SUMMARY

S.1 N.C. DEPARTMENT OF TRANSPORTATION

Administrative Action Environmental Impact Statement

() Draft (X) Final

S.2 CONTACTS

The following may be contacted for additional information concerning this Final Environmental Impact Statement (FEIS):

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S.3 DESCRIPTION OF PROPOSED ACTION

This study evaluates transportation improvements proposed for the Stantonsburg Road (US 264 Business)/Memorial Drive (NC 11) corridor in Pitt County, North Carolina, southwest of the city of Greenville.

This transportation improvement project is identified in the North Carolina Department of Transportation (NCDOT) Draft 2009-2015 Transportation Improvement Program (TIP) as Project R-2250. Right-of-way acquisition is scheduled to begin in FY 2009; construction is scheduled to begin after 2015.

The primary purposes of the proposed project are to improve traffic flow and congestion on Memorial Drive (NC 11) and Stantonsburg Road (US 264 Business) within the project area; relieve congestion on NC 11 in Greenville, thereby improving safety and reducing the number of accidents; and improve regional travel along the US 264/NC 11 corridor.

S.4 OTHER MAJOR ACTIONS IN THE PROJECT VICINITY

There are fourteen other projects located in the study area; six NCDOT TIP projects, and eight proposed city of Greenville projects. These are listed below:

NCDOT TIP Projects
The following projects are currently listed in the Draft 2009-2015 TIP:

- U-3613. Widen Fire Tower Road (SR 1708) from Davenport Farm Road (SR 1128) to east of Corey Road (SR 1709). The portion of the project from NC 903 to Corey Road is currently under construction.
- U-3315. Construct Stantonsburg Road / Tenth Street Connector from Memorial Drive to Evans Street. The facility will be partly on new location with multiple lanes and a grade separation at the CSX rail crossing. Right of way acquisition is scheduled for 2010; and construction is scheduled to begin in 2012.
- U-2817. Widen Evans Street and Old Tar Road from Main Street in Winterville to US 264A. Planning is currently underway.
- B-4231. Replace Bridge No. 53 over Swift Creek on NC 102. Right of way acquisition is in progress and construction is scheduled to begin in 2008.
- B-4232. Replace Bridge No. 9 over Swift Creek on NC 903. Right of way acquisition is in progress and construction is scheduled to begin in 2008.
- B-4786. Replace Bridge No. 38 over the Tar River on US 13. Right of way acquisition is scheduled to begin in 2009 and construction in 2012.

City of Greenville Projects
The following projects have been identified as priority projects by the Greenville Urban Area MPO. The schedule for completing these projects is dependent on available funding.

- W.H. Smith Road Extension. New two-lane roadway to provide alternate route to Arlington Boulevard from the regional medical center facilities.
- US 13/Dickinson Road Widening. This route connects Greenville with areas in Southwest Pitt County and Goldsboro. The recommended cross-section is a four-lane roadway.
- Evans Street/Old Tar Road, (same as U-2817). This route connects the fast-growing residential areas to Greenville and Winterville. The recommended cross-section is a four-lane roadway with a raised median.

- Thomas Langston Road Extension. To relieve traffic on Greenville Boulevard and Fire Tower Road, Thomas Langston Road would be extended from Memorial Drive (NC 11) to Evans Street.
- Forlines Road Widening. Forlines Road is becoming a suburban thoroughfare and will serve as the main interchange from the proposed Southwest Bypass to Winterville. The road will be widened to four lanes.
- NC 102/Third Street Widening. The project will widen the road from two lanes to four lanes through a developing commercial area.
- Juanita Avenue Extension. To create a bypass of Ayden, a new two lane roadway would be constructed, terminating at the Ayden Southern Loop.
- Southeast Bypass. This new freeway would provide easier through travel from the east to the south and across the southern portion of the urban area, and would relieve traffic on Greenville Boulevard, Fire Tower Road, and Worthington Road.

