

# Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	I-5707
WBS Element	50123.1.1
Federal Project No.	NHPP-040-4(160)279

**A. Project Description:**

The proposed project is located in the southern portion of Durham County and within the City of Durham (see Figure 1). I-40 is a six-lane median divided facility, with a freeway-to-freeway interchange with NC 147 and a partial clover interchange with NC 55.

The 12-foot-wide auxiliary lane will connect the existing I-40 ramp from NC 147 to the existing NC 55 exit ramp. The 17-foot-wide outside shoulder will consist of 12 feet of pavement and five feet of grass with guardrail. No interchange modifications will occur as a result of the project.

**B. Description of Need and Purpose:**

I-40 is a heavily-traveled east-west freeway through Durham County. Currently, approximately 7,100 vehicles per day enter I-40 West from NC 147. These vehicles have approximately 750 feet in which to merge into I-40 traffic. At 65 miles per hour (mph), vehicles have less than eight seconds to complete this merge, exacerbating already congested conditions, particularly in the afternoon peak traffic period.

The addition of an auxiliary lane to I-40 West between NC 147 and NC 55 will lengthen the weaving section by connecting the NC 147 entrance ramp to the NC 55 exit ramp in order to reduce congestion along I-40 West within the project limits and just upstream of NC 147, until longer-term congestion countermeasures can be implemented.

**C. Categorical Exclusion Action Classification: (Check one)**

- TYPE I A
- TYPE I B
- TYPE II A
- TYPE II B

**D. Proposed Improvements**

26. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes), if the action meets the constraints listed in 23 CFR 771.117(e)(1-6).

E. Special Project Information:

**Traffic Analysis**

The proposed project is shown to substantially improve traffic operations in the 2014 Base Year, essentially eliminating the Level of Service (LOS) E or F operations within the study area. In the Interim Year analysis for 2025 and 2035 the proposed project also shows substantial improvements in the traffic operations within the study area, as the network has LOS E operations with average speeds remaining in excess of 55 mph. Additionally, the proposed project will reduce the duration of congestion and improve the upstream bottleneck where I-40 Westbound reduces from four through lanes to three through lanes following the diverge to NC 147 Northbound. The 2040 Future Year Build analysis shows relatively substantial improvements in both the magnitude and duration of congestion when compared to the No-Build scenario.

**Structures**

Two bridges and three culverts will be impacted by construction of the project. Alston Avenue is crossed by I-40 with a bridge. The westbound bridge will be widened as a result of the project. Interstate 40 crosses the CSXT SDS-line with a bridge. The westbound bridge will be widened as a result of the project, and existing horizontal and vertical clearances will be maintained. NCDOT will coordinate with CSXT to ensure impacts to railroad operations are minimized during construction.

**Jurisdictional Resources**

One potential jurisdictional wetland is located north of the proposed project construction limits (see Figure 2). It is possible the project could impact 247 square feet of the wetland within the proposed right-of-way limits. The potential impacts to wetlands was calculated based on the proposed slope stake limits plus 25 feet, so further minimization of impacts to wetlands is anticipated during final design. If the final design indicates impacts to the wetland, the U.S. Army Corps of Engineers will be consulted to ensure there are no adverse effects.

**Transit Issues**

Because of the high traffic volumes through the project area, three lanes of through traffic will be maintained throughout construction. However, GoTriangle's current Bus On Shoulder System (BOSS) service will likely need to be suspended through the project area during construction, due to lack of shoulder space. NCDOT will coordinate with GoTriangle during project development to minimize impacts to transit patrons.

**Public Involvement**

A newsletter was sent to property owners and tenants in the vicinity of the project. No public comments were received.

