

US 301 BYPASS IMPROVEMENTS
ROCKY MOUNT, NORTH CAROLINA
NASH COUNTY

TIP PROJECT NO. U-3330
WBS NO. 36596.1.2
FEDERAL AID NO. STP-301 (28)

Administrative Action
Finding of No Significant Impact

Submitted Pursuant to the
National Environmental Policy Act
42 U.S.C. 4332 (2)(c)

United States Department of Transportation
Federal Highway Administration
and
North Carolina Department of Transportation
Division of Highways

11/8/13
Date

Clarence W. Cole Jr.
for John F. Sullivan, III, PE
Division Administrator
Federal Highway Administration

12/11/12
Date

Gregory J. Thorpe
Gregory J. Thorpe, PhD., Manager
Project Development and Environmental Analysis Unit
North Carolina Department of Transportation

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Documentation Prepared By:
STANTEC CONSULTING SERVICES INC.
RALEIGH, NORTH CAROLINA

For The:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

12/3/12
Date

Andrea Dvorak-Grantz
Andrea Dvorak-Grantz, AICP
Project Manager
Stantec Consulting Services Inc.



12/6/12
Date

Thomas E. Devens
Thomas E. Devens, PE
Project Development Engineer
NCDOT Project Development & Environmental Analysis Unit

12/10/12
Date

Brian F. Yamamoto
Brian F. Yamamoto, PE
Project Engineer
NCDOT Project Development & Environmental Analysis Unit

**US 301 BYPASS IMPROVEMENTS
ROCKY MOUNT, NORTH CAROLINA**

**TIP PROJECT NO. U-3330
WBS PROJECT NO. 36596.1.1.1**

PROJECT COMMITMENTS

Hydraulics Unit, Roadside Environmental Unit

To reduce the potential for stormwater pollution to Section 303(d) listed water bodies and the City of Rocky Mount's water supply watershed and intake critical area, the NCDOT will 1) include stormwater treatment devices in the proposed roadway's final design; and 2) utilize protective sediment and erosion control best management practices (BMPs) during construction as detailed in 15A NCAC 4B .0124 (*Design Standards in Sensitive Watersheds*).

Final design of the proposed project will maintain adherence to the Tar-Pamlico Riparian Buffer Rules.

The hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), the delegated state agency for administering FEMA's National Flood Insurance Program, to determine status of the project with regard to applicability of NCDOT's Memorandum of Agreement with FMP (dated 6/5/08), or approval of a Conditional Letter of Map revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

The southern portion of the project, which encompasses the UT to the Tar River, is within a water supply watershed (WS-IV) for the City of Rocky Mount and within the water supply "critical area" which is defined as the land within a 0.5-mile upstream radius of a water intake. Measures will be taken to restrict construction limits to the north of the drainage divide. However, if construction limits cannot be maintained north of the drainage divide, then NCDOT Hydraulics Unit will investigate the need for hazardous spill containment measures during the final design stage.

NCDOT Division 4

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

Project Development and Environmental Analysis Branch

Noise Walls:

A wall that is 10 feet in height and 1,070 feet long was found to be feasible based on a planning level noise analysis. Based on NCDOT Noise Abatement Policy, a design noise wall analysis will be conducted during final design to further investigate the feasibility of a wall at this location.

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- Exhibit 3.1a-3.1c – Build Alternative A
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- Exhibit 3.3a-3.3c – Preferred Alternative A1
- Exhibit 9.1 – Riparian Buffers and Water Supply Watersheds
- Exhibit 10.1 – Floodplains

I. Type of Action

This Finding of No Significant Impact (FONSI) describes alternatives considered, and the Preferred Alternative for the proposed US 301 Bypass Improvements (TIP Project No. U-3330). In accordance with the National Environmental Policy Act (NEPA), this FONSI describes why it is determined the proposed project will not have a significant effect on the environment and concludes that an environmental impact statement (EIS) will not be required (40 CFR 1508.13).

The information presented in this FONSI is a summary of the analyses contained in the Environmental Assessment (EA), dated April 30, 2009. The EA contains supporting project information, including background data on the purpose and need for the proposed project, a discussion of the affected environment, and a complete description of the anticipated impacts of each alternative considered at that time. To maintain brevity, the EA is incorporated by reference [40 CFR 1500.4(j)]. As a result of the public hearing process after EA distribution, a new “hybrid alternative”, A1, was developed. Therefore, this FONSI is based on public and agency responses to the EA, and necessarily includes a full analysis of Alternative A1.

II. Description of Proposed Action

The North Carolina Department of Transportation (NCDOT) 2012-2020 Transportation Improvement Program (TIP) includes the widening of a 2.5 mile section of US 301 Bypass in Rocky Mount, North Carolina from just south of SR 1836 (May Drive) to the interchange of NC 43/48 (Benvenue Road) and US 301 bypass. Exhibit 2.1 shows the project location. The proposed project is referred to as US 301 Bypass Improvements (TIP Project No. U-3330). Right-of-way acquisition is scheduled for 2017, with construction scheduled for 2019 (based on the 2012-2020 Statewide Transportation Improvement Program [STIP]).

A primary need for this project is to improve capacity along the facility. The project area serves as the main commercial and retail area in Rocky Mount, in an area expected to experience continued growth and increased traffic. This project is part of the North Carolina Strategic Highway Corridor System (SHC) and has been classified as an “expressway”, which envisions a high speed, median-divided, partially-controlled facility without traffic signals. Other purposes are to replace functionally-deficient structures and improve travel conditions for all modes of transportation along

the facility, in order to fulfill the SHC vision. In the project corridor, one bridge is listed as structurally deficient and three bridges are listed as functionally obsolete.

III. Alternatives Considered

This section identifies the various alternatives considered to address the transportation deficiencies in the study area. Alternatives that did not meet the needs of the project, or were considered impractical or noncompetitive, were eliminated from further consideration. All alternatives were presented in the Environmental Assessment (EA), with the exception of a newly developed “hybrid alternative”, A1 which is described later in this section.

A. *Alternatives Studied in the Environmental Assessment*

Travel Demand Management (TDM) – This alternative includes demand reduction options such as ride-sharing, park & ride, and vanpooling. This alternative has the potential to reduce traffic associated with commuting to employment centers outside the Rocky Mount area. However, the nature of local travel, particularly the diversity of trip origins and retail/restaurant destinations in the immediate area, make this alternative an ineffective solution for the congestion and safety issues associated with travel on US 301 Bypass.

Mass Transit – Although the project study area is served by mass transit, expansion of existing transit services will not, by itself, substantially alleviate increased traffic volumes within the project study area. The adjacent mall and retail/restaurant types of businesses within the project study area present countywide destinations that also draw patrons from rural areas not served by transit. For these reasons, expansion of mass transit was eliminated from detailed study in the Environmental Assessment.

Transportation Systems Management (TSM) – Transportation Systems Management (TSM) improvements increase the available capacity of the facility within the existing right-of-way with minimum capital expenditures and without reconstructing the existing facility. Strategies include the addition of turn lanes, striping, signing, signalization, and minor realignments. TSM operational improvement examples also consist of traffic law enforcement, speed restrictions, access control, and signal timing changes.

NCDOT considered the above improvements, and some elements such as turn lane additions, signal coordination, and access control are incorporated into the build alternatives. TSM improvements alone, however, do not provide adequate measures to prevent failing traffic conditions in the future years. The TSM Alternative alone fails to meet the purpose and need for this project; therefore selective measures were chosen to augment study alternatives.

Improve Existing Facility – The detailed study alternatives involve widening the existing facility; discussion of these alternatives can be found in subsequent paragraphs.

New Location Alternatives – Due to the highly-urban characteristics of the project study area and the surrounding region, new location alternatives were ruled out as detailed study options. This section of US 301 is already designated a bypass of US 301 Business to the east. As well, Interstate 95 parallels US 301 Bypass to the west. Although commercial development is prevalent throughout this section of US 301, the local and regional mix of traffic indicates that improving the existing route is still a viable option and a step toward achieving the local and state long-term vision for the road facility. The US 301 Bypass corridor is bound by commercial properties and is connected to the regional transportation network at interchanges with US 64 Bypass, US 64 Business, and NC 43/48. The SR 1836 (May Drive) termini is also a likely component of any new location alternatives.

No-Build Alternative – The No-Build Alternative foregoes any improvement to the US 301 Bypass within the project study area. No roadway or intersection improvements will occur. The No-Build Alternative is not compatible with the transportation goals of North Carolina, which are to provide and support a safe and integrated transportation system that enhances the state; nor is it consistent with the City of Rocky Mount’s goal to provide a safe, economical and environmentally sensitive means of moving people, services, and goods through an accessible transportation network that serves the City of Rocky Mount.

The No-Build Alternative avoids any adverse natural environmental impacts or residential relocations; however adverse social and economic impacts do occur. Future traffic volume increases without facility improvements will likely result in an increased number of collisions and longer delays that degrade the safety of the transportation system and create an even higher potential for collisions. An

inefficient transportation system also causes patrons of businesses within the project study area to consider shopping in other areas of reduced congestion, resulting in long-term economic impacts to local businesses.

The No-Build Alternative was eliminated because it does not meet the transportation goals of the State of North Carolina, or the transportation needs of the region. Also, by failing to provide solutions to high traffic volumes in the area, improved connectivity to other traffic corridors, and improved safety, this alternative does not satisfy the purpose for this project. The No-Build Alternative does, however, provide a basis for comparing the benefits and adverse impacts of the Build Alternatives.

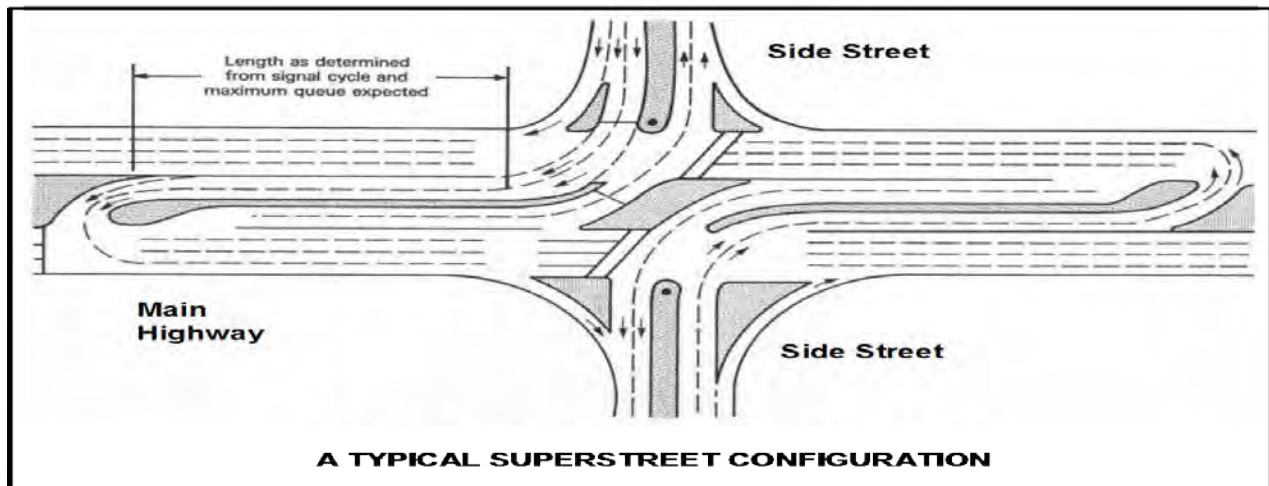
Alternative A (conventional) – Alternative A (Exhibit 3.1a – 3.1c) represents a “conventional” widening solution whereby additional travel lanes are added to the existing highway, and existing signalized intersections are modified by the addition of turning lanes, additional queuing capacity, and changes to the traffic signal phasing and timing plans. This conventional alternative proposes widening the existing 4-lane, median-divided highway to a 6-lane median-divided highway with three 12-foot travel lanes in each direction, separated by a 30-foot depressed grass median. Inside shoulders are 6-feet wide (including 4-foot paved shoulders), while outside shoulders are 10-feet wide (including 4-foot paved shoulders). Alternative A provides conventional improvements to existing intersections by modifying turn-lane configurations and signal phasing/timing. This alternative replaces the bridges at US 64 Bypass and the bridges over Stony Creek on US 301 Bypass, and extends an existing culvert at Goose Creek. The length of improvements is approximately 1.9 miles, from SR 1836 (May Drive) to just south of the NC 43/48 interchange. The Environmental assessment (EA) presents Alternative A in more detail.

Alternative B (superstreet) – Alternative B also widens the existing 4-lane, median-divided highway to a 6-lane median-divided highway with three 12-foot travel lanes in each direction, separated by a 30-foot depressed grass median (Exhibits 3.2a-3.2c). Inside shoulders are 6-feet wide (including 4-foot paved shoulders), while outside shoulders are 10-feet wide (including 4-foot paved shoulders). The primary distinction of Alternative B is that it incorporates median treatments and islands to restrict left turn movements from side-streets, for the entire length of the study corridor.

