# North Carolina Department of Transportation

# NEPA Consultation Form

| STIP Project No.        | U-2579AA, U-2579AB      |
|-------------------------|-------------------------|
| WBS Element             | No.34839.1.7, 34839.1.8 |
| Federal Aid Project No. | 0074226; NHPIM-0040(68) |

#### A. Project Description, Location, and Purpose:

U-2579 AA and AB are two eastern sections of the Winston-Salem Northern Beltway project in Forsyth County, Division 9. The western portion of the Beltway (R-2247) extends from US 158 north to US 52. The eastern portion of the Beltway (U-2579) extends from US 52 north of Winston-Salem to US 311 southeast of Winston-Salem.

U-2579AA is part of the Eastern Section (Future I-74) from US 311 to I-40. U-2579AB is part of the Eastern Section (Future I-74) I-40 TO I-40 BUSINESS/US 421. The remaining Eastern Sections of the project, U-2579 B, D, E, and F are under construction and section C is complete.

The purposes for building the entire Northern Beltway include the following:

- Improve roadway connectivity in eastern and western Forsyth County
- Provide congestion relief for area roadways
- Expand options for regional/intrastate/interstate travel
- Help meet the state and local land use and transportation plans
- Help fulfill the Highway Trust Fund Act

The purposes for constructing Projects U-2579 are listed below. These also would be served by construction of the entire Northern Beltway.

- Improve intrastate and interstate mobility
- Improve roadway system linkage and continuity
- Reduce traffic congestion and carry future traffic at a desirable level of service
- Enhance safety
- Provide a corridor for I-74 (a congressionally designated High Priority Corridor on the National Highway System)

#### B. Consultation Phase:



C. NEPA/SEPA Class of Action Initially Approved as:

FEIS/ROD

 $\boxtimes$ 

January 2007/February 2008

D. Changes in Proposed Action & Environmental Consequences:

# Changes in Proposed Action

## <u>U-2579AA</u>

The project has had no major design changes since the completion of the environmental document.

## <u>U-2579AB</u>

Design changes made since the signing of the Right-of-Way Consultation dated July 2017 includes a change in north bound ramp ingress to I-40 and a roundabout at SR 2632 (Sedge Garden Road) and Longmont Drive. Both design changes occur within the project study area. The following design changes were made:

The north bound ramp, Y15RPD, was realigned to provide direct ingress to I-40 east bound instead of tying to the north bound flyover ramp Y15FLYBD. This revised design eliminates a traffic weaving on the flyover and eliminates weaving issues with the flyover ingress to I-40 and I-40 egress to Union Cross Road Ramp. The IAR will include this change.

The T- intersection at SR 2632 (Sedge Garden Road) and Longmont Drive has been revised to include a roundabout. This plan change was developed to improve accessibility to and from Longmont Drive.

#### **Environmental Consequences**

Construction will occur within the study area identified in the 2007 FEIS.

### Water Resources

Water resource classifications have not changed since the FEIS was completed. Water resources within the project area are all located within the Yadkin River Basin [US Geological Survey (USGS) Hydrologic Unit 03040101]. Fiddlers Creek, South Fork Muddy Creek, Swain Creek, and their associated tributaries are within the U-2579AA project study area. Fiddlers Creek and its associated tributaries are located within the U-2579AB project construction area.

Neither High Quality Waters (HQW), Water Supplies (WS-I: undeveloped watersheds or WS-II predominately undeveloped watersheds), nor Outstanding Resource Waters (ORW) occur within 1.0 mile of the project study area. No streams within the project construction area or within one mile of the project construction area are listed on the Final 2018 303(d) list of impaired waters for turbidity and/or sedimentation.

The jurisdictional features have been updated since the completion of the referenced FEIS and are included in the referenced Preliminary Jurisdictional Determination Report (R-2247CA, EB & U-2579 AA, AB, C, D, E, F), dated January 2016 (Report) and approved JD for Section U-2579B, dated 2/28/2013. Additional jurisdictional features not identified within the FEIS study area were identified and included in the referenced Reports. Additionally, as the study area for the referenced Report was larger than the original study area for the FEIS, additional jurisdictional features are included in the referenced Report.

