Dewberry

# R-5889 External Scoping/Merger Screening Meeting

**DATE:** September 13, 2023

**TIME:** 9:30 a.m. – 11:30 a.m.

**LOCATION:** NCDOT Century Center – CCA Technical Services Conference Room and Microsoft Teams

**MEETING LEADS:** Chris Smitherman (NCDOT – Division 7), Beth Smyre, Karen Capps (Dewberry)

**PURPOSE:** Discuss scope, purpose, study area, and design considerations for proposed US 29 improvements (STIP Project No. **R-5889**)

## Agenda

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|---|---|
| 9:30 a.m. - 9:40 a.m. | **Introductions** |
| 9:40 a.m. – 9:50 a.m. | **Project Background**<br>Project Description, Purpose<br>Proposed Improvements<br>Project Schedule and Costs<br>Environmental Document Approach |
| 9:50 a.m. – 10:00 a.m. | **Project Study Area**<br>Review Environmental Features<br>Proposed Study Area Limits |
| 10:00 a.m. – 10:10 a.m. | **Design Considerations**<br>Discuss Design Constraints, Typical Section, Service Road Needs |
| 10:10 a.m. – 10:30 a.m. | **Discussion**<br>Agency Questions and Input |
| 10:30 a.m. – 10:45 a.m. | **Break** |
| 10:45 a.m. – 11:20 a.m. | **Merger Screening Meeting** |
| 11:20 a.m. – 11:30 a.m. | **Next Steps**<br>Summarize Action Items |

# ATLAS Workbench Report

## Basic Project Information

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|---|---|
| Project Name | R-5889 |
| Project Description | US 29 Upgrade to Interstate |
| TIP ID | R-5889 |
| Prime Firm Name | Dewberry Engineers INC |
| Funding Source | |
| Lead Agency Name | |
| Document Type | |

## Merger Pre Screening

### Merger Pre Screening Questionnaire

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| *Guidance for completing the below Merger Pre Screening questions will be posted to NCDOT Connect in the near future. When posted, url will be available here.* | |
| **Question 1:** Is the project likely to require Section 404 approval?<br>*If YES, proceed to Question 2. If NO, skip to the Conclusion section.* | Yes, Section 404 approval is likely. |
| **Question 2:** Is the project likely to require a Type III Categorical Exclusion (CE) or higher level of documentation?<br>*If YES, proceed to question 3. If NO, skip to conclusion section below.* | Yes, the project is a Type II (A/B) #13 OR Type III CE or higher level document. |
| **Question 3:** What resources have the potential to be impacted by the project? *Use multiselect questions below to mark potential resources.* | |
| What Natural Environment resources are likely to be impacted or involved in this project? | Stream(s), Wetland(s), Surface water(s), T/E species or potential habitat |
| What Human Environment resources are likely to be impacted or involved in this project? | Historic site(s)/District(s), Archaeological resource(s), EJ community(ies), Park(s)/recreation area(s), Major change (s) in access |
| What Public/Stakeholder resources are likely to be impacted or involved in this project? | |
| **Question 4:** Do any of the involved resources conflict?<br>*If YES, Merger Screening is recommended. Skip to conclusion below. If NO, proceed to Question 5.* | No, the involved resource(s) are not in conflict. |
| **Question 5:** If there are not conflicting resources, could there be substantial impacts to one or more resource(s)?<br>*Proceed to Conclusion section below.* | Yes, there could be substantial impacts to resource(s). |

## Conclusion

**Merger Pre Screening Conclusion** What is the conclusion of Merger Pre Screening activity? Merger Screening is recommended.

*If Merger Screening is recommended, information should be logged in the ATLAS Workbench Merger tab.*

Has NCDOT Environmental Policy Unit approved this conclusion? (Question to be completed by NCDOT EPU) ANSWER REQUIRED

## Report Metadata

Generated by: Karen.Capps

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**North Carolina Department of Transportation**

