



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

April 29, 2024

U. S. Army Corps of Engineers
Charlotte Regulatory Field Office
8430 University Executive Park Dr, Suite 615
Charlotte, NC 28262

NC Division of Water Resources
Transportation Permitting Branch
610 East Center Avenue, Suite 301
Mooresville, NC 28115

ATTN: Mr. Steve Brumagin,
NCDOT Coordinator

Ms. Beth Plummer,
NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 14, and Section 401 Water Quality Certification** for the Proposed Replacement of Bridge No. 109 on SR 1706 (Martin Luther King Jr. Avenue) over US 29 (N. Cannon Blvd.) in Cabarrus County, Division 10, TIP No. B-5372, Debit \$767 from WBS 46087.1.1.

Dear Sir and Madam:

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge no. 109 on SR 1706 (Martin Luther King Jr. Avenue) over US 29 (N. Cannon Blvd.) in Cabarrus County. The new bridge will include two 12-foot travel lanes and 7-foot paved offsets, or "shoulders", on each side to accommodate bicycles. The roadway grade of the new structure will be approximately two feet higher than the existing structure to allow for the proper vertical roadway clearance over U.S. 29. The new bridge will be constructed on existing location, with traffic being detoured off-site during construction. The existing entrance and exit ramps will remain open to local business traffic during construction.

The Federal Highway Administration is the lead federal agency for this project.

Impact Summary

As a result of the proposed project, there will be a total of 235 linear feet of permanent stream impacts due to culvert replacement and stream channel relocation, and 24 linear feet (0.003 ac) of temporary stream impacts due to construction access for stream channel relocation efforts. There are no wetland impacts associated with this project.

In addition to the below-referenced documents, please find enclosed Pre-Construction Notification (PCN), Stormwater Management Plan, and Permit Drawings.

A copy of this permit application will be posted on the NCDOT Website at:
<http://connect.ncdot.gov/resources/Environmental>.

If you have any questions or need additional information, please contact Rob Crowther at recrowther@ncdot.gov or (919) 707-6112.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

Telephone: (919) 707-6000
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Attachments:

- NCDMS Mitigation Acceptance Letter
- USFWS ESA Section 7 Informal Concurrence Letter
- No Archaeological Survey Required Form
- Historic Architecture and Landscapes No Survey Required Form
- Tribal Coordination Correspondence (Catawba Nation)
- Type II(A) Categorical Exclusion Action Classification Form (Signed 10/05/2022)

Sincerely,



for

Michael A. Turchy
Environmental Coordination and Permitting Group Leader

cc: NCDOT Permit Application Standard Distribution List

Pre-Construction Notification



Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits
(along with corresponding Water Quality Certifications)

December 4, 2023 Ver 4.3

Please note: fields marked with a red asterisk * below are required. You will not be able to submit the form until all mandatory questions are answered.

Also, if at any point you wish to print a copy of the E-PCN, all you need to do is right-click on the document and you can print a copy of the form.

Below is a link to the online help file.

<https://edocs.deq.nc.gov/WaterResources/DocView.aspx?dbid=0&id=2196924>

A. Processing Information



If this is a courtesy copy, please fill in this with the submission date.

Does this project involve maintenance dredging funded by the Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund or involve the distribution or transmission of energy or fuel, including natural gas, diesel, petroleum, or electricity? *

Yes No

Is this project connected with ARPA funding? *

Yes No

County (or Counties) where the project is located: *

Cabarrus

Is this a NCDMS Project? *

Yes No

Click Yes, only if NCDMS is the applicant or co-applicant.

DON NOT CHECK YES, UNLESS YOU ARE DMS OR CO-APPLICANT.

Is this project a public transportation project? *

Yes No

This is any publicly funded by municipal, state or federal funds road, rail, airport transportation project.

Is this a NCDOT Project? *

Yes No

(NCDOT only) T.I.P. or state project number:

B-5372

WBS # *

46087.1.1

(for NCDOT use only)

1a. Type(s) of approval sought from the Corps: *

- Section 404 Permit (wetlands, streams and waters, Clean Water Act)
 Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

Has this PCN previously been submitted? *

Yes
 No

1b. What type(s) of permit(s) do you wish to seek authorization? *

- Nationwide Permit (NWP)
 Regional General Permit (RGP)
 Standard (IP)

1c. Has the NWP or GP number been verified by the Corps? *

Yes No

Nationwide Permit (NWP) Number:

14 - Linear transportation

NWP Numbers (for multiple NWPS):

List all NW numbers you are applying for not on the drop down list.

1d. Type(s) of approval sought from the DWR: *

check all that apply

- 401 Water Quality Certification - Regular
- Non-404 Jurisdictional General Permit
- Individual 401 Water Quality Certification
- 401 Water Quality Certification - Express
- Riparian Buffer Authorization

1e. Is this notification solely for the record because written approval is not required?

*

For the record only for DWR 401 Certification: Yes No

For the record only for Corps Permit: Yes No

1f. Is this an after-the-fact permit application? *

Yes No

1g. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts?

If so, attach the acceptance letter from mitigation bank or in-lieu fee program.

Yes No

Acceptance Letter Attachment

Click the upload button or drag and drop files here to attach document

FILE TYPE MUST BE PDF

1h. Is the project located in any of NC's twenty coastal counties? *

Yes No

1j. Is the project located in a designated trout watershed? *

Yes No

Link to trout information: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx>

B. Applicant Information



1a. Who is the Primary Contact? *

Robert Crowther

1b. Primary Contact Email: *

recrowther@ncdot.gov

1c. Primary Contact Phone: *

(xxx)xxx-xxxx
(919)707-6112

1d. Who is applying for the permit? *

- Owner
- Applicant (other than owner)

(Check all that apply)

1e. Is there an Agent/Consultant for this project? *

Yes No

2. Owner Information

2a. Name(s) on recorded deed: *

NCDOT

2b. Deed book and page no.:

2c. Contact Person:

(for Corporations)

2d. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

US

2e. Telephone Number: *

(xxx)xxx-xxxx

(919)707-6108

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

ekcheely@ncdot.gov

3. Applicant Information (if different from owner)

3a. Name: *

Robert Crowther

3b. Business Name:

(if applicable)

3c. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

US

3d. Telephone Number: *

(919)707-6112

(xxx)xxx-xxxx

3e. Fax Number:

(xxx)xxx-xxxx

3f. Email Address: *

recrowther@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: *

TIP B-5372 - Bridge 109 on SR 1706 over US 29

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Kannapolis

2. Project Identification

2a. Property Identification Number:

(tax PIN or parcel ID)

2b. Property size:

(in acres)

2c. Project Address

Street Address

Address Line 2

City

Postal / Zip Code

State / Province / Region

Country

2d. Site coordinates in decimal degrees

Please collect site coordinates in decimal degrees. Use between 4-6 digits (unless you are using a survey-grade GPS device) after the decimal place as appropriate, based on how the location was determined. (For example, most mobile phones with GPS provide locational precision in decimal degrees to map coordinates to 5 or 6 digits after the decimal place.)

Latitude: *

35.492650

ex: 34.208504

Longitude: *

-80.611047

-77.796371

3. Surface Waters

3a. Name of the nearest body of water to proposed project: *

Unnamed Tributary to Cold Water Creek

3b. Water Resources Classification of nearest receiving water: *

WS-IV

[Surface Water Lookup](#)

3c. What river basin(s) is your project located in? *

Yadkin-PeeDee

3d. Please provide the 12-digit HUC in which the project is located. *

030401050202

[River Basin Lookup](#)

4. Project Description and History

4a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: *

The project area is located within the piedmont physiographic region of North Carolina. Topography in the project vicinity is comprised of gently rolling hills with narrow, level floodplains along streams. Elevations in the study area range from 690' to 780' above sea level. Land use in the project vicinity consists primarily of commercial/industrial ventures with interspersed residential development along roadways and forested stream corridors.

4b. Have Corps permits or DWR certifications been obtained for this project (including all prior phases) in the past? *

Yes No Unknown

4f. List the total estimated acreage of all existing wetlands on the property:

0

4g. List the total estimated linear feet of all existing streams on the property:

(intermittent and perennial)

2,190

4h. Explain the purpose of the proposed project: *

The purpose of the proposed project is to replace a structurally deficient bridge. NCDOT Bridge Management Unit records indicate that Bridge No. 109 is considered structurally deficient due to a deck condition and superstructure condition appraisal of 4 out of 9 according to Federal Highway Administration standards.

4i. Describe the overall project in detail, including indirect impacts and the type of equipment to be used: *

The proposed project involves replacing Bridge No. 109 in SR 1706 (Martin Luther King Jr. Avenue) over US 29 (N. Cannon Blvd) in Cabarrus County. It will also add curb, gutter, and sidewalks along both sides of US 29. Bridge No. 109 is 190 feet long and the proposed replacement structure would be a bridge that is approximately 175 feet long, providing a minimum 49-foot clear deck width. The new bridge will include two 12-foot travel lanes and 7-foot paved offsets, or "shoulders", on each side to accommodate bicycles. 5-foot 6-inch sidewalks and a 54-inch two bar metal rail will be provided on both sides of the bridge. The roadway grade of the new structure will be approximately two feet higher than the existing structure to allow for the proper vertical roadway clearance over US 29.

Along S.R. 1706, the roadway approaches will extend approximately 265 feet from the west end of the new bridge and 433 feet from the east end of the new bridge. The approaches will be widened to provide two 12-foot travel lanes, 7-foot bicycle lanes, 5-foot 6-inch sidewalks, and 10-foot grassed shoulders on both sides.

Along U.S. 29 (under the bridge), improvements will extend approximately 330 feet north of S.R. 1706 and 230 feet south of S.R. 1706. Improvements include upgrading U.S. 29 to a curb and gutter section, with 5-foot paved offsets, and 5-foot sidewalks along each side of U.S. 29.

The new bridge will be constructed on existing location, with traffic being detoured off site during construction. However, the existing entrance and exit ramps will remain open to local and business traffic during construction. S.R. 1706 will be designed as a Minor Collector and U.S. 29 will be designed as an Urban Collector, both utilizing Sub-Regional Tier Guidelines with a 40 mile per hour design speed.

Typical roadway construction equipment such as excavators, dump trucks, graders, cranes, etc. will be used to construct this project.

5. Jurisdictional Determinations

5a. Have the wetlands or streams been delineated on the property or proposed impact areas? *

Yes No Unknown

Comments:

Only perennial streams identified

5b. If the Corps made a jurisdictional determination, what type of determination was made? *

Preliminary Approved Not Verified Unknown N/A

Corps AID Number:

Example: SAW-2017-99999

5c. If 5a is yes, who delineated the jurisdictional areas?

Name (if known): Jan Gay

Agency/Consultant Company: Vaughn & Melton

Other:

6. Future Project Plans

6a. Is this a phased project? *

Yes No

Are any other NWP(s), regional general permit(s), or individual permits(s) used, or intended to be used, to authorize any part of the proposed project or related activity? This includes other separate and distant crossing for linear projects that require Department of the Army authorization but don't require pre-construction notification.

D. Proposed Impacts Inventory



1. Impacts Summary

1a. Where are the impacts associated with your project? (check all that apply):

Wetlands Streams-tributaries Buffers
 Open Waters Pond Construction

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

"S." will be used in the table below to represent the word "stream".

	3a. Reason for impact* (?)	3b. Impact type*	3c. Type of impact*	3d. S. name*	3e. Stream Type* (?)	3f. Type of Jurisdiction*	3g. S. width*	3h. Impact length*
S1	Site 1 - Road Crossing	Permanent	Culvert	UT to Cold Water Creek	Perennial	Both	5 Average (feet)	45 (linear feet)
S2	Site 1 - Road Crossing	Permanent	Relocation	UT to Cold Water Creek	Perennial	Both	5 Average (feet)	85 (linear feet)
S3	Site 1 - Construction Access	Temporary	Other	UT to Cold Water Creek	Perennial	Both	5 Average (feet)	12 (linear feet)
S4	Site 2 - Road Crossing	Permanent	Culvert	UT to Cold Water Creek	Perennial	Both	5 Average (feet)	50 (linear feet)
S5	Site 2 - Road Crossing	Permanent	Relocation	UT to Cold Water Creek	Perennial	Both	5 Average (feet)	55 (linear feet)
S6	Site 2 - Construction Access	Temporary	Other	UT to Cold Water Creek	Perennial	Both	5 Average (feet)	12 (linear feet)

** All Perennial or Intermittent streams must be verified by DWR or delegated local government.

3i. Total jurisdictional ditch impact in square feet:

0

3i. Total permanent stream impacts:

235

3i. Total temporary stream impacts:

24

3i. Total stream and ditch impacts:

259

3j. Comments:

E. Impact Justification and Mitigation



1. Avoidance and Minimization

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project.*

The proposed bridge replacement project does not result in any newly located roadway. The replacement of the existing bridge over US 29 will maintain the approximately perpendicular crossing and not result in any wetland impacts. The eastern approach to the bridge will have widened slopes to accommodate the addition of bicycle lanes and the new curb and gutter along US 29. The only impacts to jurisdictional resources will occur on an unnamed tributary that has an existing culvert that is being extended. The improvements will include the installation of a surface drainage network. Rip rap pads will be installed at pipe outlets across the project to reduce flow velocities and erosivity.

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques.*

Best management practices and sedimentation and erosion control measures will be used during construction of the proposed project.

2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?

Yes No

2c. If yes, mitigation is required by (check all that apply):

DWR Corps

2d. If yes, which mitigation option(s) will be used for this project?

Mitigation bank Payment to in-lieu fee program Permittee Responsible Mitigation

4. Complete if Making a Payment to In-lieu Fee Program

4a. Approval letter from in-lieu fee program is attached.

Yes No

4b. Stream mitigation requested:

(linear feet)

235

4c. If using stream mitigation, what is the stream temperature:

warm

NC Stream Temperature Classification Maps can be found under the Mitigation Concepts tab on the Wilmington District's [RIBITS](#) website.

4d. Buffer mitigation requested (DWR only):

(square feet)

4e. Riparian wetland mitigation requested:

(acres)

4f. Non-riparian wetland mitigation requested:

(acres)

4g. Coastal (tidal) wetland mitigation requested:

(acres)

4h. Comments

NC DMS has committed to implementing sufficient mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the In-Lieu Fee Instrument dated July 28, 2010.

F. Stormwater Management and Diffuse Flow Plan (required by DWR)

*** Recent changes to the stormwater rules have required updates to this section .***

1. Diffuse Flow Plan

1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?

Yes No

For a list of options to meet the diffuse flow requirements, click [here](#).

If no, explain why:

The proposed project is located within the Yadkin-Pee Dee River Basin, which does not have Riparian Buffer Rules administered by NCDWR.

2. Stormwater Management Plan

2a. Is this a NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250? *

Yes No

Comments:

G. Supplementary Information

1. Environmental Documentation

1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? *

Yes No

1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)? *

Yes No

1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) *

Yes No

2. Violations (DWR Requirement)

2a. Is the site in violation of DWR Water Quality Certification Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), or DWR Surface Water or Wetland Standards or Riparian Buffer Rules (15A NCAC 2B .0200)? *

Yes No

3. Cumulative Impacts (DWR Requirement)

3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? *

Yes No

3b. If you answered "no," provide a short narrative description.

The proposed project will not add additional roadway travel lanes or create new access to surrounding properties. No new development is anticipated to occur as a result of this bridge replacement project.

4. Sewage Disposal (DWR Requirement)

4a. Is sewage disposal required by DWR for this project? *

Yes No N/A

5. Endangered Species and Designated Critical Habitat (Corps Requirement)

5a. Will this project occur in or near an area with federally protected species or habitat? *

Yes No

5b. Have you checked with the USFWS concerning Endangered Species Act impacts? *

Yes No

5c. If yes, indicate the USFWS Field Office you have contacted.

Asheville

5d. Is another Federal agency involved? *

Yes No Unknown

What Federal Agency is involved?

FHWA

5e. Is this a DOT project located within Division's 1-8? *

Yes No

5f. Will you cut any trees in order to conduct the work in waters of the U.S.? *

Yes No

5g. Does this project involve bridge maintenance or removal? *

Yes No

5g(1). If yes, have you inspected the bridge for signs of bat use such as staining, guano, bats, etc.? Representative photos of signs of bat use can be found in the NLEB SLOPES, Appendix F, pages 3-7.

Yes No

Link to the NLEB SLOPES document: http://saw-reg.usace.army.mil/NLEB/1-30-17-signed_NLEB-SLOPES&apps.pdf

If you answered "Yes" to 5g(1), did you discover any signs of bat use? *

Yes No Unknown

*** If yes, please show the location of the bridge on the permit drawings/project plans.

5h. Does this project involve the construction/installation of a wind turbine(s)? *

Yes No

5i. Does this project involve (1) blasting, and/or (2) other percussive activities that will be conducted by machines, such as jackhammers, mechanized pile drivers, etc.? *

Yes No

5j. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? *

USFWS Information for Planning and Consultation (IPaC) was consulted.

Natural resource investigations that were conducted in support of the Categorical Exclusion that was prepared for this project found that there is suitable habitat for Schweinitz's sunflower and Michaux's sumac within the project study area. Surveys for Schweinitz's sunflower conducted five times between 2015-2023, with no individuals observed. Michaux's sumac is newly listed for the study area and surveys of suitable habitat will be conducted during the appropriate survey window in 2024, prior to project letting.

A conference opinion was requested of USFWS for both the tricolored bat and little brown bat. Both species received a biological conclusion of May Affect - Not Likely to Adversely Affect.

