Inter-Agency Project Update Meeting

NC 143 Improvements

From West Buffalo Creek to NC 143 Business, west of Robbinsville

Graham County

WBS No. 34808.1.2

STIP Project No. R-2822B

November 19, 2026, at 10:00 am
North Carolina Department of Transportation

1.0 Project Description

1.1 Purpose of Today's Meeting

The purpose of today's meeting is to update our Tribal and Resource Agency partners on the status of the NC 143 improvements and introduce the project to any new team members. We will also discuss how we plan to reinitiate the Merger Process and progress the project through Final Design and construction. NCDOT is reinitiating the Merger Process and conducting this update meeting due project modifications related to the following environmental resources:

- Hooper Branch Culvert / Bridge #13
- Chickalelee Cemetery Retaining Wall
- Archaeological Site #31GH227 Retaining Wall
- Newly identified Environmentally Sensitive Area

1.2 Project Description

The project proposes to make safety improvements along the 4.5-mile-long segment of NC 143 from West Buffalo Creek to NC 143 Business, west of Robbinsville in Graham County by improving horizontal and vertical geometry. The project is state funded and its location is shown below in **Figure 1**. This project is included in the 2026-2035 State Transportation Improvement Program (STIP) as Project # R-2822B. The State Minimum Criteria Determination Checklist (MCDC) was signed in **June 2022.**

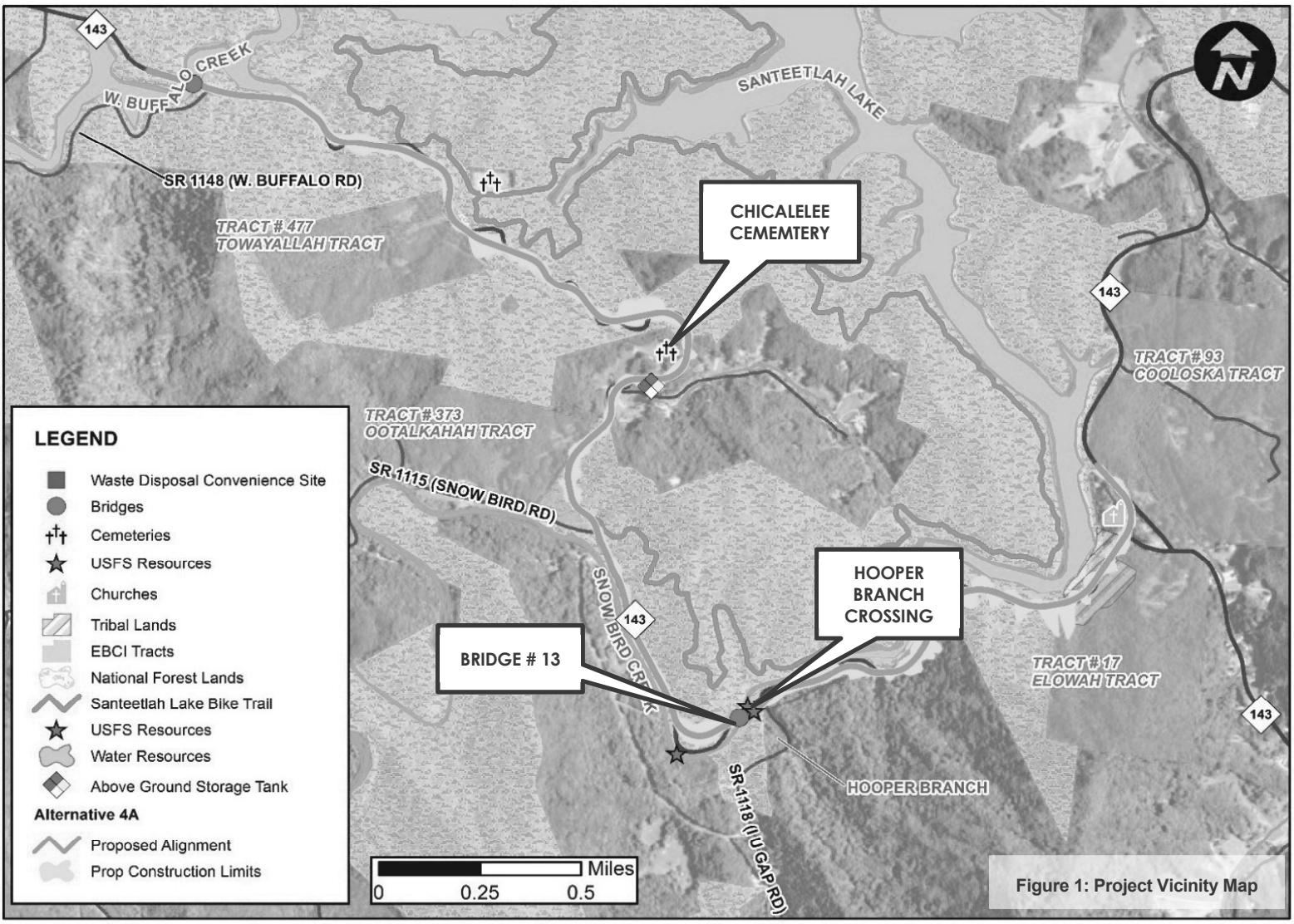


Figure 1: Project Vicinity Map

The project includes upgrading the horizontal and vertical curves on NC 143 to have a minimal design speed of 35-mph, widening lanes to 11-feet with 6-foot-wide shoulders (4-foot paved), realigning the NC 143/NC 143 Business Intersection, and replacing Bridge #13 over Snowbird Creek using staged construction.

Visualizations of the geometric improvements on NC 143, including examples of the curves and deep cuts, are shown in **Figure 2 and 3** below.

