

Type III Categorical Exclusion Action Classification Form

STIP Project No.	I-5700
WBS Element	50118.1.FS1
Federal Project No.	NHPP 040-1(259)286

A. Project Description:

The North Carolina Department of Transportation (NCDOT), in consultation with the Federal Highway Administration (FHWA), proposes to improve the interchange of I-40 and SR 3015 (Airport Boulevard) near the Raleigh Durham Airport in Wake County (see Figure 1). The proposed project involves the conversion of the existing interchange to a diverging diamond interchange (see Figure 2). Additional right-of-way will be required to accommodate the proposed improvements. Control of access will be adjusted and maintained to accommodate the proposed design. The project is not following the NEPA 404/Merger Process.

B. Description of Need and Purpose:

Purpose of Project

The purpose of the project is to reduce existing and future congestion at the I-40 interchange with Airport Boulevard.

Need for Project

The proposed project will address the following traffic needs in the I-40 and SR 3015 (Airport Boulevard) Interchange area:

- Increase the capacity of the interchange to meet projected 2040 traffic demand
- Reduce congestion for traffic movements exiting I-40 westbound to Airport Boulevard southbound
- Reduce the queue backup out to I-40 for exiting traffic
- Provide increased length of acceleration lane for traffic entering I-40
- Reduce the congestion for traffic movements on existing I-40

As a secondary benefit, the proposed improvements will enhance the safety of I-40, SR 3015 and the interchange ramps. There were 1260 reported crashes in the project area from July 1, 2010 to June 30, 2015. These crashes included 3 fatal crashes and 259 non-fatal injury crashes. The remaining crashes were property damage only with a total estimated property damage of \$6.6 million during the studied period.

The predominant crash type during the study period was rear end collisions which accounted for 46% of all crashes on I-40, 42% of the crashes on SR 3015 (Airport Boulevard), and 78% of all crashes on the interchange ramps. The second most prevalent crash type on I-40 were sideswipes, accounting for 17% of the crashes on I-40. The second most common crash type on SR 3015 involved left turning traffic making up 22% of the crashes on this route. The second most common crash on the ramps were vehicles hitting fixed objects resulting in 18% of the crashes on the ramps. These accident types are consistent with the congested conditions in the interchange

area. The proposed improvements to the interchange will likely reduce the potential for these types of crashes by reducing congestion and eliminating left turn conflicts.

C. Categorical Exclusion Action Classification:

The proposed project will modify the existing interchange at I-40 and Airport Boulevard, including adding auxiliary lanes on I-40 eastbound between Airport Boulevard and Aviation Parkway and westbound from Airport Boulevard to I-540. The project is classified as is classified as a Type III for purposes of preparing the CE.

D. Proposed Improvements:

NCDOT evaluated the No Build Alternative and four potential Build Alternatives for the proposed project. During the planning process two of the Build Alternatives were eliminated from consideration, while the other two were retained for further consideration. The two alternatives eliminated from further consideration were a Flyover interchange that would provide a flyover ramp from I-40 westbound directly to SR 3015 (Airport Boulevard) southbound, and a Single Point Urban Interchange (SPUI). Build Alternative 1 converts the existing Airport Boulevard interchange into a diverging diamond interchange as shown on Figure 2. Build Alternative 2 converts the existing interchange into a partial clover interchange as shown on Figure 3. Both of the Build Alternatives include an auxiliary lane from the westbound on-ramp to the I-40 exit ramp to I-540, and an auxiliary lane from the eastbound on-ramp to the I-40 exit ramp to SR 1002 (Aviation Parkway). Both alternatives also include the relocation of Pleasant Grove Church Road approximately 600 feet to the north, providing better separation between intersections on SR 3015 (Airport Boulevard).

No Build Alternative

A No Build Alternative is an alternative for which no physical improvements to the existing roadway or construction of a new facility is proposed. The No Build Alternative for this project does not improve congestion in the area and, hence does not meet the purpose of the project. In addition, the No Build Alternative is not consistent with the transportation goals of CAMPO. For these reasons, NCDOT does not consider the No Build Alternative as the preferred alternative for this proposed project. The No Build Alternative does, however, provide a basis for comparing the benefits and adverse impacts of the Build Alternatives. Thus, the No Build Alternative is included in this CE.

Alternatives Eliminated from Further Consideration

NCDOT considered the construction of a Flyover interchange that would provide a flyover ramp from I-40 westbound directly to SR 3015 (Airport Boulevard) southbound, and a Single Point Urban Interchange (SPUI). The Flyover design was eliminated from further consideration because it created additional impacts without providing substantive improvements in traffic operations over the other alternatives, and the SPUI was eliminated because it had a higher cost and constructability issues without providing substantive operational benefits over and above the other studied build options.

Preferred Alternative

Following the January 30, 2018 public meeting, Alternative 1 was selected as the preferred alternative. Alternative 1 was selected because it increases the capacity of the interchange, reduces congestion for traffic movements on both I-40 and Airport Boulevard, reduces the queue backup out to I-40 for exiting traffic, and it has less impact on both the natural environment and existing development than the other build alternative due to smaller construction footprint and right-of-way requirements. Alternative 1 also provides easier maintenance of traffic through this busy interchange during the construction period.

E. Special Project Information:

The construction of the preferred Alternative 1 will rebuild the existing SR 3015 (Airport Boulevard) interchange providing a diverging diamond interchange as shown on Figure 2. Auxiliary lanes will be constructed on I-40 between the westbound entrance ramp from SR 3015 and the exit ramp to I-540 and the eastbound entrance ramp from SR 3015 and the exit ramp to SR 1002 (Aviation Parkway).

Airport Boulevard will be improved from SR 1640 (Slater Road) approximately ½ mile south of I-40 to the relocated SR 1789 (Pleasant Grove Church Road) approximately ¼ mile north of I-40. From Slater Road to I -40 Airport Boulevard will have three lanes southbound. From Slater Road to the approach to Aerial Center Parkway, Airport Boulevard will have two northbound lanes, and from this point northward to I-40 it will have three northbound lanes. The bridges over I-40 will have three lanes in each direction and will be long enough to accommodate two future managed lanes in each direction on I-40. North of I-40, Airport Boulevard is variable in width as turn lanes are developed and the project ties back into the existing roadway north of the relocated Pleasant Grove Church Road.

A ten-foot multi-use path is proposed along the west side of Airport Boulevard to accommodate pedestrians and bicycles. The existing sidewalks along the east side of Airport Boulevard, south of I-40 will be retained with the missing gaps being filled in by the project.

Agency Coordination

Comments regarding the proposed project were requested from various federal, state, and local agencies and were received at the scoping meeting held on September 10, 2014. Copies of written comments are included in the Appendix.

Public Involvement

A public meeting was held on January 30, 2018. The project was well received and comments on the project were generally positive. There were some concerns from hotels along Airport Boulevard over the restriction of direct left turns into their driveways with the proposed median on Airport Boulevard. The project will provide signalized intersections and provisions for U-turns to ease access to existing businesses.

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"> • The Categorical Exclusion will require FHWA approval. • If any questions are marked “yes” then additional information will be required for those question in Section G. 			
1	Does the project involve potential effects on species listed with the US Fish and Wildlife Service (USFWS) or National Marine Fisheries (NMFS)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (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 type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>Type III Actions (continued)</u>	Yes	No
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	Has Mobile Source Air Toxics (MSAT) been considered for this project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Is the project in an Air Quality Non-attainment or Maintenance Area for a National Ambient Air Quality Standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project include Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a no effect, including archaeological remains? Are there project commitments identified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project involve hazardous materials and/or landfills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	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 checked="" type="checkbox"/>	<input type="checkbox"/>
18	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	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"/>
21	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project impact federal lands (e.g. USFS, USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project involve any changes in access control?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>Type III Actions (continued)</u>	Yes	No
26	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT's Noise Policy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that effected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F

Checklist Item 1: Federally Protected Species

As of July 10, 2017, the United States Fish and Wildlife (USFWS) lists four federally protected species for Wake County and two federally protected species for Durham County (Table 1). A brief description of each species' habitat requirements follows, along with the Biological Conclusion rendered based on survey results in the study area. Habitat requirements for each species are based on the current best available information from referenced literature and/or USFWS.

**Table 1
Federally Protected Species Listed for Wake and Durham Counties**

Scientific Name	Common Name	Federal Status	Habitat Present	County	Biological Conclusion
<i>Picoides borealis</i>	Red-cockaded woodpecker	E	Yes	Wake	No Effect
<i>Alasmidonta heterodon</i>	Dwarf wedgemussel	E	No	Wake	No Effect
<i>Elliptio lanceolate</i>	Yellow lance	PT	TBD	Wake	Unresolved
<i>Rhus michauxii</i>	Michaux's sumac	E	Yes	Durham / Wake	No Effect
<i>Echinacea laevigata</i>	Smooth coneflower	E	Yes	Durham	No Effect
<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic sturgeon*	E	No	Wake	No effect

E – Endangered; PT – Proposed Threatened; TBD – To Be Determined; * - species listed by NMFS only

***Red-cockaded woodpecker* - Biological Conclusion: No Effect**

The red-cockaded woodpecker (RCW) typically occupies open, mature stands of southern pines, particularly longleaf pine, for foraging and nesting/roosting habitat. Suitable forage (Pine/Hardwood Mid-Successional) habitat for the red-cockaded woodpecker was found within the study area. Upon establishment of suitable habitat within the study area, historical aerial imagery was used to identify potential suitable nesting habitat within 0.5 mile of the study area habitat. All potential nesting habitat was field assessed to determine suitability, including tree age and stand composition. Potential nesting habitat is present within 0.5 mile of the study area habitat. Field surveys were conducted in all identified potential nesting habitat on November 13 and 17, 2017. No red-cockaded woodpeckers or nesting trees were found. A review of NCNHP data, updated October 2017, indicates no known RCW occurrence within 1.0 mile of the study area.

***Dwarf wedgemussel* - Biological Conclusion: No Effect**

In North Carolina, the dwarf wedgemussel is known from the Neuse and Tar River drainages. The mussel inhabits creek and river areas with a slow to moderate current and sand, gravel, or firm silt bottoms. Water in these areas must be well oxygenated. Stream banks in these areas are generally stable with extensive root systems holding soils in place. A habitat assessment, performed by NCDOT on September 15, 2015, determined that habitat for the dwarf wedgemussel does not exist in the study area.

