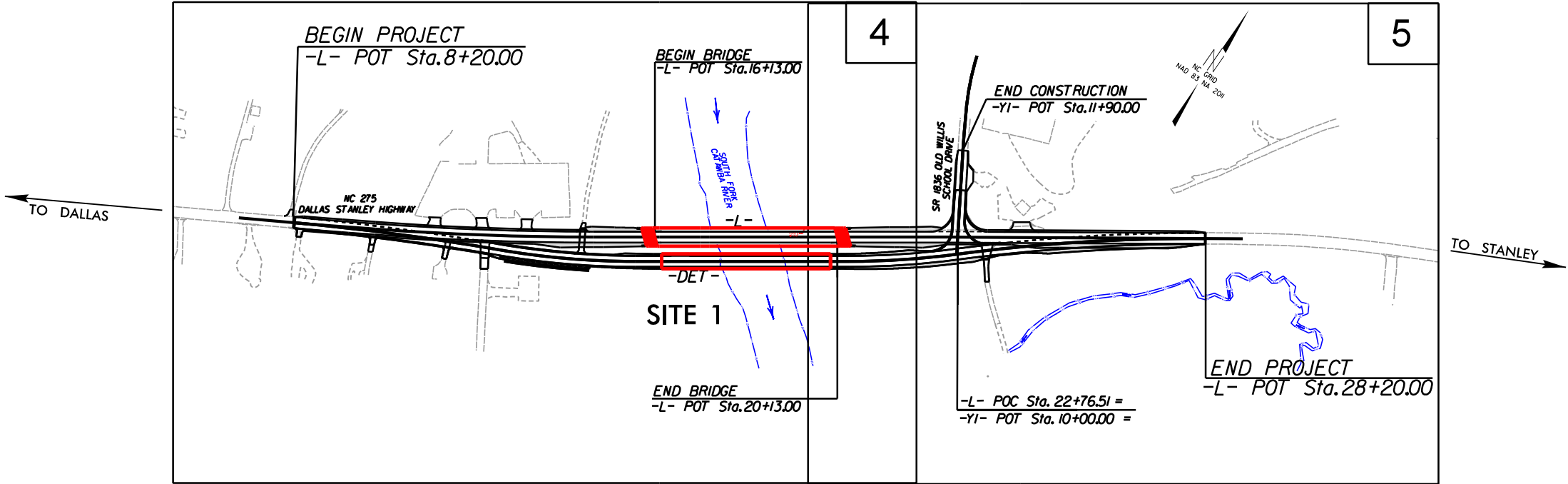
LOCATION: BRIDGE NO. 350056 ON NC 275  
OVER S. FORK CATAWBA RIVER  
TYPE OF WORK: GRADING, DRAINAGE, PAVING,  
STRUCTURES, AND RESURFACING

WETLAND AND SURFACE WATER IMPACTS PERMIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0019	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67019.1.1		P.E.	
67019.2.1		R/W AND UTIL.	

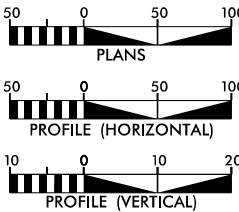


PERMIT DRAWING  
SHEET 1 OF 9



NOTES:  
CLEARING ON THIS PROJECT SHALL BE PERFORMED  
TO THE LIMITS ESTABLISHED BY METHOD III.  
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

GRAPHIC SCALES



DESIGN DATA

ADT 2018 = 9,400  
ADT 2045 = 11,500  
DHV = 10%  
DIR = 60%  
T = 6%\*  
V = 50 MPH  
\* TTST = 1% DUAL 5%  
FUNC CLASS = MINOR  
ARTERIAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT BR-0019 = 0.303 mi  
LENGTH STRUCTURE TIP PROJECT BR-0019 = 0.076 mi  
TOTAL LENGTH TIP PROJECT BR-0019 = 0.379 mi



RUMMEL, KLEPPER & KAHL, LLP  
8601 SIX FORKS ROAD, FORUM 1 SUITE 700  
RALEIGH, NORTH CAROLINA 27615-3960  
NC LICENSE NO. F-0112  
1-888-521-4455 OR 919-878-9560

FOR  
DIVISION OF HIGHWAYS

2018 STANDARD SPECIFICATIONS  
RIGHT OF WAY DATE:  
March 15, 2023  
LETTING DATE:  
April 16, 2024

Scott D. Blevins, P.E.  
PROJECT ENGINEER  
Carter Mull, P.E.  
PROJECT DESIGN ENGINEER  
David Stutts, P.E.  
NCDOT CONTACT

HYDRAULICS  
ENGINEER

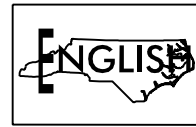
SIGNATURE:  
ROADWAY  
DESIGN  
ENGINEER

SIGNATURE:

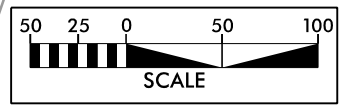


PROJECT REFERENCE NO.	SHEET NO.
BR-0019	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PERMIT DRAWING  
SHEET 2 OF 9

