

# CONCURRENCE POINTS 1 AND 2 STUDY AREA DEFINED AND NEED AND PURPOSE ALTERNATIVES TO BE STUDIED IN DETAIL

I-26 Interchange (Future Exit 35)  
Buncombe County  
STIP Project HE-0001  
WBS No. TBD

July 15, 2021

## Purpose of Meeting

Today's meeting is to discuss the need for and the purpose of the proposed STIP Project HE-0001 and the project's alternatives to be studied in detail. Concurrence for both decision points will be requested.

## Project Description

The NCDOT proposes to construct a new interchange with Interstate 26 (I-26) and a roadway extension to connect with a future state road in Buncombe County, NC (**Figure 1**).

## Project Setting

The proposed project is located approximately 6 miles south of Asheville along I-26, north of the Blue Ridge Parkway (BRP) and south of the French Broad River (FBR) bridge (**Figure 1**).

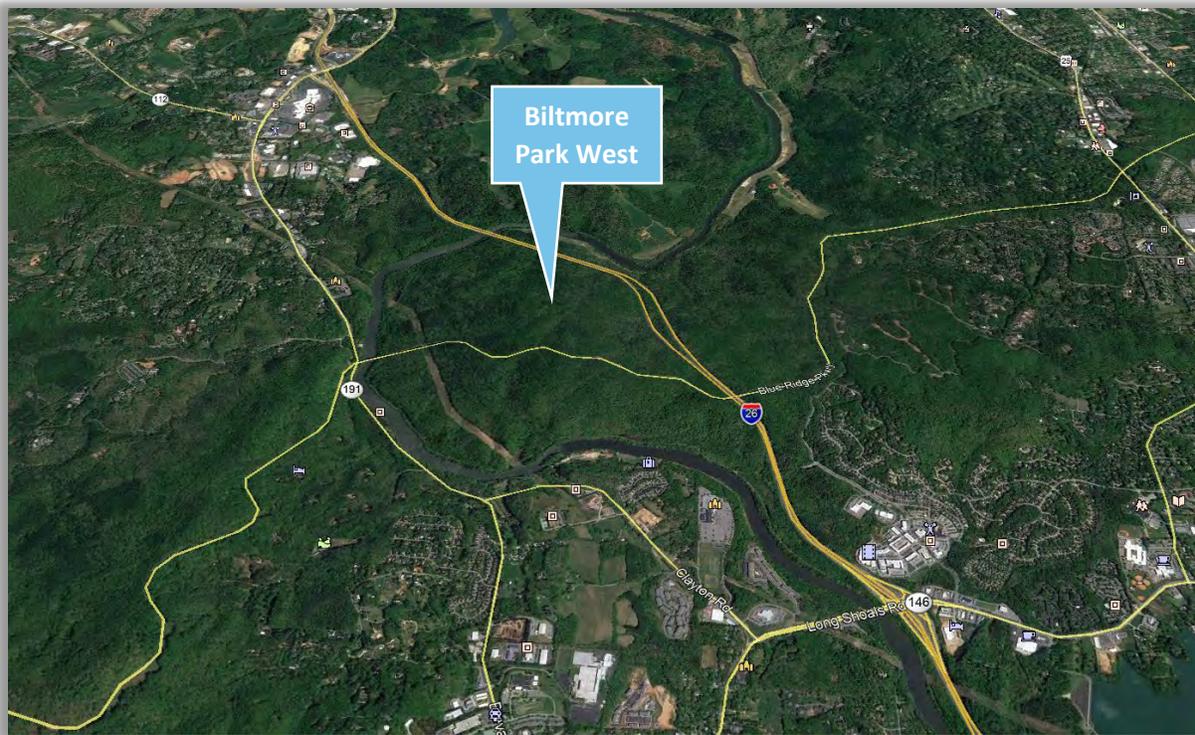
I-26 is an east-west freeway facility connecting Charleston, SC to Kingsport, TN. In NC, I-26 is included in the NC Strategic Transportation Corridors (STC) Network as Corridor C (I-26/US 23). This section of I-26 also carries the US 74 designation. The I-40 system interchange is approximately 4 miles to the north of the project and the Asheville Regional Airport is approximately 5 miles to the south. The BRP has a grade separated crossing but no direct access to I-26. This portion of I-26 is currently under construction for widening to eight lanes (four lanes in each direction of travel) and includes the widening/replacement of the I-26 bridges over the FBR and the replacement of the BRP bridge on new alignment, all under the NCDOT STIP Project I-4700. The posted speed limit is 60 mph.

NC 191 (Brevard Road) is a north-south roadway connecting Hendersonville in Henderson County to Asheville in Buncombe County. NC 191 generally parallels I-26 south of Asheville and interchanges with I-26 (Exit 33) approximately 3 miles north of the project area. NC 146 (Long Shoals Road) is an east-west roadway connecting NC 191 to US 25 (Hendersonville Road), with an I-26 interchange (Exit 37) approximately 2 miles south of the project area.

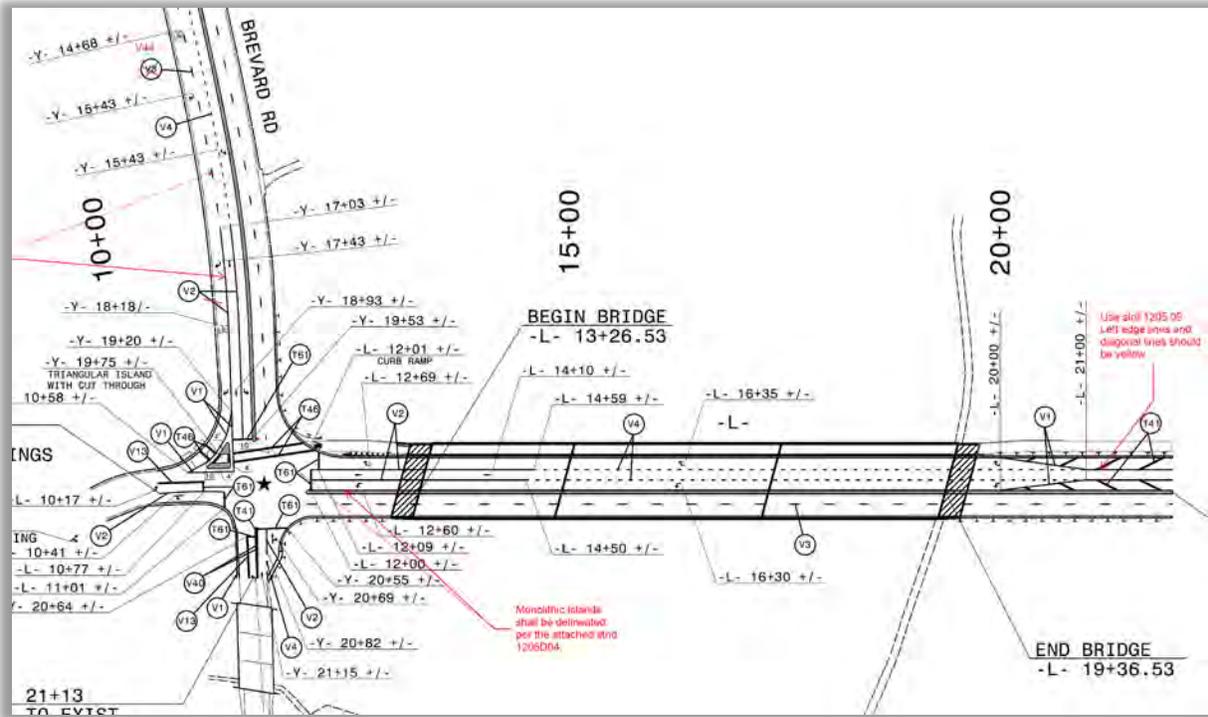
Land use in the project vicinity is mixed and includes manufacturing/distribution facilities, single- and multi-family residential neighborhoods, open space, and commercial and recreational uses. North of the

Clayton Road (SR 3501) intersection, the NC 191 corridor is characterized by preserved open space in proximity to the FBR, Pisgah National Forest, and the BRP. The BRP crosses over NC 191 and is accessible via the signalized intersection with Frederick Law Olmstead Way at the west end of the proposed project. The NC Arboretum is also accessible via this intersection.

The Biltmore Park West (BPW) property (see **Exhibit 1**) will be accessed via NC 191 at a new fourth leg to the Frederick Law Olmstead Way intersection. The private developer is currently constructing a new bridge over the FBR and a 2-lane road (Frederick Law Olmstead Way East) to connect to the Pratt & Whitney (P&W) Manufacturing Center, currently under construction. The private developer is constructing the bridge to accommodate up to 5 lanes of traffic and has graded the approach roadway to allow for a future 4-lane cross section. **Exhibit 2** shows the lane configuration including the NC 191 intersection and 5 lanes on the new bridge that taper to two lanes east of the FBR. As with many private development projects where NCDOT anticipates accepting ownership, NCDOT has reviewed and approved all preliminary plans for the FBR bridge and roadway and has an inspector on-site to confirm the privately-built transportation infrastructure is constructed to NCDOT standards. The Department anticipates accepting the bridge and roadway currently under construction (not part of HE-0001) into the State highway system within a few months following completion.



**EXHIBIT 1. BILTMORE PARK WEST (BPW) LOCATION (SOURCE: GOOGLE EARTH)**



**EXHIBIT 2. PRIVATELY BUILT BRIDGE AND ROADWAY LANE CONFIGURATION**

## Project Status and Schedule

The HE-0001 project is proposed to be federally funded, and NCDOT anticipates documentation as a NEPA Type III Categorical Exclusion (CE) in Spring 2022.

The proposed project was presented to the NCDOT Board of Transportation in June 2021 to be considered for approval in July 2021. The STIP addition would initially include funding for preliminary engineering only. The Division is targeting right of way acquisition and construction for state fiscal years 2022 and 2023, respectively. The current total cost estimate range is between \$20 and \$35 million.

The French Broad River MPO is in the process of updating their Long-Range Transportation Plan (LRTP) and Metropolitan Transportation Plan (MTP) and will consider incorporating this project as well as other modifications necessary to the plans later this summer.

NCDOT hosted an External Scoping Meeting with relevant regulatory agencies on June 16, 2021. The materials provided for that meeting and a summary of agency scoping comments are included in **Attachment 1**.

# CP 1: Purpose & Need and Study Area Defined

## Study Area

The study area generally includes approximately 210 acres along and west of I-26, south of the FBR and north of the BRP (**Figure 2**). The study area encompasses enough area to explore interchange locations on I-26 and allowing NCDOT to accommodate current and planned growth by connecting to Frederick Law Olmsted Way East. The study area is north of the BRP and south of the FBR to avoid impacts to both features (inclusive of the bridge infrastructure associated with both), and to account for proposed ramp length requirements. The study area extends along the roadway under construction to NC 191 to account for the potential need to provide four-lanes from I-26 to NC 191. This corridor extension is approximately 300 feet wide; the roadway under construction was graded for a 4-lane roadway but is being constructed as a 2-lane roadway.

The approximately 4.5-mile stretch of I-26 between Exit 33 (Brevard Road) and Exit 37 (Long Shoals Road) were evaluated for the proposed interchange location. The distance between the BRP bridge piers and Exit 37 (approximately 1 mile) would not allow for the required distance of 1-mile between interchanges on the interstate system. Further, the FBR is approximately 500 feet east of I-26 and roughly parallels this interstate section. There is approximately 1- $\frac{3}{4}$ -mile between Exit 33 and the I-26 bridge over the FBR; however, private development (e.g., manufacturing/warehouses, residences) is present along the west side of the interstate. The locations along I-26 north of the FBR and south of the BRP would not facilitate the development of alternatives to meet the project's purpose to accommodate current and planned growth and are therefore not included in the project's study area.

### *Study Area Refinement Following External Scoping*

A slightly larger study area was reviewed at the External Scoping Meeting (June 16, 2021) encompassing approximately 290 acres (refer to **Attachment 1**). That study area was refined to the smaller, 210-acre study area that is included in this CP 1 packet.

The reduction was primarily along the northern extent of the larger study area, based upon engineering judgement and topographic constraints. Conceptual roadway design review showed the proximity to the French Broad River through this northern section creates unreasonable engineering design constraints for interchange ramp design, making the encroachment within the French Broad River floodplain an impractical design solution. Therefore, the HE-0001 Study Area was reduced to follow the existing I-26 control of access boundary and the I-4700 Study Area. Also, due to topography within the development parcel west of I-26, proximity to the ongoing and planned developments, and roadway geometry considerations associated with the roundabout approach, conceptual roadway design determined the most reasonable roadway tie in this area would remain on the east side of the potential jurisdictional stream (blue-line) bisecting the property. Therefore, the HE-0001 Study Area was reduced to reflect these constraints.

The reduction of the HE-0001 Study Area by approximately 80 acres does not appear to unnecessarily constrain the development of reasonable and feasible interchange locations on I-26 or to provide for a roadway tie to the 2-lane roadway currently under construction by the private developer. This reduction in area will also result in more focused efforts in the collection of field data by NCDOT.

## Need for Project

The proposed project is needed to address the lack of network connectivity between NC 191 and I-26 in southern Buncombe County to accommodate current and planned growth.

## Project Purpose

The purpose of the project is to provide access to I-26 and improve east-west connectivity within the project vicinity to accommodate current and planned growth.

## Secondary Benefit

Other desirable outcomes of the proposed project are:

- improved traffic safety due to greater separation of local traffic from interstate traffic;
- improved emergency response times to the P&W Manufacturing Center, BPW property, and NC 191;
- support for local and regional economic development initiatives in the project vicinity;
- improved access to anticipated regional employment opportunities at P&W Manufacturing Center and BPW; and
- improved access to tourist destinations.

## Transportation Network Performance

### Traffic Volumes

NCDOT prepared a Traffic Forecast for HE-0001 (June 29, 2021). Current (2021) and future year (2045) traffic volumes are summarized in **Table 1**.

The adjacent interchanges (Exits 33 and 37) and roadways (i.e., NC 191 and NC 146) that would be utilized in a No Build scenario currently experience peak-hour congestion. On-going and planned development at BPW are expected to contribute to additional future congestion of adjacent interchanges and roadways in the No-Build scenario.

Roadway (Segment)	Lanes	2021 AADT (No Build)	2045 AADT (No Build)
I-26 (north of NC 191)	4-lane (8-lane 2024)	89,000	131,800
I-26 (south of NC 191/north of NC 146)	4-lane (8-lane 2024)	88,100	129,000
I-26 (south of NC 146)	4-lane (8-lane 2024)	85,700	125,400
NC 191 (west of I-26)	4-lane divided	30,700	46,600
NC 191 (south of NC 112)	4-lane divided or w/TWLTL	23,300	35,800
NC 191 (north of BRP)	4-lane divided or w/TWLTL	20,600	32,000
NC 191 (south of BRP)	2-lane	18,900	28,000
NC 146 (west of I-26)	4-lane divided	24,800	37,600

\*The Project Forecast was finalized 6/29/21 and is currently being evaluated. NCDOT can address questions regarding the forecast at or leading up to meeting.

### Access Needs and Connectivity

Currently motorists accessing this area use Exit 33 (NC 191/Brevard Road) and Exit 37 (NC 146/Long Shoals Road) which contributes to congestion at these interchanges and connecting roadways. As shown in **Table 2**, it is estimated that there is currently a 9- to 14-minute travel time between the adjacent interchanges and the project area. These travel times would be expected to increase in the future No Build scenario because of increased traffic volumes and traffic congestion.

The project is anticipated to improve traffic operations throughout the area roadways, intersections, and interchanges by introducing a new access to the interstate, thus improving local/regional access and connectivity to meet current and future travel demand projected because of Buncombe County population and employment growth.

A preliminary network connectivity review using Google Maps concluded that an additional I-26 access point should have a positive effect by reducing regional vehicle-miles-traveled (VMT) and vehicle-hours-traveled (VHT) (**Table 2**). Travel time estimates based on current conditions utilizing Google Maps indicate a 7- to 12-minute travel time savings in the PM Peak Hour and a reduction in vehicle miles traveled by up 2.9 miles.

Scenario	Origin	Destination (I-26)	Miles <sup>2</sup> (miles)	Travel Time <sup>2</sup> (mins)	Route Characteristics
<b>No Build</b>	BPW RAB <sup>1</sup>	Northbound (NC 191/I-26)	3.4	14	- 8 traffic signals - 5-lane roadway
		Southbound (NC 146/I-26)	3.6	9	- 3 traffic signals - 2-lane to 4-lane roadways
<b>Build</b>		Proposed Exit 35	0.7	1	- 2- to 4-lane roadway

<sup>1</sup> RAB = roundabout included in site plan, to be constructed by developer with or without HE-0001.  
<sup>2</sup> Projected in Google Maps, PM Peak Hour (5:30 PM) conditions. For purposes of this high-level analysis, the following assumptions were made about the proposed new alignment roadway: 35 mph travel speed; distance between BPW RAB and NC 191 estimated to be 0.6 mi (resulting in 1:02 mins travel time) and distance between RAB and I-26 estimated at 0.7 mile (resulting in 1:12 mins travel time).