**R-5889 Project Data Sheet**

**August 30, 2023**

| **Essential Project Information** | |
|---|---|
| STIP Project Name | US 29 (Future I-785), SR 2565 (Hicone Road) to US 158 / NC 14<br>• A – SR 2565 (Hicone Road) to NC 150<br>• B – NC 150 to US 158/NC 14 |
| STIP Number | R-5889 |
| County | Guilford and Rockingham |
| NCDOT Division | Division 7 |
| ROW Date | 2028 (2024-2033 Adopted STIP, June 2023) |
| LET Date | 2031 (2024-2033 Adopted STIP, June 2023) |
| Schedule Considerations | NCDOT is pursuing advanced acquisition for R-5889A section due to anticipated growth along the corridor. |
| Cost Estimates | From 2024-2033 Adopted STIP (June 2023)<br>• ROW Funds Needed: $ 26,500,000<br>• Utility Funds Needed: $ 7,300,000<br>• Construction Funds Needed: $ 186,200,000<br>• Total Funds Needed: $ 220,000,000 |
| Funding Type | State Funded (2024-2033 Adopted STIP, June 2023) |

| **Proposed Project Details** | |
|---|---|
| Project Description | Upgrade approximately 16 miles of US 29 to interstate standards. |
| Project Limits | From just south of Hicone Road (SR 2565) in Guilford County to US 158 / NC 14 in Rockingham County.<br>• A – SR 2565 (Hicone Road) to NC 150<br>• B – NC 150 to US 158/NC 14 |
| Typical Section | Divided four-lane section with two 12-foot lanes in each direction, a 46-foot median, and paved inside shoulders on US 29.<br>Service roads along corridor will include two 11-foot travel lanes in each direction with 2-foot shoulders and guardrail. |
| Access Control | Full control. |

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| Design Speed | 75 mph |
| Right-of-Way Width | Varies |
| Physical or Engineering Constraints | Crossing of 10 water bodies |
| Other Considerations | Increased development pressure, especially along A-section. |
| Survey Request Date | February 2023 (Completed) |
| Design Plan | |
| Construction Recommendation | |
| Consultant Involvement | Dewberry assisting with initial scoping tasks. Task Order for project development tasks, design, and coordination is in development. |

| **Project History** | |
|---|---|
| Planning Studies | *Greensboro Urban Area Comprehensive Transportation Plan* (CTP), October 2020<br>*Greensboro 2045 Metropolitan Transportation Plan* (MTP), February 2021<br>*Rockingham County Comprehensive Transportation Plan* (CTP), March 2010 |
| SPOT Description | SR 2565 (Hicone Road) in Greensboro To US 158 / NC 14 in Reidsville. Upgrade Corridor to Interstate Standards. |
| Feasibility Studies | Stantec, *Project Scoping Technical Report* (Feasibility Study), June 2019. |
| Problem Statement | No separate problem statement available. From the June 2019 Scoping Technical Report (*which includes study limits from Hicone Road to US 158/NC 14*):<br>"The purpose of this project is to improve US 29 to interstate standards from just south of Hicone Road (SR 2565) in Guilford County to just south of the Virginia Line in Caswell County. The project need is based on US 29's importance as a statewide corridor, connecting Greensboro and Guilford County to Virginia's US 29 strategic corridor, serving Guilford, Rockingham, and Caswell Counties." |
| Alternatives Previously Dismissed and Why | From the June 2019 Scoping Technical Report:<br>Maintain the existing 30-foot paved median. This alternative was dismissed because it would not accommodate the addition of a third lane in each direction in the future. |

| **Purpose & Need** | |
|---|---|
| Purpose | From the June 2019 Scoping Technical Report:<br>"The purpose of the project is to improve US 29 to interstate standards from just south of Hicone Road (SR 2565) in Guilford County to just south of the Virginia Line in Caswell County." |

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|---|---|
| | A project specific Purpose and Need statement is in progress. |
| Need(s) | From the June 2019 Scoping Technical Report:<br><br>The project need is based on US 29's importance as a statewide corridor, connecting Greensboro and Guilford County to Virginia's US 29 strategic corridor, serving Guilford and Rockingham counties. The corridor facilitates the movement of trucks from Greensboro to Virginia and connects manufacturing in the Piedmont to Virginia and the north-eastern United States. US 29 from I-40 in Greensboro to the Virginia state line is identified as Corridor J in the North Carolina Transportation Corridor Policy for its significance in serving freight. In addition, by 2035 US 29 in Rockingham County is projected to be over capacity from Reidsville to the Guilford County line.<br><br>The traffic forecast for the corridor was updated in June 2023. Based on the latest information, forecasted traffic in 2040 along US 29 is expected to range from 71,700 vehicles per day (vpd) near Hicone Road (SR 2565) to 30,500 vpd at the US 158/NC 14 interchange with US 29 in 2045. These numbers represent an increase of 25% to 50% over the current traffic respectively. The larger traffic volume growth in and around Reidsville. |
| Supporting Data | Stantec, *Traffic Analysis US 29 Corridor Improvements* (Capacity Analysis) December 2017.<br><br>RSH, *R-5889 Traffic Forecast Report* June 19, 2023 |

