

# Categorical Exclusion (CE) Type I(B)

STIP Project No.	<b>BR-0001</b>
WBS Element	<b>67001.1.1</b>
Federal Project No.	<b>N/A</b>

A. Project Description:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 020030 over Little River (STIP BR-0001) in Alleghany County. Please see the attached Jurisdictional Features map (*Fig. 1*).

Located in the Sparta town limit, existing Bridge Number 020030 is 127 feet long with deck width of 33.33 feet (28.25 feet clear roadway). The existing structure is a concrete T – Beam. The project is along US 21, 1 mile south of SR1171 (Southside Drive). The existing structure is a 2 (11 ft) lane-divided bridge with curb of 1.5 feet. In the vicinity of bridge 30, US 21 has a pavement width of 23 feet. The existing bridge is in a horizontal curve and located on a sag vertical curve. The existing roadway is approximately 21 feet above the stream channel. There is no posted weight limit on the bridge.

The new bridge is proposed to have a structure length of 135 feet with three 12 -foot lanes and 5-foot offsets on each side for bicycle accommodations and a design speed of 40 mph. The proposed bridge is in a horizontal curve and on a vertical tangent between two sag vertical curves. The preferred alternative is to replace the existing bridge using the stage construction method. The proposed roadway is approximately 24 feet above the stream channel. The new structure proposes a 3-span bridge using 45 inches of Prestressed Concrete Girders (PSG).

B. Description of Need and Purpose:

The purpose of the proposed project is to replace a structurally deficient bridge. The Comprehensive Transportation Plans (CTP) for Alleghany County proposes widening along US 21 (including all bridges) to a 3-lane facility with 12-foot lanes. The CTP also recommend bridges be designed for 3 lanes with Bicycle and Pedestrian accommodations. Bridge No. 30 was originally built in 1920, rehabilitated in 1951 and has a sufficiency rating of 49.08 out of 100. With a rating of 4 out of 9 for the bridge deck, Bridge No. 30 is in poor condition, structurally deficient, functionally obsolete, and warrants replacement.

C. Categorical Exclusion Action Classification:

**Type I(B) - Ground Disturbing Action**

D. Proposed Improvements:

Type I Action

- 28. Bridge rehabilitation, reconstruction, replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

E. Special Project Information:

**Alternatives:**

Three alternatives were initially investigated for this project;

- Alt. 1, Replace in place with offsite detour
- Alt. 2, Widening existing bridge
- Alt. 3, Staged Construction/full build out

Due to the lack of sufficient alternate routes for a detour during construction, the new bridge will be constructed to the northeast of the existing bridge and a minor realignment of U.S. 21 will be required. Alternate 1 was not feasible due to traffic conditions and non-available routes for detour.

It was initially discussed to widen the existing bridge by adding 1-1.5 lanes of new bridge to the outside with two-way traffic pattern that is signal controlled. However, this route is used by large trucks carrying Christmas trees, and it was determined more feasible to analyze 2 lanes or 2.25 lanes would be needed on the east side of the bridge as proposed improvements. The remaining components from the existing bridge would then be torn down and the remainder of the new bridge would then be built. A 5-foot offset would temporarily be used during construction to accommodate onsite vehicular movement. Alternate 3 was chosen to realign the bridge to the north using staged construction in order to maintain traffic on US 21.

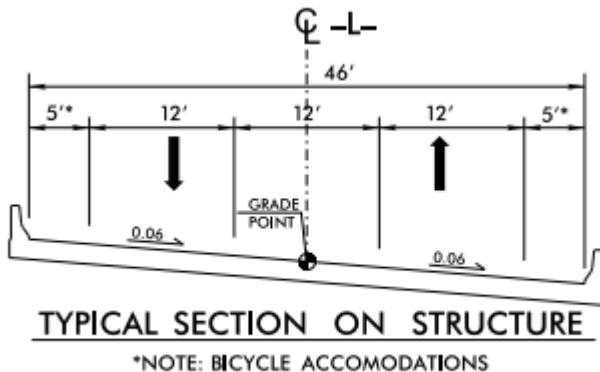
After further investigation it was determined that stage construction of the bridge was not needed. It was then decided to move forward with a full build out of the structure without adversely affecting the existing bridge.

**Multi-modal Considerations:**

Bicycle accommodations are recommended on US 21 from Andrews Ridge Road (SR 1429) to Bledsoe Creek Road (SR 1135), to include accommodations on bridge 020030. A multi-use trail is recommended along US 21 from south of the Little River to Ballpark Road, including crossing the river. New or improved sidewalks are recommended on US 21 from Blue Ridge Street to Sparta Parkway (SR 1206). A recommended bus route will also use US 21 between Sunset Drive and Sparta Parkway (SR 1206).