***Yellow lance* - Biological Conclusion: Unresolved**

In North Carolina, the yellow lance is known from the Neuse, Chowan, and Tar River drainages. The mussel inhabits creek and river areas with a slow to moderate current and sand or gravel bottoms. Water in these areas must be well oxygenated. Stream banks in these areas are generally stable with extensive root systems holding soils in place. The yellow lance is proposed for listing, and expected to be listed in fall of 2018 prior to project construction. The NCDOT Biological Surveys Group will perform screening for potential habitat for the yellow lance, prior to construction.

***Michaux's sumac* - Biological Conclusion: No Effect**

Michaux's sumac, endemic to the inner Coastal Plain and lower Piedmont, grows in sandy or rocky, open, upland woods on acidic or circumneutral, well-drained sands or sandy loam soils with low cation exchange capacities. The species is also found on maintained railroad, roadside, power line, and utility rights-of-way. Surveys of potential habitat were conducted on July 21, 2016. No individuals of Michaux's sumac were observed. A review of NCNHP records, updated October 2017, indicates no known occurrences within 1.0 mile of the study area.

***Smooth coneflower* - Biological Conclusion: No Effect**

Smooth coneflower, a perennial herb, is typically found in meadows, open woodlands, the ecotonal regions between meadows and woodlands, cedar barrens, dry limestone bluffs, clear cuts, and roadside and utility rights-of-way. Suitable habitat for smooth coneflower is not present in the study area. Areas along road shoulders within Durham County are maintained regularly to the edge of surrounding forested areas. A review of NCNHP records, updated October 2017, indicates no known occurrences within 1.0 mile of the study area.

***Atlantic sturgeon* - Biological Conclusion: No Effect**

USFWS/NMFS Recommended Survey Window: surveys not required; assume presence in appropriate waters

Habitat Description: The Atlantic sturgeon is a large fish that occurs in major river systems along the eastern seaboard of the United States. It is an anadromous species that

migrates to moderately-moving freshwater areas to spawn in the spring; in some southern rivers a fall spawning migration may also occur. Spawning occurs in moderately flowing water in deep parts of large rivers, usually on hard surfaces (e.g., cobble). Juveniles usually reside in estuarine waters. Subadults and adults live in coastal waters and estuaries when not spawning, generally in shallow nearshore areas dominated by gravel and sand substrates.

On August 17, 2017 the National Marine Fisheries Service (NMFS) designated critical habitat (DCH) for Atlantic Sturgeon in the Neuse River (Carolina Unit 3), which includes a portion of the river in Wake County and the entire river in Johnston County. NCDOT project I-5700 is located within Wake County. The project does not cross the Neuse River and is approximately 13 miles from DCH. As of January 29, 2018, NCNHP database revealed no populations of Atlantic Sturgeon within Wake County. Therefore a biological conclusion of No Effect is given for the Atlantic Sturgeon for this project due to no known populations in Wake County. The NCDOT has also determined that I-5700 will have no effect on DCH based on the absence of critical habitat in the project area and being approximately 13 miles away from DCH.

Northern Long Eared Bat (NLEB): - May Affect, Likely to Adversely Affect

The Northern long-eared bat (NLEB) is not included in the July 10, 2017 USFWS list of Federally Protected Species for Wake County. However, the US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the NLEB in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities whether or not the NLEB is listed for a specific county within Divisions 1-8. The programmatic determination for NLEB for the NCDOT program in Divisions 1-8 is “May Affect, Likely to Adversely Affect.” The PBO will provide incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Wake County.

Checklist Item 8: Mobile Source Air Toxics (MSAT)

The purpose of this project is to reduce existing and future congestion at the I-40 interchange with Airport Boulevard by converting of the existing interchange to a diverging diamond interchange. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the no-build alternative.

Checklist Item 9: National Ambient Air Quality Standards

Follow USDOT Interim Guidelines on Conformity Requirements for the 1997 Ozone NAAQS.

Checklist Item 11: Buffer Rules

Streamside riparian zones along Brier Creek, Stirrup Iron Creek and their tributaries are protected under provisions of the Neuse River Buffer Rules administered by North Carolina Division of Water Resources (NCDWR). Potential impacts to protected stream buffers will be determined once a final alignment and design have been determined. The NCDOT will investigate potential on-site stream and wetland mitigation opportunities once a final decision has been rendered on the location of the preferred alternative. If on-site mitigation is not feasible, mitigation (if required) will be provided by North Carolina Department of Environmental Quality Division of Mitigation Services (DMS).

Checklist Item 13: USACE Permit

The proposed project will require a permit from the US Army Corps of Engineers for Section 404 wetland and stream impacts, but it is not yet determined whether the permit would be an Individual Permit, Nationwide Permit or General Permit. The USACE holds the final discretion as to what type of permit will be required to authorize project construction. If an Individual Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NCDWR would be needed.

Checklist Item 17: Floodplains

The proposed project will impact five regulated streams by the extension of four existing culverts and the construction of one new culvert. The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). 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.

Checklist Item 23: Access Control

Control of access limits will be adjusted to accommodate the relocation of Pleasant Grove Church Road. Control of access limits along Airport Boulevard will remain as they currently are.

Checklist Item 29: NCDOT Noise Policy Type I Project

Introduction

In accordance with Title 23 Code of Federal Regulations Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise (Title 23 CFR 772) and the North Carolina Department of Transportation Traffic Noise Policy, each Type I highway project must be analyzed for predicted traffic noise impacts. In general, Type I projects are proposed State or Federal highway projects for construction of a highway or interchange on new location, improvements of an existing highway which substantially changes the horizontal or vertical alignment or increases the vehicle capacity, or projects that involve new construction or substantial alteration of transportation facilities such as weigh stations, rest stops, ride-share lots or toll plazas.

Traffic noise impacts are determined through implementing the current Traffic Noise Model (TNM) approved by the Federal Highway Administration (FHWA) and following procedures detailed in Title 23 CFR 772, the NCDOT Traffic Policy and the NCDOT Traffic Noise Manual. When traffic noise impacts are predicted, examination and evaluation of alternative noise abatement measures must be considered for reducing or eliminating these impacts. Temporary and localized noise impacts will likely occur as a result of project construction activities. Construction noise control measures will be incorporated into the project plans and specifications.

A copy of the unabridged version of the full technical report entitled *Traffic Noise Report, SR 3015 (Airport Boulevard) Interchange Improvements, February 2018* can be viewed in the Environmental Analysis Unit, Century Center Building A, 1000 Birch Ridge Drive, Raleigh.

Traffic Noise Impacts and Noise Contours

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.

The maximum extent of the 71- and 66- dB(A) noise level contours measured from the center of the proposed roadway is 425 feet and 550 feet, respectively.

Predicted Traffic Noise Impacts by Alternative*

DETAILED STUDY ALTERNATIVE	REASON FOR NOISE IMPACT	SUMMARY OF IMPACTED RECEPTORS ⁷							
		BY ACTIVITY CATEGORY							
		A	B	C	D	E	F ⁵	G ⁶	ALL ACTIVITY CATEGORIES
Build Alternative 1	Based on NAC Criteria Only ¹	0	5	0	0	1	0	0	6
	Based on Substantial Increase Criteria Only ²	0	0	0	0	0	0	0	0
	Based on Both Criteria ³	0	0	0	0	0	0	0	0
	TOTAL DSA IMPACTS ⁴	0	5	0	0	1	0	0	6
Build Alternative 2	Based on NAC Criteria Only ¹	0	5	0	0	1	0	0	6
	Based on Substantial Increase Criteria Only ²	0	0	0	0	0	0	0	0
	Based on Both Criteria ³	0	0	0	0	0	0	0	0
	TOTAL DSA IMPACTS ⁴	0	5	0	0	1	0	0	6
Note 1: Predicted traffic noise level impacts due to design year worst hour build-condition noise levels approaching or exceeding the NCDOT Noise Abatement Criteria (NAC)									
Note 2: Predicted design year worst hour noise levels exceeding existing worst hour noise levels by 10 dB(A) or greater. (NCDOT Substantial Increase Criteria).									
Note 3: Predicted traffic noise level impacts due to both 1 and 2 above.									
Note 4: Only one of the Note 1 and Note 2 conditions must be met for an impact to exist.									
Note 5: There are no impact criteria for land use facilities in this activity category and no analysis of noise impacts is required.									
Note 6: There are no impact criteria for undeveloped lands but some noise levels may need to be provided to local officials to aid them in future land use planning efforts.									
Note 7: Values noted for Activity Category C, D, and E include Equivalent Receptor values for these non-residential land uses.									

*Per TNM2.5 and in accordance with 23 CFR Part 772

Traffic Noise Abatement Measures

Measures for reducing or eliminating the traffic noise impacts were considered for all impacted receptors in each alternative. The primary noise abatement measures evaluated for highway projects include highway alignment changes, traffic system management measures, establishment of buffer zones, noise barriers and noise insulation (NAC D only). For each of these measures, benefits versus costs (reasonableness), engineering

feasibility, effectiveness and practicability and other factors were included in the noise abatement considerations.

Substantially changing the highway alignment to minimize noise impacts is not considered to be a viable option for this project due to engineering and/or environmental factors. Traffic system management measures are not considered viable for noise abatement due to the negative impact they would have on the capacity and level of service of the proposed roadway. Buffer zones are typically not practical and/or cost effective for noise mitigation due to the substantial amount of right-of-way required, and would not be a feasible noise mitigation measure for this project.

Noise Barriers

Noise barriers include two basic types: earthen berms and noise walls. These structures act to diffract, absorb and reflect highway traffic noise. For this project, earthen berms are not found to be a viable abatement measure because of the additional right of way that would be required.

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. The barrier location evaluated with TNM was to benefit residences on Triple Oak Drive, north of I-40 and east of Airport Boulevard in Noise Study Area (NSA) 1. A barrier was evaluated for each of the Build Alternatives. Based upon criteria defined in the NCDOT Traffic Noise Policy, -NW1- would not meet cost-reasonableness criteria. Therefore, this site is not eligible for noise abatement and noise abatement measures are unlikely.

