

# Type III Categorical Exclusion Action Classification Form

|                     |                   |
|---------------------|-------------------|
| STIP Project No.    | I-3306A           |
| WBS Element         | 34178.1.3         |
| Federal Project No. | IMS-040-4(148)259 |

A. Project Description:

The proposed project is included in the North Carolina Department of Transportation’s (NCDOT) approved *2018-2027 State Transportation Improvement Program (STIP)* as Project I-3306A. NCDOT is proposing to widen I-40 from four lanes to six lanes from I-85 to the Durham County Line (where the existing laneage increases near US 15-501). The proposed project is approximately 11.4 miles long. The project vicinity map is included in Figure 1.

B. Description of Need and Purpose:

Currently the number of vehicles using the section of I-40 between I-85 and US-15-501 ranges between 45,700 vehicles per day (vpd) to 64,300 vpd. The current Level of Service (LOS) for the section of I-40 from I-85 to US 15-501 is LOS C (21.3 density) to D (28.4 to 28.7 density) for the peak AM and PM hour volumes.

Future traffic volumes (2040 No Build) are between 51,100 and 80,300 vpd for I-40 between I-85 and US 15-501. The future LOS (2040 No Build) for the section of I-40 between I-85 and US 15-501 is LOS C (24.3 density) to E (37.7 to 42.1 density) for AM and PM peak hours.

Based on the capacity analyses and traffic volumes, this section of I-40 will require one additional lane in each direction to achieve an acceptable LOS. The delays experienced from I-85 to New Hope Church Road are less than those experienced from New Hope Church Road to the Durham County line; however, the entire project is needed to achieve an acceptable LOS, proper lane balance and lane continuity for the project area.

The purpose of the proposed project is to relieve peak hour congestion on this facility such that a LOS D or better can be maintained for the 2040 Build condition. A desired outcome would be to improve the traffic flow and continuity between the existing eight-lane section at the beginning of the project (I-85) and the six-lane section at the end of the project (Durham County Line).

Improving travel conditions on I-40 to a LOS D or better throughout this portion of the freeway from I-85 to the Durham County Line will have a direct and positive impact on traffic flow and continuity experienced by the public using this corridor. Daily commuting between points west of I-85 and US 15-501 will experience fewer delays.

C. Categorical Exclusion Action Classification:

Type III

D. Proposed Improvements:

The proposed project consists of widening I-40 in Orange County, from the I-85/I-40 interchange to the Durham County line, to a six-lane facility with a 22-foot median. The widening will involve adding an additional lane in each direction along I-40, predominately within the existing median, which will require little additional right-of-way. Full depth, 12-foot paved outside shoulders will be provided. Improvements to interchange areas will be provided as needed to accommodate future traffic. At the NC 86 interchange, a superstreet design is proposed at the intersection of Eubanks Road and NC 86 with a U-turn bulb-out near Perkins Drive.

## E. Special Project Information:

### 1. Public Outreach

#### a. Citizens Informational Workshop – June 10, 2014

A Citizens Informational Workshop was held on June 10, 2014 at the Chapel Hill Human Services Center in Chapel Hill. The informal workshop was conducted from 4:00 to 7:00 p.m., during which the public had the opportunity to review project maps and displays, ask questions, provide comments, and discuss the project informally with project representatives. A total of 78 people registered their attendance and 23 comments were collected. The majority of the comments received at the public meeting expressed concerns about traffic noise and the potential to add to the existing noise levels. A few comments also supported the widening project from a safety perspective, noting it would make entering and exiting I-40 much safer.

#### b. Newsletter – July 2015

A newsletter was mailed to those on the project mailing list in July 2015. The newsletter announced that the project was delayed in the most recent STIP and studies were being suspended until 2017.

#### c. Public Meeting – January 24, 2019

NCDOT conducted an Open-House Public Meeting on January 24, 2019 at the Passmore Center in Hillsborough, North Carolina. The purpose of the meeting was to provide information and gather comments on the project.

The informal public meeting was conducted from 4:00 to 7:00 p.m., during which the public had the opportunity to review project maps and displays, ask questions, provide comments, and discuss the project informally with project representatives. A total of 185 citizens registered their attendance at the public meeting. Participants included residents, property owners, local government employees and officials, and church and local organization representatives. A total of 188 comments were received at the meeting and during the comment period (through February 8, 2019).

The most frequent project specific comments expressed by citizens were the following:

- Disapproval of Option 4A, one-way pair realignment of Eubanks Road at the NC 86 interchange
- Preference for Option 4B, Superstreet design, at the NC 86 interchange
- Impacts to the Northwood neighborhood, including concerns over noise, access, safety, speed, and lighting
- Request for pedestrian and bicycle accommodations
- Request for noise walls
- Consideration of alternative traffic control measures at NC 86, including roundabouts, loop designs, vehicle storage along exit ramps, and maintaining the ability to turn left out of Eubanks Road
- A petition from the Carol Woods Retirement Community Residents Association requested effective noise abatement measures for the community

#### d. Local Government Input

Two resolutions were received from local governments. Orange County provided a resolution opposing NCDOT incursion into the Henry J. Oosting Natural Area of Duke Forest and encouraging NCDOT to seek alternatives that would not disrupt the Northwood neighborhood. The Town of Chapel Hill submitted a resolution opposing Alternative 4A and requesting NCDOT to:

- Support alternate modes of travel
- Contribute positively to the character of Chapel Hill
- Stagger construction improvements on Old NC 86 and NC 86
- Protect the feasibility of the North-South Bus Rapid Transit System
- Ensure design allows for sufficient emergency response
- Maintain left-turn movements from Eubanks Road as much as possible, potentially as a short-term measure until traffic levels exceed certain thresholds.

The Durham/Chapel Hill/Carrboro Metropolitan Planning Organization (DCHC MPO) submitted a letter in support of Option 4B (Superstreet) as well as encouraging accommodation of the proposed Bus Rapid Transit system and bicycle and pedestrian accommodations.

#### e. State Government Input

The NC Department of Natural and Cultural Resources Natural Heritage Program (NHP) provided a letter to NCDOT concerning the project's potential impact on the Henry J. Oosting Natural Area Registered Heritage Area. The natural area is located in Duke Forest, which is privately owned by Duke University. NHP requested the proposed project be modified to minimize or avoid impacts to the Natural Area.

## 2. NEPA/Section 404 Merger Process

An External Scoping Meeting was held on April 23, 2013. Representatives from NCDOT, Federal Highway Administration (FHWA), US Army Corps of Engineers (USACE), US Fish and Wildlife Service (USFWS), US Environmental Protection Agency (USEPA), NC Division of Water Quality, Town of Chapel Hill, DCHC MPO, and New Hope Creek Corridor Advisory Committee participated in the meeting.

A NEPA/Section 404 Merger screening was conducted on March 13, 2013 with FHWA, USACE, and NC Department of Environment Quality - Division of Water Resources (NCDWR). It was agreed the project would follow the NEPA/Section 404 Merger process and that an attempt will be made to combine future concurrence points into a single meeting.

A NEPA/Section 404 Merger meeting was held on September 11, 2014 for Concurrence Points 1 (Purpose and Need) and 2 (Alternatives). The Merger Team concurred on Concurrence Points 1 and 2 at the meeting. A NEPA/Section 404 Merger meeting was held on October 17, 2018 for Concurrence Point 2A (Hydraulic Recommendations), Concurrence Point 3 (LEDPA Selection), and Concurrence Point 4A (Avoidance and Minimization). The Merger Team concurred with the selection of the "Best Fit" Alternative for LEDPA. The signed concurrence forms are included Appendix C.

The USACE issued a public notice for the project on October 4, 2018, accepting public comments until November 2, 2018. Per the USACE, no comments were received as a result of the public notice that would have an influence on the LEDPA selection.

### 3. Options at the Eubanks Road/NC 86 intersection

NCDOT reviewed several options to address traffic issues at the NC 86 interchange, specifically between the intersection of the I-40 eastbound ramps and NC 86 and Perkins Drive. The intersection of Eubanks Road and NC 86 is located 410 feet from the eastbound I-40 exit ramp. The close proximity of these two intersections along with the future traffic demand contribute to poor level of service and unacceptable traffic queue lengths. The following two options were developed as preliminary designs and presented to the public for comment at the January 24, 2019 public meeting. Both options are presented on the public meeting maps in Appendix A.

**Option 4A (One Way Pair):** This option would relocate the right turning movements from eastbound Eubanks Road to intersect NC 86 at Perkins Road by providing a one-directional, two-lane realignment of Eubanks Road. Under this option, traffic would use the realigned two-lane road to access NC 86 from Eubanks Road. Traffic turning from NC 86 to Eubanks Road would enter Eubanks Road near the existing intersection at a one-directional, two-lane road. This option is anticipated to provide an adequate level of service and manageable queue lengths beyond 2030, but would operate poorly by the design year of 2040 without additional improvements to NC 86. This option would impact the Northwood neighborhood and would likely result in four residential displacements.

**Option 4B (Superstreet)- Recommended:** This option would provide right-in/right-out and left-in movements at Eubanks Road near its existing intersection with NC 86. Traffic would not be permitted to make a left turn from Eubanks Road onto NC 86 at this intersection, but would instead turn right onto NC 86 and use the proposed U-turn bulb-out near Perkins Road to continue north on NC 86. This option would operate at an acceptable level of service with manageable queue lengths in the design year. This option would have minimal impacts within the Northwood neighborhood, only affecting road frontages along Eubanks Road and NC 86, and would not require any homes to be displaced.

Both options were presented at the January 24, 2019 public meeting. The public overwhelmingly preferred option 4B (Superstreet). Officials from Chapel Hill, Orange County, and DCHC MPO all preferred option 4B as well.

Although option 4B was clearly preferred by the public and local government officials over option 4A, there were still components that were undesirable to the public and local officials. The restriction of left turns out of Eubanks Road was of particular concern regarding option 4B. NCDOT was urged by the public and local governments to review potential options including a roundabout at the Eubanks Road intersection, a provision providing part-time off-peak left turn ability, or to delay construction of the superstreet concept until traffic demand is greater.

NCDOT considered the use of a roundabout at this location. Geometrically, the existing road and ramp locations would not preclude the design of a roundabout here. The project team had concerns with such a design, primarily due to the safety and capacity of a roundabout at this location. The traffic demands in the design year (2040) at this location are expected to far exceed the capacity of a single-lane or two-lane roundabout. NCDOT does not recommend roundabouts larger than two lanes due to safety concerns. Furthermore, when roundabouts are over-capacity they tend to lock-up and produce queuing that is much longer than traffic signals, thereby endangering safe operations on the ramps and the freeway mainline. From a safety perspective, based on research pertaining to converting a signalized intersection to a multi-lane roundabout, NCDOT anticipates a multi-lane roundabout installation would increase crashes. Therefore, a roundabout is not recommended at this location.

NCDOT also evaluated the option of allowing left turns from Eubanks Road in off-peak hours within the superstreet concept. Under this option left turns would be permitted when traffic is lighter, but during peak traffic periods the intersection would operate as a traditional superstreet and restrict left turns. While such a signal design is possible, the project team concluded that the problem of violators during superstreet operation would be too difficult to

overcome. There are no known devices to physically prevent vehicles from violating the restricted turn movement. The burden on police to enforce the restriction would be significant, and the consequences of violations in terms of potential crashes would be severe.

NCDOT recommends option 4B (superstreet design) for final design and construction. Option 4B represents the only viable option to accommodate the anticipated traffic in the design year while minimizing impacts to neighborhoods and businesses. It is understood that revisions to the proposed design are desired by the public and local officials to make the project more appealing and less disruptive. To that end, NCDOT will continue to coordinate with the public and local officials during final design to consider their concerns in more detail and incorporate suggestions into the final design as appropriate. NCDOT will also coordinate with the Town of Chapel Hill concerning the timing of the proposed improvements in the Eubanks Road area as requested.

#### 4. Noise Analysis

The source of this traffic noise information is Traffic Noise Report for STIP Project I-3306A, by Gannett Fleming dated March 2019.

##### **Summary**

A traffic noise evaluation was performed that identified four noise barriers that preliminarily meet feasibility and reasonableness criteria found in the NCDOT Traffic Noise Policy. A more detailed analysis will be completed during project final design. Noise barriers preliminarily found to be feasible and reasonable during the preliminary noise analysis may not be found to be feasible and reasonable during the final design noise analysis due to changes in proposed project alignment and other design considerations, surrounding land use development, or utility conflicts, among other factors. Conversely, noise barriers that preliminarily were not considered feasible and reasonable may meet the established criteria and be recommended for construction. This evaluation was conducted in accordance with the highway traffic noise requirements of Title 23 CFR Part 772.

In accordance with NCDOT Traffic Noise Policy, the Federal/State governments are not responsible for providing noise abatement measures for new development for which building permits are issued after the Date of Public Knowledge. The Date of Public Knowledge of the proposed highway project will be the approval date of the Categorical Exclusion (CE).

##### Traffic Noise Impacts

The maximum number of receptors in each project alternative predicted to become impacted by future traffic noise is shown in the table below. The table includes those receptors expected to experience traffic noise impacts by either approaching or exceeding the FHWA Noise Abatement Criteria or by a substantial increase in exterior noise levels.

***Predicted Traffic Noise Impacts by Alternative\****

| <b>Traffic Noise Impacts</b> |                                |   |                               |              |
|------------------------------|--------------------------------|---|-------------------------------|--------------|
| <b>Alternative</b>           | <b>Residential<br/>(NAC B)</b> | <b>Places of Worship/Schools,<br/>Parks, etc. (NAC C &amp; D)</b> | <b>Businesses<br/>(NAC E)</b> | <b>Total</b> |
| <b>Build 1</b>               | <b>78</b>                      | <b>5</b>  | <b>0</b>                      | <b>83</b>    |

\*Per TNM 2.5 and in accordance with 23 CFR Part 772

Noise Barriers

A noise barrier evaluation was conducted for this project utilizing the Traffic Noise Model (TNM 2.5) software developed by the FHWA. The following table summarizes the results of the evaluation.

**Preliminary Noise Barrier Evaluation Results**

| <b>Noise Barrier Location</b>   | <b>Length / Height<sup>4</sup> (feet)</b> | <b>Square Footage</b> | <b>Number of Benefited Receptors</b> | <b>Square Feet per Benefited Receptor / Allowable Square Feet per Benefited Receptor</b> | <b>Preliminarily Feasible and Reasonable ("Likely") for Construction<sup>1</sup></b> |
|---|---|-----------------------|--------------------------------------|--|--|
| NW 3 – EB I-40 from Dimmocks Mill Rd to the SB I-85/EB I-40 Ramp Loop | 1,470/25                                  | 36,752                | 1                                    | NA   | No <sup>2</sup>  |
| NW5 – EB I-40 (Cedar Ridge High School Athletic Fields)               | 1,080/21                                  | 23,098                | 1                                    | NA   | No <sup>2</sup>  |
| NW6 – WB I-40 Ramp to NB I-85   | 2,010/16                                  | 31,829                | 22                                   | 1,447/2,000  | Likely   |
| NW9 – WB I-40 east of Orange Grove Rd.                                | 990/9                                     | 8,911                 | 3                                    | 2,970/1,500  | No <sup>3</sup>  |
| NW10 – EB I-40 west of Old NC 86                                      | 600/25                                    | 14,997                | 0                                    | NA   | No <sup>2</sup>  |
| NW12 – EB I-40 east of Old NC 86                                      | 1,080/25                                  | 26,999                | 0                                    | NA   | No <sup>2</sup>  |
| NW13 – WB I-40 east of the Old NC 86 exit ramp                        | 1,094/9                                   | 9,847                 | 16                                   | 615/1,500  | Likely   |
| NW14 – WB I-40 between Old NC 86 and New Hope Church Rd.              | 1,440/16                                  | 22,499                | 1                                    | NA   | No <sup>2</sup>  |
| NW17 – WB I-40 east of New Hope Church Rd.                            | 1,050/16                                  | 16,291                | 2                                    | 8,146/1,500  | No <sup>3</sup>  |
| NW20 – WB I-40 crossing Millhouse Rd.                                 | 1,620/13                                  | 20,880                | 5                                    | 4,176/1,500  | No <sup>3</sup>  |
| NW22A – WB I-40 east of Millhouse Rd.                                 | 1,110/12                                  | 13,170                | 2                                    | 6,585/1,500  | No <sup>3</sup>  |
| NW22B – EB I-40 west of Martin  | 360/10                                    | 3,510                 | 2                                    | 1,755/2,000  | Likely   |

|  |          |        |    |             |                 |
|--|----------|--------|----|-------------|-----------------|
| Luther King Jr. Blvd.  |          |        |    |             |                 |
| NW24A - EB Eubanks Rd. and SB Martin Luther King Jr. Blvd.   | 1,363/20 | 27,251 | 7  | NA          | No <sup>2</sup> |
| NW24B - SB Martin Luther King Jr. Blvd. south of Eubanks Rd. | 861/14   | 12,453 | 5  | 2,491/1,500 | No <sup>3</sup> |
| NW26 - WB I-40 east of Martin Luther King Jr. Blvd.          | 1,650/13 | 21,210 | 4  | 5,303/2,000 | No <sup>3</sup> |
| NW32 - EB I-40 between Sunrise Rd. and Erwin Rd.             | 2,940/12 | 37,461 | 25 | 1,499/1,500 | Likely          |

<sup>1</sup>The likelihood for barrier construction is preliminary and subject to change, pending completion of final design and the public involvement process.

