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WANT MORE DETAILS?

See the list of technical reports at the end of this chapter.

Introduction

There are many issues to consider when a large project is proposed in a densely developed area, and there are many laws and regulations protecting important resources that need to be addressed.

As shown in this chapter’s table of contents, issues are organized by the following general categories: social resources, cultural resources, physical resources, natural resources, and an impact summary/ comparison. For each resource, existing conditions are described, followed by the potential impacts from each Detailed Study Alternative and ways to minimize those impacts. Teal boxes with the following icon explain how various laws and regulations apply to the project.



When developing the Detailed Study Alternatives’ preliminary designs, great care was taken to first avoid impacts and then minimize impacts where reasonable and feasible, while conforming to the established design criteria (see **Section 2.4.2**). However, this section of I-440 was constructed in the early 1960s, and the right of way is narrow in many locations. Therefore, upgrading the roadway to modern standards will bring roadway elements closer to existing adjacent uses, and/or require acquisition of right of way in some locations.

To help the reader navigate this chapter, the following icons appear in the bottom center of each page, indicating the resource category being discussed.



3.1 SECTION

Neighborhoods and Community Resources

3.1.1 Existing Community Characteristics

Community Context

The project is located in an established urban area approximately three miles west of downtown Raleigh in east central North Carolina.

Several regional destinations are located in and around the project study area, as shown on **Exhibit 1.3**. These include the North Carolina State Fairgrounds, Carter-Finley Stadium, PNC Arena, the North Carolina Museum of Art, Rex Hospital, North Carolina State University, Meredith College, and Crossroads Shopping Center. Many people use I-440 through the project study area to access these resources.

The university community is an important influence in the project area. Meredith College is located adjacent to I-440 between Hillsborough Street and Wade Avenue. The main campus of North Carolina State University is located to the east and several university facilities are located within the vicinity of I-440, including the Centennial Biomedical Campus (College of Veterinary Medicine), JC Raulston Arboretum, several NCSU research buildings, and a housing complex.

Because of the university and college, there is a large student population living in apartment complexes and homes in the project study area, which increases the demand for bicycle, pedestrian, and transit facilities.

There is also an active residential community in the area. Most of the homes were built between 1960 and 2000, so the neighborhoods are well established and the residents take pride in their community. This is evident in the creation of several local organizations aimed at empowering residents and business owners and maintaining their quality of life. These organizations include the Method Civic League in the Method Neighborhood, the City of Raleigh's West Citizen Advisory Council (CAC) and Wade CAC, Avent West Community Development Corporation, Blue Ridge Corridor Alliance, and Hillsborough Street Community Service Corporation.

Demographics

According to US Census data, between 2000 and 2010 the population of the study area grew more slowly compared to Raleigh and Wake County; likely because the study area includes built-out, well-established neighborhoods and limited vacant land.

The population of the study area is generally younger than the overall populations of Raleigh and Wake County due to the higher student population. The minority population of the study area is comparable to Wake County, with minorities comprising about 40 percent of the population.

The median income in the area is lower than in the city or county as a whole, and a high percentage of homes (58 percent) are occupied by renters, likely due to the higher student population. The percentage of low-income populations in the Census Block Groups surrounding the corridor are about 6 percent higher than the City of Raleigh average (16 percent). Low-income populations are present in all US Census block groups adjacent to the I-440 project corridor from Jones Franklin Road to Hillsborough Street.

3.1.2 Relocations and Property Acquisition

Because the project area is highly developed and the existing I-440 right of way is narrow in many places, permanent new right of way and temporary construction easements will be needed to construct any combination of Detailed Study Alternatives end to end. Estimates of the land areas needed to construct the Detailed Study Alternatives are shown on the preliminary designs in **Appendix B**. The relocation reports for each Detailed Study Alternative are included in **Appendix E**.

For some properties, only a portion of the property may be permanently or temporarily needed. For others, permanent relocation of the resident or business may be necessary.

NCDOT will follow their established process for acquiring property and assisting residents and businesses in relocating. This process is described in the information box on this page.

Table 3.1 lists the estimated numbers of residential and business relocations for the Detailed Study Alternatives. Based on the relocation reports, there are comparable replacement housing and suitable business sites in the area for displaced owners and tenants.

What is the highway right of way?

The is the land area dedicated to and maintained for the purpose of transportation use. Most often it is owned and/or controlled by a state or local government.

What is a temporary construction easement?

A temporary right acquired by one party to temporarily use or control real property belonging to another party for the purpose of construction. For this project, temporary construction easements may be needed for activities such as earthwork or drainage installation. Once construction is complete, the temporary easement reverts back to the property owner, who is compensated for the use.

NCDOT's Property Acquisition and Relocation Process

NCDOT's processes are administered in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act and the North Carolina Relocation Assistance Act.

