

### Manchester Rd Interchange

NC 24 and Manchester Road (SR 1451)

Local ID: U-5930

Purpose: Congestion

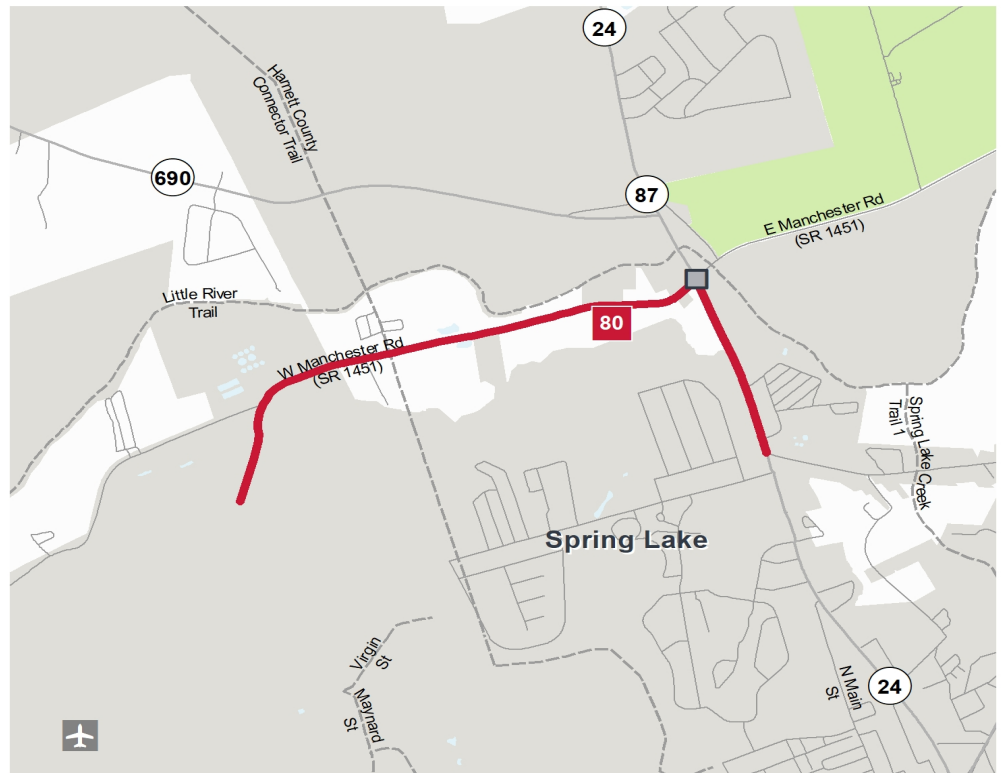
Improvement: Improve Existing

#### Identified Need

NC 24/ NC 87 Bragg Blvd is currently operated over capacity. Improvements are needed to relieve the congestion and improve access to Manchester Road/ Pope Army Air Field.

#### Recommendation

Project proposes to convert the existing at-grade intersection to an interchange along with roadway improvements.



	Local ID #	Improve	New Location		Local ID #	Improve	New Location
Congestion / Mobility	#	—	...	Interchange	⊙	□	■
Access Management / Operations	#	—	...	Bridge / Overpass	⊙	○	●
Modernization	#	—	...	Intersection	⊙	∟	▲
Other	#	—	...				

### Proposal At A Glance

Highway Class	Congestion & Mobility
Facility Type	Boulevard
Typical Section	06 D
Section Options	04 D
Length (miles)	2.28
Existing ROW (feet)	150
Safety Risk Score	44-78

### Proposal Data: 2018 Base Year 2045 Future Year

Improved Route	Existing	Without Proposal*	With Proposal
Facility Type	Boulevard	Boulevard	Boulevard
Travel Lanes	4	6	6
Volume (vpd)	10500-43000	11500-43900	9700-39500
Capacity (vpd)	9500-38100	38100-57200	38100-57200

\* Volume (vpd) and Capacity (vpd) values listed under Without Proposal column represents Existing and Committed (E+C) scenario.

### Capacity Data: Year

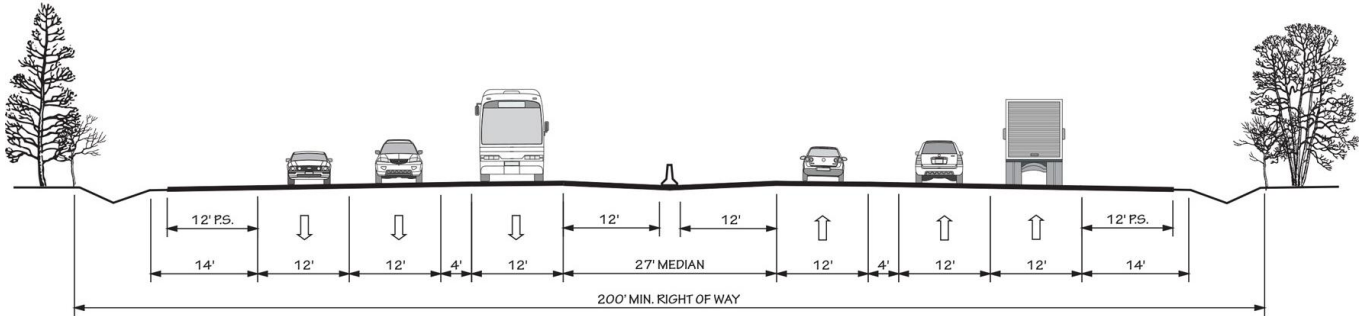
Facility will be Approaching Capacity (>80%)	-
Facility will be Over Capacity (>=100%)	-



Typical Section Options:

# TYPICAL SECTION No. 6D

04 D  
6 LANE FREEWAY (4 GENERAL PURPOSE LANES, 2 MANAGED LANES, AND 27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS



POSTED SPEED 55-70 MPH

### Project History/Linkage to Other Plans

The proposed project is included in the approved 2020-2029 North Carolina State Transportation Improvement Program (STIP) with right-of-way acquisition scheduled for Fiscal Year (FY) 2029.

