

North Carolina Department of Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory Secretary Susan Kluttz Office of Archives and History Deputy Secretary Kevin Cherry

May 23, 2013

MEMORANDUM

TO: Shelby Spillars

Office of Human Environment NCDOT Division of Highways

FROM: Ramona M. Bartos Peletor Ramona M. Bartos

SUBJECT: Historic Architectural Resources Survey Report, Replace Bridge 154 on Coble Mill Road (SR

2365)over Cane Creek, PA 12-06-0050, Alamance County, ER 13-0903

Dear Ms. Spillers:

Thank you for your letter of May 3, 2013, transmitting the above report prepared by TRC Environmental Corporation.

For the purpose of compliance with Section 106 of the National Historic Preservation Act, we concur that the **Ward Mill** (AM 0457) property (containing the **Ward Mill House** (AM 0458)) is eligible for listing in the National Register of Historic Places under Criterion A for industry and that the proposed boundaries appear appropriate. We also concur, that once the ongoing restoration is complete and the mill machinery is reinstalled it is likely the Ward Mill will be eligible under Criterion C for architecture/design as well.

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 renee.gledhill-earley@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NC DOT, <u>mfurr@ncdot.gov</u>

Geoffrey Henry, TRC Environmental, GHenry@trcsolutions.com

NATIONAL REGISTER ELIGIBILITY ASSESSMENT OF WARD MILL (AM 457) AND WARD MILL HOUSE (AM 458)

REPLACEMENT OF BRIDGE NO. 154 ON SR 2365 (COBLE MILL ROAD) OVER CANE CREEK, SNOW CAMP VICINITY, ALAMANCE COUNTY, NORTH CAROLINA WBS No. 17BP.7.R.38

Submitted to:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
HUMAN ENVIRONMENT SECTION
1598 Mail Service Center
Raleigh, North Carolina 27699



Prepared by:

TRC Environmental Corporation 50101 Governors Drive, Suite 250 Chapel Hill, North Carolina 27517

April 2013

NATIONAL REGISTER ELIGIBILITY ASSESSMENT OF WARD MILL (AM 457) AND WARD MILL HOUSE (AM 458)

REPLACEMENT OF BRIDGE NO. 154 ON SR 2365 (COBLE MILL ROAD) OVER CANE CREEK, SNOW CAMP VICINITY, ALAMANCE COUNTY, NORTH CAROLINA WBS No. 17BP.7.R.38

Submitted to:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
HUMAN ENVIRONMENT SECTION
1598 Mail Service Center
Raleigh, North Carolina 27699

Prepared by:

TRC Environmental Corporation 50101 Governors Drive, Suite 250 Chapel Hill, North Carolina 27517

Quy Hee	April 2013
Geoffrey Henry, M.A., Program Manager Architectural History	Date
TRC Environmental Corporation	
Supervisor, Historic Architecture Group	Date
North Carolina Department of Transportation	

MANAGEMENT SUMMARY

The North Carolina Department of Transportation (NCDOT) proposes replacing Bridge No. 154 on SR 2365 (Coble Mill Road) over Cane Creek in southern Alamance County, North Carolina. Following a review of the North Carolina Historic Preservation Office (HPO) GIS, NCDOT has identified two previously surveyed architectural resources within the Area of Potential Effects (APE) for this project: the Ward Mill (AM 457) and the Ward Mill House (AM 458), both located at 8110 Coble Mill Road, Snow Camp. The two resources require evaluation for eligibility for listing in the National Register of Historic Places (NRHP or National Register) and delineation and justification of NRHP boundaries, if applicable. This report represents the documentation and NRHP-eligibility evaluation of the Ward Mill and Ward Mill House.

The Ward Mill property is recommended eligible for listing in the NRHP under Criterion A on the local level for its association with the history of gristmills and the agricultural economy of late-nineteenth/early-twentieth-century Alamance County. The period of significance for the Ward Mill property spans the years between the ca. 1885 Ward Mill and Ward Mill House construction date and the mill's closing in the early 1920s. The Ward Mill and Ward Mill House are contributing resources; the other buildings on the property fall outside the period of significance and do not relate to the Ward Mill's operating history. The Ward Mill property is not associated with any individual(s) significant on the local, state, or national level and is not NRHP-eligible under Criterion B. Because the current owner has removed the original milling machinery and stored it off-site as part of the mill's on-going restoration, the Ward Mill is not presently NRHP-eligible under Criterion C, due to a loss of integrity of materials and design. Determination of the Ward Mill's eligibility under Criterion C as embodying the distinctive design characteristics of an Oliver Evans-type gristmill should be re-evaluated after the return and restoration of the milling machinery. The Ward Mill property does not add to existing information on grist mills or milling technology and is not NRHP-eligible under Criterion D.