**Cost Estimates**

The estimated project costs are as follows:

Right-of-Way	\$268,000
Utilities	\$55,000
Construction	\$3,550,000
<b>Total Project Cost</b>	<b>\$3,873,000</b>

F. Project Impact Criteria Checklists:

<u>Type I &amp; II - Ground Disturbing Actions</u>			
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u>			
If any of questions 1-7 are marked "yes" then the CE will require FHWA approval.		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (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"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" or less for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Does the project impact anadromous fish?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Other Considerations (continued)</u>		Yes	No
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 affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (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, Tennessee Valley Authority (TVA), or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT's Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F  
N/A



H. Project Commitments

Durham County  
I-40 Westbound Auxiliary Lane from NC 55 To NC 147 in Durham  
Federal Project No. NHPP-040-4(160)279  
WBS No. 50123.1.1  
TIP No. I-5707

**Division 5 and Rail Division**

NCDOT will coordinate with CSXT to ensure impacts to railroad operations are minimized during construction.

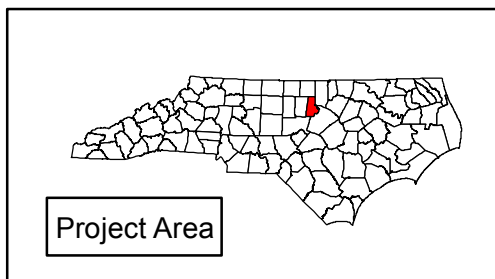
**Division 5**

NCDOT will coordinate with GoTriangle to minimize impacts to transit patrons and the Bus On Shoulder System (BOSS) service during construction.

**Division 5 and Division of Bicycle and Pedestrian Transportation**

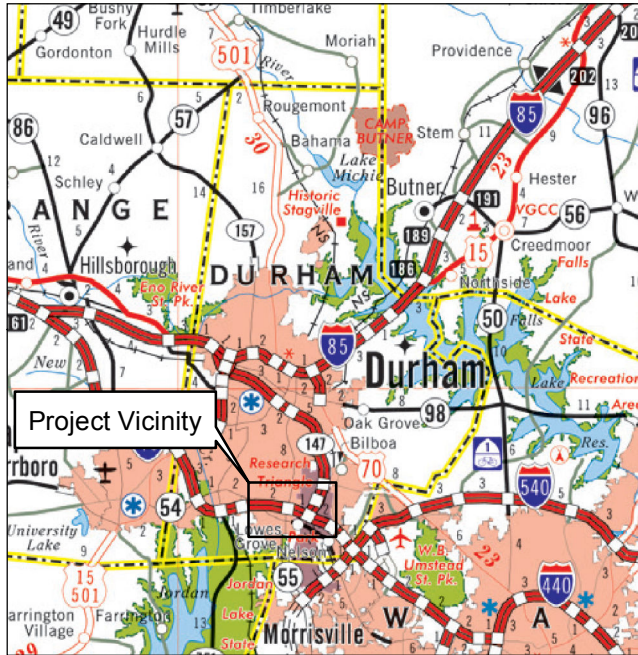
NCDOT will coordinate with the City of Durham and Research Triangle Park to assure appropriate pedestrian and bicycle detours are provided during construction.