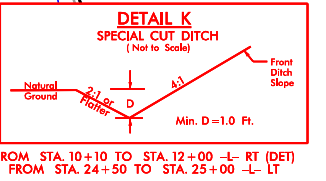
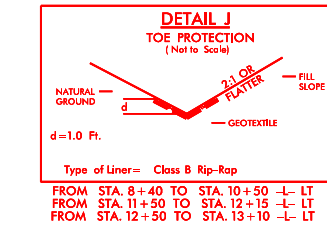
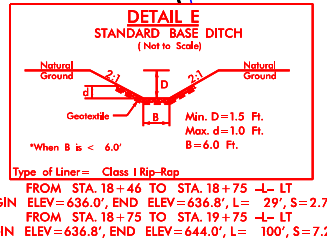
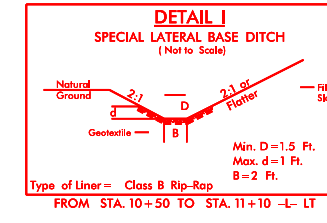
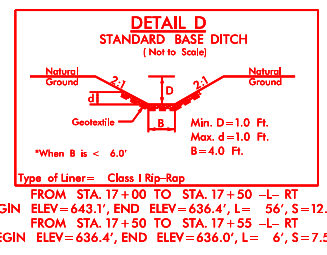
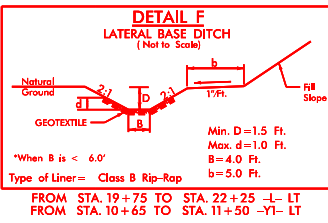
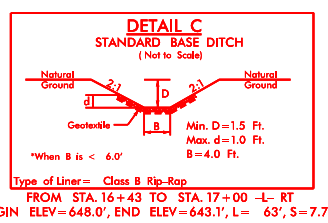
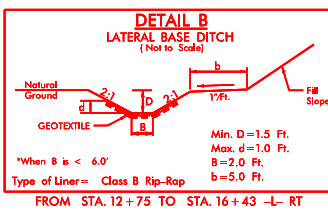
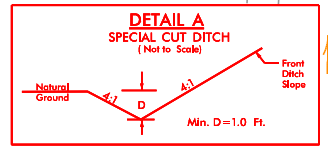
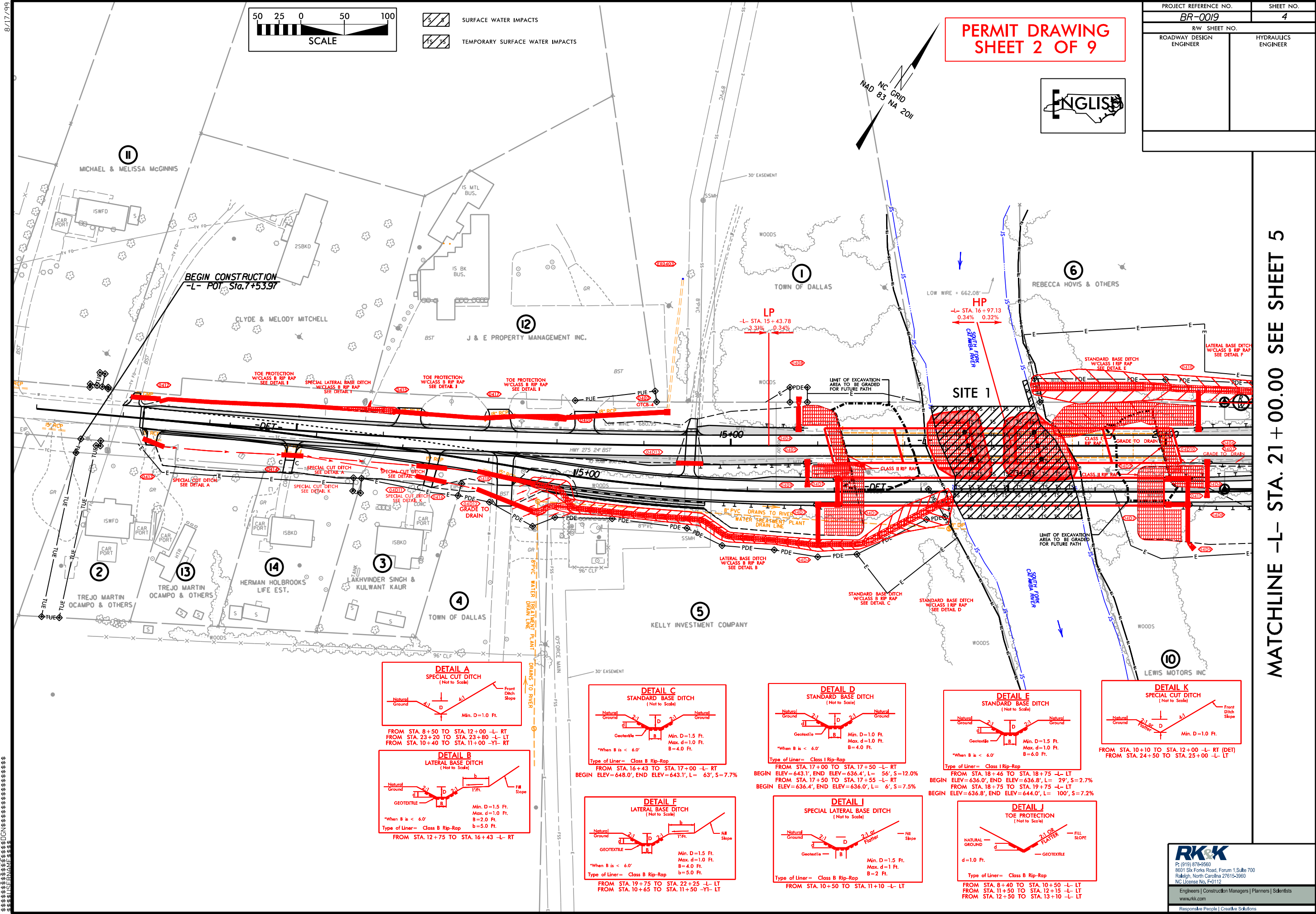


