

08/12/2021 9:26:20  
**TIP PROJECT: BP2.R018.1**  
**CONTRACT: TBD**

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

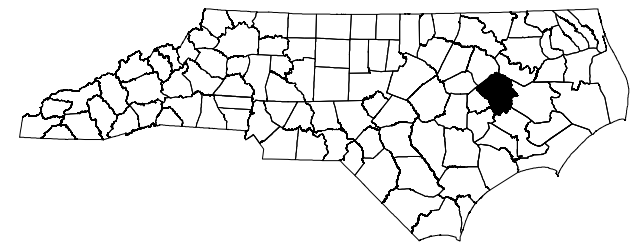
9 / 27 / 2021

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP2.R018.1	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
BP2.R018.1		PE	
BP2.R018.2		RW, UTILITIES	
BP2.R018.3		CONSTRUCTION	

PITT COUNTY

LOCATION: *BRIDGE NO. 730015 ON SR 1565 (S. GRIMESLAND BRIDGE ROAD)  
 OVER CHICOD CREEK*

TYPE OF WORK: *GRADING, DRAINAGE, PAVING AND STRUCTURE*

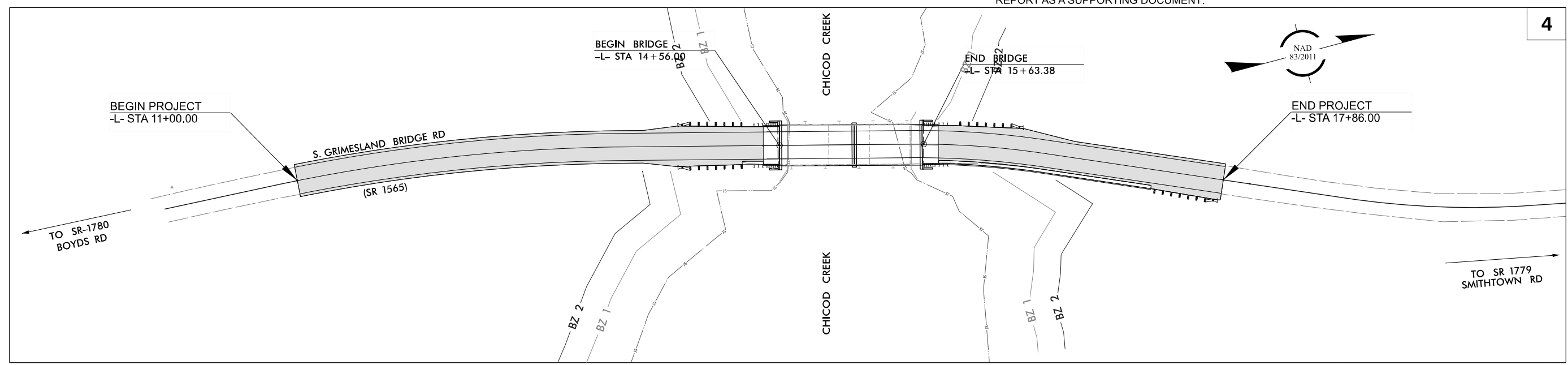
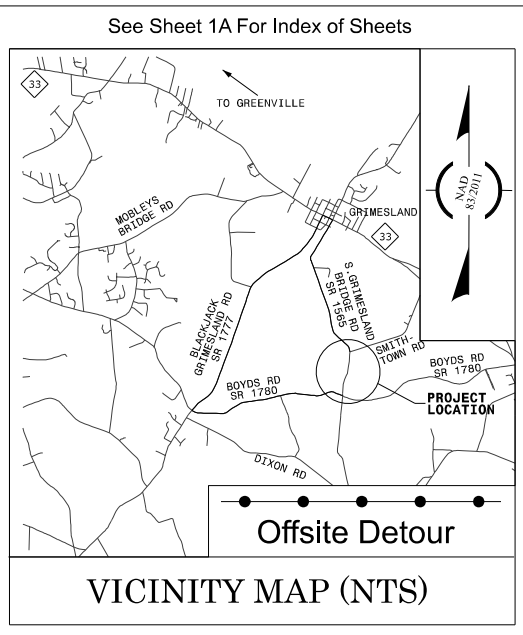