S.5 ALTERNATIVES CONSIDERED

A screening evaluation was conducted to identify the alternatives that could fulfill the purpose and need for the proposed project. Five broad-ranged alternatives were established for consideration on this project. These alternatives included:

- No-Build Alternative
- Transportation System Management Alternative
- Mass Transit Alternative
- Upgrade Existing Facilities Alternative
- Build Alternative involving the construction of a roadway on new location

The preliminary alternatives that could not fulfill the purpose of and need for the project, had excessive undesirable impacts, or were considered impractical were eliminated from further consideration. The potential for adverse environmental impacts on residential communities and businesses, historic resources, streams, wetlands, and natural areas was also considered. The evaluations of the preliminary alternatives are included in Section 2 of this FEIS.

Based on this first screening evaluation, only the Build Alternative was determined to meet the goals of the proposed project. The Build Alternative included several alternates for the proposed project, referred to as the Greenville Southwest Bypass.

Land suitability maps of the project study area were created highlighting man-made and natural features that make one particular area unsuitable or less desirable than another for roadway construction. Such features included churches, cemeteries, schools, residential communities, parks, known historic architectural sites, community facilities, streams, and wetlands.

Potential roadway study corridors then were overlain onto the land suitability maps, avoiding the sensitive features to the extent possible, and in accordance with the design criteria. The locations

of the preliminary corridor segments were closely coordinated with the local governments as well as state and federal environmental and regulatory resource agencies.

An impact matrix table was developed for the fifteen preliminary study corridors to estimate the potential impacts of each corridor. Based on the results of this second screening evaluation, and consideration of comments received through public involvement and agency coordination programs, twelve of the preliminary study corridors were eliminated from further consideration. The three Bypass Alternates remaining for detailed study were 1B-EXT, 4-EXT, and 5-EXT. These corridors were evaluated in detail in the Draft Environmental Impact Statement (DEIS) prepared for this study and are also summarized in Sections 3 and 4 of this FEIS.

S.6 PREFERRED ALTERNATIVE

Bypass Alternate 4-EXT was selected as the Least Environmentally Damaging Practicable Alternative (LEDPA) by the Section 404/NEPA Merger Team, which includes representatives of a variety of State and federal regulatory agencies, in November 2006. More information on the Section 404/NEPA Merger process is provided in Section 7.1.2 of this FEIS. Alternate 4-EXT, modified to incorporate minimization measures (see below), is the Preferred Alternative for the Greenville Southwest Bypass. Alternate 4-EXT was selected because it would have the fewest residential relocations and divide the fewest neighborhoods; it would have the least impacts to wetlands, streams, and floodplains; its cost would be comparatively low; and it is supported by the local governments in the project area.

The key drawback of the original preliminary design proposed for the Preferred Alternative was its adverse effect on the Renston Rural Historic District. To minimize impacts to contributing properties, five potential design modifications to the preliminary design were identified that would reduce direct impacts to contributing structures and reduce the total number of acres of contributing properties directly impacted. In June 2007 the Merger Team selected one of these design modifications (removal of the NC 903 interchange) to minimize impacts to the Renston Rural Historic District. This modification was subsequently incorporated into the Preferred Alternative.

S.7 SUMMARY OF ENVIRONMENTAL IMPACTS

The following is a narrative summary of the primary environmental consequences associated with the Preferred Alternative under consideration. Table S-1 found at the end of this section provides this information in table form.

Land Use and Transportation Planning

The proposed project would be consistent with the state and local transportation plans for the area.

Relocations

There are expected to be forty (40) relocations as a result of the alternative chosen. These include 1 business and 39 residential relocations. Of the 39 relocations twenty seven (27) are owners and the others renters; of the total residential relocations 8 are classified legally as minority families.

Minority & Low Income Populations

Though not a federally funded and thus guided project the analysis contained in this FEIS is consistent with the Title VI of the Civil Rights Act of 1964, Executive Order 12898 and the Department of Transportation Environmental Justice Order. Analysis and field observations do not indicate that the Greenville Southwest Bypass will adversely or disproportionately affect any minority or low-income populations.

Based on 2000 Census Data, the non-white population of the entire study area is comparable to that of Pitt County. The Preferred Alternative does cross the area of highest concentration of minorities and would not divide any cohesive neighborhoods. Though crossing the geography of highest concentration of minorities the southern terminus crosses farmland and avoids all almost all residential property.