Additional information regarding ESA Section 7 compliance can be found in the attached USFWS Informal Concurrence Letter.

6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as an Essential Fish Habitat? *

Yes No

6b. What data sources did you use to determine whether your site would impact an Essential Fish Habitat? *

NOAA Fisheries Essential Fish Habitat Mapper. <https://www.habitat.noaa.gov/apps/efhmapper/>

7. Historic or Prehistoric Cultural Resources (Corps Requirement)

Link to the State Historic Preservation Office Historic Properties Map (does not include archaeological data: <http://gis.ncdcr.gov/hpweb/>)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? *

Yes No

7b. What data sources did you use to determine whether your site would impact historic or archeological resources? *

Please see attached "No Archaeological Survey Required" and "Historic Architecture and Landscapes No Survey Required" forms.

8. Flood Zone Designation (Corps Requirement)

Link to the FEMA Floodplain Maps: <https://msc.fema.gov/portal/search>

8a. Will this project occur in a FEMA-designated 100-year floodplain? *

Yes No

8b. If yes, explain how project meets FEMA requirements:

NCDOT Division 10 shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction. The NCDOT Hydraulics Unit will coordinate with the 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 (LOMAR).

8c. What source(s) did you use to make the floodplain determination?*

Review of floodplain mapping via the North Carolina Flood Risk Information System. <https://fris.nc.gov/fris/Home.aspx?ST=NC>

Miscellaneous



Comments

Please use the space below to attach all required documentation or any additional information you feel is helpful for application review. Documents should be combined into one file when possible, with a Cover Letter, Table of Contents, and a Cover Sheet for each Section preferred.

[Click the upload button or drag and drop files here to attach document](#)

B-5372 PCN Attachment Package.pdf

7.74MB

File must be PDF or KMZ

Signature



*

By checking the box and signing below, I certify that:

- The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief; and
- The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.
- I have given true, accurate, and complete information on this form;
- I agree that submission of this PCN form is a "transaction" subject to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the PCN form.

Full Name:*

Erin K. Cheely

Signature*



Date

4/29/2024

Mitigation

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

MARC RECKTENWALD
Director



NORTH CAROLINA
Environmental Quality

February 16, 2024

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

Dear Mr. Lancaster:

Subject: Mitigation Acceptance Letter: **TIP B-5372**, Replace Bridge 120109 over US 29 (North Cannon Boulevard) on SR 1706 (Martin Luther King Jr. Avenue), Cabarrus County

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the mitigation for the subject project. Based on the information supplied by you on February 15, 2024, the impacts are located in CU 03040105 of the Yadkin River basin as follows:

Stream and Wetlands	River Basin	CU Location	Eco-Region	Stream			Wetlands		
				Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh
Impacts	Yadkin	03040105	SP	0	0	235.000	0	0	0

*Some of the impacts may be proposed to be mitigated at various ratios. See permit application for details. DMS will provide the amount of stream and wetland mitigation included in the environmental permits.

DMS commits to implementing sufficient mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from NCDEQ-DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely,

Elizabeth A. Harmon
DMS NCDOT ILF Coordinator

cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office
Ms. Amy Chapman, NCDWR
Mr. Brad Chilton, NCDOT
File: B-5372



North Carolina Department of Environmental Quality | Division of Mitigation Services
217 West Jones Street | 1652 Mail Service Center | Raleigh, North Carolina 27699-1652
919.707.8976

Permit Drawings



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



(Version 3.00; Released August 2021)

WBS Element: 46087.1.1 **TIP/Proj No:** B-5372 **County(ies):** Cabarrus **Page** 1 **of** 3

General Project Information

WBS Element:	46087.1.1	TIP Number:	B-5372	Project Type:	Bridge Replacement	Date:	2/9/2024
NCDOT Contact:	David Stutts, PE			Contractor / Designer:	Jon Ford, PE		
Address:	1000 Birch Ridge Drive Raleigh, NC 27610			Address:	2550 West Tyvola Road Suite 120 Charlotte, NC 28217		
Phone:	919-707-6442			Phone:	704-357-0488		
Email:	dstutts@ncdot.gov			Email:	jcford@imt.com		
City/Town:	Kannapolis			County(ies):	Cabarrus		
River Basin(s):	Yadkin-Pee Dee			CAMA County?	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	885 feet	Surrounding Land Use:	Suburban
	Proposed Project		Existing Site
Project Built-Up Area (ac.)	0.2 ac.		1.7 ac.
Typical Cross Section Description:	2-lane road to bridge with sidewalks over 4-lane divided highway		2-lane road with 5' bike lanes and curb and gutter to bridge over 4-lane divided highway
Annual Avg Daily Traffic (veh/hr/day):	Design/Future: 5600	Year: 2040	Existing: 3,520 Year: 2020

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

B-5372 involves replacing bridge number 109 on SR-1706 (Martin Luther King Jr Ave) in Kannapolis, NC. The existing road and bridge is a 2-lane road without curb and gutter. The proposed typical section is a 2-lane road with curb and gutter and sidewalks before and after the bridge. The improvements will include the installation of a surface drainage network that will outfall into the jurisdictional stream on site. Rip rap pads will be installed at pipe outlets across the project to reduce flow velocities and erosivity. The existing 66" RCP culvert for the unnamed tributary to Cold Water Creek will be removed and replaced with a 72" welded steel culvert, the channel will be shifted to align with the new culvert.



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



(Version 3.00; Released August 2021)

WBS Element: 46087.1.1 TIP/Proj No.: B-5372 County(ies): Cabarrus Page 2 of 3

General Project Information

Waterbody Information

Surface Water Body (1):		UT to Cold Water Creek		NCDWR Stream Index No.:		13-17-9-4-2-(1)	
NCDWR Surface Water Classification for Water Body		Primary Classification:		Water Supply IV (WS-IV)			
		Supplemental Classification:		None			
Other Stream Classification:							
Impairments:							
Aquatic T&E Species?		Comments:					
NRTR Stream ID:		SA		Buffer Rules in Effect:		N/A	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer?		N/A	
Deck Drains Discharge Over Water Body?		N/A		(If yes, provide justification in the General Project Narrative)		Dissipator Pads Provided in Buffer?	
(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)	

Surface Water Body (2):		UT to Cold Water Creek		NCDWR Stream Index No.:		13-17-9-4-2-(1)	
NCDWR Surface Water Classification for Water Body		Primary Classification:		Water Supply IV (WS-IV)			
		Supplemental Classification:		None			
Other Stream Classification:							
Impairments:							
Aquatic T&E Species?		Comments:					
NRTR Stream ID:		SB		Buffer Rules in Effect:		N/A	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer?		N/A	
Deck Drains Discharge Over Water Body?		N/A		(If yes, provide justification in the General Project Narrative)		Dissipator Pads Provided in Buffer?	
(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)	

Surface Water Body (3):		UT to Cold Water Creek		NCDWR Stream Index No.:		13-17-9-4-2-(1)	
NCDWR Surface Water Classification for Water Body		Primary Classification:		Water Supply IV (WS-IV)			
		Supplemental Classification:		None			
Other Stream Classification:							
Impairments:							
Aquatic T&E Species?		Comments:					
NRTR Stream ID:		SC		Buffer Rules in Effect:		N/A	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer?		N/A	
Deck Drains Discharge Over Water Body?		N/A		(If yes, provide justification in the General Project Narrative)		Dissipator Pads Provided in Buffer?	
(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)	



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



(Version 3.00; Released August 2021)

WBS Element: 46087.1.1
TIP No.: B-5372
County(ies): Cabarrus
Page 3 **of** 3

Additional Waterbody Information

Surface Water Body (4):	UT to Cold Water Creek		NCDWR Stream Index No.:	13-17-9-4-2-(1)	
NCDWR Surface Water Classification for Water Body	Primary Classification:		Water Supply IV (WS-IV)		
	Supplemental Classification:		None		
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?		Comments:			
NRTR Stream ID:	SD		Buffer Rules in Effect:	N/A	
Project Includes Bridge Spanning Water Body?	No	Deck Drains Discharge Over Buffer?	N/A	Dissipator Pads Provided in Buffer?	N/A
Deck Drains Discharge Over Water Body?	N/A	(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)	
(If yes, provide justification in the General Project Narrative)					

09_08/99

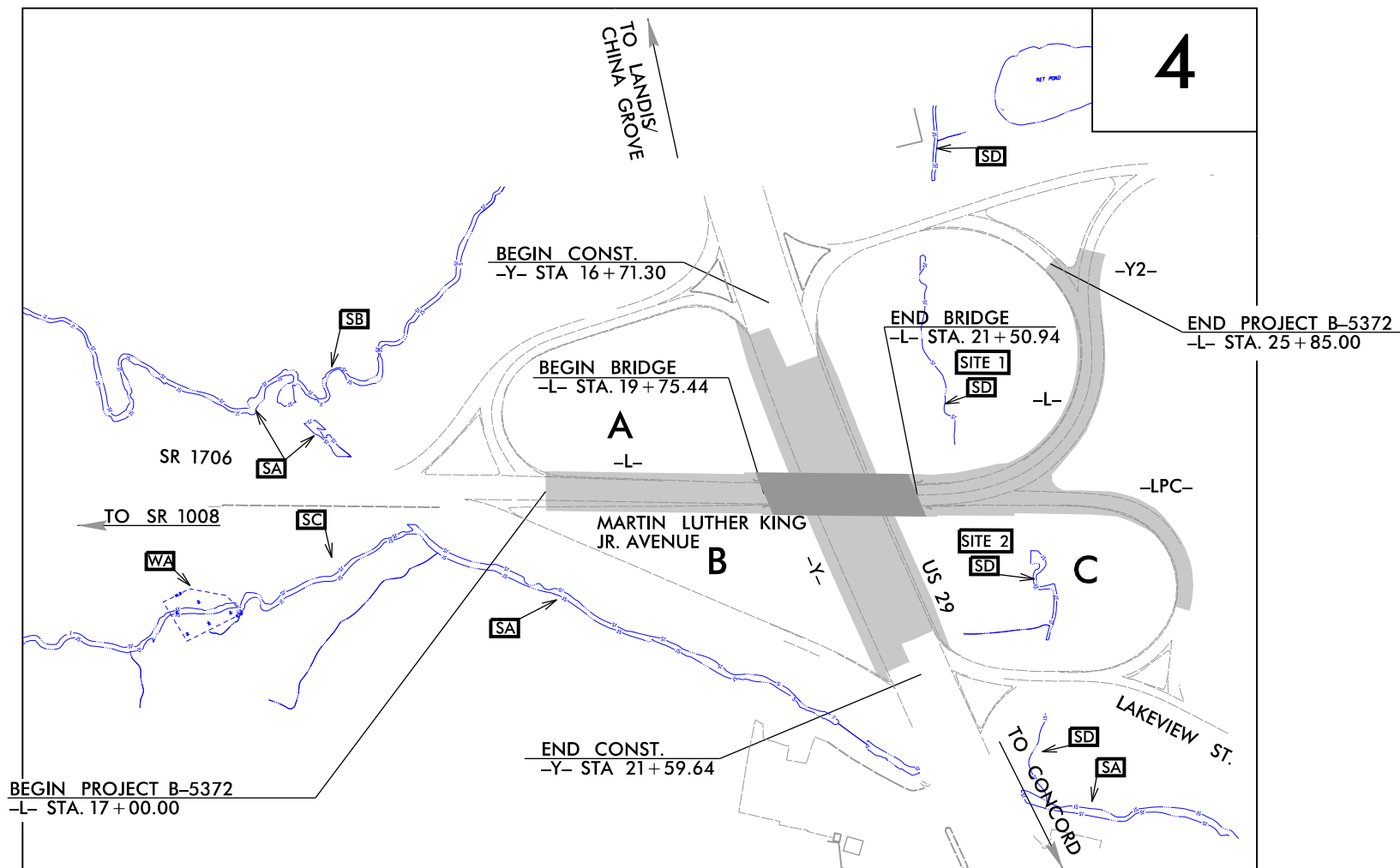
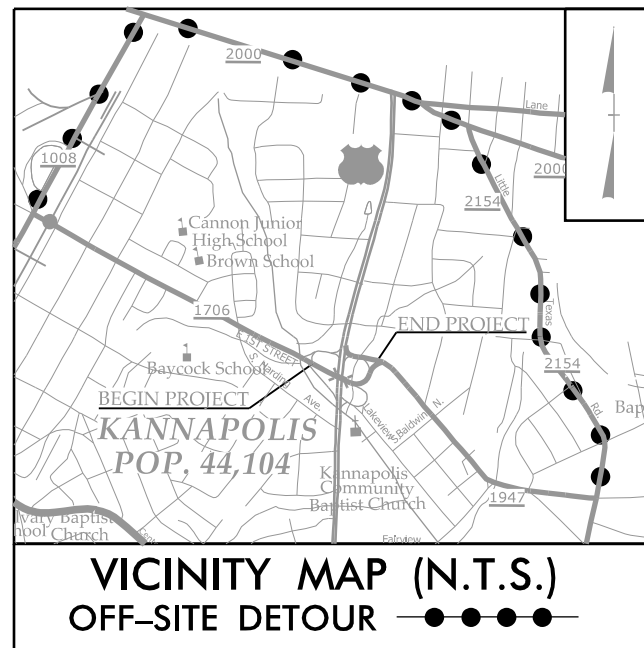
TIP PROJECT: B-5372

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS CABARRUS COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5372	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46087.1.1		P.E.	
46087.2.1		ROW	

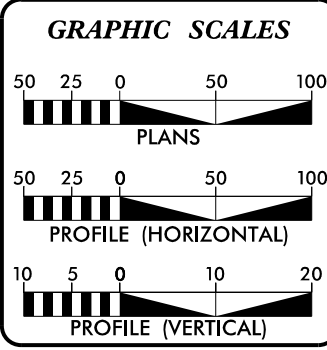
LOCATION: BRIDGE NO. 109 ON SR 1706 (MLK JR. AVE) OVER US 29
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE
WETLAND AND SURFACE WATER IMPACTS PERMIT

**PERMIT DRAWING
SHEET 1 OF 7**



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARY OF KANNAPOLIS
THIS PROJECT IS PARTIAL ACCESS CONTROL.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

CONTRACT:



DESIGN DATA

ADT 2020 =	3,520
ADT 2040 =	5,600
K =	11%
D =	55%
T =	5% *
V =	40 MPH
* TTST =	1% DUAL = 4%
FUNC CLASS =	MINOR COLLECTOR
SUB-REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5372 =	0.133 MILES
LENGTH STRUCTURE TIP PROJECT B-5372 =	0.035 MILES
TOTAL LENGTH TIP PROJECT B-5372 =	0.168 MILES

JMT Johnson, Mirmiran, & Thompson Inc.
2550 West Tyvola Road, Suite 120,
Charlotte, NC, 28217
License No: C-3097