| **Alternatives Currently Under Consideration** | |
|---|---|
| Alternative 1 | The Build Alternative includes a divided four-lane section with two 12-foot lanes in each direction, a 46-foot median, with paved inside shoulders on US 29 with various interchange improvements along a portion of the corridor.<br><br>Parallel auxiliary lanes are proposed on either side of US 29 in certain sections between the interchanges. |
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| **Public and Agency Coordination** | |
|---|---|
| Anticipated Permits | Section 404/401 |
| Federal Agency Involvement | The lead Federal Agency is FHWA (Federal NEPA document). Other agencies involved include USACE. |
| Public Involvement Strategy | To be determined. |
| Merger Screening Date | Merger Screening Meeting will be held on 9/13/2023. |
| Potential Merger Triggers | Impacts to jurisdictional streams or wetlands; both Haw River and Troublesome Creek (B-section) are 303(d) streams. Feedback from the public may also trigger merger process. |

| **Existing Conditions** | |
|---|---|
| Functional Classification | Principal Arterial |
| Strategic Highway Corridor | US 29 is NCDOT Strategic Transportation Corridor J. |

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| AADT | 2021 AADT ranges between 45,500 (Hicone Road) and 15,000 (north of Ruffin). |
| Access Control | Varies by segments from full control to no control of access |
| Typical Section | Varies by segment. |
| Right-of-Way Width | Varies by segment. |
| Posted Speed | 55 mph |
| Structures (bridges, RCBC, etc.) | Multiple structures are located along the approximate 16-mile corridor. |
| Railroad Involvement | Not likely. There are no railroad crossings, but railroad parallels corridor in two locations. |
| Other Adjacent STIP Projects | R-4707 – US 29; SR 4771 (Reedy Fork Parkway). Reedy Fork Parkway interchange improvements in Greensboro. Improve roadway, modify interchange, and replace bridge. Under construction (2021).<br>B-4964 – SR 2600 (Mizpah Church Road) – Replace Bridge 780085 over Southern Railroad. Under construction<br>BP7.R001 – Bridge 780023 Replacement. US 29 Bus over US 29.<br>B-4803 – SR 1925 (Worsham Mill Road) – Replace Bridge 780097 over Wolf Island Creek. Under construction.<br>*Source: NCDOT 2024-2033 STIP* |

| **Preliminary Resource Inventory Table** | |
|---|---|
| Utilities | Multiple utilities are located along the corridor. |
| Hazardous Materials | Known Underground Storage Tanks (USTs) are located along the corridor. Coordination with NCDOT GeoEnvironmental group will need to be conducted. |
| Known Potentially-Eligible National Register of Historic Places Sites/Districts | Yes. Sixty-nine potential historic properties are located along the project corridor. There are no known districts. |
| Other Cultural Resources | No known archaeological resources at this time, but further cultural resources review will be conducted during the project development phase.<br>Tribal Coordination will be required with following tribes:<br>Guilford County – Catawba Indian Nation and Occaneechi Band of the Saponi Nation (State)<br>Rockingham County – Catawba Indian Nation and Monacan Indian Nation |
| Wetlands | As shown in the Project Study Area map, wetlands are located throughout the project corridor. The June 2019 Scoping Technical Report estimated a potential wetland impact based on available online mapping. A delineation will be conducted to verify the locations and extent of all Waters of the U.S. during the project development phase. |
| Streams | As noted in the June 2019 Scoping Technical Report, the project corridor is located in the Cape Fear and Roanoke River Basins. US 29 crosses ten water bodies. Of these, one surface water is on the 303(d) impaired waterbodies list, Troublesome Creek. A delineation |