Though high pockets of poverty exist within the study area, the county exhibits a 20 percent poverty rate and the study area 17 percent. Although the area surrounding the project's southern terminus has the highest minority population, highest percentage of population in poverty, and lowest median household income, the Preferred Alternative will not have disproportionate impacts on members of these populations.

Community Cohesion

The Preferred Alternative does not directly impact any major subdivisions in the project study area. While no major cross streets connecting to any of the residential areas near the Preferred Alternative would be closed as part of the proposed project, there may be individual and community property access impacts due to relocation of driveways and local roads. The NCDOT will provide new access wherever practicable to properties isolated by the project. All property access changes and proposed solutions developed for the Preferred Alternative will be presented to affected property owners.

Community Facilities and Services

Schools, libraries, and parks and recreation areas in the study area will not be impacted by the Preferred Alternative. One church is located just east of the Preferred Alternative but will not be directly impacted by the proposed project.

Utilities and Infrastructure

The proposed project will cross electrical transmission lines, municipal water and sewer lines, gas lines, and telecommunication lines owned by Greenville Utilities Commission (GUC) and others.

Through coordination with the utility providers, the Preferred Alternative is not expected to affect customers. The Preferred Alternative will cross a GUC easement two times.

The Preferred Alternative will not impact major water facilities, such as treatment plants or pump stations. Natural gas service lines are located within portions of the study area; however, the main lines that carry gas into the Greenville area are located north of the project area and would not be impacted.

The Preferred Alternative crosses the CSX Railroad tracks near the project's northern terminus and will include a bridge over the CSX tracks. Bridging should not impact railroad facilities or operations. The Preferred Alternative does not cross Norfolk-Southern Railroad facilities in the project area.

Historic Architectural Resources

There are six properties within the Area of Potential Effects (APE) which are either listed on the National Register of Historic Places or have been determined to be eligible for listing on the National Register. The Preferred Alternative will directly impact 39 acres within the National Register-listed Renston Rural Historic District, including 18 acres within contributing properties to the Historic District, but will not displace any contributing structures. Due to the Adverse Effect on the Renston Rural Historic District, NCDOT will pursue a Memorandum of Agreement for appropriate minimizations and mitigation with the US Army Corps of Engineers and the State Historic Preservation Office (HPO) per Section 106 guidelines. The Preferred Alternative will avoid the five other listed or eligible properties within the APE.

Archaeological Resources

Intensive archaeological surveys for the study corridor for the Preferred Alternative (Alternative 4-EXT) were conducted between March 12 and April 23, 2006. The survey identified forty-seven archaeological sites and one historic cemetery within the study corridor. Fourteen of the identified archaeological sites lie within or near the Renston Rural Historic District. None of the sites was determined to be eligible for the NRHP as none were determined to contain significant cultural deposits and none were found to be likely to provide significant historic or prehistoric information of local, regional, national or international importance.

Section 4(f)/6(f) Resources

As State funds have been identified for the Greenville Southwest Bypass and NCDOT will no longer seek federal funds for the project, Section 4(f) of the Department of Transportation (DOT) Act of 1966 and set forth in Title 49 United States Code (U.S.C.), Section 1653(f) is no longer applicable to any resources in the project area. Determination of Section 6f applicability must still be determined. The chosen alternative did not affect any parkland therefore Section 6f analysis was not needed

Visual Impacts

The overall visual character of the project area would be impacted by the introduction of a new controlled access facility. However, this portion of Pitt County is expected to continue to experience some of the highest growth rates in the area and will become more suburban in nature. Further, visual quality for travelers using the proposed bypass would be improved compared to the visual environment along existing Memorial Drive (NC 11) and Stantonsburg Road (US 264 Business). Travelers on the new roadway would have opportunities for view of agricultural, forested, and residential areas.