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
APRIL 26, 2024

LETTING DATE:
NOVEMBER 29, 2024

REECE M. SCHULER, P.E., P.L.S.
PROJECT ENGINEER

JON FORD, P.E.
PROJECT DESIGN ENGINEER

DAVID STUTTS, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

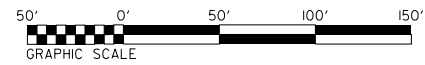
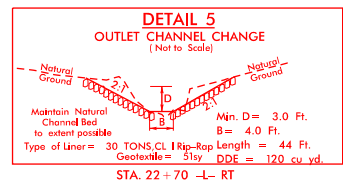
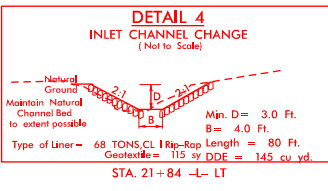
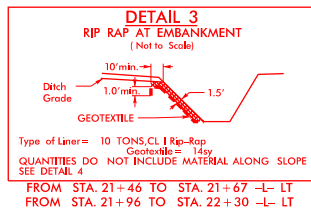
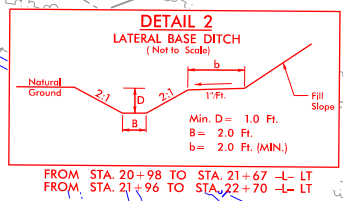
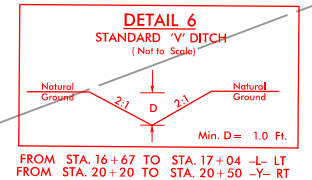
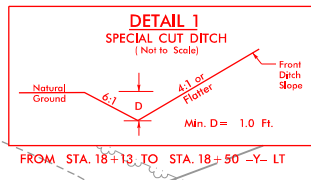
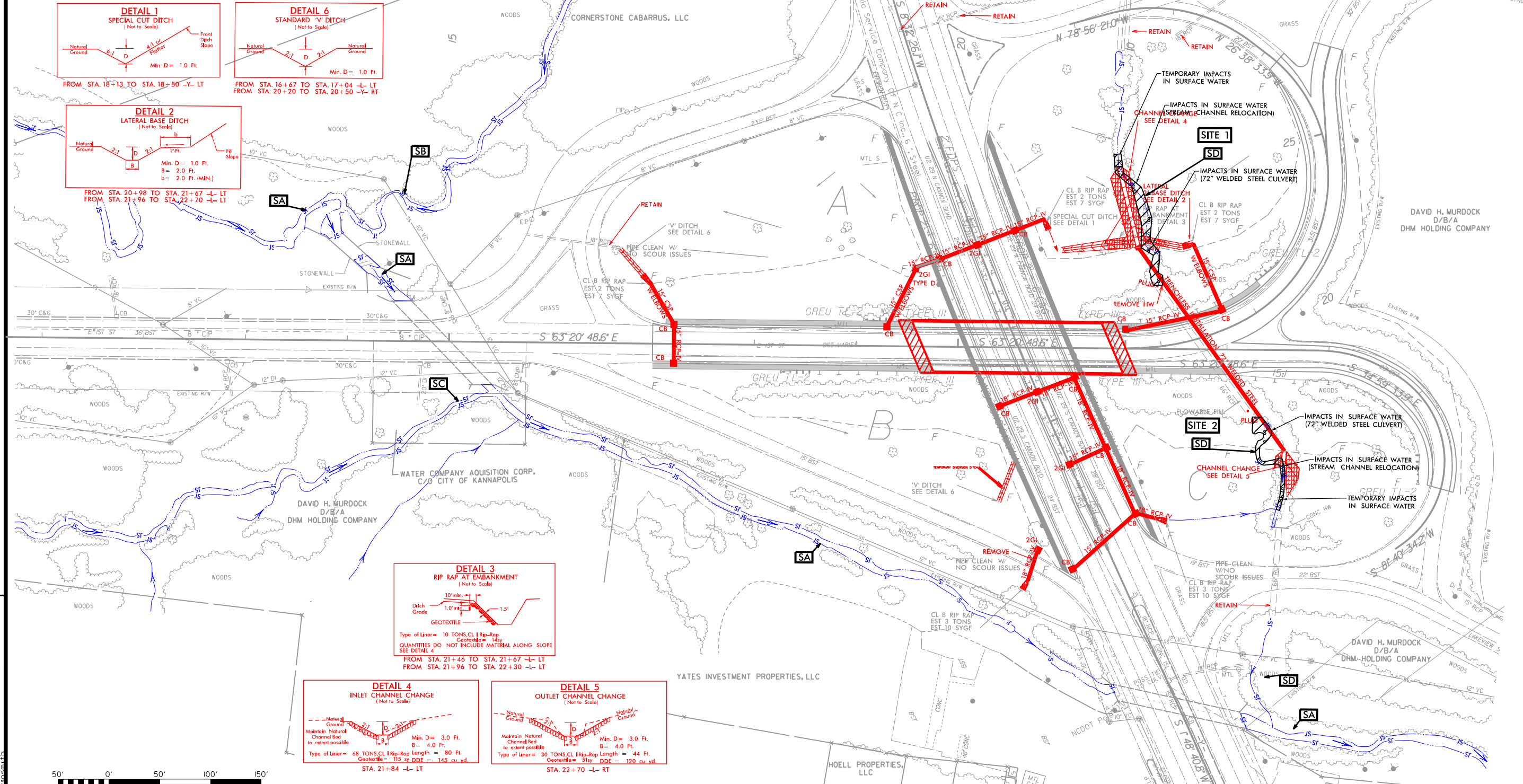
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PROJECT REFERENCE NO. B-5372	SHEET NO. 4A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WETLAND & STREAM IMPACTS

**PERMIT DRAWING
2 OF 7**

DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER



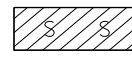

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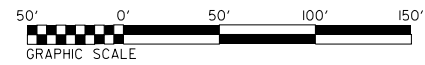
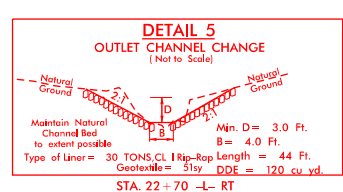
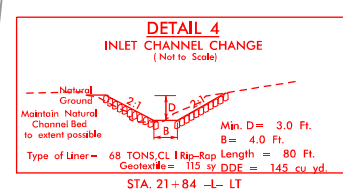
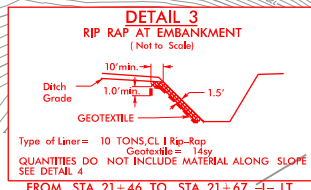
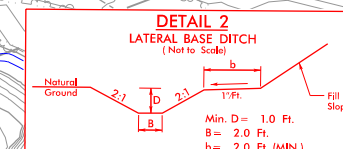
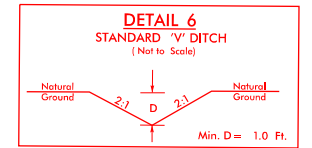
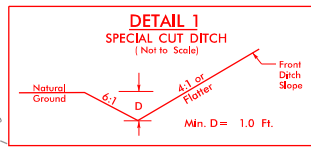
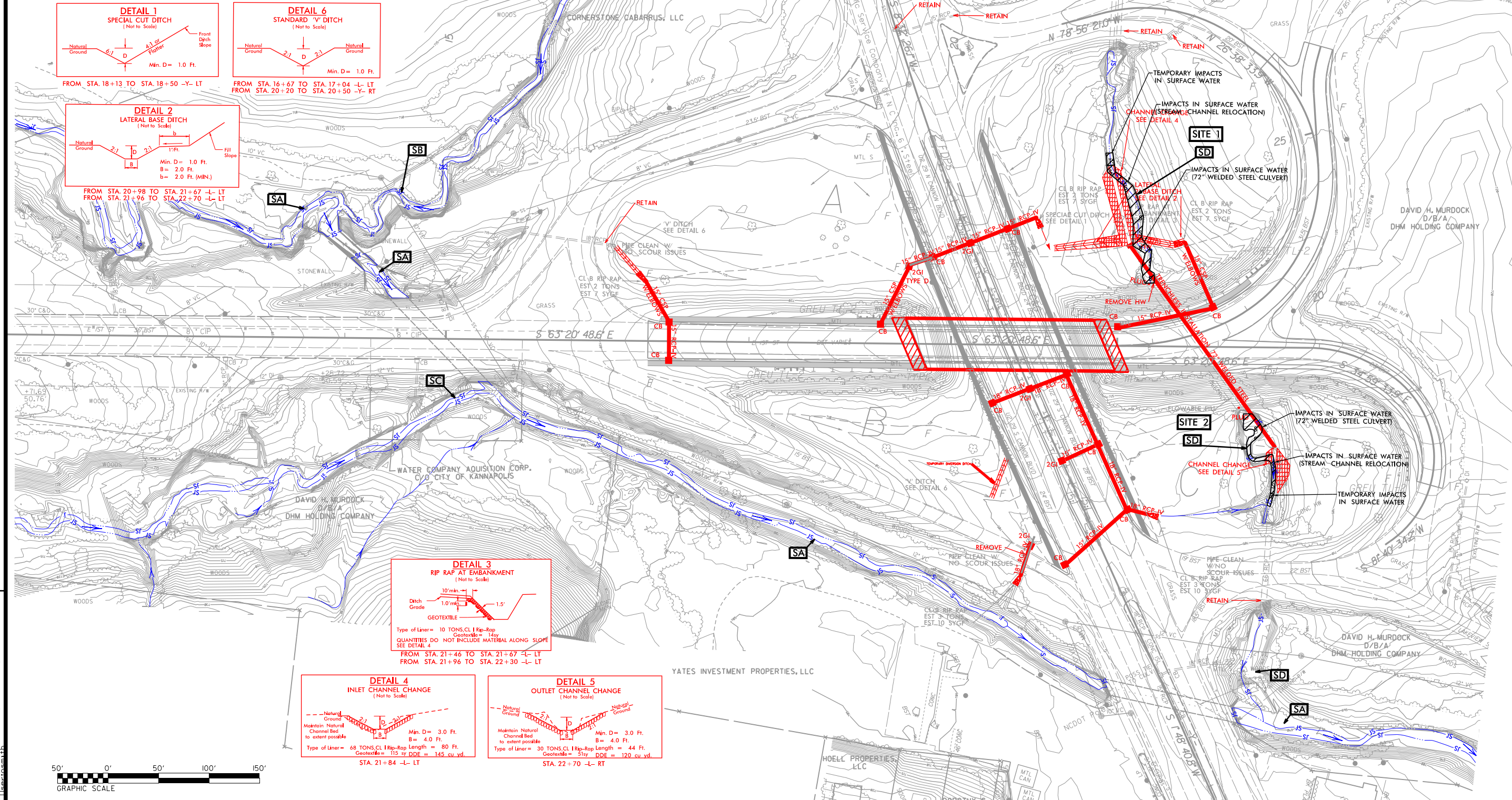
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PROJECT REFERENCE NO. B-5372	SHEET NO. 4B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WETLAND & STREAM IMPACTS

**PERMIT DRAWING
SHEET 3 OF 7**

 DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER



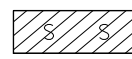
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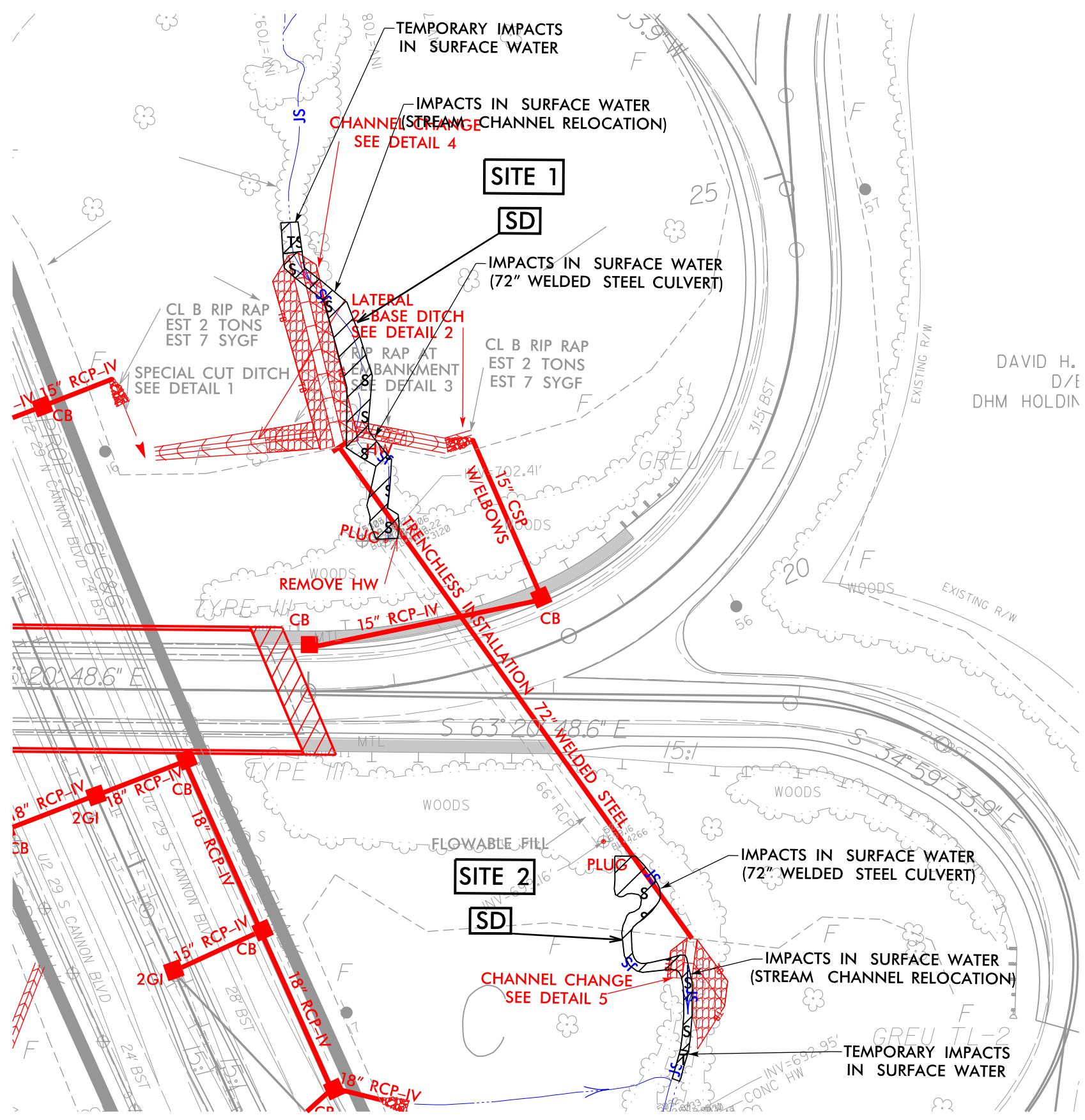
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B-5372	5A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**PERMIT DRAWING
SHEET 4 OF 7**

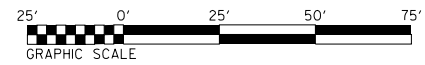
WETLAND & STREAM IMPACTS

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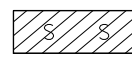

DAVID H.
D/E
DHM HOLDIN



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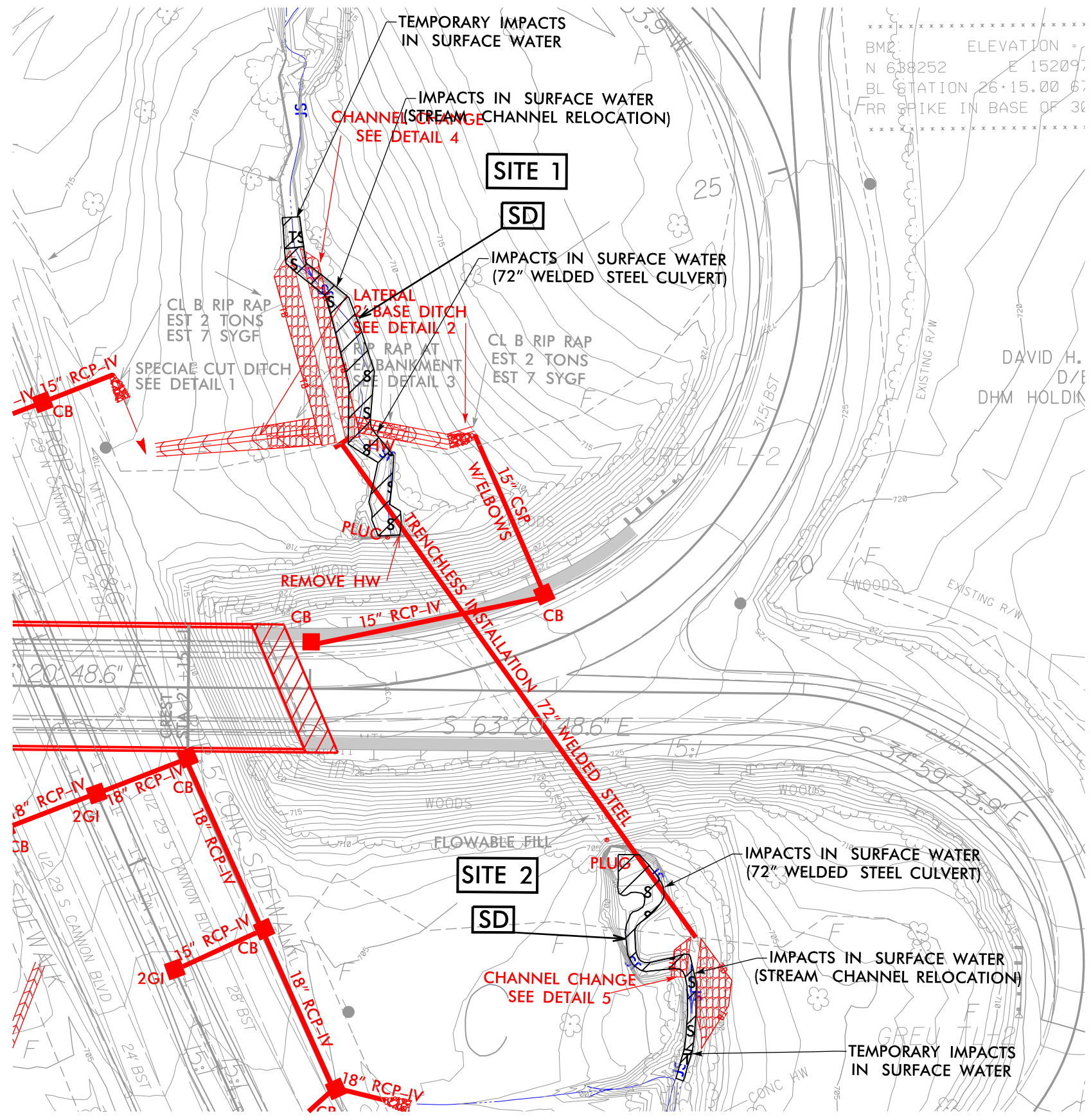
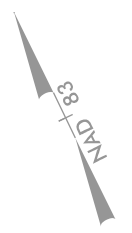
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-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

WETLAND & STREAM IMPACTS

PROJECT REFERENCE NO. B-5372	SHEET NO. 5B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**PERMIT DRAWING
SHEET 5 OF 7**

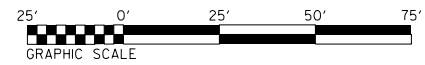


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 BL STATION 26+15.00 67
 RR SPIKE IN BASE OF 30