Private property in the path of the selected end-to-end combination of Detailed Study Alternatives will be purchased by NCDOT for right of way. NCDOT pays fair market value for all property purchased. NCDOT also pays a lesser amount for land temporarily needed for easements. Licensed real estate appraisers determine a fair market value at the time of purchase. This is the same type of appraisal that is required when selling, buying, or refinancing a property.

For renters and homeowners who are relocated by the project, NCDOT offers several programs to minimize the inconvenience of relocation: Relocation Assistance, Relocation Moving Payments, and Relocation Replacement Housing Payments or Rent Supplements. At least one relocation officer is assigned to each highway project. The relocation officer assists homeowners, renters, and owners of displaced businesses, non-profit organizations, and farm operations in searching for and moving to replacement property.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act, per NCDOT's Title VI Policy Statement.

Want to know more? Go to the project website under the heading "Resources for Local Property Owners": <https://www.ncdot.gov/projects/i-440improvements/>

Table 3.1: Property Acquisition and Relocation Summary

Segment	Detailed Study Alternative		
	One Flyover	Two Flyovers	Slight Detour
Hillsborough St / Wade Ave Interchange	1 - residential relocation 1 - business relocation	0 - residential relocation 1 - business relocation	1 - residential relocation 1 - business relocation
Ligon St Grade Separation ¹	Extend Culvert	Bridge South	Bridge North
	0 - residential relocation 7 - business relocations	0 - residential relocation 8 - business relocations	10 - residential relocations 7 - business relocations
Western Blvd Interchange	Double Crossover Diamond		
	1 - residential relocation 0 - business relocation		
Melbourne Rd Interchange	Bridge In Place	Bridge to North	
	3 - residential relocations 0 - business relocation	6 - residential relocations 0 - business relocation	
Athens Dr Grade Separation	Bridge In Place	Bridge to North	
	No relocations	5 - residential relocations 0 - business relocation	
Jones Franklin Rd Interchange	Upgrade Existing Partial Clover		
	23 - residential relocations 7 - business relocations		
I-40 Interchange and South	Widen I-440 Only		
	No relocations		
RANGE OF TOTAL IMPACTS	Residential Relocations Minimum - 27; Maximum - 46		Business Relocations Minimum - 15; Maximum - 16

1. This includes the 7 businesses on Brickhaven Road along westbound I-440 that are impacted by the widening of I-440.

As shown in the table, all end-to-end combinations of Detailed Study Alternatives are estimated to impact similar numbers of businesses (totaling 15 to 16).

Residential relocations (totaling 27 to 46) vary most at the Melbourne Road interchange, Athens Drive grade separation, and Ligon Street grade separation. The highest numbers would occur at the Jones Franklin Road interchange.

At Jones Franklin Road, the Upgrade Existing Partial Clover Alternative would displace 23 residences and 7 businesses. These would occur along Jones Franklin Road due to the need to widen Jones Franklin Road through the interchange area and to realign Ft Sumter Road and the westbound off-ramp so they are directly across from each other.

At the Melbourne Road interchange and Athens Drive grade separation, the Bridge to North Alternatives at each location would have higher residential relocations due to more land needed to realign the roadways to the new bridge locations.

At the Ligon Street grade separation, the Extend Existing Traffic Culvert Alternative and Bridge to South Alternative are anticipated to have no residential relocations, while the Bridge to North Alternative is estimated to have ten residential relocations in the Method Townes townhouse development on Ligon Street. The Method Townes are marketed as student rental housing.

For business relocations near the Ligon Street grade separation, all Detailed Study Alternatives would displace the office buildings on Brickhaven Road estimated to house seven businesses, including two non-profit organizations - 4-H Youth Development and NC FFA Association and Foundation.

3.1.3 Community Resources

Community resources in the project corridor are public and privately owned; and include facilities and lands such as parks, greenways, private recreation centers, JC Raulston Arboretum, public and private schools, libraries, places of worship, Oak Grove Cemetery, and large shopping centers. These are labeled on the maps in **Appendix B**. Public parks and greenways are not included in this section. They are discussed in **Section 3.4.2**.

Community resources that would be displaced or have functions adversely impacted by property acquisition are discussed below for each interchange and grade separation area. NCDOT will follow the established process for property acquisition and relocation of businesses and organizations, which is described in the information box on page 3-4 titled “NCDOT’s Property Acquisition and Relocation Process”.

Jones Franklin Road Interchange

The Upgrade Existing Partial Clover Alternative would displace the Learn With the Best private school for special needs children with pervasive developmental disorders. This school is located at 559 Jones Franklin Road, in the office building at the corner of Jones Franklin Road and Waters Edge Drive, as shown in **Appendix B – Figure 3**. This office building would be displaced by the project and the school would require relocation. The relocation reports included in **Appendix E** estimate there is an adequate supply of similar facilities available. NCDOT will work closely with the school to reduce the possibility of any lapse in availability of services to the community provided by this facility.