NAD 83  
NC GRID N4 2011

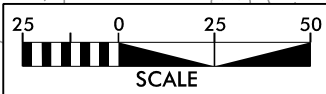


SURFACE WATER IMPACTS  
 TEMPORARY SURFACE WATER IMPACTS

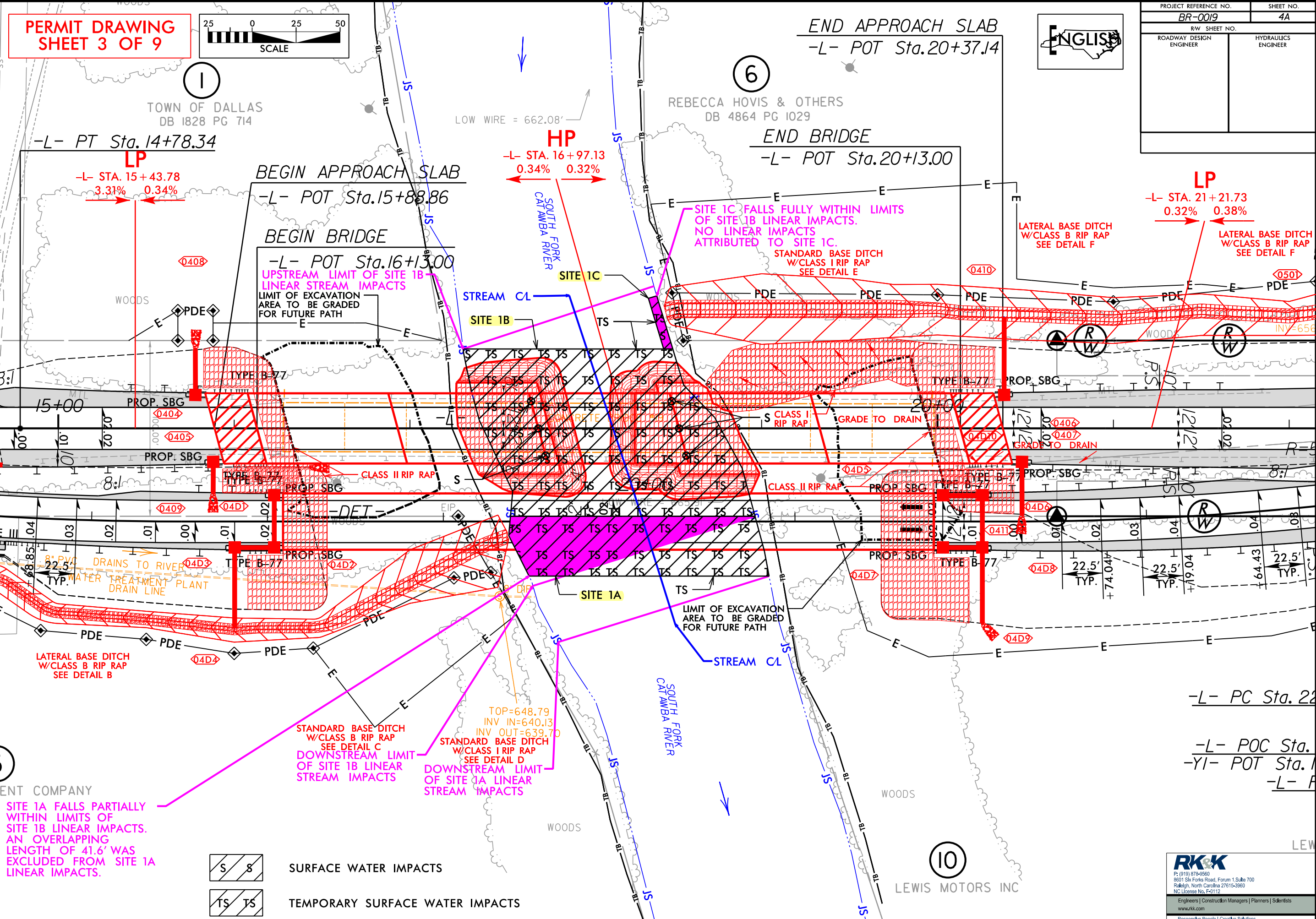
MATCHLINE -L- STA. 21+00.00 SEE SHEET 5



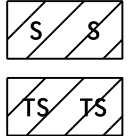
PERMIT DRAWING  
SHEET 3 OF 9



PROJECT REFERENCE NO.	SHEET NO.
BR-0019	4A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



8/17/99  
CUSTOMER: LEWIS MOTORS INC  
PROJECT: SOUTH FORK CATAMBA RIVER BRIDGE  
SHEET: 3 OF 9  
DESIGNED BY: [Name]  
CHECKED BY: [Name]  
APPROVED BY: [Name]



SURFACE WATER IMPACTS  
TEMPORARY SURFACE WATER IMPACTS

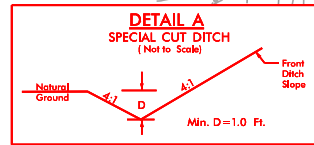
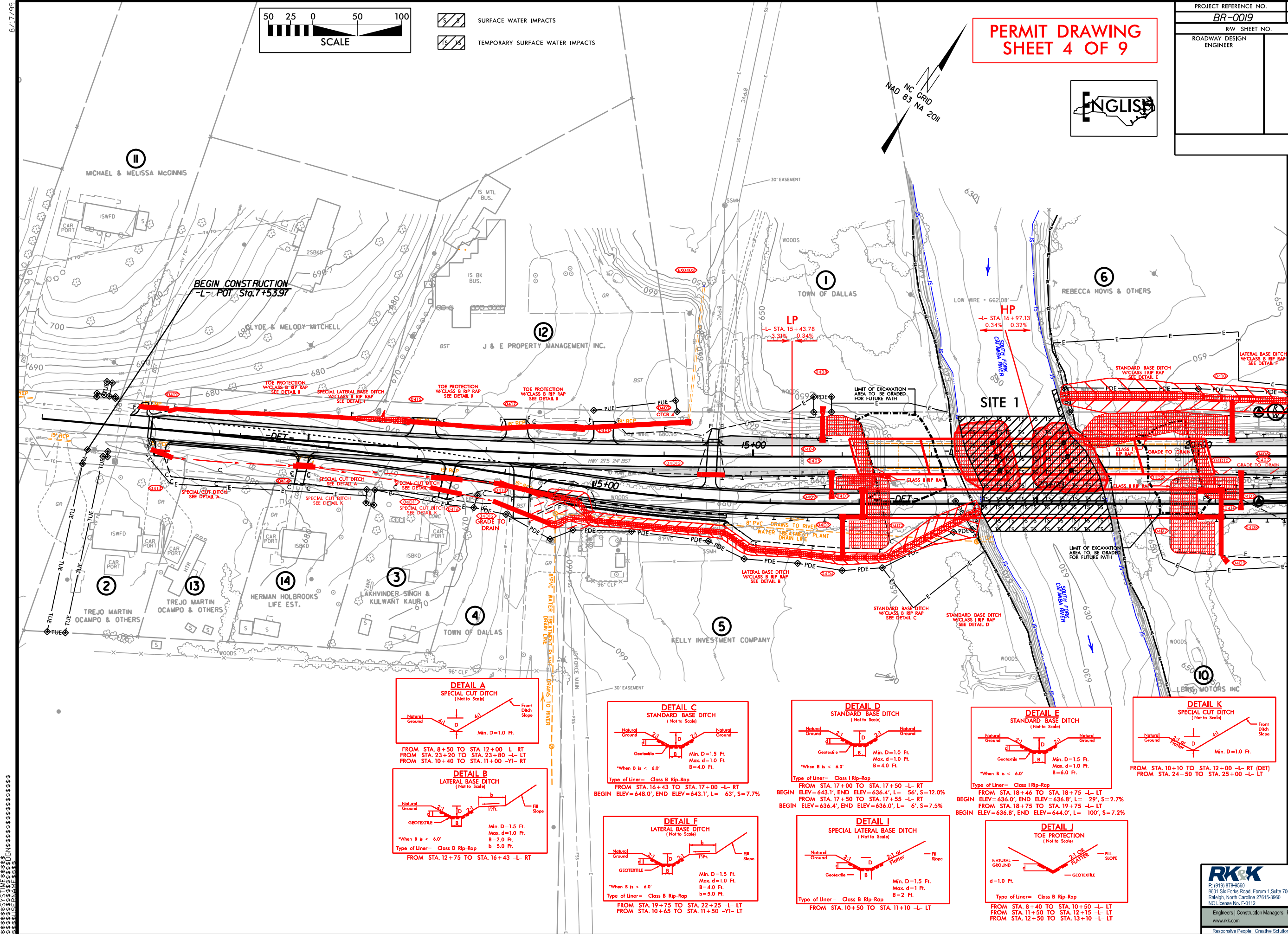
**RKK**  
P: (919) 978-9560  
6601 Six Forks Road, Forum 1, Suite 700  
Raleigh, North Carolina 27615-3960  
NC License No. F-0112  
Engineers | Construction Managers | Planners | Scientists  
www.rkk.com  
Responsive People | Creative Solutions