<sup>2</sup> Barrier is not feasible due to an inability to achieve at least 5 dB(A) of noise reduction for at least two impacted receptors.

<sup>3</sup> Barrier is not reasonable due to the quantity per benefited receptor exceeding the allowable quantity per benefited receptor OR Barrier is not reasonable due to an inability to achieve at least 7-dBA noise reduction for at least one benefited receptor.

<sup>4</sup> The height noted is the average height of all the panels analyzed.

F. Project Impact Criteria Checklists:

| <u>Type III Actions</u>  |  | Yes                                 | No                                  |
|--|--|-------------------------------------|-------------------------------------|
| If the proposed improvement is identified as a Type III Class of Action answer all questions. <ul style="list-style-type: none"> <li>• The Categorical Exclusion will require FHWA approval.</li> <li>• If any questions are marked "yes" then additional information will be required for those question in Section G.</li> </ul> |  |                                     |                                     |
| 1  | Does the project involve potential effects on species listed with the USFWS or NMFS?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2  | Does the project result in impacts subject to the conditions of the BGPA?  | <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 checked="" type="checkbox"/> | <input 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 substantial residential or commercial displacements or right of way acquisition?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 6  | Does the project include a determination under Section 4(f)?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 7  | Is a project-level analysis for direct, indirect, or cumulative effects required based on the NCDOT community studies screening tool?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 8  | Is a project level air quality Mobile Source Air Toxics (MSAT) analysis required?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 9  | Does the project impact anadromous fish?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10   | Does the project impact waters classified as ORW, HQW, Water Supply Watershed Critical Areas, 303(d)-listed impaired water bodies, buffer rules, or SAV?   | <input checked="" type="checkbox"/> | <input 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 USACE Individual Section 404 Permit?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 13   | Will the project require an easement from a FERC licensed facility?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 14   | Does the project include Section 106 of the NHPA effects determination other than a no effect, including archaeological remains? Are there project commitments identified?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 15   | Does the project involve hazardous materials and landfills?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 16   | Does the project require work encroaching and adversely effecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 17   | Is the project in a CAMA county and substantially affects the coastal zone and/or any AEC?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 18   | Does the project require a 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 CBRA resources?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |



| <u>Type III Actions (continued)</u> |   | Yes                                 | No                                  |
|-------------------------------------|---|-------------------------------------|-------------------------------------|
| 21                                  | Does the project impact federal lands (e.g. USFS, USFWS, etc.) or Tribal Lands?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 22                                  | Does the project involve any changes in access control?   | <input checked="" type="checkbox"/> | <input 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 or the MPO's TIP (where applicable)?  | <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, 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 FEMA buyout properties under the HMGP?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 28                                  | Is the project considered a Type I under the NCDOT's Noise Policy?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 29                                  | Is there prime or important farmland soil impacted by this project as defined by the FPPA?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 30                                  | 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

### **Question 3 – Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?**

As documented in Section E of the Categorical Exclusion, two design options for the NC 86 interchange area were presented at the January 24, 2019 public meeting. Option 4A would relocate a portion of Eubanks Road so that it would intersect NC 86 opposite Perkins Drive. Option 4B is a Superstreet design that would provide right-in/right-out and left-in movements at Eubanks Road near its existing intersection with NC 86. Based on input received at the public meeting, the public and local governments overwhelmingly preferred Option 4B, citing severe impacts to the Northwood neighborhood associated with Option 4A. NCDOT recommends Option 4B. It is understood that revisions to the proposed design, including the recommended Option 4B, are desired by the public and local officials to make the project more appealing and less disruptive. To that end, NCDOT will continue to coordinate with the public and local officials during final design to consider their concerns in more detail and incorporate suggestions into the final design as appropriate.

The public cited noise impacts as a major concern. A noise analysis was completed and four noise walls are recommended per the NCDOT Noise Policy. There was considerable concern for noise impacts and requests for noise abatement measures along two particular areas along the project:

Carol Woods Retirement Community - Predicted noise levels at Carol Woods in the existing condition range from 57 db(A) to 62 db(A). The analysis predicted that design year (2040) build noise levels will range from 60 db(A) to 65 db(A) with typical increases of 2-3 db(A) over existing noise levels. Based on NCDOT and FHWA impact criteria, there are no predicted impacts at Carol Woods and consideration for noise abatement is not warranted.

Northwood Neighborhood - Predicted noise levels in the Northwood neighborhood in the existing condition range from 44 db(A) to 66 db(A). The analysis predicted that design year (2040) build noise levels will range from 48 db(A) to 70 db(A) with increases ranging from 0-5 db(A) over existing noise levels. Based on NCDOT and FHWA impact criteria, there are predicted impacts at this location. Abatement was considered by dividing the neighborhood into two barrier locations.

Noise Wall 24a (NW24a) is along eastbound Eubanks Rd. and continues to the north entrance to the Chapel Hill Korean Baptist Mission on Martin Luther King Jr. Blvd. This barrier was not feasible because it only provided a 5 db(A) reduction in predicted noise levels at one impacted receptor. NCDOT policy requires a 5 db(A) reduction for at least two impacted receptors.

Noise Wall 24b (NW24b) begins at the south entrance to the Chapel Hill Korean Baptist Mission along southbound Martin Luther King Jr. Blvd and extends to Northwood Dr. This barrier is feasible but exceeds the NCDOT reasonableness criteria for the allowable square feet of barrier allowed per benefited receptor. The allowance at this location is 1,500 square feet per benefited receptor and the amount of barrier needed is 2,491 square feet per benefited receptor.

### **Question 8 – Is a project level air quality Mobile Source Air Toxics (MSAT) analysis required?**

The project meets the conditions to warrant a qualitative MSAT analysis. A qualitative MSAT analysis has been conducted as part of this project. Based on the qualitative analysis completed, under the Preferred Alternative in the design year it is expected there would be slightly higher MSAT emissions in the project study area relative to the No Build Alternative due to the increased traffic volumes. MSAT levels could be higher in some locations than others, but current tools and science are not adequate to quantify them. In considering the project study area, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause

substantial reductions that, in almost all cases, will cause area-wide MSAT levels to be significantly lower than today.

**Question 10 - Does the project impact waters classified as ORW, HQW, Water Supply Watershed Critical Areas, 303(d)-listed impaired water bodies, buffer rules, or SAV?**

The proposed project resides in both the Jordan and Falls Lake Water Supply Watersheds; streams within the study area are classified as WS-V and are also Nutrient Sensitive Waters (NSW). Since the proposed project is located in the Neuse River Basin and the Jordan Lake Water Supply Watershed, state riparian buffer rules will apply. Stormwater runoff must be addressed in accordance with the most recent version of the NCDOT BMP Toolbox. Sedimentation and erosion control must be addressed in accordance with the most recent version of the NC Division of Land Resources Sediment & Erosion Control Planning & Design Manual.

**Question 22 - Does the project involve any changes in access control?**

In areas along the project where additional right of way was needed, any existing control of access was moved to the new right of way limits. Additionally, the project includes minor revisions to the existing control of access at the NC 86 and Old NC 86 interchanges as needed to protect the operational integrity of the interchanges.

**Question 28 - Is the project considered a Type I under the NCDOT's Noise Policy?**

The project meets the conditions as a Type I project under NCDOT's Noise Policy. As such, a noise evaluation has been conducted and mitigation measures have been identified (see Special Project Information above).

## H. Project Commitments

|                     |                   |
|---------------------|-------------------|
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### **Hydraulics Unit – FEMA Coordination**

The 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 with FMP (dated April 22, 2013, modified February 5, 2015), or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

### **Transportation Program Management Unit – Sidewalk**

NCDOT will coordinate with the Town of Chapel Hill concerning cost-share and maintenance agreement for sidewalk construction.

### **Traffic Noise Group – Noise Walls**

Four noise walls were considered feasible and reasonable in the Traffic Noise Report for the project. Those locations will be further evaluated during the final design phase.

### **Division 7 – Northwood Neighborhood Steering Committee Coordination**

The Northwood Neighborhood Steering Committee has identified several concerns related to the proposed project concerning safety and speed issues within the neighborhood. NCDOT Division 7 will review those concerns and coordinate further with the Committee.


### **Project Management Unit/NCDOT Division 7 – Town of Chapel Hill Coordination**

NCDOT will coordinate with the Town of Chapel Hill concerning accommodation of the proposed Bus Rapid Transit System, emergency service, and other concerns during the final design phase.

I. Categorical Exclusion Approval

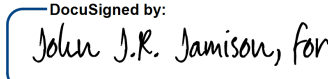
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| Federal Project No. | <u>IMS-040-4(148)259</u> |

**Prepared By:**

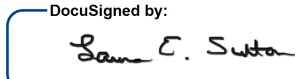
|             |   |
|-------------|---|
| 3/29/2019   |    |
| <u>Date</u> | <u>Eric Midkiff, PE, Planning Group Manager<br/>CALYX Engineers and Consultants</u> |

**Prepared For:** North Carolina Department of Transportation


**Reviewed By:**

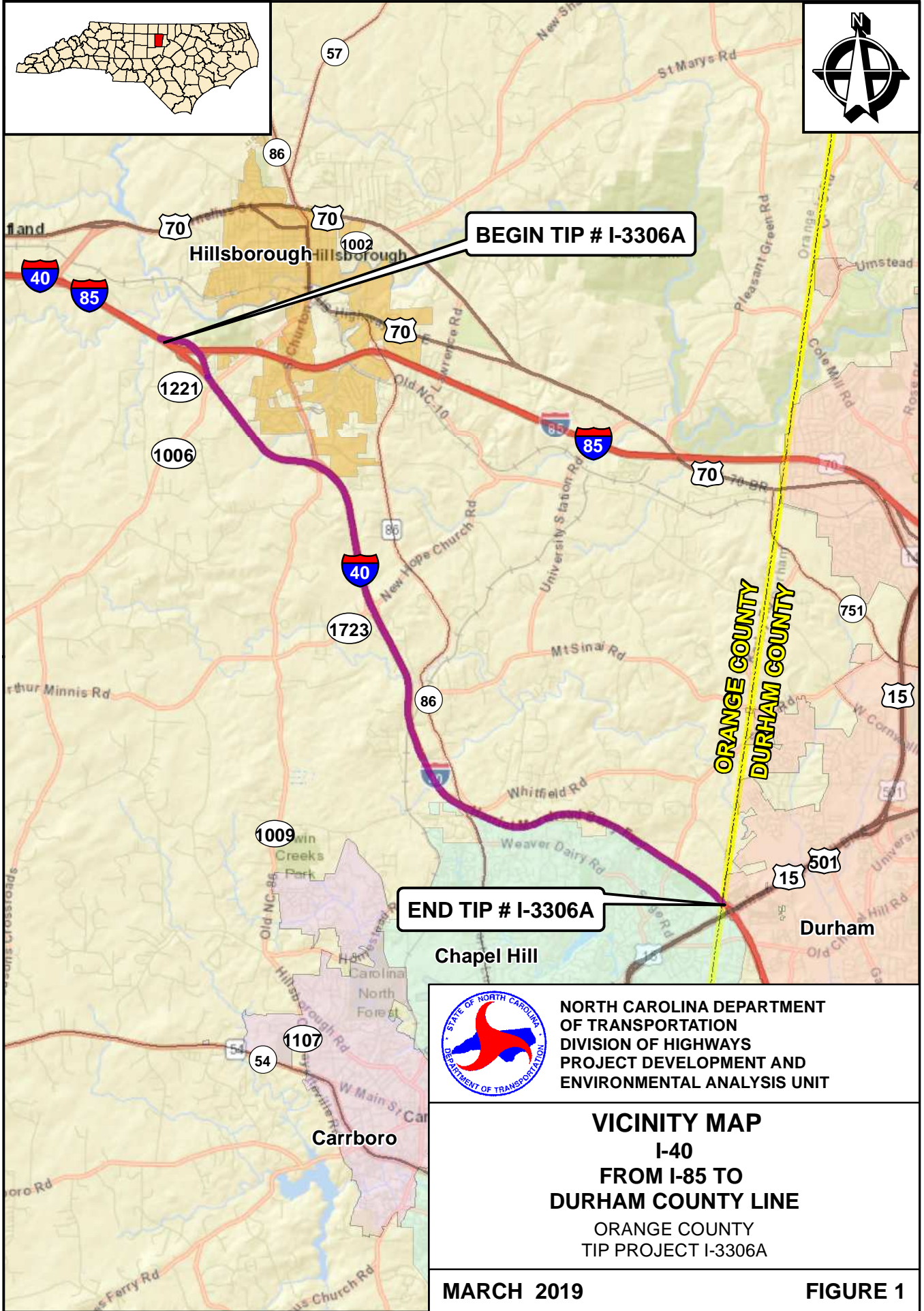
|             |  |
|-------------|--|
| 3/29/2019   |                     |
| <u>Date</u> | <u>Derrick Weaver, PE, Environmental Policy Unit<br/>North Carolina Department of Transportation</u> |

NCDOT certifies that the proposed action qualifies as a Type III Categorical Exclusion

|             |   |
|-------------|---|
| 3/29/2019   |                  |
| <u>Date</u> | <u>Laura E. Sutton, PE, Project Management Unit<br/>North Carolina Department of Transportation</u> |

**FHWA Approval:**

|             |   |
|-------------|---|
| 3/29/2019   |          |
| <u>Date</u> | <u>John F. Sullivan, III, PE, Division Administrator<br/>Federal Highway Administration</u> |



**BEGIN TIP # I-3306A**

**END TIP # I-3306A**

**ORANGE COUNTY  
DURHAM COUNTY**



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

**VICINITY MAP  
I-40  
FROM I-85 TO  
DURHAM COUNTY LINE  
ORANGE COUNTY  
TIP PROJECT I-3306A**

**MARCH 2019**

**FIGURE 1**

# Appendix A

**LEGEND**

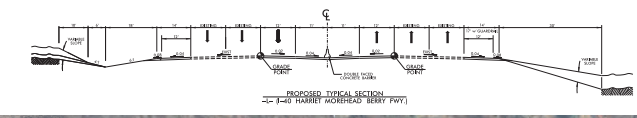
- BUILDING
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENT (DRAINAGE, UTILITIES, AND OTHERS)
- EXISTING ROADWAY
- EXISTING ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED STRUCTURE, BRIDGE, CURB AND GUTTER TO BE INSTALLED
- EXISTING STRUCTURE, BRIDGE, CURB AND GUTTER TO BE MAINTAINED
- EXISTING STREAMS AND PONDS
- WETLANDS
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- PROPERTY LINES
- EXISTING VEGETATION
- LIMITS OF CONSTRUCTION
- EXISTING TRAFFIC SIGNAL
- WETLAND LIMITS BOUNDARY
- WETLAND

**IMPACTS AND OBSERVATION INFO**

NOTES: FULL CONTROL OF ACCESS IS SHOWN AS A FULL CONTROL OF ACCESS. FULL CONTROL OF ACCESS IS SHOWN AS A FULL CONTROL OF ACCESS. FULL CONTROL OF ACCESS IS SHOWN AS A FULL CONTROL OF ACCESS.