### Growth Management

Buncombe County and other regional partners have embraced the P&W development, a 1 million square foot advanced manufacturing center on 100 acres in Biltmore Park West announced in October 2020 and have pledged their support. On November 17, 2020, Buncombe County Board of Commissioners (BOC) adopted a “Resolution Authorizing Buncombe County to Pay Economic Development Incentives and to Sign Economic Development Agreement” (Resolution #20-11-16); the Incentive Agreement with P&W was executed the following month, on December 9, 2020. NCDOT is not a party to the County Incentive Agreement. The agreement defines P&W commitments to investment and jobs in exchange for County incentives in the amount of \$27 million. P&W committed to create 750 full-time project-related jobs on or before December 31, 2029. The Buncombe County BOC approved P&W’s rezoning request on March

16, 2021 to move an 11.57-acre portion of the property from R-3 Residential to EMP-Employment (Case No. ZPH2020-00042 Ranger CUP).

P&W is the first development at BPW and additional future investment is planned. The entire property consists of approximately 575 acres of which roughly 175 acres are considered developable. The private developer expects that the property will be mixed-use in character with a tendency towards density. **Table 3** lists the current development estimates provided by the private developer in May 2021.

<b>Table 3. Biltmore Park West Development Estimate</b>	
<b>Land Use</b>	<b>Quantity (Unit)</b>
Residential	1,218 dwelling units
Retail/Office	178,000 square feet
Hotel	120 rooms
Public Service/Institutional	60,000 square feet
Industrial	460,000 square feet

The NC 191 corridor currently supports mixed uses including single-family neighborhoods, commercial and employment districts, and recreation uses. These land uses would likewise benefit from improved access to the interstate.

## Safety

The proposed interchange has the potential to provide shorter distances for truck traffic which originates and terminates at the P&W Manufacturing Center and adjacent land uses on NC 191 and generally introduces a scenario that would allow for greater separation of local traffic from interstate traffic. The presence of freight-trucks in the traffic mix will increase congestion and travel times, particularly in mountainous terrain, due to a variety of factors. Heightened congestion resulting in stop-start traffic flow pose greater safety hazards to motorists and it is expected the separation of truck traffic would benefit safety to some degree.

**Tables 4** and **5** (page 8) summarize available planning-level crash data compiled by NCDOT for the five-year period between 2015-2019. Available crash data indicate higher crash frequencies along I-26 and at the intersections and segments in proximity to the NC 191 and NC 146 interchanges. While I-26 widening and interchange improvements at NC 191 are expected to have safety benefits at these locations, they would not be expected to improve safety conditions further from the interchanges (e.g., NC 191/SR 3501). A new interchange has the potential to disperse traffic and provide a safer and more direct access point to I-26.

<b>Table 4. NCDOT 2015–2019 Total Crash Frequency by Intersection</b>	
<b>Intersection</b>	<b>Total Crash Frequency</b>
I-26 at NC 191	50 and above
SR 3428 (Rocky Ridge Rd) at NC 191*	20–29
Oak Terrace Dr at NC 191	10–19
NC 112 at NC 191	40–49
SR 3477 (Morris Rd) at NC 191	5–9
SR 3479 (Pole Creasman Rd) at NC 191	5–9
SR 3480 (Dry Ferry Rd [North]) at NC 191	10–19
Frederick Law Olmstead Way/BRP Access at NC 191**	5–9
SR 3501 (Clayton Rd) at NC 191	40–49
SR 3501 (Clayton Rd) at NC 146	10–19
SR 3498 (Ledbetter Rd) at NC 146	20–29
I-26 at NC 146	50 and above
Schenck Pkwy at NC 146	50 and above
*Intersection will be revised by I-4700	
**Intersection will be revised by Project Ranger/Biltmore Farms	

<b>Table 5. NCDOT 2015 – 2019 Section Safety Scores</b>	
<b>66–100<sup>+</sup></b>	
I-26 between NC 191 and NC 146*	NC 191 at Frederick Law Olmstead Way/BRP Access
NC 191 at [SR 3428 (Rocky Ridge Rd)]/I-26 EB on- and off-ramp	NC 191 at SR 3501 (Clayton Rd)
NC 191 at Oak Terrace Dr	SR 3501 (Clayton Rd) at NC 191
NC 191 at NC 112	NC 146 at SR 3501 (Clayton Rd)
NC 191 at SR 3477 (Morris Rd)	NC 146 at SR 3498 (Ledbetter Rd)
NC 191 at SR 3479 (Pole Creasman Rd)	NC 146 at Schenck Pkwy
<p>* This dataset contained crash data grouped by half mile roadway segments on State maintained roadways in North Carolina. Segments are assigned a score of 0-33, 33-66, and 66-100. Higher scores are considered to have poorer highway safety performance and are the only segments reported here. This data should be viewed as planning level data only.</p> <p>*This section will be widened by I-4700</p>	

## CP 2: Detailed Study Alternatives Carried Forward

The following alternatives do not meet the project's purpose and need and are recommended for elimination from further consideration:

No-Build Alternative - The No-Build Alternative would not provide any transportation improvements in the study area. Access to BPW would be limited to NC 191. The No-Build Alternative would not incur right of way or construction costs. There would be no impacts to streams, wetlands, or other natural and cultural resources. The No-Build Alternative would not improve access and connectivity, reduce travel times and distances, or improve safety within the project limits. While the No-Build Alternative is recommended for elimination, it provides a baseline for comparing the adverse impacts and benefits of the Build Alternatives and will be carried forward for that reason.

Mass Transit Alternative - The Mass Transit Alternative considered forms of transportation other than the single-occupancy passenger vehicle. Fixed route, regular service mass transit operated by Asheville Rides Transit (ART) is not available in the project area. ART Route W2 serves the NC 191 corridor between Downtown Asheville and NC 112 (Sardis Road)/Ridgefield Court. A lack of demand, low population density, diffused employment centers, and diversity of trip origins and destinations complicates mass transit effectiveness serving the project area and would not alone meet the project need. For these reasons, mass transit will not capture the requisite number of person trips to make this alternative a reasonable and feasible alternative.

Transportation Systems Management Alternative - Transportation System Management (TSM) Alternative improvements typically involve low-cost, minor transportation improvements to increase the capacity of an existing facility, and do not include reconstructing or adding additional through lanes. TSM improvements on NC 191 and/or I-26 in the study area, such as ramp termini modifications, acceleration/deceleration and/or turn lane lengths, and signing upgrades, would not noticeably reduce congestion nor would they improve access or connectivity. Therefore, the TSM Alternative would not meet the project's need and is not recommended as a detailed study alternative.

### Build Alternatives

To meet the purpose of the project and address the transportation needs, NCDOT proposes a new interchange and roadway extension as the baseline for build alternatives. NCDOT evaluated 15 possible designs at a conceptual level. These concept designs have a similar footprint and were narrowed based on the following engineering considerations and constraints:

#### *Interchange Configuration*

Modified diamond and diverging diamond interchange configurations were considered to minimize the interchange footprint and meet design requirements. The traffic operations of such configurations will continue to be refined to meet design standards, safety needs, and resource impact minimization.

#### *Westbound Ramp Location*

A left-exit scenario (in addition to a traditional right-exit scenario) was considered as an option to avoid impacts to the Biltmore Estate National Historic Landmark (NHL).

### *Interchange Location*

The location of the proposed interchange within the I-26 bifurcated section is constrained by the BRP bridge piers roughly ¼-mile to the south and the FBR bridge approximately ¾-mile to the north. Ramp length requirements and existing infrastructure associated with I-4700, including a soil-nail retaining wall south of the FBR along the eastbound I-26 travel lanes and concrete barrier wall between eastbound and westbound I-26 travel lanes, further constrain the interchange location to the north. The presence of the FEMA floodway and jurisdictional features southeast of the I-26 FBR bridge were also considered.

A central location within the bifurcated section is closer to the BRP and could cause greater impacts to the bifurcated section. This location avoids the FEMA floodway and jurisdictional features along the south (or west) bank of the FBR.

A northern location within the bifurcated section is closer to the FBR and further from the BRP. A left exit ramp would still be feasible at this location. This location could reduce the overall impact to the bifurcated section.

### *Roadway Tie*

NCDOT explored three roadway tie alignment concepts between the interchange ramp terminals and Frederick Law Olmstead Way East under construction by the private developer: a direct approach, a contour approach, and an “upgrade” approach. The contour approach laid out an alignment conforming to the natural topography in an effort to reduce cut and fill activity; however, it was determined a strict contour approach will not meet horizontal alignment design requirements.

The upgrade approach evaluated at a high-level the potential to reuse some of the gravel roads that traverse the property. These gravel roads were reportedly built by NCDOT in the 1950s to reestablish connections to the Biltmore property that would be severed by construction of I-26. These gravel roads are variable in width (up to 30 feet wide) and do not meet current geometric design standards. It was determined that a strict upgrade approach will not meet horizontal alignment design requirements. Further, these old roads are generally close to potentially jurisdictional streams.

Based on the engineering constraints and requirements of the considerations above, NCDOT proposes the following build alternatives be carried forward for detailed study (**Table 6**, page 11); a No Build Alternative would also be retained to provide the baseline against which to measure potential benefits and impacts. These three proposed build alternatives represent two interchange locations and three interchange configurations. The left-exit option is retained at both locations; however, based on a conceptual-level screening a right exit (i.e., traditional interchange configuration) at the north end of the I-26 bifurcated section is not recommended due to impacts to the FEMA regulated floodway, associated floodplains, and known wetland resources.

The NCDOT will consider traffic operations in the final recommendation for the interchange ramp terminal treatment(s). A 2- to 4-lane connecting roadway section is being considered; NCDOT anticipates making this decision prior to the meeting. Avoidance and minimization measures will continue to be evaluated throughout design development and in consultation with the Merger Team.

**Table 7** (page 11) compares the potential impacts to known environmental features for each interchange alternative, including the four-lane roadway tie. Potential impacts are calculated based on conceptual design slope stake limits plus 40 feet to cover potential utility and erosion control footprints.

<b>Build Alternative</b>	<b>Description</b>	<b>Figures</b>
<b>Alternative 1</b>	<ul style="list-style-type: none"> <li>• left exit/entrance ramp</li> <li>• Diamond configuration</li> <li>• center of the I-26 bifurcated section</li> </ul>	3 & 4
<b>Alternative 2</b>	<ul style="list-style-type: none"> <li>• right-exit/entrance ramp</li> <li>• Diverging diamond (DDI) configuration</li> <li>• center of the I-26 bifurcated section</li> </ul>	5 & 6
<b>Alternative 3</b>	<ul style="list-style-type: none"> <li>• left exit/entrance ramp</li> <li>• Diamond configuration</li> <li>• North end of the I-26 bifurcated section</li> </ul>	7 & 8

		<b>Alternative 1</b>	<b>Alternative 2</b>	<b>Alternative 3</b>
Surface Water	<i>Stream length (ft) – I-4700</i>	1,900	2,100	900
	<i>Stream length (ft) – ATLAS</i>	700	800	1,100
	<b>Stream Total (ft)</b>	<b>2,600</b>	<b>2,900</b>	<b>2,000</b>
	<i>Wetland (acre) – I-4700</i>	0.2	0.2	0.1
	<i>Wetland (acre) – ATLAS/NWI</i>	0	0	0.1
	<b>Wetland Total (acre)</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
FEMA	100-yr Floodplain (acre)	< 0.1	0.2	0
	500-yr Floodplain (acre)	< 0.1	0.4	0
	Floodway (acre)	0	0	0
Cultural Resource	Biltmore Estate NHL (acre)	0	6.8	0

## Sources

Buncombe County, Incentive Agreement, Pratt and Whitney, a Division of Raytheon Technologies Corporation and Buncombe County, North Carolina, Dec. 9, 2020.

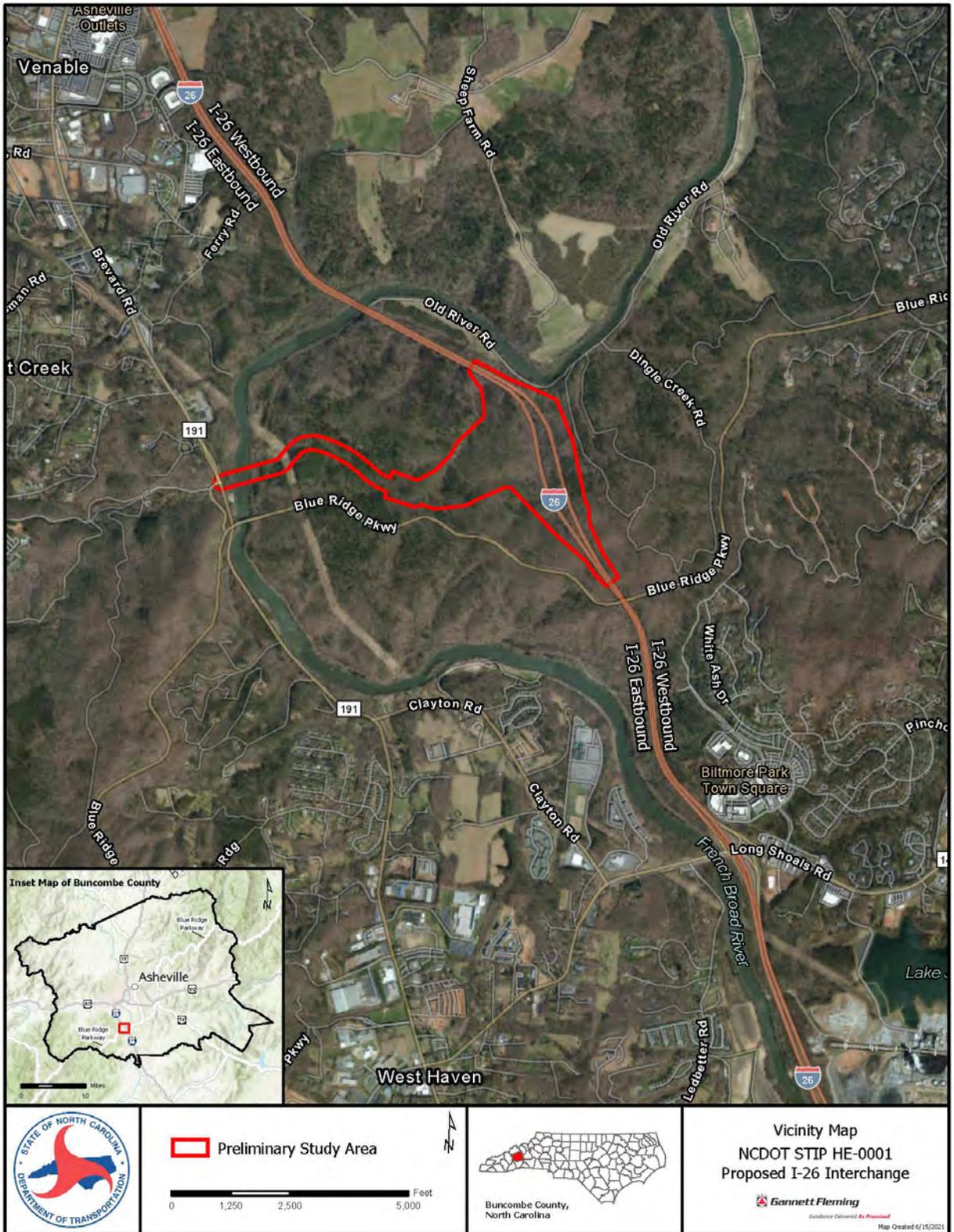
---, Resolution Authorizing Buncombe County to Pay Economic Development Incentives and to Sign Economic Development Agreement (Resolution #20-11-16), Nov. 17, 2020.