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 D/E
 DHM HOLDIN

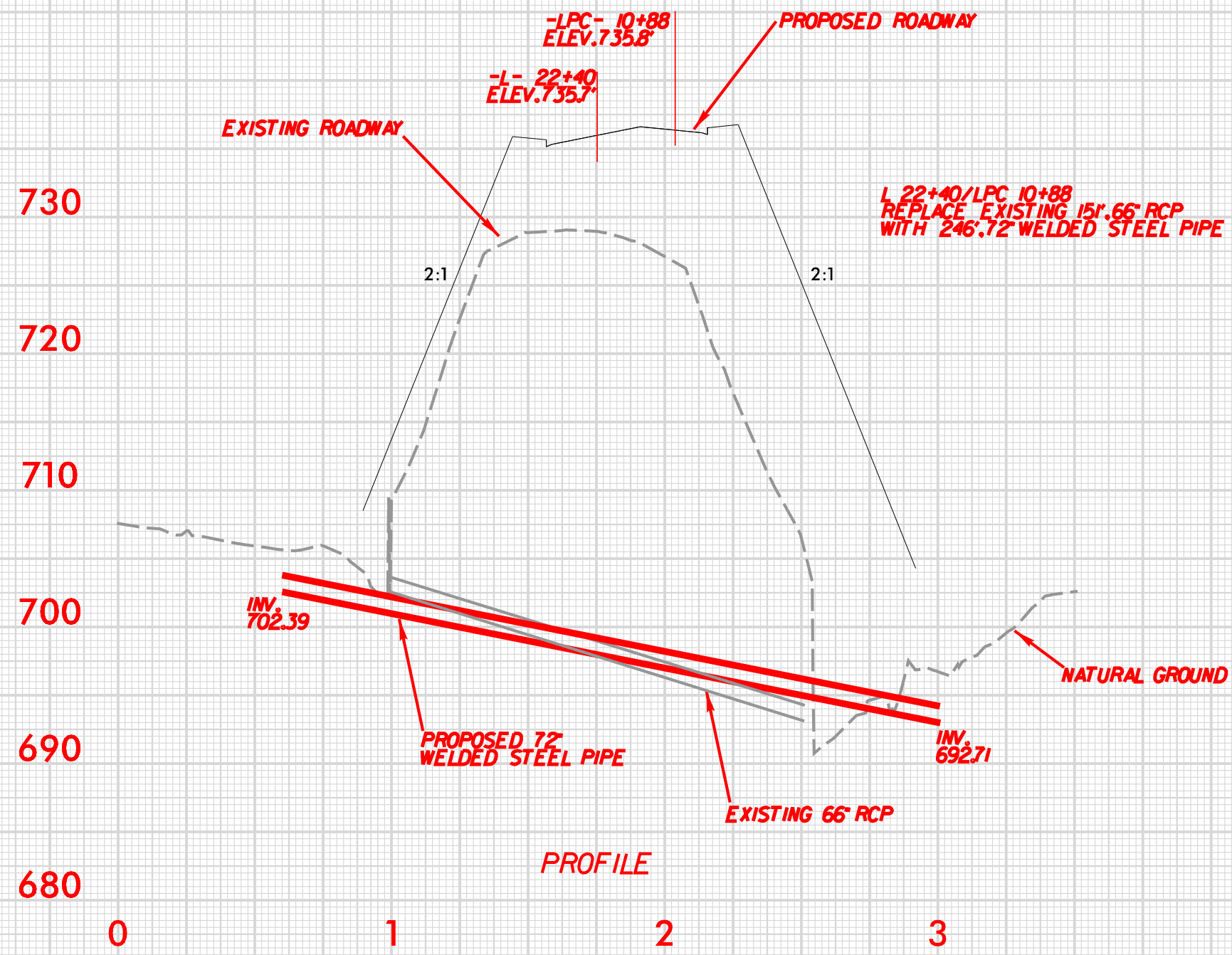
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PROJECT REFERENCE NO. B-5372	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PERMIT DRAWING
SHEET 6 OF 7



PROFILE

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WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Stream Name Stream ID	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
				Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	UT to Cold Water Creek	-Y- 18+73 to 19+17 LT	Replacement 72" Welded Steel Culvert, New Headwall 45 ft Upstream						0.009		45		
1	UT to Cold Water Creek	-Y- 17+76 to 18+73 LT	Stream Channel Relocation, Inlet Channel Change						0.017	0.002	85	12	
2	UT to Cold Water Creek	-Y- 20+77 to 21+22 LT	Replacement 72" Welded Steel Culvert, New Outlet 53 ft Downstream						0.009		50		
2	UT to Cold Water Creek	-Y- 21+22 to 21+71 LT	Stream Channel Relocation, Outlet Channel Change						0.014	0.001	55	12	
TOTALS*:									0.05	< 0.01	235	24	

*Rounded totals are sum of actual impacts
 NOTES:
 *1: Emedding Riprap
 *2: No Riprap in Channel

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 02/09/2024
 Cabarrus County
 B-5372

Protected Species/ Section 7



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Asheville Field Office
160 Zillicoa Street Suite B
Asheville, North Carolina 28801

April 11, 2024

Robert Crowther
Environmental and Permitting Group, Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699

Subject: Informal Conference for Replacement of Bridge 109 over US 29 on SR 1706 in Cabarrus County (TIP No. B-5372, Service Log #24-198)

Dear Robert Crowther:

On February 14, 2024, we received your request to initiate informal conference procedures for effects the subject project may have on federally proposed species. We have reviewed the information you submitted, and the following is provided in accordance with the provisions of the National Environmental Policy Act (42 U.S.C. § 4321 et seq.); the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661 - 667e); and section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 - 1543) (Act).

Project Description

According to the information provided, the North Carolina Department of Transportation (NCDOT) proposes to replace Bridge 109 over US 29 on SR 1706 in Cabarrus County. The existing bridge is a four-span structure with concrete deck, end walls, and guard rails. The overall length of the existing bridge is approximately 190 feet. One culvert meeting NCDOT's Standard Operating Procedures for Preliminary Bat Habitat Assessments was identified meeting the criteria of greater than 3 feet wide and 60 feet in length during this site visit. This culvert is a 66-inch reinforced concrete pipe that currently carries an unnamed tributary to Cold Water Creek. Percussive activities could include but are not limited to; pile driving, guardrail installation, pneumatic chipping, hydromulching, pavers, drill rigs, cranes, pumps, generators, compressors, concrete trucks, ground compactors, rollers, and concrete vibrators. Tree clearing surrounding the bridge location is expected. The project is scheduled to Let in October of 2024. The Federal Highway Administration (FHWA) is the federal lead for this project for section 7 purposes, with authority delegated to NCDOT.

NCDOT has agreed to implement the following conservation measures for the project:

1. Tree clearing will take place from October 16 to March 31.
2. Bridge demolition will occur outside of the bat active season.
3. Should night work occur during the bat active season (April 1-October 15), temporary lighting will only be used to illuminate work areas and will avoid lighting the surrounding landscape.
4. No additional permanent lighting will be added to the roadway.
5. No blasting will occur.

Federally Listed Species

The information provided indicates that a "No Effect" (NE) determination has been made for Schweinitz's sunflower (*Helianthus schweinitzii*) and that a determination for Michaux sumac (*Rhus*

michauxii) is “unresolved”. In instances of suitable habitat being absent from the action area, we would agree that NE determinations are appropriate. In instances where suitable habitat is present and botanical surveys conducted during the optimal survey window and within the past 1 or 2 years (depending on the species) have negative results, we would concur with a biological determination of “may affect, not likely to adversely affect” (NLAA). This information is provided for the sake of the administrative record.

The correspondence received from NCDOT requests a conference for the tricolored bat (*Perimyotis subflavus*) and little brown bat (*Myotis lucifugus*).

A suitable bridge roost, culvert, and suitable commuting and foraging habitat for tricolored bat occur within the action area. The bridge and culvert have not been surveyed for bats. The proposed conservation measures minimize effects to bats potentially occurring within the action area. However, effects from construction noise to unknown tree roosts within the action area but outside the construction limits, while minimized, are not avoided. Bats that are present in proximity to transportation corridors are expected to be tolerant of baseline noise and vibration levels (or have already modified their behaviors to avoid them). How temporary increases in noise and vibration from construction activities effect bats within existing transportation corridors has not been well studied to our knowledge, though one study found that bats habituated rapidly to traffic noise (Luo et al. 2014). Given the information available and conservation measures above, we do not believe any response to project noise and vibration by bats that are already tree-roosting in the area is expected to rise to the level of harm (as defined at 50 CFR 17.3).

On September 14, 2022, the U.S. Fish and Wildlife Service (Service) published a proposal in the Federal Register to list the tricolored bat as endangered under the Act. As a result, NCDOT has requested a conference for the tricolored bat as the project may be on-going after the effective date of any final listing rule, if one is published. Little brown bat is considered an at-risk species. At-risk species are not legally protected under the Act and are not subject to any of its provisions, including section 7, unless they are formally proposed or listed as endangered or threatened. While lead federal agencies are not prohibited from jeopardizing the continued existence of an at-risk species unless the species becomes listed, the prohibition against jeopardy and taking a listed species under section 9 of the Act applies as soon as a listing becomes effective, regardless of the stage of completion of the proposed action. USACE has requested a conference for the little brown bat, as the project may be on-going after a potential proposal for listing and effective date of any final listing rule, if one is published. Based on the information provided, the noted bat inactive season during which the project will occur, the analysis above, and the commitments to minimize project impacts, we have determined that the proposed project will not jeopardize the continued existence of the tricolored bat or little brown bat. Additionally, we would concur with the NCDOT’s determination that the project is NLAA the tricolored bat and the little brown bat should the species become listed.

Conservation Recommendations

Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. General recommendations for the benefit of fish and wildlife resources are provided here:

- **Structure Surveys:** Survey the bridge and culvert structures within 14 days of project work, regardless of season, to ensure absence of roosting bats. Contact the Service immediately if bats are observed.
- **Riparian Replanting:** Because the removal of forested riparian habitat can affect the quality and suitability of foraging and commuting habitat for bats and the water quality for aquatic organisms, we recommend replanting the riparian zone with native, fast-growing trees and shrubs that would serve to stabilize the stream bank, filter runoff and reduce erosion and sedimentation, block light pollution, and generally improve the quality of the habitat for bats and aquatic species.

Examples of potential native tree species to plant include: Sycamore, tulip poplar, black cherry and river birch. Planting with established (e.g. containerized) young trees can increase the survival rate of plantings and contribute to faster improvement of riparian habitat.

- **Noise Considerations for Bats:** If suitable roost trees are present near high-decibel activity (81 – 162 dBA) and would experience noise above background levels (41 – 70 dBA), avoid conducting those high-decibel activities during the bat maternity and pup season (May 15 – August 15). To minimize noise levels, incorporate sound-dampening devices such as noise shrouds for pile driving.

Reinitiation Notice

We believe the requirements under section 7 of the Act are fulfilled for the federally listed species discussed above. However, obligations under section 7 must be reconsidered if: (1) new information reveals impacts of this proposed action may affect listed species or critical habitat in a manner not previously considered, (2) this proposed action is subsequently modified in a manner that was not considered in this review, or (3) a new species is listed, or critical habitat is determined that may be affected by the proposed action.

We appreciate the opportunity to provide these comments. Please contact Ms. Holland Youngman of our staff at holland_youngman@fws.gov if you have any questions. In any future correspondence concerning this project, please reference our Service Log #24-198.

Sincerely,

-- original signed --

Janet Mizzi
Field Supervisor

Archaeology

15-02-0043**Revised****NO ARCHAEOLOGICAL SURVEY REQUIRED FORM**

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.

**PROJECT INFORMATION**

Project No: **B-5372** County: **Cabarrus**
 WBS No: **46087.1.1** Document: **CE**
 F.A. No: **na** Funding: State Federal
 Federal Permit Required? Yes No Permit Type: **USACE**

Project Description:

The project calls for the replacement of Bridge No. 109 on SR 1706 (East 1st Street) over US 29 in Cabarrus County. The archaeological Area of Potential Effects (APE) for the project is defined as an approximate 2,900 foot (883.92 m) long corridor running along East 1st Street. From the center of the bridge, the corridor extends approximately 2,200 feet (670.56 m) to the northwest and 700 feet (213.36 m) to the southeast. The corridor has a variable width of 200 feet (60.96 m) at its northwestern end and expands to 850 feet (259.08 m) towards the southeast. The APE includes all existing ramps and a portion of US 29 extending approximately 825 feet (251.46 m) to the north and 420 feet (128.02 m) to the south along US 29 from the bridge. In all, the APE encompasses approximately 32 acres, which will cover all ground disturbing activities.

It is anticipated that this project will require federal permits. Therefore, the archaeological review of Bridge No. 109 was conducted pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance (36 CFR Part 800).

SUMMARY OF CULTURAL RESOURCES REVIEW**Brief description of review activities, results of review, and conclusions:**

Bridge No. 109 is located in Kannapolis and west of I-85 at the northern boundary of Cabarrus County, North Carolina. The project area is plotted in the northwest corner of the Concord USGS 7.5' topographic quadrangle (Figure 1).

A map review and site file search were conducted at the Office of State Archaeology (OSA) on February 19, 2015 with a subsequent review on December 18, 2019 due to the project's resubmittal. No previously recorded archaeological sites have been identified within the APE or a mile of the bridge. According to the North Carolina State Historic Preservation Office online data base (HPOWEB 2015), the boundary for the Study Listed and Determined Eligible Kannapolis Mill Village (CA 264a) is just south of the archaeological APE. However, no surveyed or contributing archaeological resource falls within the APE. Topographic maps, USDA soil survey maps, aerial photographs (NC One Map), and historic maps (North Carolina maps website) were examined for information on environmental and cultural variables that may have contributed to prehistoric or historic settlement within the project limits and to assess the level of ground disturbance.

Bridge No. 106 and East 1st Street cross US 29 from the northwest to southeast. Unnamed tributaries to Cold Water Creek run alongside East 1st Street to the north and south crossing under the road west of the bridge. These waterways are part of the Yadkin-Pee Dee drainage basin. The APE is situated mostly on ridges and side slope adjacent to the drainages, but the majority of the landforms has been modified

15-02-0043 Revised

(Figure 2). It is likely that some of the area was in floodplain prior to the construction of US 29 and the ramps. The channels for the tributaries have also been modified to improve drainage and prevent flooding. Although the APE is forested in places, it is characterized by urban development and residential properties. Overall, ground disturbance is very heavy.

The USDA soil survey map suggests that the APE is composed of two soil types (see Figure 2). The Cecil-Urban land complex (CeB) covers most of the project area. These are mixed soils, where most of the natural soils have been altered or covered as the result of grading or digging. The series also contain households, pavement, and building complexes. It is very unlikely for intact deposits to be found in these altered soils. The second series, Cecil sandy clay loam (CcD2), is situated along the side slopes next to the tributaries. These are well drained but eroded soils with a slope of 8 to 15 percent. Due to soil erosion, it is unlikely for a significant site to be present.

A review of the site files shows few archaeological surveys and no sites within a mile of the project area. Although the current APE has not been reviewed or included in any previous studies, nearly all properties surround the project have been reviewed and cleared by OSA as low potential due to disturbance. The current project area shares the same characteristics as these other reviewed properties.

Lastly, a historic map review was conducted. Early and accurate historic maps of the project vicinity are rare. The 1910 soil map of Cabarrus County is the earliest map to depict the project area with any accuracy (Figure 3). This map shows no roads or structures in the vicinity of the current bridge. Likewise, subsequent early 20th century maps illustrate no additional features. As a result, it seems that no historic archaeological deposits should be affected by the proposed bridge replacement.

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

The defined archaeological APE for the proposed replacement of Bridge No. 109 over US 29 consists of heavily disturbed soils associated with past urban development and road construction. It is very unlikely intact and significant archaeological deposits will be encountered within the APE. In addition, OSA has cleared many neighboring properties with similar characteristics as low potential for significant sites. Lastly, the historic maps suggest that no former historic structures and/or features are in the area. As long as impacts to the subsurface occur within the defined APE, no further archaeological work is recommended for the replacement of Bridge No. 109 in Cabarrus County. If construction should affect subsurface areas beyond the defined APE, further archaeological consultation might be necessary.