The rural historic district and private historic properties within the project area are considered visually sensitive resources. The Cox-Ange House, the A.W. Ange Company Store Building, the William Amos Shivers House, and the Alfred McLawhorn House are a sufficient distance from the Preferred Alternative that there will be no impact to these resources. The Preferred Alternative, because it crosses the Renston Rural Historic District and because it will be elevated over NC 903 and Abbott Farm Road in the vicinity of the historic district, will have a high visual impact on this resource. Because the Bypass may also be visible from the Charles McLawhorn Historic Property, located just east of the Preferred Alternative, it will have a moderate visual impact on this property.

Air Quality

In comparing the projected CO concentration levels with the National Ambient Air Quality Standards, no violations of the 1-hour standard (35 ppm) or 8-hour standard (9 ppm) are expected. The 1-hour and 8-hour CO concentrations are not expected to exceed 4.4 and 3.5 ppm (including background contributions), respectively, at any of the sites along the Preferred Alternative for any of the three years investigated.

Noise

The Preferred Alternative will result in a total of seventeen impacted receptors without mitigation. Eleven residential properties and one church along the Preferred Alternative will receive traffic noise levels which approach or exceed FHWA Noise Abatement Criteria (NAC). Five properties will experience design year build noise levels substantially higher than existing levels.

A preliminary review of potential noise wall locations was conducted for all receptors predicted to approach or exceed the noise abatement criteria or to experience a substantial noise increase. One barrier at one site along the Preferred Alternative was shown to be effective and reasonable based on its cost-effectiveness, for a total cost of $378,000.

Based on the studies thus far accomplished, NCDOT recommends installing noise abatement measures in the form of a barrier at the location indicated above. However, if these conditions substantially change during final design, the abatement measures would be reevaluated. A final

decision of the installation of the abatement measure will be made upon completion of the project design and the public involvement processes.

Hazardous Material and Waste Sites

Thirteen facilities with the possibility for underground storage tanks (USTs), one automotive salvage yard, and one above ground storage tank were identified in the project study area. In addition, an abandoned landfill is located near the northern terminus of the project. The Preferred Alternative will not directly impact the landfill site. Parcels containing twelve of the thirteen potential USTs and the above ground storage tank are located partially within the Preferred Alternative. Based on current knowledge, it is not expected that conditions at any of these sites would preclude construction of the Preferred Alternative.

Soils

Review of available information for the project area indicates that there are no soils or geological features that would preclude construction of or alter the Preferred Alternative. Detailed geotechnical investigations will be undertaken as part of the design phase for the Bypass.

Prime and Important Farmland

In accordance with the Farmland Protection Policy Act of 1981 (7 CFR Part 658) and State Executive Order Number 96, an assessment was undertaken of the potential impacts of land acquisition and construction activities in prime, unique, and local or statewide important farmland soils, as defined by the US Natural Resource Conservation Service (NRCS). Approximately 268 acres of prime farmland soils will be impacted by the Preferred Alternative.

As required by the FPPA, coordination with the NRCS for this project was initiated by submittal of Form AD-1006, Farmland Conversion Impact Rating. Sites receiving a total score of less than 160 should be given a minimal level of protection, and sites receiving a total score of 160 or more are given increasingly higher levels of consideration for protection (7 CFR Section 658.4). The description of soils as prime farmland soils (see above) is not the same as the designation of prime farmland soils requiring mitigation for loss per NRCS criteria. Bypass Alternate 4-EXT, which contains the Preferred Alternative, received a total site assessment less than 160 points. Therefore, in accordance with the Farmland Protection Policy Act, no mitigation for farmland loss is required for the project.

Surface Waters

As shown in Table S-1, the Preferred Alternative will require eight stream crossings; total stream impacts for the Preferred Alternative will be approximately 1,760 linear feet. At this phase in the planning process, the need for stream relocation is not anticipated. Total direct wetland impacts will be 0.5 acre.

Streams crossed by the Preferred Alternative may be temporarily and locally impacted by road construction. Potential short-term water quality impacts associated with construction activities include temporarily increased sedimentation and turbidity levels. An increase in impervious road surface area will result in increased runoff with the potential for carrying higher pollutant loads. Adherence to the NCDOT's *Best Management Practices for the Protection of Surface Waters* during design and construction of the proposed project are expected to minimize impacts.