PROJECT REFERENCE NO.	SHEET NO.
BR-0019	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

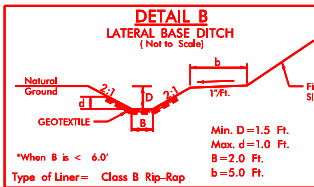
PERMIT DRAWING  
SHEET 4 OF 9



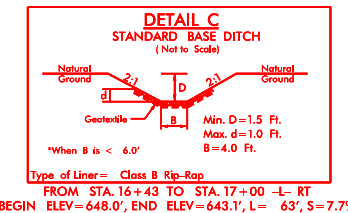
MATCHLINE -L- STA. 21+00.00 SEE SHEET 5



FROM STA. 8+50 TO STA. 12+00 -L- RT  
FROM STA. 23+20 TO STA. 23+80 -L- LT  
FROM STA. 10+40 TO STA. 11+00 -YI- RT

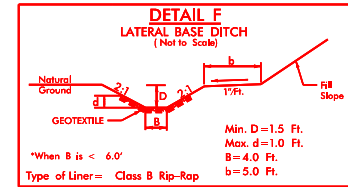


FROM STA. 12+75 TO STA. 16+43 -L- RT

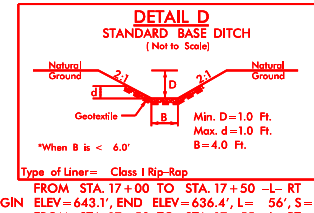


FROM STA. 16+43 TO STA. 17+00 -L- RT

BEGIN ELEV=648.0', END ELEV=643.1', L= 63', S=7.7%



FROM STA. 19+75 TO STA. 22+25 -L- LT  
FROM STA. 10+65 TO STA. 11+50 -YI- LT

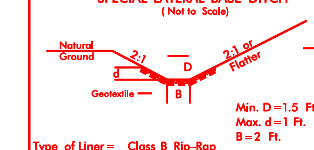


FROM STA. 17+00 TO STA. 17+50 -L- RT

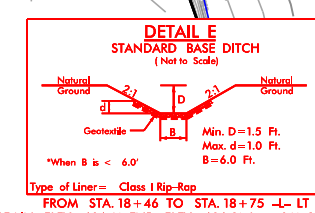
BEGIN ELEV=643.1', END ELEV=636.4', L= 56', S=12.0%

FROM STA. 17+50 TO STA. 17+55 -L- RT

BEGIN ELEV=636.4', END ELEV=636.0', L= 6', S=7.5%



FROM STA. 10+50 TO STA. 11+10 -L- LT

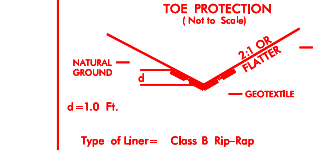


FROM STA. 18+46 TO STA. 18+75 -L- LT

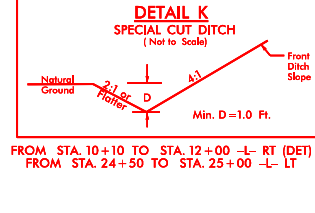
BEGIN ELEV=636.0', END ELEV=636.8', L= 29', S=2.7%

FROM STA. 18+75 TO STA. 19+75 -L- LT

BEGIN ELEV=636.8', END ELEV=644.0', L= 100', S=7.2%



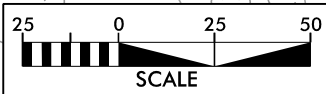
FROM STA. 8+40 TO STA. 10+50 -L- LT  
FROM STA. 11+50 TO STA. 12+15 -L- LT  
FROM STA. 12+50 TO STA. 13+10 -L- LT



FROM STA. 10+10 TO STA. 12+00 -L- RT (DET)