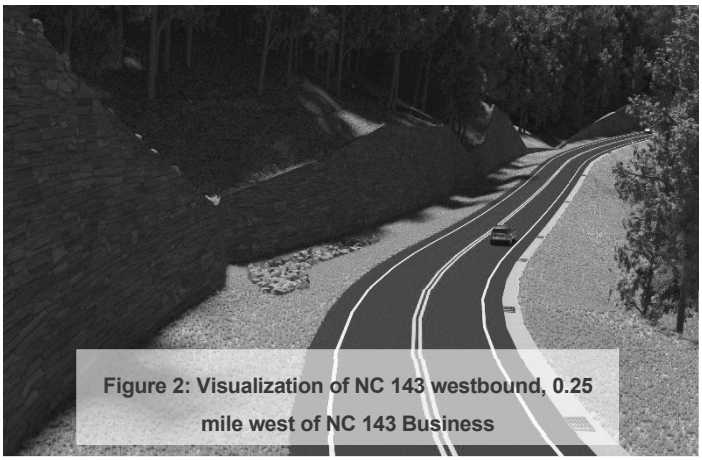


Figure 2: Visualization of NC 143 westbound, 0.25 mile west of NC 143 Business

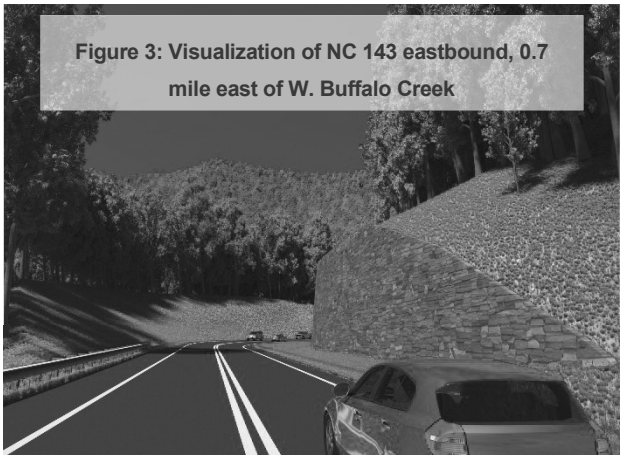


Figure 3: Visualization of NC 143 eastbound, 0.7 mile east of W. Buffalo Creek

2.0 Project History

See **Appendix A** for detailed project history.

3.0 Hooper Branch Culvert Replacement / Bridge #13

- During the **November 2018 CP #2A Meeting**, the replacement of Bridge #13 over Snowbird Creek was added to the project. The replacement bridge will be constructed at the location of the existing bridge using staged construction. Both eastbound and westbound approaches will be realigned.
- Due to the staged construction for Bridge #13, a new 80-foot-long hydraulic structure (culvert) was recommended at Hooper Branch. **Figure 4** shows the proposed realignment of NC 143. **Figure 5** shows the existing Hooper Branch culvert.

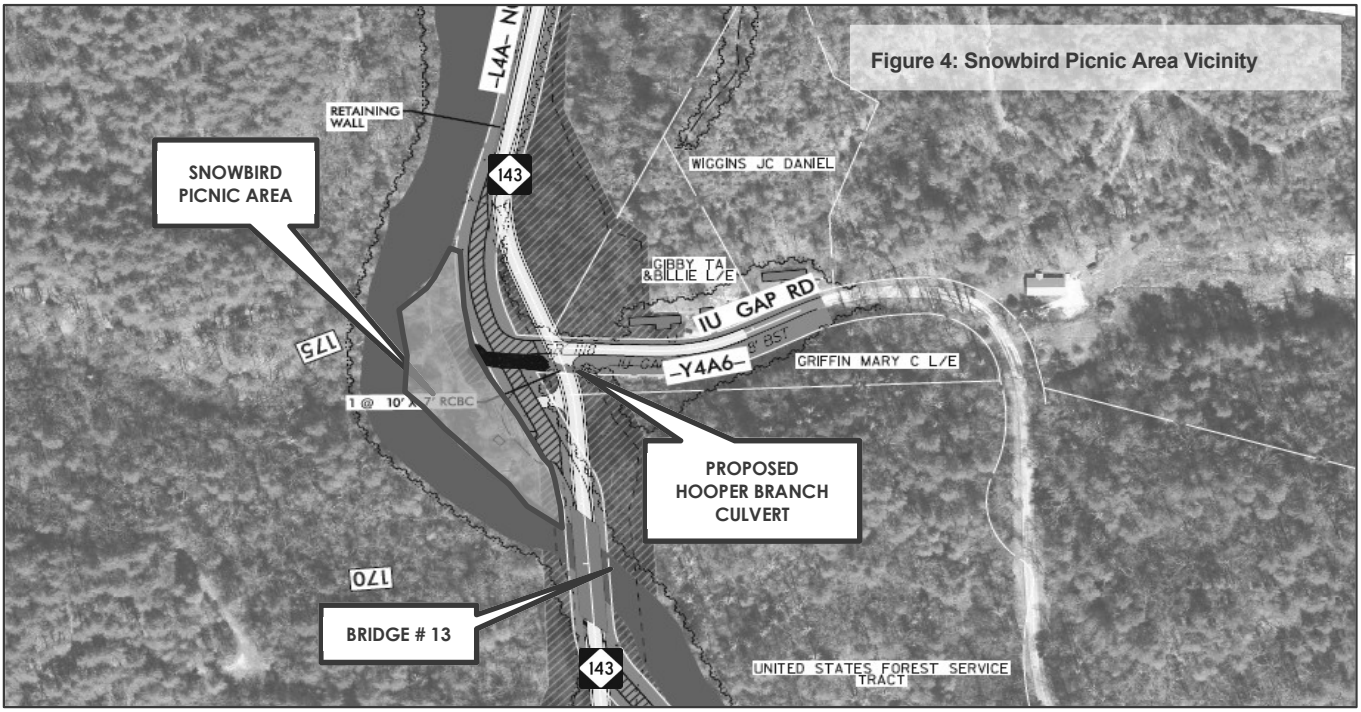


Figure 4: Snowbird Picnic Area Vicinity



Figure 5: Hooper Branch Culvert

- The US Fish and Wildlife Service (USFWS) and the US Forest Service (USFS) requested a bottomless hydraulic structure be evaluated at the Hooper Branch crossing. NCDOT made the following commitment.