Riparian Buffers

Impacts to Zone 1 riparian buffers are based on a buffer width of 30 feet measured landward from the top of bank or rooted vegetation. Impacts to Zone 2 are based on a buffer width of 20 feet measured from the outer edge of Zone 1. Zones 1 and 2 should consist of an undisturbed vegetated area. The Preferred Alternative would impact a total of 4.0 acres of riparian buffers: 2.4 acres within Zone 1 and 1.6 acres in Zone 2.

Flood Hazard Zones

The Preferred Alternative does not cross any FEMA flood hazard zones. All hydraulic structures will be designed such that the proposed structures would not significantly increase upstream flooding and would not increase the flood hazard potential of the existing floodplain.

Terrestrial Plant Communities

The maintained-disturbed community type accounts for the majority of the vegetative cover within the Preferred Alternative. The mixed pine-hardwood forest community is the next most abundant community type within the Preferred Alternative. Hardwood swamp and bottomland forest communities are represented least within the Preferred Alternative.

Terrestrial Wildlife

Most of the project area is rural in character with scattered residential and small commercial developments. Large forested areas are still present near the project study area, but are limited primarily to lands immediately adjacent to the larger streams. Clearing and conversion of land for highways, railroads, agricultural, timberland, commercial, and residential uses has eliminated cover and protection for many species of wildlife, but has increased habitat for others that are able to utilize these anthropogenic habitats. There is little habitat for interior species, but woodland strips bordering small tributaries often serve as travel corridors between habitat types. Agricultural fields and residential areas not only provide food for wildlife, but also create edge habitat favored by many species.

Improving existing roads will impact less wildlife habitat than construction that is on new location. Although some loss of maintained habitat and forested ecotonal areas adjacent to existing road shoulders would result, these areas are minimal and of limited value to habitat-sensitive wildlife due to preexisting disturbance. Since the proposed project deviates from existing roadways, impacts to a variety of habitats, including forested communities, will occur.

Fragmentation and loss of forested habitat resulting from a new location corridor will have a greater impact on wildlife and its habitat, including the loss of potential nesting and foraging areas, and displacement of animal populations.

Aquatic Communities

Aquatic habitats within the project study area range from ephemeral waters to intermittent streams, to permanent riverine habitat. The diversity of streams within the project study area provide habitat for a variety of aquatic species.

Resident aquatic species may be temporarily displaced during construction. Water resource impacts may also result from the physical disturbance of the forested stream buffers that adjoin most of the streams within the study area. Removing streamside vegetation can cause elevated water temperatures, cause an increase in sedimentation and turbidity, and ultimately lower the species diversity in the stream. Since the project is located in the Neuse and Tar-Pamlico River Basins, state regulations require that stormwater enter the 50-foot riparian buffer at non-erosive velocities. The buffers will assist in ameliorating nutrients, sediments, and other pollutants from impacting the water resources. Measures to maximize sediment and erosion control during construction would protect water quality for aquatic organisms.

Jurisdictional Issues

Section 404 of the Clean Water Act (CWA) requires regulation of discharges into "Waters of the United States." Although the principal administrative agency of the CWA is the US Environmental Protection Agency (EPA), the US Army Corps of Engineers (USACE) has major responsibility for implementation, permitting, and enforcement provisions of the Act.

Table S-1 provides information regarding the area wetlands, jurisdictional ponds, and streams impacted by the Preferred Alternative. Total direct wetland impacts will be 0.1 acre; there will be 8 stream crossings and approximately 1760 linear feet of streams impacted. These quantities are based on the construction limits in the preliminary roadway design plans.

Protected Species

There are three federally-protected species with habitat ranges that extend into the study area: the West Indian manatee (*Trichechus manatus*), Red-cockaded woodpecker (*Picoides borealis*), and Tar River spinymussel (*Elliptio steinstansana*). The habitat range of the bald eagle (*Haliaeetus leucocephalus*) also extends into the study area. While this species is no longer a federally listed species, it is still protected under the Bald and Golden Eagle Protection Act. Field investigations along the Detailed Study Corridors were conducted between Spring 2002 and Summer 2005.