Athens Drive Grade Separation

There are no community resources directly impacted by the Bridge in Place Alternative or the Bridge to North Alternative.

Melbourne Road Interchange

There are no community resources directly impacted by the Bridge in Place Alternative or the Bridge to North Alternative.

Exhibit 3.1: Shopping Center at Western Boulevard interchange



Source: ESRI, NCDOT, Wake County, NOneMap

Western Boulevard Interchange

The Double Crossover Diamond interchange would require a strip of land and some parking spaces from the parking lot of the K-Mart parcel located at the intersection of Western Boulevard and Blue Ridge Road, as shown in **Exhibit 3.1**. Adequate parking would remain available at the site.

The existing multi-use path through the current I-440/Western Boulevard interchange would be replaced as part of the project.

Ligon Street Grade Separation

There would be no direct impacts to community resources under the Extend Existing Traffic Culvert Alternative and the Bridge to North Alternatives.

Oak Grove Cemetery and Method Community Park, which are nearby, would not be directly impacted by any of the alternatives.

The Bridge to South Alternative would displace one of the large NC State University plant research buildings on Ligon Street on the eastbound side of I-440, as shown in **Exhibit 3.2**.

Exhibit 3.2: Research building at Ligon Street grade separation



Source: ESRI, NCDOT, Wake County, NCOneMap

Hillsborough Street and Wade Avenue Interchange Area

All the Detailed Study Alternatives would directly impact Meredith College, Reedy Creek Greenway, Museum Park, NC State University, the NC State University Club, and the NC State University Athletics golf practice facility. Existing right of way along I-440 in this area is not sufficient to construct the new interchange designs, and impacts to facilities adjacent to I-440 are unavoidable. For the discussion below, refer to **Appendix B – Figures 8a-c**. For discussions of Reedy Creek Greenway and Museum Park, see **Section 3.4**.

Meredith College. The Meredith College main campus is located east of I-440 between Hillsborough Street and Wade Avenue, with additional land north of Wade Avenue. It is a 210-acre private women’s college with nearly 2,000 students. It was founded in 1891 and moved to its current location in 1926.

Right of way impacts to the main campus of Meredith College vary by Detailed Study Alternative. The One Flyover Alternative would require approximately 10.7 acres for new right of way, the Two Flyovers Alternative would require approximately 13.0 acres for new right of way and the Slight Detour Alternative would require approximately 8.2 acres of new right of way. In this area of campus, the College’s commuter parking lot and a general athletic field would be partially impacted to varying degrees by each Detailed Study Alternative; with the Slight Detour Alternative having the least impact and the Two Flyovers Alternative the most.

North of Wade Avenue, the One Flyover Alternative would require approximately 6.2 acres of a combination of right of way and potential easement to construct the new roadway and to realign Reedy Creek Greenway. At this same location, the Two Flyovers Alternative would require approximately 0.5 acres, and the Slight Detour would require approximately 6.4 acres.

A residence on Meredith College property near Wade Avenue would be displaced with the One Flyover Alternative and the Slight Detour Alternative.

NC State University. All three Detailed Study Alternatives would require approximately 18.6 to 18.9 acres of right of way from the NC State University property between Hillsborough Street and Wade Avenue.

NC State University Club. The University Club is a private recreation facility located west of I-440 on Linda Murphy Drive. It is operated by the University Club Foundation. The Foundation leases approximately 41 acres of land from NC State University for the club site.

The University Club has a clubhouse, 9-hole golf course, tennis courts, and a swimming pool. The NC State University Athletics Department subleases land from the University Club for a golf practice facility near Wade Avenue.

The University Club tennis courts, parking area, and golf course would be directly impacted by all three Detailed Study Alternatives. Additional coordination with NC State University and University Club will be conducted by NCDOT to explore impact minimization measures and potential options for relocation and compensation.

NCSU Golf Practice Facility. All three Detailed Study Alternatives also unavoidably impact the NCSU golf practice facility and would require relocation of this facility.

3.1.4 Mobility and Access Changes

The purpose of the project is to improve traffic flow and operational efficiency, which would enhance mobility along this segment of I-440 and the local road network near the interchanges.

The proposed project would improve mobility and connectivity for pedestrians and bicyclists by providing sidewalks and bicycle lanes on cross streets. Sidewalks are proposed for all cross streets except Wade Avenue. Bicycle lanes are proposed for Jones Franklin Road, Athens Drive, and Melbourne Road. Potential additional enhancements such as wider sidewalks and sidewalk extensions would be coordinated with the City of Raleigh under a cost-sharing agreement.

During construction, there will be temporary impacts to mobility and access in the project area. A goal of the project construction will be to keep two lanes of traffic open in each direction on I-440 during the construction period to the extent feasible.