"NCDOT will evaluate the feasibility of a bottomless hydraulic structure at the Hooper Branch crossing. Geotechnical information is required to make a final determination. NCDOT will provide the Merger Team with final hydraulic recommendations once information is available.

- During the **June 2022 Revisited CP 2A / CP 4B Meeting**, NCDOT advised that geotechnical studies indicated a bottomless culvert would not be feasible due to the depth of bedrock at the site.
- **Aquatic Organism Passage (AOP)**
    - USFS preferred culvert solution
    - AOP design will extend upstream and downstream of the culvert using natural channel substrate, tying into Snowbird Creek and the realigned channel.
    - Intent is to lower the culvert's invert about 2 feet rather than widen the structure, pending field investigation. A bypass may be needed for the 100-year flow.
    - USFS approval of AOP design is expected to take 30 days and impacts the project's re-entry into merger.

3.0 Cultural Resources

3.1 Chickalelee Cemetery

- The Chickalelee Cemetery is located just north of the NC 143/Buchanan Branch Road intersection (**See Figure 6).**
- The cemetery sits on a hill overlooking NC 143, which passes east and south of the site. NC 143 will be realigned to meet a minimum 35-mph design speed in the vicinity of the Chickalelee Cemetery. This will require a "cut" into the hill that the cemetery sits upon.

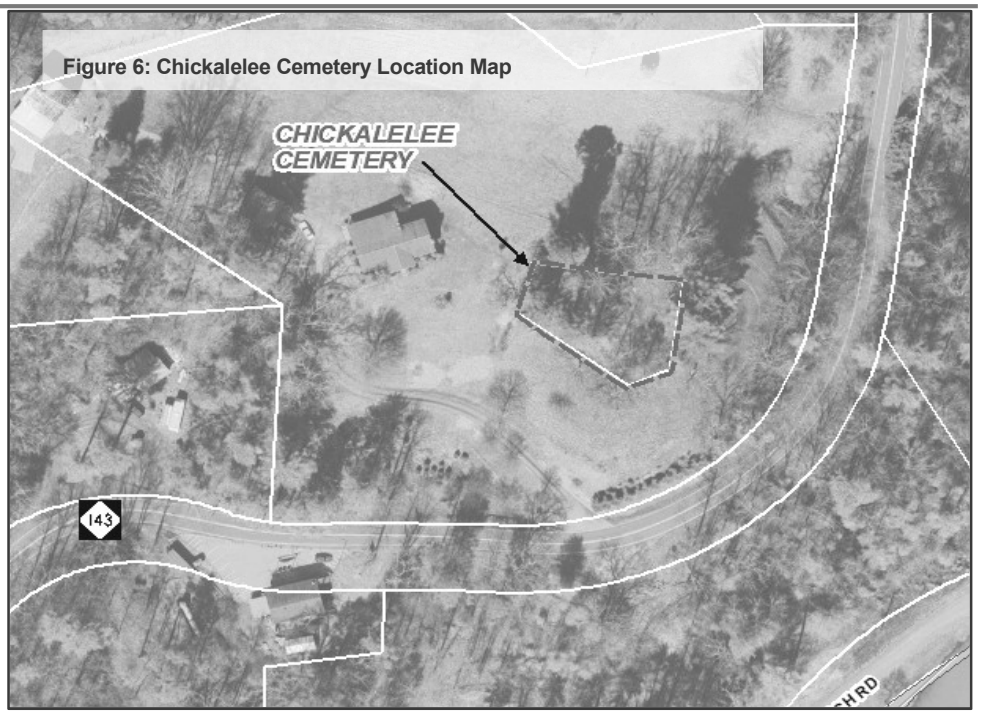
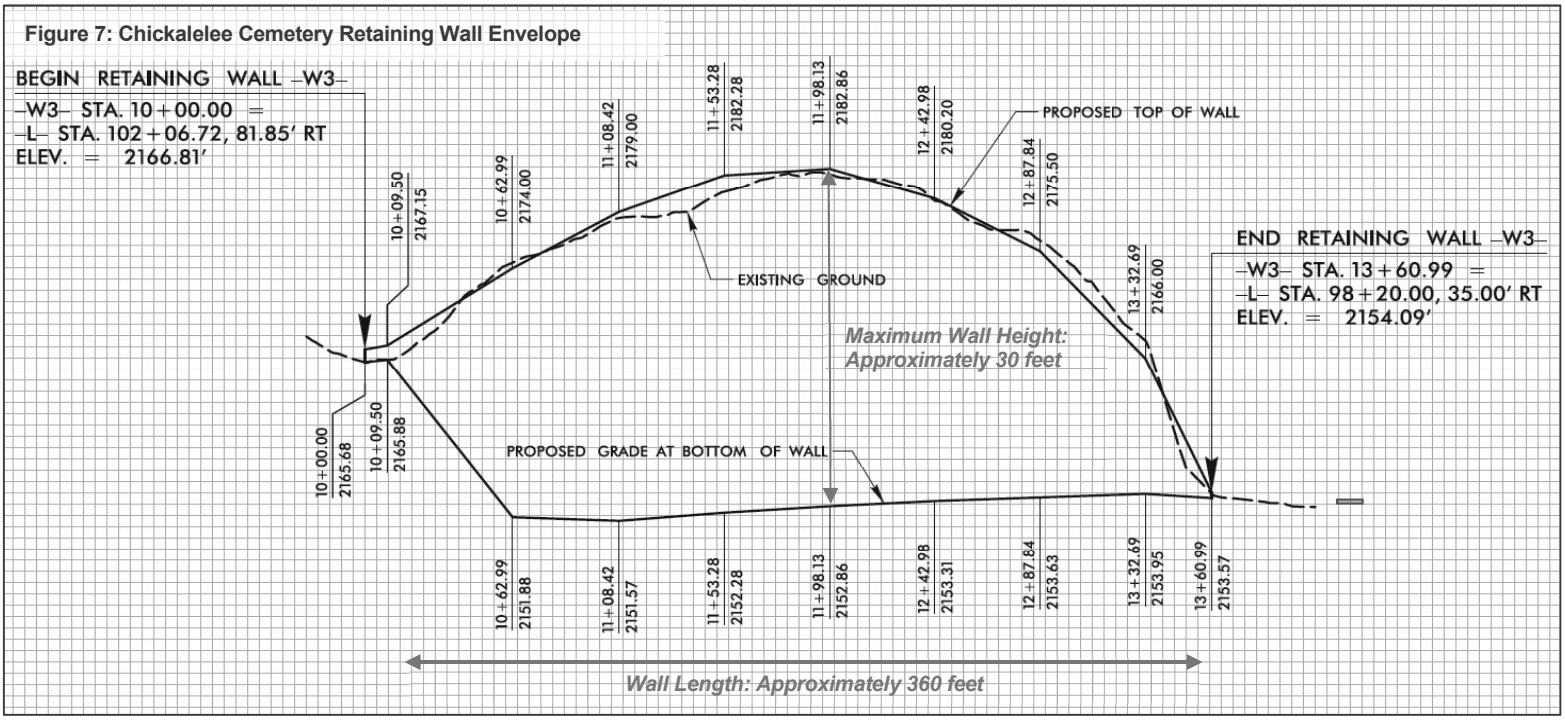