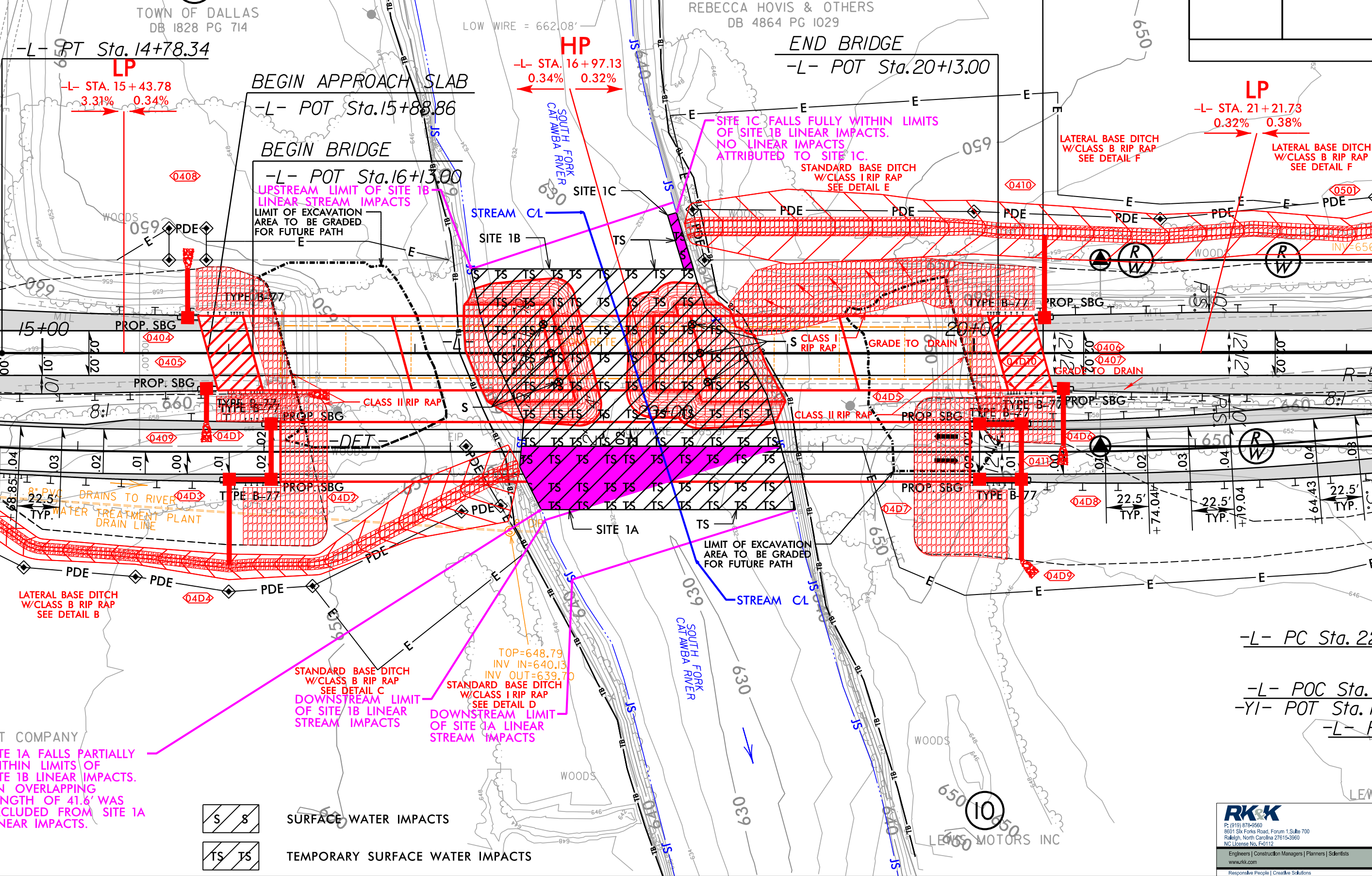
FROM STA. 24+50 TO STA. 25+00 -L- LT

PERMIT DRAWING  
SHEET 5 OF 9



ENGLISH

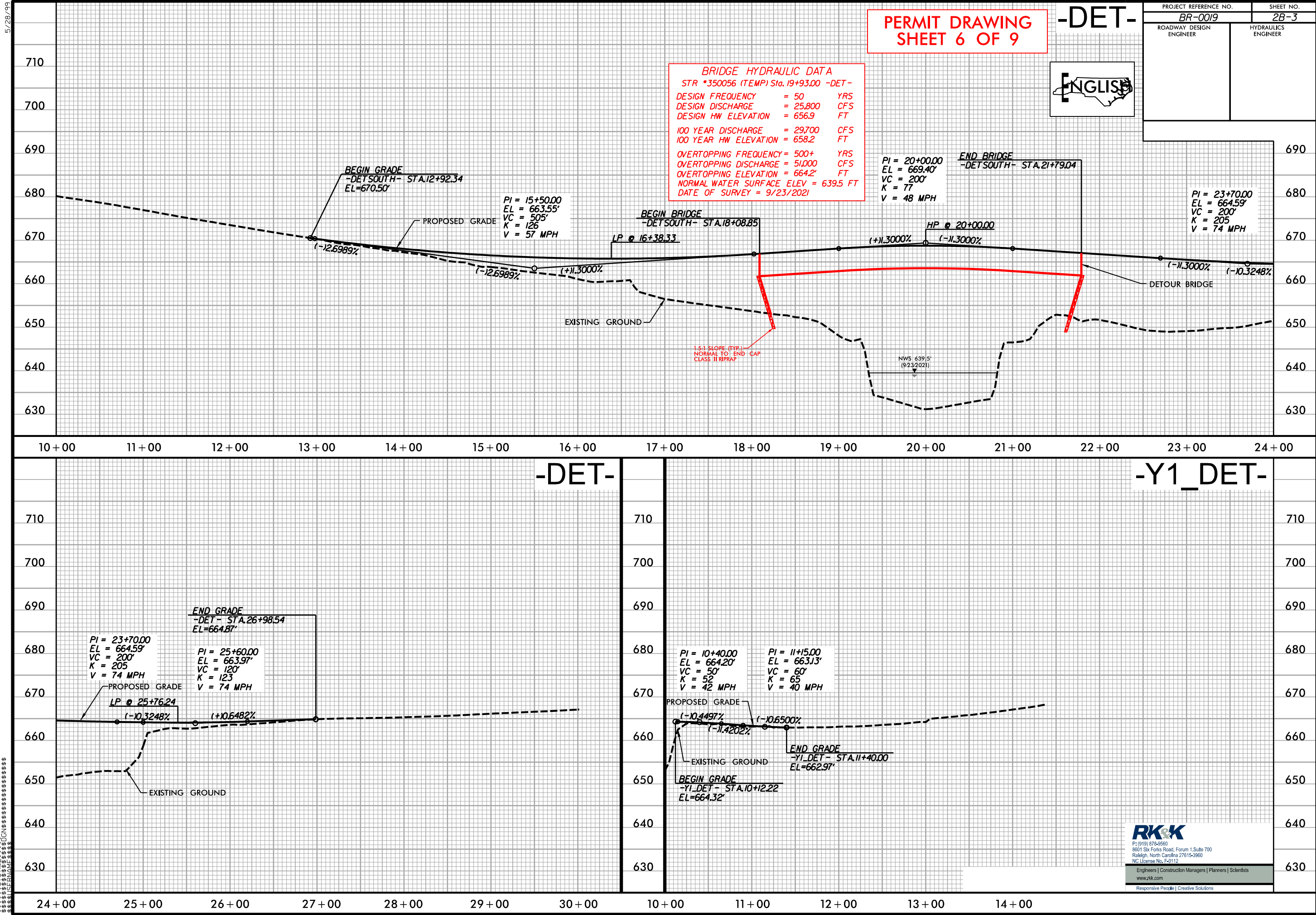
PROJECT REFERENCE NO.	SHEET NO.
BR-0019	4A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