City of Asheville, "Transit maps and schedules". Accessed online June 9, 2021 at [www.ashevollenc.gov/service/transit-maps-schedules/](http://www.ashevollenc.gov/service/transit-maps-schedules/)

NCDOT Annual Average Daily Traffic (AADT) Mapping Application, [ncdot.maps.arcgis.com/apps/webappviewer/index.html?id=5f6fe58c1d90482ab9107ccc03026280](http://ncdot.maps.arcgis.com/apps/webappviewer/index.html?id=5f6fe58c1d90482ab9107ccc03026280)

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---, Total Crash Frequency by Intersection Mapping Application, [ncdot.maps.arcgis.com/home/webmap/viewer.html?webmap=dc944f1c834f49a18479c17df1f783b9](http://ncdot.maps.arcgis.com/home/webmap/viewer.html?webmap=dc944f1c834f49a18479c17df1f783b9)



**FIGURE 1. VICINITY MAP**

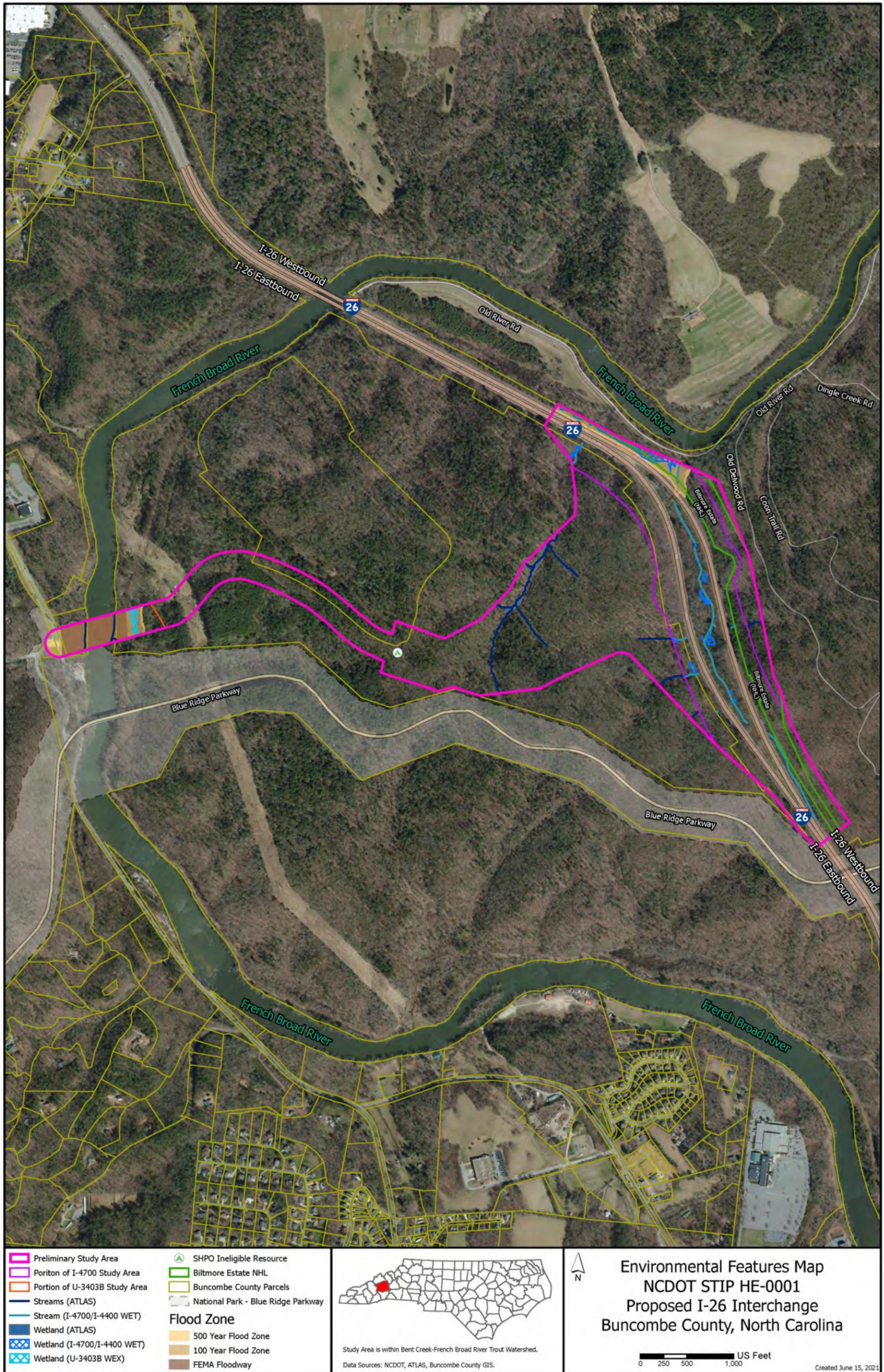


FIGURE 2. STUDY AREA AND ENVIRONMENTAL FEATURES MAP

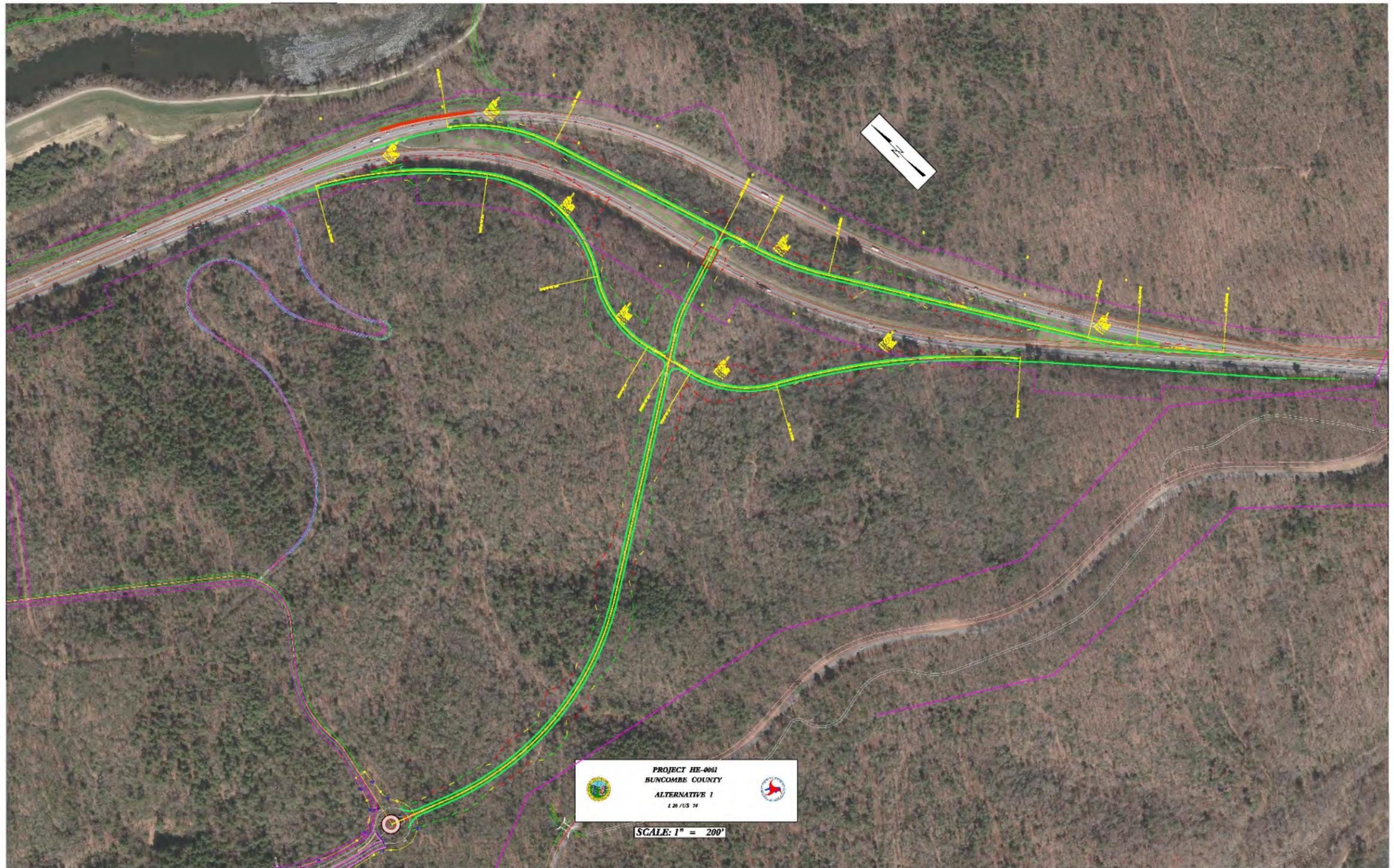


FIGURE 3. PROPOSED BUILD ALTERNATIVE 1

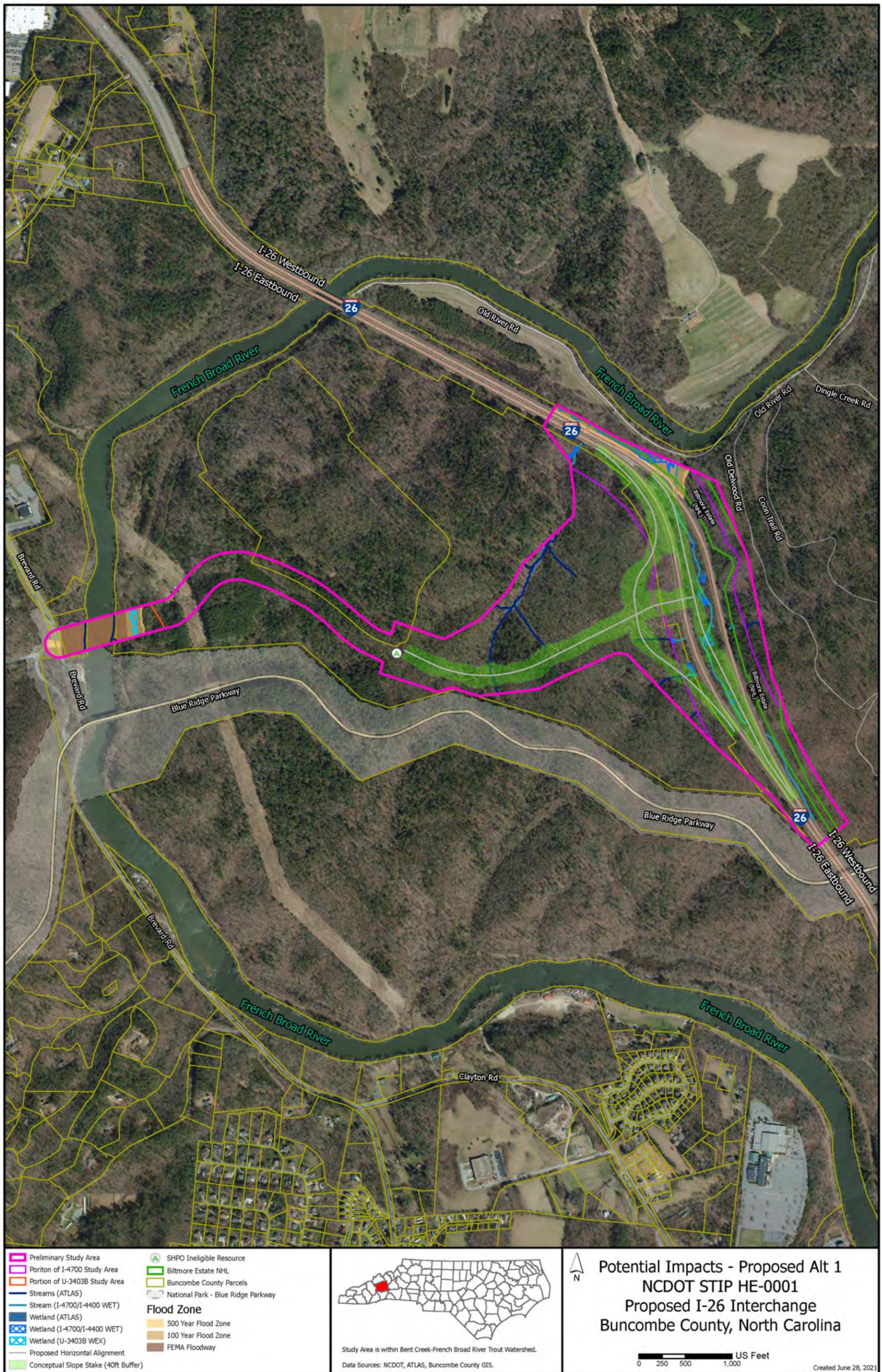


FIGURE 4. POTENTIAL IMPACTS, PROPOSED BUILD ALTERNATIVE 1

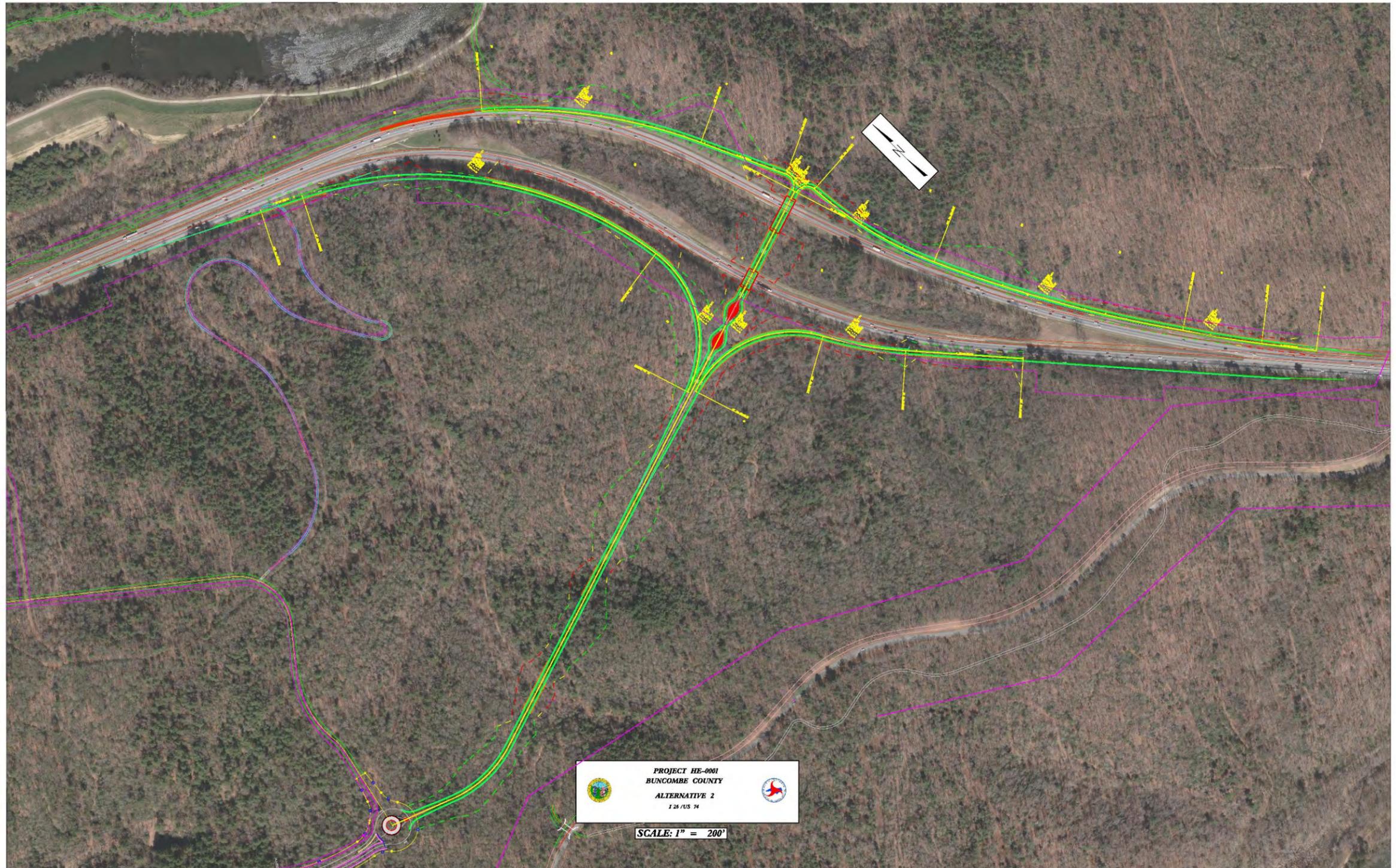


FIGURE 5. PROPOSED BUILD ALTERNATIVE 2

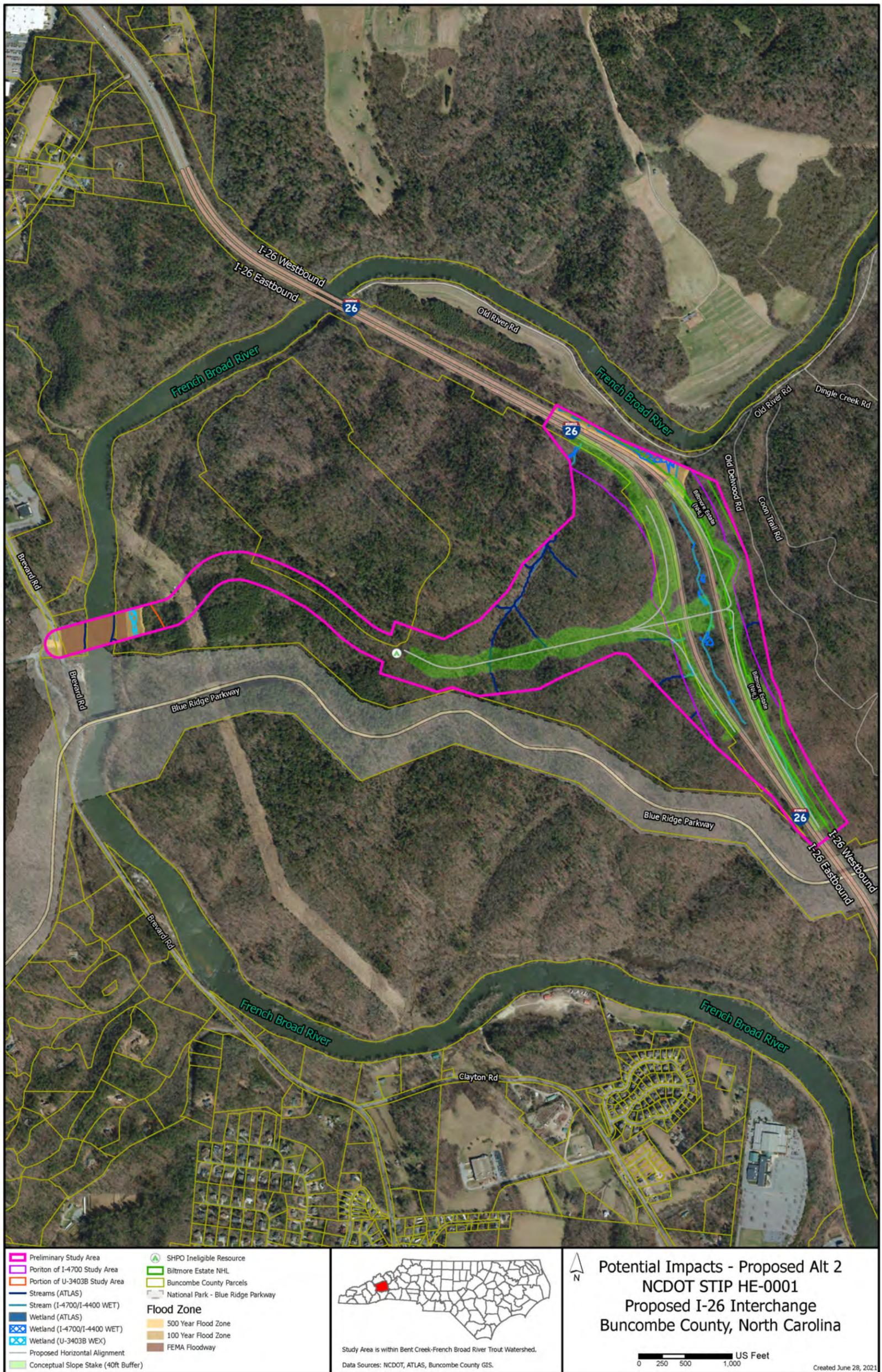


FIGURE 6. POTENTIAL IMPACTS, PROPOSED BUILD ALTERNATIVE 2

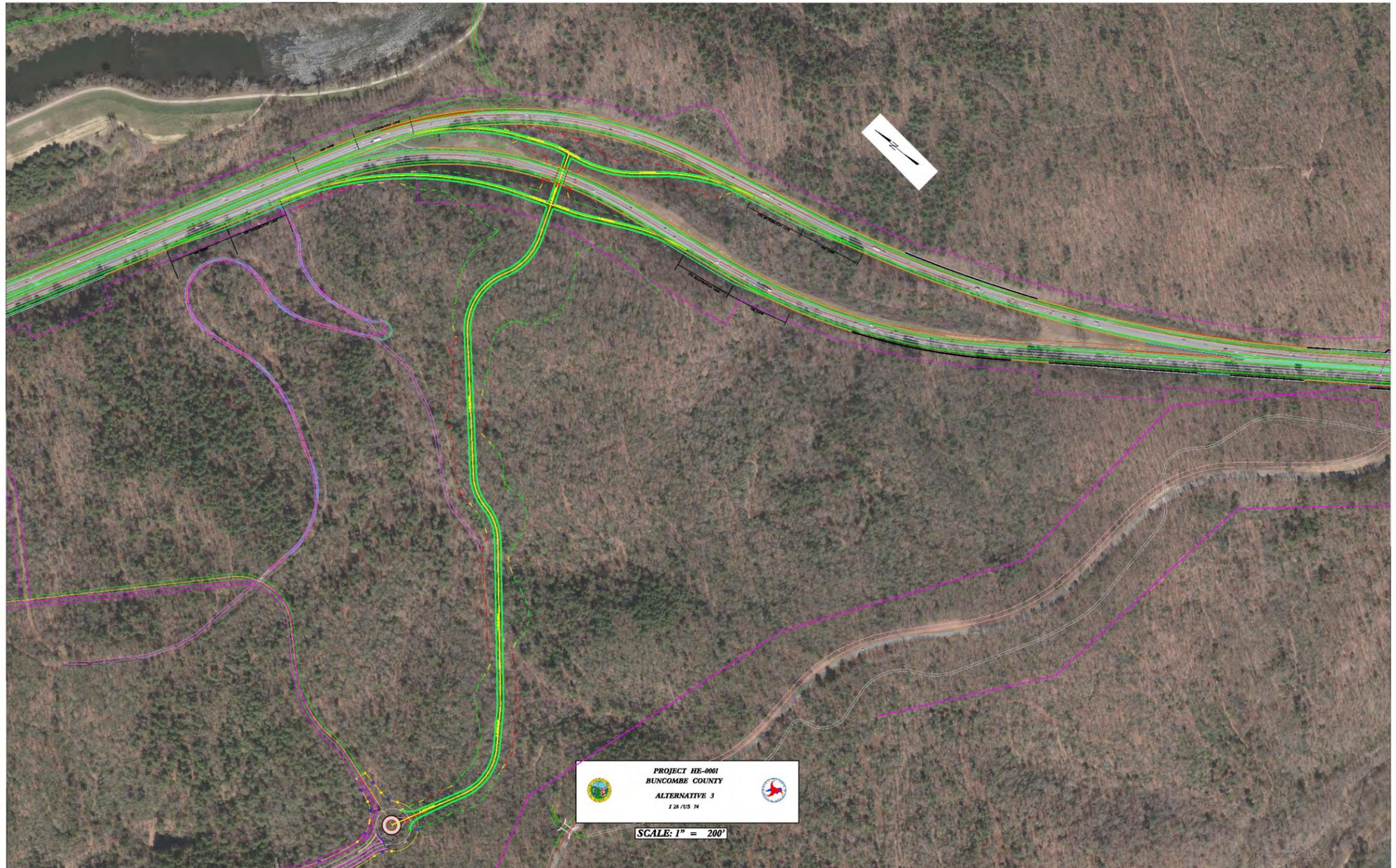


FIGURE 7. PROPOSED BUILD ALTERNATIVE 3

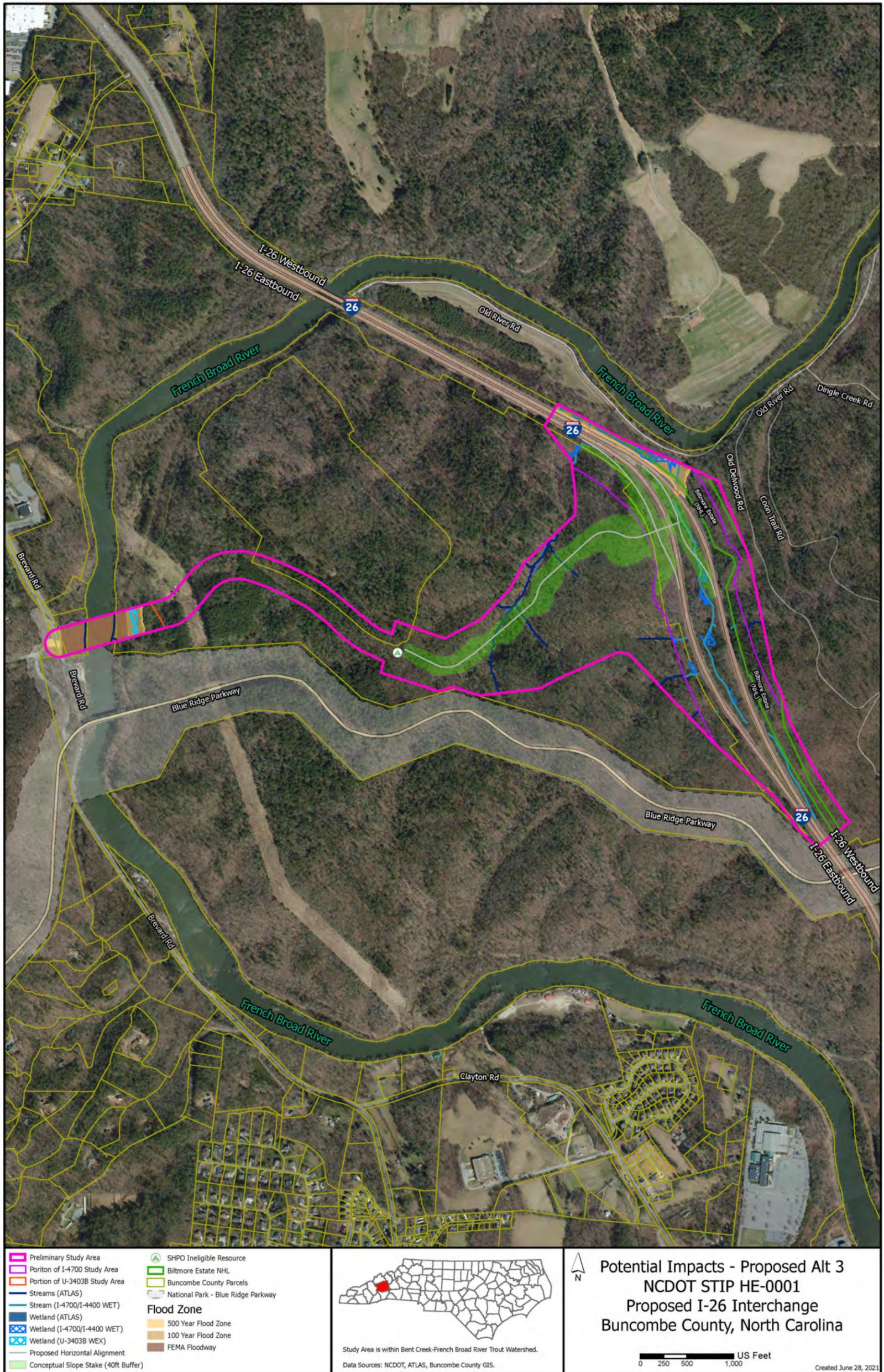


FIGURE 8. POTENTIAL IMPACTS, PROPOSED BUILD ALTERNATIVE 3

**Section 404/NEPA Merger Project Team Meeting Agreement**

**Concurrence Point 1**

**Study Area Defined and Project Need and Purpose**

Project Name/Description: I-26, New Interchange (Future Exit 35), Buncombe County

STIP Project: HE-0001

The proposed project is needed to address the lack of network connectivity between NC 191 and I-26 in southern Buncombe County to accommodate current and planned growth.

The purpose of the project is to provide access to I-26 and improve east-west connectivity within the project vicinity to accommodate current and planned growth.

The Project Team has concurred on this date, **July 15, 2021**, on the above project need and purpose and the study area defined (**Figure 2**) for STIP Project HE-0001.

USACE \_\_\_\_\_

FHWA \_\_\_\_\_

NCDOT \_\_\_\_\_

NCDWR \_\_\_\_\_

USEPA \_\_\_\_\_

SHPO \_\_\_\_\_

USFWS \_\_\_\_\_

FBRMPO \_\_\_\_\_

NCWRC \_\_\_\_\_

**Section 404/NEPA Merger Project Team Meeting Agreement**

**Concurrence Point 2**

**Detailed Study Alternatives Carried Forward**

Project Name/Description: I-26, New Interchange (Future Exit 35), Buncombe County

STIP Project: HE-0001

The Project Team has concurred on this date, **July 15, 2021**, that all checked alternatives will be carried forward to be studied in detail for STIP Project HE-0001.

If the traffic forecast shows that only two lanes are required for the roadway tie, Concurrence Point 2 will be revisited.

<b>DSA Carried Forward (Y/N)</b>	<b>DSA</b>	<b>Description</b>	<b>Figures</b>
	<b>No Build</b>	The No-Build Alternative does not meet the project's need and purpose but will be retained to provide a basis for comparing adverse impacts and benefits of the detailed study alternatives.	NA
	<b>Build Alternative 1</b>	Modified diamond interchange configuration located in the center of the I-26 bifurcated section and includes a left exit/entrance ramp.	3 & 4
	<b>Build Alternative 2</b>	Diverging diamond interchange (DDI) configuration located in the center of the I-26 bifurcated section and includes a right exit/entrance ramp.	5 & 6
	<b>Build Alternative 3</b>	Tight diamond interchange configuration located at north end of the I-26 bifurcated section and includes a left exit/entrance ramp.	7 & 8

USACE \_\_\_\_\_

FHWA \_\_\_\_\_

NCDOT \_\_\_\_\_

NCDWR \_\_\_\_\_

USEPA \_\_\_\_\_

SHPO \_\_\_\_\_

USFWS \_\_\_\_\_

FBRMPO \_\_\_\_\_

NCWRC \_\_\_\_\_

# CONCURRENCE POINTS 1 AND 2

I-26 Interchange (Future Exit 35)

Buncombe County

STIP Project HE-0001

WBS No. TBD

## ATTACHMENT 1

External Scoping Meeting Summary and External Scoping  
Meeting Packet



Excellence Delivered **As Promised**

Project: HE-0001, New Interchange with I-26  
Project No.: 064926.050  
Subject: External Scoping Meeting Summary  
Date: June 16, 2021 8:30 am  
Location: Remote (GoTo Meeting)

Attendees:

Name	Representing	Email
McCray Coates	NCDOT-Division 13	<a href="mailto:hmcoates@ncdot.gov">hmcoates@ncdot.gov</a>