# U-2579AA

Additional jurisdictional features include: fourteen (14) wetlands, twelve (12) streams, and two (2) ponds. These features have been included below in Table 1, Table 2, and Table 3, respectively.

As footnoted in Table 2, a section of the South Fork Muddy Creek (Stream ESE-S20, as identified in the referenced Report) was labeled as ESE-S28 in the FEIS; and two streams (ESE-S18 – Swaim Creek and ESE-S19) located within the FEIS study area extend further outside of the FEIS study area.

| Wetland ID | NCWAM ID                   | Size (acres) |
|------------|----------------------------|--------------|
| ESE-W14    | Headwater                  | 0.03         |
| ESE-W15    | Headwater                  | 0.08         |
| ESE-W16    | Headwater                  | 0.06         |
| ESE-W17    | Headwater                  | <0.01        |
| ESE-W18    | Bottomland Hardwood Forest | 0.32         |
| ESE-W19    | Bottomland Hardwood Forest | 0.46         |
| ESE-W20    | Headwater                  | 0.33         |
| ESE-W21    | Headwater                  | 0.03         |
| ESE-W22    | Bottomland Hardwood Forest | 0.36         |
| ESE-W23    | Bottomland Hardwood Forest | 0.20         |
| ESE-W24    | Bottomland Hardwood Forest | 1.66         |
| ESE-W57    | Bottomland Hardwood Forest | 0.77         |
| ESE-W58    | Bottomland Hardwood Forest | 0.09         |
| ESE-W60    | Bottomland Hardwood Forest | 0.83         |

| Table 1 U-2579AA Additional Juris | dictional Wetlands |
|-----------------------------------|--------------------|
|-----------------------------------|--------------------|

#### Table 2 U-2579AA Additional Jurisdictional Streams

| Stream ID                 | Stream Status | Length (If) |
|---------------------------|---------------|-------------|
| ESE-S18<br>(Swaim Creek)* | Perennial     | 2,387       |
| ESE-S19**                 | Intermittent  | 136         |
| 232-319                   | Perennial     | 1,446       |
| ESE-S28                   | Intermittent  | 89          |
| L3L-320                   | Perennial     | 429         |
| ESE-S29                   | Intermittent  | 135         |
| ESE-S30                   | Intermittent  | 34          |
| Fiddlers Creek            | Perennial     | ~600        |
| ESE-S31                   | Intermittent  | 263         |
| ESE-S32                   | Intermittent  | 77          |
| ESE-S33                   | Intermittent  | 879         |
|                           | Perennial     | 791         |
| ESE-S34                   | Perennial     | 417         |
| ESE-S35                   | Intermittent  | 904         |
| ESE-S36                   | Intermittent  | 103         |
| ESE-S37                   | Perennial     | 682         |
| ESE-S74                   | Intermittent  | 149         |
| ESE-S75                   | Intermittent  | 1045        |
| South Fork Muddy Creek*** | Perennial     | ~450        |

\*Swaim Creek (ESE-S18) extends outside of FEIS Study Area

\*\*ESE-S19 extends outside of FEIS study area.

\*\*\*A portion of South Fork Muddy Creek (Stream ESE-S20) was labeled as ESE-S28 in the FEIS

| Pond ID | Abutting Feature | Size (acres) |
|---------|------------------|--------------|
| ESE-P15 | N/A              | 0.20         |
| ESE-P12 | N/A              | 0.10         |

#### Table 3 U-2579AA Additional Jurisdictional Ponds

## U-2579AB

Additional jurisdictional features include: thirty-two (32) wetlands, thirty-four (34) streams, and four (4) ponds. These features have been included below in Table 1, Table 2, and Table 3, respectively.

As footnoted in Table 1, a portion of Wetland ESE-W54 in the referenced Report was identified in the FEIS as Wetland ESE-W14; and as footnoted in Table 2, the feature identified in the referenced Report as Stream ESE-S42 was identified in the FEIS as a linear wetland (ESE-W13).