NCDOT will coordinate with the Wake County Public School System, transit agencies, and emergency response providers regarding detour routes and associated route changes that may be necessary during construction. NCDOT also will coordinate with the NC State Fairgrounds (including NC Department of Agriculture and Consumer Services), Carter-Finley Stadium, NC State University, Wolfpack Club, PNC Arena, Gale Force Sports (Division of Carolina Hurricanes), NC State Highway Patrol, and City of Raleigh Police Department regarding traffic flow during construction for major events at venues west of I-440 that generate major traffic on I-440.

Mobility and access effects specific to each interchange and grade separation area are described next.

Jones Franklin Road Interchange

- Jones Franklin Road through the interchange area from north of Barringer Drive to Centerview Drive would be widened to four lanes, improving mobility.
- The interchange ramps on the westbound side of I-440 would be realigned to meet Fort Sumter Road as one intersection, eliminating one traffic signal from this area.
- The existing Capital Center Drive/Jones Franklin Road intersection

will be removed since it is too close to the interchange ramp. A new entrance road off Jones Franklin Road, with a traffic signal, will be provided at Denise Drive.

Athens Drive Grade Separation

- The Replace Bridge in Place Alternative would close the existing bridge during construction and require a temporary approximately 2.8-mile detour for 9 to 12 months. It should be noted that Athens Drive High School and community library is located on Athens Drive less than a mile east of I-440.
- The Replace Bridge to North Alternative would keep the existing bridge open during construction, with only potential short term closures to tie roadway approaches to the new bridge.

Melbourne Road Interchange

- The Replace Bridge in Place Alternative would close the existing bridge during construction and require a temporary approximately 3.2-mile detour for 9 to 12 months. It should be noted that AB Combs Magnet Elementary School is located less than a mile from the interchange.
- The Replace Bridge to North Alternative would keep the existing bridge open during construction, with only potential short term closures to tie roadway approaches to the new bridge.
- Both alternatives would close the Deboy Street intersection with the Melbourne Road off-ramp. Traffic would use Huntingdon Drive and Powell Street instead, which would be approximately 0.5 miles longer.

Western Boulevard Interchange

- The existing multi-use path along the north side of Western Boulevard would be replaced as part of the project.

Ligon Street Grade Separation

- The bridge alternatives would include sidewalks and would allow for buses to cross over I-440 at this location.
- Sidewalks would not be included with the Extend Existing Traffic Culvert, nor would buses be able to use the one-lane culvert due to clearance issues.

Wade Avenue and Hillsborough Street Interchange Area

- Under the Slight Detour Alternative, the access from Hillsborough Street to eastbound I-440 would change. These vehicles would be routed through a traffic signal at Wade Avenue before being able to get on eastbound I-440. This new routing will be longer, but traffic operations for the overall interchange system are similar to the One Flyover and Two Flyovers, and all are an improvement over the no-build scenario.

3.1.5 Environmental Justice

Federal laws and regulations require the evaluation of effects of transportation actions on minority and low-income populations, which in the past have been under-served in the decision-making process. These requirements are grouped under the term “environmental justice”, as described in the information box.

Both minority and low-income populations that meet the Environmental Justice criteria were identified in the project vicinity, including the minority population in the Method Neighborhood, and low-income and minority populations disbursed within neighborhoods from Jones Franklin Road to Hillsborough Street.

Adverse community impacts are anticipated under any combination of Detailed Study Alternatives end to end, but these would affect all populations along the project corridor equivalently; thus impacts to minority and low-income populations do not appear to be disproportionately high and adverse. Benefits of the project, including improved safety and mobility, would be enjoyed by both regional travelers and local residents, including minority and low-income residents.

Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community. No disparate impacts are anticipated under Title VI and related statutes.

Public involvement opportunities for all communities are described in **Sections 4.3 and 4.4.**



Environmental Justice

Title VI of the Civil Rights Act of 1964 protects individuals from discrimination on the grounds of race, age, color, religion, disability, sex, and national origin. Additional directives are included in Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority and Low-Income Populations”.

The Executive Order “directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of Federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.” (*FHWA Guidance on Environmental Justice and NEPA*, 12/16/11). The guidance directs FHWA to:

1. Ensure meaningful opportunities for all potentially affected communities in the transportation decision-making process;
2. Avoid, minimize or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority or low income populations; and
3. Fully evaluate the benefits and burdens of transportation programs, policies, and activities, upon low-income and minority populations.

A disproportionately high and adverse effect on minority and low-income populations means an adverse effect that:

1. Is predominantly borne by a minority population and/or a low-income population; or
2. Will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non low-income population.

Want to know more? Go to FHWA website

https://www.fhwa.dot.gov/environment/environmental_justice/

3.2

SECTION

Visual Resources

3.2.1 Landscape Character of Project Area

The landscape along most of the I-440 project corridor is urban and suburban, with gently rolling topography. Trees line the right of way and limit views to and from I-440. Larger undeveloped forested areas are adjacent to the roadway at Lake Johnson, Kaplan Park, and Museum Park. Views open up slightly at interchanges and grade separations.