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|---|---|
| | will be conducted to verify the locations, extent, and status of all Waters of the U.S. during the project development phase. |
| FEMA Floodplain Detailed Study Area | Yes. Unnamed Tributary at Camp Herman, Reedy Fork (Hardy's Mill Pond), Benaja Creek, Haw River, Candy Creek, Troublesome Creek, Little Troublesome Creek, Jones Creek, and Lick Fork Creek. |
| Water Supply Watersheds | US 29 is not located in any Water Supply Watersheds. |
| Riparian Buffer Rules | The southern portion of the project is located in the Jordan Lake Buffer Area of the Cape Fear River basin. |
| Active Agriculture | Yes. Voluntary Agriculture Districts are present in Guilford County. |
| Parks, Greenways, Game Lands, Section 4(f) & Section 6(f) Properties | Haw River State Park. There are no known greenways, game lands, Section 4(f) or Section 6(f) properties along the corridor. Additional research will need to be conducted. |
| Environmental Justice Populations | Yes. Potential Environmental Justice Populations are located south of Hicone Road, near NC 150, and Reidsville. |
| Other Resources (i.e., Wild and Scenic Rivers, TVA, Scenic Byways, etc.) | None. |

| **Project Management Approval** | |
|---|---|
| The need for the proposed change is sufficient to justify the impacts to the scope, schedule, and budget. | |
| **Project Manager** | |
| Name | To Be Determined –<br>Interim: Ed Lewis, PE – Consultant PM Support |
| Signature | |
| Date | |
| **Supervisor** | |
| Name | Chris Smitherman, PE - NCDOT Division 7 |
| Signature | |
| Date | |

Prepared by
Dewberry

Prepared for

0 1,000 2,000 Feet

Sources: USGS, Project Study Area provided by NCDOT, USGS, SHPO, USFWS, Guilford and Randolph County

**Environmental Features Map**
**US 29 (Future I-785) from SR 2565 (Hicone Road) to US 158/NC 14**
**Guilford and Rockingham Counties, NC**

- R5889 Study Area
- USGS Streams
- National Wetlands Inventory
- Historic Property
- Historic Boundary
- Fire Stations
- EMS Facility
- Police/Sheriff Station
- Park

WBS #: 48394.1.1

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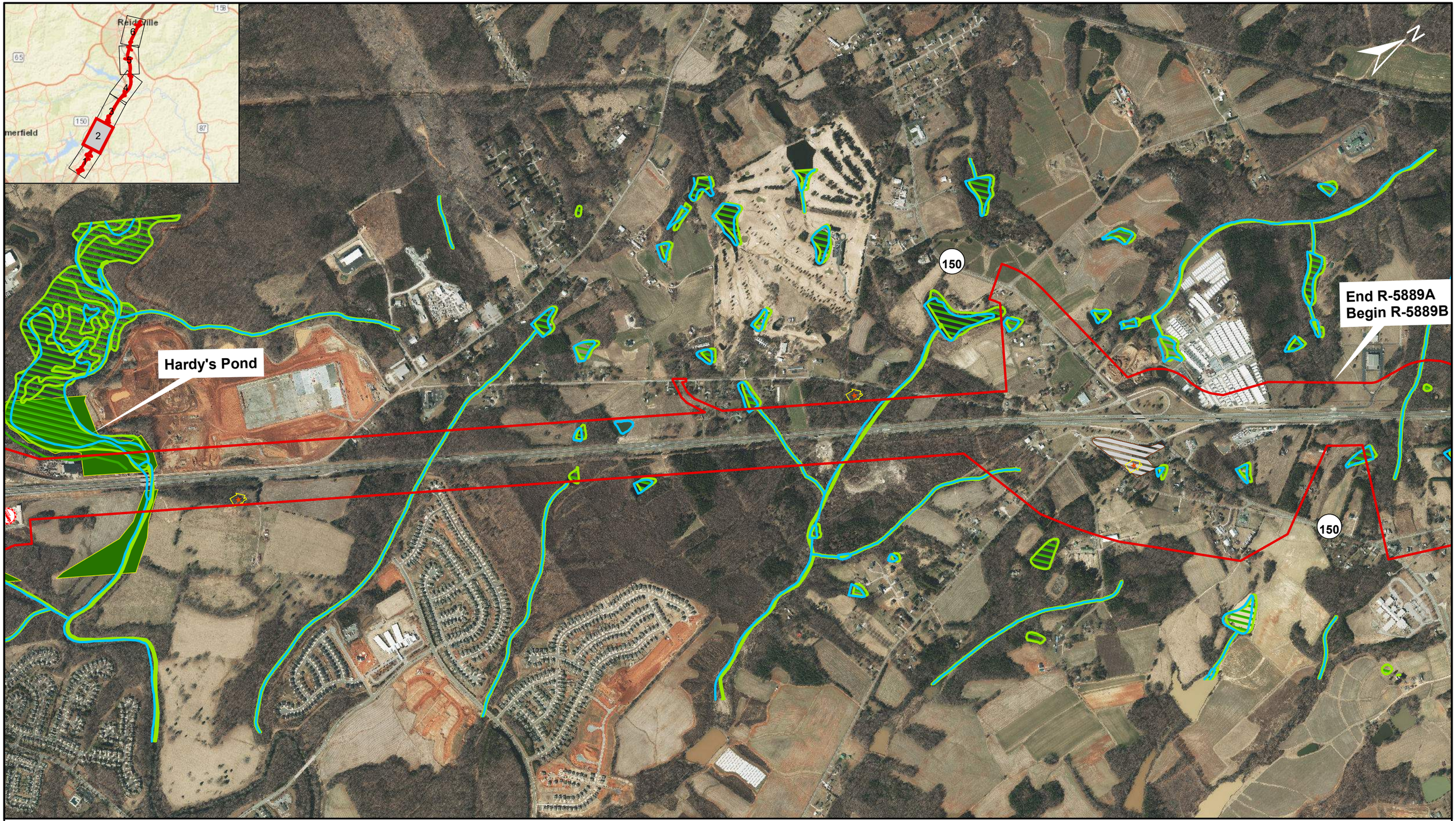
Drwn/Chkd: BF/KC