This design concept is known as a “superstreet” design, as indicated in Figure 1. The length of improvements for Alternative B is approximately 2.1 miles, from just south of SR 1836 (May Drive) to just south of the NC 43/48 interchange. Alternative B replaces the US 64 Business bridge and the dual bridges over Stony Creek, and extends an existing culvert at Goose Branch and at the unnamed tributary to the Tar River. US 301 Bypass is part of the NC Strategic Highway Corridors Program and designated as an expressway. The ultimate goal is to reduce the number of signalized intersections to the maximum extent possible by prioritizing through-movement over side-street left-turns and side-street through-movement. The superstreet configuration provides right-in/right-out movements and eliminates left turns from side streets. As shown in Exhibits 3.2a – 3.2c, Alternative B would eliminate left turns from side streets along the US 301 Bypass.

Because of the constrained intersection spacing resulting from retro-fitting this type of treatment along the heavily developed corridor, Alternative B is not a full super-street design. Rather, the design for Alternative B incorporates superstreet-type U-turns and controlled left-turn islands while still allowing several conventional-type intersections as well as multiple left-turn islands between two U-turn islands. To travel from one side street across the highway to the same side street, travelers must make a right turn and then a U-turn at a designated and protected (via the use of islands and signals) U-turn location, then turn right onto the desired street.

FIGURE 1
EXAMPLE SUPERSTREET CONFIGURATION



[To make a left turn from a side street, traffic is directed to a designated U-turn location, where travelers must make a U-turn then right-turn to access side streets.]

By removing left-turns and through movements from the side streets, Alternative B creates a corridor that can be controlled by two-phased traffic signals for the entire length of the study area. This provides a substantial reduction in the number of signal phases (versus the typical 8-phase signal where left turns are allowed) and greatly improves the traffic flow is due to the ability to coordinate the two-phase signals along the corridor. Traffic progression with minimal delays is provided to the mainline movement under the “superstreet” concept. In addition to traffic flow improvements, the elimination of left turns from the side streets increases safety by reducing the potential conflict points at each intersection. The EA presents Alternative B in more detail.

B. Development of a New Alternative after the Environmental Assessment and Public Hearing

Following the public hearing and comment period, a post-hearing meeting was held with the project team and Rocky Mount City officials to discuss the verbal and written comments received as a result of the public hearing. Based on input from the public and the City of Rocky Mount, the NCDOT project team developed a new hybrid alternative, Alternative A1, which modified Alternative A by adding a superstreet in front of the Golden East Crossing Mall. A capacity analysis, preliminary design, and impact analysis was then completed to compare Alternative A1 with Alternative A and Alternative B. This information was presented at the Preferred Alternatives Selection meeting held in December 2011. Attendees at this meeting included NCDOT staff and representatives from the City of Rocky Mount. A detailed description of Alternative A1 is provided below.

Alternative A1 – Alternative A1 also widens existing 301 Bypass from a 4-lane facility to a 6-lane facility, by adding an outside travel lane in both directions. Alternative A1 (Exhibit 3.3a – 3.3c) is an alternative that melds attributes of Alternatives A and B. Whereas Alternative A is a conventional widening for the project length, and Alternative B proposes three (3) distinct superstreet configurations, “hybrid” Alternative A1 adopts conventional widening for most of the project length, yet places a single superstreet in the vicinity of the Golden East Mall. The improvements to US 301 upon which the conventional intersection portion of this project will be constructed will begin at SR 1836 (May Drive) and continue northward through the US 64 Bypass Interchange. From the US 64 Bypass to the NC 43/48 interchange, a superstreet configuration is

proposed, with protected leftover lanes that are located between the U-turn ends at Sutter’s Creek Road and Independence Drive.

Improvements on the conventional portion of the project will consist of 12 foot lanes with 10 foot shoulders, 4 foot of which will be full depth pavement. The superstreet design follows *NCDOT Guide for Resurfacing, Restoration and Rehabilitation (R-R-R)* guidelines to minimize the design footprint. Impacts are minimized by using 8 foot shoulders (4 foot of which will be full depth pavement) and reducing ditch slopes to 4:1 and cut/fill slopes to 3:1. Auxiliary turning lane widths on US 301 may be reduced to 11 foot lanes. Hybrid Alternative A1 compromises between Alternative A and Alternative B in regards to fulfilling the Strategic Highway Corridor vision.

IV. Comparison of Alternatives

Alternative A1 was identified after completion of the Environmental Assessment (EA). Therefore, a new traffic analysis, impacts summary and cost comparison tables for all three build alternatives is provided for comparison. The following tables provide a comparison of traffic capacity, impacts, and costs between the three alternatives.

**TABLE 4.1
2030 AM AND PM INTERSECTION ANALYSIS FOR ALTERNATIVES A, B AND A1**

Alternative	Intersection	Signal/ Unsignalized	AM Peak Hour		PM Peak Hour	
			Delay (Sec/Veh)	LOS	Delay (Sec/Veh)	LOS
Alternative A	Independence	S	22.7	C	32	C
Alternative B			8.5	A	14.2	B
Alternative A1			11.7 – 14.1	B	14.3 – 19.6	B
Alternative A	Sutter’s Creek	S	31.5	C	48.6	D
Alternative B			10.3 – 12.8	B	7.5 – 21.7	A/C*
Alternative A1			9.8 – 12.9	A/B*	8.2 – 23.9	A/C*
Alternative A	Home Depot	S	10	B	8.1	A
Alternative B			10.6	B	19.5	B
Alternative A1			15.2	B	13.8	B

TABLE 4.1

2030 AM AND PM INTERSECTION ANALYSIS FOR ALTERNATIVES A, B AND A1 CON'T

Alternative	Intersection	Signal/ Unsignalized	AM Peak Hour		PM Peak Hour	
			Delay (Sec/Veh)	LOS	Delay (Sec/Veh)	LOS
Alternative A	Rowe Drive/US 64 Bypass	S	20.8	C	37	D
Alternative B			30.7	D	22.1	C
Alternative A1		S	28.6 – 32.9	B/C*	28 – 39	C/D*
Alternative A	US 64 Bypass Ramps	S	26.1	C	13.7	B
Alternative B			11.2 – 23.2	B/C*	10.3 – 21.2	C
Alternative A1	Not Applicable Due to Design					
Alternative A	Lowe's Driveway	S	11.7	B	12.4	B
Alternative B			10.7 – 16.8	B	11.7 – 15.0	B
Alternative A1		S	2.8 – 12.9	A/B*	3.6 – 11.9	A/B *
Alternative A	Stone Rose	S	27.7	C	24.3	C
Alternative B			15.0	B	20.7	C
Alternative A1		S	49.5	D	54.8	D
Alternative A1	US 64 Bus. Entrance Ramps	S/Free/Stop	8.5 – 16.7	B	13.9 – 14.7	B
Alternative A	Not Applicable Due to Design					
Alternative B	Not Applicable Due to Design					
Alternative A	May Drive	S	18.6	B	16.4	B
Alternative B			7.5	A	9.9	A
Alternative A1		S	40.9	D	32.2	C

Notes: Alternative B has seven (7) U-turn locations, the majority of which operate at an LOS of B. Alternative A1 has U-turn locations at Independence Drive and Sutter Creek, both of which operate at an LOS of B.

* LOS combinations (ex. A/C) represent a range in delay (seconds/per vehicle). The range in delay is due to the superstreet U-turns. The superstreet U-turns and the mainline intersections are grouped together for ease of comparison.

According to the FHWA and NCDOT, the results of the intersection analysis indicate that all the intersections for all of the evaluated alternatives function at an acceptable LOS as a result of the proposed improvements.

TABLE 4.2
SUMMARY OF IMPACTS

EVALUATION FACTOR	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE A1
<i>SOCIOECONOMIC FACTORS</i>			
Residential Relocations	0	0	0
Business Relocations	0	0	0
Schools/Parks Impacted	0	0	0
Churches Displaced/Cemeteries Affected	0	0	0
Homes Impacted by Noise ¹	17	22	17
Noise Wall Considerations ²	Yes	Yes	Yes
<i>INFRASTRUCTURE FACTORS</i>			
Transmission Lines	Yes	Yes	Yes
Natural Gas Lines	No	No	No
Water/Sewer Lines	Yes	Yes	Yes
<i>CULTURAL RESOURCE FACTORS</i>			
Potential/Recorded Archaeological Sites	0	0	0
Historic Properties Affected	0	0	0
<i>NATURAL RESOURCE FACTORS</i>			
Protected Species Impacted	0	0	0
Water Supply Watersheds ³	Yes (WS-IV, CA)	Yes (WS-IV, CA)	Yes (WS-IV, CA)
Upland Natural Systems – acres (sq. feet) ⁴	0	0.99 (42,983)	0
Wetland/Aquatic Systems – acres (sq. feet) ⁴	0.85 (36,940)	1.08 (46,906)	0.81 (35,402)
Stream Impacts – linear feet	173	251	151
Riparian Buffer Impacts – acres (sq. feet) ⁵	0.13 (5,734)	0.19 (8,426)	0.07 (2,875)
<i>PHYSICAL FACTORS</i>			
Floodplains ⁶	Yes	Yes	Yes
Farmland – acres	0	0	0
Hazardous Materials Sites	10	10	10
Exceedances of CO NAAQS (Carbon Monoxide National Ambient Air Quality Standards)	0	0	0

- Notes:
- The No-Build Alternative will have 16 noise receptors impacted by noise.
 - A noise wall may be considered for both build alternatives near the Rosedale Avenue subdivision.
 - The southern portion of the project study area is within the water supply watershed critical area for the City of Rocky Mount's drinking water intake location.
 - Impacts to Upland Natural Systems and Wetland/Aquatic Systems are based on the build alternatives construction limits plus an extended 25 feet.

- 5 Riparian buffer impacts are based on the construction limits of the proposed project. This quantity is based on a 50-foot offset of project study area streams and includes wetlands as well as upland maintained/disturbed areas.
- 6 As shown in Exhibit 5.5, a considerable portion of the project study area is within the 100-year and 500-year floodplains.

TABLE 4.3
SUMMARY OF COSTS

ALTERNATE	LENGTH (MILES)	CONSTRUCTION COST	RIGHT OF WAY	UTILITIES	TOTAL
Alternative A (conventional widening)	2.5	\$21,900,000	\$6,000,000	\$3,626,630	\$31,526,630
Alternative B (Superstreet)	2.5	\$26,300,000	\$9,000,000	\$3,626,630	\$39,026,630
Alternative A1 (Hybrid)	2.5	\$21,900,000	\$7,125,000	\$3,626,630	\$32,651,630

Notes:

- Alternative A1 design reconfigures the loop at 64 Business
- Alternative A1 incorporates elements of both Alternative A and Alternative B
- Alternative A1 is \$1,125,000 more than Alternative A.
- Alternative B is \$7,500,000 more than Alternative A and \$6,375,000 more than Alternative A1

V. Selection of the Preferred Alternative

Alternatives A, B, and A1 present comparable solutions. Of note, differences among natural resource impacts between alternatives were negligible and therefore not a primary factor in determining the Preferred Alternative. Key considerations included local concerns, comments received, cost, overall traffic performance, and safety issues in front of the Golden East Mall. Alternative A1 provides the solution that best attains a balance of meeting state transportation needs while addressing local concerns. Therefore, NCDOT recommends Alternative A1 as the project's Preferred (or Selected) Alternative (Exhibit 3.3a – 3.3c).

Alternative A1 provides the superior traffic efficiency of a superstreet design in the most congested location, melded with the business community's comfort and familiarity with access control measures associated with a conventional widening. Alternative A1 best suits the future land use planning goals and objectives of the City of Rocky Mount. The cost of Alternative A1 is also comparable with the lower cost of Alternative A, which is \$6 million less than Alt. B. Further, Alternative A1 provides an acceptable traffic LOS in the design year for all intersections, and is expected to cause less driver confusion than Alternative B in most locations. In most locations, Alternative A1 yields better traffic capacity than Alternative A and yields comparable traffic conditions to Alternative B.

VI. Summary of Project Impacts

Descriptions of the anticipated Alternative A1 impacts are provided in the following section. Tables 4.2 and 4.3, presented in the previous section, provide a quantified summary of the impacts and costs associated with the Preferred Alternative: A1.

Land Use and Transportation Plans - Alternative A1 is consistent with local land use and transportation plans, including the Rocky Mount Urban Area Metropolitan Planning Organization's (Rocky Mount MPO's) *Transportation Plan 2030* based on the Rocky Mount Thoroughfare Plan, which was adopted by the Rocky Mount MPO and NCDOT in 2003. These plans identify the US 301 Bypass as a major thoroughfare and include the widening of the US 301 Bypass. The proposed improvements are identified in the transportation section of the City of Rocky Mount's comprehensive plan, *Together Tomorrow* (City of Rocky Mount, 2003) with the goal of reducing traffic congestion along US 301 Bypass.

Relocations – No business or residential relocations are associated with the Preferred Alternative.

Land Use – The project study area is primarily urban in nature, with commercial development bordering a large portion of the roadway corridor. Construction of the project is not likely to alter the rate of development within the project study area.

Community Facilities – No community facility impacts are associated with the proposed project.

Environmental Justice – There are no low-income or minority populations within the project study area and further, no relocations associated with the project. In addition, adverse as well as beneficial impacts associated with project construction would be experienced by all travelers through the area. Based on these considerations, the project would not create any disproportionate effects to low-income or minority populations.

Archaeological and Historic Architectural Resources – No impacts to cultural resources are anticipated from the proposed project.

Section 4(f) and Section 6(f) Resources – No Section 4(f) or Section 6(f) properties are located in the project study area.