| Wetland ID | NCWAM ID                   | Size (acres) |
|------------|----------------------------|--------------|
| ESE-W25    | Headwater                  | 0.30         |
| ESE-W26    | Bottomland Hardwood Forest | 0.14         |
| ESE-W27    | Bottomland Hardwood Forest | 0.19         |
| ESE-W28    | Riverine Swamp Forest      | 0.20         |
| ESE-W29    | Riverine Swamp Forest      | 0.35         |
| ESE-W30    | Riverine Swamp Forest      | 0.01         |
| ESE-W31    | Bottomland Hardwood Forest | 0.02         |
| ESE-W32    | Bottomland Hardwood Forest | 1.42         |
| ESE-W33    | Bottomland Hardwood Forest | 0.02         |
| ESE-W34    | Bottomland Hardwood Forest | <0.01        |
| ESE-W35    | Bottomland Hardwood Forest | <0.01        |
| ESE-W36    | Non-Tidal Freshwater Marsh | 0.40         |
| ESE-W37    | Bottomland Hardwood Forest | 0.17         |
| ESE-W38    | Bottomland Hardwood Forest | 0.03         |
| ESE-W40    | Headwater                  | 0.09         |
| ESE-W41    | Headwater                  | 0.16         |
| ESE-W42    | Headwater                  | 0.08         |
| ESE-W43    | Headwater                  | 0.03         |
| ESE-W44    | Headwater                  | <0.01        |
| ESE-W45    | Headwater                  | 0.06         |
| ESE-W46    | Headwater                  | 0.16         |
| ESE-W47    | Floodplain Pool            | 0.02         |

#### Table 1 U-2579AB Additional Jurisdictional Wetlands

| Wetland ID | NCWAM ID                   | Size (acres) |
|------------|----------------------------|--------------|
| ESE-W48    | Riverine Swamp Forest      | 0.36         |
| ESE-W49    | Non-Tidal Freshwater Marsh | 0.17         |
| ESE-W50    | Bottomland Hardwood Forest | 0.96         |
| ESE-W51    | Headwater                  | 0.04         |
| ESE-W52    | Seep                       | 0.03         |
| ESE-W53    | Seep                       | 0.03         |
| ESE-W54*   | Headwater                  | 1.28         |
| ESE-W55    | Seep                       | 0.02         |
| ESE-W56    | Seep                       | <0.01        |
| ESE-W59    | Floodplain Pool            | <0.01        |

\*Portion of Wetland ESE-W54 was identified in the FEIS as Wetland ESE-W14

# Table 2 U-2579AB Additional Jurisdictional Streams

| Stream ID | Stream Status | Length (lf) |
|-----------|---------------|-------------|
| ESE-S13   | Intermittent  | 554         |
| ESE-313   | Perennial     | 112         |
| ESE-S38   | Intermittent  | 843         |
| ESE-S39   | Perennial     | 393         |
| ESE-S40   | Perennial     | 367         |
| ESE-S41   | Perennial     | 251         |
| ESE-S42*  | Perennial     | 148         |
| ESE-S43   | Perennial     | 105         |
| ESE-S44   | Intermittent  | 449         |
| ESE-S45   | Perennial     | 363         |
| ESE-S46   | Perennial     | 116         |
|           | Intermittent  | 74          |
| ESE-S47   | Perennial     | 169         |
| ESE-S48   | Intermittent  | 108         |
| ESE-S49   | Perennial     | 831         |
| ESE-S50   | Perennial     | 337         |
| ESE-S51   | Intermittent  | 76          |
| ESE-S52   | Perennial     | 686         |
|           | Intermittent  | 169         |
| ESE-S53   | Perennial     | 316         |
| ESE-S54   | Intermittent  | 98          |
| ESE-S56   | Perennial     | 1010        |
| ESE-S58   | Perennial     | 493         |
|           | Intermittent  | 102         |
| ESE-S59   | Perennial     | 956         |
| ESE-S60   | Perennial     | 849         |
| ESE-S61   | Intermittent  | 1082        |

| Stream ID | Stream Status | Length (If) |
|-----------|---------------|-------------|
| ESE-S62   | Intermittent  | 157         |
|           | Intermittent  | 462         |
| ESE-S63   | Perennial     | 1697        |
| ESE-S64   | Perennial     | 160         |
| ESE-S65   | Intermittent  | 48          |
| ESE-S66   | Perennial     | 79          |
| ESE-S67   | Intermittent  | 189         |
| ESE-S68   | Perennial     | 81          |
| ESE-S69   | Intermittent  | 57          |
| ESE-S70   | Intermittent  | 129         |
| ESE-S71   | Perennial     | 19          |
| ESE-S72   | Perennial     | 418         |