Bicycle accommodations will be implemented using 5-foot paved shoulders on the roadway and 5-foot offsets on the bridge. Other recommendations were considered but not implemented due to additional adverse impacts to the area.

**Proposed Typical Section:**



## **Environmental Coordination**

### **Cultural resources**

The Office of State Archaeology (OSA) on July 12, 2019, conducted a review of the proposed project area. No previously recorded archaeological sites were identified. According to the North Carolina State Historic Preservation Office online data base (HPOWEB 2018), there are also no known historic architectural resources within the project area.

No Historic Architecture survey is required, there are no National Register listed or eligible properties.

### **Natural resources**

Field work was conducted on September 19, 2018, and March 29, 2019. Jurisdictional areas identified in the study area are named streams and don't warrant verification by the U.S. Army Corps of Engineers (USACE) or the North Carolina Division of Water Resources (NCDWR).

- **Protected Species**

As of June 27, 2018, the United States Fish and Wildlife (USFWS) lists two federally protected species, under the Endangered Species Act (ESA) for Alleghany County.

Bog turtle: Species listed as threatened due to similarity of appearance do not require Section 7 consultation with the USFWS. Therefore, surveys for this species are not needed. However, no suitable bog turtle habitat is present within the study area. A review of the most recent North Carolina Natural Heritage Program (NCNHP) database indicates no bog turtle occurrences within 1.0 mile of the study area.

Our biological surveys unit has surveyed this project and a report is in progress.

The biological conclusion for this project is May Affect, Not Likely to Adversely Affect for both the gray bat and northern long-eared bat (NLEB).

- **Bald and Golden Eagle Protection Act**

A survey of the project study area and the area within 660 feet of the project limits was conducted on March 29, 2019. No eagle nests were identified. Additionally, a review of the NHP database on July 10, 2019, revealed no known occurrences of this species within 1.0 mile of the project study area. Due to the lack of habitat, known occurrences, and minimal impact anticipated for this project, it has been determined that this project will not affect this species.

- **Water Resources**

Water resources in the study area are part of the New River basin [U.S. Geological Survey (USGS) Hydrologic Unit 05050001. Two (2) streams were identified in the study area, Little River and Bledsoe Creek.

There are no designated Outstanding Resource Waters (ORW), High Quality Waters (HQW) or water supply watersheds (WS-I or WS-II) within, or within 1.0 mile downstream, of the study area. Neither the stretch of the Little River located within the study area, nor Bledsoe Creek are included in the North Carolina 2018 Final 303(d) list of impaired waters. No surface water ponds were identified in the study area. No streams within the project study area are subject to any of the N.C. River Basin Buffer Rules. Neither Little River nor Bledsoe Creek have been designated by the USACE as a Navigable Water under Section 10 of the Rivers and Harbors Act.

- Clean Water Act

Two (2) jurisdictional streams were identified in the study area, Little river and Bledsoe Creek. All jurisdictional streams in the study area have been designated as cold-water streams for the purposes of stream mitigation.

No jurisdictional wetlands were identified within the study area.

Bledsoe Creek has a Best Usage Classification (BUC) of Class C; Trout water (C;Tr). Sedimentation and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds.

- Construction Moratoria

All of Alleghany County is within a trout watershed. However, pursuant to a September 17, 2018 NCWRC Memorandum, natural trout reproduction is not expected to be significant in this area, therefore, NCWRC is not requesting a trout moratorium

**Estimated Cost:**

Roadway Construction Cost <sup>1</sup>	\$6,300,000
Right-of-Way Cost <sup>2</sup>	\$1,827,000
Utility Relocation and Construction Cost <sup>1</sup>	\$417,500
<b>Total Estimated Cost</b>	<b>\$8,544,500</b>

<sup>1</sup> Data is based on cost estimates completed on March 17, 2022.

<sup>2</sup> Data is based on updated ROW cost estimates completed on June 17, 2022.

**Estimated Traffic:**

ADT (2021)            7,750  
 ADT (2041)            8,650

**Public Involvement:**

A public meeting was held on November 21, 2019. A postcard notifying nearby residents of the project was mailed on November 7, 2019. The mailing list included 14 properties within a 500-foot buffer surrounding the project study area.