Please note, this project falls within a North Carolina County in which the Catawba Nation have expressed an interest. It is recommended that you contact each federal agency involved with this project to determine their Section 106 Tribal consultation requirements.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Photocopy of County Survey Notes Other: **Images from historic maps**

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED



C. Damon Jones
NCDOT ARCHAEOLOGIST II

1/2/20

Date

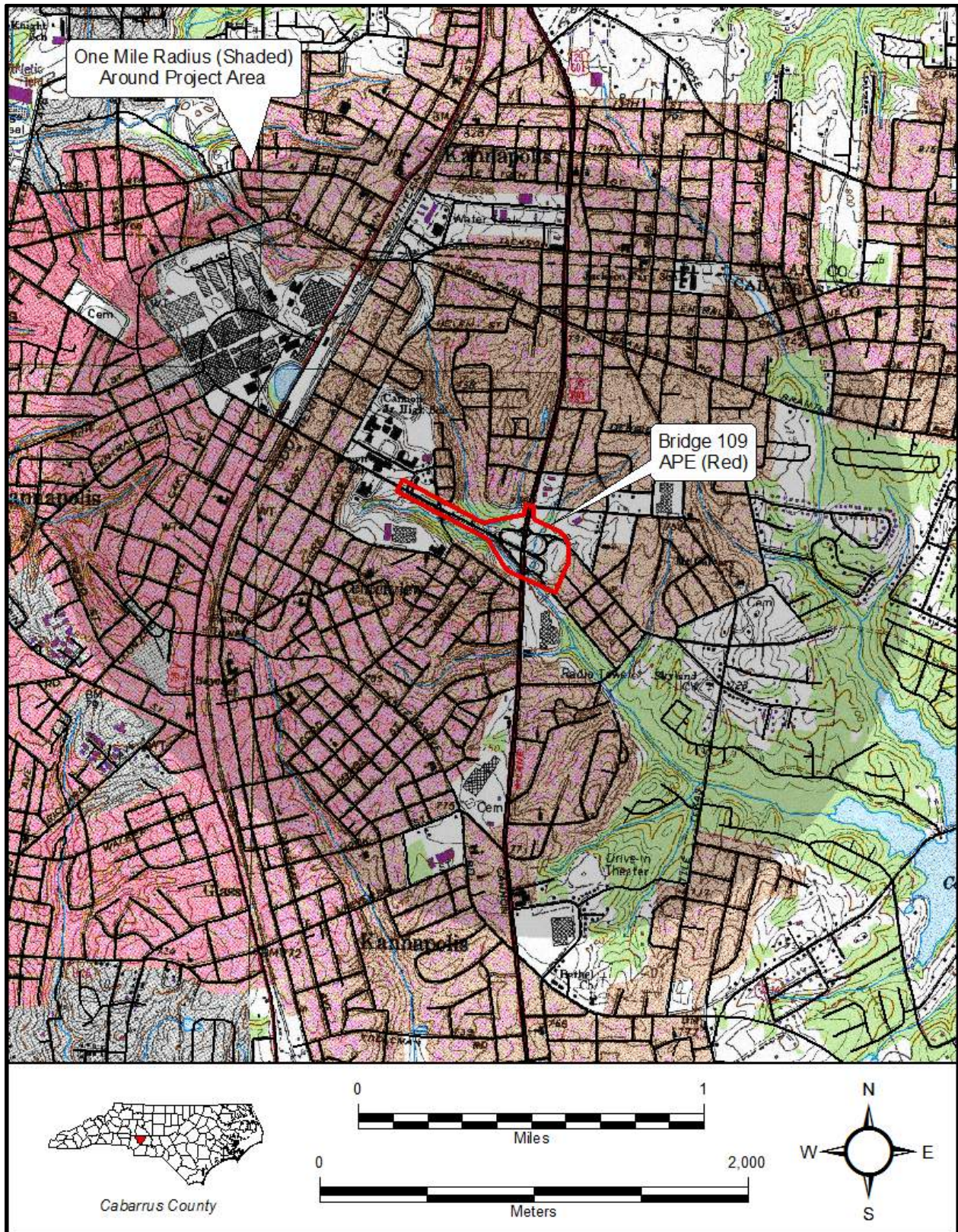


Figure 1. Topographic Setting of the Project Area, Concord (1969; photorevised), Kannapolis (1993), Enochville (1993), and China Grove (1970; photorevised 1987), NC, USGS 7.5' Topographic Quadrangle.

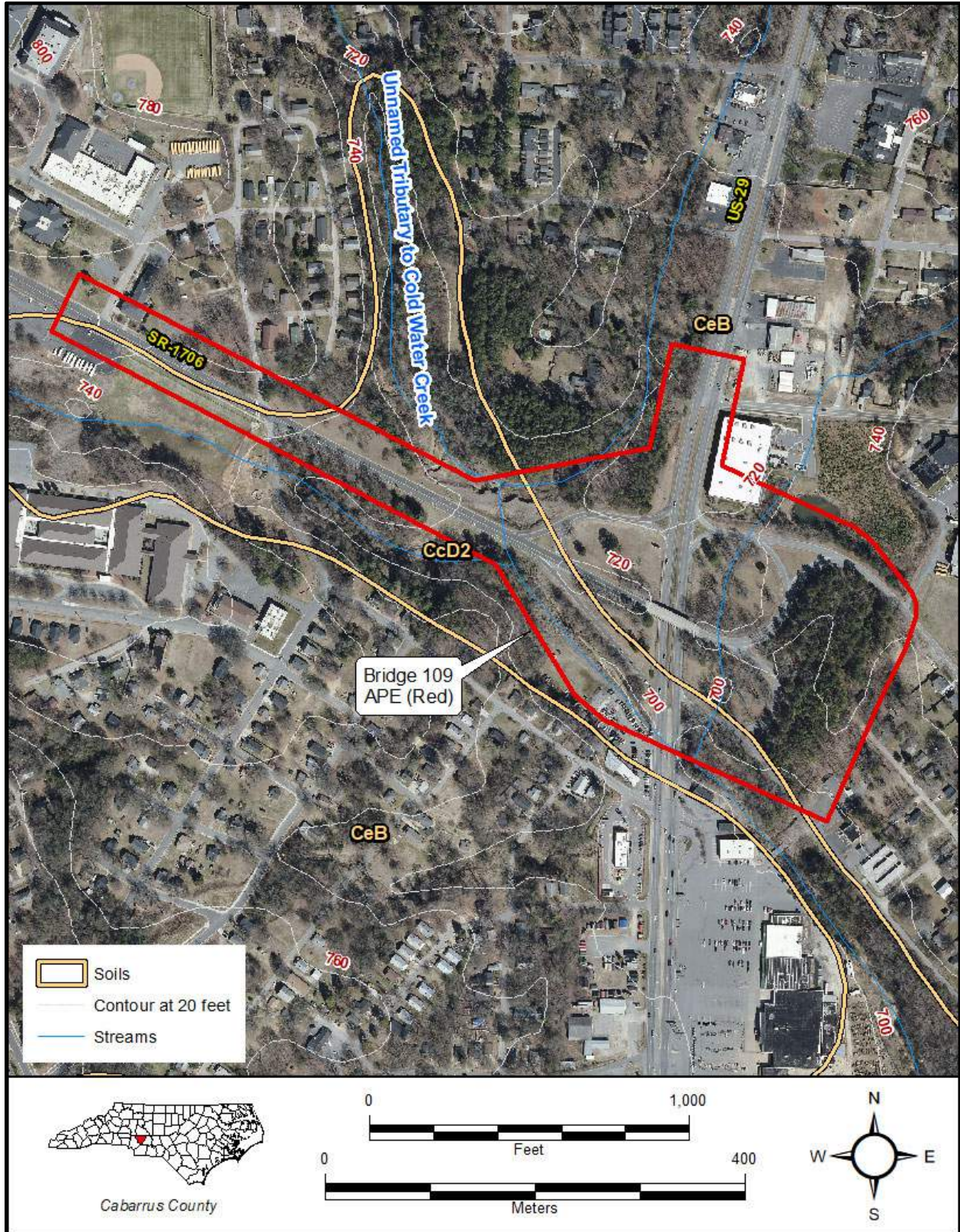


Figure 2. Aerial photograph of the APE showing development, landforms, and soils within and near the project area.

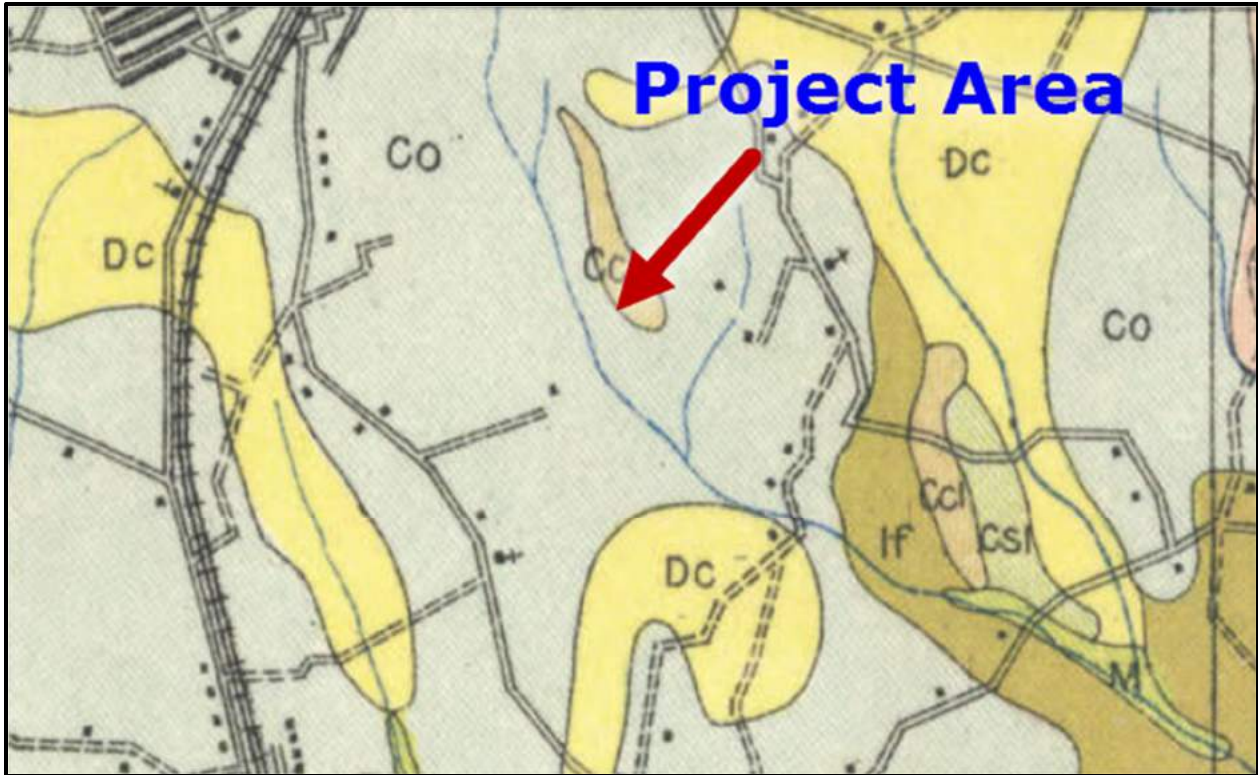


Figure 3. The 1910 Soil Survey Map for Cabarrus County showing the location of the project area.

Historic Architecture and Landscapes

20-01-0002



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

PROJECT INFORMATION

Project No:	B-5372	County:	Cabarrus
WBS No.:	46087.1.1	Document Type:	PCE or CE
Fed. Aid No:	N/A	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Permit Type(s):	N/A
Project Description: Replacement of Bridge No. 109 on SR 1706 (E. 1 st Street) over US 29.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<p><u>Description of review activities, results, and conclusions:</u> *Previously reviewed under 15-02-0043* Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on January 7, 2020. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is defined on the following maps. All properties over fifty years of age within the APE were visually inspected, and no properties warrant further evaluation. The Study Area borders the Determined Eligible/Study Listed Kannapolis Mill Village Historic District: Black Section (CA0264A), however the district will not be affected by this project and does not fall within the APE. Bridge No. 109 is not eligible for NR listing. There are no National Register listed or eligible properties. If design plans change, additional review will be required.</p> <p><u>Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:</u> HPO quad maps and GIS information recording NR, SL, LD, DE, and SS properties for the Cabarrus County survey and Google Maps are considered valid for the purposes of determining the likelihood of historic resources being present. There are no National Register listed or eligible properties within the APE and no survey is required.</p>

SUPPORT DOCUMENTATION

Map(s)
 Previous Survey Info.
 Photos
 Correspondence
 Design Plans

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

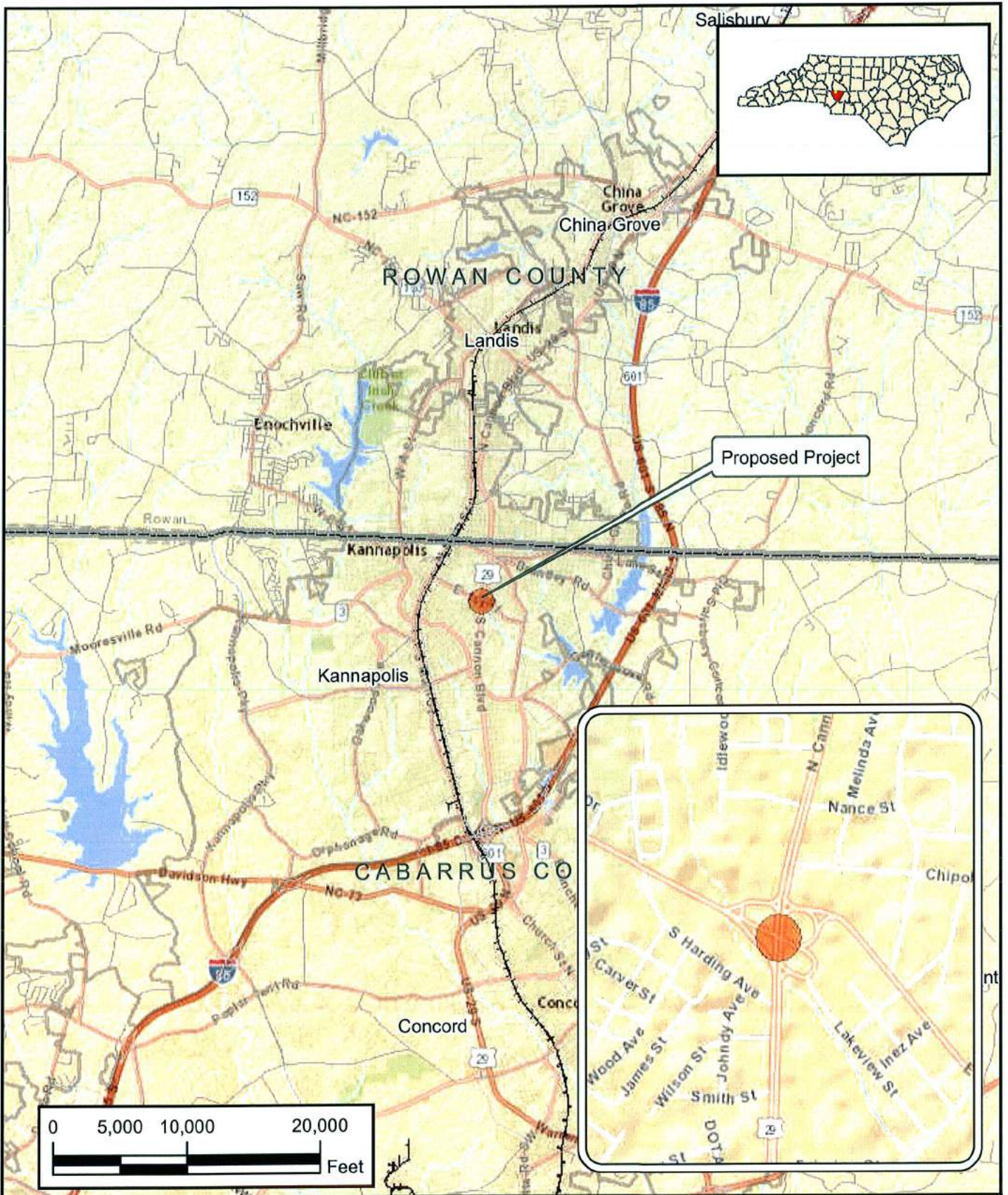
Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Kate Hubbar

NCDOT Architectural Historian

1/7/2020

Date



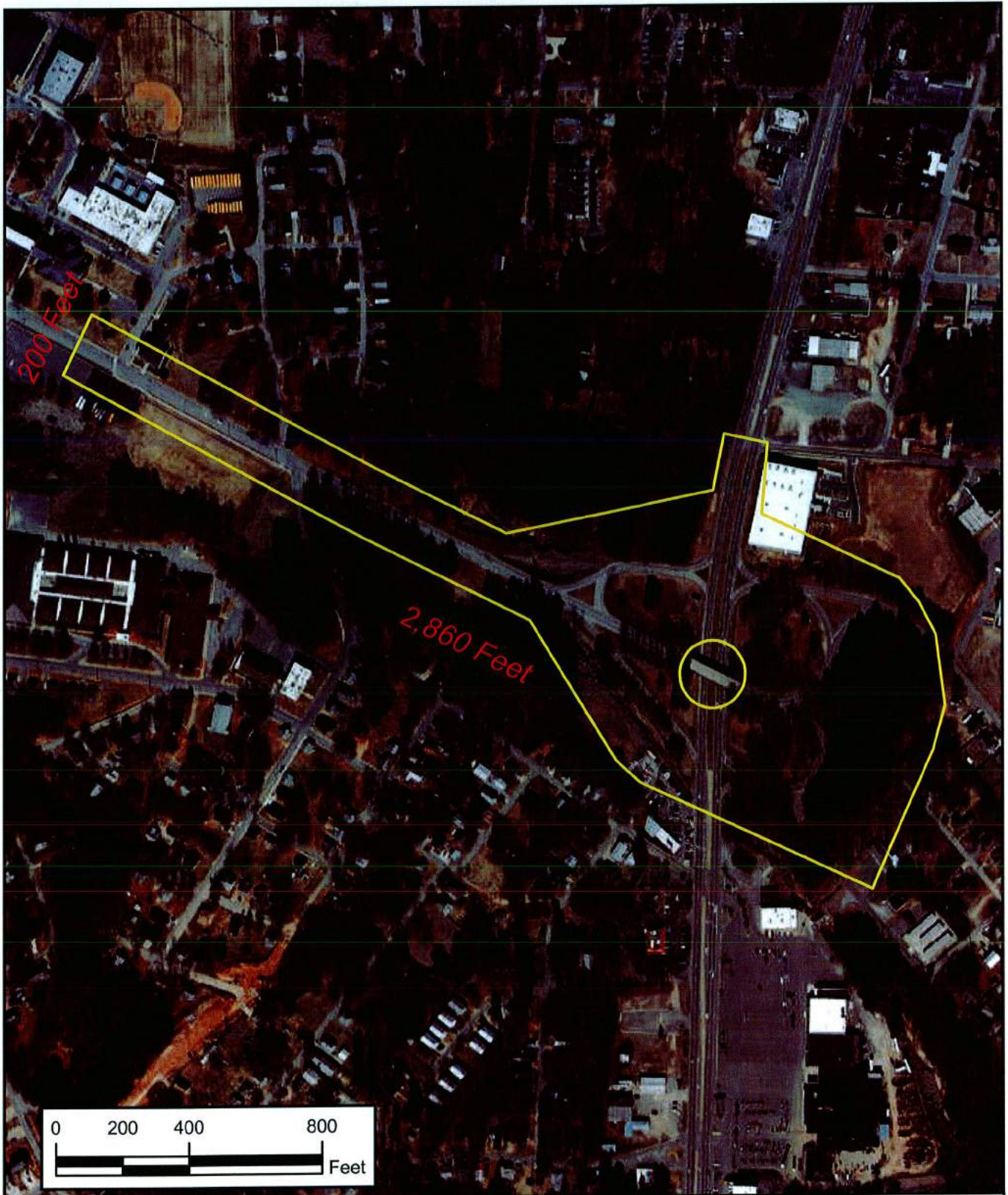
NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