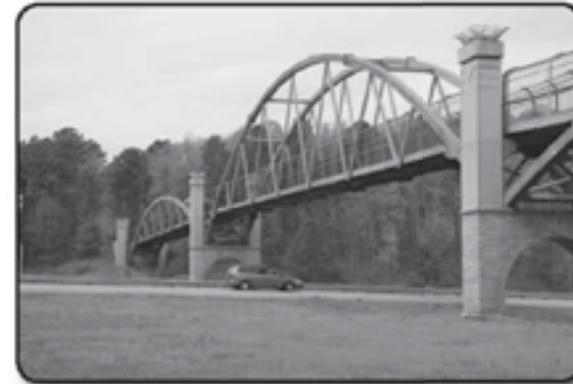


Typical forested boundaries of project corridor looking eastbound from Athens Drive bridge.

Between Hillsborough Street and Wade Avenue, open fields are located adjacent to I-440 on both sides – on the Meredith College main campus and NC State University. However, a vegetated buffer blocks most of the views from I-440 to these open areas.

3.2.2 Sensitive Visual Resources

There is one sensitive visual resource in the project corridor. The Reedy Creek pedestrian bridge over I-440 is a local landmark and prominent aesthetic feature located just east of the Wade Avenue interchange.



Reedy Creek Greenway pedestrian bridge over I-440

3.2.3 Visual Impacts

Along most of the project corridor, views would not change substantially since the view-shed already includes an interstate highway. The additional two lanes along I-440 and the proposed interchange and grade separation designs from south of Walnut Street through Western Boulevard will not substantially change the mass and scale of I-440 within the landscape.

Removal of vegetation within the existing and proposed new right of way may increase views to and from I-440 in some locations, but over time, vegetation will regrow and obscure views.

Views along I-440 at Ligon Street would change with the introduction of a new bridge over I-440 under the Bridge to North and Bridge to South Alternatives. However, the proposed two-lane bridge would be of similar mass and scale to the bridges at Melbourne Road and Athens Drive and would not look out of place.

The Ligon Street bridge may be enhanced with upgraded railings or other aesthetic treatments due to its proximity to historic Oak Grove Cemetery and Berry O’Kelly School historic district (see **Section 3.3.2**).

The greatest visual changes along I-440 would occur at the Wade Avenue interchange with the addition of the flyover ramp(s) and the ramp system between Wade Avenue and Hillsborough Street under any of the Detailed Study Alternatives. Views would change for Reedy Creek Greenway on the pedestrian bridge and for some areas at the University Club and at Meredith College. Views from Museum Park would not change noticeably because the forested buffer area would block views.

At the University Club, there would be a new view of a retaining wall along I-440 between the on/off ramps and the I-440 mainline. At Meredith College, the views on the western side of campus would be changed to include new fill slopes under all alternatives and the single flyover ramp structure under the One Flyover Alternative and Slight Detour Alternative and the two flyover ramp structures under the Two Flyovers Alternative.

Changes to views to and from the pedestrian bridge, a sensitive visual resource, were evaluated in detail for the nearby Wade Avenue interchange Detailed Study Alternatives (One Flyover, Two Flyovers and Slight Detour).

The new flyover ramps at the Wade Avenue interchange would have the most potential to impact views both to and from the pedestrian bridge. A 3D visualization model developed for this project was used to evaluate these potential effects.

Views from the pedestrian bridge are discussed first, followed by a discussion of views of the bridge from I-440.

Views from the Reedy Creek Greenway Pedestrian Bridge

An existing typical view from the pedestrian bridge is shown in this photograph below on the left. The views from the bridge are partially obscured by the bridge supports and the protective chain link fencing.

Under the One Flyover or Slight Detour Alternatives, the single new flyover ramp associated with these alternatives would be almost one-quarter mile away and would be a very small addition to the landscape as viewed from the bridge.

There would be some change in the views under the Two Flyovers Alternative since the second flyover ramp would be approximately 370 feet away from the bridge. As shown in the simulation view below on the right, the Two Flyovers second flyover ramp would be a visible, but not dominant, addition to the landscape as viewed from the pedestrian bridge.

Under any of the Detailed Study Alternatives, the character of the views looking toward Wade Avenue from the bridge would not be adversely impacted since the view would continue to be of a major highway.



Existing view from pedestrian bridge west toward Wade Avenue



Simulated view from pedestrian bridge to the Two Flyovers alternative for Wade Avenue

Views to the Reedy Creek Greenway Pedestrian Bridge from I-440

Travelers along I-440 eastbound and westbound have an attractive view of the Reedy Creek Greenway pedestrian bridge as they travel toward the bridge.

In the eastbound I-440 direction, the bridge starts becoming a prominent feature in the landscape at about the eastern edge of the existing I-440 bridge over Wade Avenue, as shown in the photograph of the existing view on this page. Simulations of the same view under the three Detailed Study Alternatives are presented on this page for comparison.