**PRELIMINARY PLANS**  
 INCOMPLETE PLANS  
 DO NOT USE FOR CONSTRUCTION

**DESIGN PUBLIC MEETING MAP**  
 PROJECT 3478.13 (I-3386A)  
 F.A. PROJECT IMS-040-4(48)259  
 ORANGE COUNTY  
 WIDENING OF I-40 FROM I-85 TO THE DURHAM COUNTY LINE  
 SHEET 1 OF 6



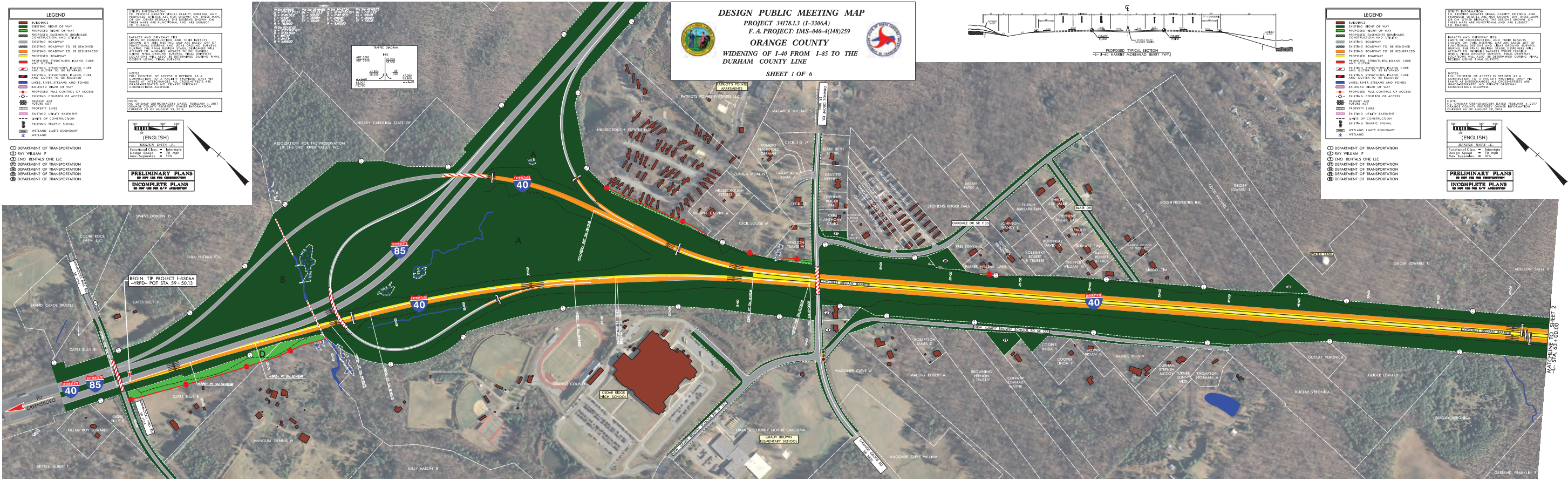
**LEGEND**

- BUILDING
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENT (DRAINAGE, UTILITIES, AND OTHERS)
- EXISTING ROADWAY
- EXISTING ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED STRUCTURE, BRIDGE, CURB AND GUTTER TO BE INSTALLED
- EXISTING STRUCTURE, BRIDGE, CURB AND GUTTER TO BE MAINTAINED
- EXISTING STREAMS AND PONDS
- WETLANDS
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- PROPERTY LINES
- EXISTING VEGETATION
- LIMITS OF CONSTRUCTION
- EXISTING TRAFFIC SIGNAL
- WETLAND LIMITS BOUNDARY
- WETLAND

**IMPACTS AND OBSERVATION INFO**

NOTES: FULL CONTROL OF ACCESS IS SHOWN AS A FULL CONTROL OF ACCESS. FULL CONTROL OF ACCESS IS SHOWN AS A FULL CONTROL OF ACCESS. FULL CONTROL OF ACCESS IS SHOWN AS A FULL CONTROL OF ACCESS.

**PRELIMINARY PLANS**  
 INCOMPLETE PLANS  
 DO NOT USE FOR CONSTRUCTION





**LEGEND**

- EXISTING ROADWAY
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENTS, DRAINAGE, CONDUITS AND UTILITY
- EXISTING ROADWAY TO BE REMOVED
- EXISTING ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED STRUCTURES, ISLAND, CURB AND "ISLANDS" OF WETLANDS
- PROPOSED "ISLANDS" OF WETLANDS
- EXISTING WETLANDS
- WETLAND BUFFER ZONE
- WETLAND BUFFER BOUNDARY
- WETLAND

**NOTES**

1. THESE DESIGN PUBLIC MEETING MAPS AND PROPOSED PLANS ARE NOT DESIGNED TO BE USED AS A BASIS FOR CONSTRUCTION AND ARE SUBJECT TO CHANGE.

2. IMPACTS AND EASEMENTS WILL BE DETERMINED BY THE ENGINEER AND WILL BE SHOWN ON THESE MAPS.

3. PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY AND ARE NOT GUARANTEED.

4. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROJECT AREA AND HAS OBSERVED THE EXISTING CONDITIONS.

5. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROJECT AREA AND HAS OBSERVED THE EXISTING CONDITIONS.

6. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROJECT AREA AND HAS OBSERVED THE EXISTING CONDITIONS.

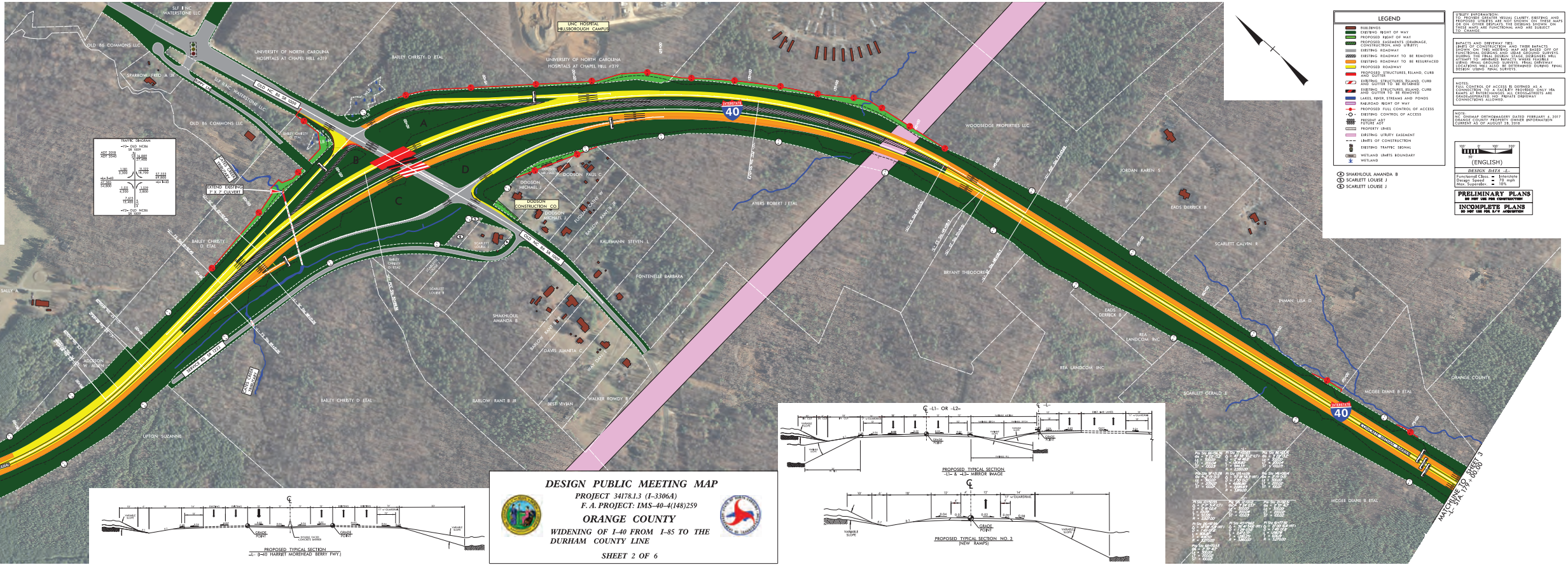
**SCALE**

1" = 100'

**DESIGN DATA**

Design Speed: 55 mph  
 Design Lane: 12 ft  
 Design Shoulder: 10 ft

**PRELIMINARY PLANS**  
 DO NOT BE USED FOR CONSTRUCTION



**LEGEND**

- EXISTING ROADWAY
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENTS, DRAINAGE, CONDUITS AND UTILITY
- EXISTING ROADWAY TO BE REMOVED
- EXISTING ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED STRUCTURES, ISLAND, CURB AND "ISLANDS" OF WETLANDS
- PROPOSED "ISLANDS" OF WETLANDS
- EXISTING WETLANDS
- WETLAND BUFFER ZONE
- WETLAND BUFFER BOUNDARY
- WETLAND

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6. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROJECT AREA AND HAS OBSERVED THE EXISTING CONDITIONS.

**SCALE**

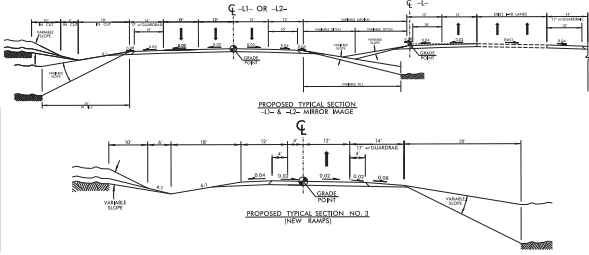
1" = 100'

**DESIGN DATA**

Design Speed: 55 mph  
 Design Lane: 12 ft  
 Design Shoulder: 10 ft

**PRELIMINARY PLANS**  
 DO NOT BE USED FOR CONSTRUCTION

**DESIGN PUBLIC MEETING MAP**  
 PROJECT 34178.13 (I-3306A)  
 F.A. PROJECT IMS-40-4(148)259  
 ORANGE COUNTY  
 WIDENING OF I-40 FROM I-85 TO THE DURHAM COUNTY LINE  
 SHEET 2 OF 6

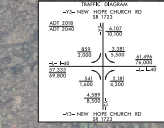
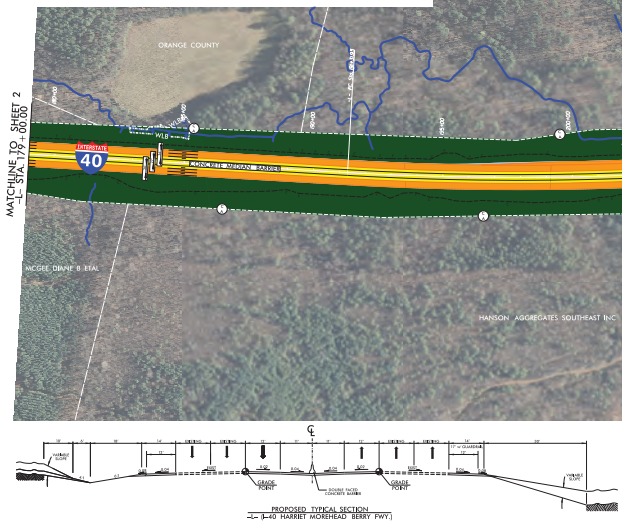


**DESIGN PUBLIC MEETING MAP**  
 PROJECT 3478.13 (I-3386A)  
 F.A. PROJECT: IMS-040-4(148)259  
**ORANGE COUNTY**  
**WIDENING OF I-40 FROM I-85 TO THE**  
**DURHAM COUNTY LINE**  
 SHEET 3 OF 6

- LEGEND**
- EXISTING RIGHT OF WAY
  - PROPOSED RIGHT OF WAY
  - EXISTING ROADWAY
  - PROPOSED ROADWAY
  - EXISTING ROADWAY TO BE REMOVED
  - ROADWAY TO BE RESURFACED
  - PROPOSED ROADWAY TO BE RESURFACED
  - EXISTING STRUCTURES, ISLANDS, CURBS AND UTILITY
  - PROPOSED STRUCTURES, ISLANDS, CURBS AND UTILITY
  - EXISTING UTILITY EASIMENT
  - PROPOSED UTILITY EASIMENT
  - EXISTING TRAFFIC SIGNAL
  - PROPOSED TRAFFIC SIGNAL
  - EXISTING CONTROL OF ACCESS
  - PROPOSED CONTROL OF ACCESS
  - PROPERTY LINES
  - EXISTING UTILITY EASIMENT
  - EXISTING TRAFFIC SIGNAL
  - WETLAND BOUNDARY
  - WETLAND

**NOTES:**  
 1. PROPERTY LINES, WETLAND BOUNDARIES, AND EXISTING UTILITY EASIMENTS ARE SHOWN FOR INFORMATION ONLY. THEY DO NOT REPRESENT A GUARANTEE OF ACCURACY OR A WARRANTY OF FITNESS FOR ANY PARTICULAR USE AND SHALL BE SUBJECT TO CHANGE.  
 2. IMPACTS AND CORRECTION MEASURES: IMPACTS OF CONSTRUCTION AND OPERATION OF THE PROJECT HAVE BEEN ANALYZED AND CORRECTION MEASURES HAVE BEEN DESIGNED AND ARE SHOWN ON THIS MAP. THESE CORRECTION MEASURES ARE SUBJECT TO APPROVAL BY THE LOCAL GOVERNMENT AND FEDERAL AGENCIES. LOCAL GOVERNMENT PERMITS AND FEDERAL PERMITS SHALL BE OBTAINED PRIOR TO CONSTRUCTION.  
 3. NOTES: CONTROL OF ACCESS IS DEFINED AS A CONTROL POINT AT A JUNCTION WHERE THE MAIN ROADWAY IS DISCONTINUED AND TRAVELERS ARE REDIRECTED TO AN ALTERNATE ROADWAY.  
 4. NOT TO SCALE: ORTHOREPHOTOGRAPH DATED FEBRUARY 6, 2013. LOCAL COUNTY PROPERTY OWNER INFORMATION CURRENT AS OF AUGUST 14, 2013.

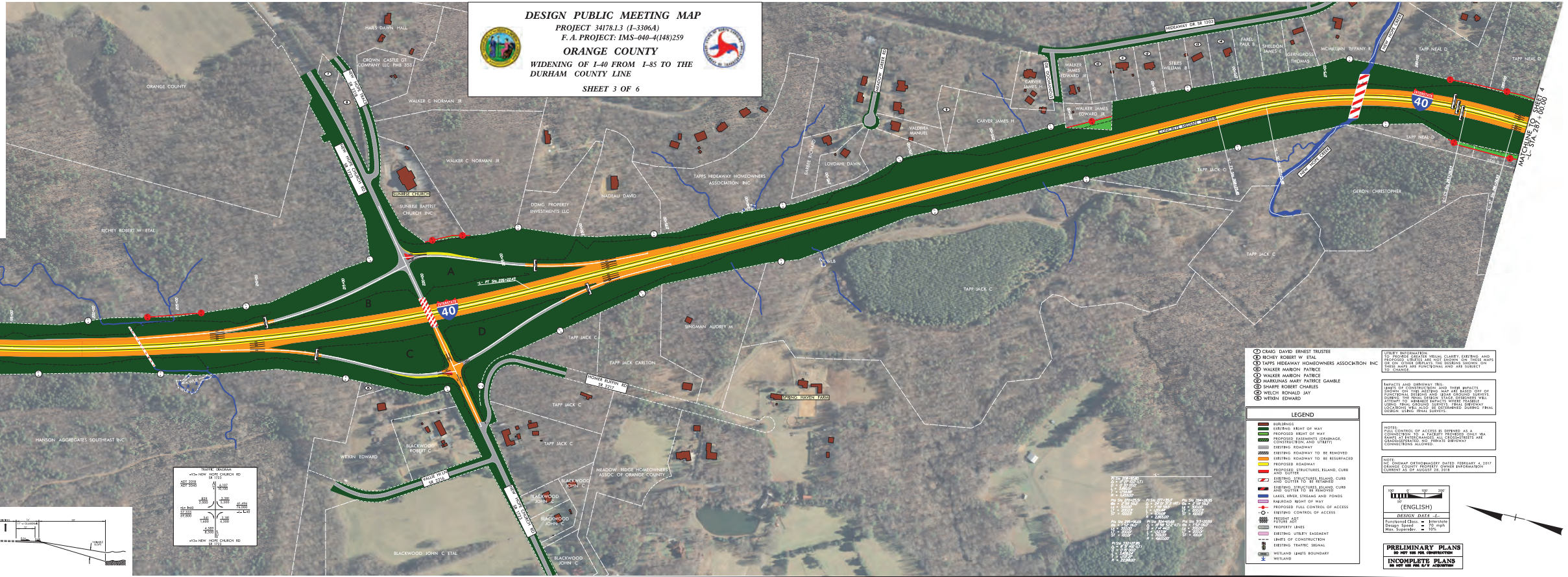
**PRELIMINARY PLANS**  
 DO NOT USE FOR CONSTRUCTION  
**INCOMPLETE PLANS**  
 DO NOT USE FOR CONSTRUCTION