S S  
TS TS

SURFACE WATER IMPACTS  
TEMPORARY SURFACE WATER IMPACTS

**RKK**  
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PERMIT DRAWING  
SHEET 7 OF 9

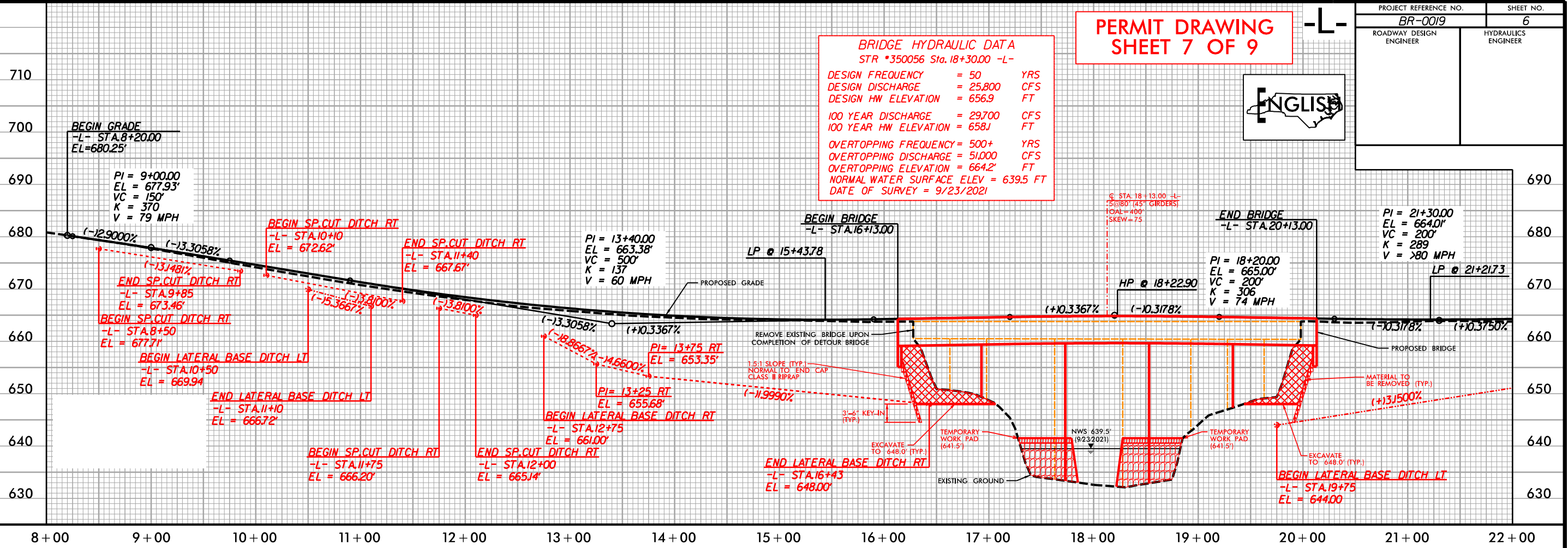
-L-

PROJECT REFERENCE NO.		SHEET NO.
BR-0019		6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



BRIDGE HYDRAULIC DATA  
STR \*350056 Sta. 18+30.00 -L-

DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 25,800	CFS
DESIGN HW ELEVATION	= 656.9	FT
100 YEAR DISCHARGE	= 29,700	CFS
100 YEAR HW ELEVATION	= 658J	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 51,000	CFS
OVERTOPPING ELEVATION	= 664.2	FT
NORMAL WATER SURFACE ELEV	= 639.5	FT
DATE OF SURVEY	= 9/23/2021	