There would be no notable changes in views of the pedestrian bridge with the One Flyover Alternative or Slight Detour Alternative since the single flyover ramp is well behind the I-440 traveler when they cross over Wade Avenue.

Under the Two Flyovers Alternative, the second flyover ramp would adversely change the views for a short time as travelers approach and pass under the flyover ramp.



View location and direction of views below



Existing view from I-440 north to pedestrian bridge



Simulated view of pedestrian bridge from One Flyover Alternative



Simulated view of pedestrian bridge from Two Flyovers Alternative



Simulated view of pedestrian bridge from Slight Detour Alternative

3.2.4 Other Aesthetic Considerations

There are two features that may be incorporated into the project that would enhance aesthetics along the I-440 project corridor.

These are the potential addition of planters in the median of I-440 and enhanced aesthetic treatments of any noise walls that may be constructed along the I-440 corridor.

Potential locations of median planters extend from Jones Franklin Road to Ligon Street and are shown on the preliminary designs in **Appendix B**. These planters would be similar to the existing median planters along other sections of I-440, but would be wider to facilitate plant growth and maintenance. The installation of median planters is dependent on cost-sharing participation by the City of Raleigh.

For noise walls determined feasible and reasonable during final design, the City of Raleigh has expressed an interest in participating in a cost-sharing agreement to provide noise walls similar to the existing brick noise walls along other segments of I-440.

All cost-sharing agreements with local municipalities would be finalized during the final design stage.



Existing view of I-440 median planter near Glenwood Avenue



Existing noise wall along I-440 west of Lake Boone Trail

3.3 SECTION

Archaeological and Historic Architectural Resources

Historic and archaeological sites determined important enough to be eligible for the National Register of Historic Places are protected under the National Historic Preservation Act, as described in the information box titled “The National Historic Preservation Act.”

3.3.1 Resources in the Project Area

Archaeological Resources

There are no archaeological resources in the project area that are on or eligible for listing on the National Register of Historic Places.

The NC Historic Preservation Office (NCHPO) stated that based on their knowledge of the area, “We, therefore, recommend that no archaeological investigation be conducted in connection with this project.” (letter to NCDOT dated August 13, 2012, included in **Appendix D2**).

Historic Architectural Resources

Surveys by qualified historians were conducted in the project’s Area of Potential Effect, as described in the supporting documentation at the end of this chapter. The five sites determined to be on or eligible for listing on the National Register of Historic Places are documented in letters from the NCHPO dated February 4, 2014, September 26, 2014, and May 21, 2015. These letters are included in **Appendix D2**.

These five sites are described below and shown on **Exhibit 3.3**. More detailed site boundaries are shown on the environmental features maps in **Appendix B**.



The National Historic Preservation Act

This Act, specifically Section 106 of the Act, requires federal agencies to take into account the effects of their actions on historic properties (which includes archaeological sites).

Properties protected under this Act includes districts, sites, buildings, structures, and objects that are on or determined eligible for listing on the National Register of Historic Places (<https://www.nps.gov/Nr/index.htm>).

What is the National Register of Historic Places? This is the official list maintained by the National Park Service of the nation’s historic places worthy of preservation.

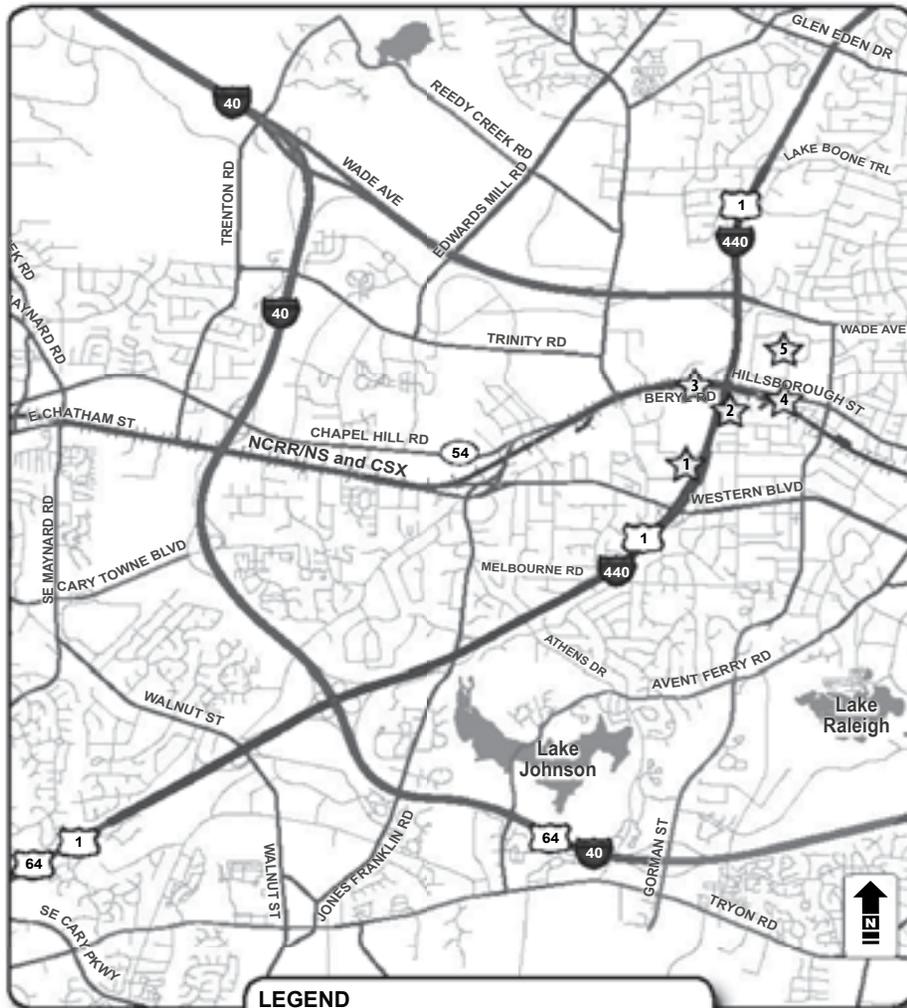
What makes a property eligible for the National Register of Historic Places? Properties that are generally 50 years old or older, and also fulfill one or more criteria related to American history, architecture, archaeology, engineering, and culture.