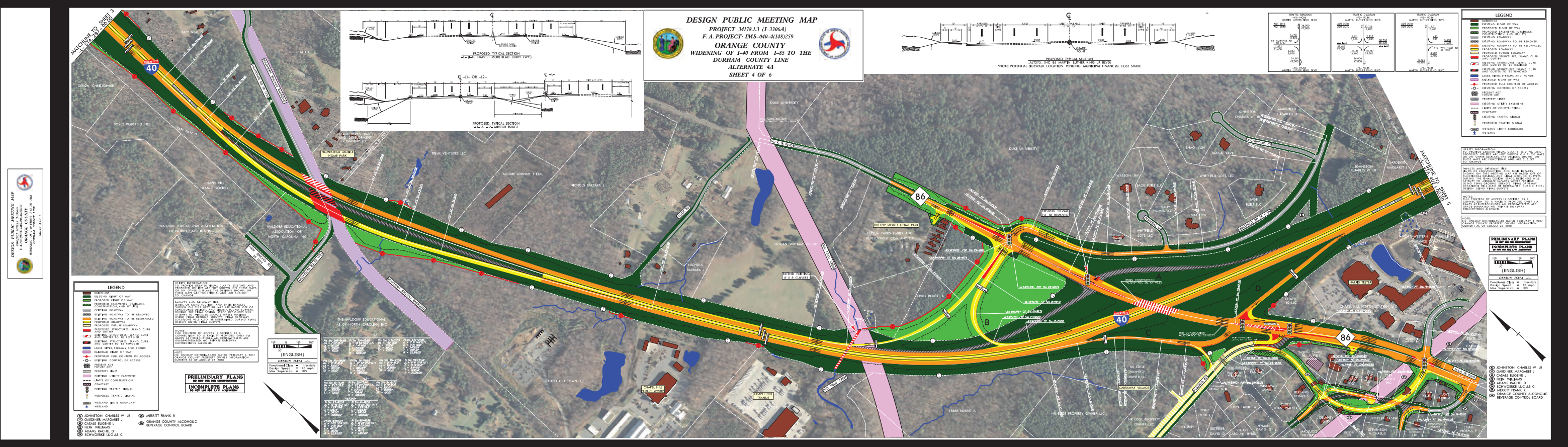


- LEGEND**
- EXISTING RIGHT OF WAY
  - PROPOSED RIGHT OF WAY
  - EXISTING ROADWAY
  - PROPOSED ROADWAY
  - EXISTING ROADWAY TO BE REMOVED
  - ROADWAY TO BE RESURFACED
  - PROPOSED ROADWAY TO BE RESURFACED
  - EXISTING STRUCTURES, ISLANDS, CURBS AND UTILITY
  - PROPOSED STRUCTURES, ISLANDS, CURBS AND UTILITY
  - EXISTING UTILITY EASIMENT
  - PROPOSED UTILITY EASIMENT
  - EXISTING TRAFFIC SIGNAL
  - PROPOSED TRAFFIC SIGNAL
  - EXISTING CONTROL OF ACCESS
  - PROPOSED CONTROL OF ACCESS
  - PROPERTY LINES
  - EXISTING UTILITY EASIMENT
  - EXISTING TRAFFIC SIGNAL
  - WETLAND BOUNDARY
  - WETLAND

**NOTES:**  
 1. PROPERTY LINES, WETLAND BOUNDARIES, AND EXISTING UTILITY EASIMENTS ARE SHOWN FOR INFORMATION ONLY. THEY DO NOT REPRESENT A GUARANTEE OF ACCURACY OR A WARRANTY OF FITNESS FOR ANY PARTICULAR USE AND SHALL BE SUBJECT TO CHANGE.  
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 3. NOTES: CONTROL OF ACCESS IS DEFINED AS A CONTROL POINT AT A JUNCTION WHERE THE MAIN ROADWAY IS DISCONTINUED AND TRAVELERS ARE REDIRECTED TO AN ALTERNATE ROADWAY.  
 4. NOT TO SCALE: ORTHOREPHOTOGRAPH DATED FEBRUARY 6, 2013. LOCAL COUNTY PROPERTY OWNER INFORMATION CURRENT AS OF AUGUST 14, 2013.

**PRELIMINARY PLANS**  
 DO NOT USE FOR CONSTRUCTION  
**INCOMPLETE PLANS**  
 DO NOT USE FOR CONSTRUCTION



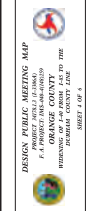


**DESIGN PUBLIC MEETING MAP**  
PROJECT 3478.1.3 (I-3306A)  
F. A. PROJECT: IMS-040-4(148)259  
**ORANGE COUNTY**  
**WIDENING OF I-40 FROM I-85 TO THE DURHAM COUNTY LINE**  
**ALTERNATE 4A**  
SHEET 4 OF 6

- LEGEND**
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- EXISTING ROADWAY
- PROPOSED ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED UNDERROADWAY
- PROPOSED STRUCTURE
- PROPOSED FULL CONTROL OF ACCESS
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- PROPERTY LINES
- EXISTING UTILITY EASEMENT
- LEVELS OF CONSTRUCTION
- CONTRACT
- PROPOSED TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- WETLAND
- WETLAND BOUNDARY
- WETLAND

**NOTES:**

- 1. THIS DOCUMENT IS A PRELIMINARY DESIGN AND SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE BOARD OF SUPERVISORS AND THE BOARD OF ALCOHOLIC BEVERAGE CONTROL.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES.



- LEGEND**
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- EXISTING ROADWAY
- PROPOSED ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED UNDERROADWAY
- PROPOSED STRUCTURE
- PROPOSED FULL CONTROL OF ACCESS
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- PROPERTY LINES
- EXISTING UTILITY EASEMENT
- LEVELS OF CONSTRUCTION
- CONTRACT
- PROPOSED TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- WETLAND
- WETLAND BOUNDARY
- WETLAND

**PRELIMINARY PLANS**  
INCOMPLETE PLANS

**LEGEND**

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- EXISTING ROADWAY
- PROPOSED ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED UNDERROADWAY
- PROPOSED STRUCTURE
- PROPOSED FULL CONTROL OF ACCESS
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- PROPERTY LINES
- EXISTING UTILITY EASEMENT
- LEVELS OF CONSTRUCTION
- CONTRACT
- PROPOSED TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- WETLAND
- WETLAND BOUNDARY
- WETLAND

**LEGEND**

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- EXISTING ROADWAY
- PROPOSED ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED UNDERROADWAY
- PROPOSED STRUCTURE
- PROPOSED FULL CONTROL OF ACCESS
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- PROPERTY LINES
- EXISTING UTILITY EASEMENT
- LEVELS OF CONSTRUCTION
- CONTRACT
- PROPOSED TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- WETLAND
- WETLAND BOUNDARY
- WETLAND



| LEGEND   |  |
|----------|--|
| [Symbol] | BUILDINGS  |
| [Symbol] | EXISTING RIGHT OF WAY                                      |
| [Symbol] | PROPOSED RIGHT OF WAY                                      |
| [Symbol] | PROPOSED EASEMENTS (DRAINAGE, CONSTRUCTION, AND UTILITY)   |
| [Symbol] | EXISTING ROADWAY   |
| [Symbol] | EXISTING ROADWAY TO BE REMOVED                             |
| [Symbol] | EXISTING ROADWAY TO BE RESURFACED                          |
| [Symbol] | PROPOSED ROADWAY   |
| [Symbol] | PROPOSED STRUCTURES ISLAND, CURB AND GUTTER                |
| [Symbol] | EXISTING STRUCTURES ISLAND, CURB AND GUTTER TO BE RETAINED |
| [Symbol] | EXISTING STRUCTURES ISLAND, CURB AND GUTTER TO BE REMOVED  |
| [Symbol] | LAKES, RIVER, STREAMS AND PONDS                            |
| [Symbol] | RAILROAD RIGHT OF WAY                                      |
| [Symbol] | PROPOSED FULL CONTROL OF ACCESS                            |
| [Symbol] | EXISTING CONTROL OF ACCESS                                 |
| [Symbol] | PRESENT ADT  |
| [Symbol] | PROPERTY LINES   |
| [Symbol] | EXISTING UTILITY EASEMENT                                  |
| [Symbol] | LIMITS OF CONSTRUCTION                                     |
| [Symbol] | EXISTING TRAFFIC SIGNAL                                    |
| [Symbol] | WETLAND LIMITS BOUNDARY                                    |
| [Symbol] | WETLAND  |

**UTILITY INFORMATION**  
 TO PROVIDE CLEARER VISUAL CLARITY EXISTING AND PROPOSED UTILITIES ARE NOT SHOWN ON THESE MAPS OR ON OTHER DISPLAYS. THE DESIGN SHOWN ON THESE MAPS ARE FUNCTIONAL AND ARE SUBJECT TO CHANGE.

**IMPACTS AND DRIVEWAY TIES**  
 LIMITS OF CONSTRUCTION AND THEIR IMPACTS SHOWN ON THIS MEETING MAP ARE BASED OFF OF FUNCTIONAL DESIGN AND LEAD GROUND SURVEYS. DURING THE FINAL DESIGN STAGE DESIGNERS WILL ATTEMPT TO MINIMIZE IMPACTS WHILE FEASIBLY USING FINAL GROUND SURVEYS. FINAL DRIVEWAY LOCATIONS WILL ALSO BE DETERMINED DURING FINAL DESIGN USING FINAL SURVEYS.

**NOTES**  
 FULL CONTROL OF ACCESS IS DEFINED AS A CONNECTION TO A FACILITY PROVIDED ONLY VIA RAMP AT INTERCHANGES. ALL CROSS-STREETS ARE GRADE-SEPARATED. NO PRIVATE DRIVEWAY CONNECTIONS ALLOWED.

**NOTE**  
 THE SHIMAP ORTHOPHOTOGRAPHY DATED FEBRUARY 4, 2017 ORANGE COUNTY PROPERTY OWNER INFORMATION CURRENT AS OF AUGUST 28, 2018.

1" = 100'

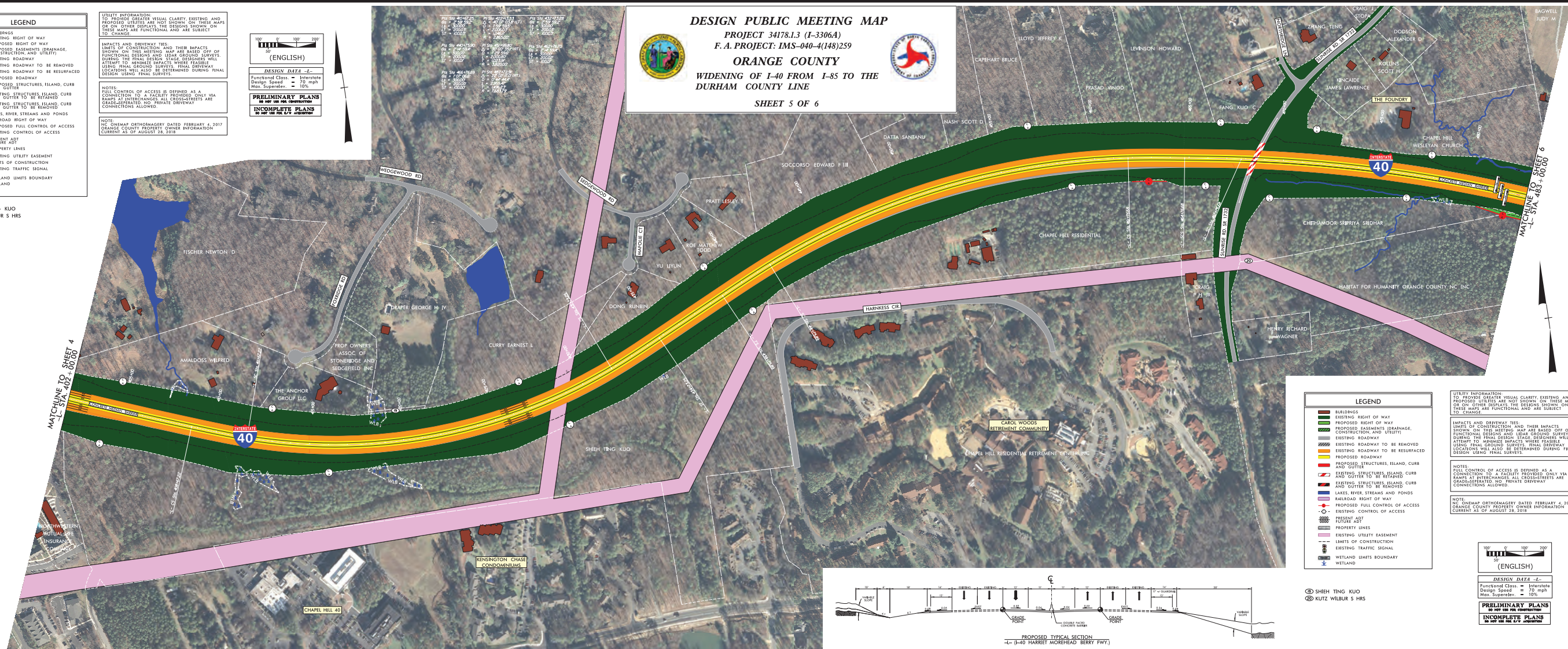
(ENGLISH)

DESIGN DATA - L -  
 Functional Class = Interstate  
 Design Speed = 70 mph  
 Max. Superelev. = 10%

PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS  
 DO NOT USE FOR CONSTRUCTION

**DESIGN PUBLIC MEETING MAP**  
 PROJECT 34178.1.3 (I-3306A)  
 F.A. PROJECT: IMS-040-4(148)259  
**ORANGE COUNTY**  
 WIDENING OF I-40 FROM I-85 TO THE  
 DURHAM COUNTY LINE  
 SHEET 5 OF 6



| LEGEND   |  |
|----------|--|
| [Symbol] | BUILDINGS  |
| [Symbol] | EXISTING RIGHT OF WAY                                      |
| [Symbol] | PROPOSED RIGHT OF WAY                                      |
| [Symbol] | PROPOSED EASEMENTS (DRAINAGE, CONSTRUCTION, AND UTILITY)   |
| [Symbol] | EXISTING ROADWAY   |
| [Symbol] | EXISTING ROADWAY TO BE REMOVED                             |
| [Symbol] | EXISTING ROADWAY TO BE RESURFACED                          |
| [Symbol] | PROPOSED ROADWAY   |
| [Symbol] | PROPOSED STRUCTURES ISLAND, CURB AND GUTTER                |
| [Symbol] | EXISTING STRUCTURES ISLAND, CURB AND GUTTER TO BE RETAINED |
| [Symbol] | EXISTING STRUCTURES ISLAND, CURB AND GUTTER TO BE REMOVED  |
| [Symbol] | LAKES, RIVER, STREAMS AND PONDS                            |
| [Symbol] | RAILROAD RIGHT OF WAY                                      |
| [Symbol] | PROPOSED FULL CONTROL OF ACCESS                            |
| [Symbol] | EXISTING CONTROL OF ACCESS                                 |
| [Symbol] | PRESENT ADT  |
| [Symbol] | PROPERTY LINES   |
| [Symbol] | EXISTING UTILITY EASEMENT                                  |
| [Symbol] | LIMITS OF CONSTRUCTION                                     |
| [Symbol] | EXISTING TRAFFIC SIGNAL                                    |
| [Symbol] | WETLAND LIMITS BOUNDARY                                    |
| [Symbol] | WETLAND  |

**UTILITY INFORMATION**  
 TO PROVIDE CLEARER VISUAL CLARITY EXISTING AND PROPOSED UTILITIES ARE NOT SHOWN ON THESE MAPS OR ON OTHER DISPLAYS. THE DESIGN SHOWN ON THESE MAPS ARE FUNCTIONAL AND ARE SUBJECT TO CHANGE.

**IMPACTS AND DRIVEWAY TIES**  
 LIMITS OF CONSTRUCTION AND THEIR IMPACTS SHOWN ON THIS MEETING MAP ARE BASED OFF OF FUNCTIONAL DESIGN AND LEAD GROUND SURVEYS. DURING THE FINAL DESIGN STAGE DESIGNERS WILL ATTEMPT TO MINIMIZE IMPACTS WHILE FEASIBLY USING FINAL GROUND SURVEYS. FINAL DRIVEWAY LOCATIONS WILL ALSO BE DETERMINED DURING FINAL DESIGN USING FINAL SURVEYS.

**NOTES**  
 FULL CONTROL OF ACCESS IS DEFINED AS A CONNECTION TO A FACILITY PROVIDED ONLY VIA RAMP AT INTERCHANGES. ALL CROSS-STREETS ARE GRADE-SEPARATED. NO PRIVATE DRIVEWAY CONNECTIONS ALLOWED.

**NOTE**  
 THE SHIMAP ORTHOPHOTOGRAPHY DATED FEBRUARY 4, 2017 ORANGE COUNTY PROPERTY OWNER INFORMATION CURRENT AS OF AUGUST 28, 2018.

