North Carolina Department of Natural and Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

June 20, 2017

MEMORANDUM

TO: Mary Pope Furr
Office of Human Environment
NCDOT Division of Highways

FROM: Renee Gledhill-Earley
Environmental Review Coordinator

SUBJECT: Historic Structures Survey Report for Replacement of Bridge 237 on SR 1120 Over Sorrel Creek, PA 16-02-0082, Haywood County, ER 17-0880

Thank you for your April 28, 2017, memorandum transmitting the above-referenced report. We have read the report and offer the following comments.

We concur with the consultant's evaluation that the Little East Fork Creek Stone Silos (HY0658) are eligible for listing in the National Register under Criterion C. In initial discussions with both the author and you our staff was initially skeptical about their eligibility, since the barn is gone, but the report provides a good background context establishing the rarity of a stone silo and the general historic context in which these were constructed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

ER17 0880

April 28, 2017

MEMORANDUM

TO: Renee Gledhill-Earley
Environmental Review Coordinator
North Carolina State Historic Preservation Office

+ ER Le Hess 6/19/17

FROM: Mary Pope Furr MPF
Architectural Historian
NCDOT Division of Highways

Due 5/31/17

SUBJECT: PA No. 16-02-0082, Replace Bridge No. 237 on SR 1129 (Little East Fork Road) over Sorrell Creek, Haywood County

Enclosed please find the Historic Structure Survey Report, survey site form, and additional materials for the above referenced project. Please feel free to contact me by phone (919-707-6068) or email (mpfurr@ncdot.gov) if you have any additional questions or comments. We look forward to hearing from you.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
PDEA-HUMAN ENVIONMENT SECTION
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RALEIGH NC 27699-1598

Telephone: (919) 707-6000
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Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
1020 BIRCH RIDGE RD
RALIEGH NC 27610

HISTORIC ARCHITECTURE
ELIGIBLITY EVALUATION REPORT

Replace Bridge No. 237 over Sorrell Creek on SR 1129 (Little East Fork Road), Haywood County, North Carolina

WBS No. 17BP.14.R.177

Prepared For:

Human Environment Unit
North Carolina Department of Transportation

Prepared By:
AECOM Technical Services of North Carolina, Inc.
701 Corporate Center Drive
Raleigh, NC 27607

Marvin A. Brown
Principal Investigator

April 2017

HISTORIC ARCHITECTURE
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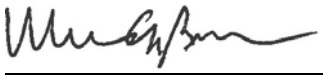

4-7-17

Marvin A. Brown, Principal Investigator **Date**
AECOM Technical Services of North Carolina, Inc.

Mary Pope Furr, Supervisor **Date**
Historic Architectural Resources Group
North Carolina Department of Transportation

MANAGEMENT SUMMARY

AECOM Technical Services of North Carolina, Inc. (AECOM) prepared this report in in support of the North Carolina Department of Transportation's (NCDOT) proposal to Replace Bridge No. 237 over Sorrell Creek on SR 1129 (Little East Fork Road) in Haywood County, North Carolina (WBS No. 17BP.14.R.177). NCDOT conducted a preliminary investigation in 2016 that identified three potentially historic resources within the Area of Potential Effects (APE) which required historic architectural assessment—a pair of stone silos and a house. It requested that AECOM evaluate these resources and provide a written report that included photographs of the resources and landscapes; historic and architectural contexts (as needed); evaluations of National Register of Historic Places (NRHP) eligibility; comparisons to similar types of resources in the region; and carefully delineated and justified NRHP boundaries, if appropriate. (NCDOT did not request that AECOM assess Bridge No. 237, which is to be replaced.)

As a result of its analyses, AECOM established that it was appropriate to assess the silos and house, which stand close to each other on the same less-than-ten-acre parcel, as a single resource. AECOM recommends that this resource—named the Little East Fork Creek Stone Silos property—is eligible for NRHP listing under Criterion C as embodying the distinctive characteristics of a type of construction, the early twentieth-century stone silo.

Resource Name	**NC HPO Survey Site #**	**NRHP Recommendation**	**NHRP Criterion**
Little East Fork Creek Stone Silos	HW-0658	Eligible for NRHP listing	C

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I. PROJECT DESCRIPTION AND METHODOLOGY

AECOM prepared this report in support of NCDOT's proposal to Replace Bridge No. 237 over Sorrell Creek on SR 1129 (Little East Fork Road) in Haywood County, North Carolina (WBS No. 17BP.14.R.177) (Figure 1 and Figure 2). NCDOT conducted a preliminary investigation in 2016 which identified three potentially historic resources within the Area of Potential Effects (APE) that required historic architectural assessment—a pair of stone silos and a house. It requested that AECOM evaluate these resources and provide a written report that included: photographs of the resources and landscapes; historic and architectural contexts (as needed); evaluations of NRHP eligibility; comparisons to similar types of resources in the region; and carefully delineated and justified NRHP boundaries, if appropriate. (NCDOT did not request that AECOM assess Bridge No. 237 that is to be replaced. The APE provided by NCDOT is an ellipse roughly centered on the bridge that is about 300 feet at its widest and 1,200 feet at its longest (Figure 3).

In December 2016 AECOM evaluated the resources as required, in compliance with the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, other state and federal regulations, and NCDOT's current *Historic Architecture Group Procedures and Work Products* and the North Carolina Historic Preservation Office's (HPO) *Report Standards for Historic Structure Survey Reports/Determinations of Eligibility/Section 106/110 Compliance Reports in North Carolina*. As a result of its evaluation, AECOM recommends that the three identified resources comprise a single resource—the Little East Fork Creek Stone Silos property—that is eligible for NRHP listing under Criterion C as embodying the distinctive characteristics of a type of construction, the early twentieth-century stone silo.

AECOM senior architectural historian Marvin A. Brown, who meets the Secretary of the Interior's qualifications for history and architectural history (CFR 36 CFR Part 61), conducted the analyses and drafted this report. As part of this effort, he visited, documented, and photographed the resources and conducted supplementary research. This effort included research at the main branches of the Haywood and Buncombe County public libraries in Waynesville and Asheville, and State Library and Archives in Raleigh; examination of Haywood County deeds and plat maps; online historical and genealogical research; and investigation into the history and of silos in HPO files and in late nineteenth and early twentieth-century agricultural publications and newspapers.