How does a project comply with Section 106 of the Act? A four step process is followed:

1. NCDOT and FHWA consult with the NC Historic Preservation Office (NCHPO) to determine whether Section 106 of the Act applies to a project. If the answer is “yes”, then;
2. The Area of Potential Effect (APE) around a project is surveyed by qualified historians and/or archaeologists. Results are reviewed with NCHPO to identify properties on or eligible for listing on the National Register of Historic Places. For these identified properties, go to Step 3...
3. For the project’s effect on each historic property identified in Step 2, a finding is made of No Effect, No Adverse Effect, or Adverse Effect. If there is an Adverse Effect, go to Step 4...
4. FHWA, NCDOT, NCHPO, and property owners work together to explore ways to avoid and minimize impacts, and/or include measures in the project to mitigate adverse effects.

Want to know more? Go to the US Advisory Council on Historic Preservation website <http://www.achp.gov/nhpa.pdf> or the National Park Service website <https://www.nps.gov/Nr/index.htm>

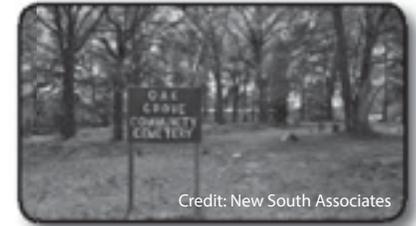
Exhibit 3.3: Location of Historic Sites in the Project Area



- LEGEND**
- ★ 1 Oak Grove Cemetery
 - ★ 2 Berry O'Kelly School Historic District
 - ★ 3 Capital City Lumber Company (portion)
 - ★ 4 Royal Baking Company
 - ★ 5 Meredith College (portion)

Source: ESRI, NCDOT, Wake County, NCOneMap

Oak Grove Cemetery. This 1.5-acre cemetery is located on Ligon Street on the westbound side of I-440. Although the total number of burials is not known, the cemetery contains approximately 100 grave markers; with approximately half of the markers being 50 years of age or older. The earliest marked grave, of Lafayette Ligon, is dated 1891. The cemetery is still being actively used and maintained by the churches in the Method community.



Oak Grove Community Cemetery

Oak Grove Cemetery was determined eligible for the National Register of Historic Places because it represents the area's early settlement and history of the Method community, it is a good example of African American folk burial practices, and is one of two known freedmen cemeteries in Raleigh.

Berry O'Kelly School Historic District. A prominent founder of the Method community was Berry O'Kelly, born in 1864. He was a successful mixed-race businessman with an interest in improving educational opportunities for rural black children. In 1895, a two-room frame community school was built on Method Road that became known as the Berry O'Kelly Training School. Facilities were improved over the years and in 1921, the Berry O'Kelly Training School was the first rural high school for African American children to be accredited in North Carolina. The last high school class graduated in 1958 and the school was closed in 1967.



Berry O'Kelly Grave Site

Today, the City of Raleigh Parks and Recreation Department operates Method Community Park and Community Center on a portion of the historic site. The remainder of the historic district includes the St James AME Church and the grave site of Berry O'Kelly.

The district was determined eligible for the National Register of Historic Places for its importance in the areas of education, ethnic heritage, and community development, its association with Berry O'Kelly, and its intact collection of buildings that are representative remnants of the old Method community.

