



Eastern Rockingham Corridor Study Richmond County STIP Project U-5706

Concurrence Point 4A: LEDPA/Preferred Alternative March 8, 2023

PURPOSE OF TODAY'S MEETING

The purpose of today's meeting is to present information on avoidance and minimization and to discuss concurrence on Point 4A for the Eastern Rockingham Corridor Study. Formal concurrence on avoidance and minimization will be requested following this meeting. A map showing the project location and study area is included as **Figure 1**.

PROPOSED ACTION

The Eastern Rockingham Corridor Study is included in NCDOT's 2020-2029 State Transportation Improvement Program (STIP) as Project U-5706. The project would connect US 74 Business in the southeastern part of Rockingham to US 1 and SR 1423 (Richmond Road) in the city's northeastern area. The total length of the project is about 3.5 miles.

PROJECT PURPOSE

The purpose of the proposed project, as approved by the Merger Team on May 10, 2017, is to provide direct connectivity between commercial areas along US 74 Business and residential areas northeast of central Rockingham and reduce conflicts between through traffic and local traffic on Long Drive.

PROJECT STATUS

On December 6, 2017, the Merger Team concurred with carrying forward three alternatives (Alt. 1, Alt. 4, and Alt. 5) to study in detail. On May 7, 2019, the Merger Team concurred with hydraulic recommendations for each of the major hydraulic crossings on each alternative. On February 22, 2023, the Merger Team met to discuss the Least Environmentally Damaging Practicable Alternative (LEDPA).

ALTERNATIVE 5

Alternative 5, the LEDPA, would provide a direct route for through traffic from the commercial areas along US 74 Business to residential areas in northeast Rockingham (see **Figure 2**). It generally follows SR 1641 (Clemmer Road) until it crosses SR 1624 (County Home Road.) It then continues on new location, turning northeastward before crossing Falling Creek. It then turns back toward the northwest, roughly following SR 1645 (Mt. Olive Church Road) to US 1. From that point, the alternative continues northward on new location, where it would then intersect and follow existing SR 1626 (Old Aberdeen Road) to Richmond Road.

The portion of Alternative 5 between US 74 Business and SR 1624 (County Home Road) is proposed to be three lanes with two 12-foot through lanes and a 16-foot center turn lane. Ten-foot shoulders (four-foot paved) will be provided on both sides of the road. The portion of Alternative 5

between County Home Road and US 1 will be two lanes. Ten-foot shoulders (four-foot paved) will be provided on both sides of the road. The portion of Alternative 5 between US 1 and Richmond Road will be three lanes with two 12-foot through lanes and a 16-foot center turn lane. Ten-foot shoulders (four-foot paved) will be provided on both sides of the road. Proposed typical sections for Alternative 5 are shown on **Figure 3**.

Table 1 summarizes the potential environmental impacts for Alternative 5.

Table 1. Alternative 5 Impacts*

Environmental Resource		Alternative 5
Jurisdictional streams (linear feet)	High	0
	Medium	174
	Low	92
	Total	266
Jurisdictional wetlands (acres)	High	2.0
	Med	1.2
	Low	0.6
	Total	3.8
100-year floodplain (acres)		1.7
Water supply watershed critical area (acres)		20.3
Protected species adversely affected		1**
Historic properties adversely affected		0
Archaeological sites affected		0
Agricultural operations affected		1
Residential relocations		13
Business/nonprofit relocations		1
Noise Impacted Receptors		5
Potential hazardous materials sites		3
Prime farmland soils (acres)		45.8
Cost estimates		\$43,000,000

*Impacts calculated within slope stakes.

**Northern long-eared bat – Programmatic Biological Conclusion is “May Affect, Likely to Adversely Affect”

AVOIDANCE AND MINIMIZATION

Avoidance

Efforts to avoid impacts to the project area’s environmental features have been a part of the U-5706 project since preliminary alternatives were first developed. When developing the alignments of the project’s preliminary alternatives, NCDOT attempted to avoid jurisdictional resources to the greatest extent possible. However, due to the number and location of wetlands in the project area, total avoidance of all wetlands and streams is not possible.