Preliminary Noise Barrier Evaluation Results

Build Alternative	Length / Height (feet)	Square Footage	Number of Benefited Receptors	Square Feet per Benefited Receptor / Allowable Square Feet per Benefited Receptor	Likely for Construction¹
-NW1- Alternative 1 (NSA 1)	1,590/8	12,706	5	2,541 / 1,500	No
-NW1- Alternative 2 (NSA 1)	1,815/8	14,610	5	2,922 / 1,500	No

¹Barrier is not reasonable due to the quantity per benefited receptor exceeding the allowable quantity per benefited receptor

Summary

Traffic noise and temporary construction noise can be a consequence of transportation projects, especially in areas near high-volume and high-speed existing steady-state traffic noise sources. This Traffic Noise Report utilized computer models created with the FHWA Traffic Noise Model software (TNM 2.5), validated to field-collected traffic noise monitoring data, to predict future noise levels and define impacted receptors along the proposed new highway project.

For Design Year 2040 traffic volumes the Build condition is predicted to create six (6) traffic noise impacts for each of the Build alternatives. Furthermore, construction noise impacts – some of them potentially substantial – may occur due to the proximity of

numerous noise-sensitive receptors to project construction activities. It is the recommendation of this traffic noise report that all reasonable efforts should be made to minimize exposure of noise-sensitive areas to construction noise impacts.

This analysis completes the traffic noise requirements of the Title 23 CFR Part 772 and NCDOT Policy. Unless modifications to presently considered alignments occur, additional alignments are considered, or significant changes to Design Year 2040 traffic volumes are predicted, no additional noise reports are necessary for this project.

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). For development occurring after this date, local governing bodies are responsible to ensure that noise compatible designs are utilized along the proposed facility.

H. Project Commitments

Wake County
Improvements to I-40 at the Interchange with SR 3015 (Airport Boulevard)
Federal Project No. NHPP-040-1(259)286
WBS No. 50118.1.FS1
TIP No. I-5700

Hydraulics Unit

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

Division 5

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.

Biological Surveys Group

NCDOT Biological Surveys Group will perform screening for potential habitat for the yellow lance mussel.

Environmental Coordination and Permitting Group

The proposed project will require a permit from the US Army Corps of Engineers for Section 404 wetland and stream impacts, but it is not yet determined whether the permit would be an Individual Permit, Nationwide Permit or General Permit. The USACE holds the final discretion as to what type of permit will be required to authorize project construction. If an Individual Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NCDWR would be needed.

Mitigation and Modeling Group


Streamside riparian zones within the study area are protected under provisions of the Neuse River Buffer Rules administered by the North Carolina Division of Wildlife Resources (NCDWR). Potential impacts to protected stream buffers will be determined once the final design has been prepared, with appropriate mitigation provided as necessary.

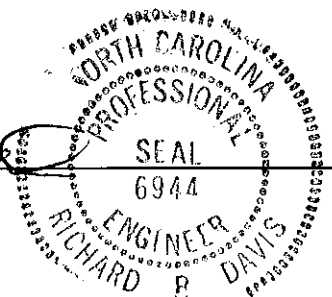
I. Categorical Exclusion Approval

STIP Project No. I-5700
WBS Element 50118.1.FS1
Federal Project No. NHPP 040-1(259)286

Prepared By:

5/2/18
Date


Richard B. Davis, PE
Wetherill Engineering

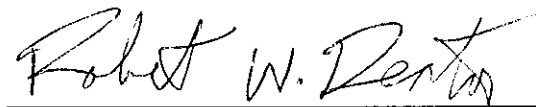


Prepared For:

North Carolina Department of Transportation

Reviewed By:

5/04/18
Date


Robert W. Deaton
Project Planning Engineer
North Carolina Department of Transportation

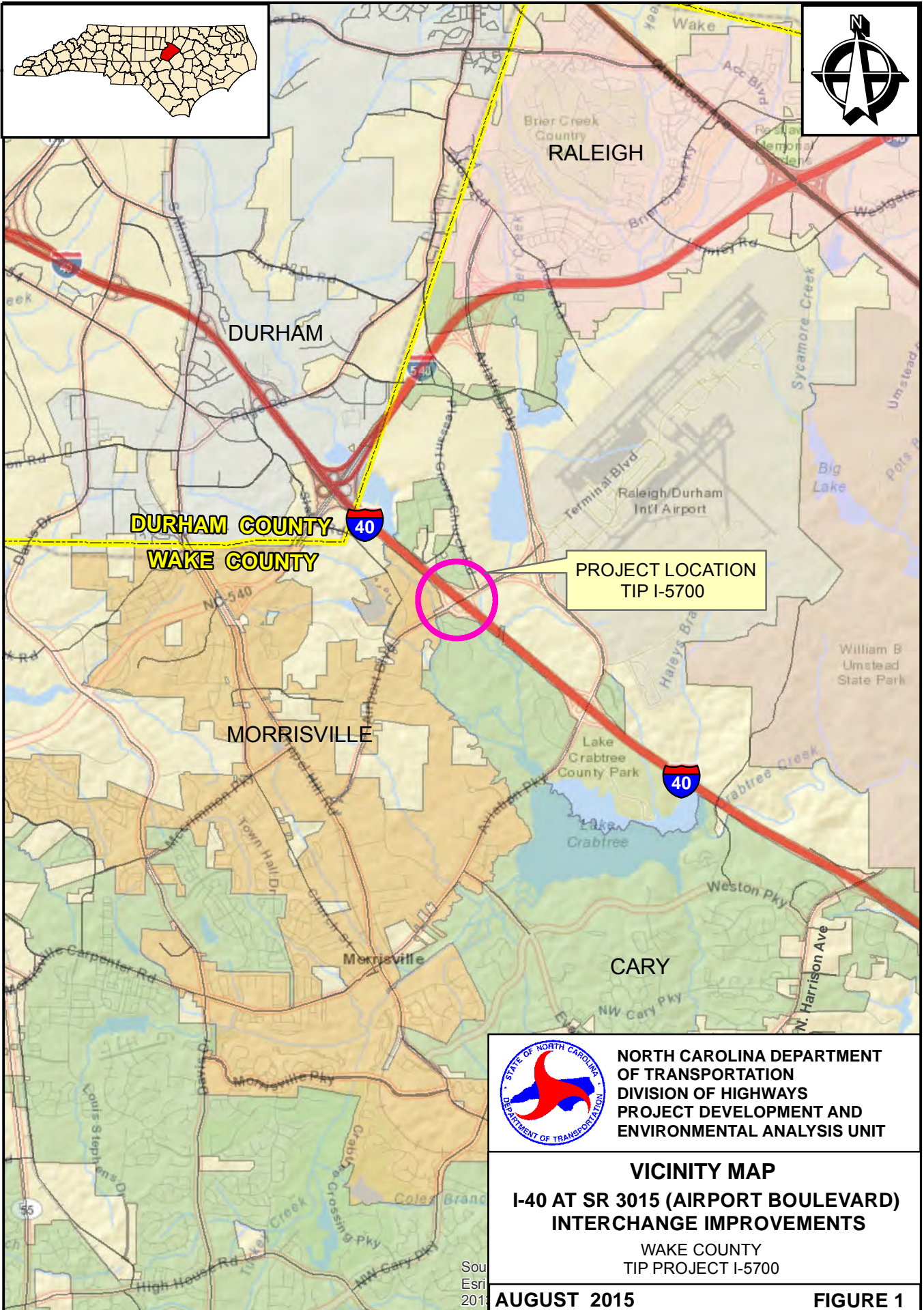
NCDOT certifies that the proposed action qualifies as a Type III Categorical Exclusion.

FHWA Approval:

5/4/18
Date


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

FIGURES



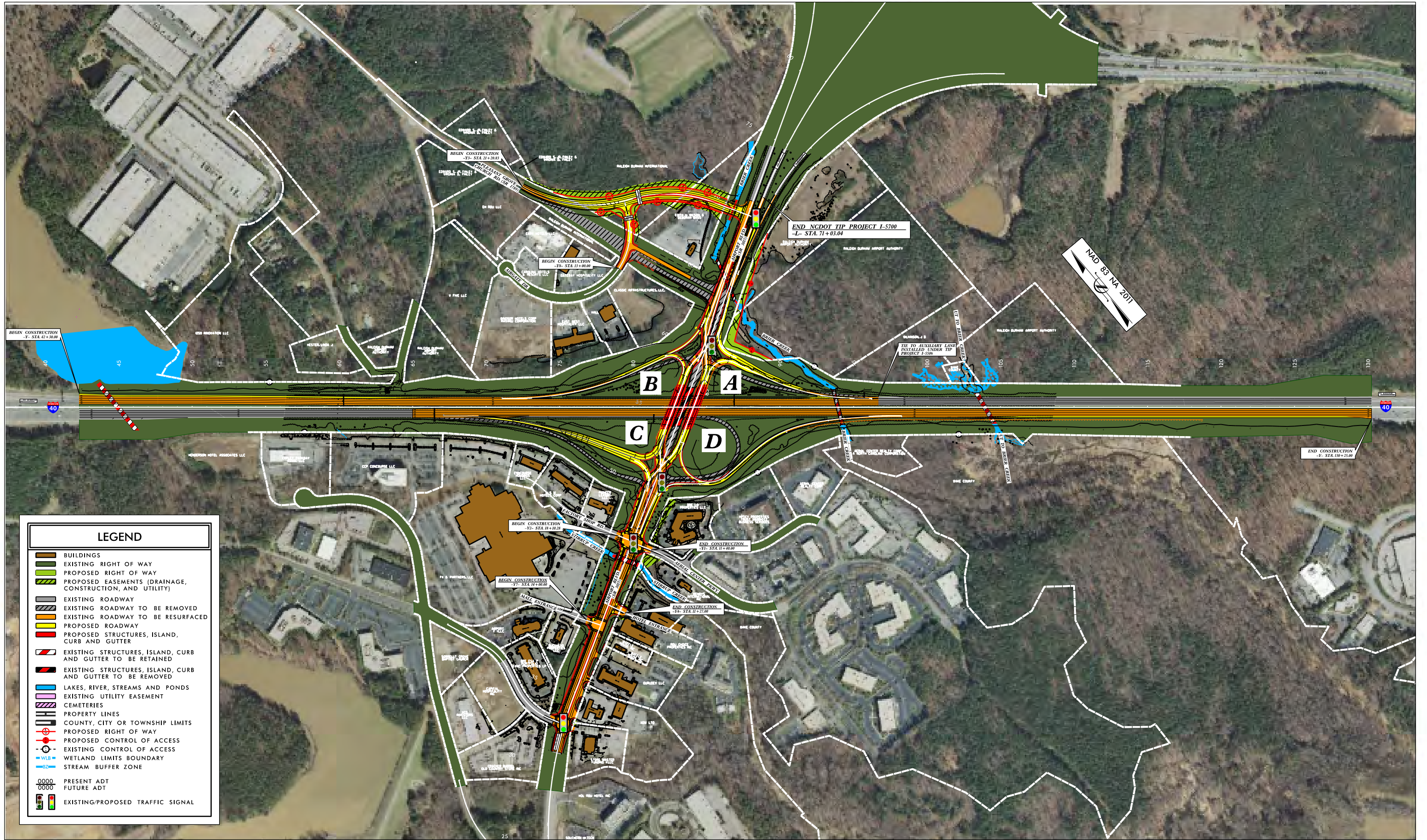
**NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT**