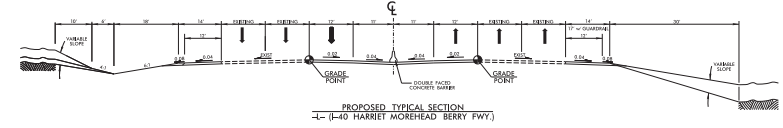
1" = 100'

(ENGLISH)

DESIGN DATA - L -  
 Functional Class = Interstate  
 Design Speed = 70 mph  
 Max. Superelev. = 10%

PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS  
 DO NOT USE FOR CONSTRUCTION



SHIEN TING KUO  
 KLITZ WILBUR S HRS

**DESIGN PUBLIC MEETING MAP**  
**PROJECT 34178.1.3 (I-3306A)**  
**F. A. PROJECT: IMS-040-4(148)259**  
**ORANGE COUNTY**  
**WIDENING OF I-40 FROM I-85 TO THE**  
**DURHAM COUNTY LINE**  
**SHEET 6 OF 6**

**LEGEND**

- BUILDINGS
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENTS (DRAINAGE, CONSTRUCTION, AND UTILITY)
- EXISTING ROADWAY
- EXISTING ROADWAY TO BE REMOVED
- EXISTING ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- PROPOSED STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- LAKES, RIVER, STREAMS AND PONDS
- RAILROAD RIGHT OF WAY
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- FUTURE ADT
- PROPERTY LINES
- EXISTING UTILITY EASEMENT
- LIMITS OF CONSTRUCTION
- EXISTING TRAFFIC SIGNAL
- WETLAND LIMITS BOUNDARY
- WETLAND

**UTILITY INFORMATION:**  
 TO PROVIDE GREATER VISUAL CLARITY, EXISTING AND PROPOSED UTILITIES ARE NOT SHOWN ON THESE MAPS OR ON OTHER DISPLAYS. THE DESIGN SHOWN ON THESE MAPS ARE FUNCTIONAL AND ARE SUBJECT TO CHANGE.

**IMPACTS AND DEWEYWAY THIS:**  
 LIMITS OF CONSTRUCTION AND THEIR IMPACTS SHOWN ON THIS MEETING MAP ARE BASED OFF OF FUNCTIONAL DESIGN AND USAR GROUND CONVEYS DURING THE FINAL DESIGN STAGE. DESIGNERS WILL ATTEMPT TO MINIMIZE IMPACTS WHERE FEASIBLE USING FINAL GROUND SURVEY. FINAL DEWEYWAY LOCATIONS WILL ALSO BE DETERMINED DURING FINAL DESIGN USING FINAL SURVEY.

**NOTES:**  
 FULL CONTROL OF ACCESS IS DEFINED AS A CONNECTION TO A FACILITY PROVIDED ONLY VIA RAMP OR INTERCHANGE. ALL CROSS-STREETS ARE GRADE-SEPARATED AND PRIVATE DEWEYWAY CONNECTIONS ALLOWED.

**NOTE:**  
 NC ONEMAP ORTHOPHOTOGRAPHY DATED FEBRUARY 4, 2017  
 ORANGE COUNTY PROPERTY OWNER INFORMATION CURRENT AS OF AUGUST 18, 2018

**DESIGN DATA**

Functional Class = Interstate  
 Design Speed = 70 mph  
 Max. Superelev. = 10%

**PRELIMINARY PLANS**  
 DO NOT USE FOR CONSTRUCTION

**INCOMPLETE PLANS**  
 DO NOT USE FOR CONSTRUCTION

**LEGEND**

- BUILDINGS
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENTS (DRAINAGE, CONSTRUCTION, AND UTILITY)
- EXISTING ROADWAY
- EXISTING ROADWAY TO BE REMOVED
- EXISTING ROADWAY TO BE RESURFACED
- PROPOSED ROADWAY
- PROPOSED STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- PROPOSED STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- LAKES, RIVER, STREAMS AND PONDS
- RAILROAD RIGHT OF WAY
- PROPOSED FULL CONTROL OF ACCESS
- EXISTING FULL CONTROL OF ACCESS
- FUTURE ADT
- PROPERTY LINES
- EXISTING UTILITY EASEMENT
- LIMITS OF CONSTRUCTION
- EXISTING TRAFFIC SIGNAL
- WETLAND LIMITS BOUNDARY
- WETLAND

**UTILITY INFORMATION:**  
 TO PROVIDE GREATER VISUAL CLARITY, EXISTING AND PROPOSED UTILITIES ARE NOT SHOWN ON THESE MAPS OR ON OTHER DISPLAYS. THE DESIGN SHOWN ON THESE MAPS ARE FUNCTIONAL AND ARE SUBJECT TO CHANGE.

**IMPACTS AND DEWEYWAY THIS:**  
 LIMITS OF CONSTRUCTION AND THEIR IMPACTS SHOWN ON THIS MEETING MAP ARE BASED OFF OF FUNCTIONAL DESIGN AND USAR GROUND SURVEY DURING THE FINAL DESIGN STAGE. DESIGNERS WILL ATTEMPT TO MINIMIZE IMPACTS WHERE FEASIBLE USING FINAL GROUND SURVEY. FINAL DEWEYWAY LOCATIONS WILL ALSO BE DETERMINED DURING FINAL DESIGN USING FINAL SURVEY.

**NOTES:**  
 FULL CONTROL OF ACCESS IS DEFINED AS A CONNECTION TO A FACILITY PROVIDED ONLY VIA RAMP OR INTERCHANGE. ALL CROSS-STREETS ARE GRADE-SEPARATED AND PRIVATE DEWEYWAY CONNECTIONS ALLOWED.

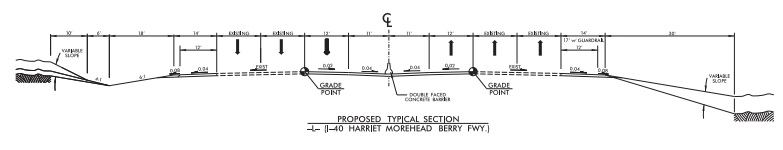
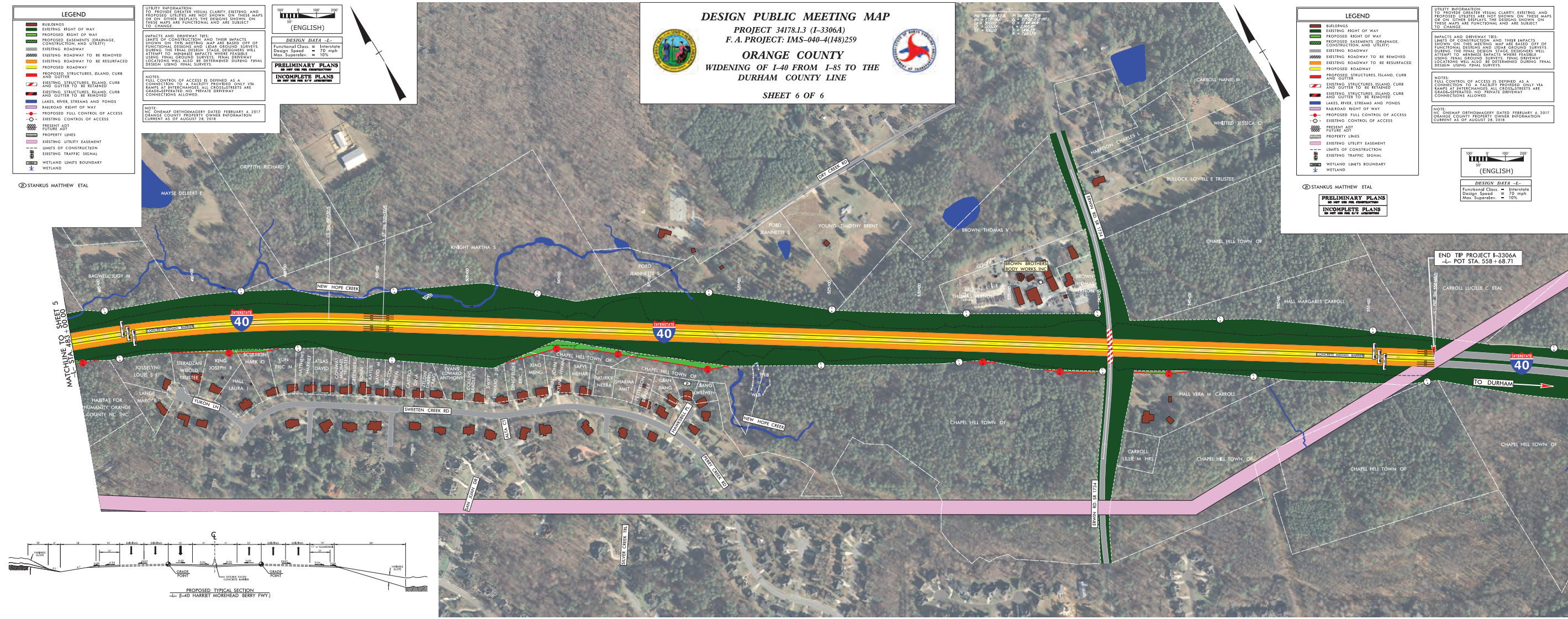
**NOTE:**  
 NC ONEMAP ORTHOPHOTOGRAPHY DATED FEBRUARY 4, 2017  
 ORANGE COUNTY PROPERTY OWNER INFORMATION CURRENT AS OF AUGUST 18, 2018

**DESIGN DATA**

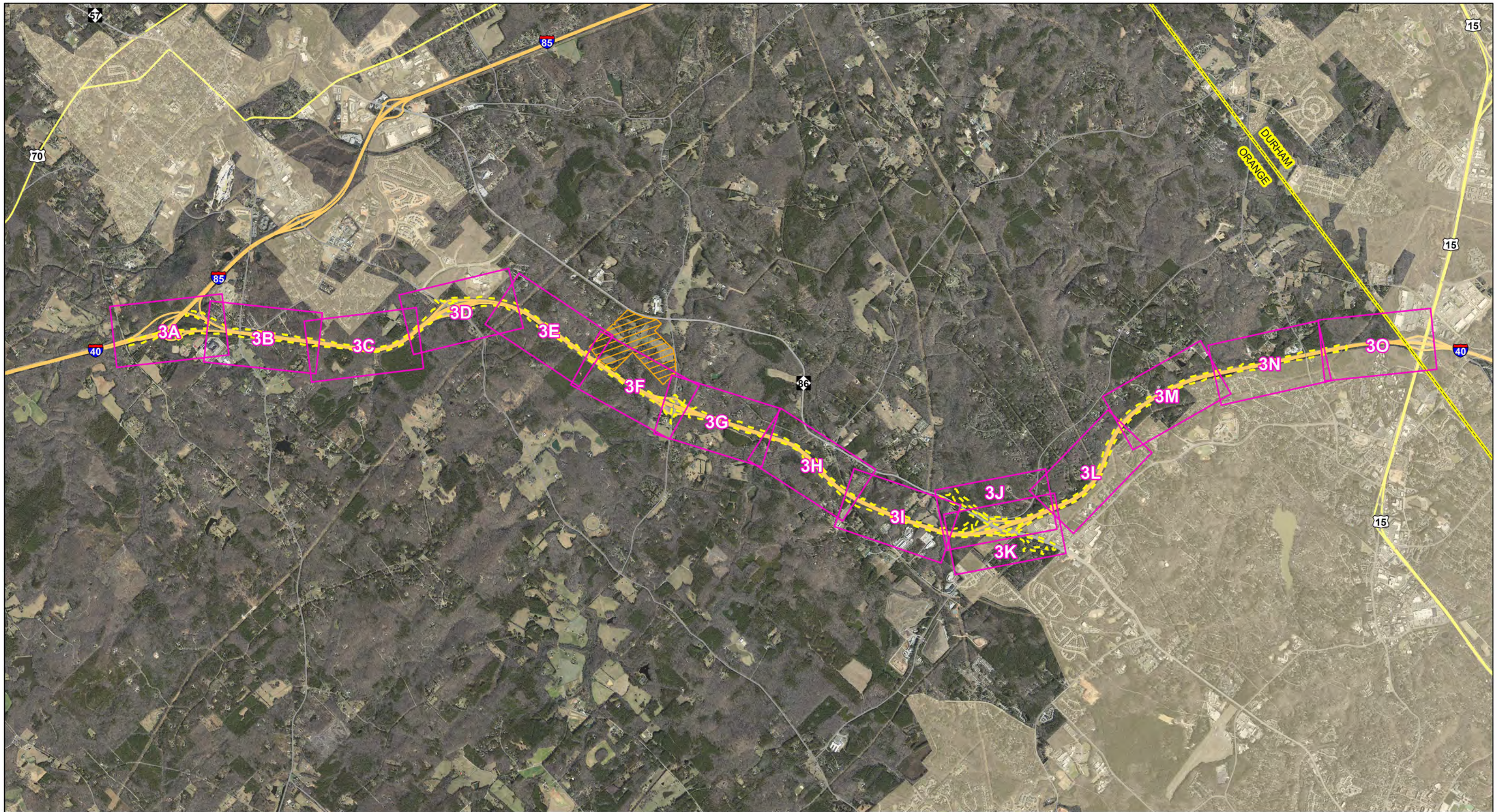
Functional Class = Interstate  
 Design Speed = 70 mph  
 Max. Superelev. = 10%


**PRELIMINARY PLANS**  
 DO NOT USE FOR CONSTRUCTION





**INCOMPLETE PLANS**  
 DO NOT USE FOR CONSTRUCTION




# Appendix B



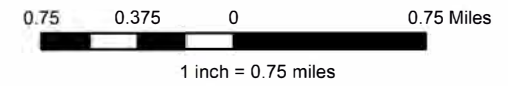
 Slope Stake Limits Plus 25 ft  
 Map Index

 Interstate  
 US Route  
 NC Route  
 Major Road

 Blackwood Farm Park  
 Municipal Boundary  
 County Boundary



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 7



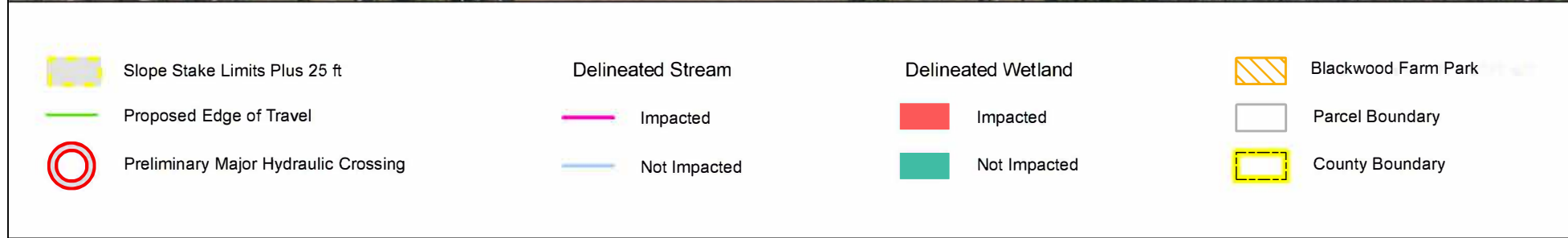
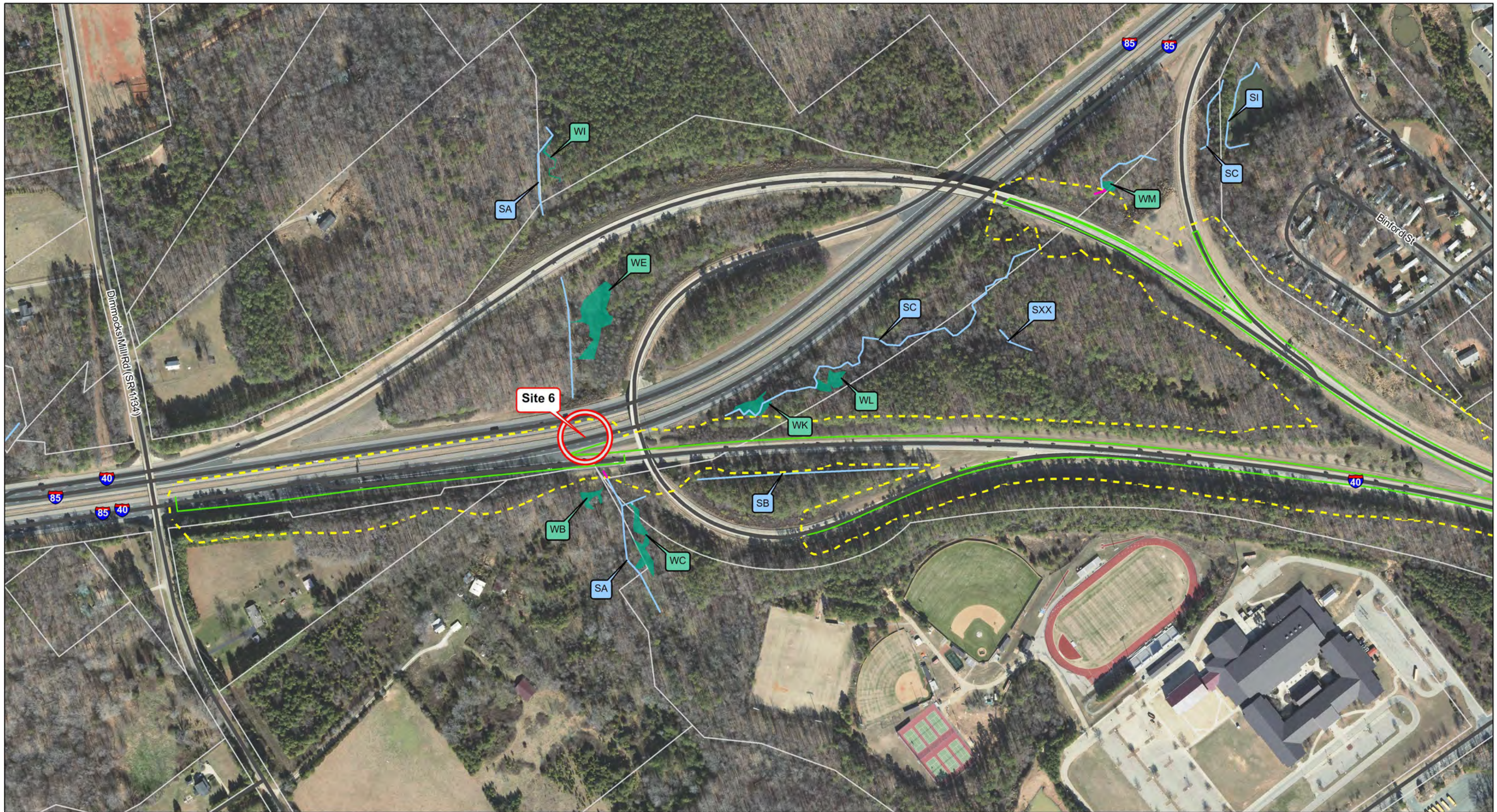
Source: NCDOT, NCOneMap, CALYX Engineers and Consultants Figure Date: 10/1/2018

I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.