Minimization

After detailed study alternatives were selected, NCDOT sought to further minimize impacts to jurisdictional resources during development of functional designs. Specific minimization efforts performed include:

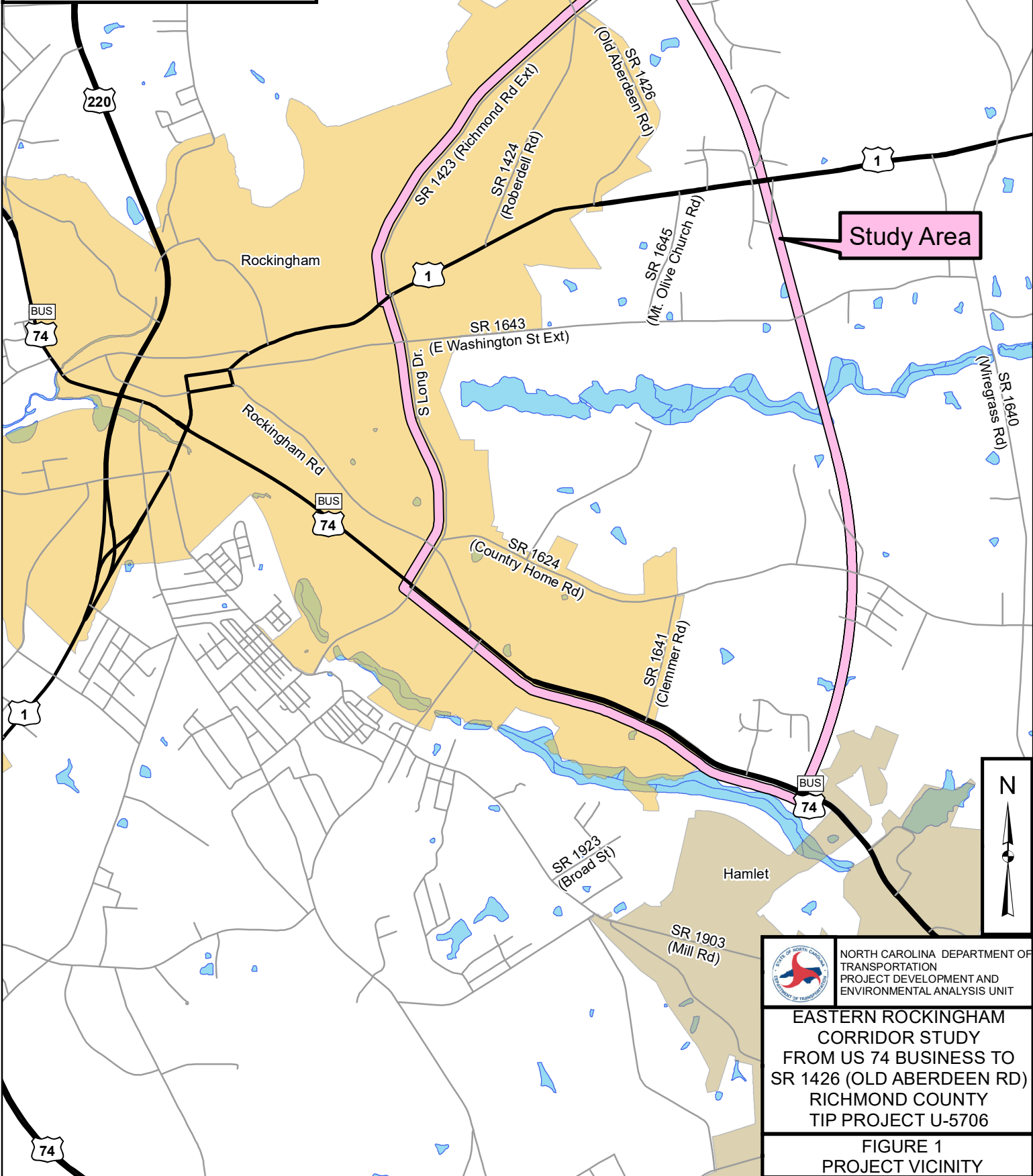
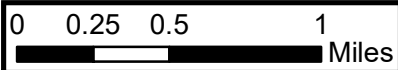
- Elimination of previously proposed 23-foot median for two-lane new location sections of Alternative 5. This change reduced wetland impacts by 0.7 acres.

- Incorporated bridging at a hydraulic crossing of North Prong Falling Creek, which reduced wetland impacts by 0.32 acres.
- Incorporated steeper fill slopes through wetlands.