Figure 6: Chickalelee Cemetery Location Map

- During the **February 19, 2021, Section 106 Effects Meeting,** USACE and SHPO concurred on a *No Adverse Effect* determination based on the following conditions:
    - Construction of a 385-foot long retaining wall with a maximum height of 25-feet.
    - Archaeological monitoring by and ECBI THPO archaeologist or representative during construction.
    - Addition of an aesthetic façade on the retaining wall.
    - Landscaping plan to determine the type of vegetation that can be planted behind the retaining wall.
    - Staging of construction equipment is restricted at the cemetery site.
- Based on geotechnical studies, the proposed retaining wall will be approximately 360 feet in length with an average height of 20 feet. The maximum height of the wall is 30 feet. This design modification is different from what was included in the *No Adverse Effect* determination. Thus, NCDOT is revisiting the Section 106 Process to provide an opportunity for the THPOs and the NCSHPO to provide comments that can be incorporated into the revised Effects Determination and ultimately, the project through revised environmental commitments (if required) and design elements. **Figure 7** shows the proposed design and wall envelope.

Figure 7: Chickalelee Cemetery Retaining Wall Envelope



- Per **Figure 8,** the proposed construction of the wall extends 6-feet behind the retaining wall, which fits within a proposed right-of-way measuring 34 feet from the wall. The height of the wall will be increased to 30 feet. However, the wall will not encroach any closer than the measurements that were presented during the **February 2021 Section 106 Effects Meeting**.