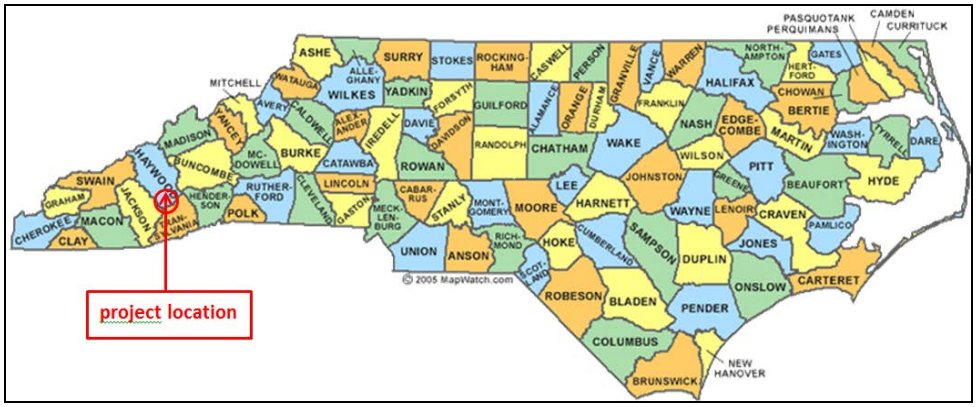

Figure 1. Project location map

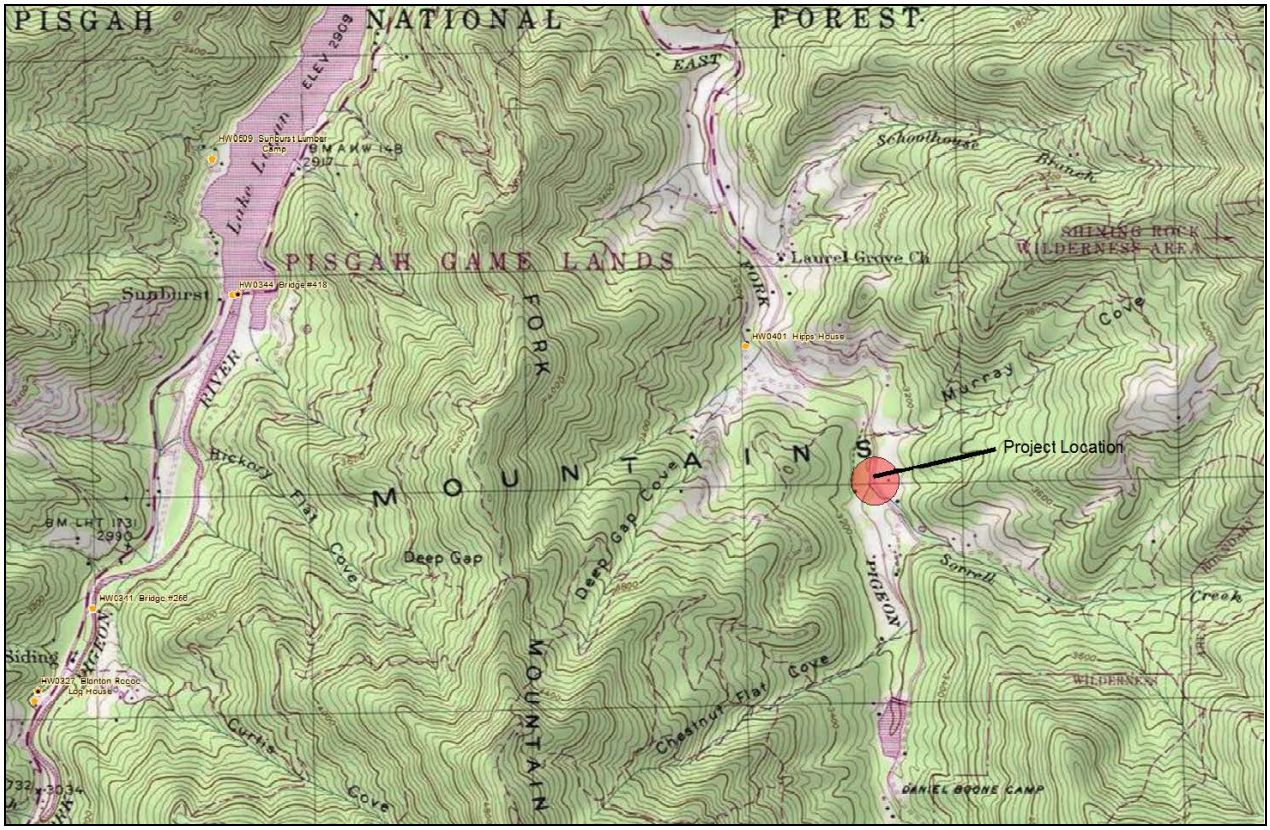

Figure 2. Project location on SR 1129 (Little East Fork Road), Haywood County (source: NCDOT)

Figure 3. Area of Potential Effects (shaded in rust) (source: NCDOT)

II. HISTORIC CONTEXT

Haywood County's first outside settlers likely reached it in the mid-1780s. Its establishment and later paring back during the nineteenth century reflects the growth of the far western thumb of North Carolina during that century (Ross 2009:55). In 1808 Haywood was the first of ten counties formed from the pioneer Buncombe County, which initially encompassed all of the state's far west. Haywood first extended from Tennessee south to Georgia, but in 1828 and 1851 the state severed its western and southern lands for the new Macon and Jackson counties (Corbitt 2000:117-120). In Haywood settlement concentrated along the rivers, creeks, and valleys that cut through its mountainous terrain, particularly the Pigeon River and Crabtree, Fines, Jonathan's, and Richland creeks (Beadle 2009:32).

The 1810 census of the then-much-larger Haywood County recorded 2,780 residents divided between 384 families. The average household ranged between eight and twelve, providing many hands for the county's almost sole source of income, agriculture. Waynesville, the county seat, was the only place that could pass for a town. Census taker Thomas Love reported that most residents were scattered amidst isolated settlements. He described Fines Creek and East Fork of Pigeon—the latter likely encompassing the project area—as "(v)ery remote from the Body of the County" (Beadle 2009:41). In the antebellum period the county and the region began to develop some business other than farming, but the 1850 and 1860 censuses list "farmer" and "laborer" as the most common occupations. The families within the remote project area likely fit "the stereotype as self-sufficient, backwoods Appalachian farmers and hunters" (Beadle 2009:51).

Farming and timbering took a toll on Haywood County during the last half of the nineteenth century and into the early twentieth. A federal report on the southern Appalachian forests noted the general problems of erosion in the region. In Haywood the only large stable agricultural areas were within the wide valleys along the Pigeon River. Of the 70,000 acres drained by the three forks of the Pigeon—the West Fork, East Fork, and the Little East Fork, which passes through the project area—the report stated: "The topography is extremely rugged and, excepting for the narrow alluvial lands along the largest streams, there is no level land. The hollows of the smaller streams are narrow, with the slopes of their intervening ridges steep and extremely rugged and rough" (Ayers and Ashe 1905:153).

Very little timbering had been done in the three forks of the Pigeon area at the opening of the century and it had only a few modest mills, including "a small one on Little East Fork." The federal report accurately noted that a large mill and railroad were planned for the West Fork, at what would become Sunburst (Ayers and Ashe 1905: 154). Railroad lines abetted the recovery and growth of Haywood County lumbering, agriculture (including tobacco and apples), and tourism beginning in the late nineteenth century. The Western North Carolina Railroad, the county's first, reached Canton in 1882. As the Richmond and Danville Railroad, it continued on to Waynesville in 1883 (Ross 2009:72-76).

Apple orchards were concentrated in the broad valley east of Waynesville that had ready railroad access. Timbering took place throughout the county, but the milling industry was concentrated in Canton and Sunburst. Both were not far from the project area in terms of road mileage—Canton about ten miles north and Sunburst about four miles distant via a hairpin drive—but much more distant in terms of travel time. Between 1905 and 1907 the Champion Fibre Company of Ohio erected a massive industrial complex to produce pulp for papermaking in Canton. When opened in 1908, the mill was the largest of its kind in the world (Wills 2009:246-249; Sullivan and Melton 2014:92-94).

The county formed Cecil Township, in which the project area is located, in 1901. A small and mountainous township, it had a voting population of about 50 in 1905 (Allen 1908:400). Although preceding Champion Fibre, the township was soon to be dominated by milling and Champion interests. In 1907 Champion purchased 1,000 acres on the headwaters of the Pigeon River (also known as the Three Forks area), near where the East Fork and Little East Fork join. It entered into an agreement with the Whitmer interests, known locally as Champion Lumber Company, to supply pulpwood for the Canton mill. Subsequently reorganized as the Suncrest Lumber Company, the enterprise established a massive milling operation to the south of the Pigeon's headwaters, at the present site of Lake Logan. Suncrest erected about 100 houses in the associated mill town of Sunburst, as well as businesses and a hotel. About 550 people lived in the camp, including approximately 100 African-Americans. The Tennessee and North Carolina Railroad (T & NCRR), organized to serve the planned operation, built a line from Canton to Sunburst in about 1912. Its purpose was to carry materials to the Champion Fibre mill. By 1925-1926 the forests had been cut over, the railroad removed, and the logging town partially burned out and abandoned. In 1931 the Champion Paper Mill Company created Lake Logan near the town's site from a smaller reservoir that had provided the mill with water (Oliver and Farlow 2001:100-101; Medford 1969:56; Webb 2006:78; Sullivan and Melton 2014:94-103).

Although built to haul lumber, the T & NCRR also served the farmers along its route, including those on the Little East Fork. Its loss negatively affected the number of citizens and value of property in Cecil Township. In 1930 the township's population was only 803 and its taxable valuation about $330,000 (Levine 2002:29). The mountainous nature of Cecil Township and the large amount of federally owned forest within its borders have further reduced its population in later years. Only 504 people lived within its approximately 50 square miles in 2010 (http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk).

A 1905 business promotion map for Waynesville depicts the remote project area on trout fishing and bear hunting grounds. Two mile-high mountains are shown rising to its east and west, Cold Mountain and High Top (Waynesville Power Site and Electric Power Company, 1905) (Figure 4).