Other Measures to Avoid and Minimize Impacts Evaluated

The following potential minimization measure was evaluated for the project but resulted in higher impacts to other resources:

- Reducing the previously proposed raised 23-foot median to a six-foot median with a four-foot monolithic island for the new location portion of Alternative 5 between County Home Road and US 1 was examined as a minimization measure but rejected in favor of providing a two-lane undivided section with no median or island, which would have lower wetland impacts than a divided section.



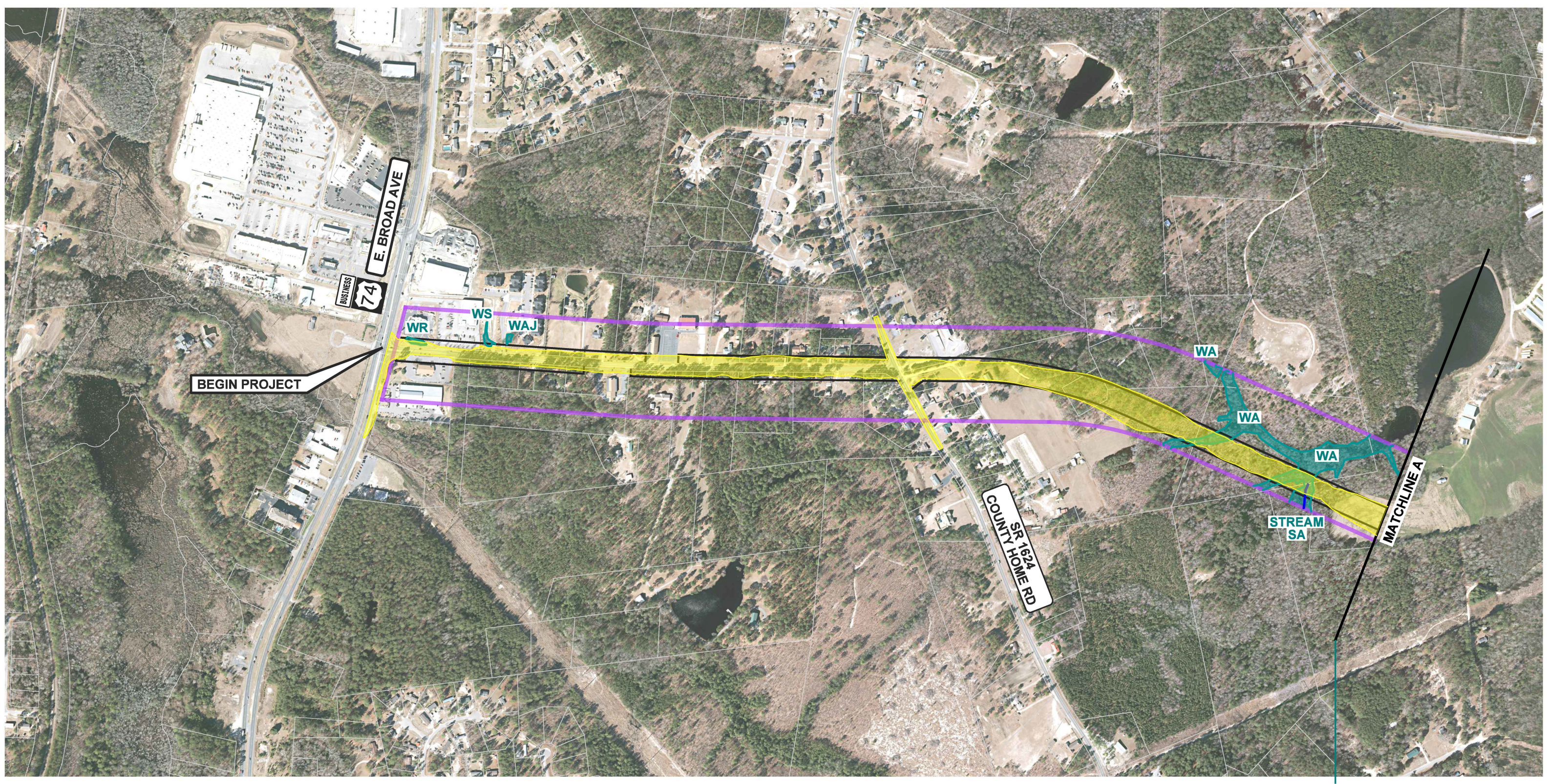