Capitol City Lumber Company

(portion). Capitol City Lumber Company on Beryl Road was incorporated in 1945 by James Anglin Nicholson (born in 1907, died 2002), and opened for business in 1947. The lumberyard opened just in time to coincide with an explosion of post-World War II commercial and residential development in the area. The company is still owned by the family and in operation today.

The portion of the property that includes structures from prior to 1950 is included in the 1.77-acre historic site boundary. The site was determined eligible for listing in the National Register of Historic Places for its strong historic associations with Raleigh’s post-World War II growth and development.



Credit: New South Associates
Capitol City Lumber

Royal Baking Company. The Royal Baking Company was founded in 1916 by Bartholomew Streb. The company built the facility on Hillsborough Street in 1941 to accommodate their growing wholesale baking and distribution business. The building is now called “The Royal on Hillsborough” and houses a variety of retail and service shops and restaurants.

The Royal Baking Company on Hillsborough Street was listed on the National Register of Historic Places in 1997 as an intact example of an International style building representing Raleigh’s emerging industrial economy in the years immediately following World War II.



Credit: New South Associates
Royal Baking Company Building

Meredith College (portion). The Baptist Female University was founded in 1891, initially at a site in downtown Raleigh on Edenton Street. The name was changed to Meredith College in 1909, and the campus was relocated to its current location on Hillsborough Street in 1926. The original campus included six brick buildings surrounding a central quadrangle. This core of the campus, the tree-lined entrance drive off Hillsborough Street, and the 1964 amphitheater and lake are included in the historic site boundary. This portion of Meredith College was determined eligible for the National Register of Historic Places for its role in the history of women’s education in North Carolina and for design and landscape architecture.



Credit: Heather Fearnbach
Meredith College

3.3.2 Effects on Historic Architectural Sites

A meeting was held on May 2, 2017 with the North Carolina Historic Preservation Office to review the preliminary designs of the Detailed Study Alternatives and to determine their effects on the five resources listed in **Section 3.4.1**. Each resource is discussed below. The effects determination letter is included in **Appendix D2**.

Oak Grove Cemetery - No Adverse Effect or Adverse Effect - Depending on Alternative

The boundary of the Oak Grove Cemetery is shown on **Appendix B Figures 7a-c**. This site is near the Ligon Street grade separation Detailed Study Alternatives (Extend Existing Traffic Culvert Alternative, Build Bridge to South Alternative, and Build Bridge to North Alternative).

As shown on the figures in **Appendix B**, none of the preliminary designs for the Detailed Study Alternatives would directly encroach upon the Oak Grove Cemetery. Avoiding direct impacts to this resource was a factor in the designs of the Detailed Study Alternatives. All of the alternatives include a retaining wall between the cemetery and the I-440 mainline so that widening of the mainline does not encroach on the cemetery. The Build Bridge to North Alternative would be slightly farther from the cemetery than the Extend Existing Traffic Culvert Alternative and the Build Bridge to South Alternative.

The bridge alternatives would enhance access between the Method Neighborhood and the cemetery with the addition of sidewalks. Sidewalks cannot be constructed in the one-lane traffic culvert under the Extend Existing Traffic Culvert Alternative.

Under Section 106 of the Historic Preservation Act, the effect determination is “No Adverse Effect” for this resource under the Build Bridge to North Alternative and Extend Existing Traffic Culvert Alternative. If the Build Bridge to North Alternative is selected, NCDOT must coordinate with the Method Neighborhood and City of Raleigh regarding aesthetic treatments for the bridge.

Under Section 106 of the Historic Preservation Act, the effect determination is “Adverse Effect” for this resource under the Build Bridge to South Alternative due to proximity of proposed earthwork needed for the roadway approach to the Ligon Street bridge. If this alternative is selected, additional coordination and consultation between NCDOT, FHWA, NCHPO, and property owners must occur to explore ways to avoid and minimize impacts and include measures to mitigate adverse effects. Measures needed to resolve adverse effects would be documented in a Memorandum of Agreement.

Berry O’Kelly School Historic District - No Adverse Effect

The boundary of the Berry O’Kelly School historic district is shown in **Appendix B on Figures 7a-c**. This site is between Hillsborough Street and Ligon Street on the eastbound side of I-440.

As shown on the figures in **Appendix B**, none of the preliminary designs for the Detailed Study Alternatives would directly impact the Berry O’Kelly School historic district. Avoiding impacts to this resource was a factor in deciding to widen I-440 on the westbound side. The preliminary design also provides space between the roadway shoulder and the historic district boundaries estimated to be sufficient for drainage features and a potential noise wall.

Under Section 106 of the Historic Preservation Act, the effect determination is “No Adverse Effect” for this resource. Aesthetic treatments and/or a public art project for the community side of the noise wall should be considered with input from the City of Raleigh and the Method Neighborhood. The City of Raleigh has expressed an interest in participating in a cost-sharing agreement to provide noise walls similar to the existing brick noise walls along other segments of I-440.