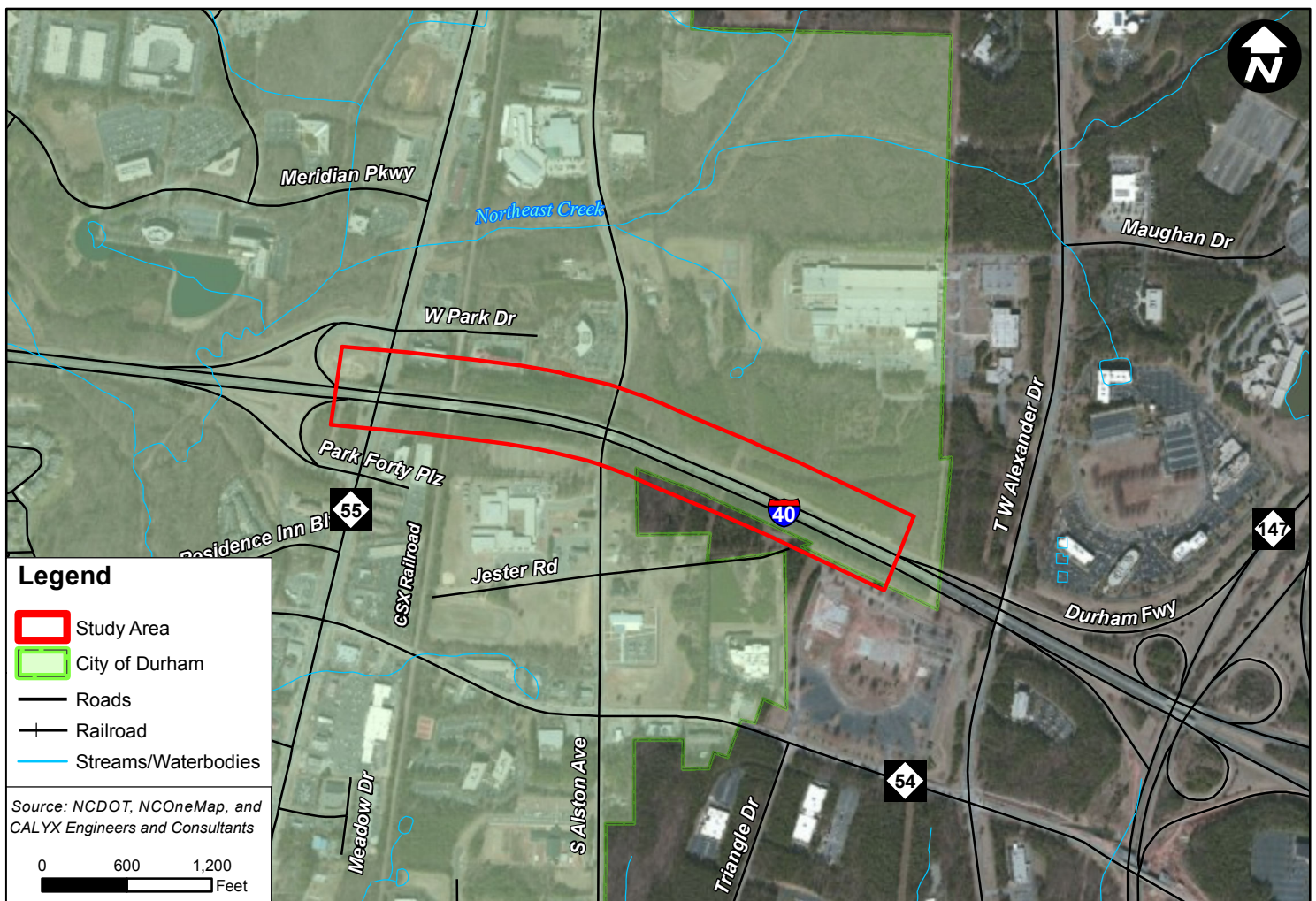


## Project Vicinity

NCDOT STIP Project I-5707  
 Construct Westbound I-40 Auxiliary Lane from  
 NC 55 to NC 147 (Durham Freeway)  
 Durham County, North Carolina



North Carolina  
 Department of Transportation





NCDOT STIP Project I-5707  
 Construct Westbound I-40 Auxiliary Lane  
 from NC 55 to NC 147 (Durham Freeway)  
 Durham County, NC

Study Area	Business	Roads
Proposed Edge of Pavement	Cemetery	Delineated Wetland
Proposed Bridge	Church	NWI Wetland
Proposed Slope Stakes	Library	Floodplain
Proposed Right of Way	School	Parcels
UST	Railroad	City of Durham