Mark Gibbs	NCDOT-Division 13	<a href="mailto:mgibbs@ncdot.gov">mgibbs@ncdot.gov</a>
Roger Bryan	NCDOT-Division 13	<a href="mailto:rdbryan@ncdot.gov">rdbryan@ncdot.gov</a>
Derrick Weaver	NCDOT-EPU	<a href="mailto:dweaver@ncdot.gov">dweaver@ncdot.gov</a>
John Jamison	NCDOT-EPU	<a href="mailto:johnjamison@ncdot.gov">johnjamison@ncdot.gov</a>
Mike Sanderson	NCDOT-EPU	<a href="mailto:jmsanderson@ncdot.gov">jmsanderson@ncdot.gov</a>
Marissa Cox	NCDOT-Biological Surveys	<a href="mailto:mrcox@ncdot.gov">mrcox@ncdot.gov</a>
Cheryl Knepp	NCDOT-Biological Surveys	<a href="mailto:clknepp@ncdot.gov">clknepp@ncdot.gov</a>
Tyler Stanton	NCDOT-Biological Surveys	<a href="mailto:tstanton@ncdot.gov">tstanton@ncdot.gov</a>
Donnie Brew	FHWA	<a href="mailto:Donnie.Brew@dot.gov">Donnie.Brew@dot.gov</a>
Joe Geigle	FHWA	<a href="mailto:Joseph.Geigle@dot.gov">Joseph.Geigle@dot.gov</a>
Lori Beckwith	USACE	<a href="mailto:Loretta.A.Beckwith@usace.army.mil">Loretta.A.Beckwith@usace.army.mil</a>
Kevin Mitchell	NCDWR	<a href="mailto:Kevin.Mitchell@ncdenr.gov">Kevin.Mitchell@ncdenr.gov</a>
Amanetta Somerville	USEPA	<a href="mailto:Somerville.Amanetta@epa.gov">Somerville.Amanetta@epa.gov</a>
Holland Youngman	USFWS	<a href="mailto:Holland.Youngman@fws.gov">Holland.Youngman@fws.gov</a>
Lauren Wilson	USFWS	<a href="mailto:lauren_wilson@fws.gov">lauren_wilson@fws.gov</a>
Marla Chambers	NCWRC	<a href="mailto:Marla.Chambers@ncwildlife.org">Marla.Chambers@ncwildlife.org</a>
Tristan Winkler	FBRMPO	<a href="mailto:tristan@landofsky.org">tristan@landofsky.org</a>
John Ridout	FBRMPO	<a href="mailto:john@landofsky.org">john@landofsky.org</a>
Heather Wallace	NV5	<a href="mailto:Heather.Wallace@nv5.com">Heather.Wallace@nv5.com</a>
Rick Tipton	Gannett Fleming	<a href="mailto:rtipton@gfnet.com">rtipton@gfnet.com</a>
Adam Archual	Gannett Fleming	<a href="mailto:aarchual@gfnet.com">aarchual@gfnet.com</a>
John Thomas	Gannett Fleming	<a href="mailto:jthomas@gfnet.com">jthomas@gfnet.com</a>

This project proposes to construct a new interchange (future Exit 35) with I-26 and connecting roadway to access the Pratt & Whitney (P&W) Manufacturing Center currently under construction. The project is located approximately 6 miles south of Asheville in Buncombe

Gannett Fleming, Inc.

Suite 900 • One Glenwood Avenue • Raleigh, NC 27603  
t: 919.420.7660 • f: 919.999.3632  
[www.gannettfleming.com](http://www.gannettfleming.com)

County. NCDOT-Division 13 is managing the project and anticipates federal funding. The Division is targeting an October 2022 construction let date.

The intent of this meeting was to provide information about the proposed project to the state and federal resource agency partners and collect feedback and direction in the development of the project. The PowerPoint Presentation is attached to this summary and the meeting packet may be accessed via the NCDOT [file transfer site](#). The following topics were discussed at the meeting:

- Jurisdictional Resources
  - o NCDOT will spot check approved delineations completed for I-4700 and U-3403B while delineating the remainder of the study area. Full delineation within the previously surveyed areas is not required but delineations should be field checked.
    - The Project Ranger delineation expires in October of 2021 and will not be relied on by this project.
  - o NCDOT should plan on a field verification with the USACE and NCDWR; that should be expected later this summer.
  - o The JD submittal should explain the history and status of the intersecting JDs, their status, and results of spot checks; these features should also be provided in the mapping.
- Agency Input/Comments
  - o USACE
    - Due to conflicting resources and the unique situation of this project overlapping the I-4700 project currently under construction, the USACE agrees with the decision to proceed in the Merger process.
    - Requested that the project purpose statement does not offer a solution to the project need statement (available in the External Scoping Meeting packet).
  - o NCDWR
    - Agreed with decision to proceed in the Merger process.
    - In review of the 2016 Project Ranger JD, noted the presence of several pocket, headwater wetlands adjacent to first order tributaries to the French Broad River.
    - The streams and habitat are in good condition based on past observations.
    - Avoidance and minimization will be important.