VICINITY MAP
I-40 AT SR 3015 (AIRPORT BOULEVARD)
INTERCHANGE IMPROVEMENTS
 WAKE COUNTY
 TIP PROJECT I-5700

Source:
Esri
2011

AUGUST 2015

FIGURE 1



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
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE RETAINED
- EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED
- LAKES, RIVER, STREAMS AND PONDS
- EXISTING UTILITY EASEMENT
- CEMETERIES
- PROPERTY LINES
- COUNTY, CITY OR TOWNSHIP LIMITS
- PROPOSED RIGHT OF WAY
- PROPOSED CONTROL OF ACCESS
- EXISTING CONTROL OF ACCESS
- WETLAND LIMITS BOUNDARY
- STREAM BUFFER ZONE
- 0000 PRESENT ADT
- 0000 FUTURE ADT
- EXISTING/PROPOSED TRAFFIC SIGNAL

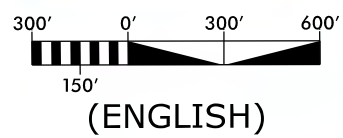


FIGURE 2

**I-5700
SR 3015 (AIRPORT BLVD.) I-40 INTERCHANGE IMPROVEMENTS
ALTERNATE 1: DIVERGING DIAMOND INTERCHANGE**

DESIGN DATA	
Functional Class.	= ARTERIAL
Design Speed	= 50 MPH
Max. Superelev.	= 0.04



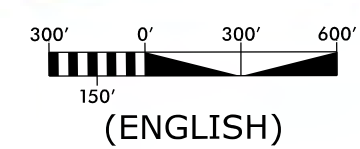
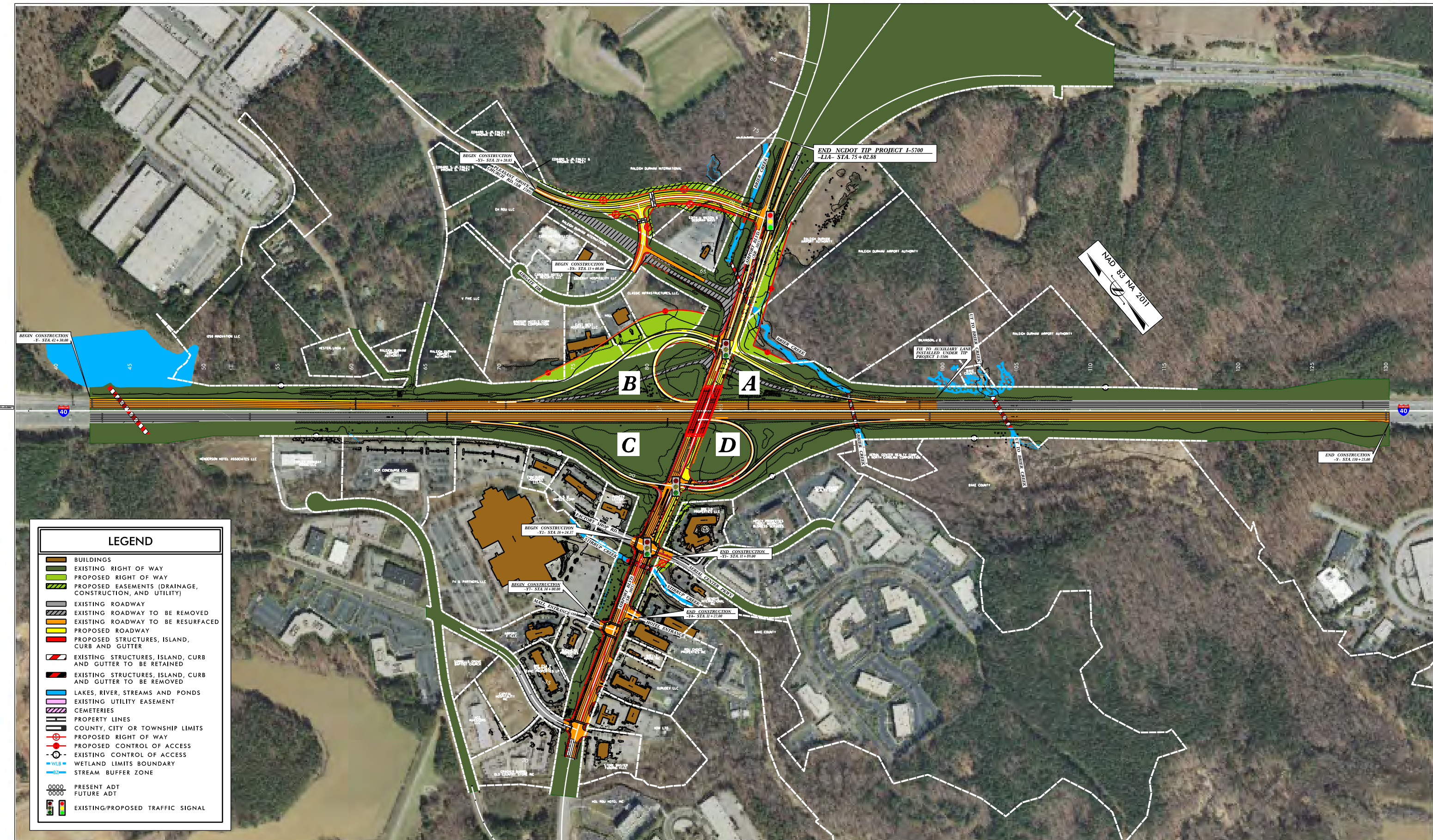
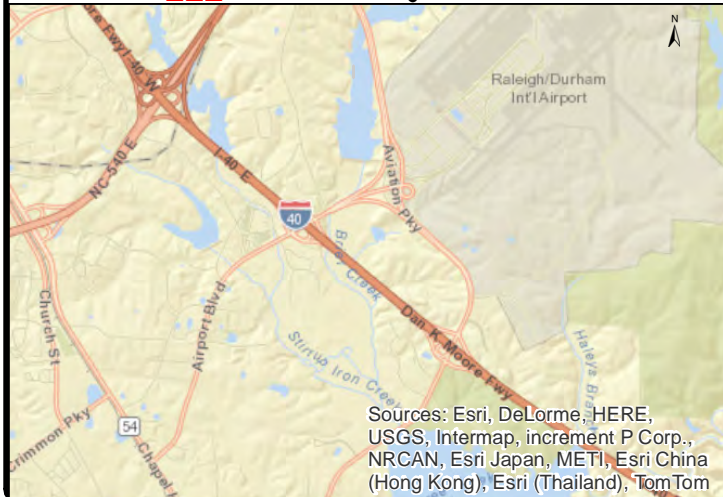
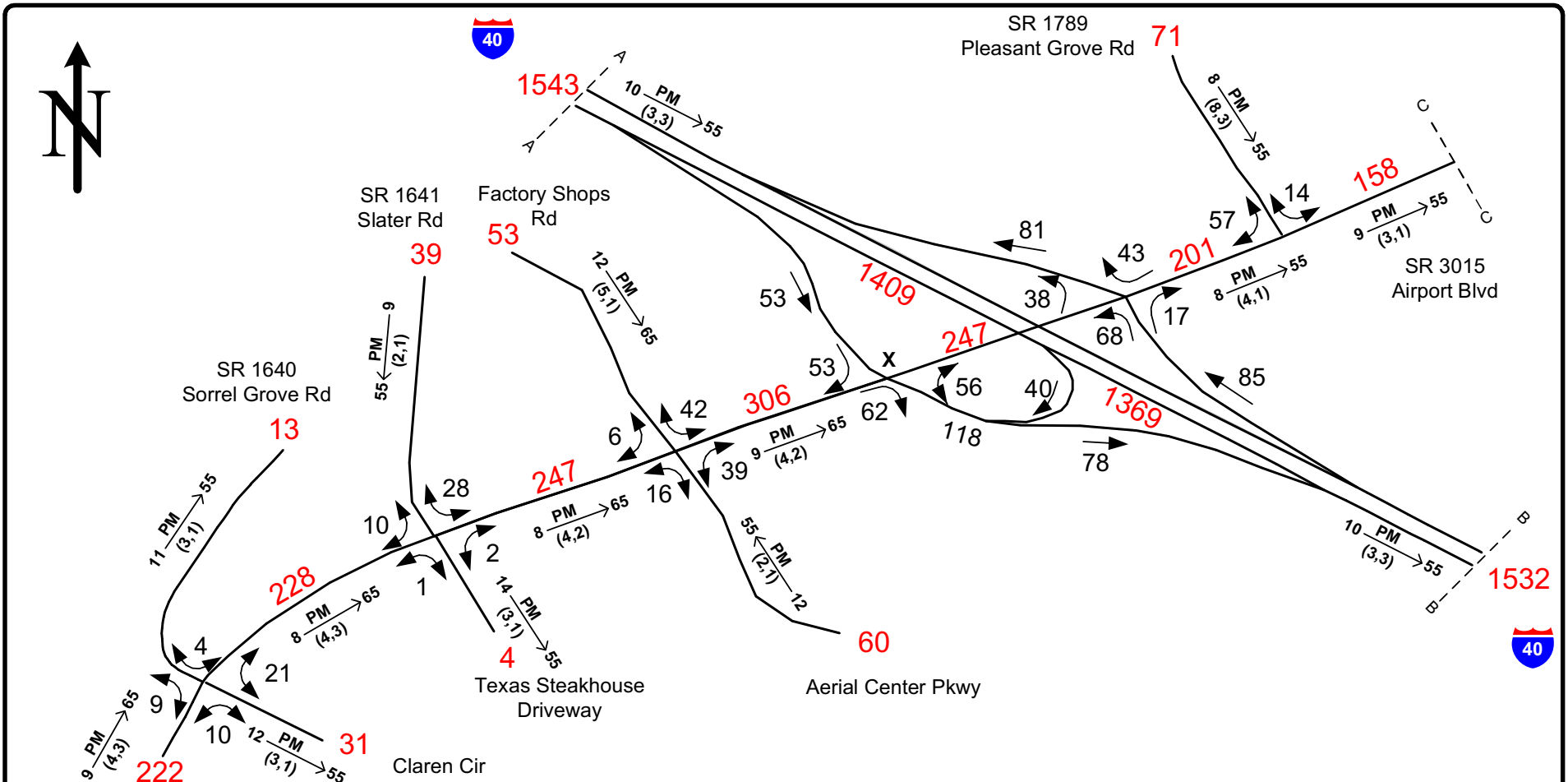