The proposed project is expected to have No Effect on any of the three federally protected species or on the bald eagle.

Indirect and Cumulative Impacts

The construction of the Greenville Southwest Bypass has been anticipated since the early 1970s and has been programmed into land use plans and other local regulations, and local officials are targeting development for the major feeder roads in anticipation of the construction of the bypass. Given that water service already exists throughout the study area, and that new extensions are allowed outside of the city of Greenville and the towns of Ayden and Winterville, water is not considered the controlling factor when it comes to growth in the study area. Sewer service, however, is limited near the city of Greenville. Sewer is therefore considered a limiting growth factor for the portion of the study area in Greenville's planning area.

Given the already strong residential growth in the area, this project will not cause complete shifts in population to the project area, but will enhance a current trend. It is expected that due to increased, and in some areas new, accessibility that residential development will occur along the feeder roads to the interchange locations, as well as increased densities from the current planned rural residential designations. It is anticipated that low-density residential growth will continue to occur along the feeder roads that support the interchange locations. The density of the growth in the area will be tempered by the lack of water and sewer infrastructure in the southern and western portions of the study area.

The construction of the bypass and the presence of interchange locations at Forlines Road and NC 13 will increase access and mobility through this portion of the County, thus increasing the potential for highway-related development such as convenience stores, gas stations, restaurants, and hotels. Development is less likely to occur on NC 903 due to the removal of the proposed interchange.

The construction of the Greenville Southwest Bypass and any resultant induced development and complementary land development coupled with the construction of the other transportation projects listed in the North Carolina TIP and other private development projects could constitute a cumulative impact on the study area. However, it is anticipated that NPDES Phase I and II stormwater rules, enforcement of Pitt and Greenville Development Standards, zoning and subdivision regulations (including those in Ayden and Winterville), and adherence to the Pitt and Greenville Comprehensive Land Use Plans will support appropriate land development and in turn minimize any development-related impacts.

S.8 ISSUES RESOLVED SINCE THE DEIS

The following issues have been addressed since the publication of the DEIS:

- Federal and state regulatory and resource agencies have concurred with the selection of the Least Environmentally Damaging Practicable Alternative (LEDPA)/Preferred Alternative and with a modification of the preliminary design, the removal of the interchange at NC 903, to reduce impacts to contributing properties in the Renston Rural Historic District.

- An intensive archaeological survey was completed for the Preferred Alternative corridor.

S.9 OTHER FEDERAL OR STATE ACTIONS REQUIRED

The proposed Greenville Southwest Bypass (TIP Project R-2250) will require environmental regulatory permits and actions as discussed in the following sections. This list of permits and actions is based on the current design of the Preferred Alternative.

S.9.1 Permits

United States Army Corps of Engineers

Section 404 Permit. A permit from the US Army Corps of Engineers (USACE) is required for any activity in water or wetlands that would discharge dredged or fill materials into Waters of the United States and adjacent wetlands. To obtain permit approval, impacts to wetlands must be mitigated through avoidance, minimization, and compensation measures in accordance with the *Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines* (February 1991). Additional policy and guidance has been established through *An Interagency Agreement Integrating Section 404/NEPA* (May 1997) which is usually referred to as the NEPA/404 Merger Agreement.

Authority. Federal Pollution control Act Amendments of 1972 and Section 404 of the Clean Water Act of 1977. Regulations promulgated in 33 CFR Part 323.

United States Fish and Wildlife Service

Section 404 Permit Review. The US Fish and Wildlife Service's (USFWS) responsibilities include review of Section 404 permits. The USFWS provides recommendations to the USACE on how impacts to fish and wildlife resources and habitats can be minimized.

Authority. Endangered Species Act of 1973, Section 7.

North Carolina Department of Environment and Natural Resources – Division of Water Quality

Section 401 Water Quality Certification. Any activity which may result in discharge to Waters of the United States requires a certification that the discharge will be in compliance with applicable state water quality standards. An application for a US Army

Corps of Engineers Section 404 permit is considered an application for a water quality certification.