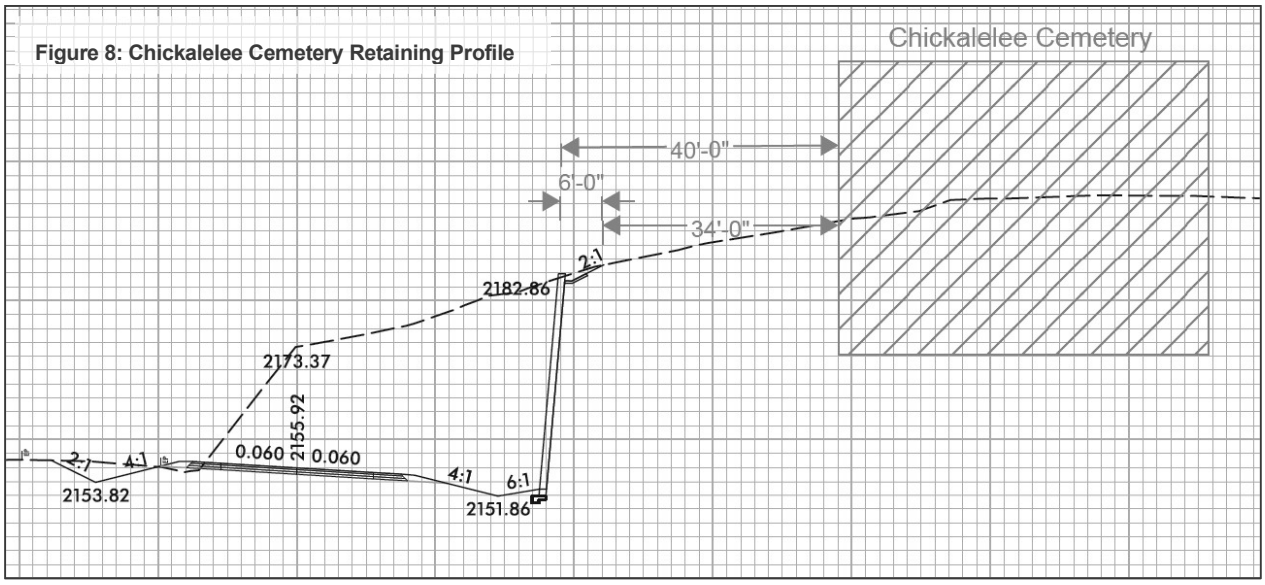
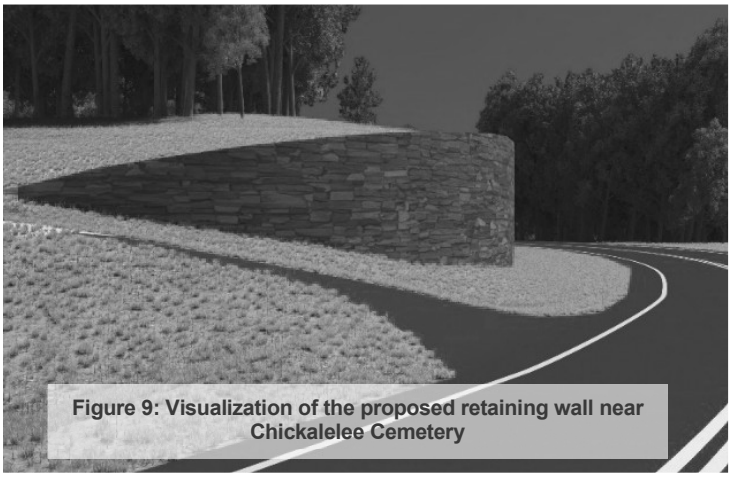
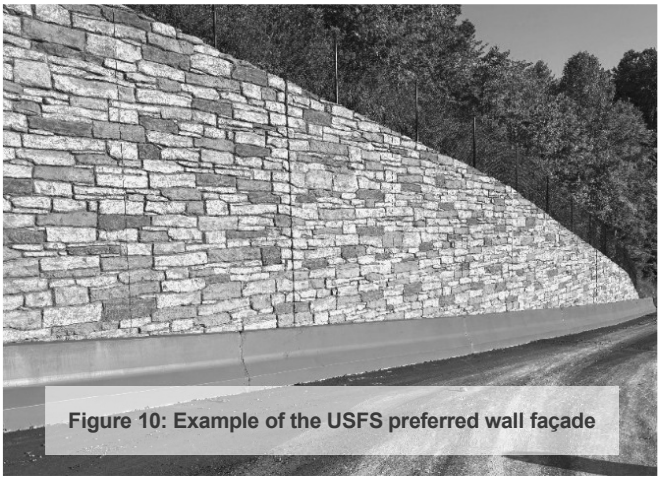


Figure 8: Chickalelee Cemetery Retaining Profile

- **Figure 9** shows a visualization of the proposed retaining wall and **Figure 10** illustrates an example of the USFS preferred color and style for future walls.
- The Section 106 Effects determination conditions noted *Archaeological monitoring by an ECBI THPO archaeologist or representative during construction.*
  - NCDOT requests authorization to use an EBCI – approved cultural resources firm to conduct monitoring during construction.


Figure 9: Visualization of the proposed retaining wall near Chickalelee Cemetery


Figure 10: Example of the USFS preferred wall façade

3.2 Archaeological Site #31GH227 Avoidance

- The proposed project will include a shored Mechanically Stabilized Earth (MSE) retaining wall to avoid this archaeological site. The wall is currently planned to be approximately 250 feet long and averages 5 feet in height. The maximum height of the wall is 10 feet. **Figure 11** shows the proposed design and retaining wall envelope.
- The Archaeological Site will be delineated with an orange safety fence and identified as an Environmentally Sensitive Area in the design plans.