NOTE TO REVIEWER:  
 PRINT STYLE AND PSET DEVELOPMENT IS STILL IN PROGRESS BY NCDOT FOR ORD DEVELOPED SHEETS AND CROSS SECTIONS. PLOTTING IN THIS SET IS ACCOMPLISHED USING NCDOT'S DEVELOPMENTAL STANDARDS FOR PLAN-ELEVATION AND CROSS SECTION SHEETS. ALL OTHER SHEETS UTILIZE THE FORMER ORD PRINT SYTLE.  
 THE CROSS SECTION SUMMARY SHEET HAS BEEN REMOVED FROM THIS PLAN SET. THE SUMMARY OF EARTHWORK QUANTITIES ARE SHOWN IN SHEET 3B-1 AND ALL EARTHWORK QUANTITY CALCULATIONS SHALL BE PROVIDED VIA A VOLUMETRIC ORD REPORT AS A SUPPORTING DOCUMENT.

BUFFER IMPACTS

Plans Developed with  
 OpenRoads

BUFFER DRAWING  
 SHEET 1 OF 5







**\*\*DESIGN EXCEPTION REQUIRED FOR MINIMUM HORIZONTAL CURVE RADIUS AND HORIZONTAL STOPPING SIGHT DISTANCE.**

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.  
 THIS PROJECT IS NOT LOCATED WITHIN MUNICIPAL BOUNDARIES.  
 THIS IS NOT A CONTROL OF ACCESS PROJECT.

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

<p><b>GRAPHIC SCALES</b></p> <p>40 20 0 40 80              PLANS</p> <p>40 20 0 40 80              PROFILE (HORIZONTAL)</p> <p>10 5 0 10 20              PROFILE (VERTICAL)</p>	<p><b>DESIGN DATA</b></p> <p>ADT 2022 = 480              ADT 2042 = 840              K = N/A %              D = N/A %              T = 6 % *              V = 60 MPH              * TTST = 3% DUAL 3%              FUNC CLASS = LOCAL              SUB-REGIONAL TIER</p>	<p><b>PROJECT LENGTH</b></p> <p>PROJECT LENGTHS FOR TIP PROJECT BP2.R018.1:</p> <p>LENGTH ROADWAY = 0.110 MILES              LENGTH STRUCTURES = 0.020 MILES              TOTAL LENGTH = 0.130 MILES</p>	<p>NCDOT Contact: CATHRINE HOSSACK-MEYER, PE</p> <p>Prepared in the Office of: <b>KCA</b>  <small>KLSINGER CAMPO &amp; ASSOCIATES</small></p> <p>NC FIRM LICENSE No: C-1506              301 Fayetteville St., Suite 1500              Raleigh, NC 27601              (919)882-7839</p> <p>2018 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: 10/15/2021              LETTING DATE: 03/15/2022</p> <p>JOHN P. MAZERES, P.E.  <small>PROJECT ENGINEER</small></p> <p>JASON M. DEBONE  <small>PROJECT DESIGN ENGINEER</small></p>	<p>HYDRAULICS ENGINEER</p> <p>_____  <small>P.E.</small></p> <p>ROADWAY DESIGN ENGINEER</p> <p>_____  <small>P.E.</small></p>	
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 ALLOWABLE IMPACTS ZONE 1  
 MITIGABLE IMPACTS ZONE 1  
 MITIGABLE IMPACTS ZONE 2  
 DENOTES RIP RAP