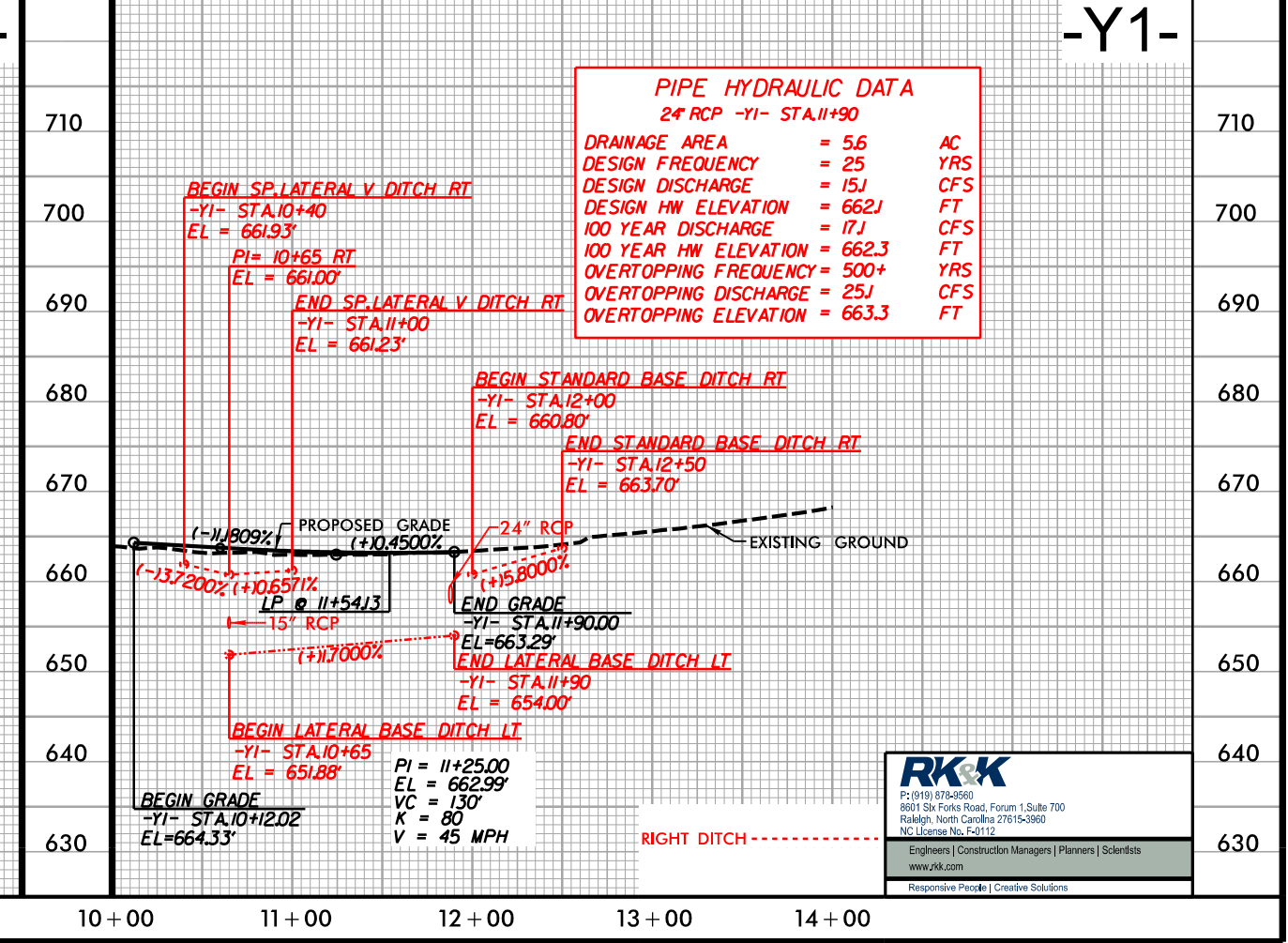
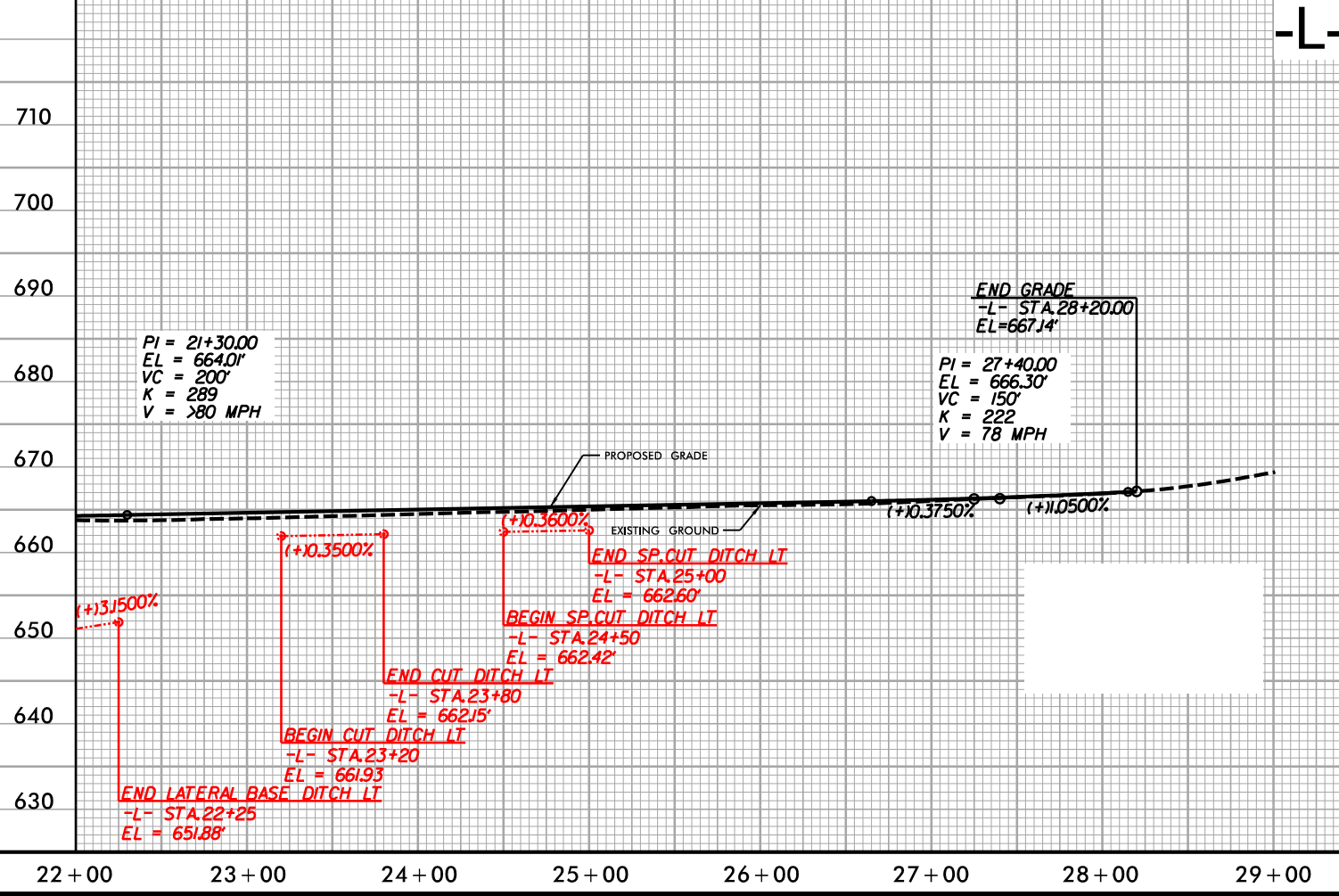