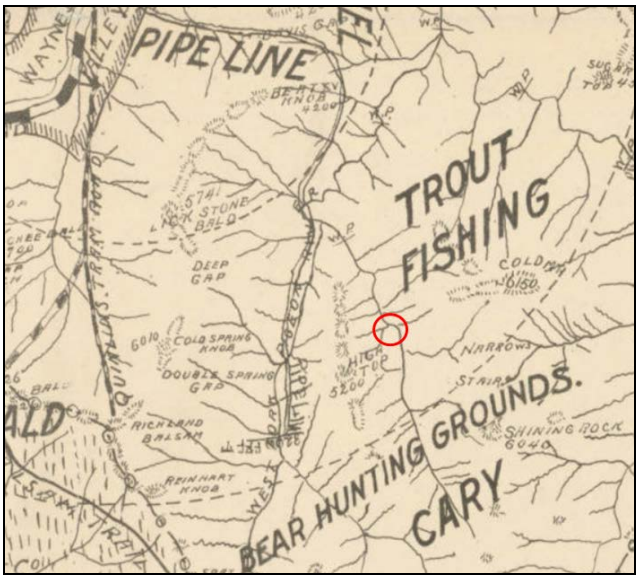

Figure 4. Waynesville business promotion map with Waynesville at top left and approximate project location circled in red (Waynesville Power Site and Electric Power Company 1905)

Hunting and fishing have remained a constant in the area. Arthur L. Lesher, a wealthy New York City mercantilist who lived in Rye, NY, owned 1,400 acres on the Little East Fork in the early twentieth century. Local news accounts noted the recreational activities of Lesher, his family, and friends. On fall expeditions that included packs of hounds, his hunting parties set sights on "foxes, coons, bears, [and] rabbits" (*Western Carolina Enterprise*, November 13, 1908 and December 1, 1909; Jackson and Peele 1911). To protect their game, Lesher and his wife, Marion, ran newspaper notices threatening legal action if their warnings of "NO FISHING, HUNTING, CUTTING OF TIMER, GENSENG-DIGGING or OTHER TRESPASS" were ignored (*Western Carolina Enterprise*, January 8, 1909). A 1922 newspaper recounts the hunting trip of two men visiting Cecil from Greer, South Carolina to hunt bear (*Carolina Mountaineer and Waynesville Courier*, October 26, 1922). And in 1950 Tighe Smathers, with a group of hunters led by Uncle Joe Hargrove of Haywood County, took down "Old Toughy"—a legendary 400-pound bear—along Sorrell Creek (*Asheville Citizen Times*, November 19, 1950). The Little East Fork has long retained its reputation as a fertile trout fishing creek (see for example, *Asheville Citizen Times*, June 10, 1934 and June 26, 1988).

Writer and naturalist Margaret W. Morley captured the remote nature of the Little East Fork in her 1913 book, *The Carolina Mountains* (1913:277, 283-284):

> "You ought to go to the Forks of the Pigeon, the coves are so thick up there, there is scarcely room for the mountains." Thus the people advise, and to the Forks of the Pigeon, if you are wise, you will go…
> …
> The left-hand [of the Pigeon] or Little East Fork lies at the bottom of a long narrow "cove" so tightly squeezed in between the sides of Cold Mountain and the wild Fork Mountain that road and river continually become one. And here on either side are the promised "coves" running up into the mountains, close together, one after the other, choked full of laurel and rhododendron, grown with forest trees, and each contributing a wild little stream to swell the waters of the Little East Fork….
>
> At the end of the road you come, not to a lumber-camp, but to a house with a clearing where the occupants apparently have lived for generations. The people here are glad to see you. A visitor up the Little East Fork is no everyday occurrence….

The 1922 Haywood County soils map depicts the predecessor of NC 215 splitting, as it currently does, where West Fork and Little East Fork creeks divide (U.S. Geological Survey 1922) (Figure 5). It heads southwest with the parallel T & NCRR rail line toward the sawmill at Sunburst. To the southeast it follows Little East Fork Creek on a partially improved road to just past the community of Cecil. Around the project area, the route becomes a secondary road or trail until it ends where the valley further pinches in about a mile to the south. A few scattered houses stand on either side of the road, including one perhaps associated with the project area's twin stone silos. The county highway map of 1930 identifies the road as Class C, the least improved type (North Carolina State Highway Commission 1930).

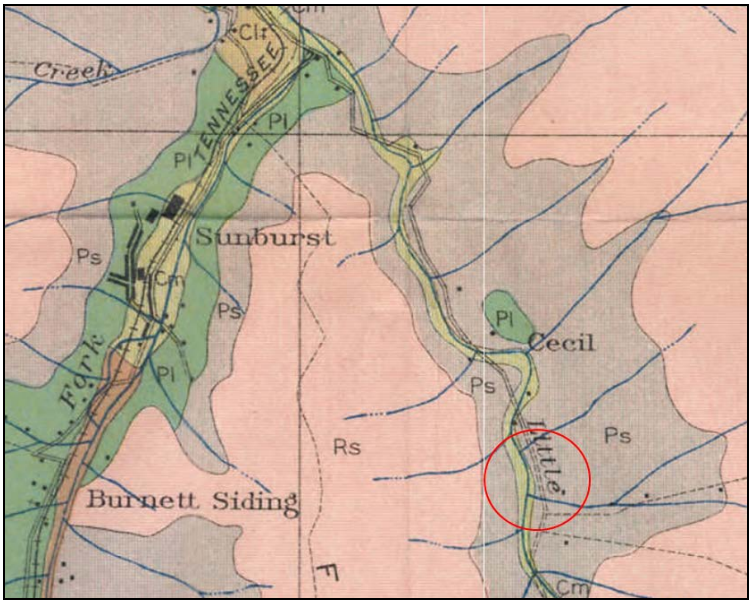

Figure 5. Haywood County Soil Map, 1922, with approximate site location circled in red (U.S. Geological Survey)

The 1935 U.S. Geological Survey map shows little change since 1922 along the Little East Fork within and near the project area (Figure 6, left). It captures the major changes to the Sunburst area to the west, however. The railroad is no longer in place and not only are the town and mill gone, but they are beneath the waters of Lake Logan. The 1954 (U.S. Geological Survey) county soils map brings the Boy Scouts' Camp Daniel Boone into the picture (Figure 6, right).

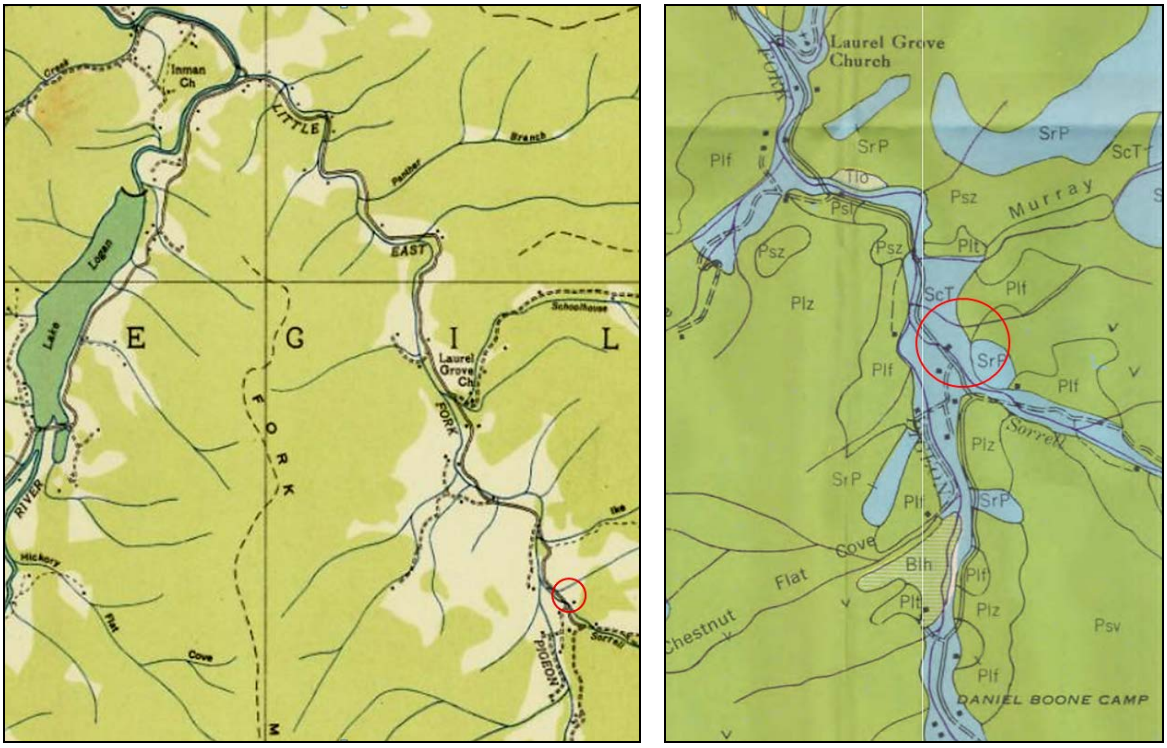

Figure 6. Waynesville, N.C. U.S. Geological Survey topographical map, 1935, at left, and Haywood County Soil Map, 1954, at right; approximate project area circled in red on both maps

The arrival of the Boy Scouts was likely the most consequential event in the history of the East Little Fork area in and around the APE since the arrival of non-native settlers. In the summer of 1940, with funds provided by Asheville Coca-Cola bottling magnate R. Lee Ellis, the western North Carolina council of the Boy Scouts purchased 700 acres for Camp Daniel Boone at the end of Little Fork Creek Road just south of the APE. The Scouts dedicated the camp in August 1944 (*Waynesville Mountaineer*, February 20, 1941; *Sylva Herald and Ruralite*, August 30, 1944).