FIGURE 3
I-5700
SR 3015 (AIRPORT BLVD.) I-40 INTERCHANGE IMPROVEMENTS
ALTERNATE 2: PARTIAL CLOVER INTERCHANGE

DESIGN DATA	
Functional Class.	= ARTERIAL
Design Speed	= 50 MPH
Max. Superelev.	= 0.04



2014 AVERAGE ANNUAL DAILY TRAFFIC

FIGURE 4

LEGEND

- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- $K \xrightarrow{PM} D$
(d, t)
- K Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D
- (d, t) Duals, TT-STs (%)

TIP: I-5700

WBS: 50118.1.FS1

COUNTY: Wake

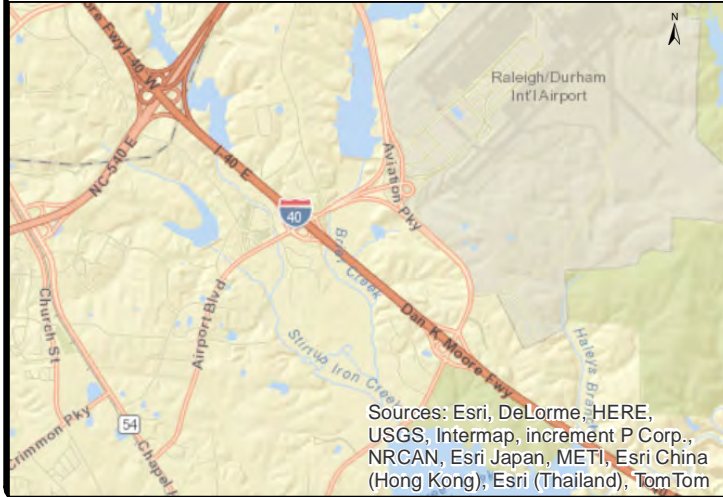
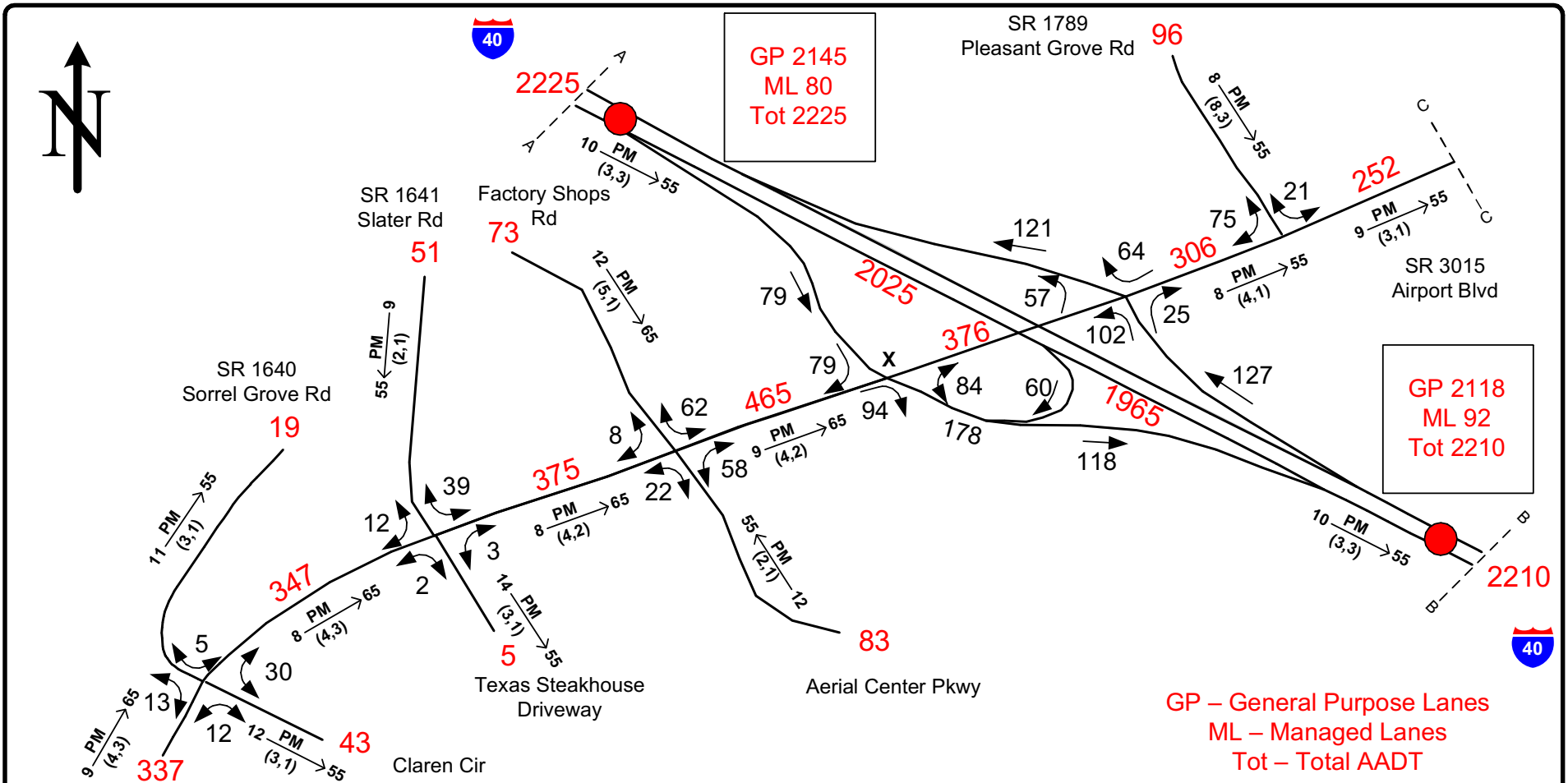
DIVISION: 5

DATE: 2/12/2015

PREPARED BY: Elisabeth Bray

LOCATION: I-40 and SR 3015 (Airport Blvd) Interchange

PROJECT: Convert existing interchange to a diverging diamond



2040		AVERAGE ANNUAL DAILY TRAFFIC		FIGURE 5	
LEGEND ### No. of Vehicles Per Day in 100s 1- Less than 50 vpd X Movement Prohibited $K \begin{matrix} \text{PM} \\ \text{---} \\ \text{(d, t)} \end{matrix} \rightarrow D$ K Design Hour Factor (%) PM PM Peak Period D Peak Hour Directional Split (%) → Indicates Direction of D (d, t) Duals, TT-STs (%)		TIP: I-5700	WBS: 50118.1.FS1		
		COUNTY: Wake		DIVISION: 5	
DATE: 2/12/2015					
PREPARED BY: Elisabeth Bray					
LOCATION: I-40 and SR 3015 (Airport Blvd) Interchange					
PROJECT: Convert existing interchange to a diverging diamond					

APPENDIX

14-09-0003



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

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

PROJECT INFORMATION

Project No:	I-5700	County:	Wake
WBS No.:	50118.1.FS1	Document Type:	CE
Fed. Aid No:	NHPP-040-7(154)	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Permit Type(s):	n/a
<u>Project Description:</u> Convert existing interchange to a diverging diamond interchange at I-40 and Airport Blvd.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<p><u>Description of review activities, results, and conclusions:</u></p> <p>Review of HPO quad maps, relevant background reports, historic designations roster, and the Wake County GIS Tax database was undertaken on September 9, 2014. Based on this review there are no resources over 50 years of age in the APE of this project. The corridor is populated by new development. No survey is required.</p>
<p><u>Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:</u></p> <p>Using HPO GIS website and Wake County GIS Tax database provides reliable information regarding the structures in the APE. These utilities are considered valid for the purposes of determining the likelihood of historic resources being present.</p>