**STIP Project I-3306A  
Orange County**

**Figure 3 - Stream and Wetland Impact Map**





**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 7**

1 inch = 300 feet




Source: NCDOT, NCOneMap, CALYX Engineers and Consultants      Figure Date: 10/1/2018




I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.




**STIP Project I-3306A  
Orange County**

**Figure 3A - Stream and Wetland Impact Map**



-  Slope Stake Limits Plus 25 ft
-  Proposed Edge of Travel
-  Preliminary Major Hydraulic Crossing

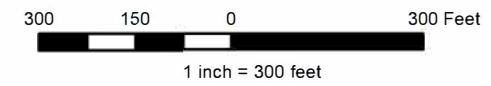
-  Delineated Stream
-  Impacted
-  Not Impacted

-  Delineated Wetland
-  Impacted
-  Not Impacted

-  Blackwood Farm Park
-  Parcel Boundary
-  County Boundary



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DIVISION 7






Source: NCDOT, NCOneMap, CALYX Engineers and Consultants Figure Date: 10/1/2018



I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.



**STIP Project I-3306A  
Orange County**

**Figure 3B - Stream and Wetland Impact Map**



-  Slope Stake Limits Plus 25 ft
-  Proposed Edge of Travel
-  Preliminary Major Hydraulic Crossing

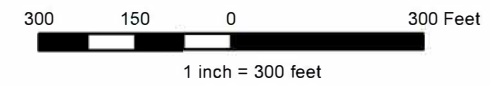
- Delineated Stream**
-  Impacted
-  Not Impacted

- Delineated Wetland**
-  Impacted
-  Not Impacted

-  Blackwood Farm Park
-  Parcel Boundary
-  County Boundary



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DIVISION 7

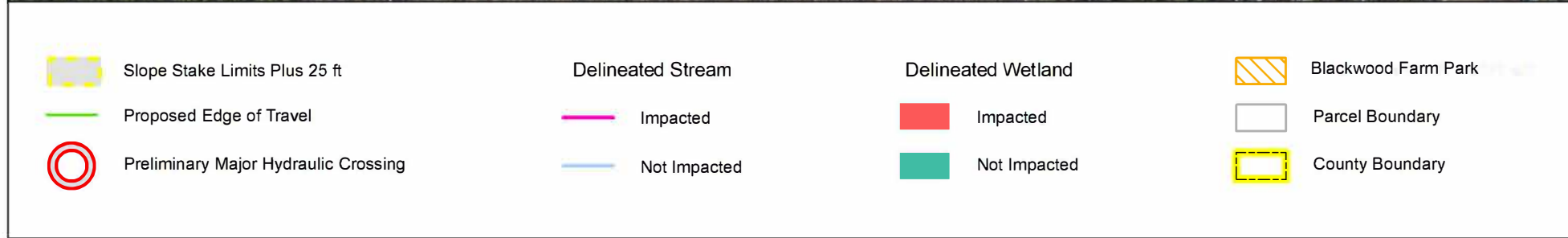
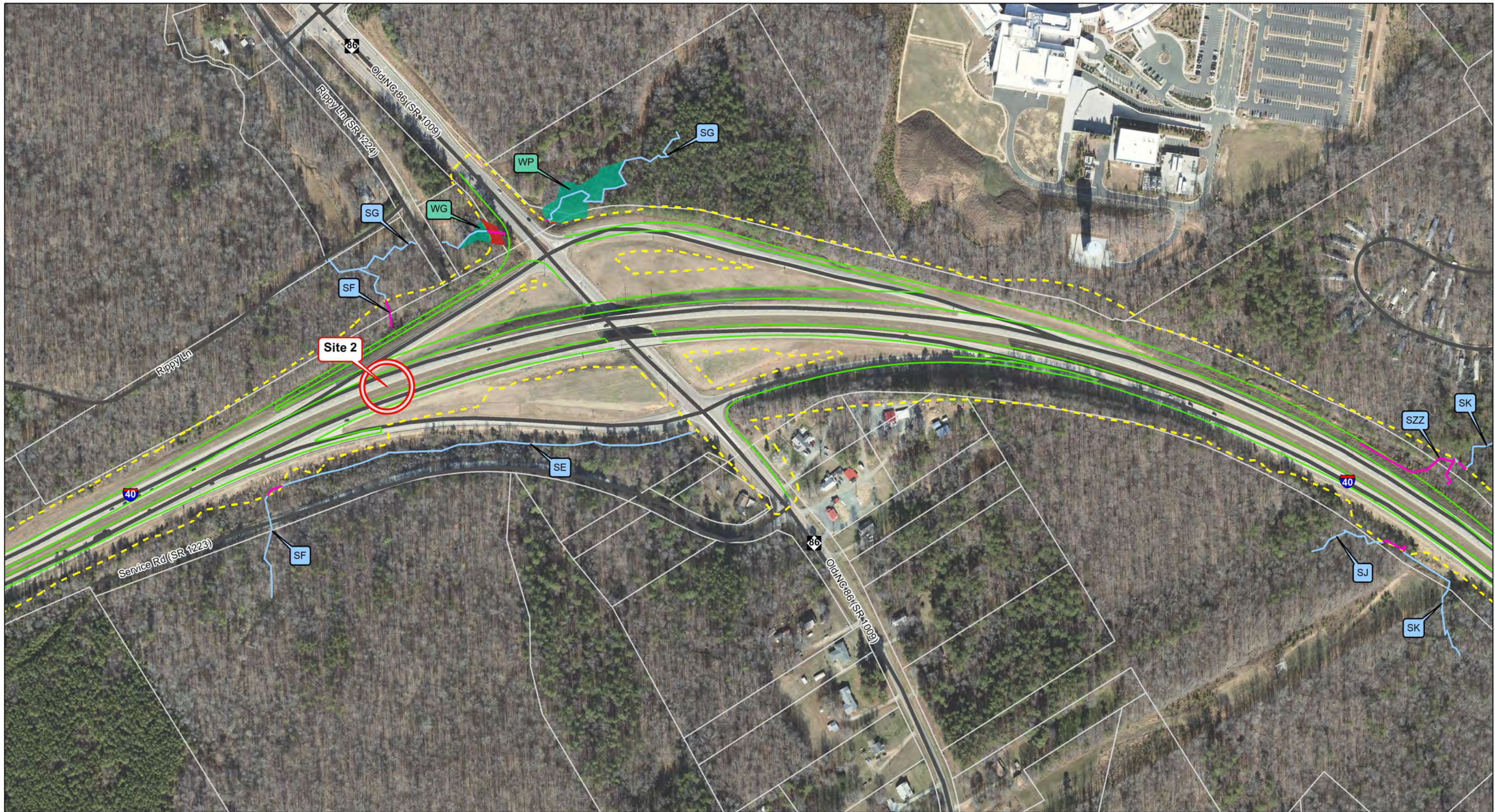



Source: NCDOT, NCOneMap, CALYX Engineers and Consultants Figure Date: 10/1/2018

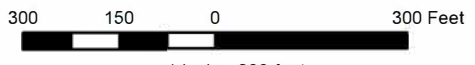
I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.


**STIP Project I-3306A  
Orange County**

**Figure 3C - Stream and Wetland Impact Map**




**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 7**

  
 1 inch = 300 feet

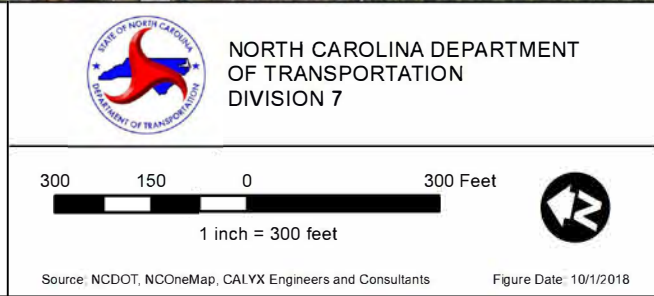
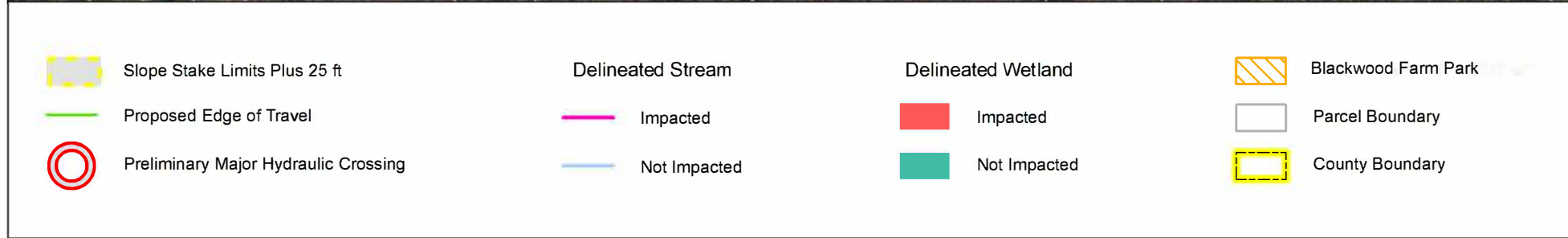


Source: NCDOT, NCOneMap, CALYX Engineers and Consultants      Figure Date: 10/1/2018

I-40 from I-85 in Orange County to the Durham County Line.  
 Widen to Six Lanes and Install ITS.

**STIP Project I-3306A  
 Orange County**

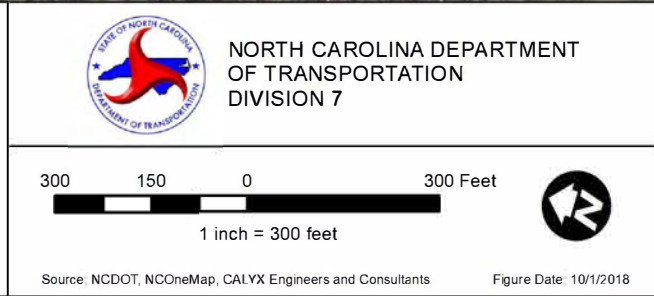
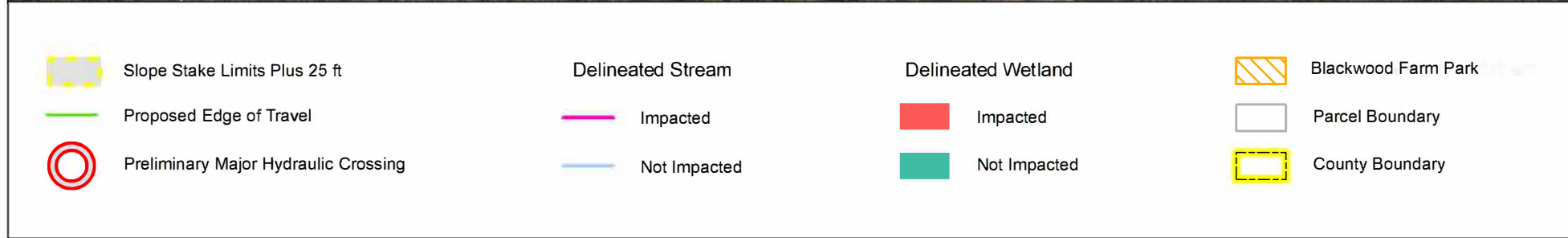
**Figure 3D - Stream and Wetland Impact Map**



I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.

**STIP Project I-3306A  
Orange County**

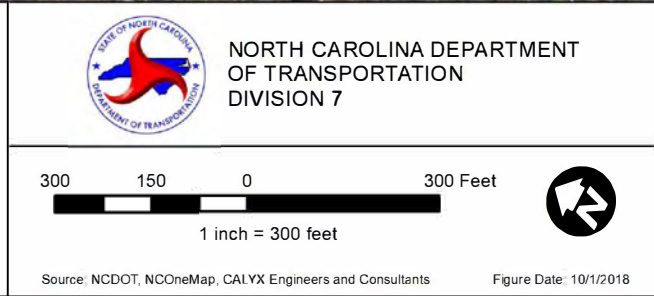
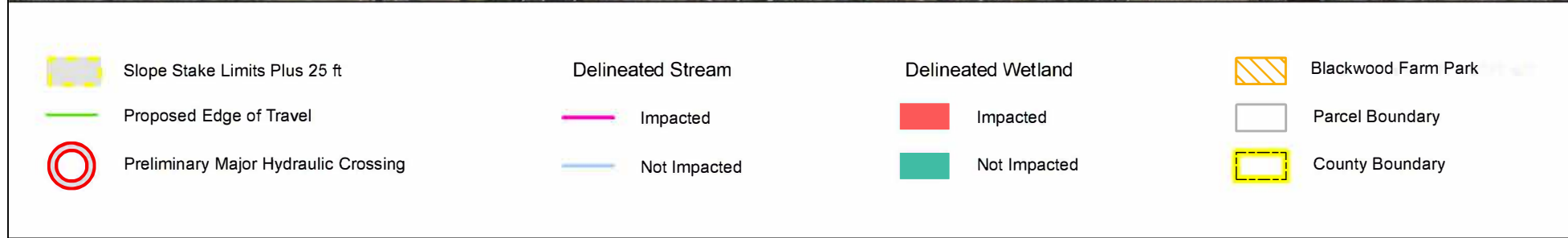
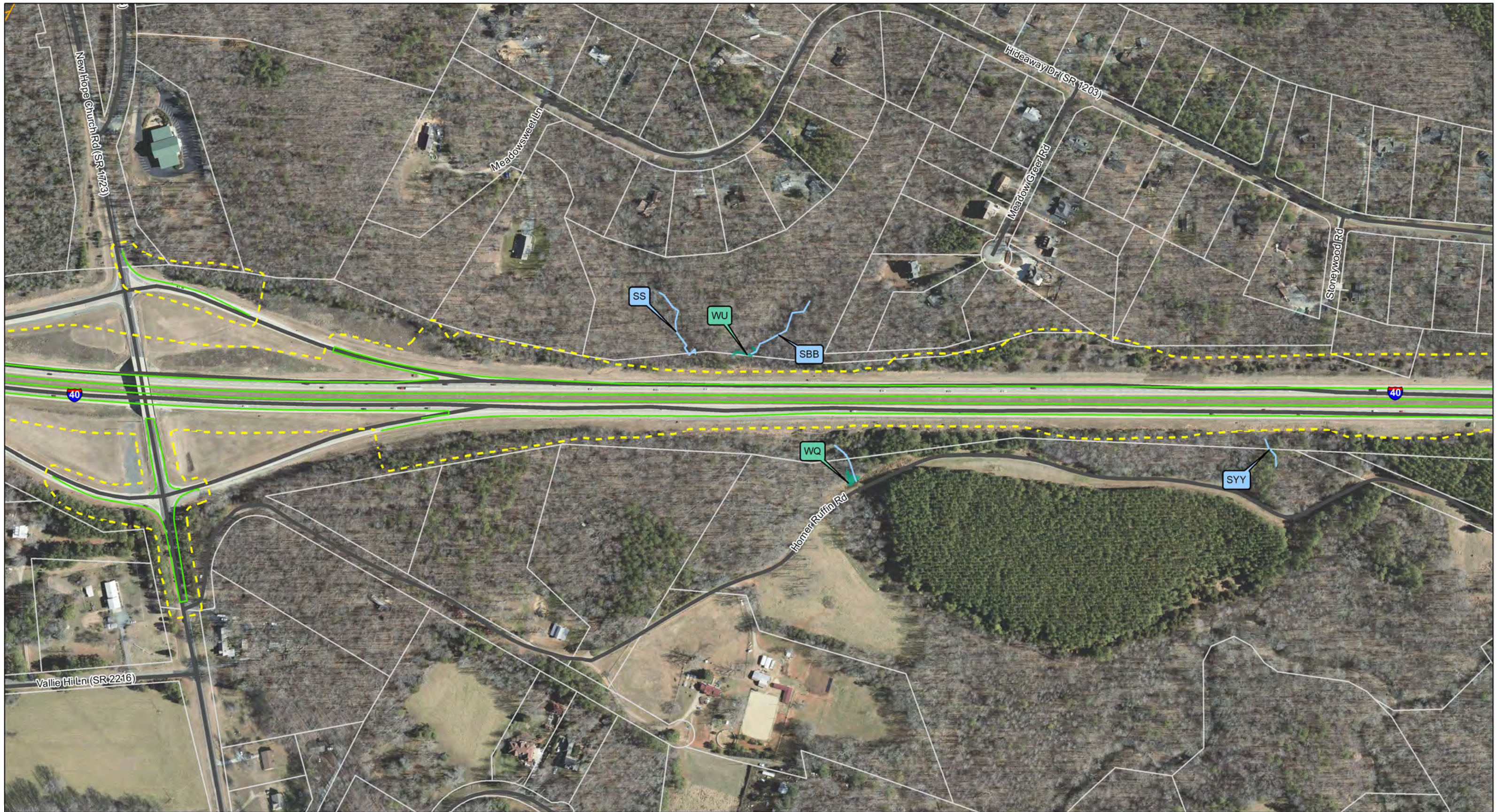
**Figure 3E - Stream and Wetland Impact Map**