Date: 6/8/2023

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Prepared for
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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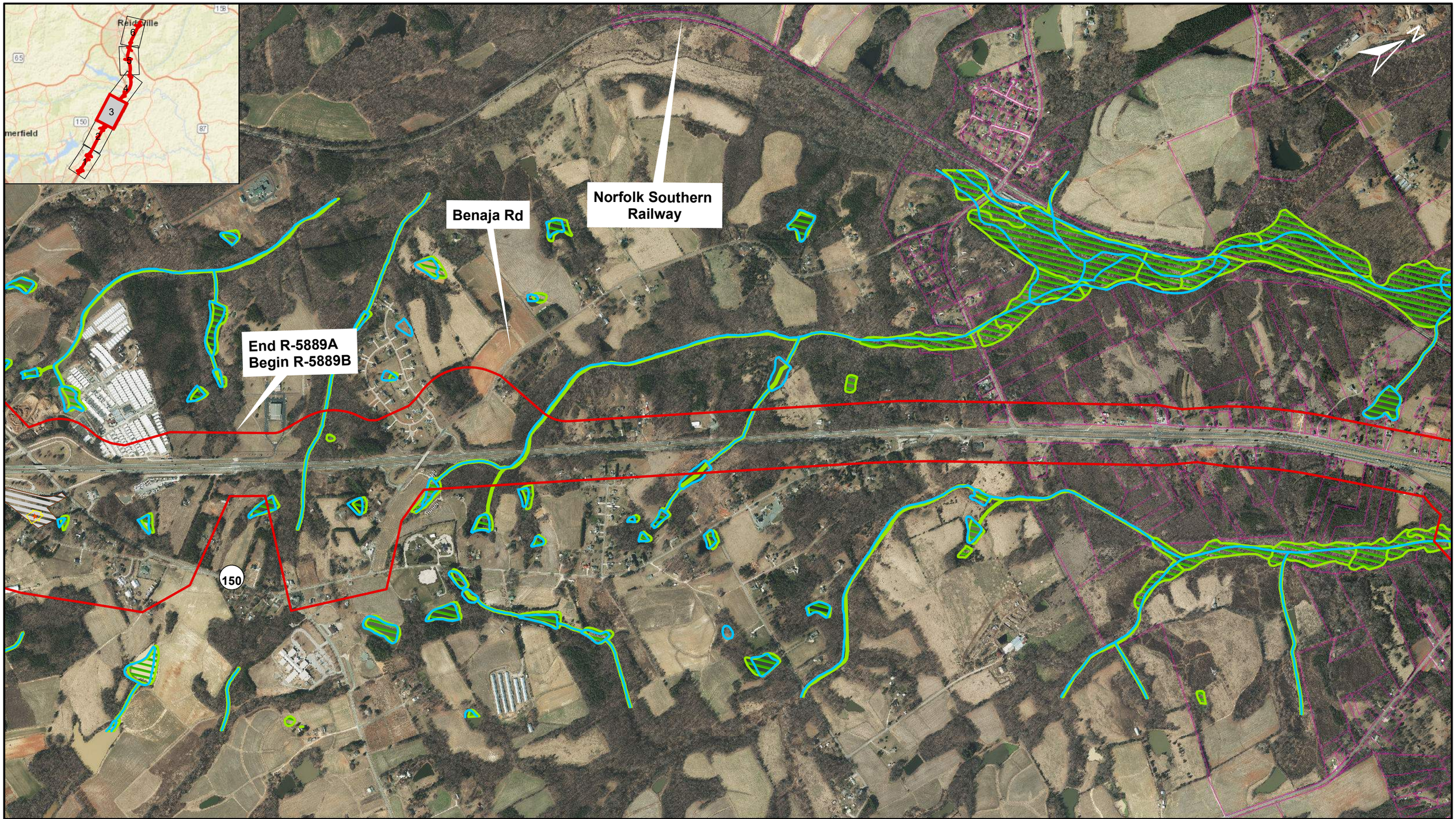