- A good stormwater management plan is necessary associated with concerns for downstream aquatic habitat for endangered Appalachian elktoe (*Alasmidonta raveneliana*) in the French Broad River.
- USFWS
  - Agreed with plan to observe/incorporate/consider the conservation measures and commitments NCDOT made for the I-4700 project and Project Ranger (FWS log # 19-328).
  - Recommend consider tree clearing in the winter in regard for concerns with the threatened Northern long-eared bat (*Myotis septentrionalis*), soon after the proposed October 2022 construction let date.
- USEPA
  - Requested additional detail on the annual average daily traffic (AADT) in future discussions to support this project would not adversely affect I-4700.
  - Will the French Broad River bridge currently under construction by the private developer accommodate future traffic needs?
    - The private developer is constructing the bridge with five lanes and the roadway is being constructed with two-lanes but has been cleared and graded for four-lanes.
- NCWRC
  - Agrees with Merger decision.
  - Will review the U-3403B and I-4700 WRC letters and resend to the appropriate members of this group.
  - Will be looking for proper passage of fish and wildlife.
  - Will also need to plan to treat stormwater to prevent degradation of the French Broad River.
- FBRMPO
  - Working on amending the MTP with target of this month but reserving the option to hold amendments until August if additional conversation is warranted.
  - Some concerns have been voiced by the TCC about this project and its impacts to funding availability for other planned transportation projects in the MTP.
  - It was noted that land-use modeling and socioeconomic data for this TAZ is a high-growth area. This was coded before the proposed project was conceived.
- SHPO (not present)

- In the absence of SHPO, the team was informed that coordination has begun with Mary Pope Furr and Matt Wilkerson and these studies are underway.
- General Conversation
  - Need and Purpose
    - USACE suggested holding a CP 1-2 pre-meeting with the MOU signatories and noted that the “direct access” in the preliminary purpose statement would have to be taken under consideration internally.
  - Merger
    - The new Merger procedure has not been finalized yet, but some of the ideas in that procedure update may be applied to this project with the team’s approval.
    - USACE stated that information about the impacts of this project on the I-26 LOS will be necessary prior to a CP 3/LEDPA decision.
      - FHWA clarified that they cannot approve the IAR (Interchange Access Report), and ultimately the project, if it results in significant adverse effect on the interstate. However, it is possible that an LOS less than service level D could be considered not adverse.
      - It was noted that the I-4700 traffic analysis uses a 2040 design year, whereas this project is a 2045 design year.
  - Study Area
    - A reduced study area was presented to the team.
      - USEPA asked whether the reduction would limit design options under consideration.
      - NCDOT noted that the reduction was based on evaluation of design factors and environmental factors. The northern section of the larger study area present conflicts with the French Broad River FEMA floodplains and jurisdictional wetlands identified in environmental studies for I-4700. Also, topography west of a blue-line stream bisecting the parcel west of I-26 presented design concerns that would be lessened by alternatives to the east of the stream.
        - USACE replied that alternatives and/or associated study area limits should not be discarded without agencies review and comment.

- NCDOT noted that reducing the study area made sense because it would reduce the time and effort associated with field data collection (e.g., archaeology) in areas that we would not expect to build in.
- USEPA requested that this explanation be documented.

This concludes the summary of the discussions held during the HE-0001 External Scoping Meeting to the best of my recollection.

Adam Archual  
June 17, 2021



# **NORTH CAROLINA**

Department of Transportation



# External Scoping Meeting

STIP Project HE-0001

June 16, 2021

# AGENDA

- Introductions
- Meeting purpose and goals
- Project description and history
- Existing conditions
- Project scoping/agency input
- Preliminary need and purpose
- Interchange concepts
- Next steps/schedule

# INTRODUCTIONS

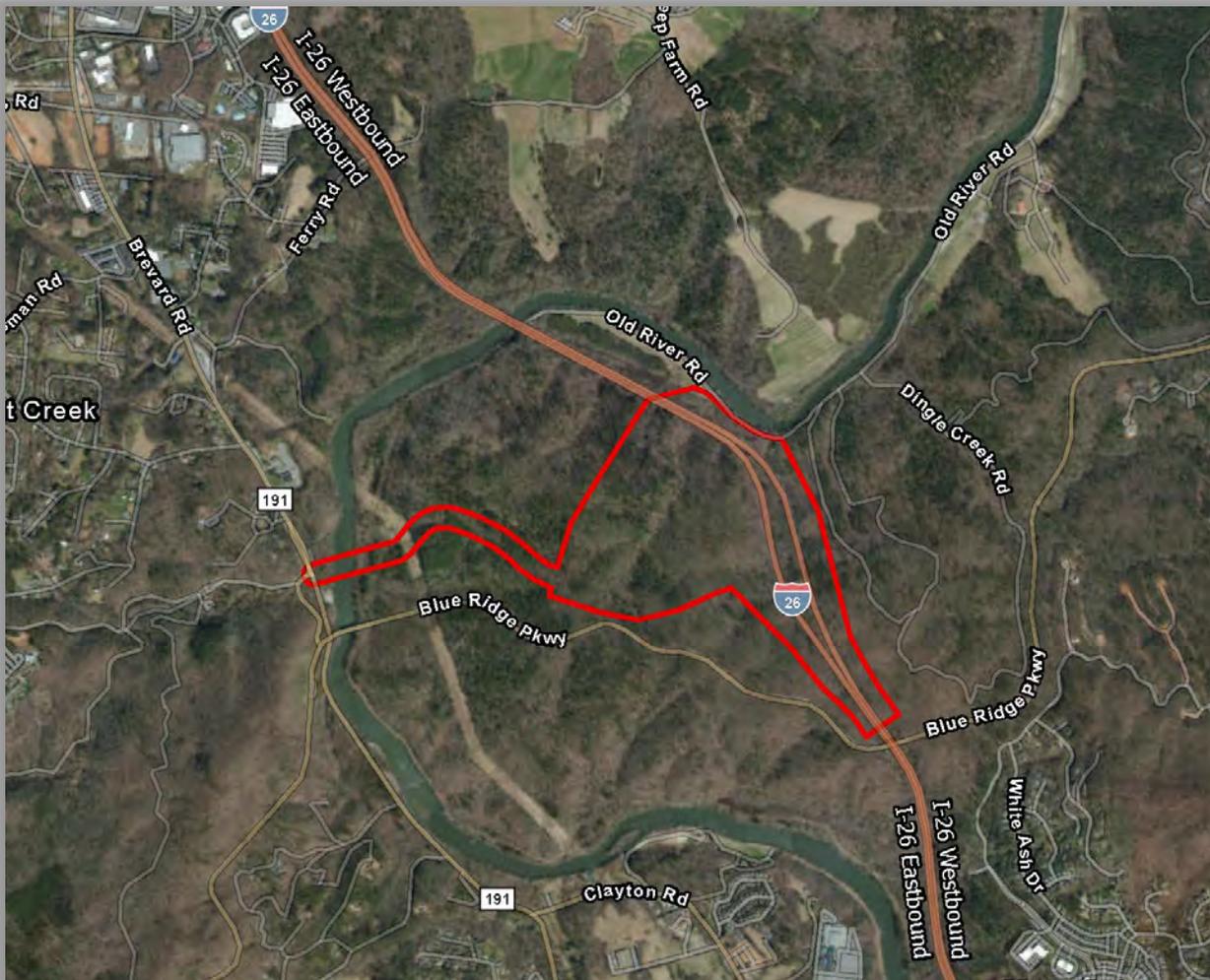
- NCDOT
- Federal Highway Administration
- US Army Corps of Engineers
- NC DEQ – Division of Water Resources
- US Fish and Wildlife Service
- Environmental Protection Agency
- NC Wildlife Resources Commission
- NC State Historic Preservation Office
- FBRMPO
- Consultants



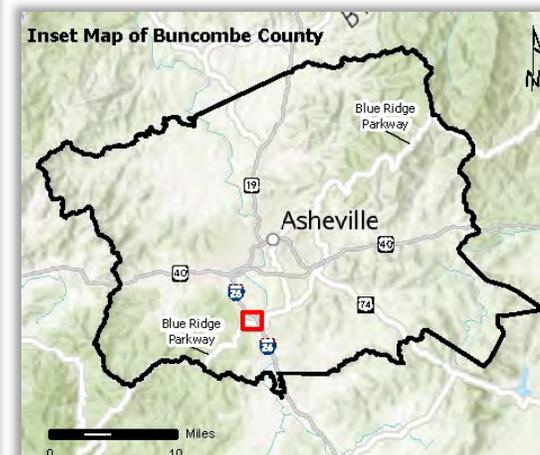
# MEETING PURPOSE & GOALS

- Transfer information about project to agencies and external partners
- Understand project background
- Identify constraints
- Strategize next steps
  - FHWA and NCDOT will proceed in Merger

# PROJECT LOCATION



- Approx. 6 mi south of Asheville
- North of Blue Ridge Parkway, south of French Broad River



# PROJECT DESCRIPTION

2-lane roadway  
(w/roundabout)  
currently under  
construction.  
Note: graded for  
ultimate 4-lane

5-lane bridge  
currently under  
construction



# PROJECT DESCRIPTION

- Construct new interchange on I-26 (future Exit 35)
- Construct approx. 1/2-mile new location roadway extension

# PROJECT CONTEXT

- 2016 – Biltmore Farms, Inc. secures preliminary JD (SAW-2016-01112)
- 2019 – USFWS issues final BO for the NCDOT Project I-4400/I-4700
- 2019 – NCDOT Project I-4400/I-4700 FEIS/ROD signed
- 2020 – USACE receives SHPO determination (ER 19-4972) (“Project Ranger”)
- 2020 – USACE issues NWP 14 and 25 French Broad River bridge to access Project Ranger (SAW-2019-01867)
- 2020 – USFWS issues a BO (FWS Log # 19-328) for Project Ranger
- 2020 – Pratt & Whitney announces 1 million sf advanced manufacturing center on 100-acre site
- 2020 – Buncombe County resolution

# ACTIVITIES TO DATE

Submit project for funding	January 2021
Concept alternatives development	March 2021
Begin Traffic Forecast	April 2021
Crash Analysis Request	May 2021
ETRACS (Cultural Resources)	May 2021
Internal Scoping Meeting	May 2021
Merger decision	May 2021
Begin T&E surveys	June 2021

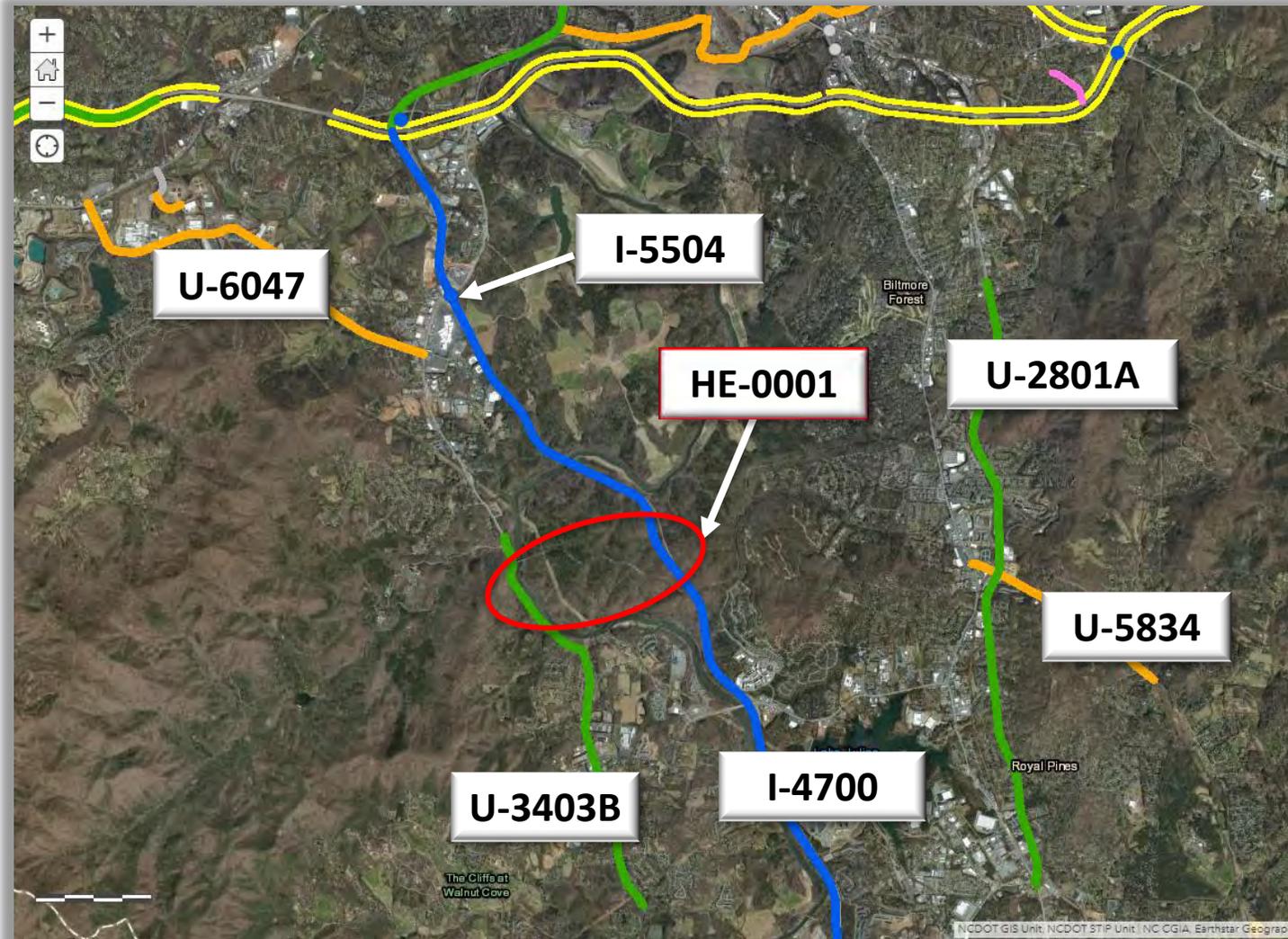
## ON-GOING AND FUTURE ACTIVITIES

- Finalize Scoping Report (June/July 2021)
- Concurrence Points 1 & 2 (July 2021)
- Project-specific Travel Demand Model (July 2021)
- HE-0001 added to STIP (July 2021)
- Technical studies (Summer-Fall 2021)

# PROJECT FUNDING SCHEDULE

- Categorical Exclusion: FY 2022
- Right of Way: FY 2022
- Construction: FY 2023 (let October 2022)

# NEARBY STIP PROJECTS

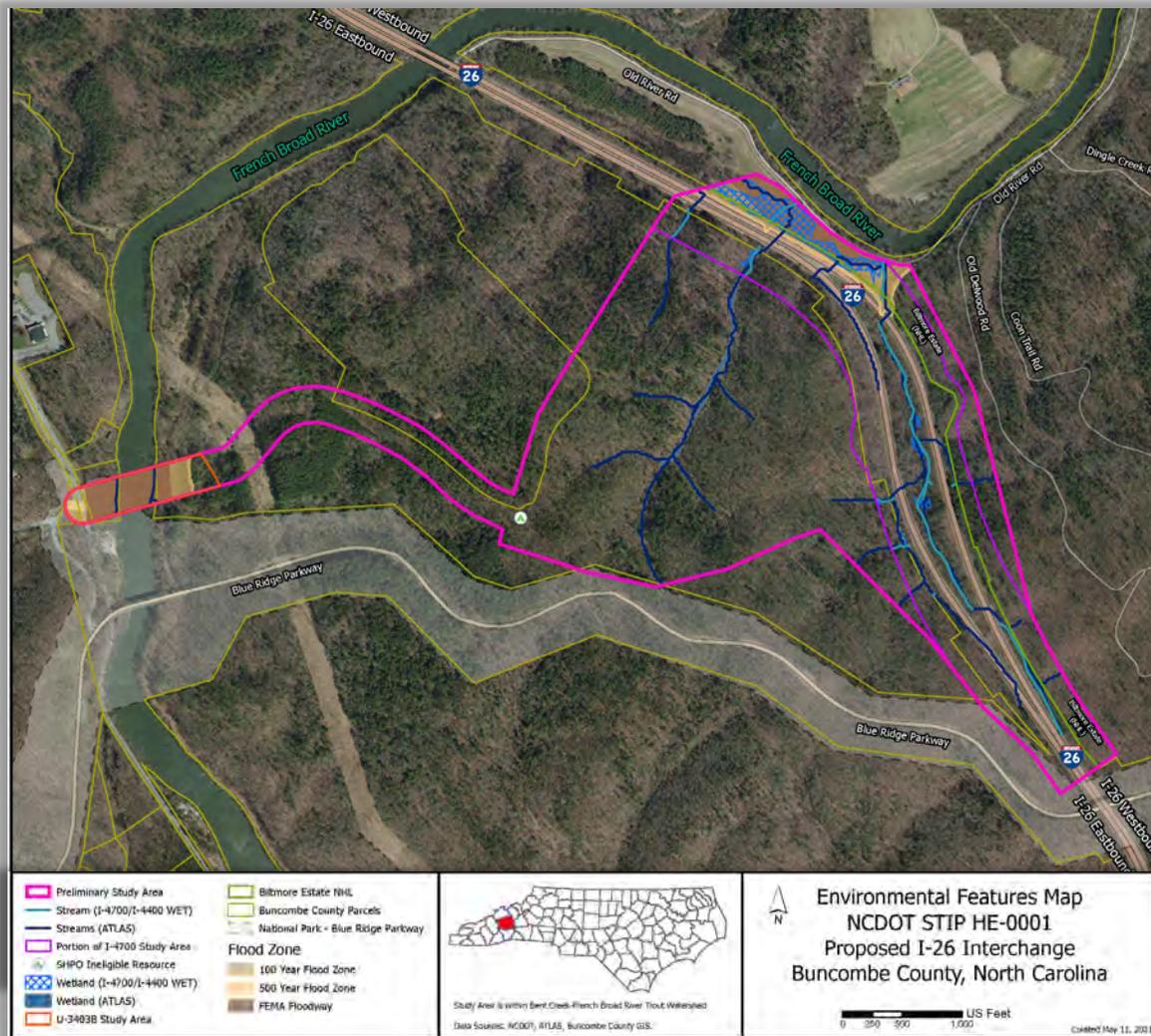


STIP Project No.	Schedule (FY)
I-4700	<i>Under Construction</i>
I-5504	<i>Under Construction</i>
U-2801A	RW 2024   CST 2027
U-3403B	RW 2029   CST Post Year
U-5834	RW <i>In progress</i>   CST 2024
U-6047	RW 2025   CST 2028
HO-0002	Unknown
HO-0002A	Unknown