In 2000 the Daniel Boone Council purchased 277.74 acres from the Champion paper interests, through The Conservation Fund, onto which it expanded the camp. The land was located on three tracts contiguous to each other and the camp: Tract 15 (2.380 acres), Tract 16 (262.359 acres), and Tract 17 (10.001 acres). Tract 17 was the parcel upon which the silos and other resources addressed in this report stand (Figure 7). While the purchase was substantial, it was only a small part of the 4,230 acres collectively called the Lake Logan Tract that Champion sold in 1999-2000. The numerous purchases that Champion made over decades to acquire this and other tracts in southern Haywood County stymied efforts to trace the ownership of Tract 17 back through the deed record. (See Champion International Corporation to Champion Realty Corporation and accompanying 16 map sheets at Haywood County Deed Book 476/Page 1346 (1999); Champion Realty Corporation to The Conservation Fund, Deed Book 479/Page 2471 (2000); and The Conservation Fund to Daniel Boone Council, Inc., Boy Scouts of America Deed Book 480/Page 92 (2000).)

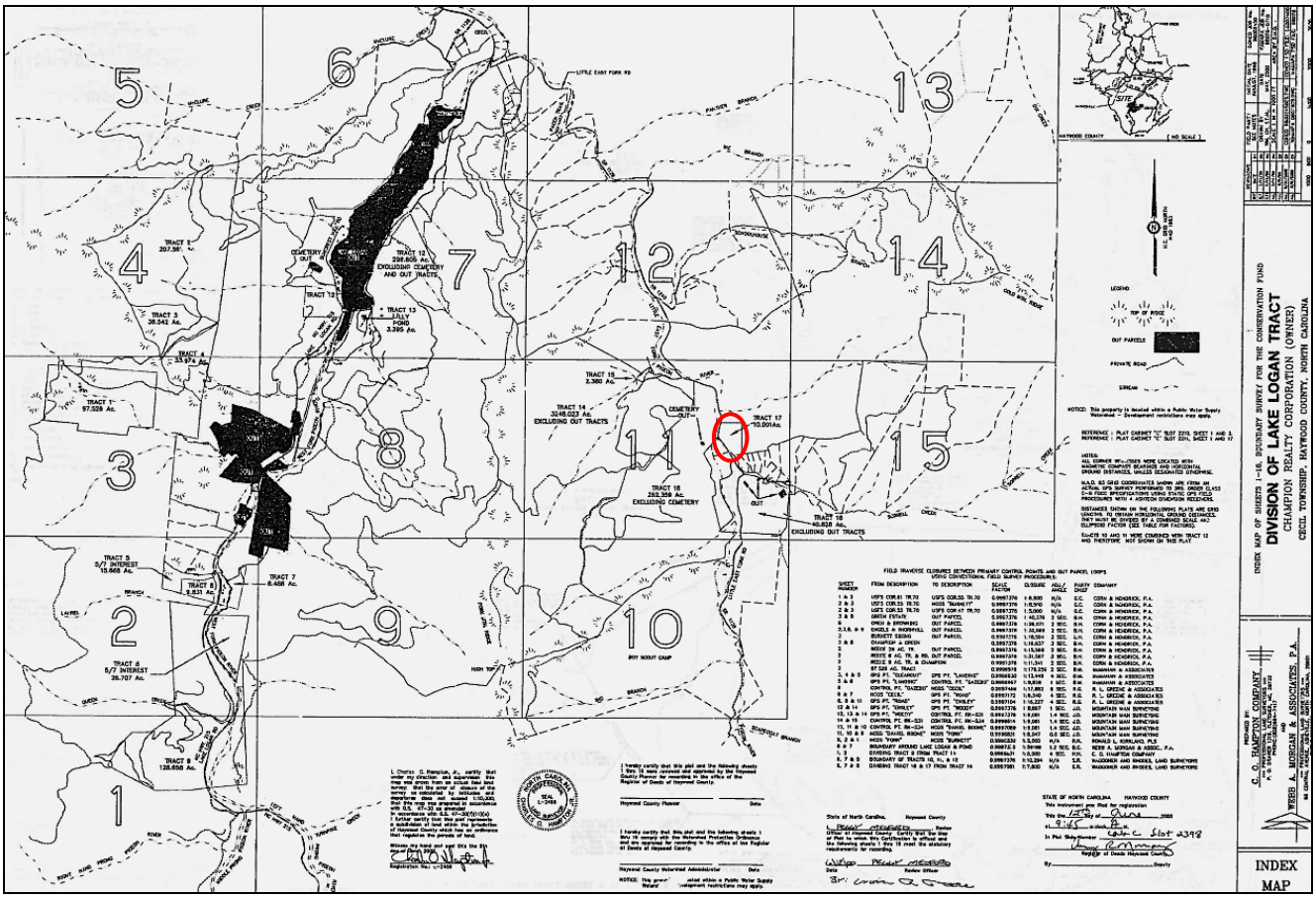

Figure 7. Cover sheet of Lake Logan Tract map sheets with Tract 17 circled in red (Deed Book 476/Page 1346 (1999))

The 1967 and 1979 updates of the 1941 Waynesville, N.C. topographical map sheet bring the history of the project area and APE almost completely up to the present. The 1967 map includes building symbols that in all likelihood are the current house and barn site/silos (Figure 8, left). Around the project area it also locates apple orchards. These orchards were removed sometime between 1967 and 1979 (Figure 8, right). (The inventory below addresses the role of apples within the APE.)

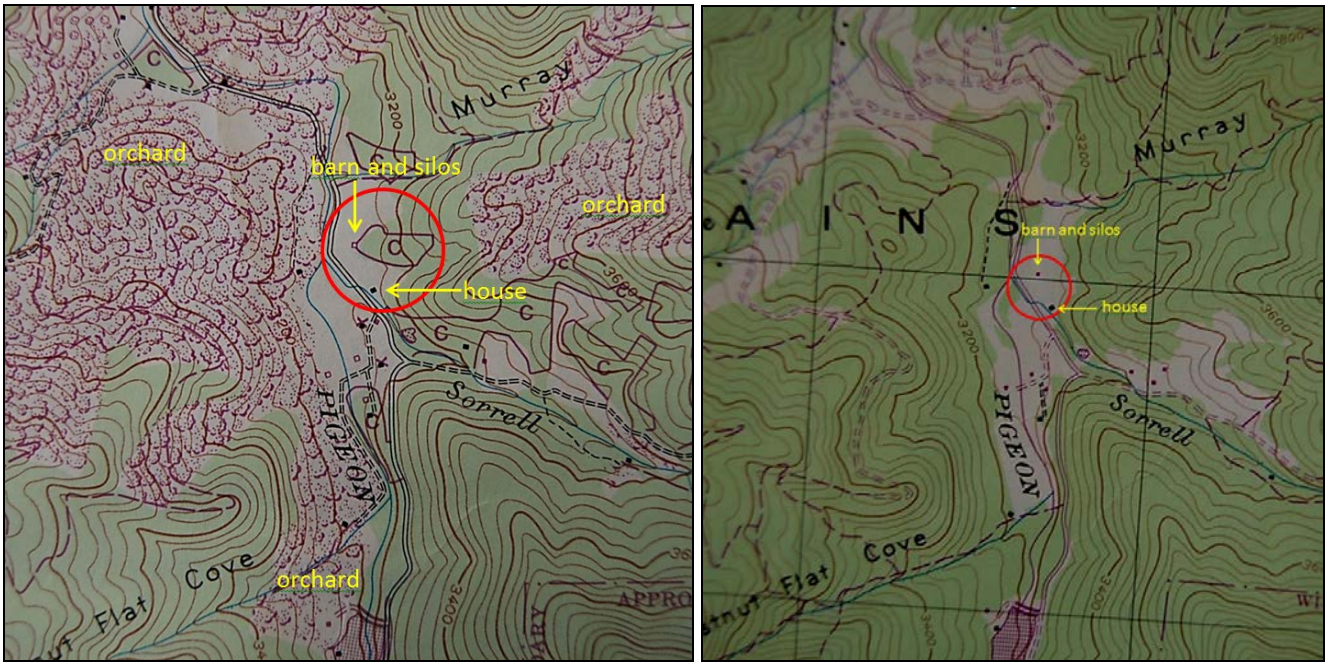

Figure 8. Waynesville, N.C. U.S. Geological Survey 1941 topographical map photorevised in 1967, at left, and 1979, at right (annotated)

Even with the presence of the camp, the project area remains remote. In 1994 13 Boy Scouts were injured in a bus accident just north of the camp and south of the APE that may in part have been due to the "narrow, twisting dirt road" (*Asheville Citizen-Times* June 17, 1994). The road was subsequently paved, but remains a dead end. It effectively terminates in the Boy Scout camp, although its continues as a track south for a ways before disappearing into the Shining Rock Wilderness Area, North Carolina's largest designated Wilderness area.