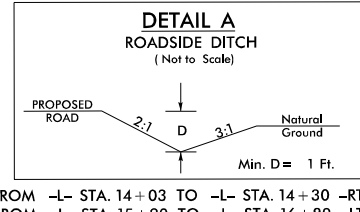
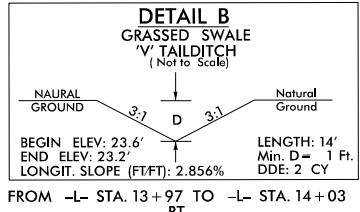
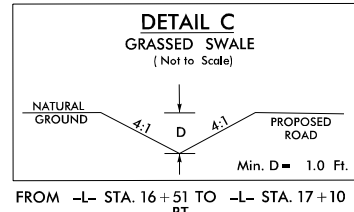
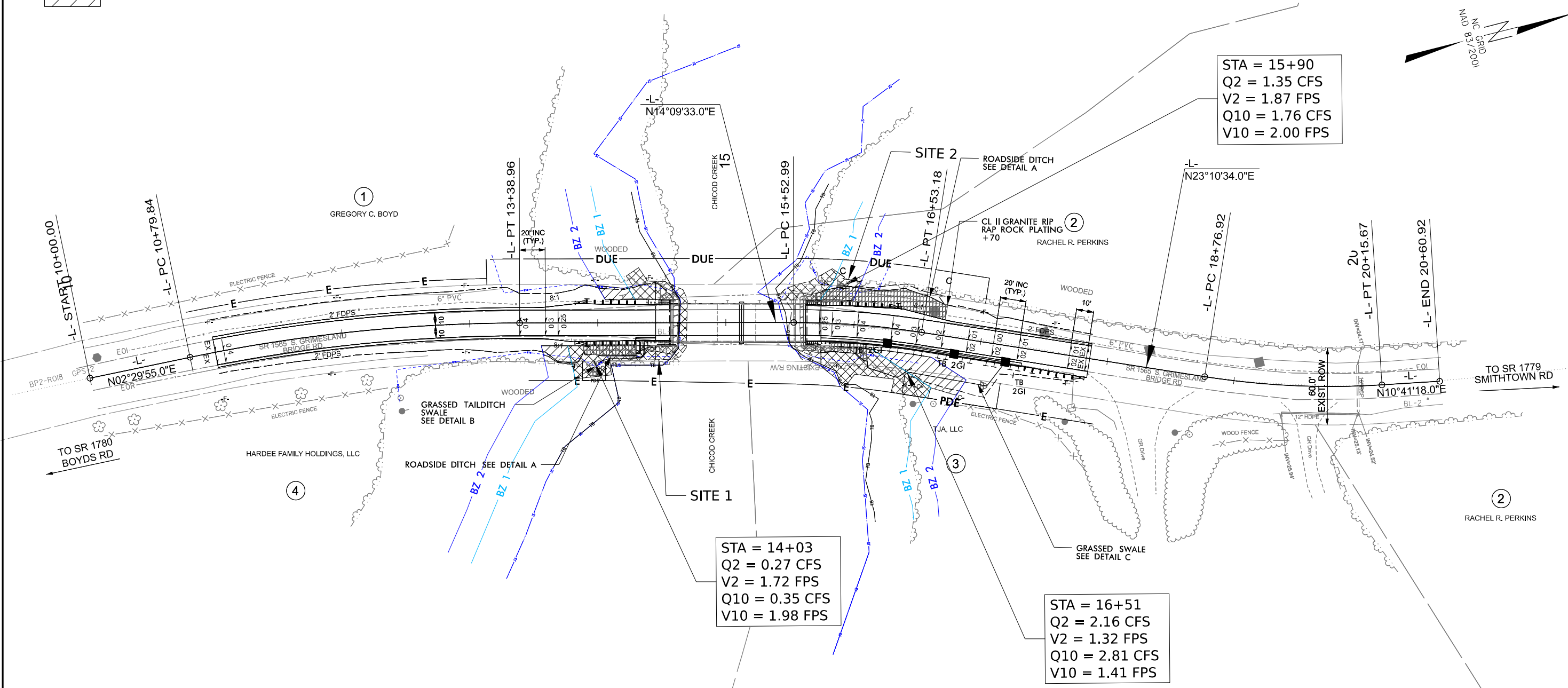
**BUFFER DRAWING  
SHEET 2 OF 5**