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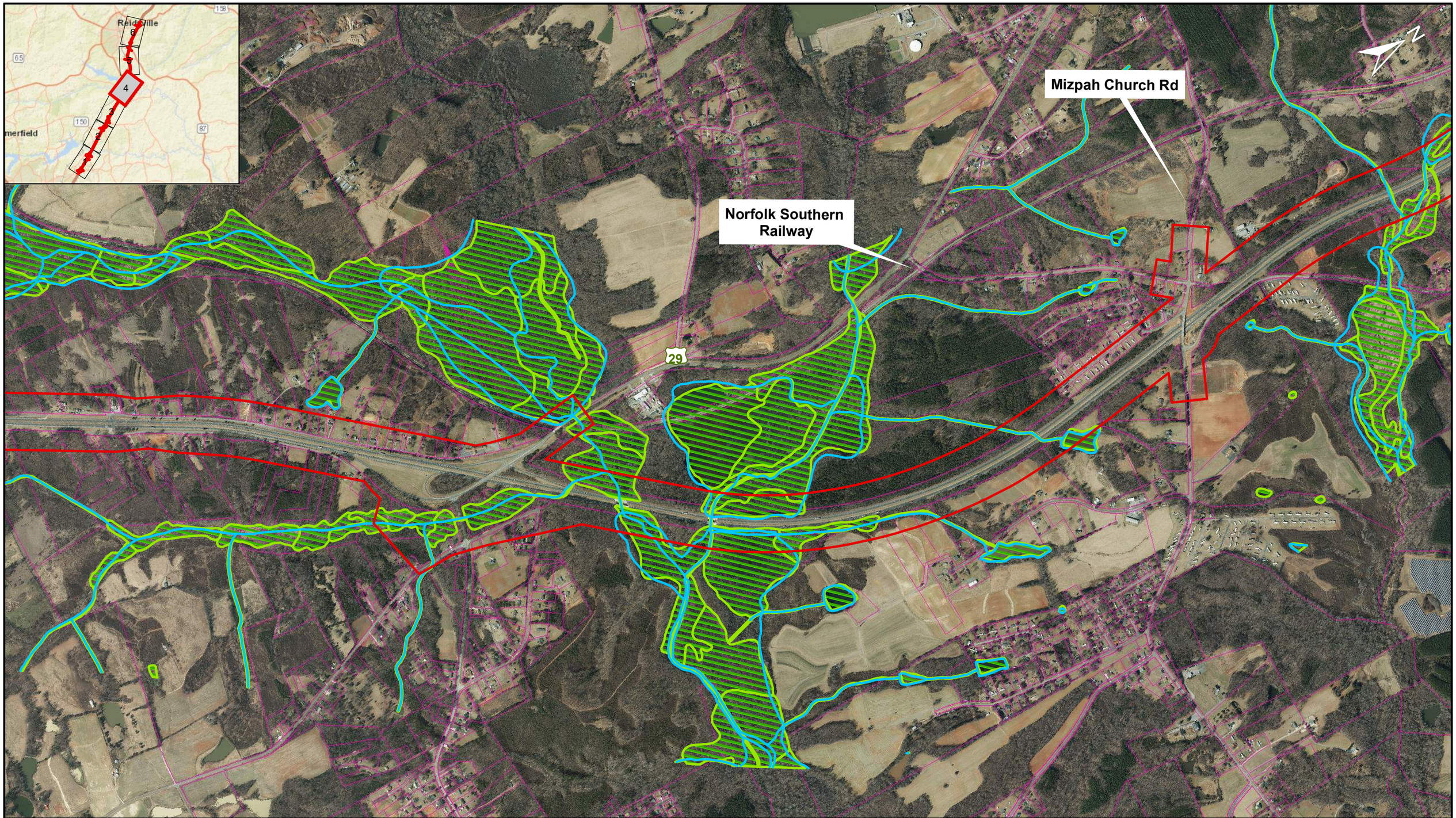