I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.

**STIP Project I-3306A  
 Orange County**

**Figure 3F - Stream and Wetland Impact Map**



I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.

**STIP Project I-3306A  
Orange County**

**Figure 3G - Stream and Wetland Impact Map**



Slope Stake Limits Plus 25 ft

Delineated Stream

Delineated Wetland

Blackwood Farm Park



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 7

I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.

Proposed Edge of Travel

Impacted

Impacted

Parcel Boundary



1 inch = 300 feet



**STIP Project I-3306A  
Orange County**

Preliminary Major Hydraulic Crossing

Not Impacted

Not Impacted

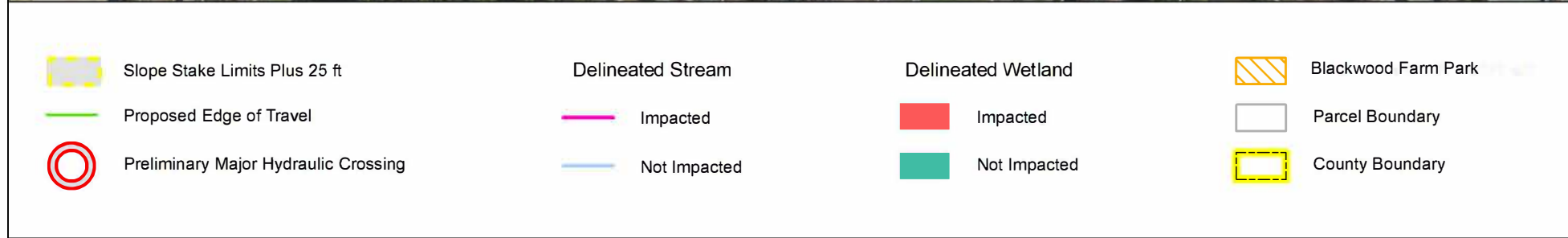
County Boundary


Source: NCDOT, NCOneMap, CALYX Engineers and Consultants


Figure Date: 10/1/2018


**Figure 3H - Stream and Wetland Impact Map**






**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 7**


  
 1 inch = 300 feet

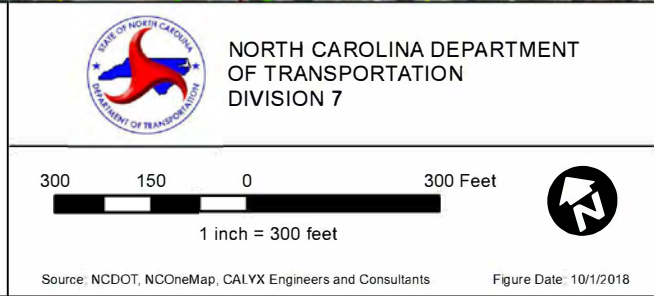
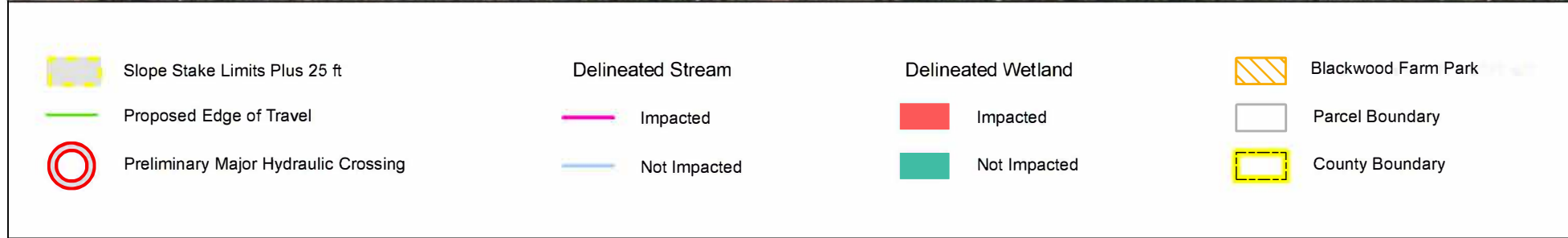


Source: NCDOT, NCOneMap, CALYX Engineers and Consultants      Figure Date: 10/1/2018

I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.

**STIP Project I-3306A  
Orange County**

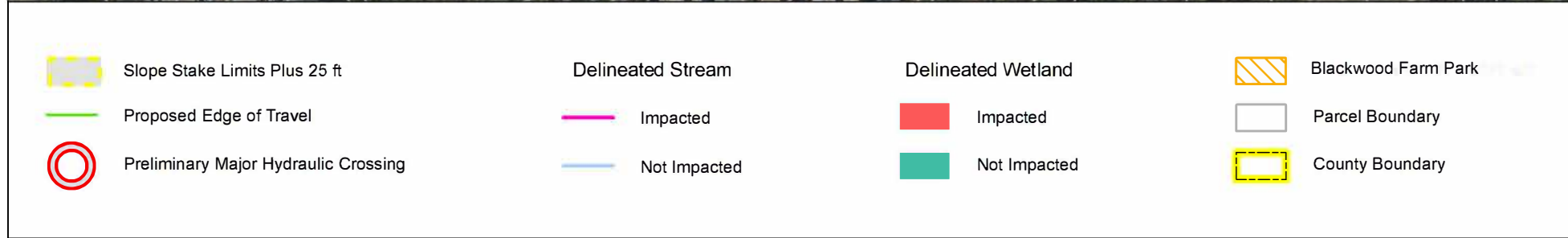
**Figure 3I - Stream and Wetland Impact Map**





I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.


**STIP Project I-3306A  
 Orange County**

**Figure 3J - Stream and Wetland Impact Map**




**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**  
 DIVISION 7

  
 1 inch = 300 feet

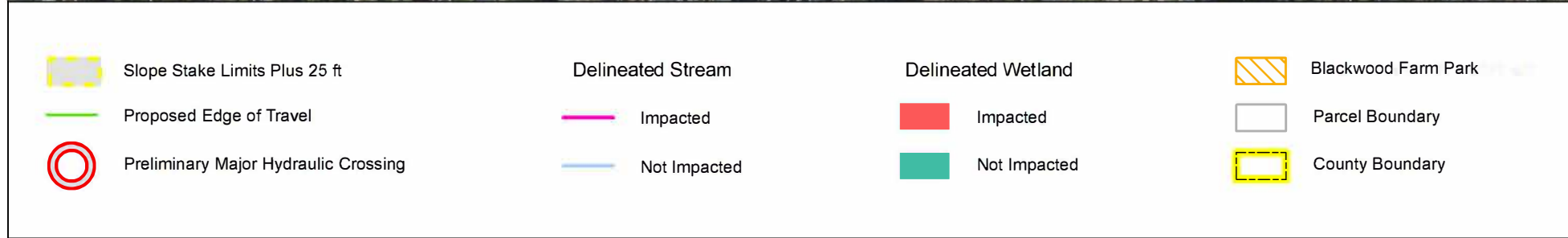



Source: NCDOT, NCOneMap, CALYX Engineers and Consultants      Figure Date: 10/1/2018


I-40 from I-85 in Orange County  
 to the Durham County Line.  
 Widen to Six Lanes and Install ITS.


**STIP Project I-3306A**  
**Orange County**

**Figure 3K - Stream and Wetland Impact Map**




**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 7**


  
 1 inch = 300 feet






Source: NCDOT, NCOneMap, CALYX Engineers and Consultants      Figure Date: 10/1/2018




I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.




**STIP Project I-3306A  
Orange County**

**Figure 3L - Stream and Wetland Impact Map**



-  Slope Stake Limits Plus 25 ft
-  Proposed Edge of Travel
-  Preliminary Major Hydraulic Crossing

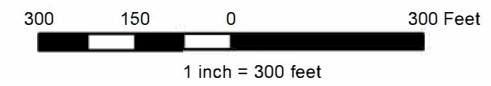
-  Delineated Stream
-  Impacted
-  Not Impacted

-  Delineated Wetland
-  Impacted
-  Not Impacted

-  Blackwood Farm Park
-  Parcel Boundary
-  County Boundary



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 7



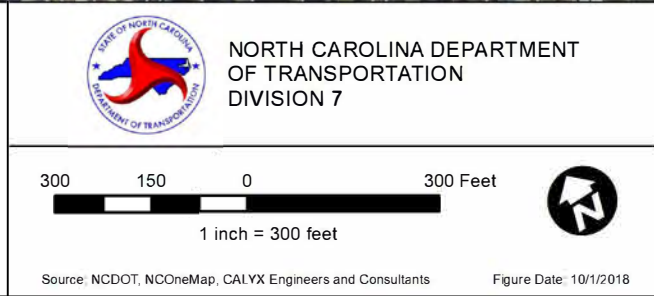
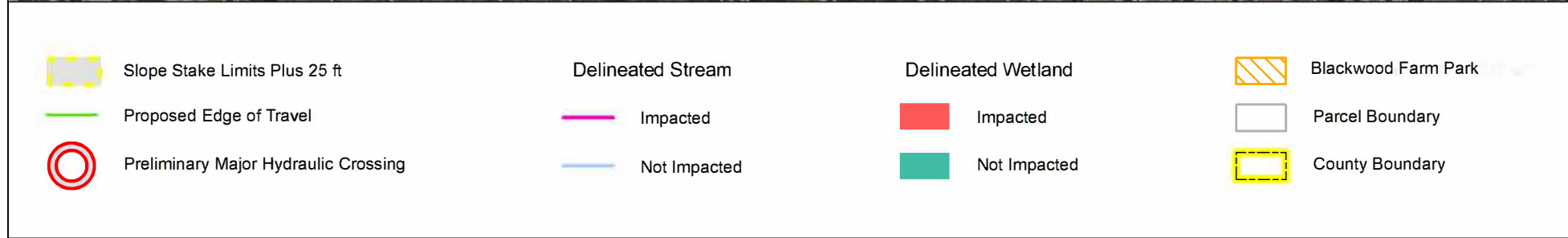
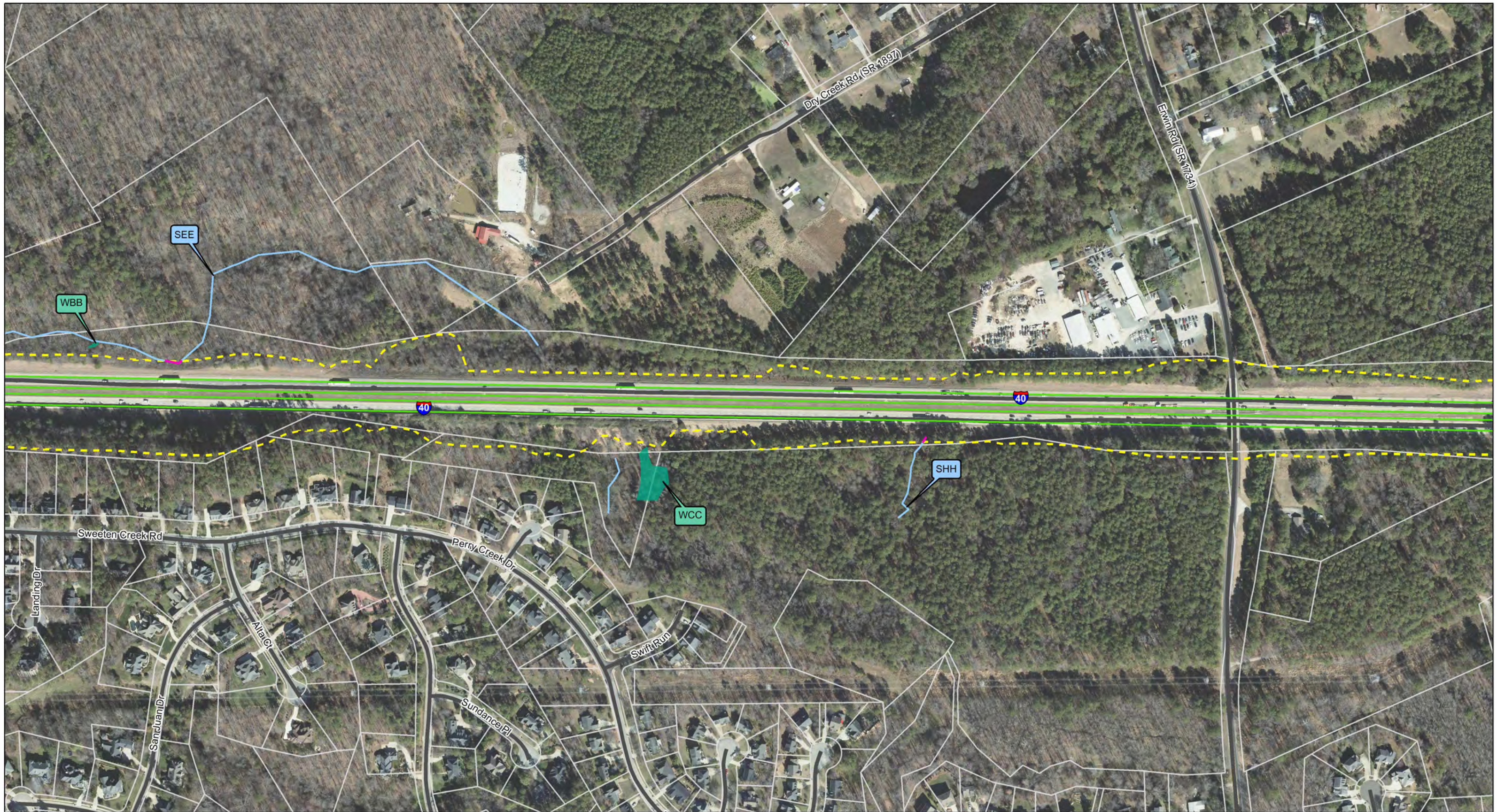
Source: NCDOT, NCOneMap, CALYX Engineers and Consultants

Figure Date: 10/1/2018

I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.