\*Stream ESE-S42 was identified as a linear wetland (ESE-W13) in FEIS

#### Table 3 U-2579AB Additional Jurisdictional Ponds

| Pond ID | Abutting Feature | Size (acres) |
|---------|------------------|--------------|
| ESE-P11 | Stream ESE-S64   | 0.30         |
| ESE-P12 | Stream ESE-S68   | 0.50         |
| ESE-P13 | Stream ESE-S68   | 0.30         |
| ESE-P14 | Stream ESE-S12   | 0.30         |

#### Federally Protected Species

As of its most recent update on July 17, 2020, the United States Fish and Wildlife Service (USFWS) lists three federally protected species for Forsyth County (see Table below). Since completion of the referenced FEIS, the red-cockaded woodpecker has been removed from the list, and the Northern long-eared bat has been added to the list.

# Federally protected Species listed for Forsyth County

| Scientific Name           | Common Name                 | Federal<br>Status | Habit<br>Present | Biological<br>Conclusion |
|---------------------------|-----------------------------|-------------------|------------------|--------------------------|
| Glyptemys<br>muhlenbergii | Bog turtle                  | T(S/A)            | No               | Not Required             |
| Myotis<br>septentrionalis | Northern long-<br>eared bat | Т                 | Yes              | *                        |
| Cardamine<br>micranthea   | Small-anthered bittercress  | E                 | No               | No Effect                |

T(S/A) – Threatened due to similarity of appearance: T-Threatened; E – Endangered \*May Affect – NLEB is consistent with the 4(d) rule

#### Northern long-eared bat:

The Northern long-eared bat (*Myotis septentrionalis*) (NLEB) has been assessed. NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R § 17.40(o) USFWS concurrence with this determination is not required. The

referenced memo was submitted to USFWS on March 30, 2017, indicating that NCDOT is in compliance with the 4(d) rule for this species, therefore satisfying Section 7 of the Endangered Species Act (ESA). As the USFWS did not respond within 30 days of notice, NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

The remaining species and their biological conclusions are accurate.

### **Parks and Recreation Facilities**

Since the FEIS/ROD, the Winston-Salem and Forsyth County City-County Planning Board Greenway Plan developed in December 2012, includes greenway along Fiddlers Creek in the vicinity of Meredith Way and the I-40/I-74 interchange on U-2579AB. The project team has coordinated with the City of Winston Salem and Forsyth County Parks and Recreation Departments to minimize any conflicts with future greenways.

### Archaeology & Historic Architecture

NCDOT has reviewed the Section 106 effects findings for historic properties within the project's area of potential effects (APE), that were made as part of the NEPA analysis. NCDOT has confirmed there is no new information that would alter the original Section 106 findings and, therefore, they remain valid. No archaeology sites or historic architecture resources are located withing U-2579AA or U-2579 AB study area.

### Noise and Air Analysis

The Design Noise Report (DNR) for U-2579AB has been completed (signed April 10, 2021), and the noise wall balloting process has been conducted. Four noise walls were found to be feasible and reasonable and will be incorporated into the project plans and specifications and will be constructed. The Design Noise Report for U-2579AA has been completed (signed May 12, 2020), and the noise wall balloting process conducted. One noise wall was found to be feasible and reasonable and will be incorporated into the project plans and plans and specifications and will be constructed.

No further studies are needed for air quality.

# E. Conclusion:

The above NEPA documentation has been reevaluated (as required by 23 CFR 771 or by NC General Statue Chapter 113A Article 1). It has been determined that the current proposed action is essentially the same as the original proposed action. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced documents unless noted otherwise herein. Therefore, the original Administration Action remains valid.