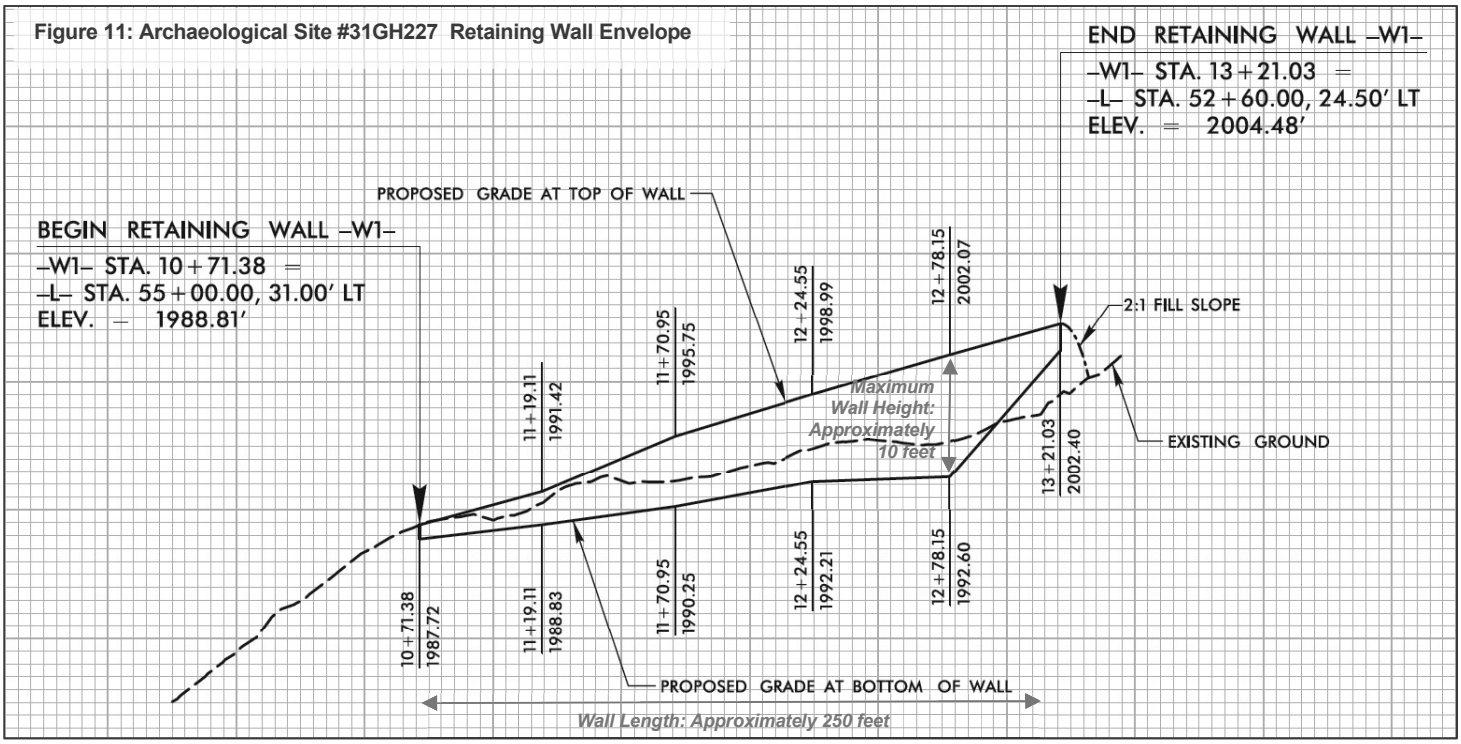


Figure 11: Archaeological Site #31GH227 Retaining Wall Envelope

- **Figure 12** shows the proposed retaining wall and roadway typical section in relation to the archaeological site boundary.

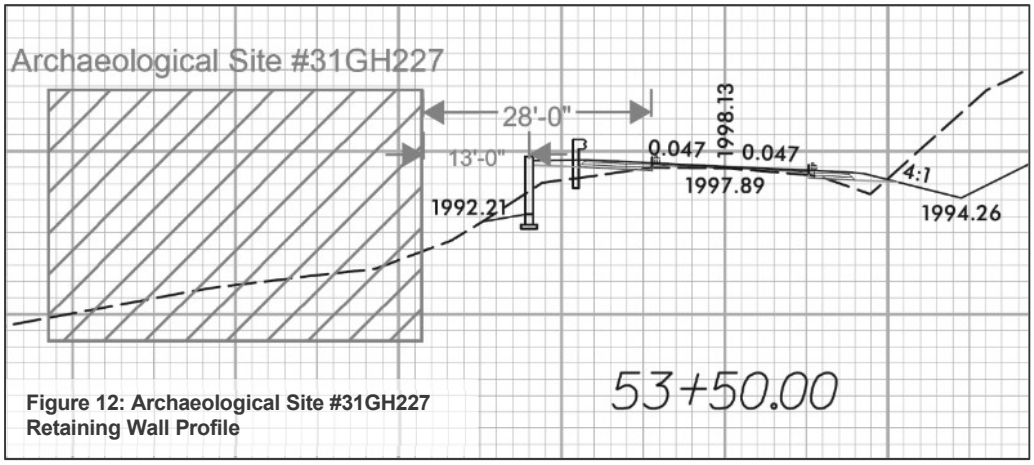


Figure 12: Archaeological Site #31GH227 Retaining Wall Profile

3.3 Newly identified Environmentally Sensitive Area (ESA)

- In 2024, NCDOT was notified of an ESA near the Waste Convenience Site.
- NC 143 will be realigned in the vicinity of the ESA, requiring additional Section 106 coordination and an Effects Determination. Traditional Cultural Property eligibility is pending USACE coordination with the Eastern Band Cherokee Indians (EBCI).
- Coordination required with EBCI and USFS, since the ESA falls on Forest Service land.

4.0 Additional Discussion Items

4.1 Threatened and Endangered Species Surveys

- USFS Species of Conservation Concern Surveys - completed Spring 2026 and validated by USFS.
- Terrestrial T&E bat surveys – Summer 2026 – No evidence of bats was found.

4.2 Snowbird Picnic Area (US Forest Service Coordination)

- Snowbird Picnic parking lot and access revisions (see **Figures 13 and 14**).



Figure 13: Snowbird Picnic Area Improvement Map


Figure 14: Snowbird Picnic Area access visualization

4.3 Federal Energy Regulatory Commission (FERC) Coordination

- Lake Santeetlah is a designated Hydropower River and a FERC property, as shown in **Figure 15**.
- Brookfield Smokey Mountain currently owns the Special Use Permit.
- The Project Limits of Disturbance have minor impacts to the FERC boundary; therefore, additional coordination will be required.