III. INVENTORY AND EVALUATION


Photograph: Megan Privett

Little East Fork Creek Stone Silos
HW-0658
2845 Little East Fork Road, Cecil Township
Parcel number 8632-83-9803
Ca. 1900-1925
Recommended eligible for National Register listing under Criterion C

Description

The approximately 9.5-acre Little East Fork Creek Stone Silos property holds a pair of freestanding, intact, fieldstone silos; two independent sections of stone wall running between and abutting the silos, which were portions of the foundation of two no-longer-extent barn sheds, along with another concrete section of barn shed foundation; a frame former house used as the office/support building for Camp Daniel Boone's High Adventure Camp; and a modern camp shower facility (Figure 9). (When the Boy Scouts are on the site, tents are pitched in the open land to the north of the resources.) The silos stand at their closest point about 250 feet east of Little East Fork Creek and 200 feet east of the eponymous road. Both the east silo and west silo are approximately 30-feet tall and 9-to-10 feet in diameter.

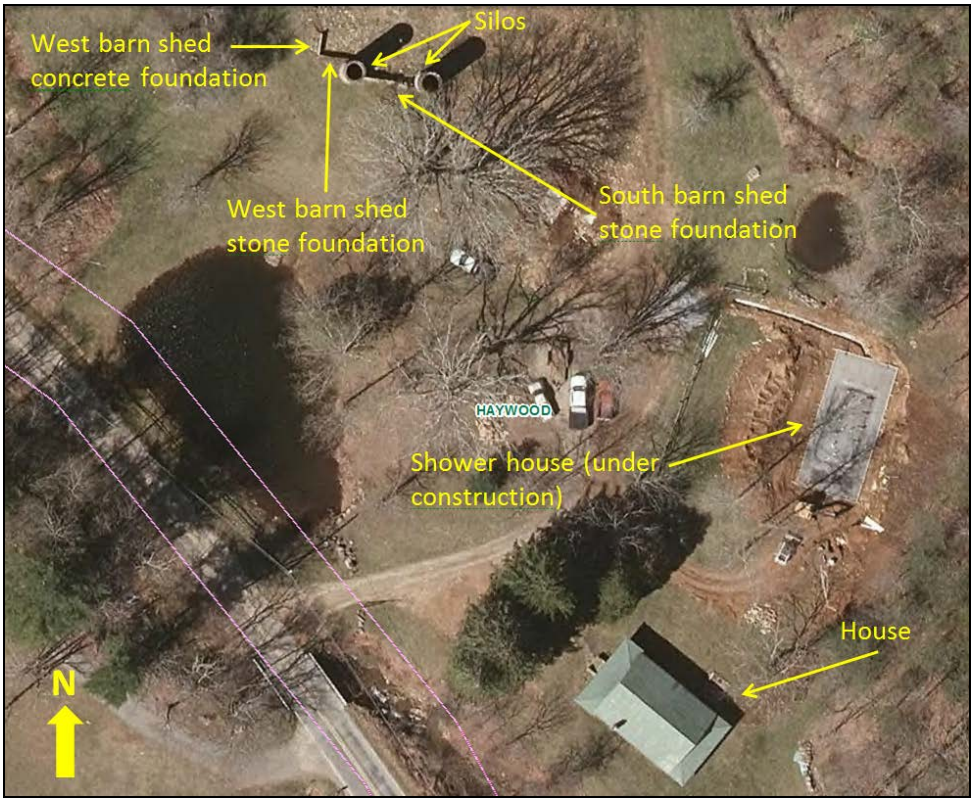

Figure 9. Resource locator map, ca.2015; note late afternoon light casting deep shadows to the northeast (source of base map: http://gis.ncdcr.gov/hpoweb/)

Before addressing the site's intact resources—the silos, the former house, and the shower facility—it is important to address the remnant foundation walls and lost barn. Following review of aerial images and two photographs of the standing barn and silos, and a somewhat cursory examination of the walls, it was initially assumed that the silos and barn were structurally integrated (Figure 10 through Figure 12). A closer examination reveals otherwise.

Figure 10. Aerial photograph taken in 2010 showing barn/sheds/silos at right, road at left, and creek at far left (source: http://gis.ncdcr.gov/hpoweb/)

Figure 11. Looking northeast at barn, sheds, and silos, December 10, 2005 (photographer: 'DW Hike'; source: http://www.dwhike.com/Hikes-in-the-South/North-Carolina-Hikes/South-Beyond-6000-Hikes/ Cold-Mountian-NC-12-10-05/i-T8Zk5kC/A)

Figure 12. Looking northeast at barn, sheds, silos, November 11, 2010 (photographer: 'Internet Brothers'; source: www.flickr.com/photos/netbros/5167673823/in/album-72157623912582454/)

The main body of the barn was a large, shallowly gambreled, frame building with its ridge running north-south. A shed extended across its south side between the silos. The silos were partially enveloped by and opened into the shed. They do not appear to have opened directly into the barn proper. A deep shed ran the length of the barn's west side elevation. All of the frame building was removed between late 2010 and 2015, along with the entirety of the foundation of the main barn block. What remains on the ground are the sections of barn shed foundation walls. Close examination of these walls reveals that they abut the silos and are not part of them. The same local fieldstone and construction was used, but the walls and the silos were built independently.

The fieldstone foundation of the south barn shed extends, on an east-west axis, about 25 feet between the silos. A second fieldstone foundation at a lower elevation, which underpinned the south end of the barn's long western shed, extends about 12 feet west of the west silo. A small section of concrete foundation wall is set at a right angle to this wall. This too underpinned the barn's western shed. A careful look at the points where the stone foundations meet the stone silos reveals the abutting rather integration of the walls (Figure 13 through Figure 18).

Figure 13. Looking west along south barn shed foundation wall, at left, to its abutting of west silo

Figure 14. Looking southwest at south shed foundation wall, at left, and west shed foundation wall, at right, abutting west silo

Figure 15. Looking west along west barn shed foundation wall, at left, showing where it abuts west silo and concrete foundation wall

Figure 16. Looking southwest at three sections of foundation wall and west silo

Figure 17. Looking southeast at point where south shed foundation wall abuts east silo

Figure 18. Looking southeast along length of south shed foundation wall between west silo, at right, and east silo, at left

West Silo

The west silo is constructed of variegated local fieldstones of the same material as, if in many instances larger than, the surviving barn shed foundation. Three regularly spaced almost-square openings, set one above the other starting at ground level, penetrate the silo's north face. A fourth opens above them on the silo's northeast face. Building ghost marks indicate that the lower three opened directly into the main body of the barn, while the uppermost faced outside (Figure 19 and Figure 20). Early literature called for openings to be placed one above the other (see for example Shaw 1900:305; Silver Manufacturing Co. 1913:72). Why both of the Little East Fork silos have their uppermost openings skewed to the side is not known. It is also not known why their openings face in different directions, although this likely had to do with when and how the barn and its north shed were constructed. The differing directions of the openings suggest that the silos were built at least a few years apart.

The west silo is round with concrete mortar laid roughly but evenly between its stones. The mortar is original, though patched in spots. No evidence of a roof is visible from ground level or by looking up through the silo's interior. However, relatively narrow integral stones projecting from near the silo's top may have been used to support a roof or perhaps a ladder (Figure 21, at left). No ladder or silo filling tubes, or any braces for them, mark the exterior stonework.

A coat of cement lines the silo's interior (Figure 21, at right). Likely once smooth, it has deteriorated somewhat over time, but continues to cover the interior stone face. Concrete and wood boards frame the bottom three silo-filling openings; only concrete faces the uppermost. Two apparently largely intact doors that once sealed the openings (which are also called "doors") lie on the silo's floor. Among the floor's additional detritus are boards that were likely portions of the other two doors and the top opening's frame. A triangular section of standing-seam metal may once have formed part of a roof or it may have come from the barn (Figure 22).

Figure 19. West Silo: south face at left; west face and edge of east silo at center; north face at right

Figure 20. West Silo: looking southwest, at left, with opening at top that did not face into barn; looking south at bottom of silo and surviving fieldstone and concrete barn foundation walls

Figure 21. West Silo: top of silo with some integral projecting stones at left; plastered interior at right

Figure 22. West Silo: silo floor with doors and other detritus

East Silo

The east silo is likely roughly contemporary with the west silo. It has nearly identical dimensions and is constructed of the same variegated local fieldstone, although its openings are different in number and orientation. Two rather than three almost-square openings are set one above the other, starting at ground level, into the silo's west face. A third opens higher up on the silo's northwest face. Building ghost marks indicate that the lower two opened directly into the shed that extended between the two silos, rather than into the barn proper, as the west silo did. The uppermost faced outside, which can be seen in the 2005 photograph of the barn and silos (Figure 11). The silo's north, east, and south faces are unbroken (Figure 23 and Figure 24, at left).

As is its mate, the east silo is round with concrete mortar laid roughly but evenly between its stones. Much of the mortar is original, but the lower two-thirds of the east elevation, which opened into the shed that connected the barns, have been re-mortared. This effort likely included rebuilding the openings, which may have been slightly enlarged and reduced in number from three to two (Figure 24, at right). Only the uppermost opening appears to be untouched. The rebuilding suggests a failure at this lower portion of the silo: the bottoms of silos were at greater risk due to the increased pressure of the silage upon their walls. From ground level or looking up through the silo there is no evidence of a roof. (A piece of standing-seam metal projecting out near the silo's top was a portion of the barn roof, not the silo's.) No stones project out from the silo's top and its walls retain no evidence of a ladder, filling tube, or any support braces.