**STIP Project I-3306A  
Orange County**

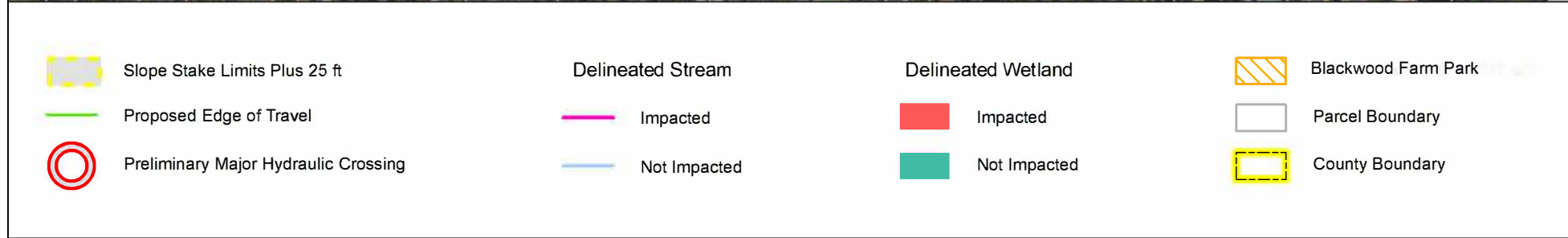
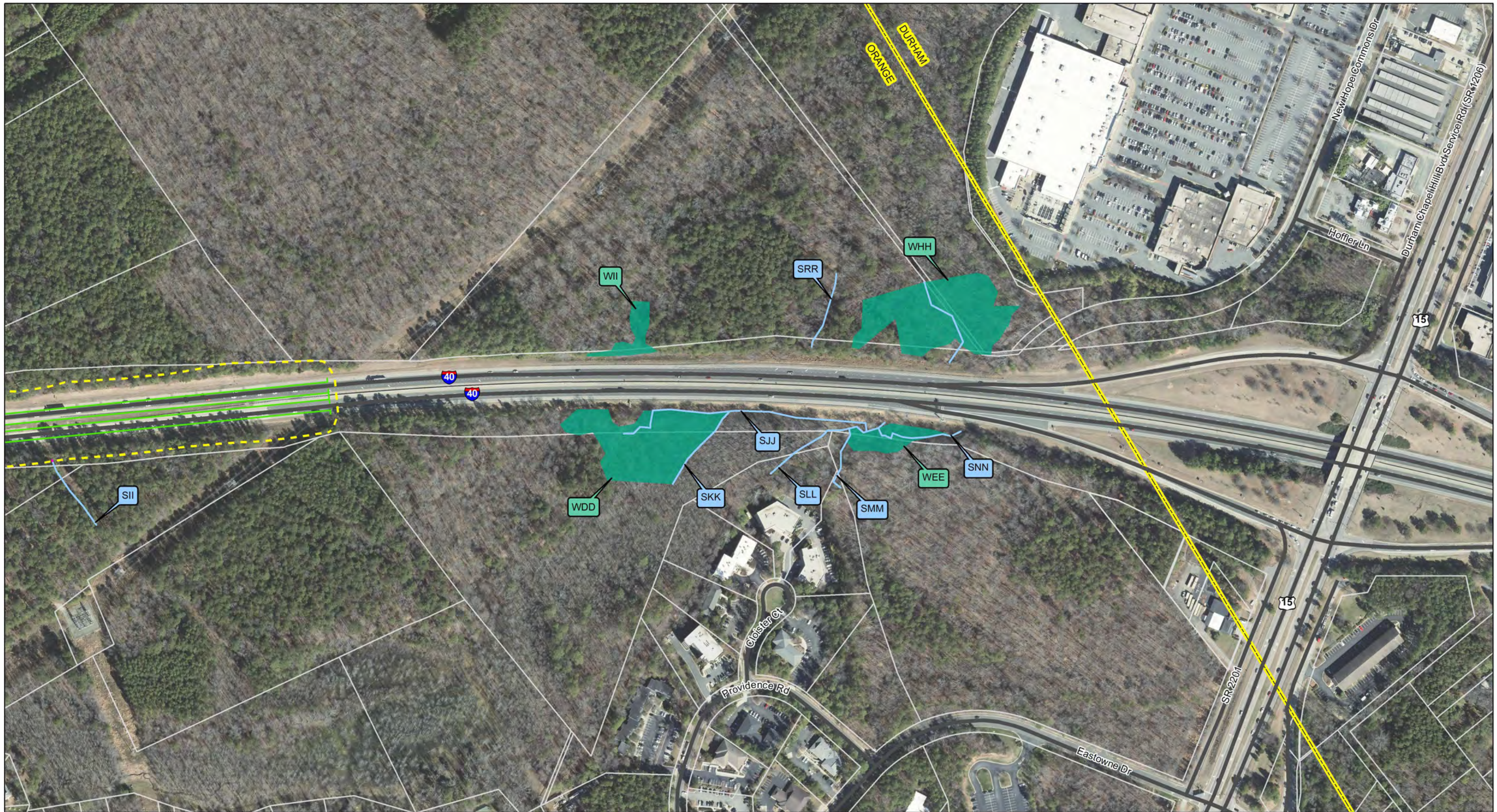
**Figure 3M - Stream and Wetland Impact Map**




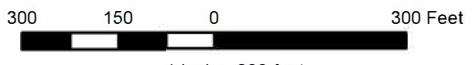
I-40 from I-85 in Orange County to the Durham County Line. Widen to Six Lanes and Install ITS.


**STIP Project I-3306A  
Orange County**

**Figure 3N - Stream and Wetland Impact Map**




**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**  
 DIVISION 7

  
 1 inch = 300 feet



Source: NCDOT, NCOneMap, CALYX Engineers and Consultants      Figure Date: 10/1/2018

I-40 from I-85 in Orange County to the Durham County Line.  
 Widen to Six Lanes and Install ITS.

**STIP Project I-3306A**  
**Orange County**

**Figure 30 - Stream and Wetland Impact Map**

# Appendix C



# EIS RELOCATION REPORT

North Carolina Department of Transportation  
RELOCATION ASSISTANCE PROGRAM

E.I.S.       CORRIDOR       DESIGN

|                         |   |        |        |           |   |    |   |           |
|-------------------------|---|--------|--------|-----------|---|----|---|-----------|
| WBS ELEMENT:            | 34178.1.1   | COUNTY | Orange | Alternate | 1 | of | 2 | Alternate |
| T.I.P. No.:             | I-3306A   |        |        |           |   |    |   |           |
| DESCRIPTION OF PROJECT: | I-40 widening from I-85 in Orange County to the Durham Co. line |        |        |           |   |    |   |           |

| ESTIMATED DISPLACEDS |        |         |       |            | INCOME LEVEL      |        |          |                        |                        |     |
|----------------------|--------|---------|-------|------------|-------------------|--------|----------|------------------------|------------------------|-----|
| Type of Displacees   | Owners | Tenants | Total | Minorities | 0-15M             | 15-25M | 25-35M   | 35-50M                 | 50 UP                  |     |
| Residential          | 1      | 2       | 3     | 2          | 0                 | 0      | 2        | 0                      | 1                      |     |
| Businesses           | 0      | 0       | 0     | 0          | VALUE OF DWELLING |        |          | DSS DWELLING AVAILABLE |                        |     |
| Farms                | 0      | 0       | 0     | 0          | Owners            |        | Tenants  |                        | For Sale      For Rent |     |
| Non-Profit           | 0      | 0       | 0     | 0          | 0-20M             | 0      | \$ 0-150 | 0                      | 0-20M                  | 0   |
|                      |        |         |       |            | 20-40M            | 0      | 150-250  | 0                      | 20-40M                 | 0   |
|                      |        |         |       |            | 40-70M            | 0      | 250-400  | 0                      | 40-70M                 | 21  |
|                      |        |         |       |            | 70-100M           | 0      | 400-600  | 0                      | 70-100M                | 29  |
|                      |        |         |       |            | 100 UP            | 1      | 600 UP   | 2                      | 100 UP                 | 688 |
|                      |        |         |       |            | TOTAL             | 1      |          | 2                      |                        | 738 |
|                      |        |         |       |            |                   |        |          |                        |                        | 125 |

| ANSWER ALL QUESTIONS                |                                     |  |
|-------------------------------------|-------------------------------------|--|
| Yes                                 | No                                  | Explain all "YES" answers.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. Will special relocation services be necessary?  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 2. Will schools or churches be affected by displacement?   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 3. Will business services still be available after project?  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc. |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 5. Will relocation cause a housing shortage?   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 6. Source for available housing (list).  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 7. Will additional housing programs be needed?   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. Should Last Resort Housing be considered?   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 9. Are there large, disabled, elderly, etc. families?  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 10. Will public housing be needed for project?   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 11. Is public housing available?   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 12. Is it felt there will be adequate DSS housing available during relocation period?                          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 13. Will there be a problem of housing within financial means?   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 14. Are suitable business sites available (list source).   |
|                                     |                                     | 15. Number months estimated to complete RELOCATION? <b>12 to 18 months</b>                                     |

| REMARKS (Respond by number)   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| 1. Personal contact with relocate was not done, it will have to be determined when an in depth interview is done at a later time. |  |  |  |  |  |  |  |
| 3. Business Services will still be available.   |  |  |  |  |  |  |  |
| 6. Local Survey, Internet Services and MIs  |  |  |  |  |  |  |  |
| 8. When warranted, last resort housing guidelines should be a consideration. Apply in accordance with Uniform Relocation Act.     |  |  |  |  |  |  |  |
| 11. If public housing is needed, it is available through local governmental agencies.   |  |  |  |  |  |  |  |
| 12. Based on local real estate markets there should be no Shortage of DSS housing available.                                      |  |  |  |  |  |  |  |
| 14. According to Loopnet Service (commercial and business land listing service). There are no business relocation involved.       |  |  |  |  |  |  |  |

Tenant determination was done based on address information from local public records. No individual interviews were done to determine owner status. This will be done at a later time when the full relocation program will be explained to the owners or tenants. **There could be shortage of vacant mobile home lots or mobile home units available for rental.**

|  |                    |  |                    |
|--|--------------------|--|--------------------|
| <br>Daniel B. Parks<br>Right of Way Agent | 12/17/2018<br>Date | <br>Relocation Coordinator | 12/18/2018<br>Date |
|--|--------------------|--|--------------------|

# Merger Project Team Meeting Agreement

Concurrence Point No. 1: Project Purpose and Need

Project Name/Description: I-40, Widen from I-85 to Durham County Line in Orange County

TIP Project: I-3306A

WBS Nos.: 34178.1.3

### Purpose

The purpose of this project is to relieve peak hour congestion on this facility such that a level of service (LOS) D or better can be maintained for the 2040 build condition. Other desired outcomes would be to improve the traffic flow and continuity between the existing eight-lane section at the beginning of the project (I-85) and the six-lane section at the end of the project (Durham County Line).

### Needs

The needs to be addressed by these projects include:

- Congestion due to lane balance and continuity.

### Comments:

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The Project Team has concurred on this date of September 11, 2014, on the above mentioned project purpose and need for TIP Project I-3306A.

USACE [Signature] 9/11/14  
Date

NCDOT [Signature] 9/11/14  
Date

USEPA C. Va. Dwyer 9/11/14  
Date

USFWS Gary Jordan 9/11/2014  
Date

FHWA [Signature] 9/11/14  
Date

NCDWR [Signature] 9-11-2014  
Date

NCWRC [Signature] 9-11-14  
Date

NCDCR Renee Hedhill-Cady 9/12/14  
Date

DCHC MPO [Signature] 9/11/2014  
Date

Merger Project Team Meeting Agreement

Concurrence Point No. 2: Preliminary Alternatives to be studied in detail

Project Name/Description: I-40, Widening from I-85 to Durham County Line in Orange County

TIP Project: I-3308A

WBS Nos.: 34178, 1, 3

Alternatives

"Best Fit" Widening

No Build Alternative

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The Project Team has concurred on this date of September 11, 2014, on the above mentioned project purpose and need for TIP Project I-3308A.

|  |   |
|--|---|
| USACE <u><i>[Signature]</i></u> <u>9/11/2014</u><br>Date | NCDOT <u><i>[Signature]</i></u> <u>9/11/14</u><br>Date      |
| USEPA <u><i>[Signature]</i></u> <u>9/11/14</u><br>Date   | USFWS <u><i>[Signature]</i></u> <u>9/11/2014</u><br>Date    |
| FHWA <u><i>[Signature]</i></u> <u>Date</u>               | NCDWR <u><i>[Signature]</i></u> <u>9-11-2014</u><br>Date    |
| NCWRC <u><i>[Signature]</i></u> <u>9-11-14</u><br>Date   | NCDCR <u><i>[Signature]</i></u> <u>9/12/14</u><br>Date      |
|  | DCHC MPO <u><i>[Signature]</i></u> <u>9/11/2014</u><br>Date |

**Section 404/NEPA Interagency Merger Process Agreement  
 Concurrence Point Number 2A  
 Bridging Decisions and Alignment Review**

WBS No.: 34178.1.3  
 STIP Project: I-3306A  
 County: Orange

Project Name/Description: I-3306A: I-40 from I-85 in Orange County to the Durham County Line. Widen to six lanes.

The Project Team has reviewed the proposed hydraulic structures at the major crossings and agrees to carry forward the structures noted in the following table:

**PRELIMINARY HYDRAULIC RECOMMENDATIONS FOR MAJOR CROSSINGS**

| Site Number <sup>1</sup> | Figure 3 Sheet | Stream/Wetland ID | Stream Name          | Existing Structure           | Minimum Recommended Structure  |
|--------------------------|----------------|-------------------|----------------------|------------------------------|--------------------------------|
|                          |                |                   |                      | Number, Size, Structure Type | Number, Size, Structure Type   |
| 1                        | 3C             | Cates Creek       | Cates Creek          | 1 @ 7'x7' RCBC               | Retain                         |
| 2                        | 3D             | SF                | UT to Cates Creek    | 1 @ 7'x7' RCBC               | Retain & Extend 65 feet Outlet |
| 3                        | 3F             | SN                | UT to New Hope Creek | 1 @ 7'x6' RCBC               | Retain                         |
| 4                        | 3H             | New Hope Creek    | New Hope Creek       | 4 @ 13'x12' RCBC             | Retain                         |
| 5                        | 3I             | Old Field Creek   | Old Field Creek      | 1 @ 8'x8' RCBC               | Retain & Extend 10 feet Outlet |
| 6                        | 3A             | SA                | UT to Eno River      | 1 @ 8'x8' RCBC               | Retain                         |

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### Section 404/NEPA Interagency Merger Process Agreement Concurrence Point Number 3 LEDPA

WBS No.: 34178.1.3  
STIP Project: I-3306A  
County: Orange

Project Name/Description: I-3306A: I-40 from I-85 in Orange County to the Durham County Line. Widen to six lanes

The Merger Team has concurred on this date of **October 17, 2018** that the circled alternative is the **Least Environmentally Damaging Practicable Alternative** for STIP Project I-3306A:

- Alternative 1: "No Build" Alternative

A "No Build" Alternative will be studied to establish a baseline for comparing the effects associated with the "Build" alternative. The "No Build" Alternative would provide routine road repairs and maintenance to existing I-40 and would include other projects listed in NCDOT's 2012-2020 STIP; however, there are no other projects in the area scheduled for right of way acquisition or construction before 2017. The "No Build" alternative would not provide any substantial improvements to the I-40 project area and would not improve traffic flow.

- Alternative 2: "Best Fit" Alternative

The "Best Fit" Alternative (Alternative 2) consists of widening I-40 in Orange County, from the I-85/I-40 interchange to the Durham County line to a 6-lane facility with a 22-foot median. The widening will involve adding an additional lane in each direction along I-40, predominately within the existing median. Full depth, 12-foot paved outside shoulders will be provided. Improvements to interchange areas will be provided as needed to accommodate future traffic.

USACE David Bailey  
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USFWS Gary Jordan  
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SHPO Pence Gledhill-Carley  
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USEPA Amanetta Somerville  
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NCWRC Travis Wilson  
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**Section 404/NEPA Interagency Merger Process Agreement  
Concurrence Point Number 4A  
Avoidance and Minimization Measures**

WBS No.: 34178.1.3  
STIP Project: I-3306A  
County: Orange

Project Name/Description: I-3306A: I-40 from I-85 in Orange County to the Durham County Line. Widen to six lanes

The Project Team has concurred on this date to use the following measures to minimize or avoid impacts:

- Utilizing the existing, disturbed median to accommodate the majority of the widening
- Retaining all existing major hydraulic structures minimizing stream and wetland impacts
- Utilizing 2:1 Slopes where possible
- Revising the preliminary design at the NC 86 interchange to minimize impacts to the Northwood neighborhood and to areas north of I-40, eliminating the need for six residential displacements.

USACE DocuSigned by:  
*David Bailey*  
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