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Shelby Reap

NCDOT Architectural Historian

Sept 9, 2014

Date

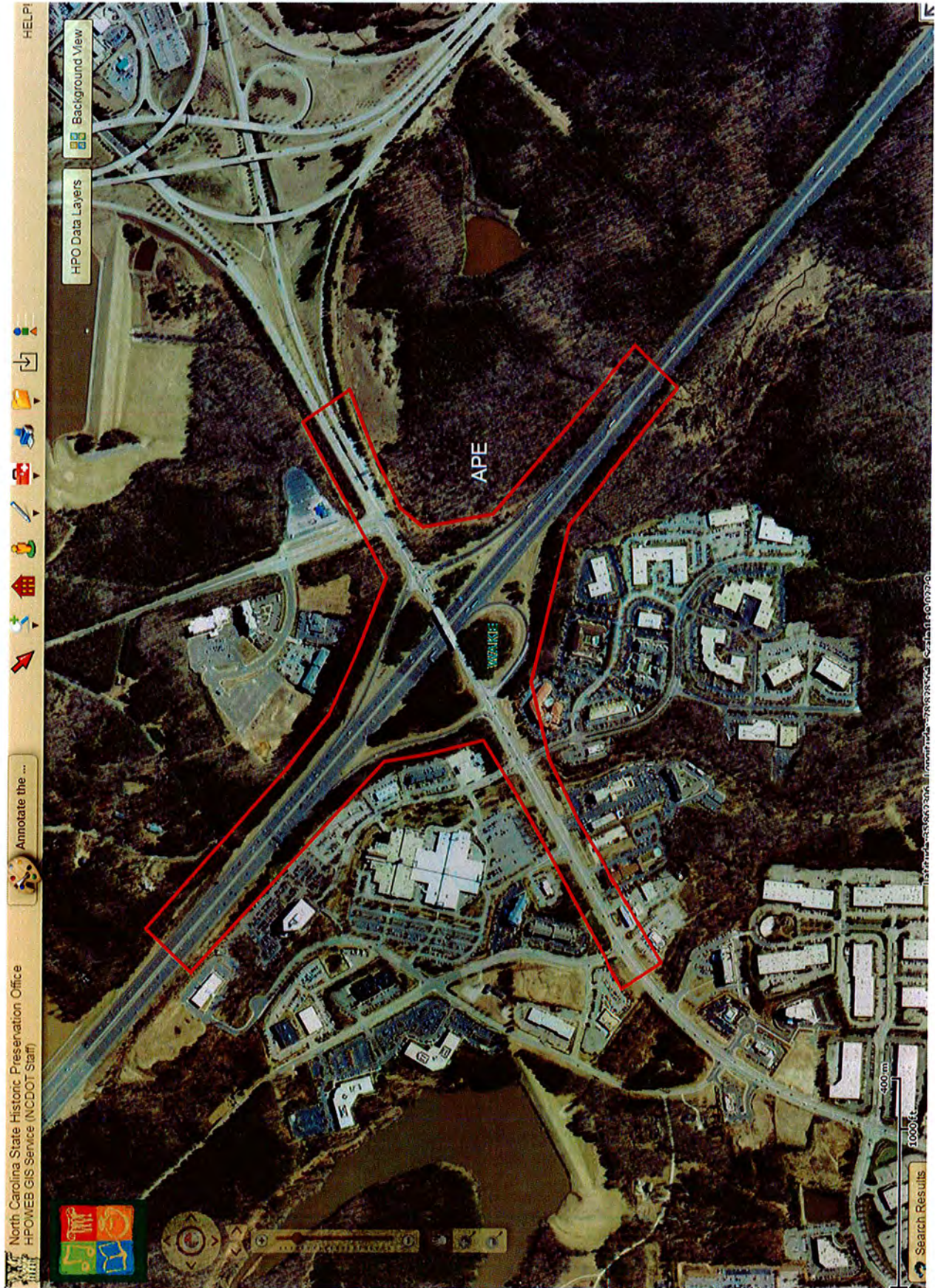





Figure 2	County:	WAKE
	District:	5
	Project:	I-570/0
	Map:	50118.1.FS1
	Date:	JUNE 2014

**STUDY AREA FOR I-570
I-40 AND SR 3015 (AIRPORT BOULEVARD),
CONVERT EXISTING INTERCHANGE
TO DIVERGING DIAMOND**

WAKE COUNTY
TIP PROJECT I-5700

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



14-09-0003



**NO NATIONAL REGISTER OF HISTORIC PLACES
ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES
PRESENT OR AFFECTED FORM**



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

PROJECT INFORMATION

Project No: **I-5700** *County:* **Wake**
WBS No: **50118.1.FS1** *Document:* **CE**
F.A. No: **NHPP-040-1(259)286** *Funding:* State Federal
Federal Permit Required? Yes No *Permit Type:* **na**

Project Description: NCDOT intends to convert the existing interchange at I-40 and SR 3015, Airport Boulevard, to a diverging diamond interchange. At the time of the Cultural Resources review, no plans had been developed for this project; however, it is expected that new right-of-way (ROW) or construction easements may be necessary to complete the project. For the purposes of the archaeological review, a study area encompassing roughly 141 acres (approximately 57 hectares) will be considered the area of potential effects (APE).

SUMMARY OF ARCHAEOLOGICAL FINDINGS

The North Carolina Department of Transportation (NCDOT) Archaeology Group reviewed the subject project and determined:

- There are no National Register listed ARCHAEOLOGICAL SITES within the project's area of potential effects.**
- No subsurface archaeological investigations are required for this project.
- Subsurface investigations did not reveal the presence of any archaeological resources.
- Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.
- All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.**
- There are no National Register Eligible or Listed ARCHAEOLOGICAL SITES present or affected by this project. (Attach any notes or documents as needed)**

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

As noted on the Survey Required Form (dated October 2, 2014), a number of archaeological investigations have occurred in the vicinity of the current project study area, and a handful of archaeological sites have been recorded in the vicinity of the proposed interchange improvements. A review of aerial photographs before, during, and following the construction of I-40 revealed that some landforms appeared to have remained untouched by the highway facility construction. Recent aerial photographs depict areas that have been severely altered by commercial and transportation development, while other areas appear to have remained relatively intact. On September 25, 2014, an archaeological reconnaissance was conducted to determine the potential for archaeological resources in the proposed APE. Based on this reconnaissance, the examination of aerial photography, and previous archaeological investigations in the Briar Creek/Crabtree Creek drainage basin, it was decided that an intensive archaeological investigation of the project area would be required. Given the proximity of the current project to the proposed improvements at the intersection of I-40 and SR 1002, Aviation Parkway (TIP No. I-5506, which also required additional intensive archaeological investigation), it was decided to combine the two projects into a single archaeological study.

The combined archaeological investigations were conducted periodically from February through April 2015 by Legacy Research Associates. This form will outline the results of those investigations, with a heavy emphasis on the findings of the investigations within the I-5700 project area. The detailed results of the combined archaeological investigations are reported in a separate document to be filed with the North Carolina Office of State Archaeology. The official results of the investigations conducted within the I-5506 study area will be outlined in a separate No National Register of Historic Places Eligible or Listed Archaeological Sites Present or Affected form (PA No. 13-11-0006).

As noted above, and in the preliminary investigations of the project area, commercial development following the opening of I-40 in late 1971, as well as the highway construction itself, dominate much of the landscape evolution in the project area. Raleigh-Durham Airport, the largest development in the vicinity, grew out of a set of three military training airstrips built in the area during WWII. Prior to the coming of the airport and I-40, land-use was dominated by single-crop agriculture and widespread clearing of vegetation. As a result soil deflation and erosion have been severe problems in this portion of the Piedmont. The implications for general site preservation in the area were not overly promising, but it was still hoped that an examination of the remaining cultural resources in the project area might garner a greater understanding of the evolution of the landscape over a long time scale, as well as a much more detailed criteria for assessing local archaeological resources.

In 1978, an archaeological survey conducted on behalf of the Raleigh-Durham Airport Authority (Hall and Littleton 1978) identified 33 archaeological sites, four of which are situated in the vicinity of the I-5700 project area (sites 31Wa120, 31Wa121, 31Wa122, and 31Wa123). All four of these sites can be characterized as prehistoric lithic scatters, being largely composed of quartz and metavolcanic debitage. Two of these sites produced Morrow Mountain projectile points and one of the sites with a Middle Archaic point also produced a Middle Woodland Yadkin point in the site assemblage. None of these sites was considered to be archaeologically significant.

Legacy Research Associates conducted intensive archaeological investigation in 130 acres of the combined 280 acres encompassed by the I-5506 and I-5700 project areas. These 130 acres of tested APE represent areas that were not initially excluded from the investigations due to severe disturbance from development. A total of 490 shovel test pits were excavated as part of the testing program using tests placed systematically on 20-meter intervals, judgmentally placed tests to investigate particular features or locations, and tests used to document suspected disturbances within the area subjected to testing. This combination of probabilistic and non-probabilistic testing identified 19 archaeological resources in the combined I-5506 and I-5700 project areas. Of these 19 archaeological resources, only four are located within the APE established for the I-5700 project (31Wa1940**, 31Wa1941**, 31Wa1942, and 31Wa1944**).

Site 31Wa1940** is located at the southeastern end of the APE, to the north of I-40 along the Briar Creek floodplain, approximately 30 meters south of an unnamed drainage. The remains of two structures were identified during the initial subsurface testing program: the 14-x-14-foot foundation remains of Structure 1 is located within the current project APE; the 15-x-18-foot fieldstone foundation remains of Structure 2, however, are located outside the current boundary for the APE. Few artifacts were recovered from the radial and judgmental subsurface tests placed in the site area (n=5); predominantly architectural materials. The foundation at Structure 1 appeared to have been constructed from concrete and mortared stones. In the center of the foundation, a smaller construction of indeterminate function was identified. Structure 2 featured a foundation of mortared fieldstones. Aerial photographs of the Site 31Wa1940** location from the early twentieth century seem to feature structures in proximity to areas that appear to be agricultural fields. Additionally, proximity to the early- though mid-twentieth-century home site, 31Wa1951/1951** (located within the I-5506 project area), suggested a possible connection between the two areas. This site was not considered to possess enough integrity to convey significance nor to be eligible for the National Register of Historic Places.

Site 31Wa141**, an isolated find, was recovered from north of I-40 West to the southeast of Exit 284 and the off ramp leading to SR 3015, Airport Boulevard. A fragile brick fragment was recovered from a single subsurface test on the Briar Creek floodplain. Researchers with Legacy Research Associates (2015: 71) speculated that this brick fragment was redeposited in its present location. Regardless of its depositional history, the find has extremely limited research potential and was not considered to be eligible for the National Register of Historic Places.