Mineral Resources – No mineral production operations or mineral resources are impacted by the project.

Terrestrial Communities – Mesic/Mixed Hardwood Forest and Bottomland Hardwood wetland communities will experience minor impacts associated with the Preferred Alternative. Approximately 0.0 acres of upland impacts and 0.81 acres of wetland impacts are associated with the construction of the Preferred Alternative.

Waters of the United States – The Preferred Alternative modifies three existing crossings under US 301 Bypass, with the addition of fill material for the widening of the roadway. Approximately 151 linear feet of stream impacts are associated with the construction of the Preferred Alternative.

Rare and Protected Species – The Preferred Alternative will not affect any federal or state protected species. Field surveys were conducted in June 2007 to assess the suitability of aquatic habitat in Stony Creek and Goose Branch for the Dwarf wedge mussel (*Alasmidonta heterodon*) and Tar spiny mussel (*Elliptio steinstansana*). An in-stream exploration of Stony Creek concluded that the stream was largely unsuitable for mussels and no live mussels were found. Goose Creek was found to offer inadequate habitat for mussel species. A subsequent assessment of the UT to the Tar River in November 2008 determined that the stream is too small and urbanized to provide suitable mussel habitat.

Water Quality – Construction of the project will slightly increase the amount of impervious surface within the project study area, which will subsequently increase stormwater runoff. To reduce the potential for stormwater, the NCDOT will 1) include stormwater treatment devices in the proposed roadway's final design; and 2) utilize protective sediment and erosion control best management practices (BMPs) during construction as detailed in 15A NCAC 4B .0124 (*Design Standards in Sensitive Watersheds*).

The hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), the delegated

state agency for administering FEMA's National Flood Insurance Program, to determine status of the project with regard to applicability of NCDOT's Memorandum of Agreement with FMP (dated 6/5/08), or approval of a Conditional Letter of Map revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

The southern portion of the project, which encompasses the UT to the Tar River, is within a water supply watershed (WS-IV) for the City of Rocky Mount and within the water supply "critical area" which is defined as the land within a 0.5-mile upstream radius of a water intake. Measures will be taken to restrict construction limits to the north of the drainage divide. However, if construction limits cannot be maintained north of the drainage divide, then NCDOT Hydraulics Unit will investigate the need for hazardous spill containment measures during the final design stage.

Riparian Buffers – Riparian buffers are limited due to the urban nature of the project study area. Final design of the proposed project will maintain adherence to the Tar-Pamlico Riparian Buffer Rules (15A NCAC 2B.0259) as required.

Farmlands – The project study area is classified as an urbanized area on US Census Bureau mapping for the Rocky Mount area and does not require the submittal of a Farmland Conversion Impact Rating Form. No impacts to prime, unique, or important farmlands are associated with the proposed project.

Air Quality – Nash County is currently a maintenance area based on 1997 Ozone Standards. The project would not have any adverse effects on air quality and conformity. The project is included in the current Long Range Transportation Plan (LRTP) and has been modeled and incorporated in the latest conformity analysis of the Rocky Mount MPO.

Noise – The Preferred Alternative will impact 17 noise receivers, however; the No-Build Alternative will impact 16 receivers, indicating that noise impacts would occur with or without the proposed project due to the increased numbers of vehicles using the roadway. A noise wall was evaluated for the west end of the project near the Rosedale subdivision. A wall that is 10 feet in height and 1,070 feet long was found to be feasible based on a planning level noise analysis. Based on NCDOT Noise Abatement Policy, a design noise wall analysis will be conducted during final design to further

investigate the feasibility of a wall at this location.

Indirect and Cumulative Effects (ICEs) – New ICEs generated by the Preferred Alternative are limited, as the amount of new impervious surface created by the roadway improvements is minimal. Potential effects include ecosystem-related ICEs such as water quality effects, habitat fragmentation, and noise; however, these are long-term effects associated with the US 301 Bypass that were created at the roadways' initial construction and are anticipated to continue through the project's 2030 design year. Improved mobility through the project study area has the potential to provide beneficial ICEs such as improved air quality and safety.

Hazardous Material Sites/Underground Storage Tanks – There are ten underground storage tanks (USTs) located in the project study area; however, no adverse environmental effects will be created by the alteration of these sites. No hazardous waste sites, landfills, or other geo-environmental concerns were identified within the study area.

Utilities – Water, stormwater, natural gas, and sanitary sewer, fiber optic, and electrical power are located throughout the project study area. The proposed project will require the relocation of numerous existing underground and overhead utilities, with the possibility of short-term interruptions to service during construction. The final locations of utility work will be determined during final design.

Direct Impact Avoidance & Minimization – Impacts to wetlands, streams and businesses were minimized by adjusting alignments, widths and slopes; and, reducing the design footprint in an effort to minimize impacts.

Permits

A list of permits that may be required for this project is provided below.

- **Section 401 General Water Quality Certification** – A NCDWQ Section 401 Water Quality Certification is required prior to the issuance of the Section 404 NWP. A Section 401 General Water Quality Certification will be required for any activity that may result in a discharge into “Waters of the United States” or for which an issuance of a federal

permit is required. Prior to issuance of the Water Quality Certification, NCDWQ must determine that the project will not result in cumulative impacts that cause or will cause a violation of downstream water quality standards. Based on the anticipated wetland (0.81 acres) impacts a 401 Water Quality Certification will be required.

- **Tar-Pamlico Riparian Buffer Rules** - The jurisdictional streams within the project study area fall within the Tar-Pamlico River Basin and are therefore subject to the rules for the “Protection and Maintenance of Existing Riparian Buffers” (15A NCAC 02B .0259). The Tar-Pamlico Riparian Buffer Rules were established to protect water quality of streams in the Tar-Pamlico River Basin through the protection of riparian buffers. A minimum 50-foot vegetative Riparian Protection Area (i.e., buffer) is required along all perennial and intermittent streams, lakes and ponds. All runoff from new ditches or man-made conveyances must be converted to diffuse (non-erosive) flow prior to entering the riparian buffer. Corrective action must be completed as necessary to ensure that diffuse flow is maintained in the riparian buffer.

The Tar-Pamlico Riparian Buffer Rules apply to surface waters that are shown on the most recent version of either soil survey mapping prepared by the USDA or the USGS 1:24,000 scale topographic quadrangle maps. Impacts to the riparian buffer zones for road crossings are allowed with the minimization of impacts and compensatory mitigation for impacts greater than one-third of an acre or 150 linear feet of buffer. The Tar-Pamlico Riparian Buffer Rules would apply to riparian buffer impacts along Stony Creek, Goose Branch and the UT to the Tar River. The Preferred Alternative (A1) impacts 151 linear feet of stream and 0.07 acres of riparian buffer, therefore a buffer mitigation plan (including use of the NC Ecosystem Enhancement Program) must be provided to NCDWQ prior to the approval of the General Water Quality Certification.

- **Section 404 (Impacts to “Waters of the United States”)** – Impacts to “Waters of the United States” fall under the jurisdiction of the USACE. Discharges of dredge or fill material into jurisdictional wetlands, streams, or open waters associated with the construction of the bridge or other roadway improvements will require a Section 404 permit from the USACE. The proposed project impacts 0.81 acres of wetlands, which

exceeds the NWP permit thresholds for wetland/stream impacts (0.5-acre cumulative wetland impact). Therefore, an Individual Section 404 permit will likely be required.

- State Stormwater Permit - Final determination of permit applicability lies with the USACE and North Carolina Division of Water Quality (NCDWQ). After final designs are completed, NCDOT will coordinate with regulatory agencies to obtain the necessary permits. Since the project lies within the Tar-Pamlico basin, the Tar-Pamlico Rivers Nutrient Management Strategy: Basinwide Stormwater Requirements apply. NCDOT is subject to these rules for specific construction activities. The affected local government will notify the NCDOT of the required nutrient removal prior to construction.

VII. Comments and Coordination

The following sections describe public involvement and agency coordination efforts conducted after publishing the Environmental Assessment (EA).

Circulation of the Environmental Assessment – The EA was circulated to federal, state, and local agencies for review and comments on March 10, 2010. The EA and project mapping were also made available for public review. The review period for the EA closed in June 2010.

Agency Comments Received on the Environmental Assessment – Comments on the EA were received from the federal and state agencies. These letters are contained in Appendix A. Project-specific comments requiring a detailed response are included in the following bullets.

- **US Environmental Protection Agency (March 17, 2010)**
 - “...EPA has not identified any substantial environmental concerns for the proposed project. EPA notes that the EA is very comprehensive and includes a very detailed impact summary table at Table S.1. EPA notes the following potential impacts to human and natural resources based upon either Alternatives A or B: noise receptor impacts of 17 or 22; terrestrial forest impacts of 0.1 or 0.7 acres; wetland impacts of 0.6 acres for each; stream impacts of 250 or 370 linear feet; riparian buffer impacts of 0.1 or 0.2 acres; and 10 hazardous material sites each. EPA notes that the stream systems that are potentially impacted include the Tar River and an unnamed tributary (UT) to the Tar River and that

they are included on the 303(d) listed of impaired waters. EPA requests that NCDOT consider during planning and final design the most stringent of soil erosion and sediment control measures and stormwater management practices to minimize potential water quality impacts. EPA plans to attend future hydraulic and permit review meetings that may be conducted by the NCDOT for the proposed project.”

Response: The commitment to include stormwater treatment devices in the proposed roadway’s final design and utilize the most protective sediment and erosion control best management practices (BMPs) during construction as detailed in 15A NCAC 4B .0124 (Design Standards in Sensitive Watersheds) is being carried forward in this FONSI and will be resolved during the final design.

- “...EPA notes that the EA indicates that a noise wall is being considered near the Rosedale Avenue subdivision. . “

Response: For purposes of the noise analysis, noise walls were evaluated for feasibility and reasonableness. A noise wall was evaluated for the west end of the project near the Rosedale subdivision. Based on NCDOT Noise Abatement Policy, NCDOT will further analyze the justification and viability of a noise wall at this location during final design.

- **North Carolina Division of Water Quality (April 6, 2010)**

Project Specific Comments provided below:

- “...Goose Branch and Hornbeam Branch are class C:NSW waters of the State. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDWQ recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to these waters. NCDWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQs *Stormwater Best Management Practices*.”

Response: Comment noted.

- "...Stony Creek is class C;NSW, 303(d) waters of the state. The Tar river is class WS-IV, NSW, CA, 303(d) waters of the state. NCDWQ is very concerned with sediment and erosion control BMPs be implemented in accordance with *Design Standards in Sensitive Watersheds* to reduce the risk of nutrient runoff to these waters. NCDWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQs *Stormwater Best Management Practices*."

Response: Comment noted.

- "...Review of the project reveals the presence of surface waters classified as Water Supply Critical Area (CA) in the project study area. Given the potential for impacts to these resources during the project implementation, NCDWQ requests that NCDOT strictly adhere to North Carolina regulations entitled "Design Standards in Sensitive Watersheds" (15A NCAC 04B.0124) throughout design and construction of the project. This would apply for any area that drains to streams having WS CA (Water Supply Critical Area) classifications.

Response: To reduce the potential for stormwater pollution to Section 303(d) listed water bodies and the City of Rocky Mount's water supply watershed and intake critical area, the NCDOT will 1) include stormwater treatment devices in the proposed roadway's final design; and 2) utilize the most protective sediment and erosion control best management practices (BMPs) during construction as detailed in 15A NCAC 4B .0124 (Design Standards in Sensitive Watersheds).

- "...This project is within the Tar-Pamlico River Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0259. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in Accordance with 15A NCAC 2B.0259. Buffer mitigation may be required for buffer

impacts resulting from activities classified as “allowable with mitigation” within the “Table of Uses” section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, including use of the NC Ecosystem Enhancement Program, must be provided to NCDWQ prior to approval of the Water Quality Certification.

Response: Comment noted.

- **NC Wildlife Resources Commission (March 2, 2007)**

- “...NCDOT proposes to widen an approximate 2.1 mile urban section of the US 301 bypass from a 4 lane to a 6 lane facility. Environmental impacts associated with the construction of this facility include 0.6 acres of jurisdictional wetlands and up to 370 linear feet of perennial stream. The document reflects prior coordination, comments, and recommendations to avoid and minimize impacts to natural resources in the project study area. At this time NCDOT has not selected a preferred alternative, however we will continue to assess the impacts associated with the design and construction of this project. We concur with the EA, and appreciate the opportunity to comment.”

Response: Comment noted.

Pre-Hearing Open House and Combined Public Hearing - In accordance with 23 USC 128, the North Carolina Department of Transportation certifies that a public hearing for the subject project has been held, and the social, economic and environmental impacts, consistency with local community planning goals and objectives, and comments from individuals have been considered in the selection of the Preferred Alternative.

A Public Hearing was held on June 17, 2010 at the Rocky Mount Shrine Club in Rocky Mount. The meeting was advertised via a newsletter that announced the meeting, on the NCDOT website, and via a press release to local media. The Informal Public Hearing was held from 2:00 PM to 6:30 PM with a drop-in format and no formal presentation. Displays available for review included hearing maps of Alternatives A and B and travel time comparisons of the alternatives, an animated VISSIM

simulation of the access modification alternative (Alternative B), and a PowerPoint slideshow which provided detailed project background information. Based on the sign in sheets 39 people attended the Public Hearing.