Map Date: 6/8/2017

0 140 280 Feet

Data Source: NCDOT, NCOneMap, & CALYX Engineers and Consultants

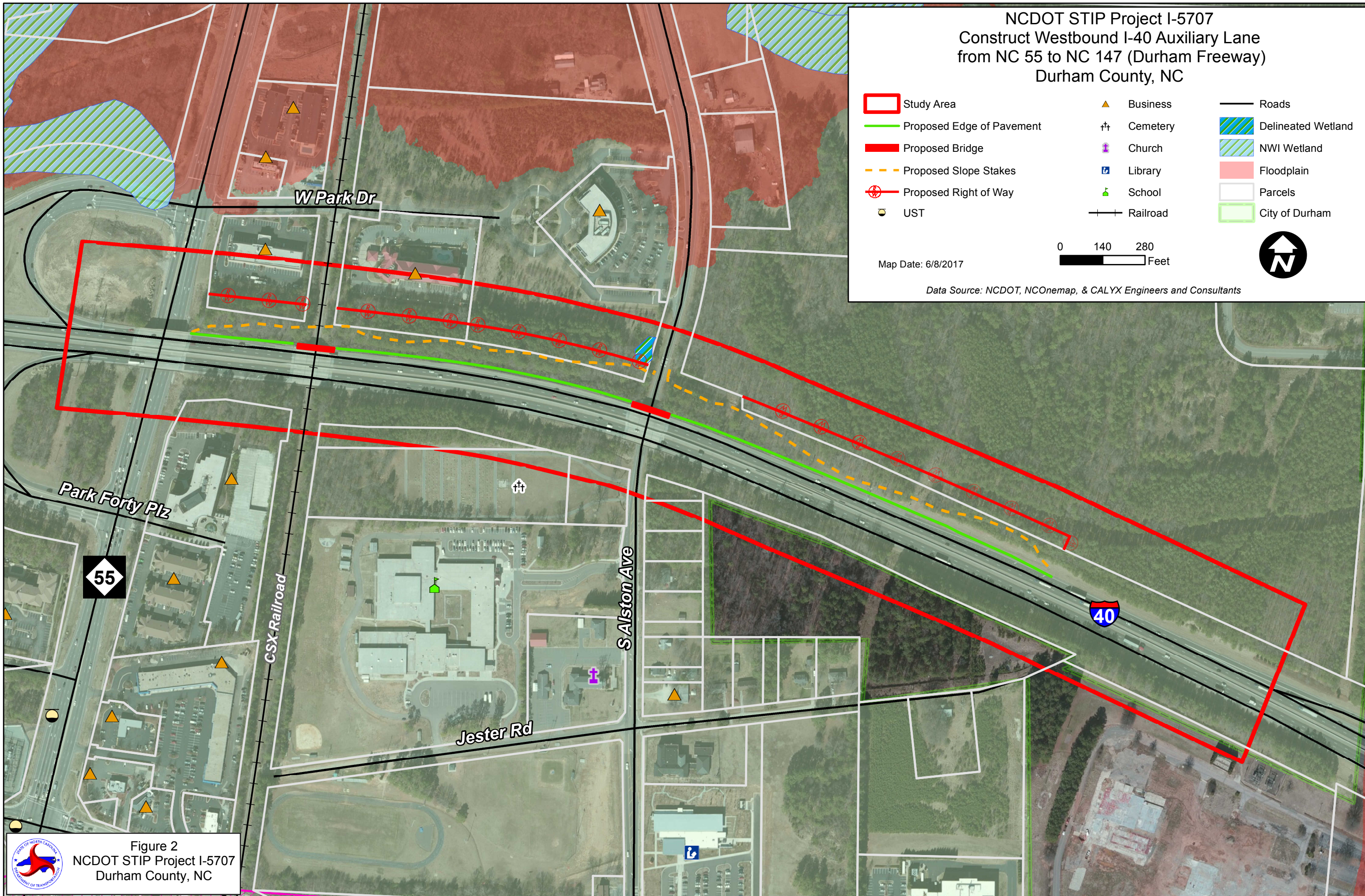


Figure 2  
 NCDOT STIP Project I-5707  
 Durham County, NC