Cement lines the silo's interior (Figure 25). Although deteriorated, it continues to shield the interior stonework. The uppermost opening retains its original concrete enframement, bolstered by wood boards that would have held the no-longer-extant door. The silo's floor retains no pieces of its doors or any possible roofing materials.

Figure 23. East Silo: west and northwest faces at left; north face at center; east face with west silo beyond at right

Figure 24. East Silo: south face at left; west/northwest face at right with re-mortaring evident, original uppermost opening at top center, and piece of barn roof sandwiched into stonework near the top

Figure 25. East Silo: interior cement surface

House

The house on the property was built as a single-family dwelling or perhaps a hunting lodge. Since the Boy Scouts have owned the property, it has been used as the office/support building for Camp Daniel Boone's High Adventure Camp. It is a built of frame and clad in board-and-batten siding. Three bays cross the house's front (northwest) elevation and it is three piles deep. Rafter ends are visible beneath the gabled roof, which is filled at its front and rear (southeast) peaks with asphalt shingles. Fieldstones support the house and its full-façade front and rear porches. Both porches have been altered through the addition of screens and wooden lattices. The framing of the front porch's hipped roof, however, may be original. The 3/1 sash that fills most of the window bays also appears to be original. The interior was visible through doors and windows. It now holds offices, but retains wooden floors and plain wooden surrounds. At least one original, vertically stacked, five-panel door remains in place inside (Figure 26 through Figure 28).


Figure 26. House: northeast side and northwest front elevations at left; northwest front and southwest side elevations at right


Figure 27. House: southwest side and southeast rear elevations at left; southeast rear and northeast side elevations at right


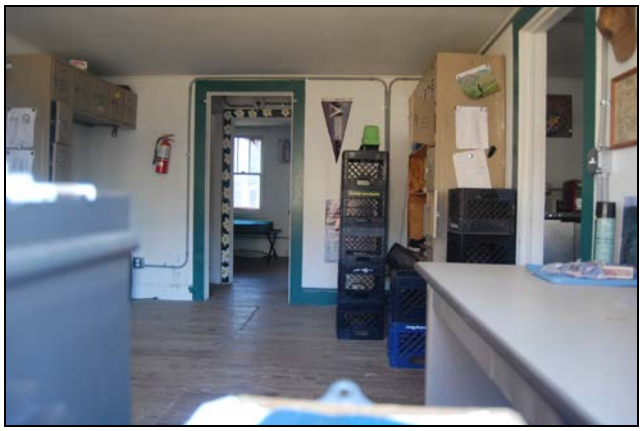

Figure 28. House: view looking through front door toward rear room at left; view looking from rear window toward front room at right

Shower House

The modern shower house is a long board-and-batten siding building that houses multiple showers behind doors on its long side elevations. The gables of its seam-metal roof extend out over its short north and south elevations to shade outdoor sinks and concrete-floored patios. A tiny, modern, board-and-batten sided building off its southeast gable likely holds pumping mechanisms (Figure 29).

Figure 29. Shower House: north short and west long elevations at left; south short and east long elevations at right

History

The site-specific history of the Little East Fork Creek Stone Silos could not be uncovered. No mention of the silos or their associated farm was found in primary or secondary sources at either the Haywood County public library in Waynesville or the Buncombe County public library in Asheville. Multiple searches of various phrases at *newspapers.com* and in the North Carolina newspaper archives of *digitalnc.org*, and more generally online, identified elements of the history of the Little East Fork Creek area, but not of the specific site. However, thumbnail information from a local source, historic maps, and the relatively brief history of stone silos help to roughly date the silos and identify their historic use.

A local contact provided NCDOT architectural historian Megan Privett with limited background information during her 2016 scoping of the project. According to the source the property was once associated with the Harrison family and functioned as a crabapple farm. Searches of the name Harrison in county deed records failed to identify a connection between the family and the property, although not every Harrison deed was viewed. Online searches of the name Harrison in newspapers, genealogies, and cemetery records did not identify any individuals with that last name who lived in Cecil Township. The 1910, 1920, 1930, and 1940 census records also did not identify any Harrisons living in the township. The Harrisons who occupied the property therefore likely leased it from the Champion timber interests.

The association of crabapple cultivation with the farm also failed to provide any fruitful leads on its history. The 1967 photorevision of the 1941 topo map does show apple orchards to each side of the property (Figure 8, at left). However, the silos would not have been connected with crabapple production or storage. Silos (as discussed below) were for the storage of silage, almost 90% of which was composed of chopped up corn stalks and cobs in the country in 1940 (Wiegand 1989:1). Apples

cannot be made into silage. In the North Carolina mountains, apples in the late nineteenth and early/mid-twentieth centuries were stored in purpose-built, rectangular, stone buildings often erected partially into a hillside. Examples of these in Haywood County include ones at the O'Neil and Barber orchards and at the Dan Cook Cabin (Oliver and Farlow 2001:38; Cotton 1993:18; Carroll and Pulley 1976:74-78, 108-115; North Carolina Department of Agriculture 1910) (Figure 30). Alternatively, they were stored in similarly fashioned frame buildings.

Figure 30. O'Neil applehouse, built in the 1890s, at left; Barber's Orchard applehouse, built in the early twentieth century, at center (source: Oliver and Farlow, *Mountain Gables*); Cook Place applehouse in December 1937, at right (source: Carroll and Pulley, *Historic Structures Report*)

The construction of stone silos began in the United States in the late nineteenth century. Expensive to build if sturdy, such silos were never common. By the 1920s they were rarely erected, except in association with farm estates. The twin silos on the Little East Fork therefore likely date from the first quarter of the twentieth century.

The tax record date of 1935 assigned to the former house on the property generally corresponds with its appearance. Due to the same difficulties piercing the deed record, its early ownership could not be determined. The Boy Scouts erected the shower house in ca.2015.

Historical and Architectural Context

Silos are a relatively modern outbuilding type. They first appeared in the 1850s in the form of in-ground storage pits. Around the time of the publication of French farmer August Goffart's book on ensilage in 1877, and its translation into English in 1879, the silo reached America. In a variety of materials and forms, the silo spread within a few decades throughout the country. In 1882 perhaps only 91 American farms had silos. By 1895, however, there were about 50,000 silos in the United States. By 1900 the number had doubled (Wiegand 1989:1; Beedle 2001:2; Noble 1984:69-71).

Silos allowed farmers to store winter feed—silage—through the winter, which provided hearty sustenance for cattle, horses, and mules and allowed for year-round milk production by cows. They were initially horizontal, either in-ground trench or aboveground bunker types. However, they quickly evolved into tall vertical buildings. (In recent decades many farmers have returned to horizontal storage.) In their formative years in the late nineteenth and early twentieth centuries, silos were sometimes square or even other polygonal shapes, such as octagonal. Round silos, however, soon became the rule. (Their shapes permitted silage to pack and move down the silo more evenly, reducing spoilage.) There was much experimentation with different types of materials. Silos were built of stone, brick, clay or tile block, tile staves, wooden staves, poured concrete, or concrete block. Because they were less expensive to build than masonry silos, wood-stave silos became dominant in the early

twentieth century in spite of their drawbacks—greater spoilage of sileage, shrinking of staves, wracking. By mid-century concrete as well as fused glass-on-steel silos—the once ubiquitous cobalt blue Harvestore silo—predominated (Falk 2012:126-133; Wiegand 1989:2-4; Beedle 2001:6-14).

Historical accounts of Wisconsin (Wiegand 1989; Beedle 2001; Apps 2010), New York (Falk 2012), and Missouri (Yeager 2008) silos have been written, but no history of North Carolina's silos has yet to be compiled. In his *History of Livestock in North Carolina*, Robert Curtis (1956:60) includes an undated photograph of a frame structure that he avers was built about 1860 in Alamance County as the state's first silo. The appearance of the structure, its exceptionally early date, and the lack of any supporting documentation, however, call his claim into serious question (Figure 31).