Summary of Public Hearing Comments – A total of six written comments were received at the hearing or during the 30-day comment period following the hearing. A complete record of these comments is available in the project files. Steven Spiegel (Golden East Mall), Gabe Rowe (Gabe Rowe Nissan), and Fred Turnage (Chairman, Rocky Mount Chamber of Commerce) provided their written support for Alternative A, the conventional widening alternative. In his comments, Mr. Turnage noted that Chamber members along the US 301 Bypass corridor were surveyed as to which alternative they preferred. Alternative A was unanimously selected as the preferred alternative [*Note: Four citizens responded to the survey, two were outside the project study area and the other two, who were business owners inside the project study area, were in support of Alternative A*].

Bradley Walters (Gas System Engineer, City of Rocky Mount) and Bob League, AICP, (Principal Transportation Planner, City of Rocky Mount) supported Alternative B, the superstreet alternative. Mr. League noted that City, along with the staff members of the MPO Technical Coordinating Committee (Peter Varney, Brad Kerr, and Steve Yetman), supported Alternative B (super street design) for its long term value of better traffic efficiency and safety.

VIII. Revisions to the Environmental Assessment

Based on agency responses and review of the Environmental Assessment (EA), there were no additions or revisions to the EA. However, updates since the EA include development and evaluation of an additional alternative, Alternative A1, as previously discussed in Section III.B.

IX. Wetland Impacts

Surface waters and wetlands fall under the broad category of “Waters of the United States” as defined in Title 33 of the Code of Federal Regulations (CFR) Part 328.3, 1987 Guidelines. Wetlands are found in the transitional zone between terrestrial and aquatic habitats and are influenced to varying degrees by both. Wetlands are areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in

saturated conditions. Any action that proposes to fill into these areas falls under the jurisdiction of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA).

Wetland W (see Exhibit 9.1, Inset C) is a small riverine wetland located adjacent to the unnamed tributary (UT) to the Tar River located in the southernmost portion of the study area. This wetland was delineated when the design of Alternative B necessitated the extension of the project study area southward to include the crossing of a UT to the Tar River. However, the USACE Jurisdictional Determination for this wetland was not pursued since ultimately A1 was selected as the Preferred Alternative and does not impact Wetland W.

Wetland impacts for the Preferred Alternative total 0.81 acres, which is slightly less than the other alternatives. These impacts occur to the wetland that lies between the east side of US 301 Bypass and Stony Creek (near the Lowes Hardware and the US 64 Bypass Interchange).

Stream impacts for the Preferred Alternative total 151 linear feet, which is the lowest impact of the three alternatives. Impacts to Waters of the United States are regulated by the USACE, in cooperation with the USFWS and the USEPA, through the CWA Section 404 permitting process. Issuance of a federal Section 404 permit requires a state Section 401 Water Quality Certification, which is administered by the NC Division of Water Quality.

Compensatory mitigation for the proposed project will likely be provided through the Ecosystem Enhancement Program (EEP). The EEP was established on July 22, 2003 through a Memorandum of Agreement (MOA) between the NCDOT, NCDENR, and USACE. Compensatory mitigation will be provided in sufficient quantity and quality to offset project impacts in accordance with the requirements of the CWA of 1970, as amended.

X. Floodplain Impacts

The Federal Emergency Management Agency (FEMA), in cooperation with federal, state, and local governments, has developed floodway boundaries and Flood Insurance Rate Maps (FIRMs) for Nash County. A considerable portion of the project study area is within the floodplains of the Tar River and Stony Creek. Most of the land between the Tar River and Stony Creek is within the floodplain; this includes the US 301 Bypass from the southern limits of the project study area to the

US 64 Bypass interchange. Exhibit 10.1 details the flood hazard areas associated with waterbodies of the project study area. These areas are primarily designated as Zone AE floodways and floodplains, which correspond to a statistical 1% annual chance of flooding (i.e., 100-year flood) (NFIP, 1980). The Zone AE floodplains are flanked by “Zone X” flood areas, which are those areas having a 0.2 percent annual chance flood (i.e., 500 year flood).

The NCDOT Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), the delegated state agency for administering FEMA’s National Flood Insurance Program, to determine status of project with regard to applicability of NCDOT’s Memorandum of Agreement with FMP (dated 6/5/08), or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). This project involves construction activities on or adjacent to FEMA-regulated stream(s).

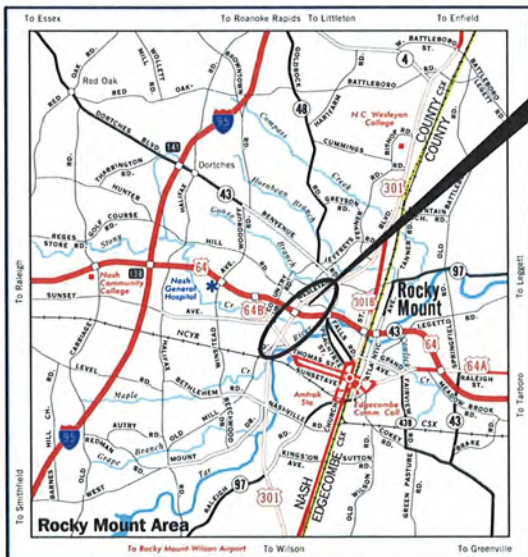
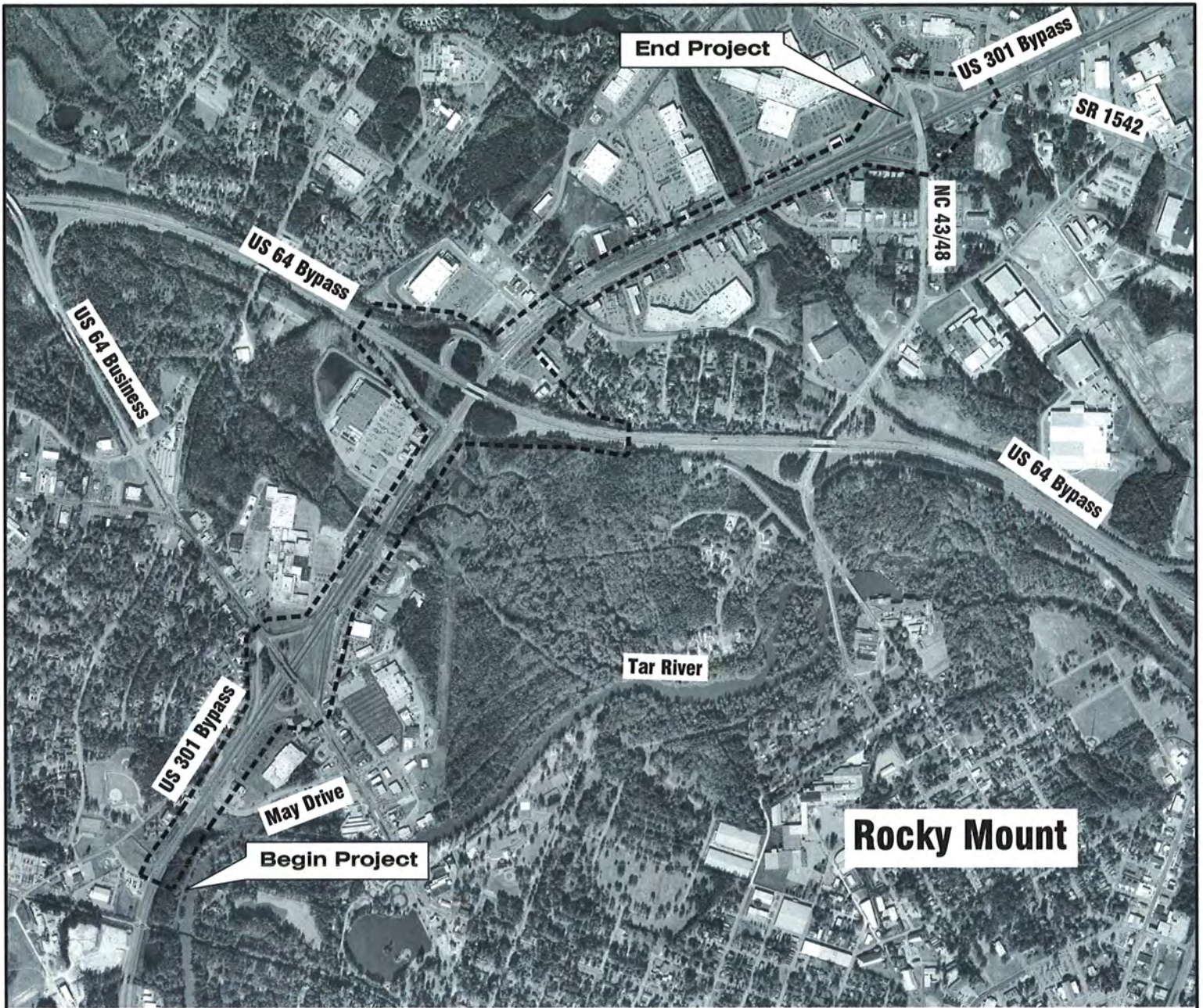
XI. Basis for Finding of No Significant Impact (FONSI)

This FONSI, in conjunction with the EA (incorporated by reference), have been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. No significant impacts to natural, social, ecological, cultural, economic, or scenic resources are expected. The proposed project is consistent with local plans, and the project has been coordinated with federal, state, and local agencies. In view of this evaluation and based on responses to the EA and subsequent public involvement, it has been determined that a Finding of No Significant Impact (FONSI) is applicable for this project. Therefore, neither an Environmental Impact Statement nor further environmental analysis is required. Table 11.1 summarizes the anticipated impacts associated with the proposed projects and assesses their significance based on each impact’s context and intensity (40 CFR 1508.27).

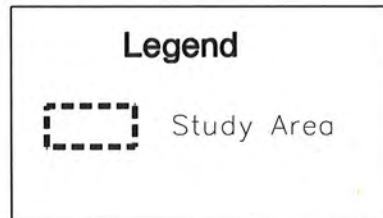
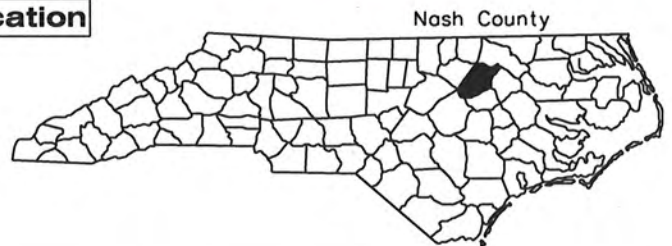
The following individuals can be contacted for additional information on the proposed project:

John F. Sullivan III, P.E.
 Division Administrator
 Federal Highway Administration
 310 New Bern Avenue, Suite 410
 Raleigh, North Carolina 27601
 Telephone: (919) 856-4346

Gregory J. Thorpe, Ph.D., Manager
 Project Development and Environmental Analysis Unit
 North Carolina Department of Transportation
 1548 Mail Service Center
 Raleigh, North Carolina 27699-1548
 Telephone: (919) 707-6000