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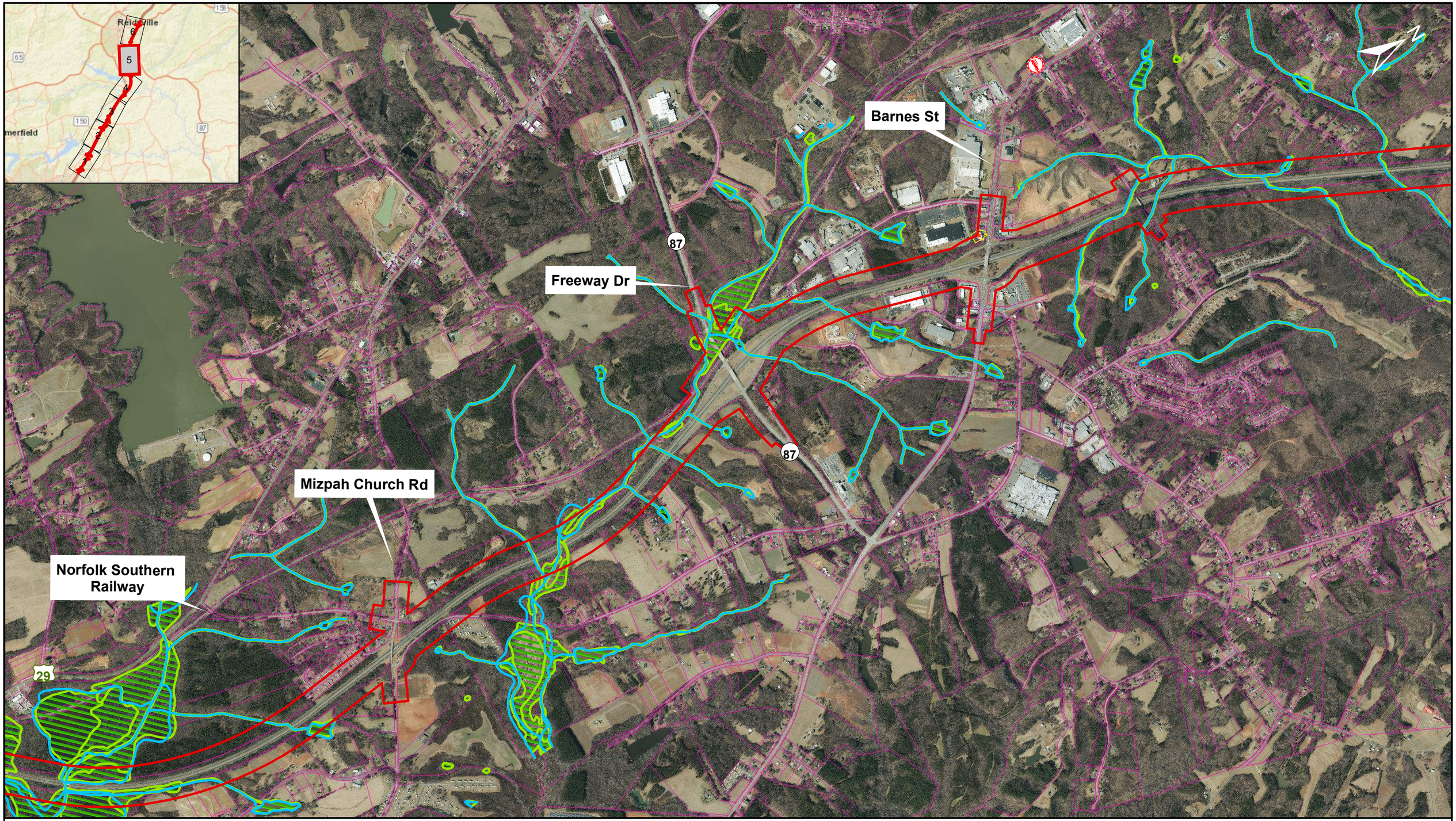