# EXISTING CONDITIONS

	Interchange		Tie-in	
	Existing	Proposed	Existing	Proposed
<b>Right of Way</b>	Varies, 270-830 ft on I-26	TBD	N/A	TBD
<b>Type of Access Control</b>	N/A	Full control		No control
<b>Roadway Typical Section</b>	N/A	1-2 lane		2-4 lane
<b>Speed</b>	70 mph on I-26			40 mph
<b>Length of Project</b>	Approx. ½- to 1-mile			
<b>Bridge/Culvert Inventory</b>	Buncombe Bridge Nos. 100214 (I-26 EBL) and 100211 (I-26 WBL) over French Broad River; Buncombe Bridge No. 100205 (Blue Ridge Parkway over I-26); Project Ranger Bridge over French Broad River ( <i>under construction</i> )			
<b>Functional Classification</b>	Interstate			
<b>Strategic Transportation Corridor Information</b>	Corridor C (I-26/US 23)			

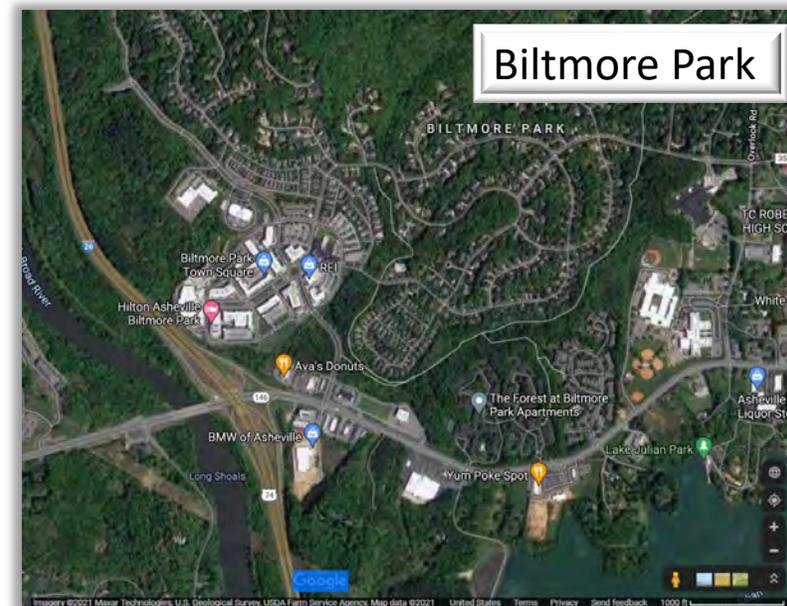
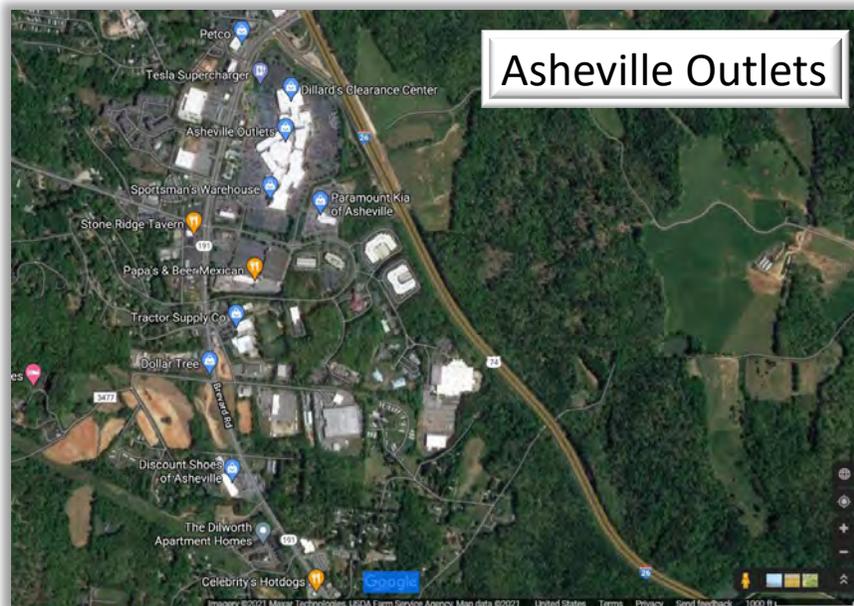
# ENVIRONMENTAL FEATURES



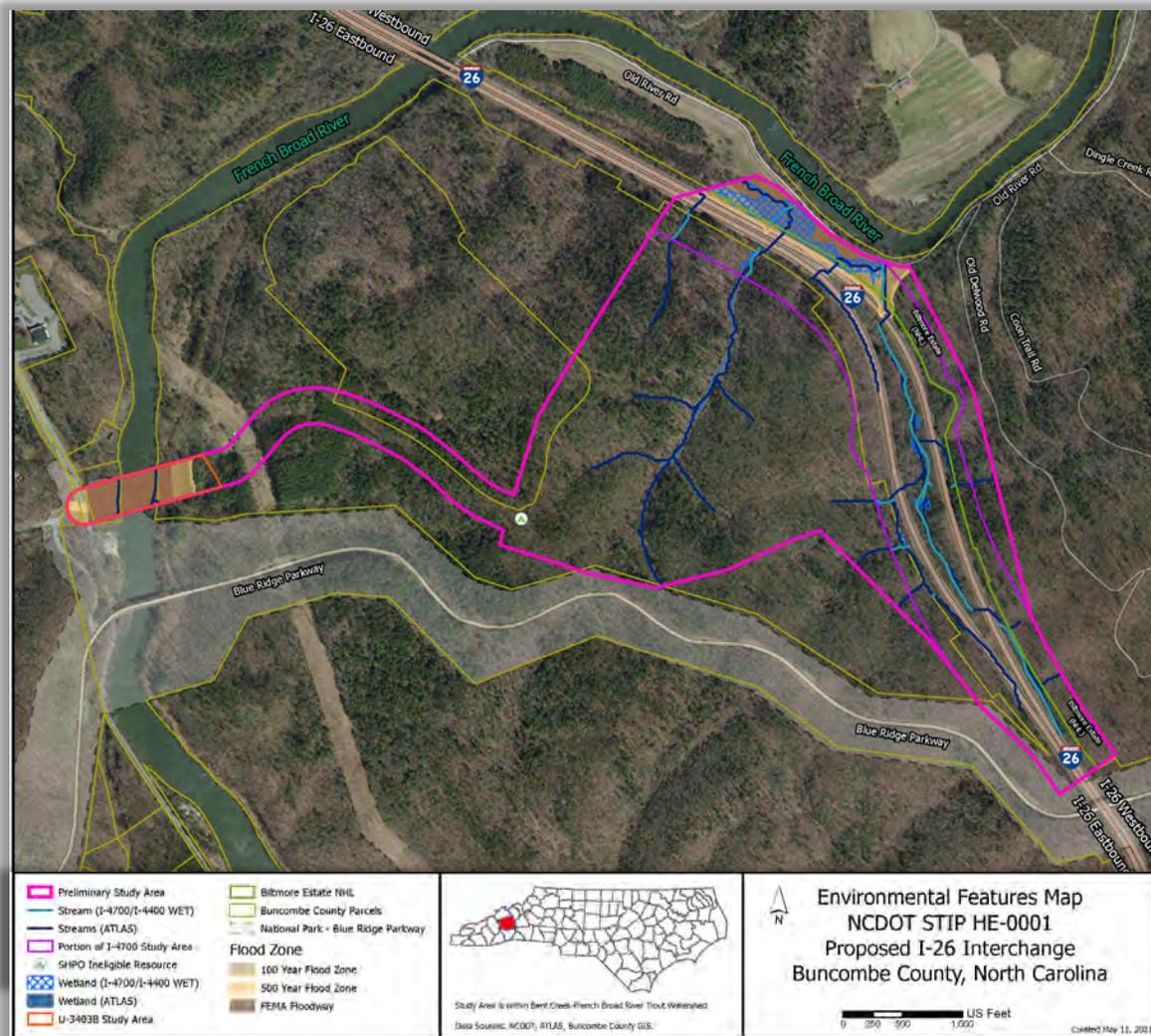
- Human Environment
  - Section 106/Section 4(f) resources
- Natural Environment
  - Jurisdictional resources
  - FEMA resources
  - T&E species

# HUMAN ENVIRONMENT

- Biltmore Park West under development
- Commercial/office and residential subdivisions at adjacent interchanges



# NATURAL ENVIRONMENT



- 11 streams and French Broad River
  - 7 streams (within I-4700 study area)
  - 4 other streams (ATLAS)
- Approx. 11 acres wetlands
  - Approx. 10 acres (within I-4700 study area)
  - Approx. 1 acre (ATLAS; NWI)
- FEMA floodway, floodplain

# NATURAL ENVIRONMENT

- T&E species
  - 8 threatened
  - 1 threatened/similar in appearance, and
  - 3 endangered species

Species	Status
Carolina northern flying squirrel	E
Gray bat	E
Northern long-eared bat	T
Bog turtle	T/A
Appalachian elktoe	E
Blue Ridge goldenrod	T
Mountain sweet pitcher plant	E
Spreading avens	E
Virginia spiraea	T
Rock gnome lichen	E

# INTERNAL SCOPING NOTES

- NCDOT-EAU
  - U-3403B
  - Plan for Individual Permit
    - Merger applicability
  - Observe environmental commitments attached to I-4700
    - Clearing restrictions
    - Erosion control measures
    - Consider interchange lighting
  - BRP/NPS involvement will affect species surveys
- Biltmore Estate (NHL) – Section 4(f) and Section 106
- FBRMPO
  - Working to amend MTP
  - Buncombe County Bent Creek Greenway Corridor

# INDIVIDUAL AGENCY INPUT

- Federal Highway Administration
- US Army Corps of Engineers
- NC DEQ–Division of Water Resources
- US Fish and Wildlife Service
- Environmental Protection Agency
- NC Wildlife Resources Commission
- NC State Historic Preservation Office
- FBRMPO

# PRELIMINARY PROJECT NEED & PURPOSE

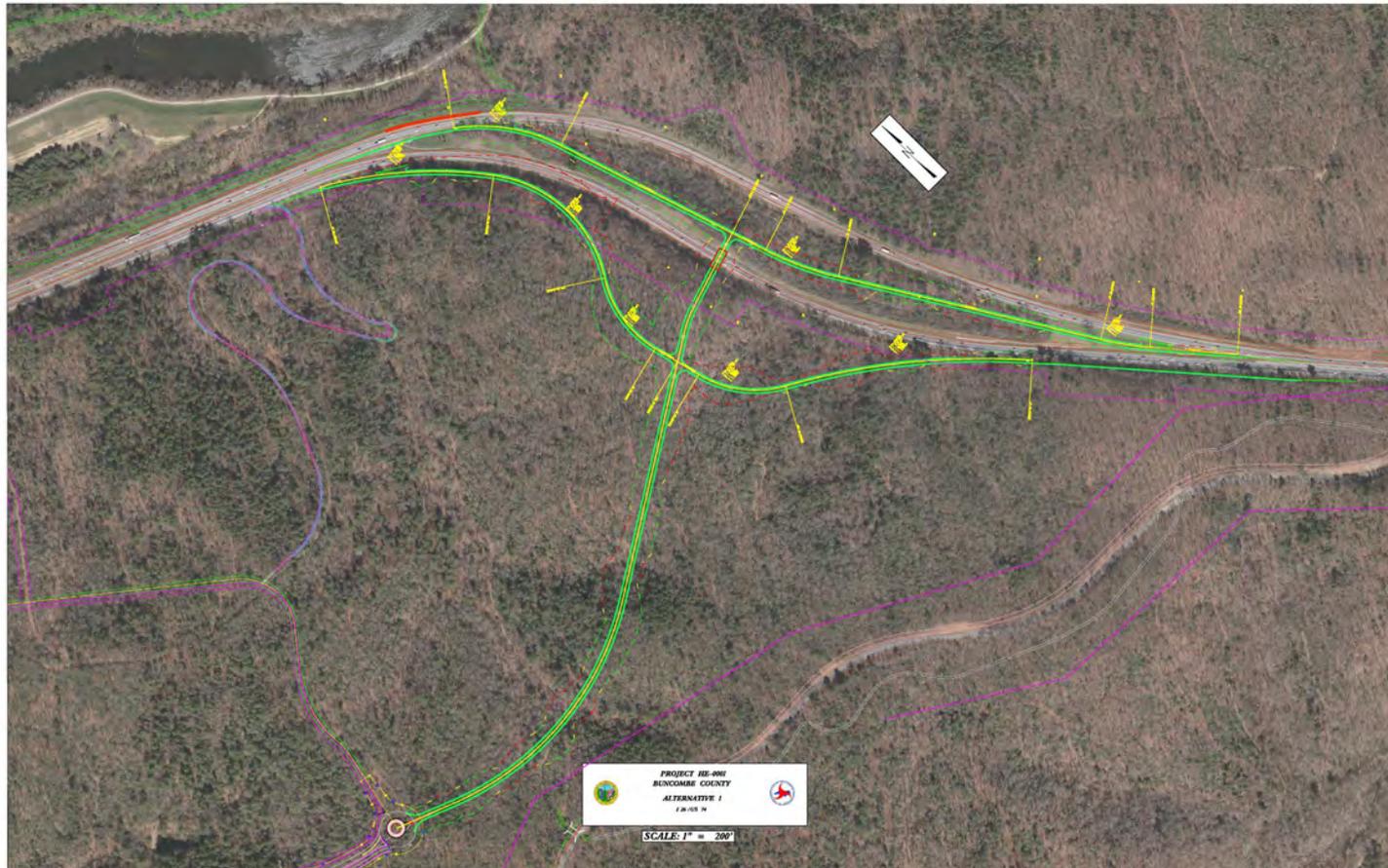
- **Need Statement:** The proposed project is needed to address the lack of network connectivity between NC 191 and Interstate 26 in southern Buncombe County to accommodate current and planned growth.
- **Purpose Statement:** The purpose of the project is to provide direct access to I-26 and improve east-west connectivity within the project study area.