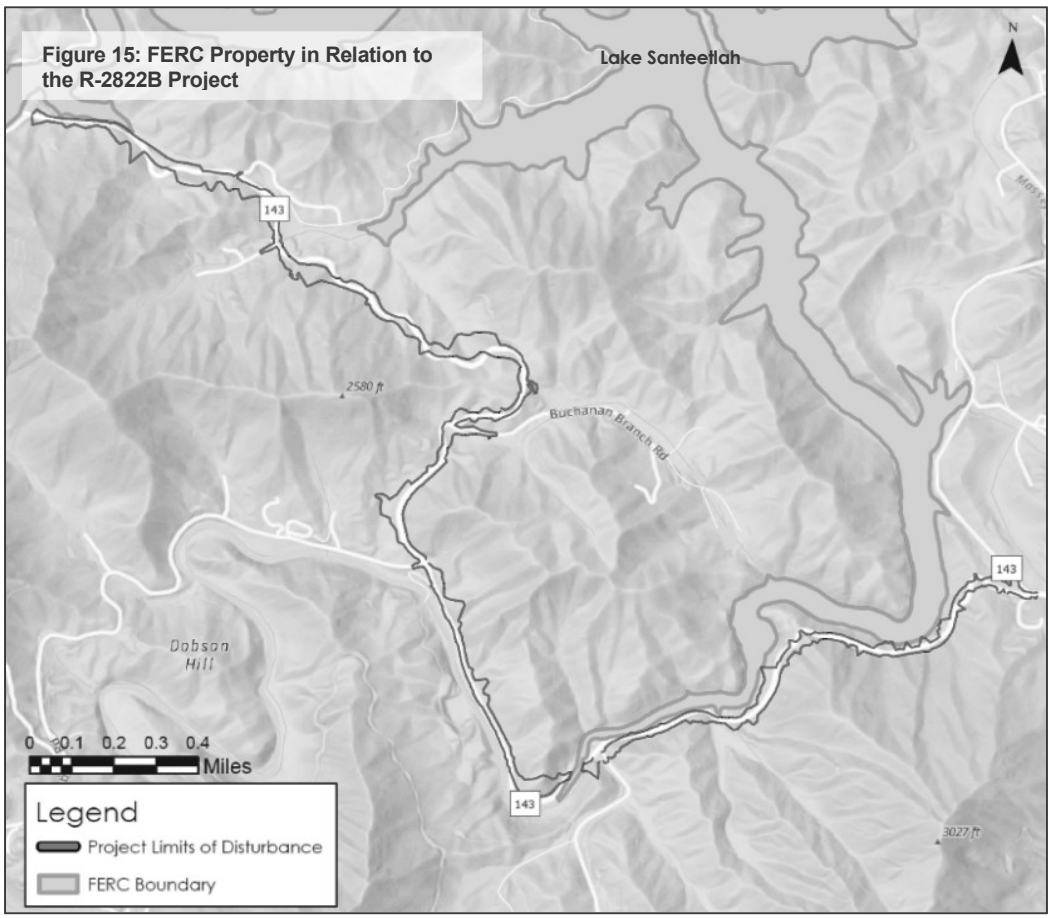


Figure 15: FERC Property in Relation to the R-2822B Project

5.0 Project Milestone Schedule*

Spring 2025 – Fall 2026	Revisit Section 106 Effects
Summer 2025	FERC Coordination Meeting
Sept. 2026 & Nov. 2026	Pre-Merger Project Update Meeting
Winter 2027	4A Merger Meeting
Spring 2027	4B/4C Merger Meeting
Fall 2028	FERC Approval
Summer 2029	Right-of-Way Certification
Summer 2029	Utility Certification
Fall 2029	Construction

**Future dates are subject to change*

APPENDIX A: PROJECT HISTORY SUMMARY

January 23, 2007	Concurrence Point 1 (Purpose and Need) ***"The purpose of this action is to improve safety along NC 143 using context sensitive solutions."*** • Project Study Area defined (see Figure 1)
December 16, 2010	Concurrence Point 2 (Detailed Study Alternatives) • The project study area was revised to encompass the alignment for Alternative 2, which was the Section 4(f) Avoidance Alternative. This alternative was developed to avoid impacts to the Snowbird Picnic Area. • Alternative 1, 2, and 4 were carried forward for detailed study.

- ***Alternative 1:*** *P*roposes to widen existing NC 143 with substantial horizontal alignment improvements from West Buffalo creek to just north of NC 143 Business. This alternative has a design speed of 45 mph and includes realignment of the NC 143 intersection with NC 143 Business near the eastern project terminus.
- ***Alternative 2,*** proposes to widen NC 143 with horizontal alignment improvements from West Buffalo creek to Carver cemetery and construct NC 143 along a new alignment to the north and east of the existing road with a new 640-long crossing of Santeetlah Lake from Carver cemetery to north of Jackson Branch Road (SR 1149). This alternative has a design speed of 45 mph.
- ***Alternative 4 (Transportation System Management Alternative),*** proposes to improve NC 143 without vertical or horizontal alignment improvements from West Buffalo Creek to NC 143 Business. The alternative consists solely of pavement and shoulder widening. Proposed total pavement width of 22 feet (two 11-foot travel lanes) and 4-foot (usable width) grassed shoulders[4]. No improvements would be made to NC 143 intersection with NC 143 Business near the eastern project terminus. This alternative has a design speed of 45 mph.

May 8, 2013	Concurrence Point 2A (Bridging Decisions and Alignment Review)
February 2015	Draft Visual Impact Assessment submitted to the USFS for review.
March 25, 2015	Project Coordination Meeting • Informed the Merger Team of the reprioritization of the project which resulted in the project being unfunded and going on hold. • Draft Visual Impact Assessment was reviewed by the USFS.
July 20, 2017	Merger Update Meeting • Project funding shifted from federal to state – Section 4(f) USDOT Act no longer applies to the project. • **NCDOT requested the introduction of an alternative using 3-R guidelines (requires revisiting CP 2/2A).** • **USACE (lead agency) recommended revisiting CP 1 to reconstruct the purpose and need statement to incorporate metrics into the concurrence form and establish safety screening criteria.**
March 22, 2018	Concurrence Points 1,2, and 2A revisited • Revise Purpose and Need and introduce Alternative 4A ***"The purpose of the project is to improve safety by achieving the minimum geometric standards consistent with the facility's functional classification."*** • Retaining Bridge #13 was recommended.

	• The 48-in corrugated metal pipe along Hooper Branch would be removed and replaced with at 115-foot, 8x8 reinforced concrete box culvert (RCBC).