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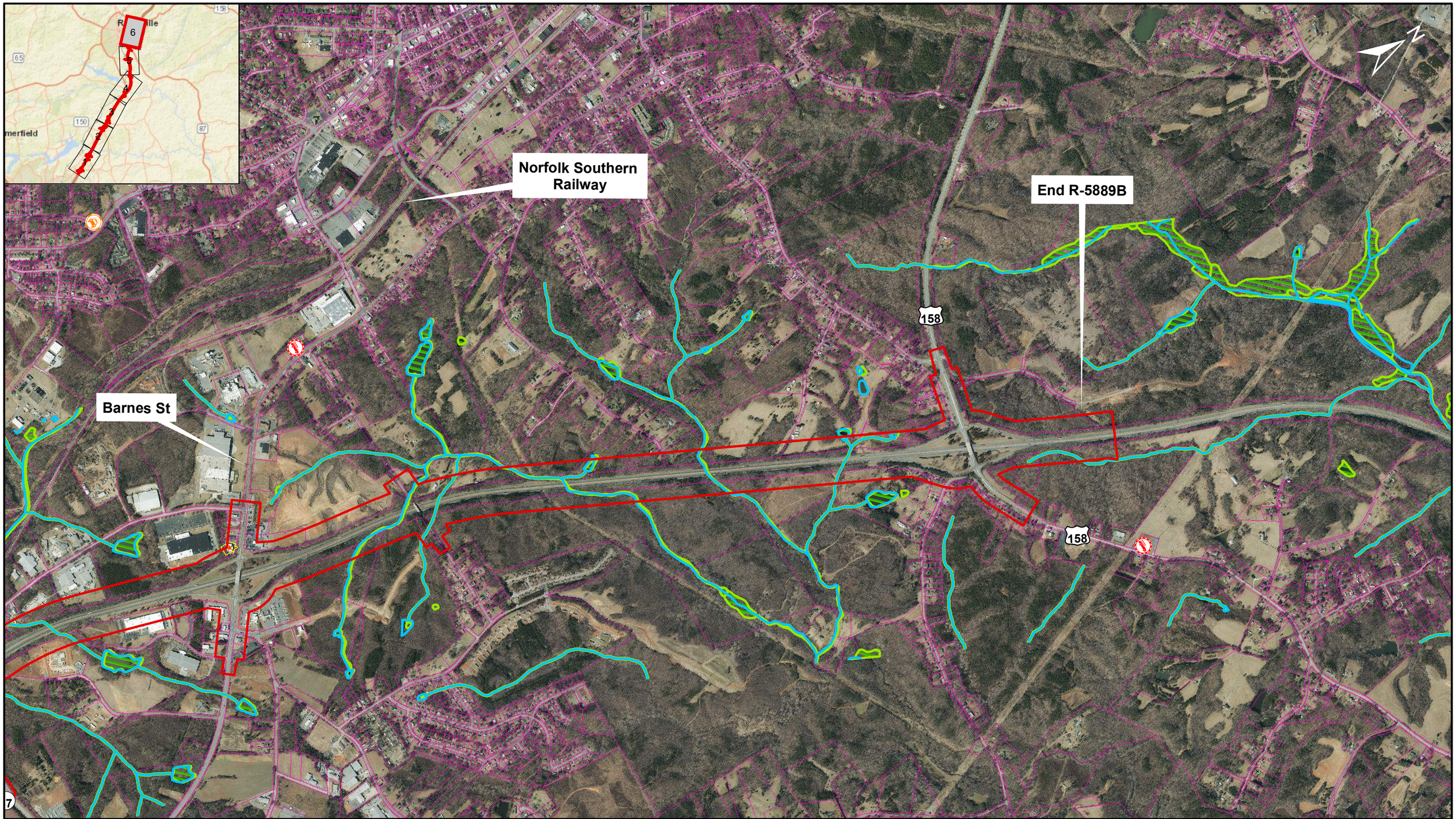


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