Study Area




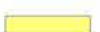





NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS UNIT

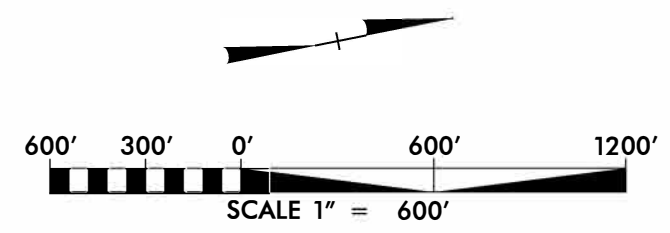
EASTERN ROCKINGHAM CORRIDOR STUDY FROM US 74 BUSINESS TO SR 1426 (OLD ABERDEEN RD) RICHMOND COUNTY TIP PROJECT U-5706

FIGURE 1 PROJECT VICINITY




LEGEND

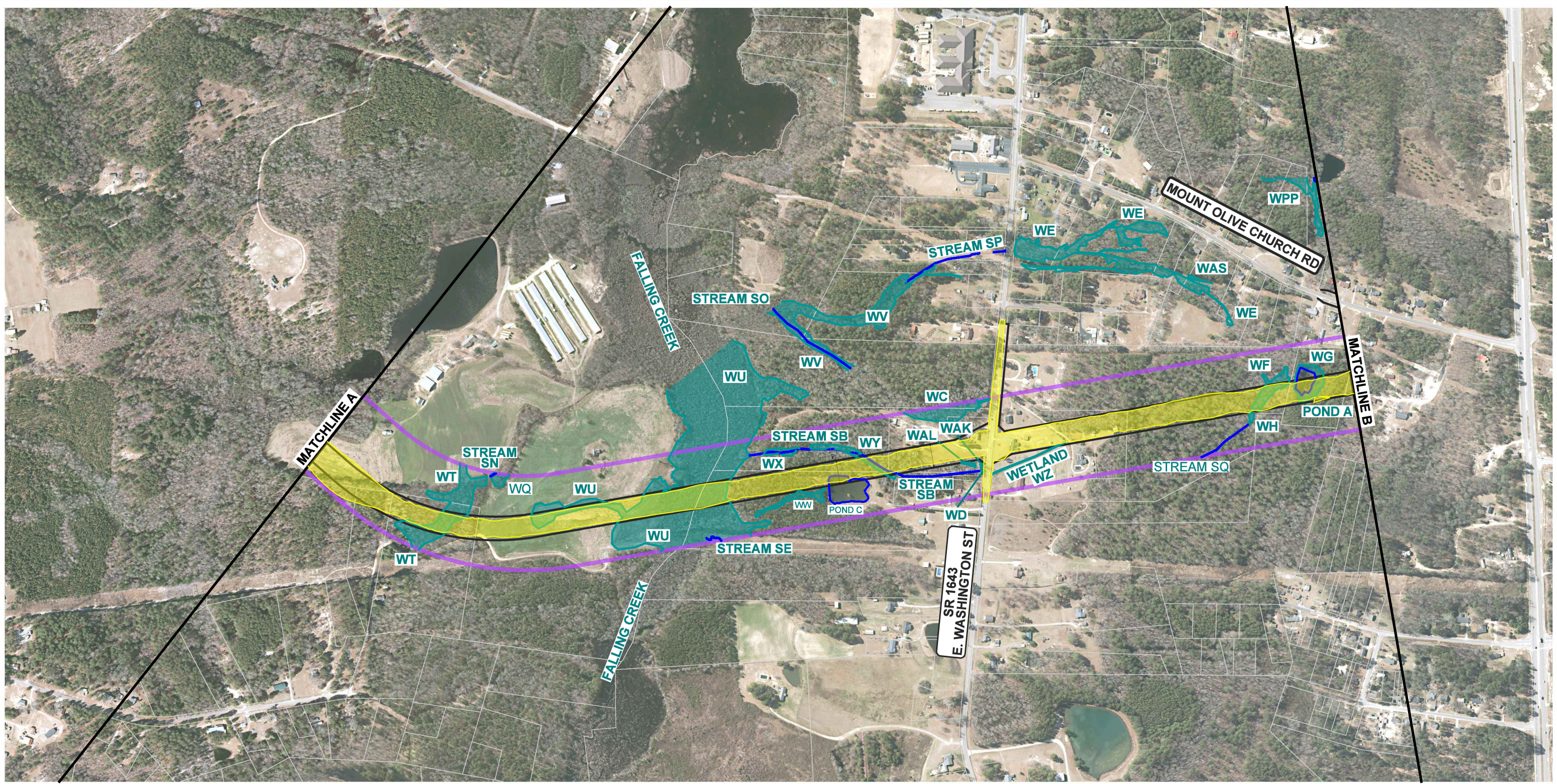
 Project Alternative Corridor	 Proposed Construction Limits
 Existing Parcel Boundary	 Jurisdictional Stream Lines
 Proposed Right Of Way	 Delineated Wetlands
 Historic Property Boundary (NR Listed/Eligible)	