The needs for this project include:

- Compliance with NCDOT STIP 2020-2029. This project is part of improvements to the N Bragg Blvd corridor to relieve congestion.
- Additional roadway capacity and a full interchange with Manchester Rd will relieve traffic congestion along N Bragg Blvd, accommodate area growth, and mitigate congestion and safety concerns on neighborhood roads due to spill-over traffic.

Per SPOT 5.0 (SPOT ID: H151036) information, the primary purpose of this project is to provide "mobility and safety enhancements". It is accepted transportation engineering practice that grade-separated interchange provides additional capacity and enhance safety performance over at-grade intersection.

### CTP Goal Analysis

#### Vision, Goals, & Objectives

The purpose of this project is to reduce congestion, reduce travel time, and improve safety along this facility. The Cumberland County / FAMPO CTP Goals include focusing on growth around established municipalities, infrastructure, and strategic nodes while encouraging safe, multi-modal transportation options with adequate connectivity. Additionally Cumberland County / FAMPO CTP goals strive to protect, preserve, and enhance environmental features and open space opportunities in conjunction with recognizing the strategic importance of military installations within and adjacent to the

community and promoting economic development growth through transportation and planning means.

#### Goals & Objectives Survey

U-5930 project received no comments during the survey period. The Survey was launched on August 12, 2020 and closed on September 28, 2020. There was an English and Spanish version of the survey. A total of 228 participants created 530 comments / suggestions on the map of Cumberland County / FAMPO.

### Potential Impacts

Based on the preliminary environmental screening, there may be endangered and threatened species along the proposed interchange corridor which requires a formal consultation with U.S. Fish and Wildlife Service (USFWS). This project is located in the vicinity of the 100-year and 500-year floodplain for the Lower Little River, a Water Supply Classification III (WS-III) stream, as well as National Wetland Inventory (NWI) wetlands, Natural Heritage Natural Areas (NHNA), and Managed Areas (MAREA).

The proposed interchange passes through both residential developments, and commercial land uses. It is estimated that there may be eight residential displacements, six commercial displacements, and parking reduction at two commercial properties.

The proposed project also includes a new bridge crossing of the Lower Little River north of Manchester Rd, an overpass of Manchester Rd over N Bragg Blvd, and potential bridge structures at three separate stream crossings.

### Additional Information - Environmental

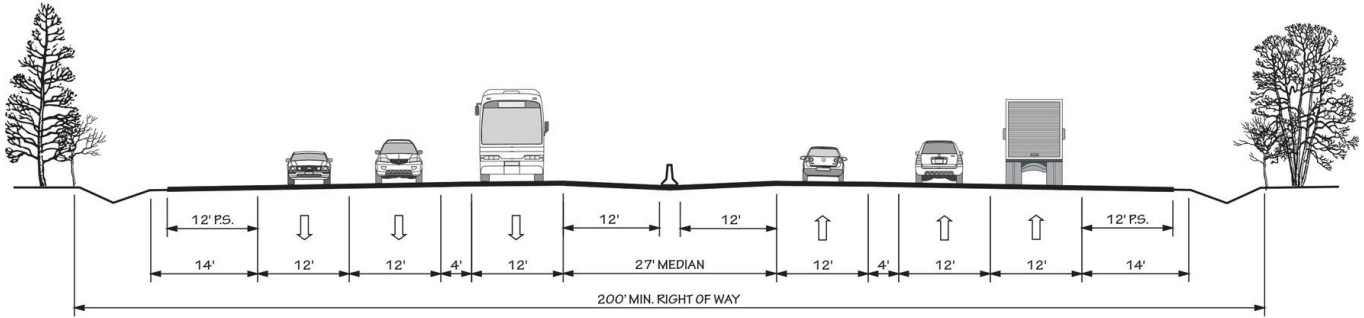
This project is within 150 feet of:

- River(s) and Stream(s)
- River(s) and Stream(s)-NCIR

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- NC CREWS (North Carolina Coastal Region Evaluation of Wetland Significance) Area(s)
- Flood Hazard Area(s)
- Land Habitat Indicator Guild(s)
- Managed Area(s)
- National Wetlands Area(s)
- National Heritage Significant Area(s)
- Waterbody(ies)

- Between 5% and 10% identify as Some Other Race
- Between 15% and 20% identify as Two of More Races
- Between 0% and 15% identify as Households with No Car

*Additional Information - Title VI*

This recommendation passes through one or more Census Blocks with the following characteristics:

- Between 50% and 75% identify as African American
- Between 0% and 25% identify as 65+
- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hawaiian or Pacific Islander
- Between 25% and 50% identify as Hispanic and Latino
- 0% identify as Over 18 w/ Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 w/ Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 w/ Limited English Proficiency (LEP) - Other
- Between 5% and 15% identify as Over 18 w/ Limited English Proficiency (LEP) - Spanish
- Between 0% and 15% identify as Native American
- Between 0% and 1% identify as Below Poverty Line