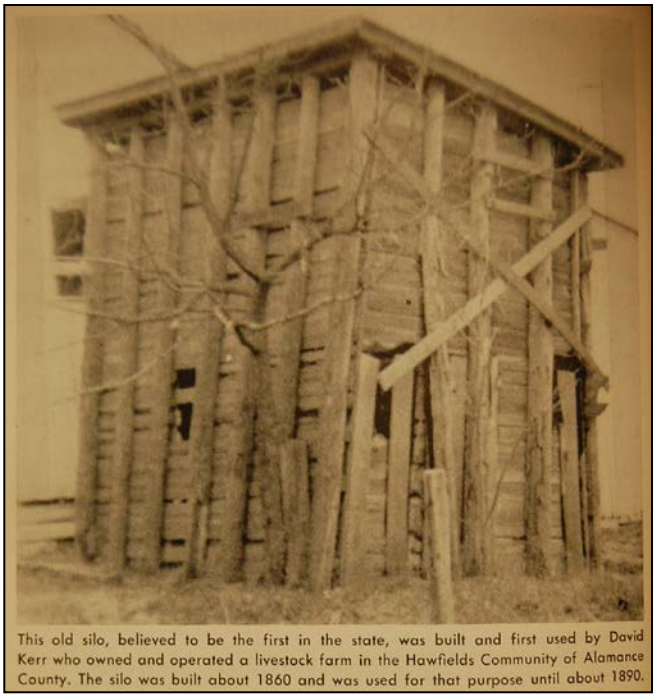
This old silo, believed to be the first in the state, was built and first used by David Kerr who owned and operated a livestock farm in the Hawfields Community of Alamance County. The silo was built about 1860 and was used for that purpose until about 1890.

Figure 31. Purported first silo in North Carolina (Curtis, *History of Livestock in North Carolina)*

Publications by many different state agricultural extension services about silage and silos became increasingly common as the 1880s and 1890s progressed. In 1891 agriculturist F.E. Emery addressed "Silos and Ensilage" in Bulletin No. 80 of the North Carolina Agricultural Experiment Station. He stated that a "considerable number of the most progressive farmers" in the state had silos, "But there is a call from other farmers for information as to building and filling silos, raising the crops to fill them, and for information on the practice of ensilage." To "meet this demand from the constituents of the Station," the bulletin was compiled and published (Emery 1891:3). In other words, in 1891 a North Carolina silo was apparently still novel.

North Carolina newspapers begin to write often of silos beginning in the late 1890s and early 1900s. On July 7, 1903 Raleigh's *Farmer and Mechanic* ran a piece titled "The Evolution of the Silo" authored by Wilbur Fisk Massey, horticulturist of the North Carolina Agricultural Experiment Station. On June 6, 1907 the city's *Progressive Farmer* printed a longer illustrated story titled "The Value of a Silo and How to Build One," which had previously been published in Michigan. The *Progressive*

Farmer on August 5, 1909 ran an account of a model farm, picked up by other papers in the state, in which a "great advocate of the silo," John Robinson of Catawba County, stated "If I had to give up silage, I'd give up stock."

Closer to home, newspapers in Buncombe, Henderson, and Haywood counties printed stories in the early twentieth century about silos and feeding stock in the winter. These included an illustrated piece in the *Asheville Gazette-News* of September 14, 1911 titled "Failures of Silos" and one in the same paper on August 23, 1912 headlined "The Silo Spells Prosperity." (Both of these may have come from other state or national publications.) Hendersonville's *French Broad Hustler* on December 8, 1913 carried a story about the promotion of the silo in the town by Dr. C.D. Lowe, assistant livestock agent of the Southern Railway. Dr. Lowe stated that "the silo is rapidly growing into favor with the farmers and that during the past year a large number had been built in Western North Carolina." He asked farmers to contact him in Morristown in eastern Tennessee and volunteered to speak with them personally about the benefits of the silo. In the 1910s the *Asheville Citizen-Times* began to run advertisements for silo and silo fillers (Figure 32).

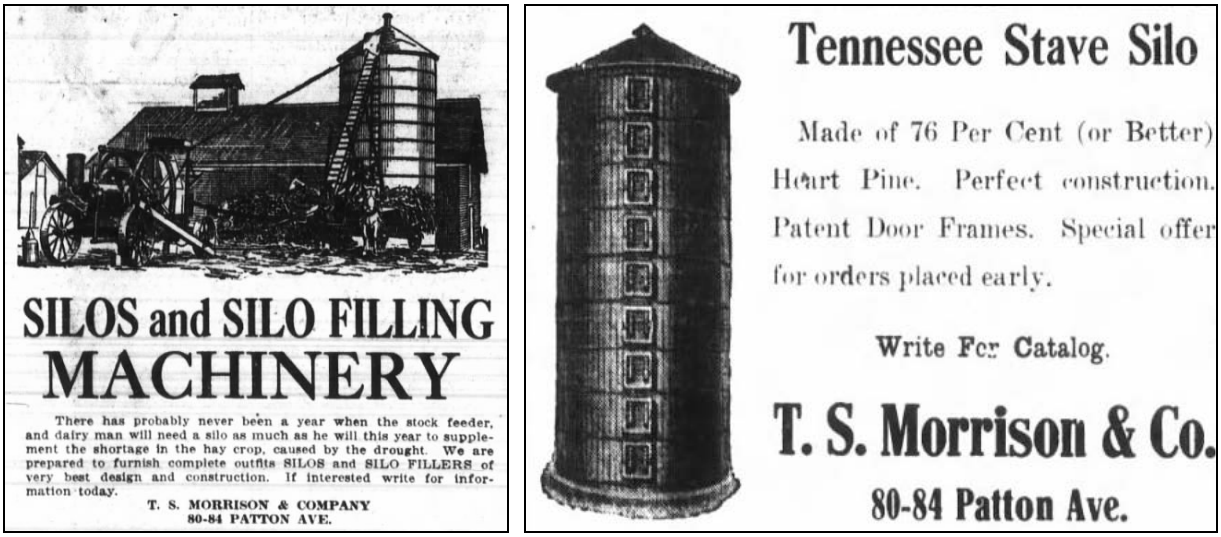

Figure 32. *Asheville Citizen-Times* silo advertisements of July 15, 1914 at left and June 7, 1915 at right; note continuous door design of Tennessee Stave Silo

The October 25, 1917 issue of Haywood County's *Carolina Mountaineer and Waynesville Courier*, carried an article entitled "Cheap Feeds for Live Stock during Winter" that stated "the majority of farmers who keep beef cattle and dairy cattle should certainly provide a silo and all of them should provide some kind of fall, winter, and spring grazing." The story goes on to discuss experiments conducted by the state Agricultural Experiment Station in cooperation with "prominent beef cattle raiser" T.L. Gwyn of Haywood that proved the benefits, in addition to silage, of winter pasture in the mountains. By this date enterprising county farmers—and certainly those who had been in contact with C.D. Lowe or the North Carolina Agricultural Extension Service county agent—were well aware of the value of winter pasturage and the benefits of silos and how to construct them.

No sources provide anything approaching a statistical account of silos in early twentieth-century Haywood or, apparently, any other North Carolina county. How many were built of what materials, and when, is not known. State agricultural extension service work, however, provides an inkling of

what materials were used in silos built throughout the state and in Haywood County. In 1913, with the assistance of county extension agents, 146 silos rose in the state. Of the 589 silos the service identified—almost certainly far fewer than the state total—97 were cement, 40 were tile, 13 were stone, and 439 were of other materials (North Carolina Agricultural Extension Service 1915:22). In 1918 the service identified the materials of 584 silos (North Carolina Agricultural Extension Service 1918:30). These were built of cement (97), stone (70), tile (22), and other (395), the catchall category in all likelihood encompassing various types of wood construction. Although stone silos were in the minority, they clearly continued to be built in North Carolina through at least the late teens.

One even smaller sample survives for Haywood County. In 1916 county extension agent Wm. H. Ferguson reported that through his efforts 18 silos were erected in Haywood, including two he had supported the construction of that year. Sixteen were of wood stave and two of cement. He recorded no stone, tile, or other types of silos (North Carolina Cooperative Extension 1916:"Silos" reporting form).

These sources suggest that North Carolina farmers erected few silos prior to the 1890s and that they remained relatively rare through the end of the century. By about 1910 silos were reported on regularly in newspapers throughout the state and their numbers had greatly increased. The silos built from the 1880s through 1920 were built of a variety of materials, including stone. However, by the teens, and certainly beyond, stone was rare. Frame and concrete predominated.

Recorded evidence of the types, materials, and date ranges of early silos constructed in Haywood County and elsewhere in the state is as limited as the documentary record. Presumably few of the silos built in the late nineteenth and early twentieth centuries survive and those that do are difficult or impossible to date. The files of the North Carolina HPO, however, include examples of silos made out of various materials, including stone, even if those structures often cannot be dated with any precision. Examples of those silos—located east of the mountains—include the Smith Silo (HX0519), built of brick in Halifax County (Taves 1988); the paired brick-tile silos that contribute to the NRHP-listed Stonewall Jackson Training School (CA0045) in Caldwell County, which may date from 1918, along with a contributing concrete silo also on the property that likely predates 1940 (Kaplan and Brown 1984); and the early 1930s, stonemason-laid silo that contributes to the NRHP-listed Mary's Grove property (CW0052) in Caldwell County (Hood 2000) (Figure 33).