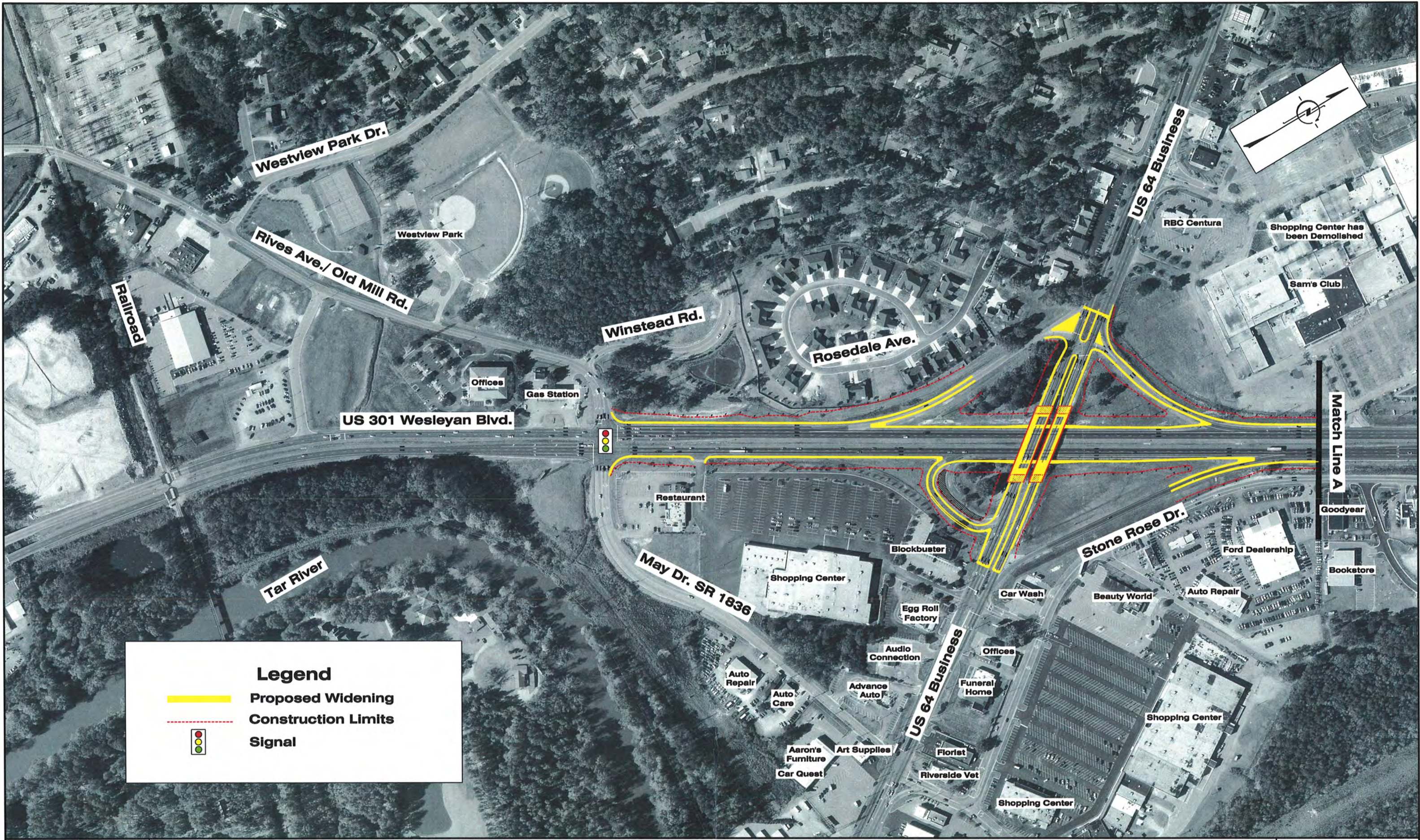


Project Location



US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

**Project Location
 and Study Area Map
 Not To Scale
 Exhibit 2.1**



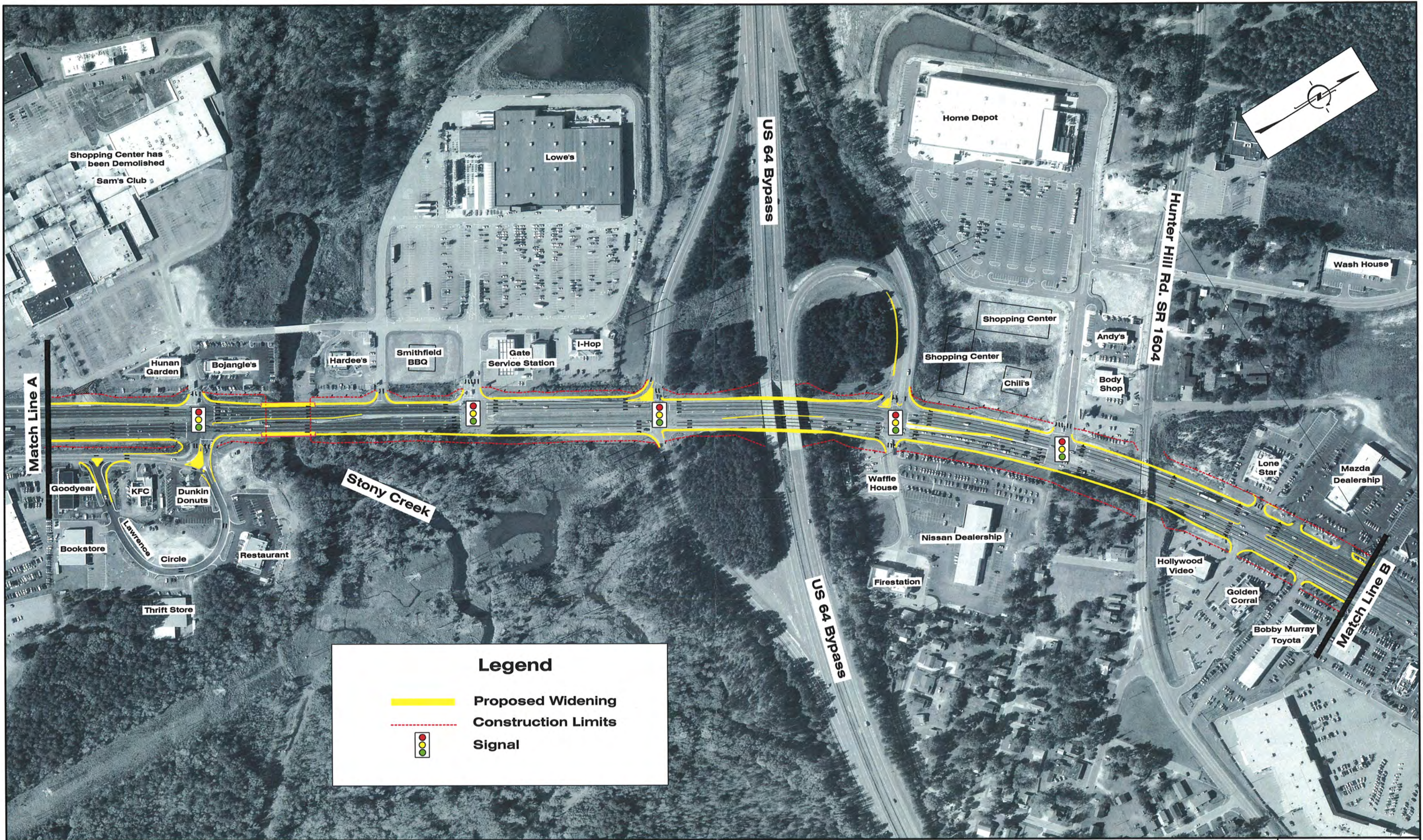
Legend

- Proposed Widening
- Construction Limits
- Signal



US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

**Build Alternative
 Alternative A**
 Scale: 1" = 300'
 Exhibit 3.1a



Legend

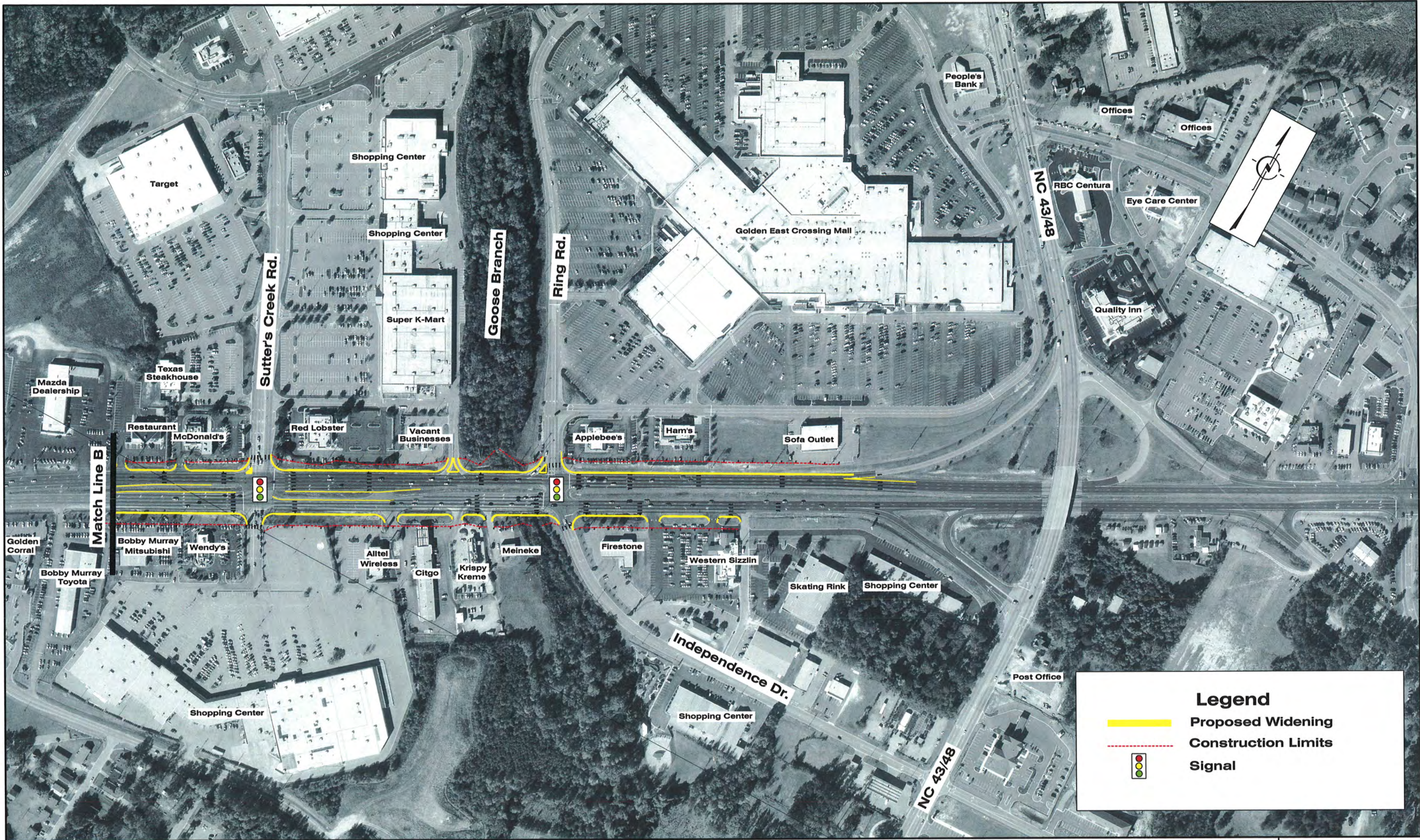
- Proposed Widening
- Construction Limits
- Signal

US 301 Bypass

TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

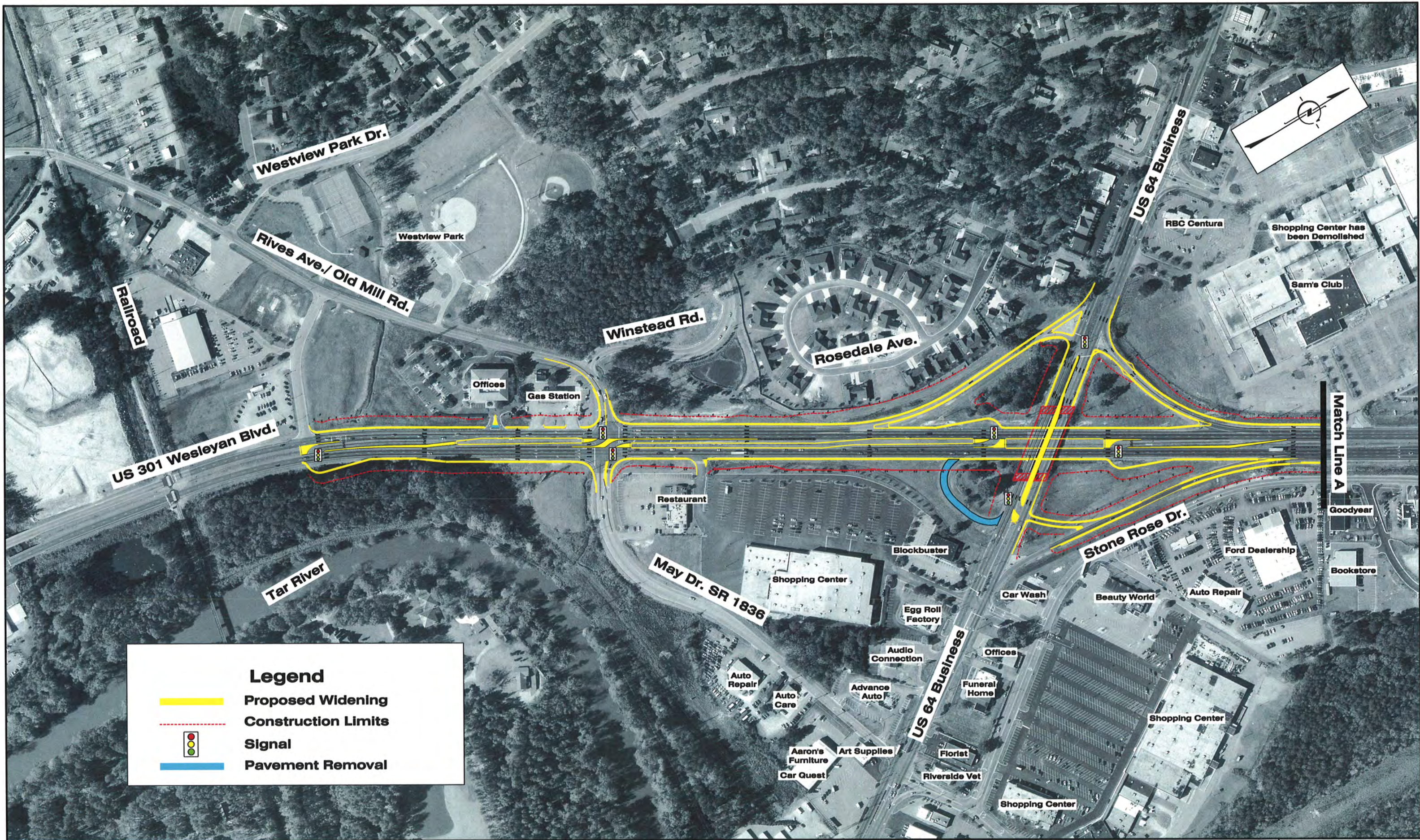
**Build Alternative
 Alternative A**
 Scale: 1" = 300'
 Exhibit 3.1b