# PROPOSED INTERCHANGE ALTERNATIVES

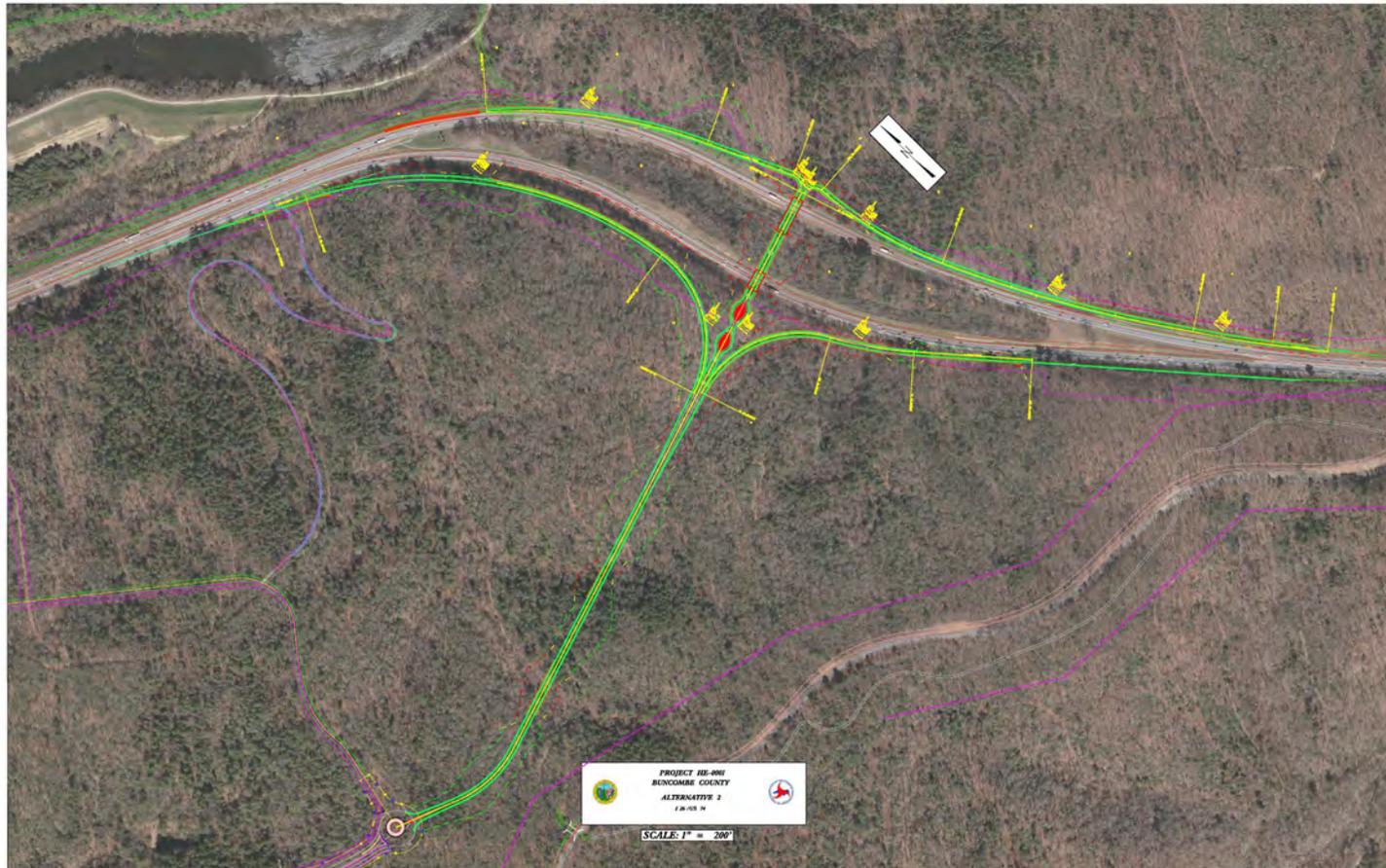
<b>Proposed Alternative 1</b>	<ul style="list-style-type: none"><li>• Modified diamond</li><li>• Center of the I-26 bifurcated section</li><li>• Left-exit/entrance ramp</li></ul>
<b>Proposed Alternative 2</b>	<ul style="list-style-type: none"><li>• Diverging diamond (DDI)</li><li>• Center of the I-26 bifurcated section</li><li>• Right-exit/entrance ramp</li></ul>
<b>Proposed Alternative 3</b>	<ul style="list-style-type: none"><li>• Tight diamond</li><li>• North end of the I-26 bifurcated section</li><li>• Left-exit/entrance ramp</li></ul>

Note: Ramp terminal configurations will be determined based on traffic operations analysis later, as appropriate. Potential ramp terminal treatments are constrained in some locations.

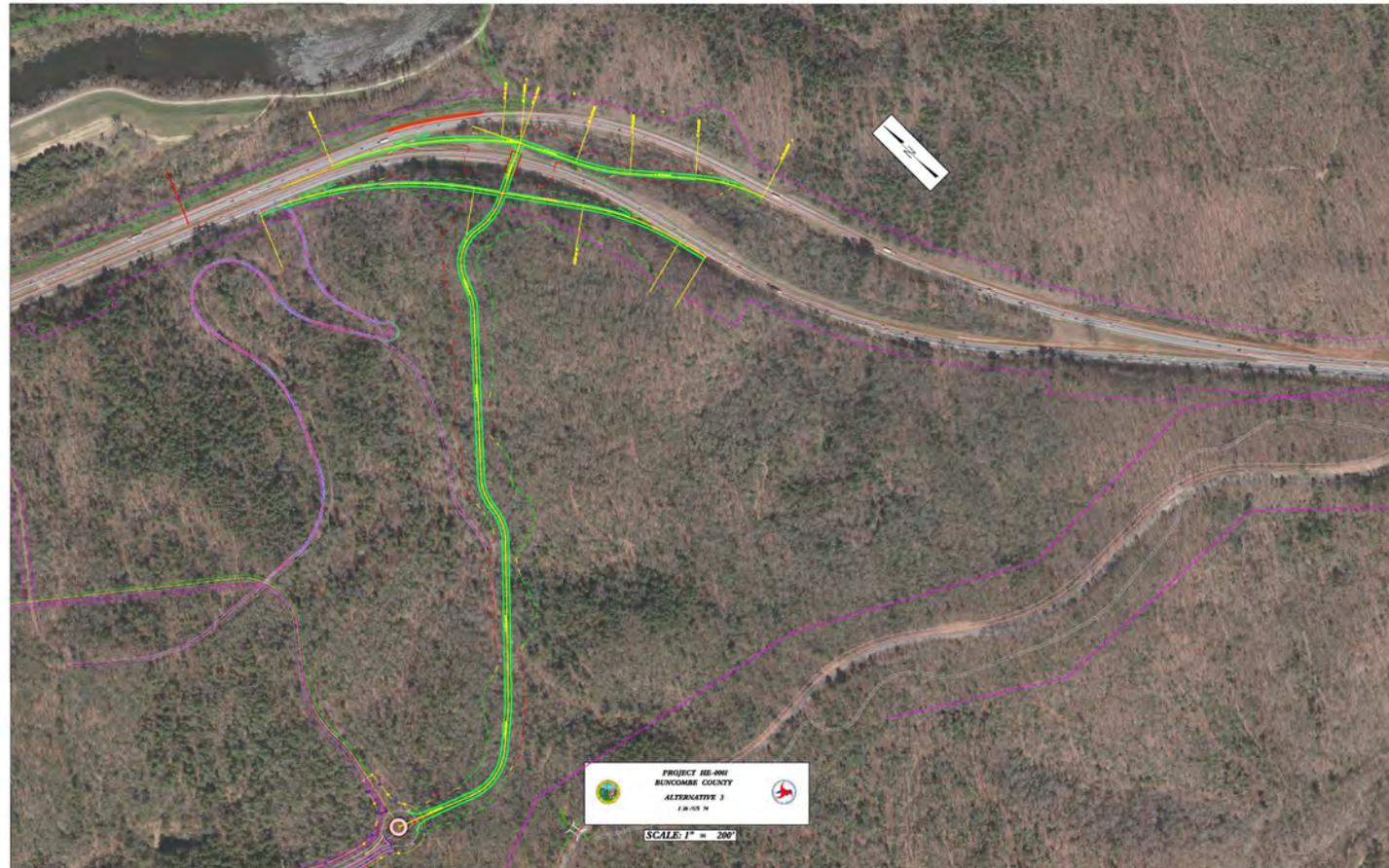
# PROPOSED INTERCHANGE ALTERNATIVE 1



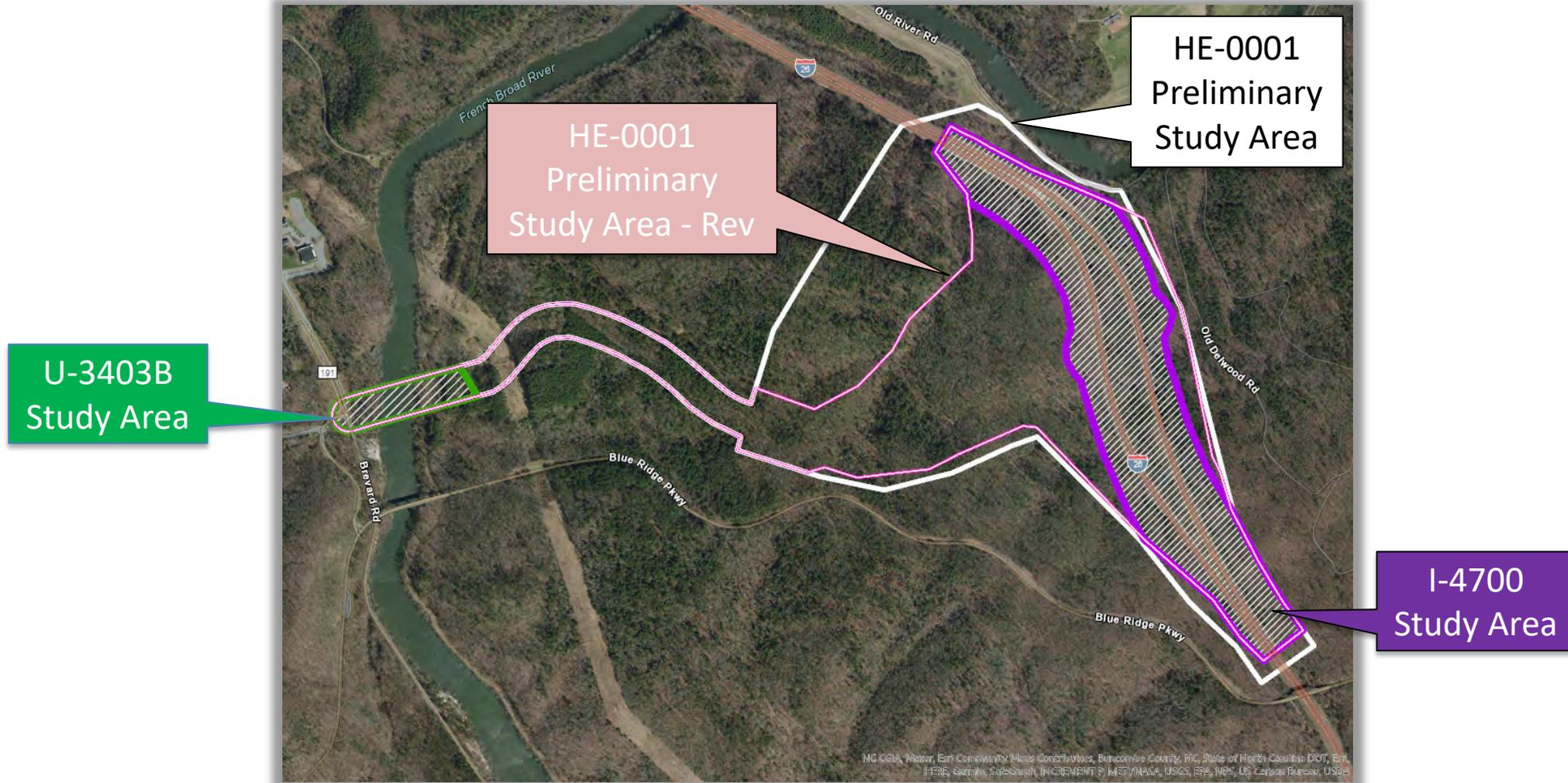
# PROPOSED INTERCHANGE ALTERNATIVE 2



# PROPOSED INTERCHANGE ALTERNATIVE 3



# REVISED STUDY AREA



# TENTATIVE PROJECT SCHEDULE (Subject to change)

Activity	Date
Traffic Forecast	Summer 2021
Concurrence Point 1 & 2	
Indirect and Cumulative Effects (ICE) Report	
NRTR/Jurisdictional Determination	
Stakeholder/Small Group Meetings	
Interchange Access Report (IAR)	Fall 2021
Local Officials' Informational Briefing	
Public Comment Period	
Concurrence Point 3	
Traffic Operations Analysis	Winter 2021/22
Community Impact Assessment (CIA)	
T&E Surveys	
Traffic Noise	
Type III CE	Spring 2022

# QUESTIONS?



# CONTACTS

McCray Coates, PE  
Division 13 Project Manager  
[hmcoates@ncdot.gov](mailto:hmcoates@ncdot.gov)  
828-250-3006

Rick Tipton, PE  
Consultant Project Manager  
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Adam Archual  
Consultant Deputy PM  
[aarchual@gfnet.com](mailto:aarchual@gfnet.com)  
984-389-2398

# ADJOURN

- Thank you!



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. Eric Boyette  
SECRETARY

June 4, 2021

Memorandum To: External Scoping Attendees

From: McCray Coates, PE  
Division Project Manager 

SUBJECT: External Scoping Meeting  
Proposed New I-26 Interchange (Future Exit 35), Asheville, Buncombe County  
NCDOT STIP HE-0001

Division 13 is starting the project development, environmental and engineering studies for the proposed new interchange with I-26 (future exit 35) to access the Pratt & Whitney Manufacturing Center (currently under construction) in Buncombe County. This proposed project includes the construction of a 0.5-1-mile two-lane roadway tie. This proposed roadway tie would connect to the two-lane roadway currently under construction by the private developer which includes a new bridge over the French Broad River and intersects NC 191/Brevard Road.

STIP HE-0001 is not included in the current NCDOT 2020-2029 STIP; however, the Department is in the process of having this project programmed. Right of way acquisition and construction let are targeted for Federal Fiscal Year (FFY) 2022 and 2023, respectively. Federal funds will be used for this project and a Type III Categorical Exclusion is anticipated.

NCDOT-Division 13 will host a one and one-half hour External Scoping Meeting at **8:30 AM** on Wednesday, **June 16, 2021**. This meeting will be held remotely via a web conference.

If you have any questions about the project or the meeting please contact McCray Coates, PE, Division Project Manager, at 828-250-3000 or by email at [hmcoates@ncdot.gov](mailto:hmcoates@ncdot.gov). Please include **HE-0001** in all correspondence and comments.

Attachments

- Project Data Sheets
- Project Mapping

Mailing Address:  
NC DEPARTMENT OF TRANSPORTATION  
HIGHWAY DIVISION 13  
POST OFFICE BOX 3279  
ASHEVILLE, NC 28802-3279

Telephone: (828) 250-3000  
Fax: (828) 251-6394  
Customer Service: 1-877-368-4968

Website: [www.ncdot.gov](http://www.ncdot.gov)

Location  
55 ORANGE STREET  
ASHEVILLE, NC 28801

## Project Data Sheets

<u>TIP No.:</u>	HE-0001	<u>Sent Date:</u>	June 4, 2021
<u>WBS No.:</u>	TBD	<u>Revision Date:</u>	
<u>Federal Aid No.:</u>	TBD	<u>Meeting Date:</u>	TBD
<u>Division:</u>	13		
<u>County:</u>	Buncombe		

Project Description: Construct new interchange on I-26 (Exit 35), southeast of the I-26 bridge over the French Broad River, and approximately 0.5- to 1-mile new location roadway for a new industrial park in Buncombe County, NC. (See Project Location Map.)

General Project Need: *(Preliminary)* The proposed project is needed to address the lack of network connectivity between NC 191 and Interstate 26 in southern Buncombe County to accommodate current and planned growth.

Metropolitan / Rural Planning Organization: French Broad River Metropolitan Planning Organization

NEPA/404 Merger Candidate?:  Yes  No  To Be Determined

Feasibility Studies Completed?:  Yes  No Date of Studies: In process

<u>Project Schedule:</u>	<u>Type of Document:</u>	<u>Dates:</u>
Anticipated Environmental Document(s):	CE	FY 2022
Right of Way Authorization Date:		FY 2022
Let Date:		FY 2023

<u>Cost Estimate:</u>	<u>Construction:</u>	<u>Right of Way:</u>	<u>Total Cost:</u>
TIP Estimate:			
Current Estimate:	\$16–28M	\$100k–1.2M	\$19–35M

**Design Criteria:**

Length of Project: Interchange – Approximately ½-mile  
Tie-in – Approximately ½-mile

Right of Way:

Existing:	Interchange – Varies, 270–830 ft on I-26 Tie-in – Not applicable
Proposed:	Interchange – To be determined Tie-in – To be determined

Type of Access Control:

Existing:	Interchange – Not applicable Tie-in – Not applicable
Proposed:	Interchange – Full control of access (interstate) Tie-in – No control

Roadway Typical Section:

Existing:	Interchange – Not applicable Tie-in – Not applicable
Proposed:	Interchange – 1-2 lane Tie-in – 2 lane

Speed:

Existing Posted Speed:	Interchange – Not applicable (60 mph on I-26) Tie-in – Not applicable
Proposed Design Speed:	Interchange – Not applicable (70 mph on I-26) Tie-in – 40 mph

Bridge/ Culvert Inventory: Buncombe Bridge Nos. 100214 (I-26 EBL) and 100211 (I-26 WBL) over French Broad River; Buncombe Bridge No. 100205 (Blue Ridge Parkway over I-26)

Functional Classification: Interstate

Strategic Transportation Corridor Information: Corridor C (I-26/US 23)

CTP/Thoroughfare Plan Designation (Facility Type): N/A

Air Quality Status:       Non-attainment       Maintenance       Attainment

Horizon Completion Year (Long Range Trans. Plan): N/A

Typical Section in Compliance with Conformity Determination?       Yes       No

<u>Traffic (AADT):</u>	Year	Range of Traffic*		
Current Year:	2021	86,000	% TTST:	4
Design Year (No Build):	2040	107,000	% Dual:	11
Design Year (Build):	2040	129,000	% DHV:	7

\* Source: I-4700/I-4400 Traffic Analysis/Forecast and site daily trip generation.  
 NOTE: A new forecast is being prepared for this project.