Authority. North Carolina General Statute 143, Article 21, Part 1. Regulations promulgated in 15A NCAC 2H and 2B.

Riparian Buffer Certification (Neuse Buffer Certification and Tar-Pamilco Buffer Certification). The Neuse Buffer Certification and Tar-Pamlico Buffer Certification will be obtained from NCDWQ in conjunction with a 401 Water Quality Permit.

Authority: North Carolina General Statute 143, Article 214, Part 20-23. Regulations promulgated in 15 NCAC 2B .0233 (6) for the Neuse River Basin and 15 NCAC 02B .0259 (6) for the Tar-Pamlico River Basin.

North Carolina Department of Environment and Natural Resources – Division of Land Quality

Soil and Erosion Control Plan. Persons conducting land-disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activities. Pursuant to GS 113A-57(4) and 113A-54(d)(4), an erosion and sedimentation control plan must be both filed and approved by the agency having jurisdiction.

Authority. North Carolina Administrative Code, Title 15A. Department of Environment and Natural Resources Chapter 4. 15A NCAC 04B.0101.

North Carolina Department of Environment and Natural Resources – Division of Air Quality

Burn Permit. Any burning done during the construction of the proposed project will be done in accordance with applicable local laws and ordinances and regulations of the North Carolina State Implementation Plan for air quality in accordance with 15 NCAC 2D.0520.

S.9.2 Subsequent Actions

After approval of the FEIS and Record of Decision (ROD), further coordination with the public will occur as the final design is completed. The final roadway design plans will be prepared, taking into consideration all public and agency comments received on the preliminary designs and FEIS.

Other actions that must be completed prior to the start of project construction include, but are not limited to, the following:

- Completion of a Memorandum of Agreement (MOA) regarding the Renston Rural Historic District, per Section 106 guidelines.
- Preparation of an erosion control plan incorporating the NCDOT *Best Management Practices for protection of Surface Waters.*
- Coordination with municipalities and utilities for relocation and reconfiguration of utility systems.
- Implementation of the Relocation Assistance Program.
- Approval of all required permits and certifications.