US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

Build Alternative
 Alternative A
 Scale: 1" = 300'
 Exhibit 3.1c



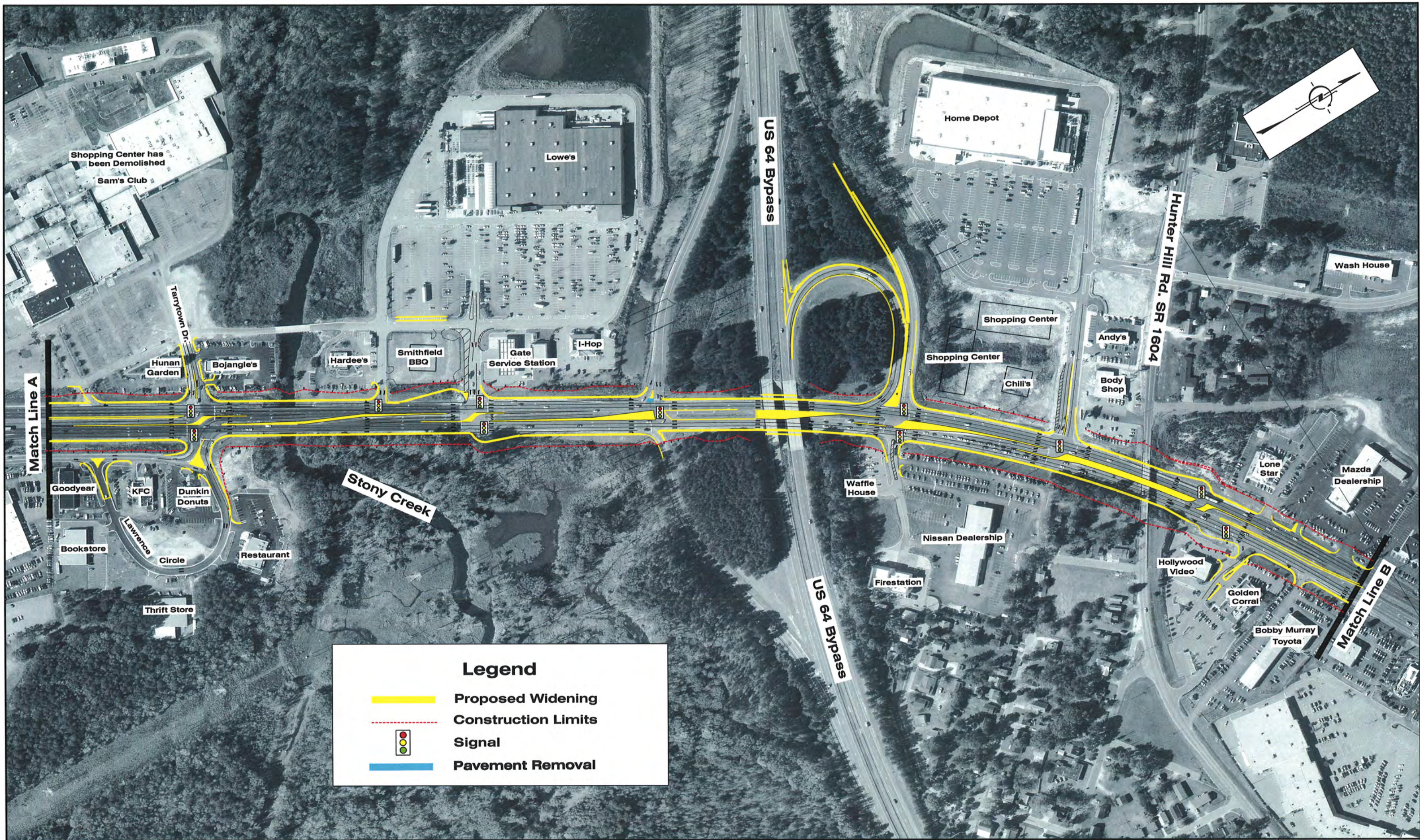
Legend

-  Proposed Widening
-  Construction Limits
-  Signal
-  Pavement Removal



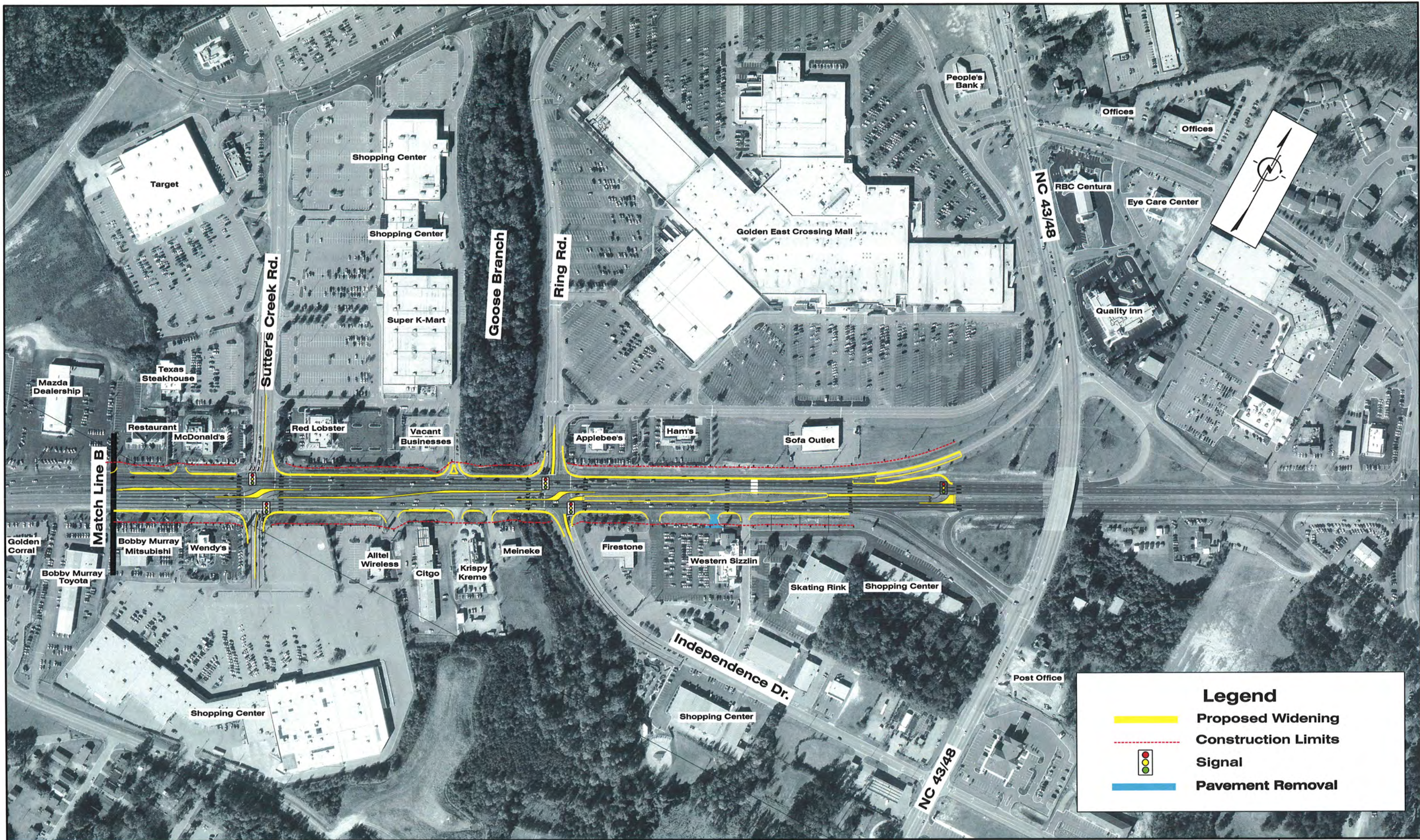
US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