# F. Coordination

NCDOT personnel have discussed the current project parameters with qualified NCDOT representatives and FHWA. The NCDOT Project Manager, Jennifer Hernandez, PE, hereby verifies the involvement of the following staff and the incorporation of their technical input:

| Design Engineer:               | Casey Harris    | 5/21/2021  |
|--------------------------------|-----------------|------------|
| Environmental Specialist:      | William Barrett | 11/16/2020 |
| FHWA:                          | Felix Davila    | 5/21/2021  |
| Roadside Environmental         | Thomas Smith    | 3/18/2021  |
| Hydraulics Unit                | Brook Anderson  | 3/4/2020   |
| Environmental Policy Unit      | Colin Mellor    | 5/12/2021  |
| Noise & Air Quality            | Missy Pair      | 5/21/2021  |
| Archaeologist                  | Matt Wilkerson  | 9/26/2020  |
| Historic Architecture          | Mary Pope-Furr  | 9/16/2020  |
| GeoEnvironmental               | Gordon Box      | 8/21/2020  |
| Division Construction Engineer | Lee Puckett     | 5/21/2021  |

# G. Consultation Approval for NCDOT Project STIP U-2579AA and U-2579AB

| Prepared By:        | DocuSigned by:   |
|---------------------|--|
| 7/14/2021           | Jennifer Gernandez   |
| Date                | Jennifer Hernandez, PE, Project Manager<br>NCDOT   |
| <b>Reviewed By:</b> | DocuSigned by:   |
| 7/14/2021           | Pamela R. Williams   |
| Date                | Pamela R Williams, Project Management Team Lead  |
| Certified           | NCDOT staff certifies if FHWA signature was previously required or where changes have resulted in FHWA signature being required. |
| 7/14/2021           | Virginia Mabry   |
| Date                | Virginia Mabry, Project Management Unit Manager<br>North Carolina Department of Transportation                                   |
| FHWA Approved:      |  |
|                     | DocuSigned by:   |
| 7/14/2021           | For: Feliz Davila  |
| Date                | John F. Sullivan, III, PE, Division Administrator<br>Federal Highway Administration  |

### H. Project Commitments (as of July 13, 2021)

#### Forsyth County WINSTON-SALEM NORTHERN BELTWAY EASTERN SECTION Federal Project No. NHPIM-0040(68) WBS No.34839.1.7; 34839.1.8 TIP No. U-2579AA, U-2579AB

Current status, changes, or additions to the project commitments as shown in the environmental document for the project are printed in *italics.*,

#### **Project Development and Environmental Analysis:**

1. Archaeological site 31FY570<sup>\*\*</sup>, a historic cemetery, will require avoidance or compliance with North Carolina General Statute, Chapter 70.

This site is located outside of the Area of Potential Effects (A.P.E.) of the U-2579AA and AB segments, a short distance to the west of the R-2247EB segment.

2. Temporary construction easements may be needed on the historic Clayton Family Farm property. It has been determined that these temporary easements do not constitute a use under Section 4(f). No permanent right of way will be acquired from the Clayton Family Farm property. All work will be contained in temporary easements, and the encroachment on the property will be minimal. The duration of the temporary encroachment on the Clayton Family Farm property will be shorter than the timeframe for the construction of the project. The land temporarily occupied from the Clayton Family Farm will be fully restored, that is, the Clayton Family Farm property will be returned to a condition that is at least as good as that which existed prior to the project.

This site is located outside of the Area of Potential Effects (A.P.E.) of the U-2579AA and AB segments The U2579F segment of the project currently under construction required a permanent drainage easement at the back of the property for 150' by 20' to accommodate ditch maintenance adjacent to a pipe that is outside of the historic boundary. The property owners are amendable to the easement and ditch maintenance. The easement and maintenance will not affect the qualities that make this property historically significant. FHWA, NCDOT, and SHPO provided concurrence for the assessment of affects October 30, 2018 and agreed on a no adverse effect "de minimuis" 4(f) use.

3. Eligibility of Site 31FY64 is unknown because archaeologists were denied access to the property. If the site falls within the Preferred Alternative after final design, an assessment would be conducted prior to construction after it is acquired by NCDOT. Currently, the site is adjacent to non-preferred Detailed Study Alternative segment E3.

\* Commitments marked by an asterisk (\*) are taken from the Memorandum of Agreement between SHPO, NCDOT, and FHWA regarding addressing the Adverse Effects to historic resources (**Appendix D.1**). *Winston-Salem Northern Beltway* 3 *Supplemental Final EIS – Project R-2247 Final EIS – Projects U-2579 and U-2579A January 2007* 

Green Sheet Sheet 1 of 7 This site is located outside of the Area of Potential Effects (A.P.E.) of these sections, north of U-2579D.