VICINITY MAP
BRIDGE REPLACEMENT
BRIDGE NO 109 OVER
US 29 ON SR 1706
CABARRUS COUNTY
TIP PROJECT B-5372



County:	CABARRUS
Div:	10
TIP#	B-5372
WBS:	46087.1.1
Date:	JAN 2015

Figure
1



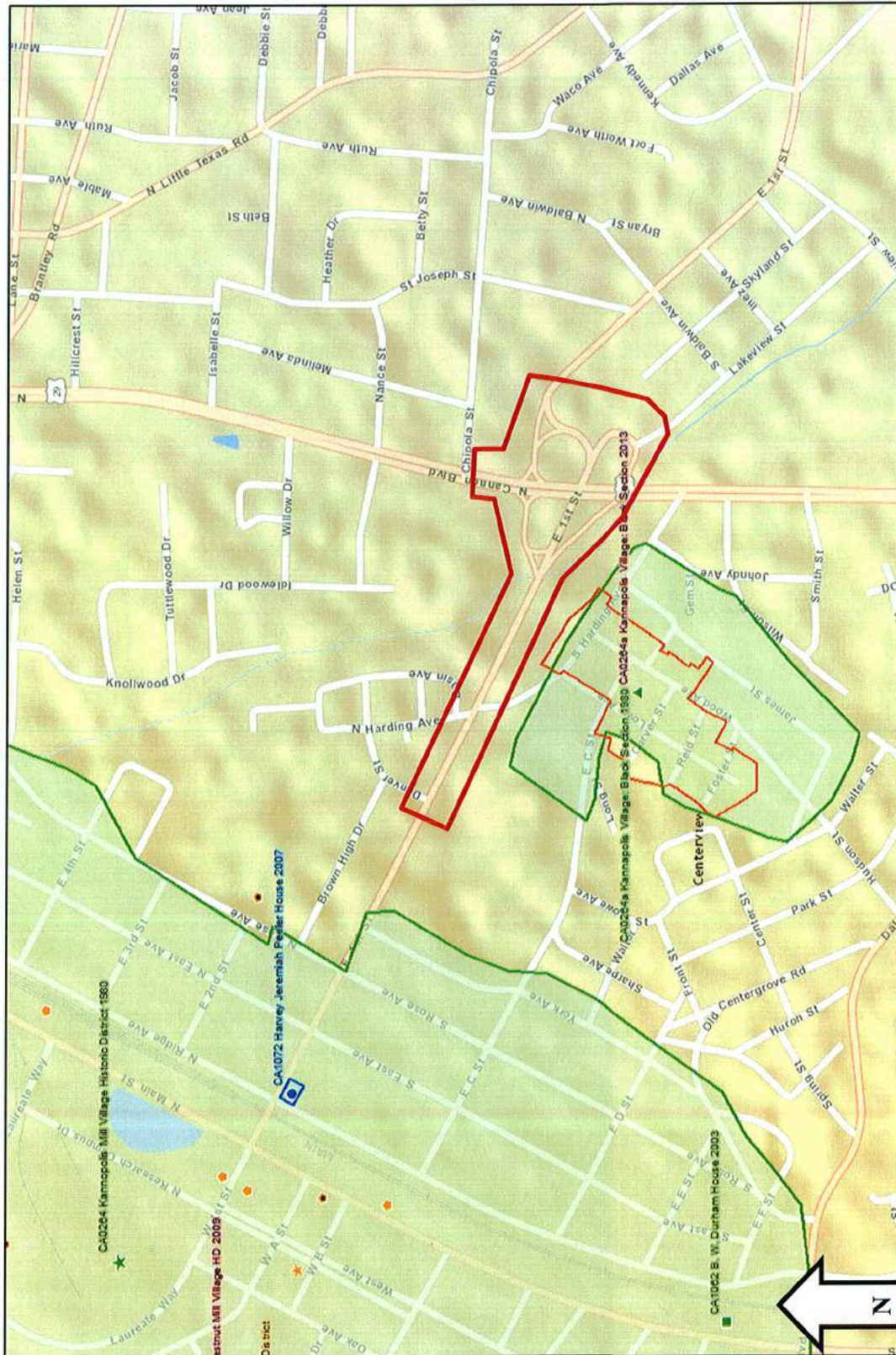
NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

STUDY AREA MAP
BRIDGE REPLACEMENT
BRIDGE NO 109 OVER
US 29 ON SR 1706
CABARRUS COUNTY
TIP PROJECT B-5372



County:	CABARRUS	
Div:	10	TIP# B-5372
WBS:	46087.1.1	
Date:	JAN 2015	

Figure
2

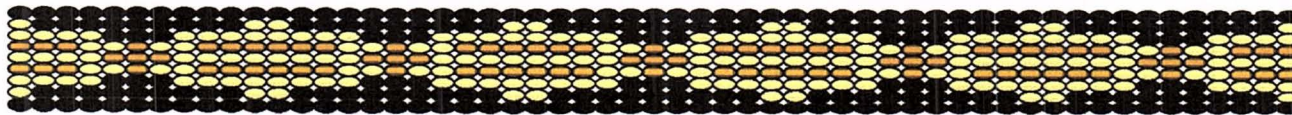


**HPO GIS. National Register LISTED properties outlined in blue.
 There are no National Register listed properties within the APE, defined in red.**

Tribal Coordination

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427
Fax 803-328-5791



January 31, 2020

Attention: David Stutts
NC Department of Transportation
1581 Mail Service Center
Raleigh, NC 27699

Re. THPO #	Project #	Project Description
2020-193-116	B-5372	Replacement of Bridge No. 109 on SR 1706 (East First St.) over US 29 in Cabarrus County

Dear Mr. Stutts,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail caitlinh@ccppcrafts.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer

NEPA/SEPA Document

Type I or II Categorical Exclusion Action Classification Form

TIP Project No.	B-5372
WBS Element	46087.1.1
Federal Project No.	N/A

A. Project Description:

The proposed project involves replacing Bridge No. 109 on S.R. 1706 (Martin Luther King Jr. Avenue) over U.S. 29 (N. Cannon Blvd) in Cabarrus County. It will also add curb and gutter and sidewalks along both sides of U.S. 29. Bridge No. 109 is 190 feet long and the replacement structure will be a bridge approximately 175 feet long, providing a minimum 49-foot clear deck width. The new bridge will include two 12-foot travel lanes and 7-foot paved offsets, or “shoulders”, on each side to accommodate bicycles. 5-foot 6-inch sidewalks and a 54-inch two bar metal rail will be provided on both sides of the bridge. The roadway grade of the new structure will be approximately two feet higher than the existing structure to allow for the proper vertical roadway clearance over U.S. 29.

Along S.R. 1706, the roadway approaches will extend approximately 265 feet from the west end of the new bridge and 433 feet from the east end of the new bridge. The approaches will be widened to provide two 12-foot travel lanes, 7-foot bicycle lanes, 5-foot 6-inch sidewalks, and 10-foot grassed shoulders on both sides.

Along U.S. 29 (under the bridge), improvements will extend approximately 330 feet north of S.R. 1706 and 230 feet south of S.R. 1706. Improvements include upgrading U.S. 29 to a curb and gutter section, with 5-foot paved offsets, and 5-foot sidewalks along each side of U.S. 29.

The new bridge will be constructed on existing location, with traffic being detoured off site during construction. However, the existing entrance and exit ramps will remain open to local and business traffic during construction (see Figure 1).

S.R. 1706 will be designed as a Minor Collector and U.S. 29 will be designed as an Urban Collector, both utilizing Sub-Regional Tier Guidelines with a 40 mile per hour design speed.

B. Description of Need and Purpose:

The purpose of the proposed project is to replace a structurally deficient bridge. NCDOT Bridge Management Unit records indicate Bridge No. 109 is considered structurally deficient due to a deck condition and superstructure condition appraisal of 4 out of 9 according to Federal Highway Administration standards.

C. Categorical Exclusion Action Classification:

Type I(A) - Ground Disturbing Action

D. Proposed Improvements:

28. Bridge rehabilitation, reconstruction, or 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:

Estimated Traffic:

Current Year (2020)	3,520 vpd
Future Year (2040)	5,600 vpd
TTST	1%
Dual	4%

Alternatives Evaluation:

No Build – The no build alternative would result in eventually closing the road, which is unacceptable given the volume of traffic served by S.R. 1706.

Rehabilitation – The existing bridge was constructed in 1953 and is reaching the end of its useful life. Rehabilitation would only provide a temporary solution to the structural deficiency of the bridge.

Remove Bridge No. 109, Replace with At-Grade Signalized Intersection - Offsite Detour – A Planning-Level Study was performed by NCDOT Congestion Management, in which the results of this study showed that replacing the existing bridge with a signalized at-grade intersection would be a viable option. A detailed traffic analysis confirmed these findings. In addition, by replacing the bridge with an at-grade intersection, the cost of replacing and maintaining the bridge would be saved. Bridge No. 109 would be removed, and a new at-grade signalized intersection would be installed just north of the existing bridge. During the construction period, the existing ramps and the existing bridge would remain open to local and business traffic. However, as a result of comments received from the public and further coordination with the City of Kannapolis, this alternative was not selected.

Staged Construction – Staged construction was not considered because of the availability of an acceptable offsite detour.

Replace Bridge No. 109 In-Place with a New Bridge – Offsite Detour (Recommended) – Bridge No. 109 will be replaced on its existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include S.R. 1706, N. Main Street, Jackson Park Road, and Little Texas Road. The majority of traffic on S.R. 1706 is through traffic. The existing ramps would remain open to local and business traffic during construction. The detour for the average road user would result in 4 minutes of additional travel time (2 miles of additional travel). Up to a 12-month duration of construction is expected on this project.

Based on the Offsite Detour Guidelines, the criteria above indicate that, on the basis of delay alone, the proposed offsite detour is acceptable. Cabarrus County Emergency Services has indicated that the detour is acceptable. NCDOT Division 10 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement and concurs with the use of the detour, as identified in Figure 1.

Pedestrian and Bicycle Accommodations: The existing bridge is within an established residential area with pedestrian and bicycle trip generators, including schools, churches and commercial establishments in close proximity. The Kannapolis Bicycle Plan indicates that S.R. 1706 carries the Central/East Bike Route. The current bridge includes sidewalks. The City of Kannapolis requested that striped bike lanes and sidewalks be included on both sides of S.R. 1706 within the construction limits for this project. In addition, the City of Kannapolis requested that curb and gutter, wide outside shoulders, and sidewalks be included

along U.S. 29. These bicycle and pedestrian accommodations have been incorporated into the designs. Construction of sidewalks is contingent upon the completion of a cost-sharing municipal agreement between the City of Kannapolis and NCDOT.

Estimated Costs:

The proposed project is included in the NCDOT State Bridge Program. Right of way acquisition and construction are scheduled for Fiscal Year (FY) 2022 and FY 2023, respectively. Current cost estimates, based on 2022 prices, are as follows:

Right of Way:	\$ 9,600
Utilities:	\$ 125,000
Construction:	\$ 5,324,500
Total:	\$ 5,459,100

Design Exceptions: There are no anticipated design exceptions.

Public Involvement:

STIP Project B-5372 was originally scoped as a bridge replacement project. However, in early 2018, NCDOT Congestion Management did a high-level traffic capacity analysis and determined that replacing the existing bridge with an at-grade intersection was a viable, cost-saving alternative to replacing the bridge. Based on this capacity analysis, NCDOT changed the scope of the original B-5372 project from a bridge replacement to a conversion of the interchange to an at-grade signalized intersection.

On November 15, 2018, a Local Officials Meeting and Public Meeting was held. The meetings were held at the Faith Baptist Church in Kannapolis, NC. The Local Officials Meeting was held from 3:00pm until 4:00pm, and the public meeting was held from 5:00pm until 7:00pm. Six local officials were in attendance at the Local Officials Meeting. Approximately nine persons signed in to the informal "open house" public meeting. Written comments were submitted by 11 people at the meeting and during the comment period. The majority of the comments received were related to concerns with removing the bridge, and the assumption that additional traffic may occur with a new signalized intersection in this area. Based on input received during and after the public meeting, the City of Kannapolis requested that the scope return to its original concept of replacing Bridge No. 109 with a new bridge on existing location.

To announce this change of scope back to a bridge replacement, a newsletter was developed and mailed out to the public. This newsletter provided updated project information including updated design data, project schedule, project decisions, and graphics. The newsletter was mailed out on July 21, 2022. No comments have been received to date.

Threatened and Endangered Species

As of August 22, 2022, the United States Fish and Wildlife Service (USFWS) lists two federally protected species for Cabarrus County (Northern long-eared bat [NLEB] and Schweinitz's sunflower).

Norther long-eared bat (NLEB) - Habitat for NLEB is present within the project study area. According to the North Carolina Natural Heritage (NHP) Biotics Database, most recently updated July 2021, the nearest NLEB hibernacula record is approximately 79 miles west of the project and no known NLEB roost trees occur within 150 feet of the project area. NCDOT has also reviewed the Asheville Field Office website (http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html) for consistency with NHP records. This project is located entirely outside of the red highlighted areas (12 digit HUC) that the USFWS Asheville Field Office has determined to be representative of an area that may require consultation. The closest 12 digit (030501010502) red HUC is approximately 74.5 miles to the west (Upper Wilson Creek) in Avery County. A Section 7 Survey for NLEB was conducted on August 10, 2021. Bridge No. 109 was assessed for potential NLEB habitat. Some crevices suitable for roosting were present on the structures, but no evidence (bats, staining, and guano) of bats was observed. Based on the lack of evidence of bats using the bridge, and no known roost trees within 150 feet of the project area, NCDOT recommends a Biological Conclusion of **May Affect Not Likely To Adversely Affect** for the

northern long-eared bat. Final design, tree clearing, and percussive activities information will be provided in the permit application.

Schweinitz's sunflower (*Helianthus schweinitzii*) – Habitat for Schweinitz's sunflower is present within the project study area. On October 18, 2021, a plant-by-plant survey for Schweinitz's sunflower was conducted within the project site. Marginally suitable habitat for Schweinitz's sunflower was present within the project site in areas with moderate disturbance regimes and little-to-no canopy cover. However, no individuals were present. Additionally, no typical associate species were identified. A review of the North Carolina Natural Heritage Program (NCNHP) October 2021 dataset revealed no known Schweinitz's sunflower occurrences within the study area or within one mile of the project site. Due to the negative survey results of this survey and the lack of known occurrences within one mile of the project, the Biological Conclusion rendered for the species is **No Effect**.

Bald Eagle and Golden Eagle Protection Act - Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large dominant trees are utilized for nesting sites, typically within 1.0 mile of open water. A desktop-GIS assessment of the project study area, as well as the area within a 1.13-mile radius (1.0 mile plus 660 feet) of the project limits, was performed on March 25, 2015 using 2014 color aeriels. No water bodies large enough or sufficiently open to be considered potential feeding sources were identified. Since there was no foraging habitat within the review area, a survey of the project study area and the area within 660 feet of the project limits was not conducted. Additionally, a review of the NCNHP database on 25 March 2015 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.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)			
<p>Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.</p> <ul style="list-style-type: none"> • If any question 1-7 is checked “Yes” then NCDOT certification for FHWA approval is required. • If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G. 			
PROJECT IMPACT THRESHOLDS (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 type="checkbox"/>	<input checked="" 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.			
Other Considerations		Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 16 - Floodplain:

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

The NCDOT Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine 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).

H. Project Commitments:

NCDOT PROJECT COMMITMENTS

TIP Project No. **B-5372**
Replace Bridge No. 109 in S.R. 1706 (Martin Luther King Jr. Ave.) over U.S. 29
Cabarrus County
Federal Aid Project No. N/A
WBS Element 46087.1.1

Continued Coordination and Outreach (NCDOT Division 10, NCDOT Structures Management Unit [SMU])

- In order to have time to adequately reroute school buses, Kannapolis City Schools will be contacted at (704) 938-4848 at least one month prior to road closure.
- Kannapolis Fire and EMS departments will be contacted at (704) 920-4260 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.
- The Division will coordinate with the officials from the “Rider – Concord Kannapolis Area Transit” [(704) 920-7433] regarding temporary impacts to the “Blue Route” bus route and associated transit stops.
- The A.L. Brown High School athletic director [(704) 932-6125] will be notified at least one month prior to the project construction.

Sidewalks (Financial Management Division, Division 10 Construction, NCDOT SMU)

- The City of Kannapolis has committed to cost share for the construction of sidewalks on the project. NCDOT-SMU and Division 10 will continue to coordinate with the City in the development of a municipal agreement.