**Build Alternative
 Alternative B**
 Scale: 1" = 300'
 Exhibit 3.2a



US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

Build Alternative B
 Scale: 1" = 300'
 Exhibit 3.2b



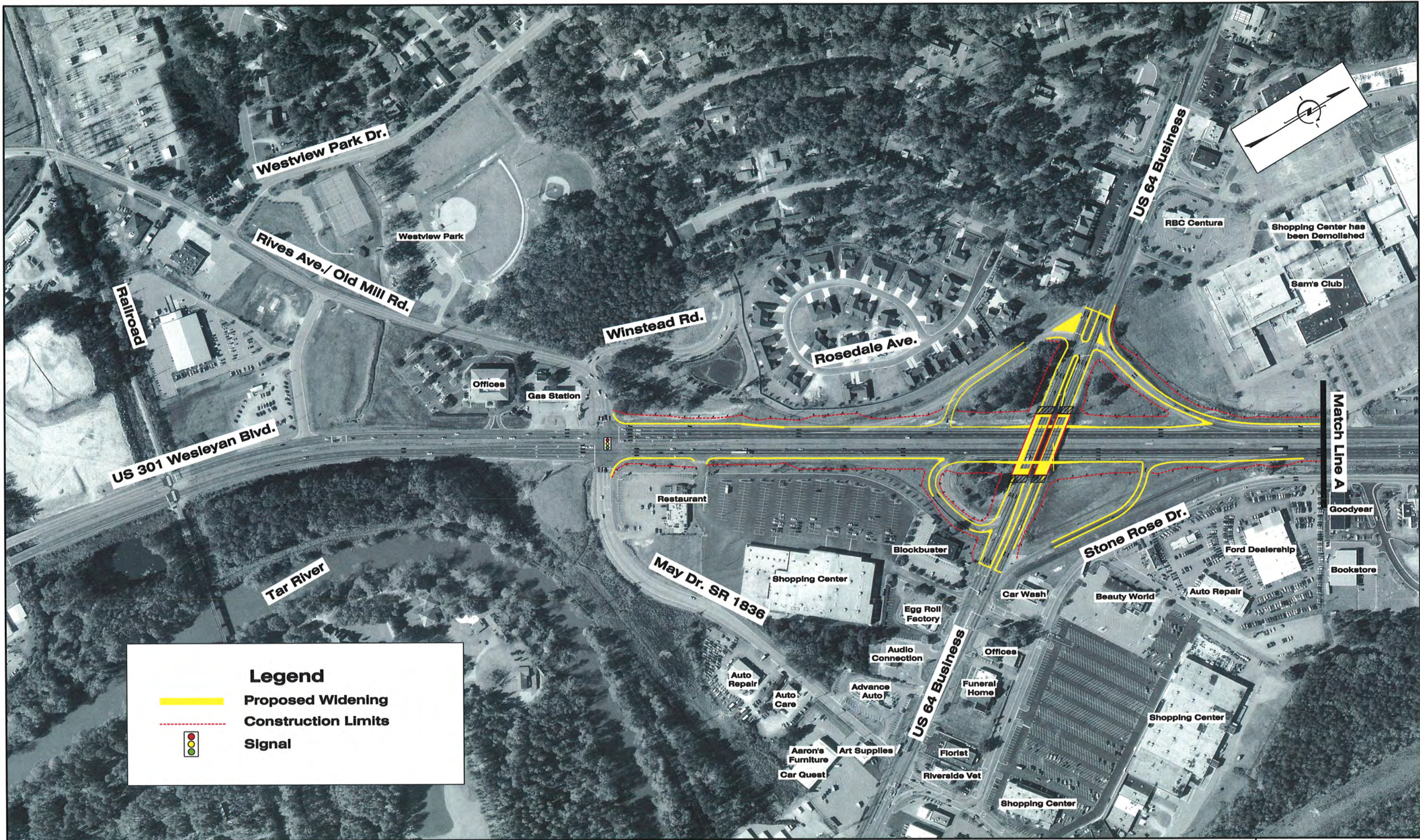
Legend

-  Proposed Widening
-  Construction Limits
-  Signal
-  Pavement Removal



US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

Build Alternative
 Alternative B
 Scale: 1" = 300'
 Exhibit 3.2c



Legend

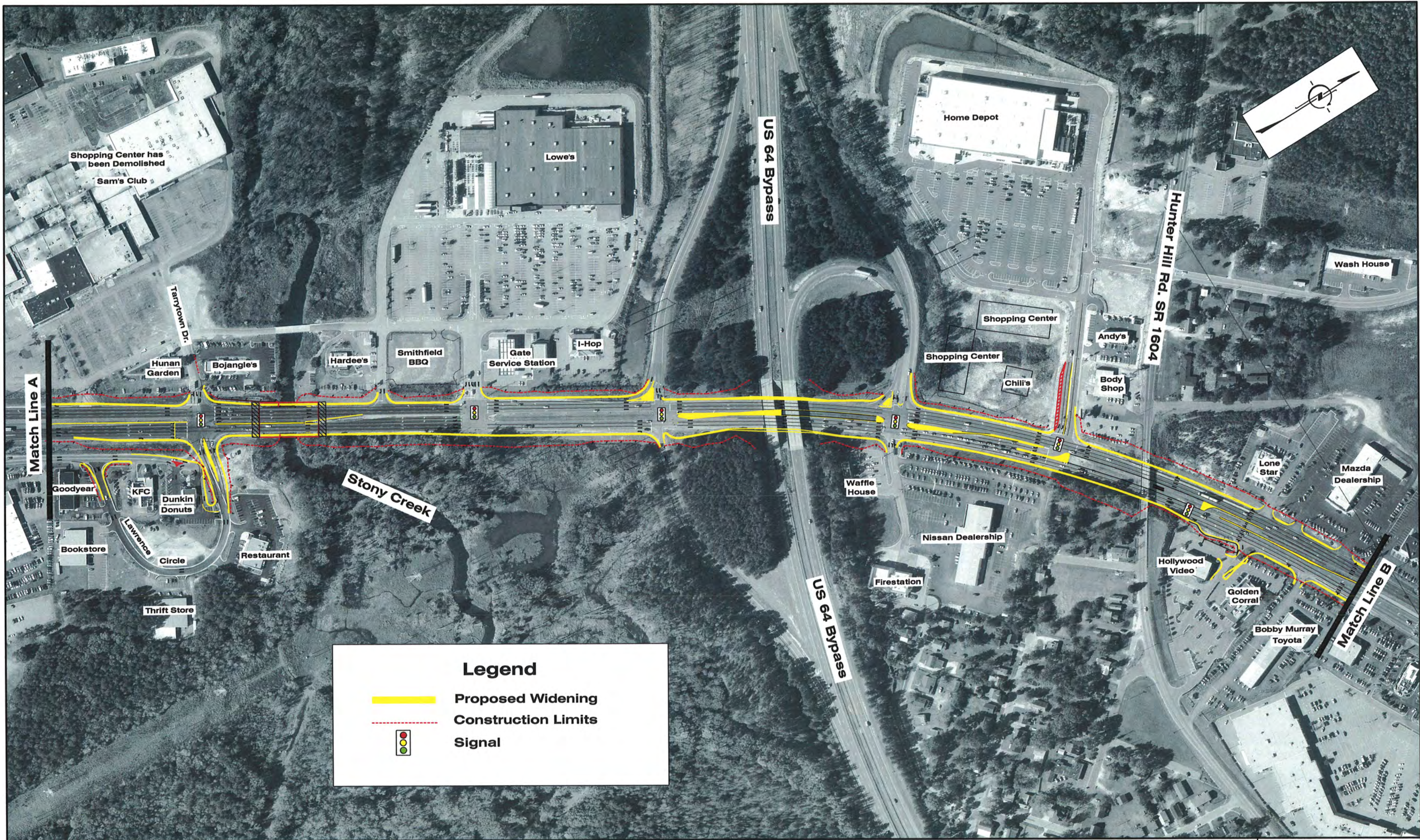
- Proposed Widening
- Construction Limits
- Signal

US 301 Bypass

TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

Preferred Alternative
Alternative A1
 Scale: 1" = 300'
 Exhibit 3.3a



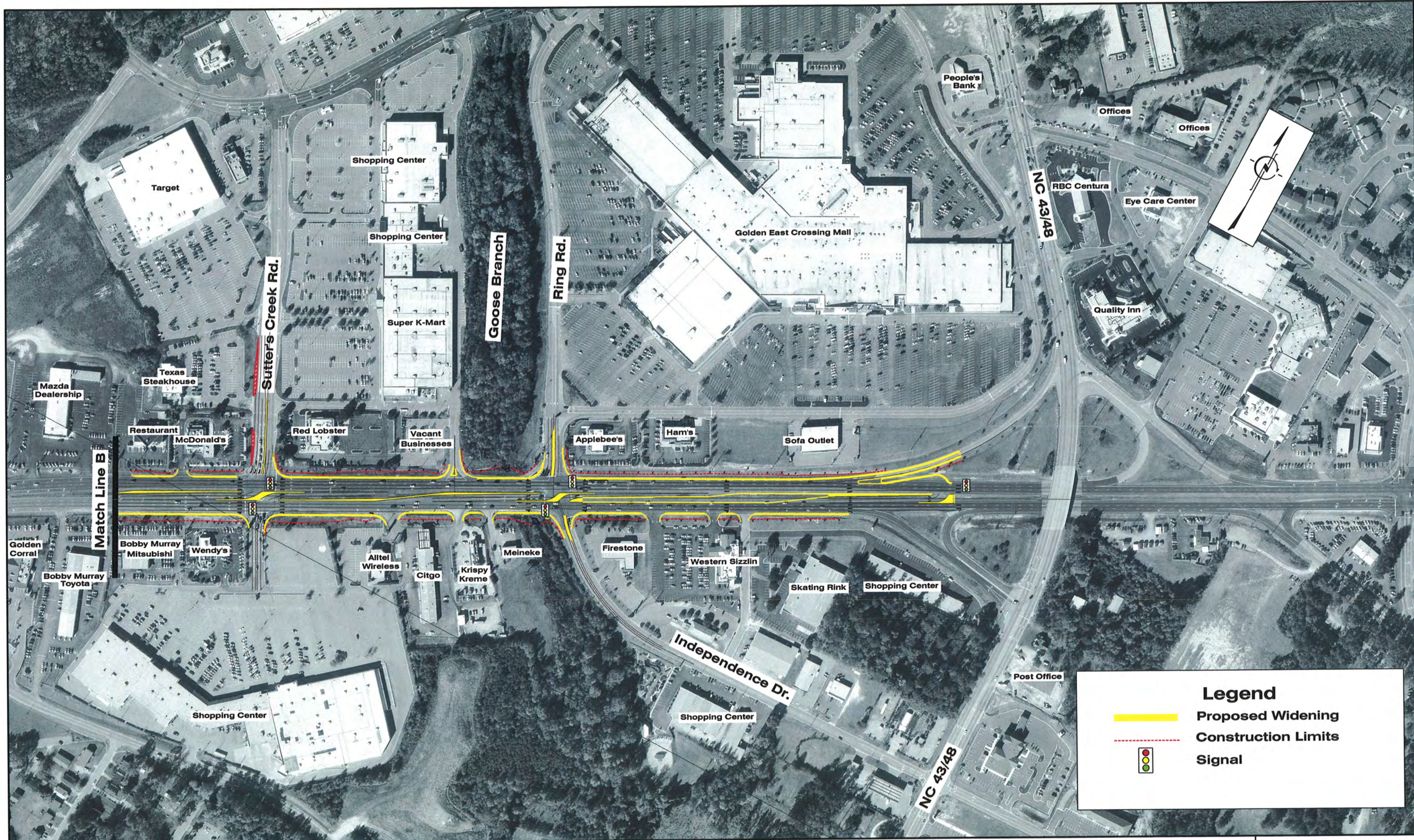


US 301 Bypass

TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

Preferred Alternative
 Alternative A1
 Scale: 1" = 300'
 Exhibit 3.3b





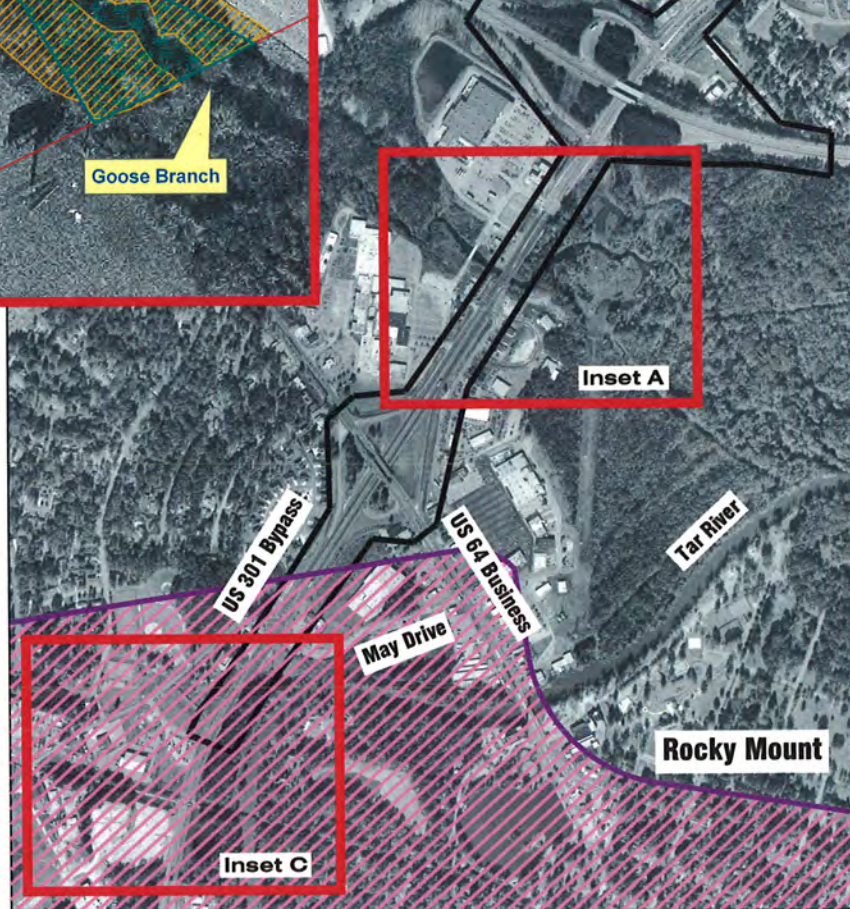
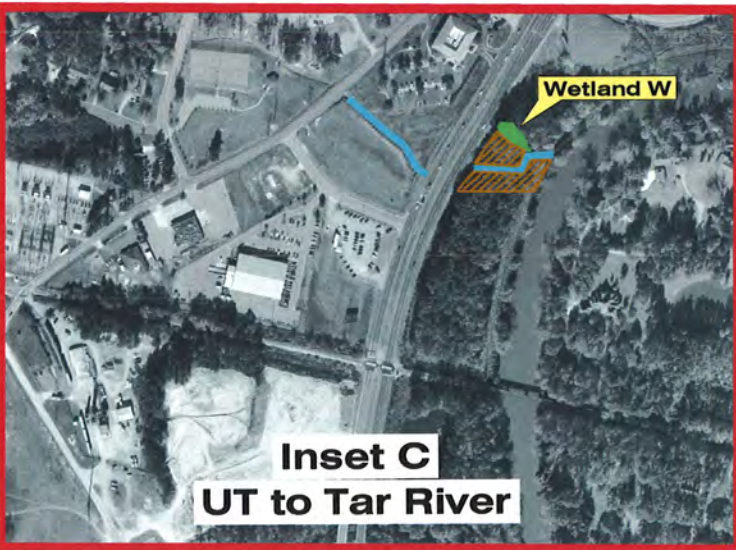
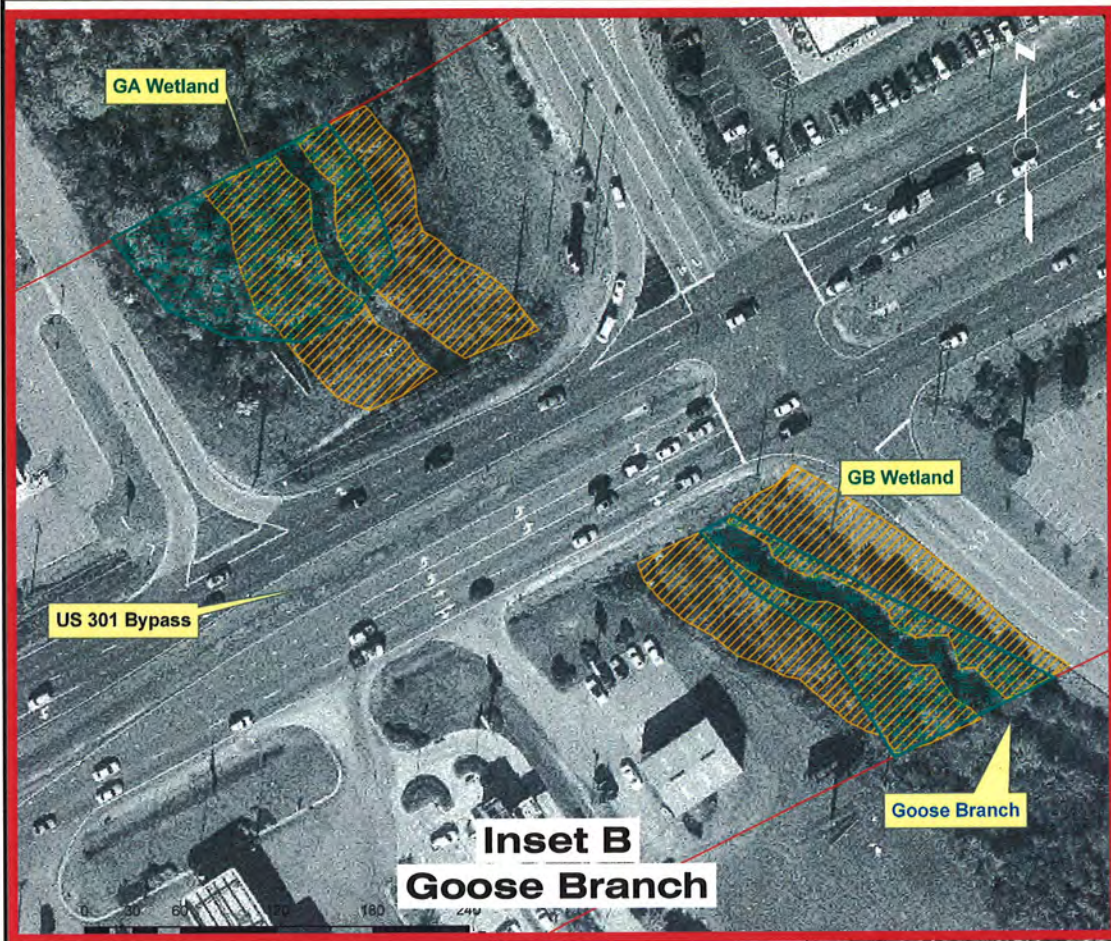
Legend