4. A design noise study will be prepared for the selected alternative. The date of public knowledge for noise abatement purposes is the date the Record of Decision (ROD) is signed.

Any feasible and reasonable noise abatement identified in the Design Noise Reports will be incorporated into the project final plans and will be constructed.

5. The design noise study for the R-2247 portion of the Beltway will include an evaluation of Ronald Reagan High School.

Ronald Reagan High School is located within the project limits of the R-2247D segment.

\*6. The NCDOT will develop Data Recovery Plans (DRP) for Sites 31FY888, 31FY893\*\*, 31FY901, 31FY902\*\*, 31FY903, 31FY910\*\*, 31FY911\*\*, 31FY912\*\*, 31FY921, 31FY925\*\*, 31FY944, 31FY1053/1053\*\*, all of which will be affected by the subject project, in consultation with the North Carolina SHPO.

The U-2579AA and AB segments do not include any archaeological data recovery sites. The U-2579D segment project had one data recovery site (31FY1053\*\*) Data Recovery report was completed and accepted by SHPO. The R-2247EA segment project had seven data recovery sites and reports are complete and accepted by SHPO for three sites 31FY910\*\*, 31FY911\*\*, and 31FY921 with 31FY910\*\*, 31FY912\*\*, 31FY901, 31FY902, and 31FY903 remaining. The remaining data recovery sites are 31FY888 impacted by R-2247CB, and 31FY893 and 31FY944 impacted by R-2247D.

\*7. The NCDOT will ensure that each DRP is implemented after Right-of-Way is acquired or once Right-of-Entry is secured from the property owners and prior to construction activities within the site location as shown in the DRP.

The U-2579AA and AB segments do not include any data recovery sites. Each DRP for in the remaining sections will be implemented as ROW or Right-of-Entry is secured.

\*8. As they are developed, each individual DRP will be forwarded for review by the SHPO.

The U-2579AA and AB segments do not include any data recovery sites. Completed Data Recovery reports for sections noted above have been approved by SHPO.

\*9. Upon completion of each Data Recovery effort, the NCDOT will prepare and forward a Management Summary to the SHPO detailing the results of the Data Recovery field investigations. The Management Summary will contain sufficient information to demonstrate that the field investigation portion of the DRP has been implemented. The U-2579AA and AB segments do not include any data recovery sites. Completed Data Recovery reports for sections noted above have been approved by SHPO.

\*10. Upon receipt of the Management Summary, the SHPO will respond within ten (10) days to the recommendations contained within the document.

The U-2579AA and AB segments do not include any data recovery sites. Completed Data Recovery reports for sections noted above have been approved by SHPO.

\*11. Upon acceptance of the recommendations contained in the Management Summary, the SHPO will issue the NCDOT documentation that the Data Recovery field investigations have been completed.

The U-2579AA and AB segments do not include any data recovery sites. Completed Data Recovery reports for sections noted above have been approved by SHPO.

\*12. The analysis and report preparation, detailing Sites 31FY888, 31FY893\*\*, 31FY901, 31FY902\*\*, 31FY903, 31FY910\*\*, 31FY911\*\*, 31FY912\*\*, 31FY921, 31FY925\*\*, 31FY944, 31FY1053/1053\*\* will be completed by the NCDOT, or their consultants, within twenty-four (24) months after completion of each site's fieldwork schedule.

The U-2579AA and AB segments do not include any data recovery sites. Completed Data Recovery reports for sections noted above have been approved by SHPO.

\*13. In the vicinity of Alexander Hege House, NCDOT in consultation with SHPO will determine the extent of control-of-access fencing, as well as its type, material, and finish. NCDOT will purchase and then install the control-of-access fencing within the NCDOT right-of-way. NCDOT will maintain the control-of-access fencing.

This site is located within the Area of Potential Effects (A.P.E.) of the R-2247CB segment.

#### NCDOT Roadway Design:

 NCDOT will continue to work with residents of affected communities to develop mitigation strategies for community impacts. The following options will be considered during final design to minimize impacts to communities/subdivisions: construction of noise abatement barriers, landscaping or vegetative screens based on NCDOT policies and guidelines. These types of options already have been incorporated into the Project R-2247, Project U-2579, and Project U-2579A preliminary engineering designs where practicable but will be further considered during final design.