Site 31Wa1942 was identified to the north of the Exit 284 on-ramp from SR 3015 onto I-40 West. Located on the side slope of a ridge toe facing southwest, the site was characterized as a small scatter of prehistoric lithic material. Three of the nine subsurface tests excavated at this location produced four tertiary flakes (three of quartz and one of metavolcanic material). This site was considered to be very limited in its ability to convey its significance as an individual archaeological resource and is not considered to be a good candidate for the National Register of Historic Places.

Located to the south of the I-40/SR 3015 interchange on the edge of a relatively level upland flat, site 31Wa1944** was identified through the recovery of historic ceramics in two subsurface tests. Three pearlware sherds, two undecorated body fragments and one green shell-edged rim, were recovered. In general, undecorated pearlware was produced in England from 1780 to 1840. Edged pearlware falls along similar dates of production (1786-1840), but unscalloped rims are characteristic of pearlware from 1840 to 1860. Unfortunately, the edged sherd recovered at 31Wa1944** was too small to determine if it could be associated with the earlier or later production dates. Deed research and examinations of aerial photography, as well as historic mapping, suggested to the investigators with Legacy Research Associates (2015: 154-159) that these artifacts may have been associated with a homestead that disappeared in the mid-twentieth century. They noted significant disturbances in the area from the construction of the interchange. The limited nature of the assemblage and the high level of disturbances indicate that site 31Wa1944** is not a good candidate for the National Register of Historic Places.

Overall, the study conducted by Legacy Research Associates revealed a number of considerations with regards to archaeological resources along the I-40 corridor in Wake County and adjacent areas. The dominant consideration, unsurprisingly, is the high level and pace of landscape alteration that has occurred in this portion of the North Carolina Piedmont. Between clearing and agricultural activities that have caused soil erosion/deflation in the region and the more direct impacts from transportation and commercial development in the modern era, depositional contexts are frequently compromised. Prehistoric sites identified in this area have been pretty consistently characterized as small lithic scatters composed of quartz and metavolcanic debitage associated with toolkit maintenance (rather than toolkit creation or raw material processing). Diagnostic tools that occasionally appear in the assemblages generally date to the mid- and late Holocene. Sites like these may not suffer context degradation from soil deflation as badly as other types of sites, but they also tend to be poor candidates for National Register inclusion. Prehistoric sites that might

break out of this pattern could suggest a degree of significance on that fact alone. Historic resources identified in the area generally tend to be characterized as domestic or agricultural sites, which are largely consistent with the picture of historic occupation for the region. An assemblage and site that might be able to adequately convey its significance might provide further detail into these lifeways, but the history of landscape evolution surrounding the airport and I-40 suggests that such well-preserved contexts would be rare.

As noted above, 19 archaeological resources were identified through the combined investigations for I-5700 and I-5506. None of the archaeological resources was considered to be eligible for the National Register of Historic Places. No further archaeological investigations are recommended for the proposed conversion of the existing interchange at I-40 and SR 3015, Airport Boulevard, to a diverging diamond interchange. Should the project change further investigation may be necessary. The project as described should be considered to be compliant with Section 106 and NCGS121-12a.

References:

Hall, W.K. and T. R. Littleton

1978 *Cultural Resources Survey of the Raleigh-Durham Airport Area*. Prepared for Raleigh-Durham Airport Authority by Coastal One Resources Division, Ocean Data Systems, Inc., Wilmington, North Carolina.

Legacy Research Associates

2015 *Archaeological Survey and Evaluation for Two Intersection Improvements, I-40 at SR 1002 (Aviation Parkway) – TIP I-5506 (WBS No. 43608.1.1) PA Tracking No. 13-11-0006, Federal Aid Number NHPP-040-7(152)284; I-40 at SR 3015 (Airport Boulevard) – TIP I-5700 (WBS No. 50118.1.FS1) PA Tracking No. 14-09-0003, Federal Aid Number NHPP-040-1(259)286; Wake County, North Carolina*. MS. On file, North Carolina Department of Transportation, Archaeology Group, Raleigh.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Other:

Signed:



September 17, 2015

NCDOT ARCHAEOLOGIST II

Date



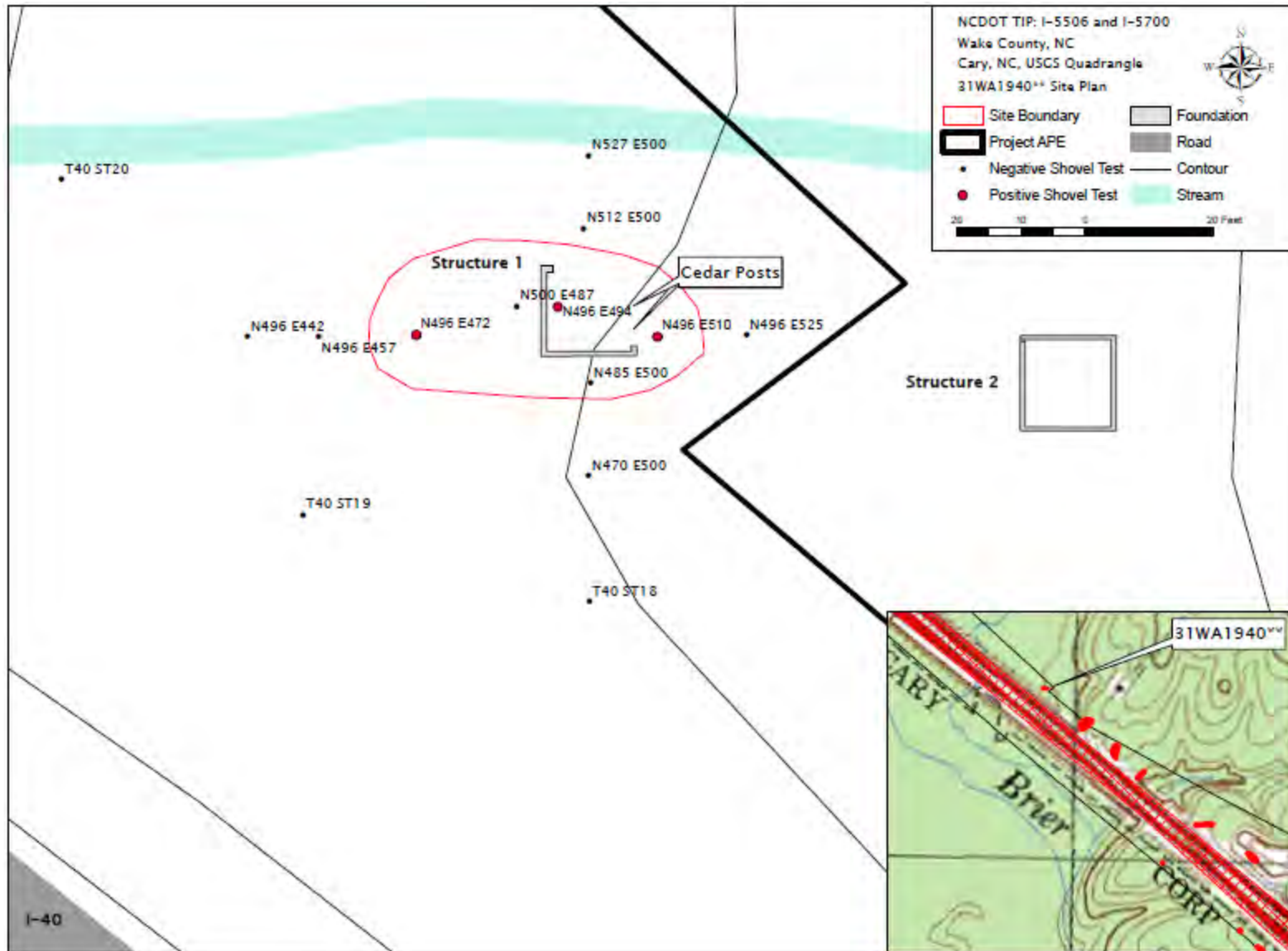
Aerial photograph of the I-40 and SR 3015 interchange illustrating the associated APE (red line).

*"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.*



Aerial photograph of the I-5700 APE (red line) with 2-foot contour lines illustrating the locations of archaeological resources identified during the current investigations.

*"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.*



Site plan for 31Wa1940** (Legacy Research Associates 2015: 146).

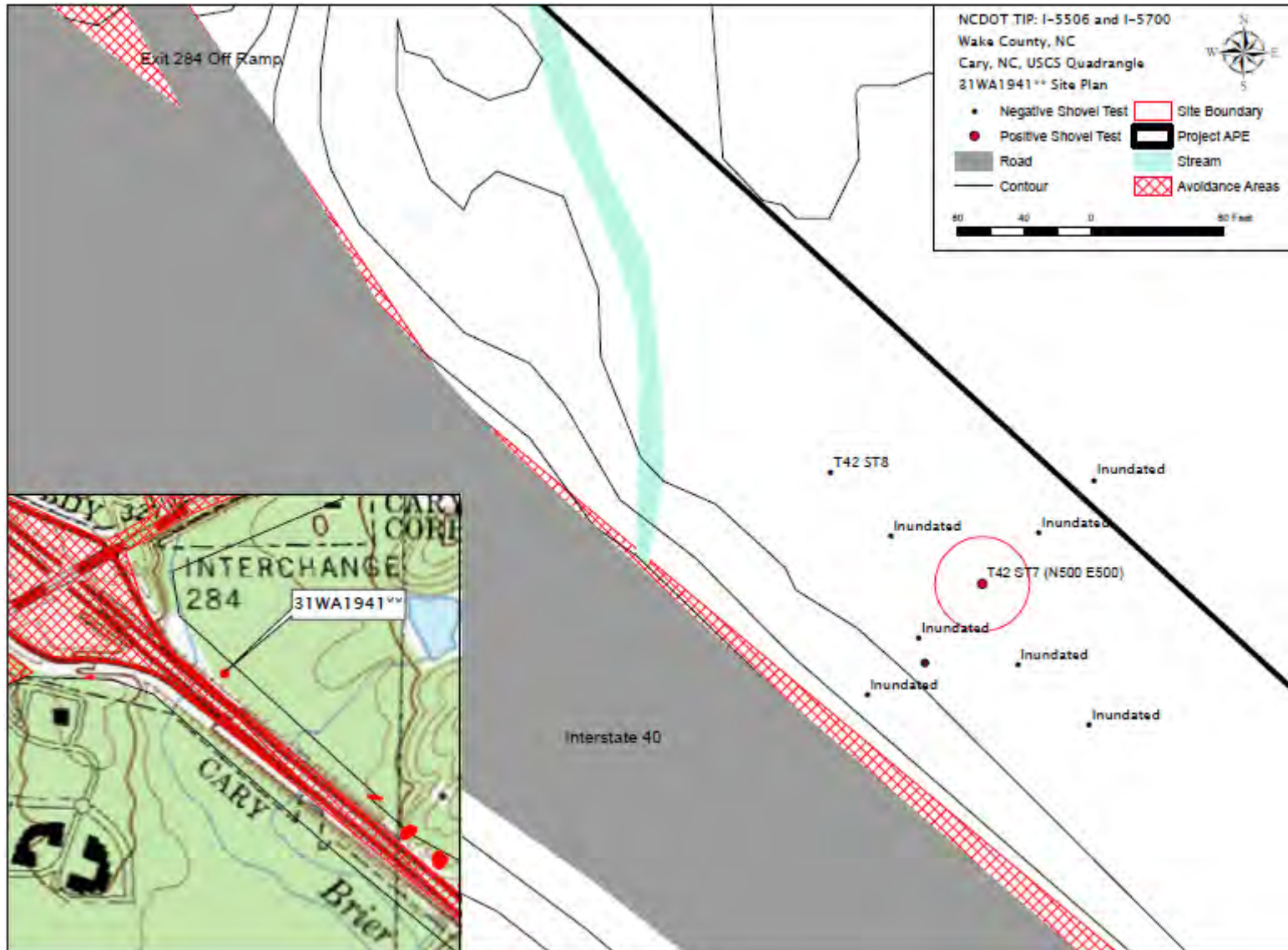
"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
 form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.