**Agency Coordination:**

A start of study letter was sent to state and local agencies on July 26, 2018. Follow up project notifications and comment request were then sent on February 25, 2022. Agency coordination letters and responses are included in the link below:

[Agency responses.](#)

[https://connect.ncdot.gov/site/Preconstruction/division/div11/BR-0001%20Alleghany%20020030/Natural%20Environment/Response\\_NCDOT%20Utilities\\_BR-0001\\_%20StartOfStudy\\_Agency%20Notification.zip](https://connect.ncdot.gov/site/Preconstruction/division/div11/BR-0001%20Alleghany%20020030/Natural%20Environment/Response_NCDOT%20Utilities_BR-0001_%20StartOfStudy_Agency%20Notification.zip)

F. Project Impact Criteria Checklists:

<b>F2. Ground Disturbing Actions – Type I (Appendix A) &amp; Type II (Appendix B)</b>			
<u>PROJECT IMPACT THRESHOLDS</u> (FHWA signature required if any of the questions 1-7 are marked “Yes”.)		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other Considerations for Type I and II Ground Disturbing Actions (continued)</u>		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F (ONLY for questions marked 'Yes'):

\*Response to Question 8:

Gray Bat:

On June 14, 2018, NCDOT biologists assessed bridge No. 30 for potential bat habitat. Shallow top sealed crevices suitable for roosting were present. Evidence of bats in the form of guano was observed on the end wall on the western side of the bridge. No bats were observed during this site visit. No caves or mines are located within the project footprint or within line of sight of the bridge. Based on the presence of guano and the lack of caves or mines in the project vicinity the proposed project will have a biological conclusion of MAY AFFECT NOT LIKELY TO ADVERSELY AFFECT for gray bats.

Northern long-eared bat:

According to the North Carolina Natural Heritage Program (NHP) Biotics Database, most recently updated April 2020, the nearest NLEB hibernacula record is 48 miles west of the project and no known NLEB roost trees occur within 150 feet of the project area.

NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

Additional surveys are being conducted in the summer of 2022 due to the age of the forementioned surveys.

H. Project Commitments):

## NCDOT PROJECT COMMITMENTS

STIP Project No. **BR-0001**  
Replace Bridge No. 30 over Little River  
Alleghany County  
WBS Element 67001.1.1

**Bicycle Accommodations** - The project will include 5 feet of paved shoulder in each direction of travel to allow for potential future bicycle lanes.

**Greenway Plan** – Coordinate with partners regarding the installation of relevant segments and crossing paths.

**Alleghany County Schools** – Coordinate with school officials, prior to construction, regarding road closure and detour routes.

**Emergency Responders / Local Official** - Coordinate with local officials, prior to construction, regarding road closure and detour routes.

**Roadside Environmental Unit / Division 11 Construction**

Bledsoe Creek has a Best Usage Classification (BUC) of C;Tr. Sedimentation and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds.



I. Categorical Exclusion Approval:

STIP Project No.	<b>BR-0001</b>
WBS Element	67001.1.1
Federal Project No.	N/A

**Prepared By:**

09/26/2022

Date

DocuSigned by:

Verrol Mcleary, Project Manager  
NCDOT/Project Management Unit

**Prepared For:**

PM's Name, PM's Organization (typically NCDOT)

**Reviewed By:**

09/27/2022

Date

DocuSigned by:

Nathan Adima, PE, Senior Project Manager  
NCDOT/Project Management Unit

**Approved**

- If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.

**Certified**

- If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.
- If classified as Type III Categorical Exclusion.

09/27/2022

Date

DocuSigned by:

Beverly G. Robinson, CPM  
North Carolina Department of Transportation

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

09/27/2022

Date

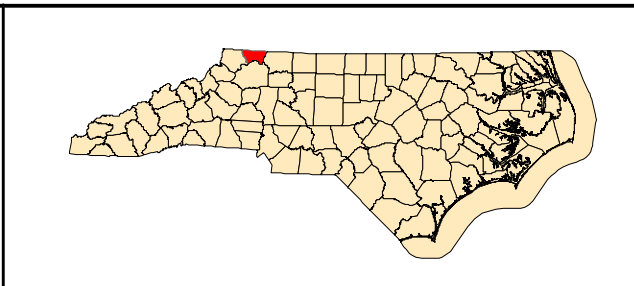
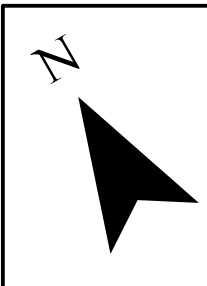
DocuSigned by:

for John F. Sullivan, III, PE, Division Administrator  
Federal Highway Administration

*Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details).*

# ATTACHMENTS

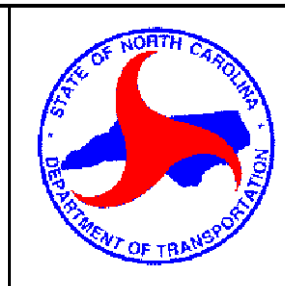




**Legend**

- Study Area
- Perennial Stream

**TIP BR-0001**  
*Allegheny County*  
 Bridge 30 on US 21 Over the Little River  
 Jurisdictional Features Map



**FIGURE 1**  
 Prepared by the NCDOT  
 Environmental Analysis Unit

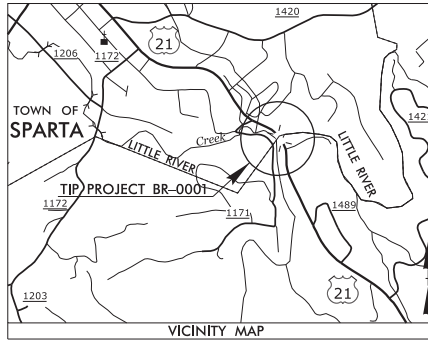


07/08/23

**CONTRACT: TIP PROJECT: BR-0001**

**CONTRACT:**

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



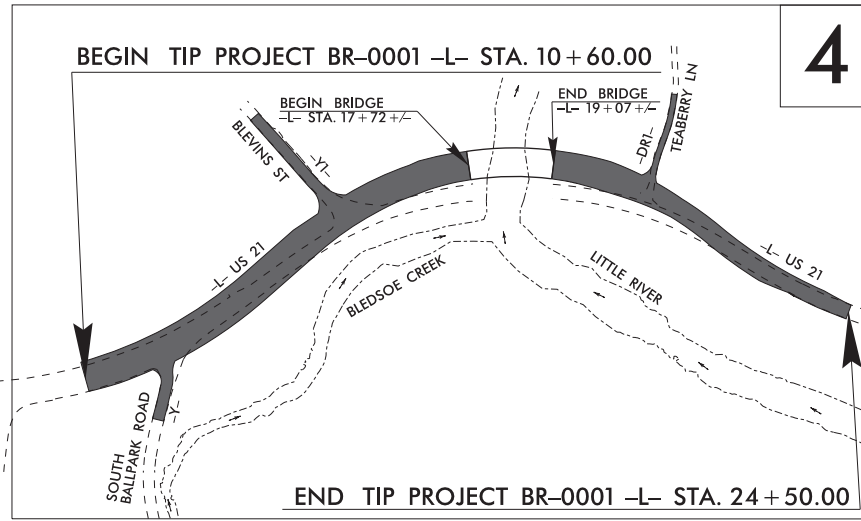
**CFI PLANS**

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

**LOCATION: BRIDGE NO. 30 ON US 21 OVER  
LITTLE RIVER**

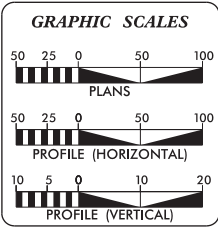
**TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0001	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67001.1.1		P.E.	
67001.2.1		ROW/UTIL	



THIS PROJECT HAS NO CONTROLLED-ACCESS.  
A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF SPARTA  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD \_\_\_\_\_

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



**DESIGN DATA**

ADT 2021 =	7750
ADT 2041 =	8650
K =	9 %
D =	70 %
T =	7 % *
V =	40 MPH
* TTST =	2% DUAL = 5%
FUNC CLASS =	MINOR COLLECTOR REGIONAL TIER

**PROJECT LENGTH**

LENGTH OF ROADWAY TIP PROJECT BR-0001	=	0.237 MI
LENGTH OF STRUCTURE TIP PROJECT BR-0001	=	0.026 MI
TOTAL LENGTH OF TIP PROJECT BR-0001	=	0.263 MI

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

<b>RIGHT OF WAY DATE:</b>	JUNE 24, 2022
<b>LETTING DATE:</b>	JUNE 20, 2023

<b>ADAM COLE, PE</b>	PROJECT MANAGER
<b>DAVID J. CLODGO, PE</b>	PROJECT ENGINEER
<b>PIOTR J. STOJDA</b>	PROJECT TEAM LEAD

**HYDRAULICS ENGINEER**

SIGNATURE: _____	P.E.
<b>ROADWAY DESIGN ENGINEER</b>	
SIGNATURE: _____	P.E.



I5-JUN-2022 07:57  
C:\Users\rdy\OneDrive\Documents\Temp\BR-0001\Roadway Design\BR0001\_RDY\_TSH.dgn  
\$\$\$\$\$USERNAME\$\$\$\$\$