This commitment has been implemented into the design through the completion of the noise wall abatement process for U-2579AA and U-2579AB. NCDOT will prepare a post construction landscape design/corridor plan.

Green Sheet Sheet 3 of 7 2. During final design for Projects R-2247, U-2579, and U-2579A, all utility providers and railroad operators would be coordinated with to ensure that the proposed design and construction of the project would not substantially disrupt service.

#### This is a standard commitment.

3. The development of this project will be further coordinated with the City of Winston-Salem and Forsyth County Parks and Recreation Departments to minimize any conflicts with future parks and greenways planning. Provisions will be considered to maintain the future viability of any impacted proposed greenways.

The department has coordinated with the City of Winston Salem to review options that would not preclude future greenway plans.

4. NCDOT will coordinate with the Forsyth County Division of Environmental Health and Laboratory regarding the Reynolds Auto Junkyard and other solid waste sites along the selected alternatives for Projects R-2247, U-2579, and U-2579A. Impacted sites will be remediated as required.

The Reynolds Auto Junkyard site is located outside of the project limits of the U-2579AA and AB segments. Preliminary Site Assessment and a soil remediation were completed 2011. There were two (2) hydraulic lifts in the garage and minor soil contamination in that area. This site is anticipated to present low GeoEnvironmental impacts to the project, see Revised GeoEnvironmental Planning Report memorandum dated July 13, 2017.

Nine potentially contaminated parcels were investigated for U-2579AB. Five of the sites found no evidence of underground storage tanks and none were found to be contaminated. Two of the sites had underground storage tanks that have been removed and reported in June 2020. Two sites have underground storage tanks to be removed once acquired and will be reported.

There were no sites of concern within the U-2579AA project limits.

The GeoEnvironmental Section of the Geotechnical Engineering Unit will coordinate with the Right of Way Branch to provide acquisition recommendations for potentially contaminated parcels. This coordination will occur prior to the parcel being acquired. Prior to construction the GeoEnvironmental Section will also coordinate with the NCDENR Division of Waste Management to address contaminated soil and ground water that may be encountered during construction.

5. NCDOT will consider wildlife crossings where appropriate in the vicinity of stream crossings, which will allow animals to cross under the Beltway.

No Special wildlife crossings are proposed. Opportunities for wildlife to cross exist along streams under bridges and through culverts.

6. NCDOT will coordinate with the Town of Kernersville regarding the compatibility of the Beltway design with the proposed Big Mill Farm Road interchange at US 421. This coordination will take place once all relevant design information has been obtained regarding the design of the Big Mill Farm Road interchange.

U-2579AA and U-2579AB Construction Consultation July 2021 Green Sheet Sheet 4 of 7 The proposed Big Mill Farm Road and US 421 interchange is adjacent to the U-2579B section. Roadway Design coordinated and will continue to coordinate until project completion.

7. NCDOT intends to maintain a connection from Northampton Road to Old Walkertown Road. The final design will be developed based on design constraints and cost considerations.

This site is located in segment U-2579D the final design maintains the existing intersection of Northampton Road and Old Walkertown Road.

\*8. NCDOT will align the Alexander Hege House driveway opposite the new intersection ramp, so property access will be under full traffic control. This will allow NCDOT and the property owner full movement for equipment and trucks.

This site is located within the Area of Potential Effects (A.P.E.) of the R-2247CB segment.

#### NCDOT Hydraulics Unit:

1. All bridges and culverts located in designated FEMA flood zones will be designed such that an increase in flood elevation would not exceed the lesser of 0.5 foot for the 100-year flood event or the elevation needed to protect structures.

An increase of more than 0.5' but it is located within our ROW on the U-2579AA segment. All MOAs have been approved by NCFPM. For the U-2579AB segment, all culverts within the FEMA flood zones show a decrease.

2. A conditional Letter of Map Revision will be prepared for any floodway modification, in coordination with Federal Emergency Management Agency.

U-2579AA segment is in compliance with all FEMA regulations. For the U-2579AB segment the CLOMR for this project was submitted as U-2579BA as the culverts on U-2579AB are part of the same model as U-2579BA. CLOMR for U-2579BA is approved. Coordination with FMP will continue through project completion.

3. NCDOT will avoid installing bridge bents in creeks to the maximum extent practicable.

For the U-2579AA segment there are no bridges that span creeks. For the U-2579AB segments, culverts were used at creek crossings. No bridge bents are located in creeks.