FEMA Floodplains and Floodways (Division 10 Construction, NCDOT SMU)

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

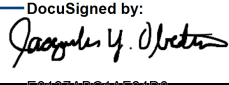
Floodplain Mapping Coordination (NCDOT Hydraulic Design Unit)

- The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of 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).

I. Categorical Exclusion Approval:

TIP Project No.	<u>B-5372</u>
WBS Element	<u>46087.1.1</u>
Federal Project No.	<u>N/A</u>

Prepared By:

<u>10/5/2022</u>	DocuSigned by: 
Date	<u>Jackie Obediente, PE</u> Three Oaks Engineering

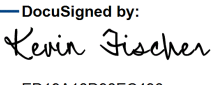
Prepared For:

North Carolina Department of Transportation

Reviewed By:

<u>10/5/2022</u>	DocuSigned by: 
Date	<u>John Jamison</u> NCDOT Environmental Policy Unit

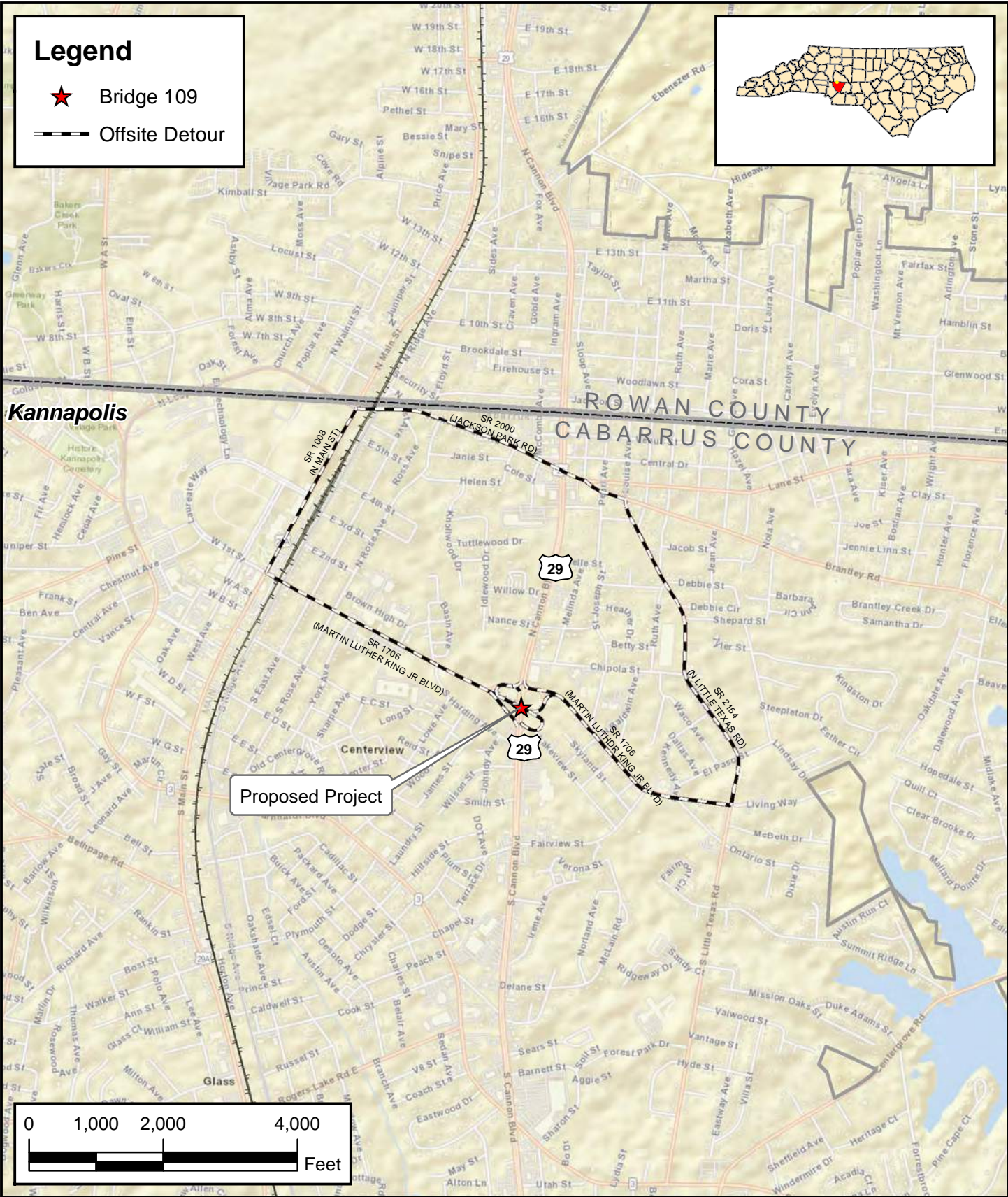
- Approved**
 - If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.
- Certified**
 - If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.
 - If classified as Type III Categorical Exclusion.

<u>10/5/2022</u>	DocuSigned by: 
Date	<u>Kevin Fischer, PE, Asst. State Structures Engineer</u> North Carolina Department of Transportation

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

<u>N/A</u>	
Date	<u>for John F. Sullivan, III, PE, Division Administrator</u> 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).



**NORTH CAROLINA
DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS**

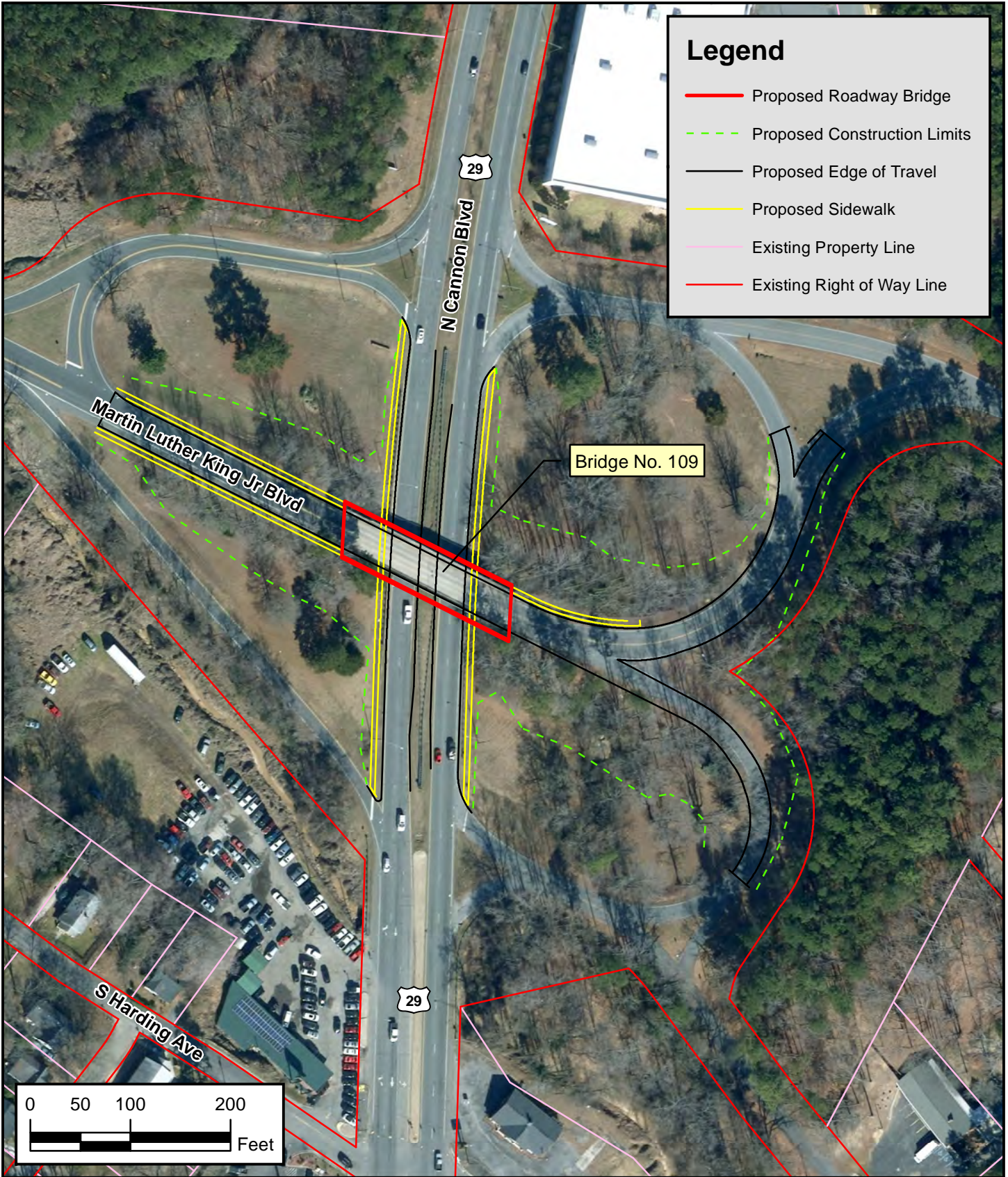
**VICINITY MAP
REPLACE BRIDGE NO. 109
ON SR 1706
(MARTIN LUTHER KING JR BLVD)
OVER US 29.**

CITY OF KANNAPOLIS



County:	CABARRUS	
Div:	10	TIP# B-5372
WBS:	46087.1.1	
Date:	JULY 2022	

**Figure
1**



NORTH CAROLINA
DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROJECT DESIGN MAP
REPLACE BRIDGE NO. 109
ON SR 1706
(MARTIN LUTHER KING JR BLVD)
OVER US 29.**
CITY OF KANNAPOLIS

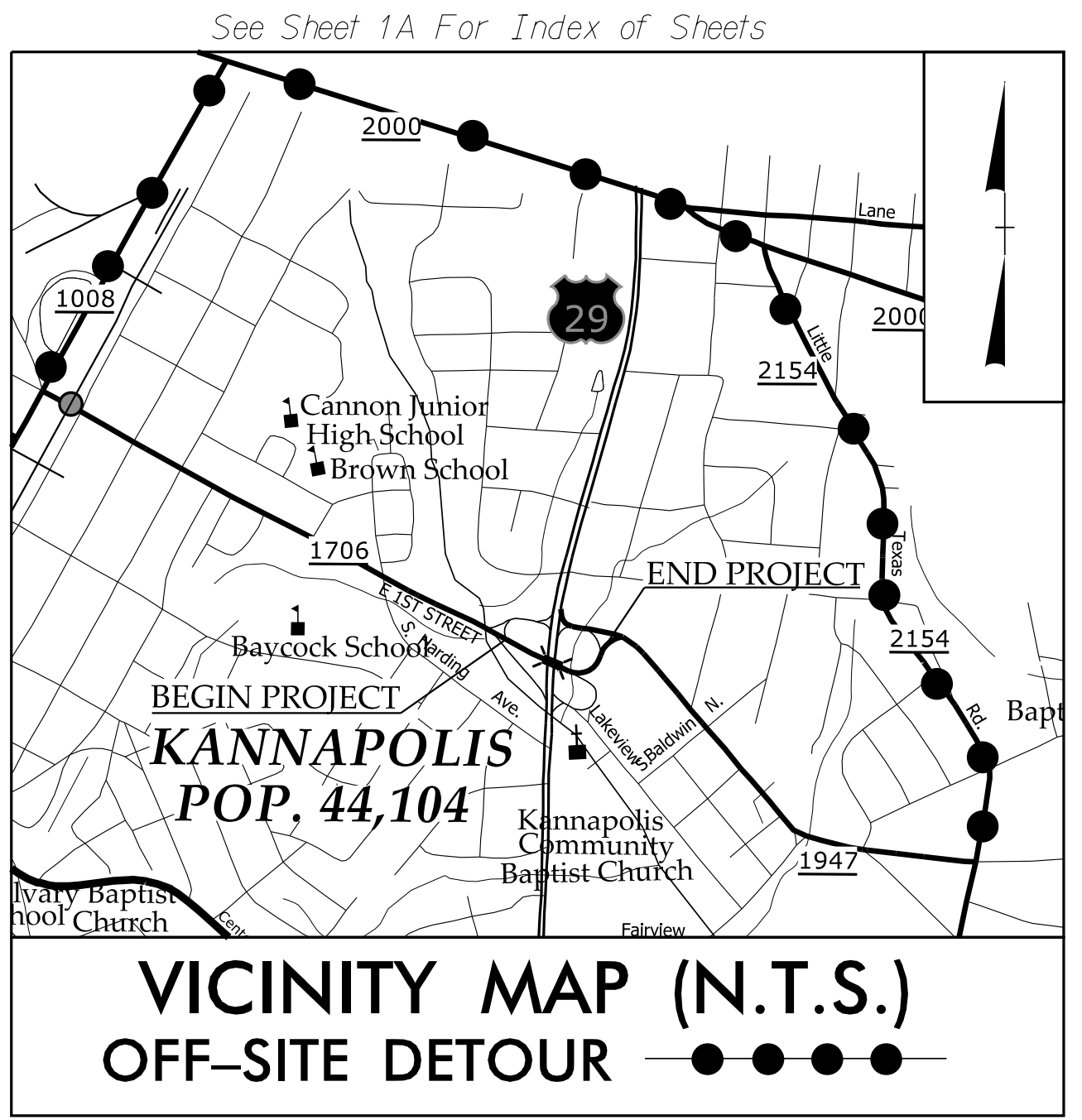


County:	CABARRUS	
Div:	10	TIP# B-5372
WBS:	46087.1.1	
Date:	JULY 2022	

**Figure
2**

09_08/2019

TIP PROJECT: B-5372



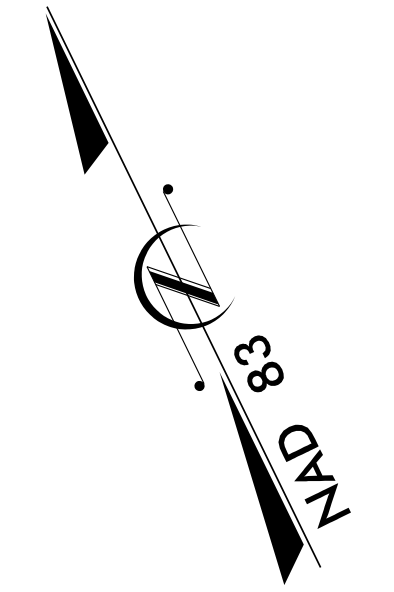
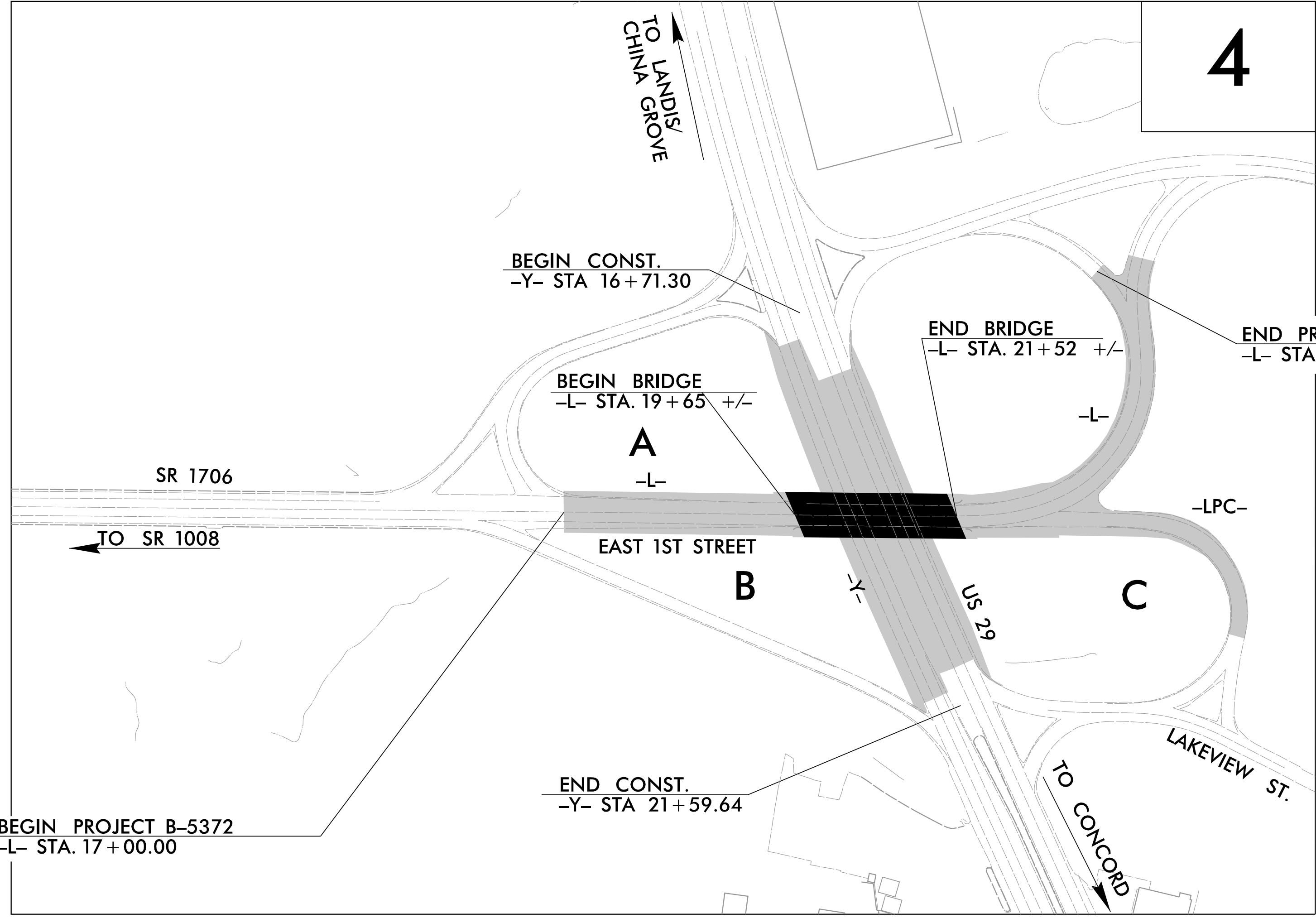
REVISED 25% PLANS (DECEMBER 2020)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CABARRUS COUNTY

LOCATION: BRIDGE NO. 109 ON SR 1706 (E. 1st St.) OVER US 29
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

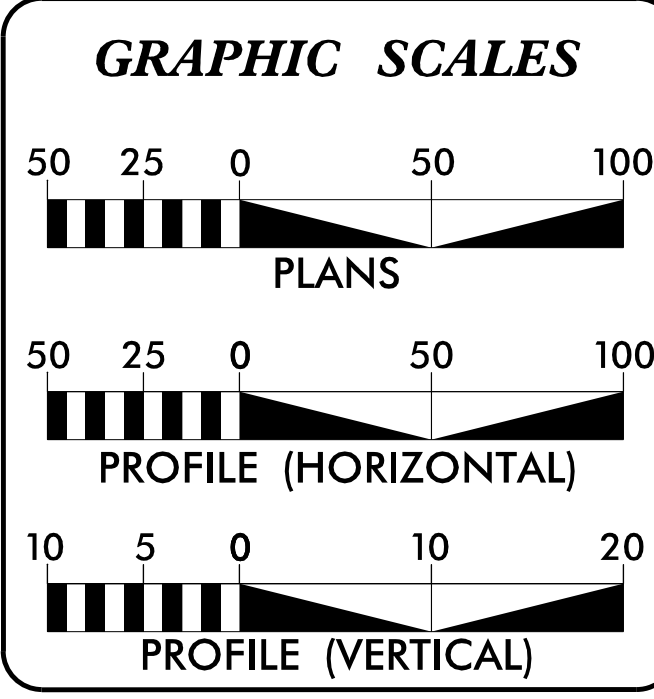
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5372	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46087.1.1		P.E.	