Design Standards Applicable:     AASHTO     3R

Railroad Involvement:   

Utility Involvement:   

**Other STIP Projects in the Area (within 3 miles)**

STIP Project No.	Description	Schedule (Fiscal Year)
I-4700*	I-26. NC280 (Exit 40) to I-40 at Asheville. Add additional lanes.	<i>Under Construction</i>
I-5504	I-26. NC 191 (Brevard Road). Upgrade interchange.	<i>Under Construction</i>
U-2801A	US 25A (Sweeten Creek Road). US 25 (Hendersonville Road) to SR 3081 (Rock Hill Road). Widen roadway.	RW 2024 CST 2027
U-3403B*	NC 191 (Brevard Road). SR 3498 (Ledbetter Road) to north of Blue Ridge Parkway. Widen to multi-lanes.	RW 2029 CST Post Year
U-5834	SR 3116 (Mills Gap Road). US 25 (Hendersonville Road) to SR 3157 (Weston Road). Upgrade existing roadway.	<i>RW In progress</i> CST 2024
U-6047	SR 112 (Sardis Road/Sandhill Road). NC 191 (Brevard Road) to US 19/23 (Smokey Park Highway). Widen roadway.	RW 2025 CST 2028
HO-0002	I-40 in Asheville to I-440 in Wilmington. Implement Broadband, ITS, and Resiliency Improvements	<i>Unknown</i>
HO-0002A	I-40 in Asheville to I-77 at I-485 (South) in Charlotte. Install Broadband.	<i>Unknown</i>

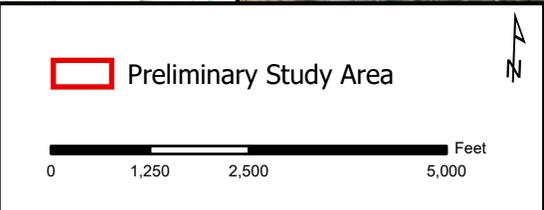
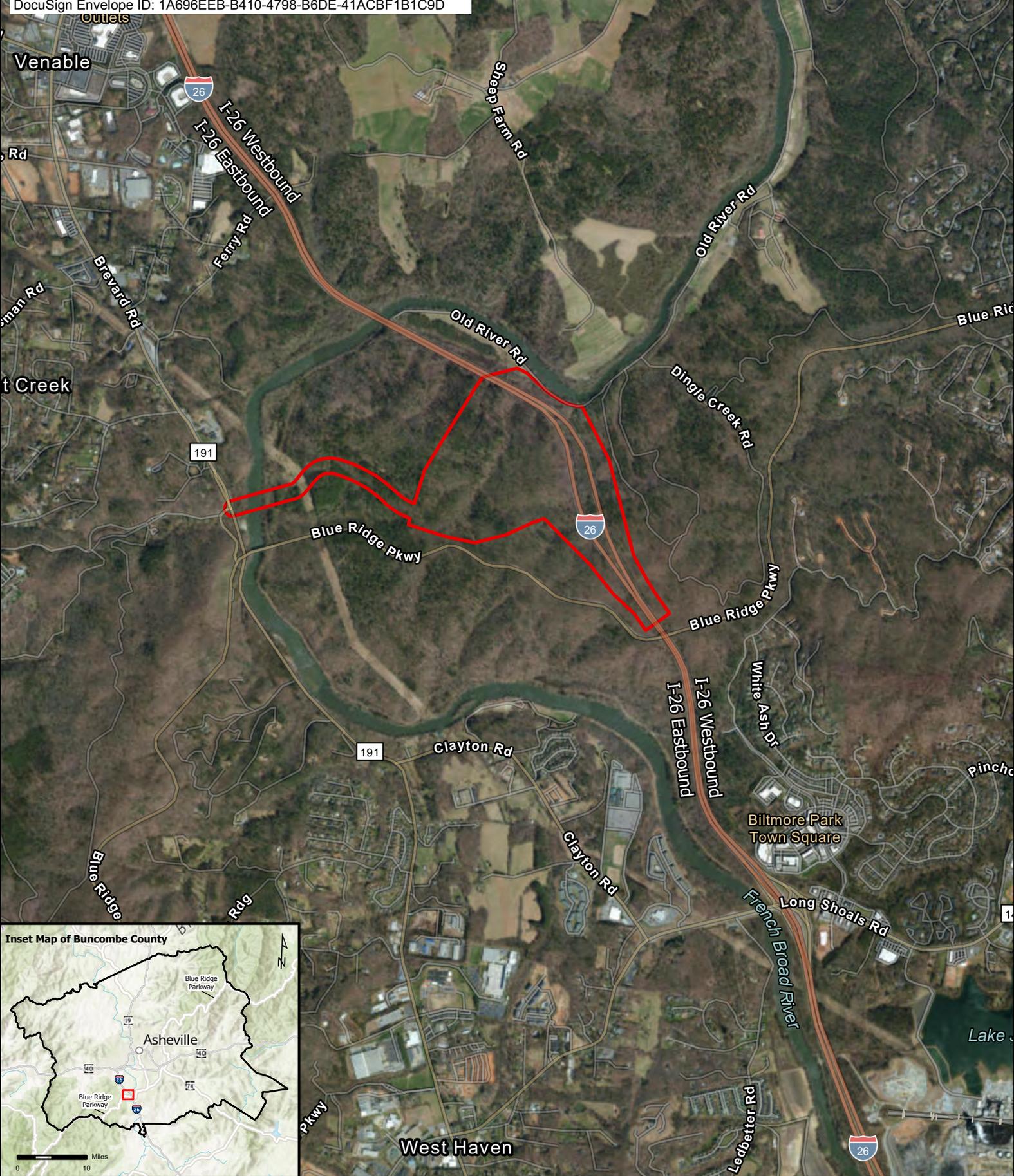
Source: North Carolina Department of Transportation, 2020-2029 Current State Transportation Improvement Program (January 2021)

\*Project intersects HE-0001 Preliminary Study Area

### Preliminary Study Area Resources Inventory Table

Resource/Affected Environment & Measure	Applicability/ Resources in Study Area
<b>General Project Information</b>	
Length of project (approximate in miles)	Approximately 1 Mile
Crossing or Intersecting roadways (#)	I-26
<b>Cultural Resources</b>	
NRHP (and eligible sites, districts, other properties) (#)	2 – Biltmore Estate (BN1835) (NHL); Blue Ridge Parkway (NC001) (NRHP Eligible)
<b>Human Environment</b>	
Community Resources (#)	None
Public Parks/Section 4(f) Properties (#)	2 - Blue Ridge Parkway (NPS); Biltmore Estate (NPS)
Greenways, Game Lands, Land and Water Conservation Fund Properties, Bicycle Routes, etc. (#)	None
Residential Properties (# potentially affected)	None
Business Properties (# potentially affected)	None
High % Special Populations (Low-income, Minority)	No
<b>Natural Environment*</b>	
Streams (# of stream crossings) Floodplain crossing	11 streams (2–4 potential crossings) + French Broad River - 7 streams (I-4700 Study Area) - 4 other streams (ATLAS) French Broad River FEMA Floodplain present, no crossing
Wetlands (est. acres)	Approximately 11 acres - Approx. 10 acres (I-4700 Study Area) - Approx. 1 acre (ATLAS; NWI)
Ponds (est. acres connected to jurisdictional waters)	None identified.
Critical Water Supply Watersheds	No
Riparian Buffer Rules apply	No
Outstanding Resource Waters / High Quality Resource	No
303(d) Listed Streams	No
Identified Critical Habitat/ESA Spp. (# known)	No critical habitat/There are 8 Threatened, 1 Threatened/Similar in Appearance, and 3 Endangered Species in Study Area
<b>Physical Environment</b>	
Hazardous Materials (# suspected/known sites)	None
Utilities	TBD
Active agriculture (Voluntary Agricultural District)	No VADs or EVADs listed.
FEMA Buyout Properties	None

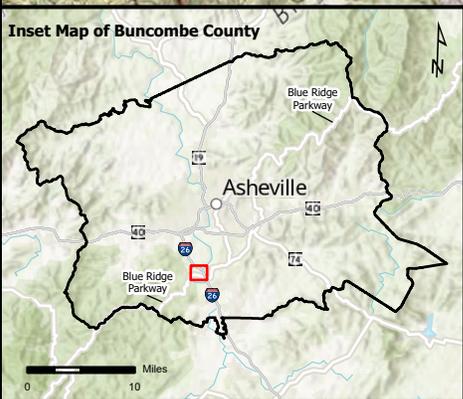
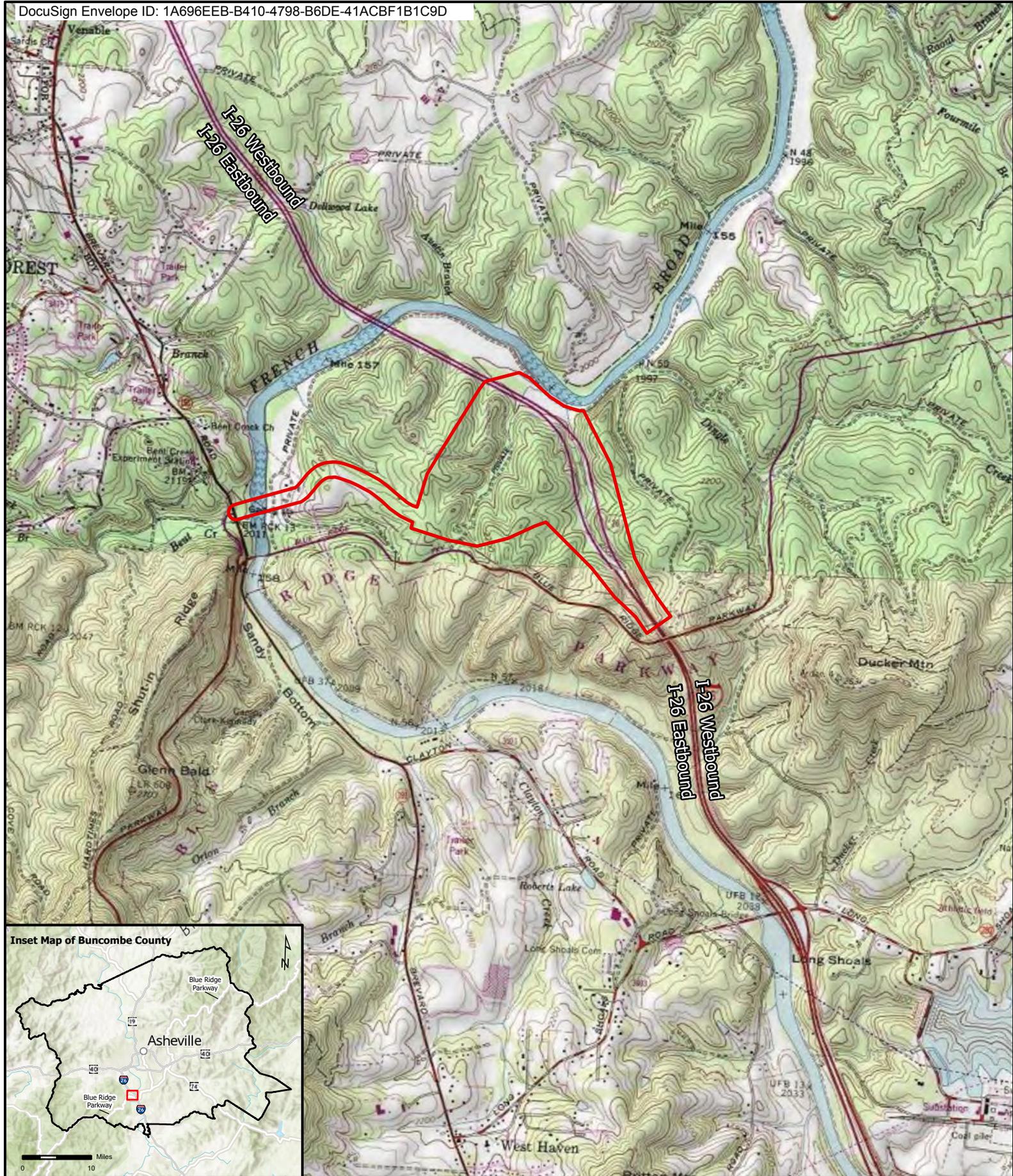
NOTES: This table is intended to be used in conjunction with the Environmental Features Map and the USGS Map. \* Stream and wetland features were previously field collected as part of the NCDOT I-4700 project; GIS (ATLAS) data was used for the remainder of the Preliminary Study Area. # Formal Section 7 consultations for I-4700/I-4400 (USFWS [Biological Opinion](#) [BO], February 22, 2019) concurred with NCDOT's Biological Assessment (August 20, 2018) and concluded that all species but two would not be affected or not likely to be adversely affected by the I-26 widening project. The BO issued by the USFWS includes conservation measures associated with the federally endangered Appalachian elktoe (*Alasmidonta raveneliana*) and gray bat (*Myotis grisescens*).



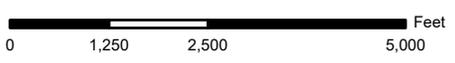
Vicinity Map  
 NCDOT STIP HE-0001  
 Proposed I-26 Interchange

**Gannett Fleming**  
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Map Created 5/11/2021



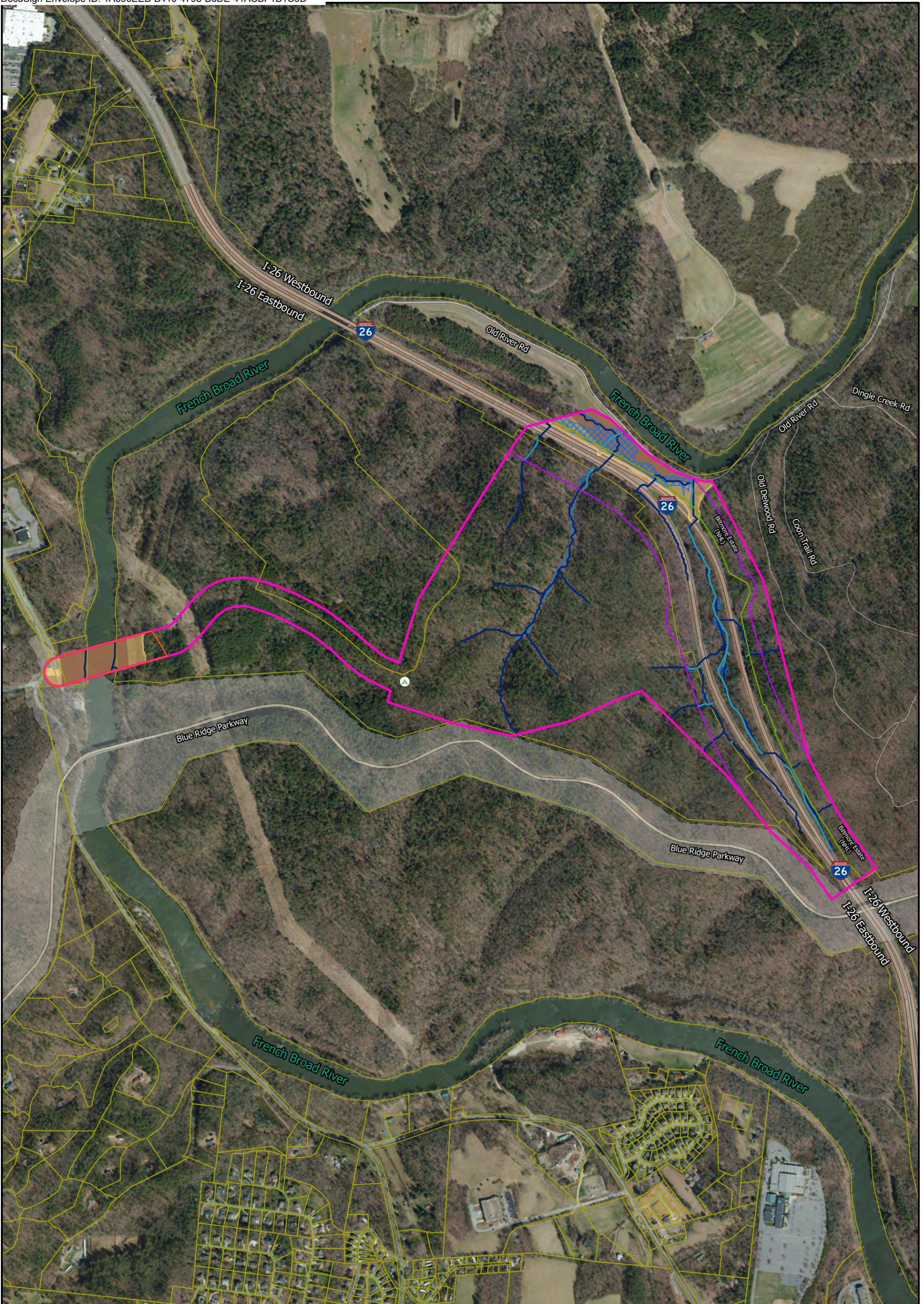
 Preliminary Study Area



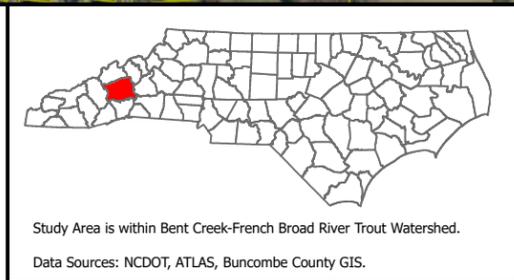
Buncombe County,  
North Carolina

Vicinity Map  
NCDOT STIP HE-0001  
Proposed I-26 Interchange





	Preliminary Study Area		Biltmore Estate NHL
	Stream (I-4700/I-4400 WET)		Buncombe County Parcels
	Streams (ATLAS)		National Park - Blue Ridge Parkway
	Portion of I-4700 Study Area	<b>Flood Zone</b>	
	SHPO Ineligible Resource		100 Year Flood Zone
	Wetland (I-4700/I-4400 WET)		500 Year Flood Zone
	Wetland (ATLAS)		FEMA Floodway
	U-3403B Study Area		



## Environmental Features Map

### NCDOT STIP HE-0001

### Proposed I-26 Interchange

### Buncombe County, North Carolina

US Feet

Created May 11, 2021