Structure 1 at site 31Wa1940**, facing west (Legacy Research Associates 2015: 148).

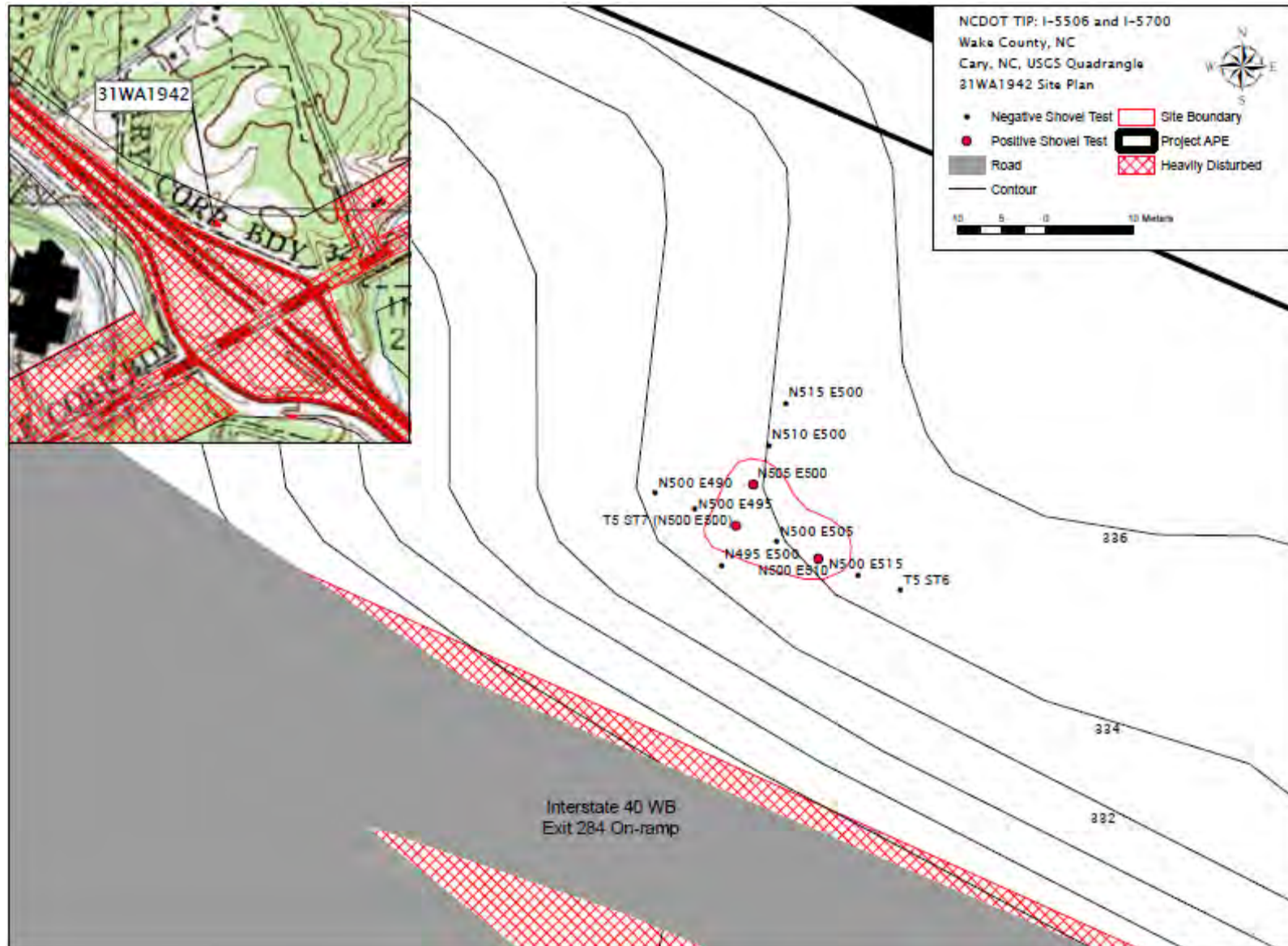


Structure 2 at site 31Wa1940**, facing north (Legacy Research Associates 2015: 152).



Site plan for 31Wa1941** (Legacy Research Associates 2015: 73).

*"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.*



Site plan for 31Wa1942 (Legacy Research Associates 2015: 103).

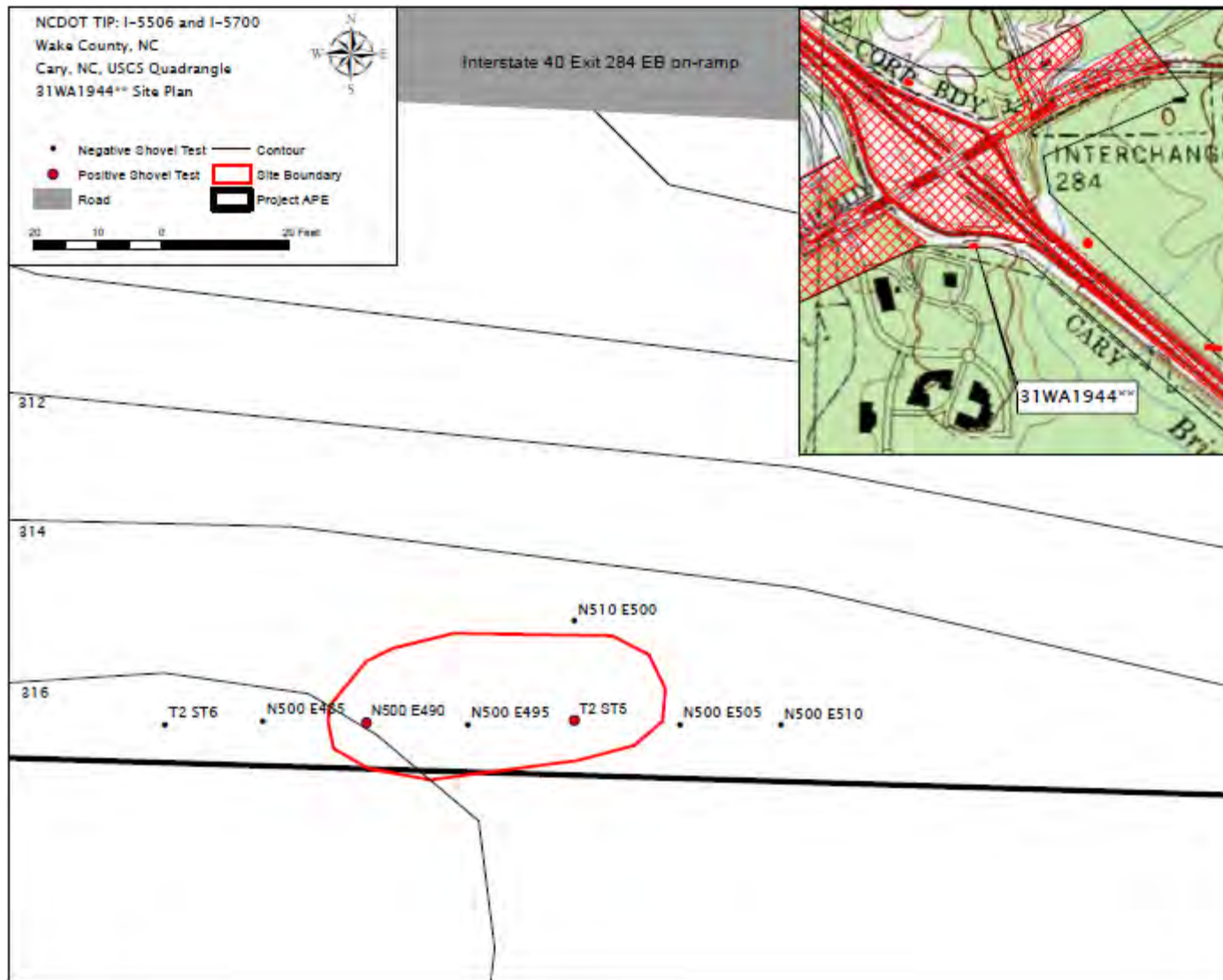
*"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.*



Site 31Wa1942 facing southeast (Legacy Research Associates 2015: 102).



Site 31Wa1944** facing north (Legacy Research Associates 2015: 156).
*"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.*



Site plan for 31Wa1944** (Legacy Research Associates 2015: 158).

*"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.*