STA = 15+90  
 Q2 = 1.35 CFS  
 V2 = 1.87 FPS  
 Q10 = 1.76 CFS  
 V10 = 2.00 FPS

STA = 14+03  
 Q2 = 0.27 CFS  
 V2 = 1.72 FPS  
 Q10 = 0.35 CFS  
 V10 = 1.98 FPS

STA = 16+51  
 Q2 = 2.16 CFS  
 V2 = 1.32 FPS  
 Q10 = 2.81 CFS  
 V10 = 1.41 FPS



- NOTES:
- 1.) ALL BRIDGE GUARDRAIL ANCHOR UNITS ARE TYPE III.
  - 2.) ALL GUARDRAIL ANCHOR UNITS ARE GREU TL-3.
  - 3.) EXISTING PAVEMENT LANE WIDTHS AT THE BEGINNING AND END OF PROJECT ARE APPROXIMATELY 10.0 FT WIDE.
  - 4.) DESIGN EXCEPTION REQUIRED FOR MINIMUM HORIZONTAL CURVE RADIUS AND HORIZONTAL STOPPING SIGHT DISTANCE.
  - 5.) BENCHMARK INFORMATION:  
EASTING: 2538979.9855'  
NORTHING: 653782.9415'  
ELEVATION: 20.5450'
  - 6.) SEE SHEET 4A FOR R/W AND EASEMENT STATIONING.
  - 7.) SEE SHEET 5 FOR PROFILE.
  - 8.) SEE GENERAL NOTES FOR SEALING TIE IN JOINTS AT BEGIN/END PROJECT.
- HYDRAULICS NOTE:
- 1.) PERMISSION WAS GIVEN BY NCDEQ WASHINGTON REGIONAL OFFICE - DOT COORDINATOR TO USE SOUTHEAST QUADRANT JS LINE AS TOP OF BANK

**BP2.R018.1**

4ENI 004

ROADWAY DESIGN ENGINEER

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HYDRAULICS ENGINEER

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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA



ROADWAY DESIGN UNIT

PREPARED BY





**KCA**  
KISINGER CAMPO & ASSOCIATES

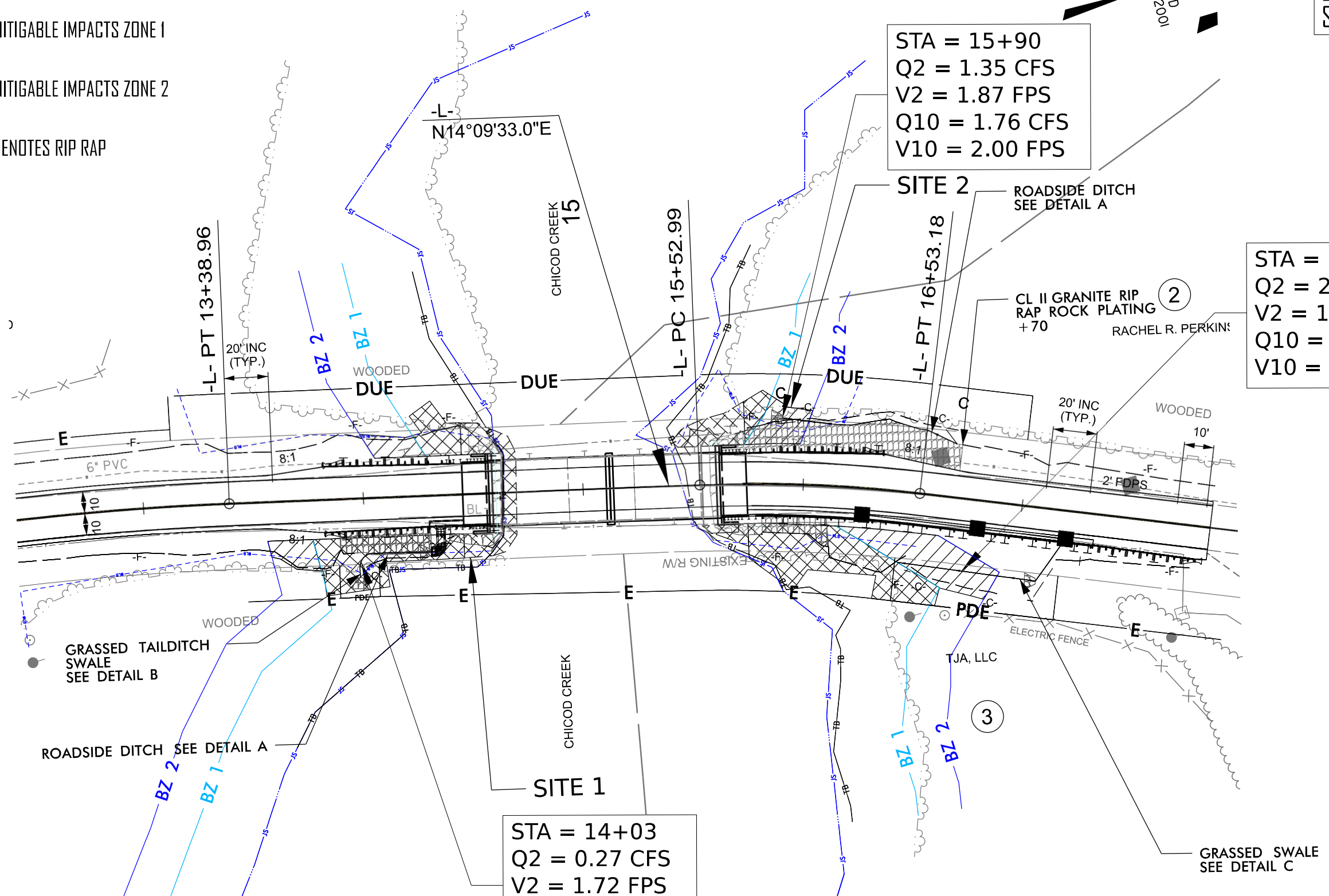
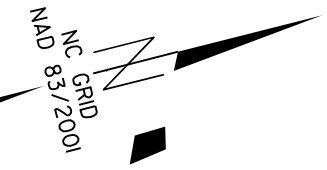
NC FIRM LICENSE No: C-1506  
501 Fayetteville Street, Suite 1500  
Raleigh, NC 27601  
(919) 882-7839

PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION

BUFFER DRAWING SHEET 3 OF 5

-  ALLOWABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 2
-  DENOTES RIP RAP

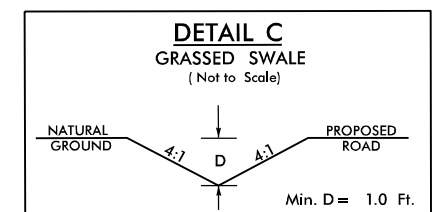
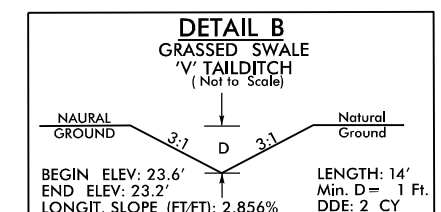
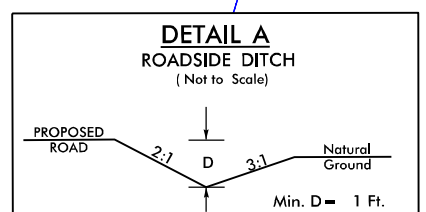


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 V2 = 1.72 FPS  
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 V10 = 1.98 FPS

SCALE:  
 1" = 50'



FROM -L- STA. 14+03 TO -L- STA. 14+30 -RT-  
 FROM -L- STA. 15+90 TO -L- STA. 16+80 -LT-

FROM -L- STA. 13+97 TO -L- STA. 14+03 -RT-

FROM -L- STA. 16+51 TO -L- STA. 17+10 -RT-

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STATE OF NORTH CAROLINA

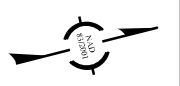


ROADWAY DESIGN UNIT

PREPARED BY



NC FIRM LICENSE No: C-1506  
 301 Fayetteville Street,  
 Suite 1500  
 Raleigh, NC 27601  
 (919)882-7839



PRELIMINARY PLANS

DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS

DO NOT USE FOR B.F.F. ACCEPTANCE

## RIPARIAN BUFFER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	IMPACTS									BUFFER REPLACEMENT		
			TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )			
1	13+56 / 14+45	Roadway Crossing	X							1517	473	1990		
1	14+45 / 14+64	105' Proposed Bridge		X		725		725						
2	15+39 / 15+74	105' Proposed Bridge		X		530		530						
2	15+74 / 16+93	Roadway Crossing	X						1804	1425	3229			
<b>TOTALS*:</b>						<b>1255</b>	<b>0</b>	<b>1255</b>	<b>3321</b>	<b>1898</b>	<b>5219</b>	<b>0</b>	<b>0</b>	

NOTES:

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 10/27/2021  
 Pitt  
 SF-730015  
 BP2.R018.1  
 SHEET 4 OF 5

## WETLANDS IN BUFFER IMPACTS SUMMARY

SITE NO.	STATION		WETLANDS IN BUFFERS	
	FROM	TO	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )
1	13+58	14+64	755	91
2	15+38	16+93	1315	374
<b>TOTAL:</b>			<b>2070</b>	<b>465</b>

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
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 Pitt  
 SF-730015  
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 SHEET      5      OF      5