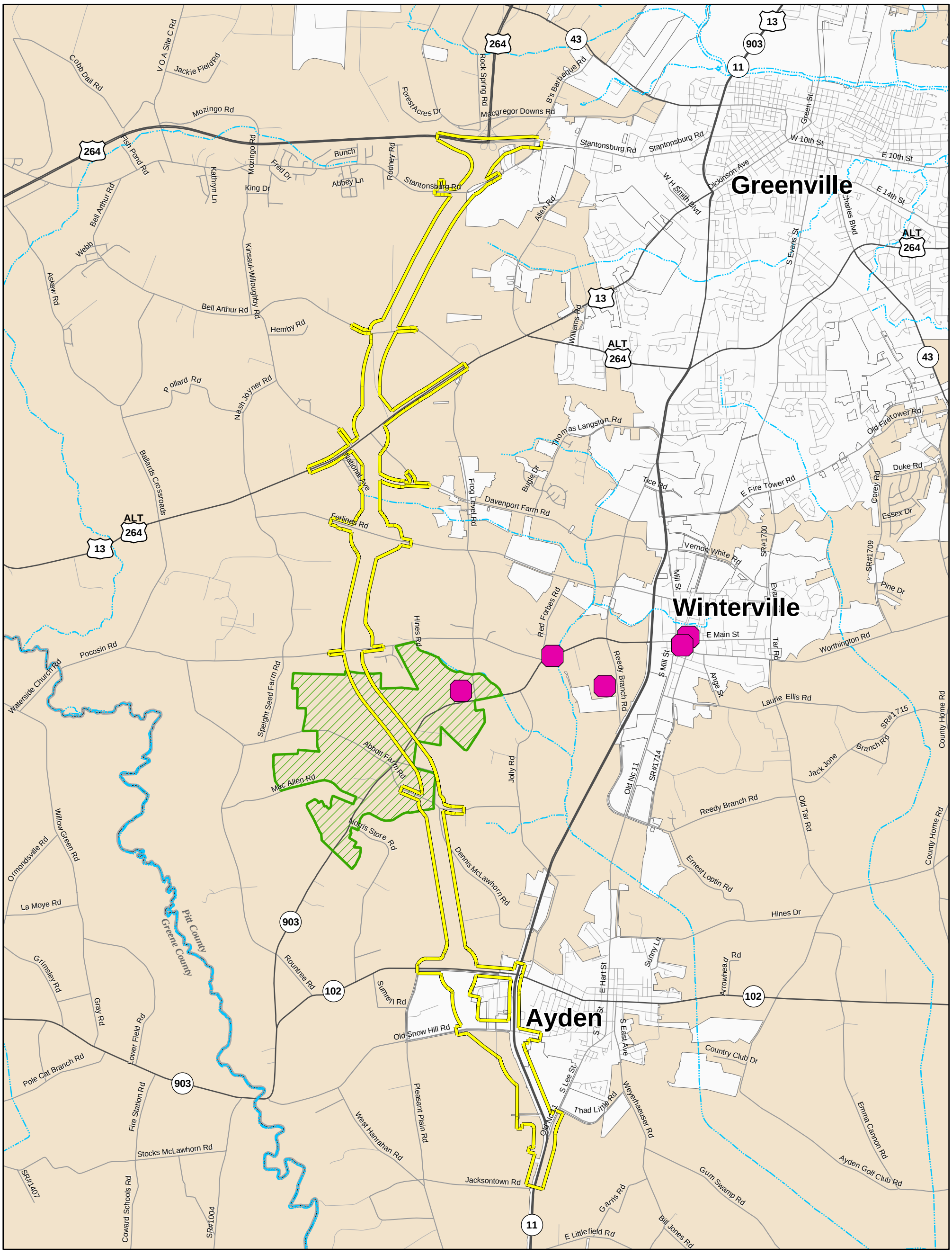
S.10 SUMMARY OF ENVIRONMENTAL IMPACTS

Table S-1 contains a summary of environmental impacts associated with the Preferred Alternative for the Greenville Southwest Bypass. The Preferred Alternative is shown in Figure S-1.

TABLE S-1: SUMMARY OF ENVIRONMENTAL IMPACTS FOR PREFERRED ALTERNATIVE

Length of Corridor	**Length on New Location**	11.0
	Length on Existing	2.2
	Total Length	13.2
Relocations	**Residential**	39
	Business	1
	Total Relocations	40
Minority Populations Impacted		None
Parks Impacted		0
Schools Impacted		0
Churches Impacted		0
Major Electric Power Lines Crossed		2
Railroad Crossings		1
Historic Sites with Adverse Effect		1
Archaeological Sites		0
Streams	**Stream Crossings**	8
	Stream Impacts* (linear feet)	1,756
Riparian Buffer	**Zone 1 (sq. feet)***	104,544
	Zone 2 (sq. feet)*	69,696
	Total Buffer Impacts (sq. feet)*	174,240
Wetlands (acres)^		0.1
Floodplains (acres)*		0
Federally Protected Species		None
Prime Farmland (acres)#		268.4
Hazardous Waste Sites		15
Noise Impacts	**No. of properties impacted without mitigation**	17
	No. of properties impacted with mitigation	7
Cost	**Construction Cost**	$149,700,000
	Right of Way Cost	$33,372,420
	Total Cost	$183,072,420

Relocations are calculated on existing occupied buildings
* Impacts calculated within conceptual slope stake limits
^ Impacts calculated within conceptual slope stake limits plus 10 feet for potential clearing impacts
# Total area with soils classified as prime farmland soils. This is distinct from the designation of prime farmland soils requiring mitigation for loss per NRCS criteria—no soils in the project area were classified with this designation.



Legend

- Preferred Alternative (Corridor Limits)
- Renston Rural Historic District
- Historic Property

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S

0 0.5 1 2 Miles

North Carolina
Department of Transportation

Greenville Southwest Bypass Study
(Improvements to NC 11 & US 264 Bus)

NCDOT Project Definition No.: 34411
T.I.P. No. R-2250

Figure S-1 **Preferred Alternative**