-L-

-Y1-

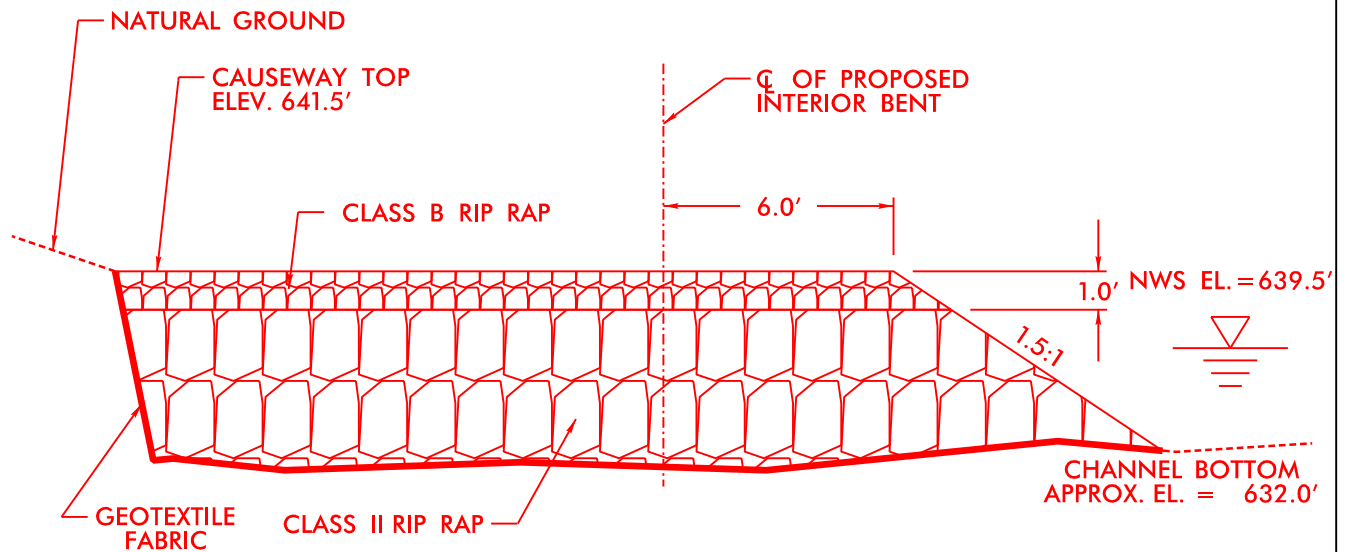
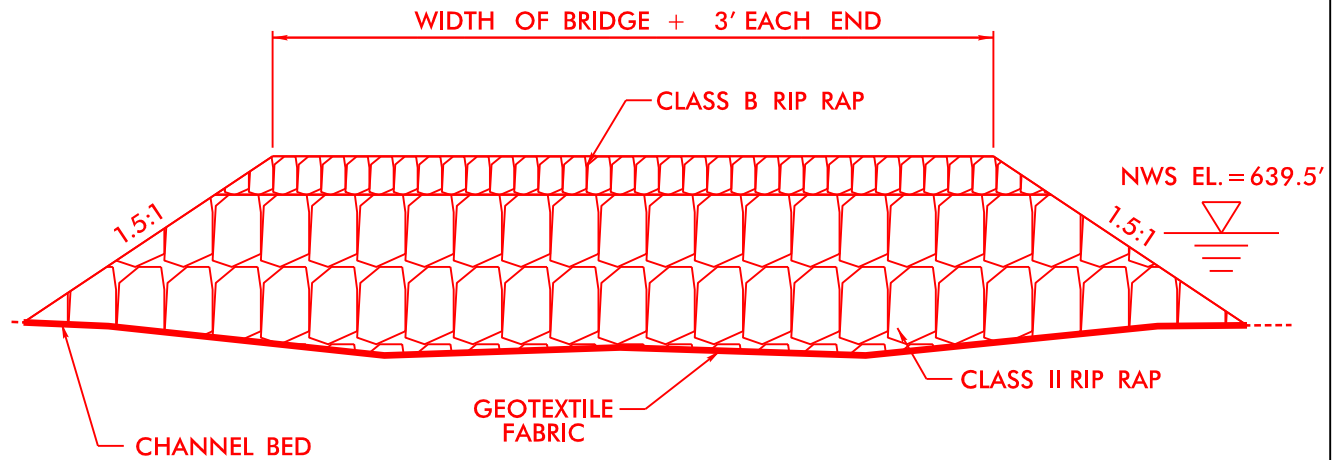
PIPE HYDRAULIC DATA  
24" RCP -Y1- STA. 11+90

DRAINAGE AREA	= 5.6	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 15J	CFS
DESIGN HW ELEVATION	= 662J	FT
100 YEAR DISCHARGE	= 17J	CFS
100 YEAR HW ELEVATION	= 662.3	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 25J	CFS
OVERTOPPING ELEVATION	= 663.3	FT



# TEMPORARY WORK PAD DETAIL

NOT TO SCALE



PERMIT DRAWING  
SHEET 8 OF 9

NCDOT

DIVISION OF HIGHWAYS

GASTON COUNTY

PROJECT: BR-0019

BRIDGE NO. 56 OVER

SOUTH FORK CATAWBA RIVER

ON DALLAS STANLEY HIGHWAY

(NC 275)

8 / 22 / 2023

## WETLAND AND SURFACE WATER IMPACTS 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)
1A	-L- 17+56 - 19+04 RT	Detour & Standard Base Ditch							0.11		35	
1B	-L- 17+30 - 18+96	Temporary Work Pads Prop Bridge: 5@80'; 48" Girder							0.28		141	
1C	-L- 18+36 - 18+49 LT	Standard Base Ditch							< 0.01			
TOTALS*:									0.40	0	176	0

\*Rounded totals are sum of actual impacts

- NOTES:
- Site 1A linear temporary impacts partially overlap Site 1B. Only 34.8' of linear impacts that fall outside of Site 1B, as measured along the stream centerline, were quantified for Site 1A in the impact table. An overlap of 41.6' was excluded from Site 1A linear temporary impacts.
  - Site 1B permanent impacts from 6 piers of 4' diameter, for a total of 75.4 sf.
  - Begin bridge and end bridge temporary work pads cover an area within Site 1B of 0.087 ac and 0.101 ac, respectively.
  - Temporary work pads are to be staged to avoid blocking >50% of channel flow area at any one time.
  - Site 1C linear temporary impacts of 31.7' fully overlap Site 1B. Only Site 1B impact lengths quantified in the impact table.

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
8/22/2023  
GASTON COUNTY  
BR-0019  
67019.1.1

SHEET 9 OF 9