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARY OF KANNAPOLIS
THIS PROJECT IS PARTIAL ACCESS CONTROL.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT:



DESIGN DATA

ADT 2020 =	3,520
ADT 2040 =	5,600
K =	11%
D =	55%
T =	5% *
V =	40 MPH
* TTST = 1% DUAL = 4%	
FUNC CLASS =	MINOR COLLECTOR
SUB-REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5372 =	0.133 MILES
LENGTH STRUCTURE TIP PROJECT B-5372 =	0.035 MILES
TOTAL LENGTH TIP PROJECT B-5372 =	0.168 MILES

Prepared in the Office of:
VAUGHN & MELTON, INC.
3509 Haworth Dr. #100, Raleigh NC, 27609 Phone (919)-977-9455

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 25, 2022

LETTING DATE:
JUNE 23, 2023

REECE M. SCHULER, P.E., P.L.S.
PROJECT ENGINEER

JON FORD, P.E.
PROJECT DESIGN ENGINEER

DAVID STUTTS, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

V&M
Vaughn & Melton
Consulting Engineers

- Asheville, NC 828-255-2796
- Raleigh, NC 919-977-9455
- Charlotte, NC 704-367-0488
- Atlanta, GA 770-627-3509
- Boone, NC 828-355-9933
- Tri-Cities, TN 423-627-9400
- Knockville, TN 865-546-5800
- Spartanburg, SC 864-574-4775
- Charleston, SC 843-974-5650
- Middlesboro, KY 606-348-5600

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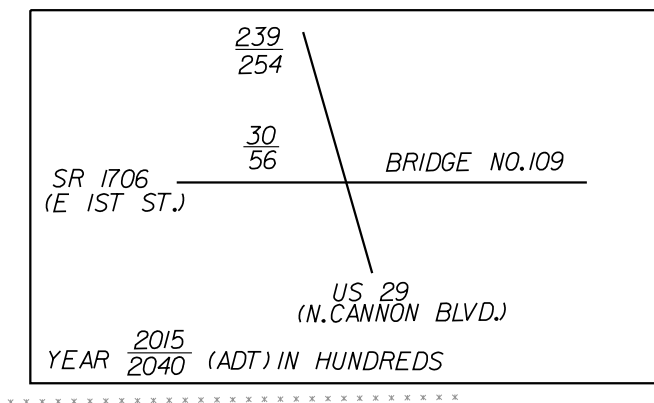
5/4/2022 1:39:34 PM ... \Sheets\B-5372_rdy - fsh.dgn User: jphilipot

8.17.17.99

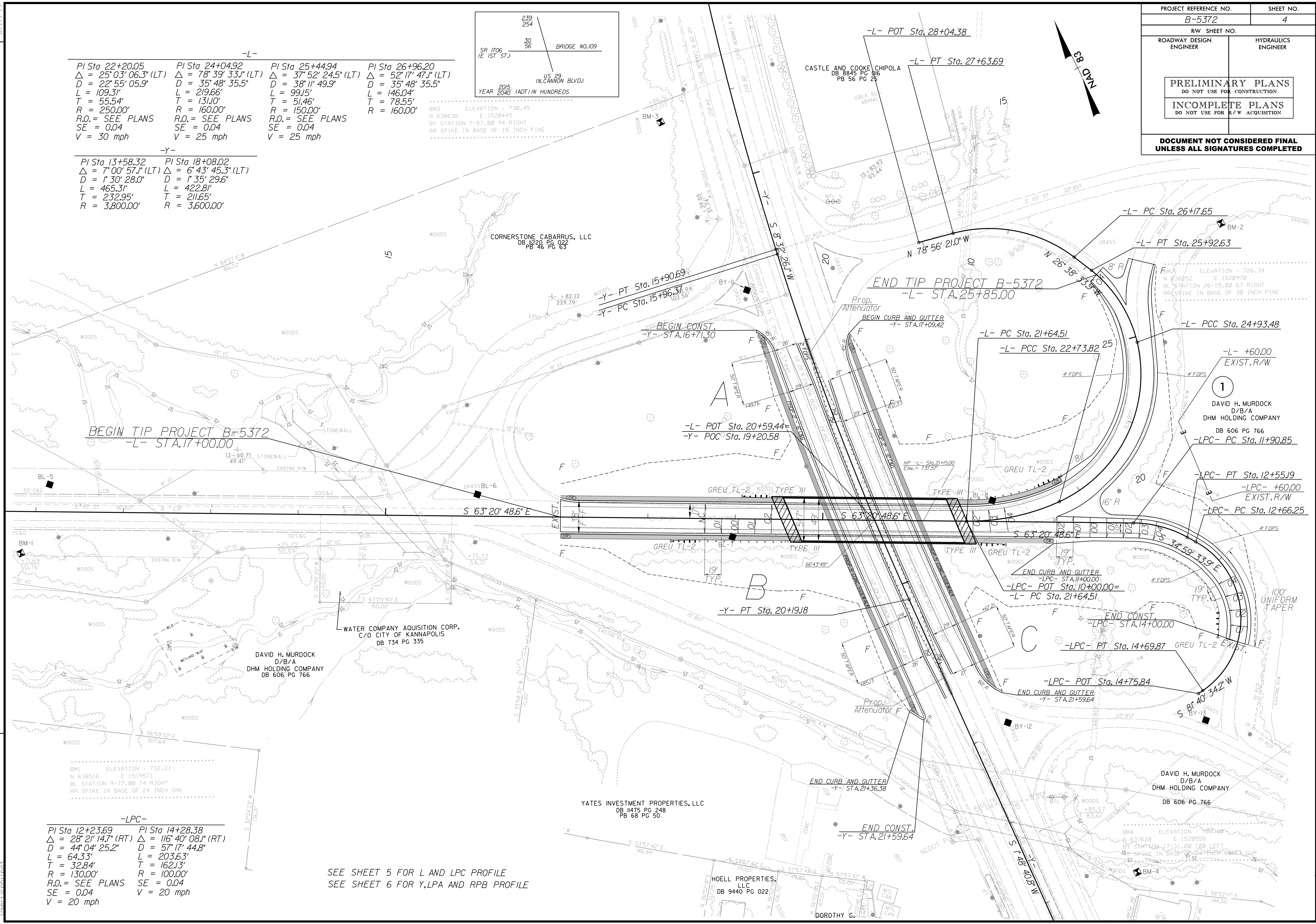
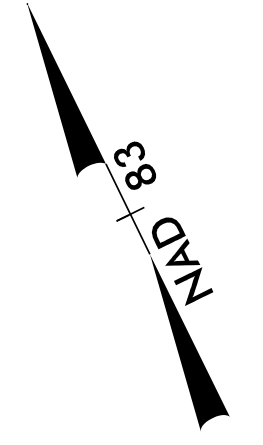
PROJECT REFERENCE NO. B-5372		SHEET NO. 4	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

-L-			
PI Sta 22+20.05 Δ = 25° 03' 06.3" (LT) D = 22' 55' 05.9" L = 109.31' T = 55.54' R = 250.00' R.O. = SEE PLANS SE = 0.04 V = 30 mph	PI Sta 24+04.92 Δ = 78° 39' 33.1" (LT) D = 35' 48' 35.5" L = 219.66' T = 131.0' R = 160.00' R.O. = SEE PLANS SE = 0.04 V = 25 mph	PI Sta 25+44.94 Δ = 37° 52' 24.5" (LT) D = 38' 11' 49.9" L = 99.15' T = 51.46' R = 150.00' R.O. = SEE PLANS SE = 0.04 V = 25 mph	PI Sta 26+96.20 Δ = 52° 17' 47.1" (LT) D = 35' 48' 35.5" L = 146.04' T = 78.55' R = 160.00'

-Y-	
PI Sta 13+58.32 Δ = 7° 00' 57.1" (LT) D = 1' 30' 28.0" L = 465.31' T = 232.95' R = 3,800.00'	PI Sta 18+08.02 Δ = 6° 43' 45.3" (LT) D = 1' 35' 29.6" L = 422.81' T = 211.65' R = 3,600.00'



BM3 ELEVATION = 730.45
N 638638 E 1520445
BY STATION 7+57.00 94 RIGHT
RR SPIKE IN BASE OF 15 INCH PINE



-LPC-	
PI Sta 12+23.69 Δ = 28° 21' 14.7" (RT) D = 44' 04' 25.2" L = 64.33' T = 32.84' R = 130.00' R.O. = SEE PLANS SE = 0.04 V = 20 mph	PI Sta 14+28.38 Δ = 116° 40' 08.1" (RT) D = 57' 17' 44.8" L = 203.63' T = 162.13' R = 100.00' R.O. = SEE PLANS SE = 0.04 V = 20 mph

SEE SHEET 5 FOR L AND LPC PROFILE
SEE SHEET 6 FOR Y, LPC AND RPB PROFILE

1
DAVID H. MURDOCK
D/B/A
DHM HOLDING COMPANY
DB 606 PG 766
-LPC- PC Sta. 11+90.85

DAVID H. MURDOCK
D/B/A
DHM HOLDING COMPANY
DB 606 PG 766

REVISIONS

6/16/2022 8:41:15 AM
11:15:27 AM
11:15:27 AM

20-01-0002



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

PROJECT INFORMATION

Project No:	B-5372	County:	Cabarrus
WBS No.:	46087.1.1	Document Type:	PCE or CE
Fed. Aid No:	N/A	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Permit Type(s):	N/A
Project Description: Replacement of Bridge No. 109 on SR 1706 (E. 1 st Street) over US 29.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<p><u>Description of review activities, results, and conclusions:</u> *Previously reviewed under 15-02-0043* Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on January 7, 2020. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is defined on the following maps. All properties over fifty years of age within the APE were visually inspected, and no properties warrant further evaluation. The Study Area borders the Determined Eligible/Study Listed Kannapolis Mill Village Historic District: Black Section (CA0264A), however the district will not be affected by this project and does not fall within the APE. Bridge No. 109 is not eligible for NR listing. There are no National Register listed or eligible properties. If design plans change, additional review will be required.</p> <p><u>Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:</u> HPO quad maps and GIS information recording NR, SL, LD, DE, and SS properties for the Cabarrus County survey and Google Maps are considered valid for the purposes of determining the likelihood of historic resources being present. There are no National Register listed or eligible properties within the APE and no survey is required.</p>

SUPPORT DOCUMENTATION

Map(s)
 Previous Survey Info.
 Photos
 Correspondence
 Design Plans

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Kate Hubbard

1/7/2020

NCDOT Architectural Historian

Date

15-02-0043
Revised



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



PROJECT INFORMATION

Project No: **B-5372** County: **Cabarrus**
 WBS No: **46087.1.1** Document: **CE**
 F.A. No: **na** Funding: State Federal
 Federal Permit Required? Yes No Permit Type: **USACE**

Project Description:

The project calls for the replacement of Bridge No. 109 on SR 1706 (East 1st Street) over US 29 in Cabarrus County. The archaeological Area of Potential Effects (APE) for the project is defined as an approximate 2,900 foot (883.92 m) long corridor running along East 1st Street. From the center of the bridge, the corridor extends approximately 2,200 feet (670.56 m) to the northwest and 700 feet (213.36 m) to the southeast. The corridor has a variable width of 200 feet (60.96 m) at its northwestern end and expands to 850 feet (259.08 m) towards the southeast. The APE includes all existing ramps and a portion of US 29 extending approximately 825 feet (251.46 m) to the north and 420 feet (128.02 m) to the south along US 29 from the bridge. In all, the APE encompasses approximately 32 acres, which will cover all ground disturbing activities.

It is anticipated that this project will require federal permits. Therefore, the archaeological review of Bridge No. 109 was conducted pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance (36 CFR Part 800).

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

Bridge No. 109 is located in Kannapolis and west of I-85 at the northern boundary of Cabarrus County, North Carolina. The project area is plotted in the northwest corner of the Concord USGS 7.5' topographic quadrangle (Figure 1).

A map review and site file search were conducted at the Office of State Archaeology (OSA) on February 19, 2015 with a subsequent review on December 18, 2019 due to the project's resubmittal. No previously recorded archaeological sites have been identified within the APE or a mile of the bridge. According to the North Carolina State Historic Preservation Office online data base (HPOWEB 2015), the boundary for the Study Listed and Determined Eligible Kannapolis Mill Village (CA 264a) is just south of the archaeological APE. However, no surveyed or contributing archaeological resource falls within the APE. Topographic maps, USDA soil survey maps, aerial photographs (NC One Map), and historic maps (North Carolina maps website) were examined for information on environmental and cultural variables that may have contributed to prehistoric or historic settlement within the project limits and to assess the level of ground disturbance.

Bridge No. 106 and East 1st Street cross US 29 from the northwest to southeast. Unnamed tributaries to Cold Water Creek run alongside East 1st Street to the north and south crossing under the road west of the bridge. These waterways are part of the Yadkin-Pee Dee drainage basin. The APE is situated mostly on ridges and side slope adjacent to the drainages, but the majority of the landforms has been modified

15-02-0043 Revised

(Figure 2). It is likely that some of the area was in floodplain prior to the construction of US 29 and the ramps. The channels for the tributaries have also been modified to improve drainage and prevent flooding. Although the APE is forested in places, it is characterized by urban development and residential properties. Overall, ground disturbance is very heavy.

The USDA soil survey map suggests that the APE is composed of two soil types (see Figure 2). The Cecil-Urban land complex (CeB) covers most of the project area. These are mixed soils, where most of the natural soils have been altered or covered as the result of grading or digging. The series also contain households, pavement, and building complexes. It is very unlikely for intact deposits to be found in these altered soils. The second series, Cecil sandy clay loam (CcD2), is situated along the side slopes next to the tributaries. These are well drained but eroded soils with a slope of 8 to 15 percent. Due to soil erosion, it is unlikely for a significant site to be present.

A review of the site files shows few archaeological surveys and no sites within a mile of the project area. Although the current APE has not been reviewed or included in any previous studies, nearly all properties surround the project have been reviewed and cleared by OSA as low potential due to disturbance. The current project area shares the same characteristics as these other reviewed properties.

Lastly, a historic map review was conducted. Early and accurate historic maps of the project vicinity are rare. The 1910 soil map of Cabarrus County is the earliest map to depict the project area with any accuracy (Figure 3). This map shows no roads or structures in the vicinity of the current bridge. Likewise, subsequent early 20th century maps illustrate no additional features. As a result, it seems that no historic archaeological deposits should be affected by the proposed bridge replacement.

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

The defined archaeological APE for the proposed replacement of Bridge No. 109 over US 29 consists of heavily disturbed soils associated with past urban development and road construction. It is very unlikely intact and significant archaeological deposits will be encountered within the APE. In addition, OSA has cleared many neighboring properties with similar characteristics as low potential for significant sites. Lastly, the historic maps suggest that no former historic structures and/or features are in the area. As long as impacts to the subsurface occur within the defined APE, no further archaeological work is recommended for the replacement of Bridge No. 109 in Cabarrus County. If construction should affect subsurface areas beyond the defined APE, further archaeological consultation might be necessary.

Please note, this project falls within a North Carolina County in which the Catawba Nation have expressed an interest. It is recommended that you contact each federal agency involved with this project to determine their Section 106 Tribal consultation requirements.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Photocopy of County Survey Notes Other: **Images from historic maps**

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED



C. Damon Jones
 NCDOT ARCHAEOLOGIST II

1/2/20

Date