Figure 33. Smith Silo at left; Jackson Training School brick-tile silos at center; Mary's Grove silo at right (source: North Carolina Historic Preservation Offices files)

In their general refinement, these silos may typify ones built on estate-type properties (although the nature of the Smith property is not known). Finely built stone silos and paired stone or brick silos seem to be found more often at the farms of the well-to-do, and to date later into the twentieth century, in North Carolina and elsewhere.

The HPO files also include silos built in the mountain counties. Among these is the octagonal silo at "The Pines" in Jackson County, surprisingly built of stacked wood (JK0299). Probably erected between about 1915 and 1930, in association with a no-longer-extant boarding house, the silo is believed to be lost (Humphries 1991). Paired brick silos that contribute to the NRHP-listed Broughton Hospital Historic District in Burke County, still extant, date to the 1920s or 1930s (Wylie 1986) (Figure 34).

Figure 34. "The Pines" Silo at left; the carefully constructed twin brick silos within the Broughton Hospital Historic District at right (source: North Carolina Historic Preservation Offices files)

At least five western silos included in the files are of stone. These are the early 1920s coursed, squared-off, granite-block silo, clearly professionally laid, at Carl Sandburg's National Historic Landmark Connemara estate in Henderson County (HN0001) (Gay 1976) and four more workmanlike silos closer in appearance to those on the Little East Fork: the ca.1935 Bennett Rock Barn and Silo (BN0253) near Candler in Buncombe County (Swaim 1981:136 and survey form); the undated stone silo at the Joseph A. Stradley House (BN0687) near Asheville (Swaim 1981:158 and survey form); the 1946 (?) Moss Rock Silo (BN0533) near Barnardsville in Buncombe County (Swaim 1981:110 and survey form); and a stone silo in the Sunburst community in Haywood County near the Little East Fork, about 3.5 miles northwest of the twin silos (Gardner Log House/HW0391) (Oliver and Farlow 2001:14).[1] Aerial and other images suggest that all five of these stone silos still stand, along with at least one more in Buncombe's Barnardsville community (Figure 35 through Figure 37).

[1] Oliver and Farlow state that William Gardner moved the silo to Sunburst along with other historic resources. A close look at the intact silo and personal communication with Michael Southern at the North Carolina HPO indicate, however, that it is on its original site. Moving a silo of this type would be almost impossible and prohibitively expensive.

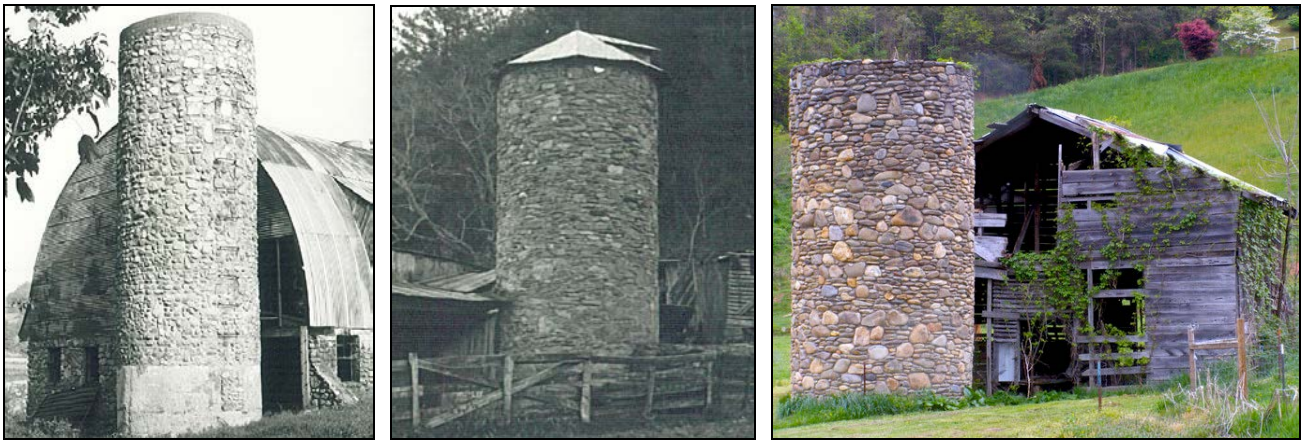

Figure 35. Bennett Silo at left and the Stradley House silo at center (source: North Carolina Historic Preservation Offices files); Moss Rock Silo in April 2010 at right (photographer: Melinda Stewart at https://www.flickr.com/photos/melystu/albums/72157627517259758)

Figure 36. Current images of silo in Haywood County's Sunburst community

Figure 37. Stone silo in Barnardsville community, Buncombe County, February 2012 (photographer Melinda Stewart at https://www.flickr.com/photos/melystu/6811533509)

National Register of Historic Places Evaluation

The Little East Fork Creek Stone Silos property is believed to be eligible for NRHP listing under Criterion C as embodying the distinctive characteristics of a type of construction, the early twentieth-century stone silo. The central resources on the property are its two freestanding silos, which continue to well represent the basic requisites of silos from the period, as summarized by many agricultural bulletins, including the following: "(1) It must be perfectly air-tight or the loss resulting will be very great; (2) the walls must be rigid, and (3) the inner surface must be smooth and uniform, so as to facilitate the rapid settling of the silage" (Soule 1912:13). The fieldstone walls of the silos continue to be air-tight and rigid and to retain the cement coating that smoothed their inner wall surfaces. The silos have suffered some losses over the years. Their doors are gone, as are any roofs they may have had. (Silos were sometimes built without roofs.) Their mortar has been patched in place, most notably at the lower western facing section of the east silo, which appears to have been rebuilt and to perhaps have lost one opening. Considering the basic integrity of the silos, however, and the rarity of early surviving stone silos in Haywood County—and, apparently, the state—they are believed to retain sufficient integrity to support NRHP eligibility under Criterion C. (As noted above, following much research the only other identified stone silo in the county is the one near the Sunburst community and the project area (Figure 38).) The two Little East Fork Creek silos—independent of each other and the abutting pieces of stone foundation walls of the no-longer-extant barn sheds—constitute two contributing structures. The period of significance of the property is recommended as ca.1900-1925, when the silos were built. Its level of significance is recommended as local.

The ca.1935 house on the property is an unremarkable example of an early/mid-20th-century dwelling. There are numerous similarly fashioned houses found throughout Haywood County, many with higher degrees of integrity, and the house is not believed to be individually significant under any of the NRHP Criteria. However, the house was standing on the farm property when the silos were in operation and is recommended as a contributing building. The shower house erected by the Boy Scouts on the property within the past few years is a noncontributing building.

Figure 38. Contributing/noncontributing resource locator map (source of ca.2015 base map: http://gis.ncdcr.gov/hpoweb/)

The Little East Fork Creek Stone Silos property is not believed to be significant under any other of the NRHP Criteria The silos have no known association with any notable historic events or individuals and are not noteworthy in the local history of agriculture. The property is therefore not believed to be NRHP-eligible under either Criterion A or B. The silos are also not believed to have a potential to yield important information on the basis of their construction. The property is therefore not recommended as NRHP-eligible under Criterion D. (This report does not address archaeological significance under Criterion D.)

LITTLE EAST FORK CREEK STONE SILOS		
Element of Integrity	**Level of Integrity**	**Assessment**
Location	High	Stands on place where constructed.
Design	Medium to High	Retains basic elements of silo form intact, but has lost doors and roofs (if they existed). West silo has been minimally re-mortared. Lower west-facing section of east silo has been more heavily re-mortared and may have had one opening removed.
Setting	High	Continues to stand on relatively flat cleared land that would have supported livestock and corn, in remote mountain valley near winding road and Little East Fork Creek.
Materials	High	Stone walls, interior concrete coating, and form remain intact.
Workmanship	Medium to High	Stone construction and interior concrete coating remain largely intact. Some re-mortaring, especially at east silo.
Feeling	Medium to High	Retains intact physical elements of integrity along with location and setting in remote area, but associated farmstead is gone.
Association	Medium to High	Retains intact physical elements of integrity along with location and setting in remote area, but associated farmstead is gone.

National Register of Historic Places Boundary

The recommended NRHP boundary of the Little East Fork Creek Stone Silos property is that of Haywood County parcel number 8632-83-9803, which encompasses approximately 9.5 acres (Figure 39). The western portion of the parcel is largely cleared open land. The remainder is wooded. The open relatively flat portion of the property, now used as temporary tent sites by Camp Daniel Boone, would have supported corn and cattle, which prompted the silos' construction. The woodland would have provided building material and fuel for those who farmed the land and tended the cattle and silos. Although the historic extent of the property is not known, the inclusion of open land and woods provides a setting that reflects its historic use. On the west, the boundary of parcel 8632-83-9803 appears to not extend into the NCDOT right-of-way along SR 1129 (Little East Fork Road). The recommended NRHP boundary on the west is limited by and does not extend into that right-of-way.

Figure 39. Proposed National Register of Historic Places boundary (light blue outline) of Little East Fork Creek Stone Silos property (source: http://maps.haywoodnc.net/gisweb/default.htm)

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