- ***Alternative 1:*** Minimum design speed of 45-mph proposed total pavement width of 22 feet (two 11-foot travel lanes) and 6-foot-wide shoulders (4-foot paved) in each direction. (see Figure 2)
- ***Alternative 2-Revised:*** Retained new alignment segment with a new 640-foot-long crossing of Santeetlah Lake. Minimum design speed of 35-mph and widen NC 143 to have 11-foot travel lanes and 6-foot-wide shoulders (4-foot paved) in each direction. (see Figure 3)
- ***Alternative 4***: This alternative does not, modify any of the horizontal or vertical curves along NC 143. Proposed to widen the roadway (consisting of two 11-foot travel lanes and 6-foot-wide shoulders (4-foot paved)) from West Buffalo Creek to just north of NC 143 Business. (see Figure 4)
- ***Alternative 4A:*** Proposed to widen existing NC 143 from West Buffalo Creek to just north of NC 143 Business. Proposed improvements include upgrading NC 143 to ensure that all vertical and horizontal curves have a minimal design speed of 35-mph. Widening improvements include two, 11-foot lanes and 6-foot-wide shoulders (4-foot paved), which is consistent with the minimal recommendations for a Rural Collector in the NCDOT 3-R guidance.

November 2018

Concurrence Point 2A Revisited

- **Replacement of Bridge #13 over Snowbird Creek added to Alternatives 1, 2-Revised, and 4A.**
  - A three-span structure along the existing alignment using staged construction was recommended.
- A new 60-foot-long hydraulic structure was now recommended at Hooper Branch due to the staged construction.
  - USFWS and the USFS requested a bottomless hydraulic structure be evaluated at this location.
- NCDOT added the following commitment:

NCDOT will evaluate the feasibility of a bottomless hydraulic structure at the Hooper Branch crossing. Geotechnical information is required to make a final determination. NCDOT will provide the Merger Team with final hydraulic recommendations once information is available.

- Due to the realignment of NC 143, access to the Snowbird Picnic area would be modified. This will also result in the abandonment of a small portion of existing NC 143, requiring a redesign of the access to the Snowbird Picnic Area.
  - USFS requested the bridge replacement include paving the parking area, moving, or replacing the stone picnic area sign if it is affected, and inclusion of a vegetative planting plan for adjacent disturbed areas.
  - These should be considered mitigative measures to address the impacts from the revised CP2A bridge changes.
- NCDOT added the following commitments

Replacement of Bridge #13 over Snowbird Creek will require the modification of the driveway access to the Snowbird Picnic Area. NCDOT will coordinate with the Forest Service to develop a revised paved driveway and paved parking. Also, NCDOT will replace any structures (including the stone picnic area sign) that are affected by the bridge replacement or construction.

NCDOT will add a vegetative planting plan in the scope of the project to mitigate the impacts to disturbed areas.

March 20, 2019	Concurrence Point 2A and Concurrence Point 3 • **Alternative 4A Selected as the Least Environmentally Damaging Practicable Alternative**
June 19, 2019	Concurrence Point 4A NCWRC requested a commitment from NCDOT to work with NCWRC to survey and move hellbenders prior to construction. • The relocation of the identified species would require the use of heavy equipment to move boulders. NCDOT added the following commitment: ***NCDOT will conduct follow-up surveys of the hellbender and coordinate with the NC Wildlife Resources Commission to remove any identified hellbenders within one week of initiating construction of temporary causeways or in-water work.***
August 19, 2019	Field Meeting at the Snowbird Picnic Area with the USFS. USFS Attendees: Andy Gaston, Amy Mathis, Eric Crews, Logan Free • Discussion on retaining walls along Snowbird Creek • Discussion on the parking lot layout for the Snowbird picnic area • Discussion on Hooper Branch and the bottomless culvert • NCDOT added the following commitment ***NCDOT will coordinate with the US Forest Service to develop aesthetic treatments to the proposed retaining wall along Snowbird Creek between Snowbird Road and I U Gap Road.***
February 19, 2021	Section 106 Effects Meeting held.
May 2021	Final USFS Comments received on Visual Impact Assessment • NCDOT added the following commitment. ***NCDOT will construct cut and fill areas that will be designed to mimic the character of the surrounding landscapes.***
March 2022	Hooper Branch • **Geotechnical studies indicated that a bottomless culvert would not be feasible at Hooper Branch**
May 2022	Revisit Concurrence Point 2A/Concurrence Point 4B • NCDOT was directed by USFS to evaluate a single box culvert at Hooper Branch. • NCDOT instructed to revisit CP 4B when stream and wetland surveys were updated.
June 2022	• State Minimum Criteria Determination Checklist signed • Concurrence Point 2A/4B Meeting held o **USFS prefers an Aquatic Organism Passage culvert solution at Hooper Branch**
September 2024	• NCDOT was notified of a new Environmental Sensitive Area near the Waste Convenience Site • Additional Section 106 Coordination and an Effects Determination will be needed. Traditional Cultural Property eligibility is pending USACE coordination with the Eastern Band Cherokee Indians (EBCI).
May 2025	• Section 106 Coordination Meeting with USACE, EBCI and Cherokee Nation

	○ Agreement that the project would have to reopen the Merger Process to address potential Section 106 impacts (newly identified ESA site) before moving into ROW and permitting. ○ USACE to coordinate with Tribes to determine TCP eligibility for the new ESA site.
June 2025	• FERC Coordination Meeting ○ Project likely impacts the FERC boundary at Lake Santeetlah. ○ Additional coordination with Brookfield Smoky Mountain will be required. ○ FERC approval can run up to two years.
Spring and Summer 2026	• USFS Species of Conservation Concern Surveys completed and validated by USFS • Terrestrial T&E bat surveys completed with no evidence of bats found
September 16, 2026	• Project update meeting to update Tribal and Resource Agency partners on the status of the NC 143 improvements and discuss the plan to reinitiate the Merger Process and progress the project through Final Design and construction.