- Proposed Widening
- Construction Limits
- Signal



US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

Preferred Alternative
Alternative A1
 Scale: 1" = 300'
 Exhibit 3.3c



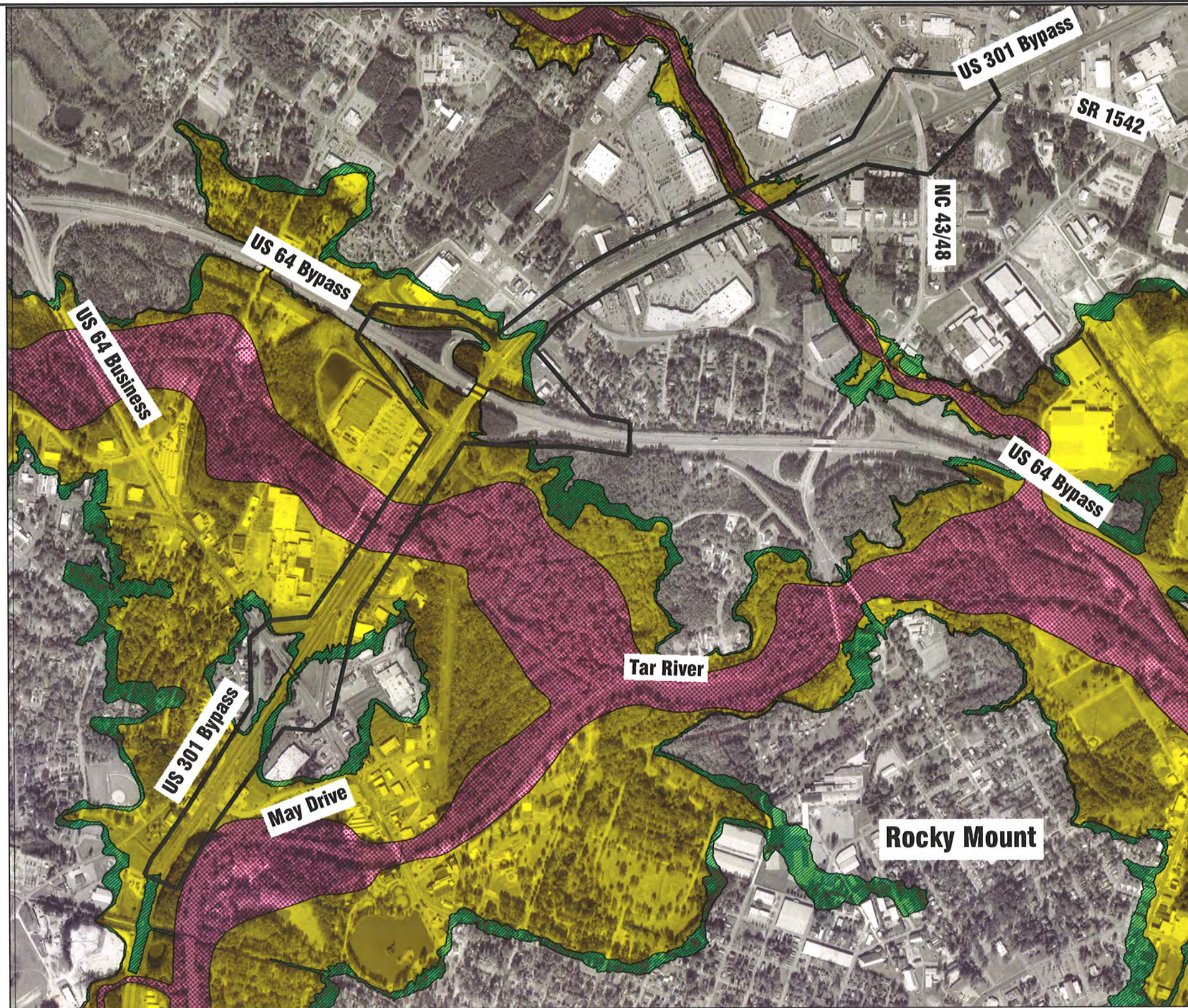
Legend

- Study Area
- 50 foot Riparian Buffer
- Wetlands
- City of Rocky Mount Water Supply Critical Intake Area
- Water Supply Watershed (WS-IV)
- Limits of Wetland and Stream Delineations







US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

**Riparian Buffers
 and Water Supply
 Watersheds
 Not To Scale
 Exhibit 9.1**



Legend

-  Study Area
-  Zone AE Floodway
-  Zone AE Floodplain
-  Zone X Floodplain



US 301 Bypass
 TIP No. U-3330
 SR 1836 (May Drive) to NC 43/48 (Benvenue Road)
 Nash County, North Carolina

Floodplains
 Not To Scale
 Exhibit 10.1

APPENDIX A

AGENCY RESPONSES TO ENVIRONMENTAL ASSESSMENT

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 4 RALEIGH OFFICE
TERRY SANFORD FEDERAL COURTHOUSE
310 NEW BERN AVENUE
RALEIGH, NORTH CAROLINA 27601**

Date: March 17, 2010

Dr. Gregory J. Thorpe, Ph.D.
Manager, Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

SUBJECT: EPA Review Comments of the Federal Environmental Assessment (EA)
for U-3330, US 301 Bypass Improvements, Rocky Mount, Nash County
North Carolina

Dear Dr. Thorpe:

The U.S. Environmental Protection Agency Region 4 (EPA) has reviewed the subject document and is commenting in accordance with Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The North Carolina Department of Transportation (NCDOT) and Federal Highway Administration (FHWA) propose to widen and provide other improvements to US 301 Bypass in Rocky Mount, Nash County for an approximate distance of 2.6 miles.

EPA has not identified any substantial environmental concerns for the proposed project. EPA notes that the EA is very comprehensive and includes a very detailed impact summary table at Table S.1. EPA notes the following potential impacts to human and natural resources based upon either Alternatives A or B: noise receptor impacts of 17 or 22; terrestrial forest impacts of 0.1 or 0.7 acres; wetland impacts of 0.6 acres for each; stream impacts of 250 or 370 linear feet; riparian buffer impacts of 0.1 or 0.2 acres; and 10 hazardous material sites each. The EA indicates that a noise wall is being considered near the Rosedale Avenue subdivision. EPA notes that the stream systems that are potentially impacted include the Tar River and an unnamed tributary (UT) to the Tar River and that they are included on the 303(d) listed of impaired waters. EPA requests that NCDOT consider during planning and final design the most stringent of soil erosion and sediment control measures and stormwater management practices to minimize potential water quality impacts. EPA plans to attend future hydraulic and permit review meetings that may be conducted by the NCDOT for the proposed project.

Should you or your staff have any questions, please feel free to contact me at 919-856-4206 or by e-mail at militscher.chris@epa.gov. EPA requests receiving a copy of the Finding of No Significant Impact (FONSI) when it becomes available. Thank you for the opportunity to comment.

Sincerely,

Christopher A. Militscher, REM, CHMM
Merger Team Representative
USEPA Raleigh Office

For:
Heinz J. Mueller, Chief
EPA Region 4 NEPA Program Office

cc: Scott McLendon, USACE
Clarence Coleman, FHWA
Brian Wrenn, NCDWQ



North Carolina
Department of Administration

Beverly Eaves Perdue, Governor

Moses Carcy, Jr., Secretary

April 13, 2010

Mr. Gregory Thorpe
NC Department of Transportation
Project Dev. and Environ. Anal.
1548 Mail Service Center
Raleigh, NC 27699-1548

Re: SCH File # 10-E-4220-0333; EA; Proposal to widen US 301 Bypass from SR 1836 (May Drive) to NC 43/48 (Benvenue Road) in Nash County. TIP No. U-3330

Dear Mr. Thorpe:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Chrys Baggett".

Ms. Chrys Baggett
State Environmental Review Clearinghouse

Attachments

cc: Region L

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail state.clearinghouse@doa.nc.gov

Location Address:
116 West Jones Street
Raleigh, North Carolina




North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

MEMORANDUM

TO: Valerie McMillan
State Clearinghouse

FROM: Melba McGee 
Environmental Review Coordinator

RE: 10-0333 EA for the Proposed US 301 Bypass Improvements in Rocky
Mount in Nash County

DATE: April 13, 2010

The Department of Environment and Natural Resources has reviewed the proposed information. The applicant is encouraged to consider the attached recommendations and continue to work with our agencies during the NEPA Merger Process.

Thank you for the opportunity to review.

Attachments



North Carolina Department of Environment and Natural Resources

Division of Water Quality
Galeen H. Gullins
Director

Date Rec'd
04/06/2010

April 6, 2010

MEMORANDUM

To: Melba McGee, Environmental Coordinator, Office of Legislative and Intergovernmental Affairs

From: Rob Ridings, Division of Water Quality, Transportation Permitting Unit *RR*

Subject: Comments on the Environmental Assessment related to proposed improvements to US 301 Bypass in Nash County, Federal Aid Project No. STP-0301(17), State Project No. 36596.1.1.1, TIP No. U-3330, State Clearinghouse Project No. 10-0333.

This office has reviewed the referenced document dated received March 16, 2010. The NC Division of Water Quality (NCDWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to jurisdictional wetlands, streams, and other surface waters. NCDWQ offers the following comments based on review of the aforementioned document:

Project Specific Comments:

1. Goose Branch and Hornbeam Branch are class C; NSW waters of the State. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDWQ recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to these waters. NCDWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ's *Stormwater Best Management Practices*.
2. Stony Creek is class C, NSW, 303(d) waters of the state. The Tar River is class WS-IV, NSW, CA, 303(d) waters of the state. NCDWQ is very concerned with sediment and erosion impacts to these impaired waters that could result from this project. NCDWQ recommends that the most protective sediment and erosion control BMPs be implemented in accordance with *Design Standards in Sensitive Watersheds* to reduce the risk of nutrient runoff to these waters. NCDWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ's *Stormwater Best Management Practices*.
3. Review of the project reveals the presence of surface waters classified as Water Supply Critical Area (CA) in the project study area. Given the potential for impacts to these resources during the project implementation, NCDWQ requests that NCDOT strictly adhere to North Carolina regulations entitled "Design Standards in Sensitive Watersheds" (15A NCAC 04B .0124) throughout design and construction of the project. This would apply for any area that drains to streams having WS CA (Water Supply Critical Area) classifications.

4. This project is within the Tar-Pamlico River Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0259. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B.0259. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, including use of the NC Ecosystem Enhancement Program, must be provided to NCDWQ prior to approval of the Water Quality Certification. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, including use of the NC Ecosystem Enhancement Program, must be provided to NCDWQ prior to approval of the Water Quality Certification.

General Comments:

1. The environmental document shall provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.
2. Environmental assessment alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ's *Stormwater Best Management Practices*, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.
3. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan should be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.
4. In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 150 linear feet to any single stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as stream mitigation.
5. Future documentation, including the 401 Water Quality Certification Application, should continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.
6. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.

7. An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis shall conform to the NC Division of Water Quality Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.
8. NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
9. Where streams must be crossed, NCDWQ prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts shall be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, NCDOT should not install the bridge bents in the creek, to the maximum extent practicable.
10. Whenever possible, NCDWQ prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage beneath the structure. Fish passage and navigation by canoeists and boaters shall not be blocked. Bridge supports (bents) shall not be placed in the stream when possible.
11. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of NCDWQ's *Stormwater Best Management Practices*.
12. Sediment and erosion control measures shall not be placed in wetlands or streams.
13. Borrow/waste areas shall avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.
14. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater shall not be permitted to discharge directly into streams or surface waters.
15. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from NCDWQ. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.
16. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.

26. Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

NCDWQ appreciates the opportunity to provide comments on your project. Shall you have any questions or require any additional information, please contact Rob Ridings at 919-733-9817.

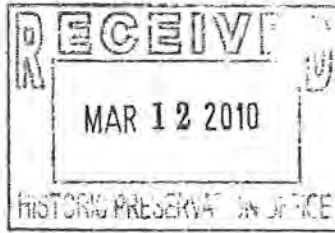
cc: Tom Steffens, US Army Corps of Engineers, Washington Field Office
Clarence Coleman Jr., Federal Highway Administration
Chad Coggins, Division 4 Environmental Officer
Dr. Gregory Thorpe, NCDOT PDEA
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NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: NASH

F02: HIGHWAYS AND ROADS

STATE NUMBER: 10-E-4220-0333
DATE RECEIVED: 03/11/2010
AGENCY RESPONSE: 04/07/2010
REVIEW CLOSED: 04/12/2010



MS RENEE GLEDHILL-EARLEY
CLEARINGHOUSE COORDINATOR
DEPT OF CULTURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
MSC 4617 - ARCHIVES BUILDING
RALEIGH NC

ER 05-0597

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A - (110) / 3/16/10

S - NC R/R 3/25/10

PROJECT INFORMATION

APPLICANT: NC Department of Transportation
TYPE: National Environmental Policy Act
Environmental Assessment

Dus 3/24/10

DESC: Proposal to widen US 301 Bypass from SR 1836 (May Drive) to NC 43/48 (Benvenue Road) in Nash County. TIP No. U-3330

CROSS-REFERENCE NUMBER: 07-E-4220-0261

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: NO COMMENT COMMENTS ATTACHED

SIGNED BY:

Renee Gledhill-Earley

DATE:

3/25/10

MAR 15 2010