ALT 5
Connector on New Alignment

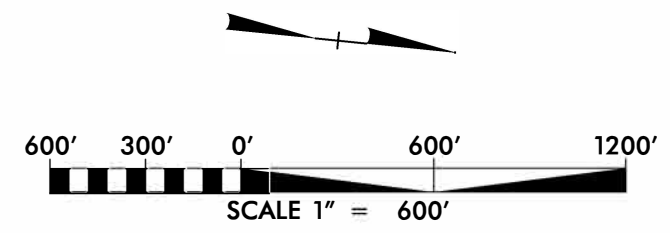
TIP U-5706
EASTERN ROCKINGHAM
CORRIDOR STUDY
RICHMOND COUNTY

 North Carolina Department of Transportation	Exhibit 2a
---	----------------------




LEGEND

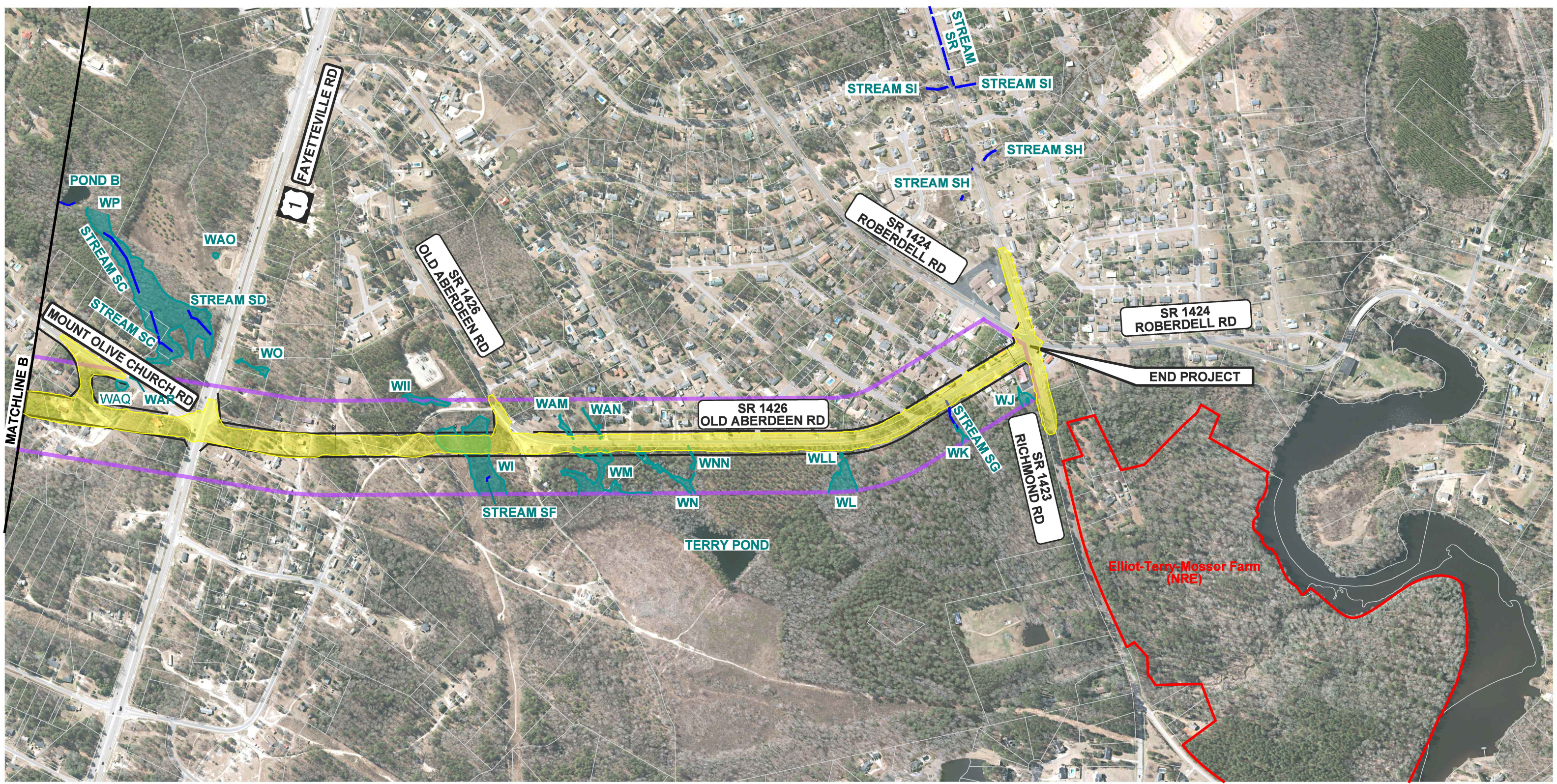
 Project Alternative Corridor	 Proposed Construction Limits
 Existing Parcel Boundary	 Jurisdictional Stream Lines
 Proposed Right Of Way	 Delineated Wetlands
 Historic Property Boundary (NR Listed/Eligible)	