#### NCDOT Roadside Environmental:

 During design and construction, efforts will be made to minimize the impact to existing vegetative buffers and natural areas. NCDOT will prepare a post construction landscape design/corridor plan to mitigate construction impacts and integrate enhancements, while remaining sensitive to the environment and to the safety of the traveling public.

This is a standard commitment; post construction plans will be prepared.

U-2579AA and U-2579AB Construction Consultation July 2021 Green Sheet Sheet 5 of 7 2. NCDOT will incorporate sediment and erosion control measures according to the Design Standards in Sensitive Watersheds for all construction in high quality water (HQW) zones in compliance with 15a NCAC 04B.0124.

There are no qualifying factors present in these sections.

\*3. NCDOT will provide tree protection measures along the National Register boundary lines adjoining project construction areas. NCDOT will exercise best management practices to minimize, as practicable, tree trimming and disturbance of existing plantings along the National Register boundary.

These segments do not include any historic or archaeological sites---- NCDOT will implement this commitment as described in the concurrence form with SHPO. Properties listed are Alexander Hege House, Samuel Stauber House & Barn John Henry Kapp Farm, Clayton Family Farm Seaver's Gas Station, Hammock Family Farm and John & Charles Fries Day Farm.

#### NCDOT Roadway, Hydraulics:

1. Generally, 2:1 slopes will be used where possible to minimize culvert length, and NCDOT will shorten culvert lengths where possible and daylight systems between culverts where possible in interchange areas.

Where streams and wetland are located where possible 2:1 slopes were used to minimize impacts.

#### NCDOT Right of Way Branch:

1. NCDOT will work with the property owner of Walker Mobile Home Park off of Bethania-Tobaccoville Road to determine the feasibility of relocating the homes to another area of the parcel.

This site is located within the Area of Potential Effects (A.P.E.) of the R-2247EA segment. This segment is in preliminary design with right of way acquisition scheduled to begin in August 2025.

2. NCDOT will contact the pastor of Mount Pleasant Holiness Church prior to the public hearing and will, if desired, meet with the pastor and members of the church to discuss the impact of Project U-2579 on the church, NCDOT relocation policies, and potential mitigation.

Since the 2004 SFEIS/SDEIS: NCDOT and consultant staff met with the pastor and members of Mount Pleasant Holiness Church during the 2005 public hearings. The church representatives declined to attend an additional meeting regarding this project or impacts of the Northern Beltway on the church.

3. NCDOT will contact minority residents of North Oaks subdivision prior to the public hearing and will, if desired, meet with them to discuss the impacts of Project U-2579 on the community, NCDOT relocation policies, and potential mitigation.

Since the 2004 SFEIS/SDEIS: NCDOT and consultant staff met the with North Oaks community on November 15, 2004.

#### NCDOT Division 9 Construction Unit:

1. A pre-construction survey will be done in areas of possible concern regarding structural damage to assess a pre-construction condition.

This commitment will be done prior to initiation of construction.

#### NCDOT Division 9:

 During construction for Project U-2579A, NCDOT will coordinate with the Forsyth County School Board to ensure the safety of those students bicycling and/or walking to Sedge Garden Elementary School. If a portion of school property is needed for a temporary construction easement, that area will be fenced to keep school children out of the construction site. The school property will be restored following construction.

This commitment is standard practice and will be implemented during construction.

2. NCDOT will coordinate with local media during the construction of the project to alert the public of traffic restrictions and construction related activities.

This commitment is standard practice and will be implemented during construction.

3. NCDOT shall not approve any new driveway permits along the property of the historic John Henry Kapp Farm within the right of way for the Preferred Alternative. This condition shall be filed in the NCDOT Division office responsible for driveway permits.

This site is located within the Area of Potential Effects (A.P.E.) of the R-2247EA segment. This commitment will be implemented in final designs.

4. This project involves construction activities on or adjacent to FEMA regulated streams(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.

This commitment will be fulfilled after the construction completion.

#### NCDOT Environmental Analysis Unit

1. The biological conclusion for the Northern long-eared bat is Unresolved. Construction authorization will not be requested until ESA compliance is satisfied for the northern long-eared bat.

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