ALT 5
Connector on New Alignment

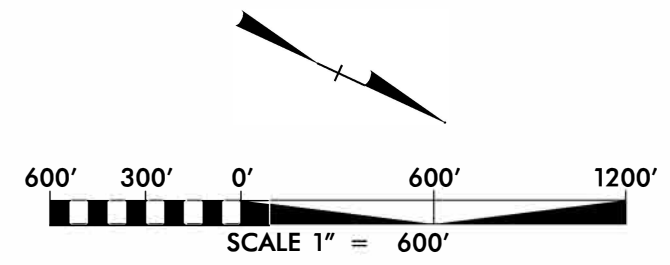
TIP U-5706
EASTERN ROCKINGHAM
CORRIDOR STUDY
RICHMOND COUNTY

	North Carolina Department of Transportation	Exhibit 2b
---	--	----------------------



LEGEND

Project Alternative Corridor	Proposed Construction Limits
Existing Parcel Boundary	Jurisdictional Stream Lines
Proposed Right Of Way	Delineated Wetlands
Historic Property Boundary (NR Listed/Eligible)	



ALT 5
Connector on New Alignment

TIP U-5706
EASTERN ROCKINGHAM
CORRIDOR STUDY
RICHMOND COUNTY

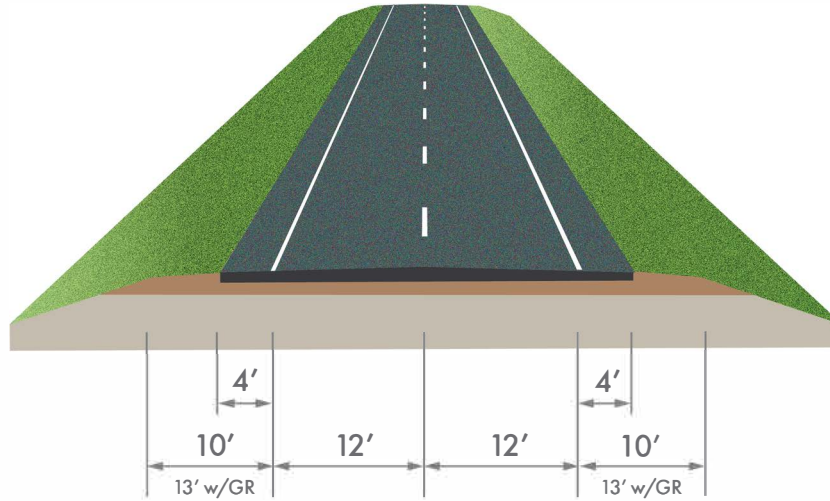
	North Carolina Department of Transportation	Exhibit 2c
--	--	----------------------

Figure 3

TYPICAL CROSS SECTIONS – Alternative 5

Eastern Rockingham Corridor Study,
Richmond County (STIP U-5706)

From SR 1624 (County Home Rd) to US 1 (Fayetteville Rd)



From US 74 Business (E. Broad Ave) to SR 1624 (County Home Rd)
From US 1 (Fayetteville Rd) to SR 1423 (Richmond Rd)