TABLE OF CONTENTS

MA	NAGEMENT SUMMARY	ii
FIG	URES	iv
1.	INTRODUCTION	
	Project Description	
	Project Area Description	1
	Purpose of Survey and Report	
	Methodology	1
2.	SURVEY RESULTS AND RESOURCE DESCRIPTIONS	4
	Location and Setting	
	Resource Descriptions	
	Ward Mill (AM 457)	
	Ward Mill House (AM 458) (Figures 24 through 30)	18
Shed	Shed	
	Vehicle Shed #1	22
	Vehicle Shed #2	23
	Mobile Home, Residence, Garage, and Springhouse	23
3. V	VARD MILL PROPERTY HISTORY	25
4. N	NATIONAL REGISTER EVALUATION OF WARD MILL AND WARD MILL HOUSE	29
	Statement of Integrity: Ward Mill (AM 457) and Ward Mill House (AM 458)	29
REI	FERENCES CITED	34

FIGURES

1.]	Project location, Bridge No. 154 replacement, Alamance County, North Carolina	2
	Project location, Bridge No. 154 replacement, Coble Mill Road, Alamance County, North Carolina.	
	Source: USGS Topographic Quadrangle (Snow Camp, North Carolina 1975)	3
3	Aerial view showing Ward Mill/Ward Mill House property, 8110 Coble Mill Road	
	Site plan of buildings on Ward Mill/Ward Mill House Property, 8110 Coble Mill Road	
	Ward Mill (AM 457), south elevation and foundation, looking north from Cane Creek.	
	Ward Mill (AM 457), detail of rebuilt foundation and wheel pit, looking northwest	
	Ward Mill (AM 457), detail of rebuilt coursed stone foundation on west elevation, looking	0
٠.	north/northeast	Q
Q 1	Ward Mill (AM 457), west elevation, looking east from Coble Mill Road. Door and window panes)
о.	have been removed	0
0.3	Word Mill (AM 457) detail of windows on west elevation leaking cost. Window pages been	🤊
9.	Ward Mill (AM 457), detail of windows on west elevation, looking east. Window panes have been	10
10	removed.	10
10.	Ward Mill (AM 457), northwest corner of mill, looking southeast from Coble Mill Road. Doors have	
	been removed and some window sash removed entirely.	
11.	Ward Mill (AM 457), north elevation, looking south/southeast. Siding in process of being repaired of	
	replaced.	
12.	Ward Mill (AM 457), southeast corner with detail of rebuilt foundation and replaced siding, looking	
	northwest.	
13.	Ward Mill (AM 457), northeast corner of mill, looking southwest. Siding and windows in process o being replaced.	f
14.	Ward Mill (AM 457), first-floor interior view, looking northeast toward rebuilt staircase. Walls and	
	floors in process of being replaced or repaired.	.12
15.	Ward Mill (AM 457), first-floor interior view looking southwest from entrance. Floors being replac	ed
	and much of the wall left open on the south side.	13
16.	Ward Mill (AM 457), first-floor interior view, detail of box for mill machinery being repaired	13
	Ward Mill (AM 457), interior view of door (not original) on north elevation.	
	. Ward Mill (AM 457), view of roofing system looking up toward the exposed third floor, showing the	
	replaced roofing members.	
19.	Ward Mill (AM 457), interior view of mostly replaced roof system, looking south	
	Ward Mill (AM 457), interior second-floor view looking toward staircase and northeast building	
	corner, showing replaced floors, exposed walls studs, and sash with panes removed	15
21	Ward Mill (AM 457), second-floor interior view, looking southwest toward partially built rebuilt	
	walls and a partition wall.	16
22	Ward Mill (AM 457), second-floor interior view, looking northeast toward staircase, showing	10
<i></i> .		16
23	Ward Mill (AM 457), detail of original grain hopper hanging from ceiling on second floor	
	Ward Mill House (AM 458), south façade, looking north from driveway.	
	Ward Mill House (AM 458), west elevation, looking east from mobile home	19
26.	Ward Mill House (AM 458), southeast corner, looking northwest toward Ward Mill (not visible in	1.0
~-	photograph).	19
27.	Ward Mill House (AM 458), north elevation, looking south	20
	Ward Mill House (AM 458), northeast corner of house, looking southwest.	
	Ward Mill House (AM 458), interior view of living room with fireplace (Shelby Spillers NCDOT).	
	Ward Mill House (AM 458), interior view with original floors (Shelby Spillers NCDOT)	
21	1940s Shed located northwest of Ward Mill House (AM 458)	22

National Register Eligibility Assessment Ward Mill (AM 457) and Ward Mill House (AM 458), Alamance County April 2013

32. Vehicle Shed #1, looking northeast from mobile home	. 23
33. Vehicle Shed #2, west façade, looking southeast from driveway	. 24
34. A portion of the 1893 William Spoon Map of Alamance County, North Carolina showing the Ward	ĺ
Mill on Cane Creek.	. 27
35. Coble Mill, Store, Coble Mill Road, and residences of John M. Coble and Claude Thompson as	
shown on 1926 Map of Alamance County, North Carolina (Spoon et al. 1926)	. 28
36. Two views of Guthrie-McBane Mill, now a residence	. 30
37. Two views of Dickey Mill	. 31
38. Johnson-McBane (Stafford & Hanley Mill (left) and miller's house (right)	
39. Two views of Cook's Mill	. 32

1. INTRODUCTION

PROJECT DESCRIPTION

NCDOT proposes replacing Bridge No. 154 on SR 2365 (Coble Mill Road) over Cane Creek in Alamance County, North Carolina. Following a review of the NC HPO cultural resources GIS, NCDOT identified the Ward Mill (AM 457) and Ward Mill House (AM 458) at 8110 Coble Mill Road, Snow Camp as being within the project APE. The two resources were last surveyed in 1978 as part of a county-wide historic architectural survey of Alamance County (Lounsbury 1980), but have not been evaluated for NRHP listing either individually or as a historic complex (they are part of the same property).

PROJECT AREA DESCRIPTION

The Ward Mill and Ward Mill House are located in a rural and sparsely populated area of southern Alamance County near the small community of Snow Camp (Figures 1 and 2). The surrounding topography is hilly and rises or descends steeply on either side of this section of SR 2365. The rural and agricultural landscape on both sides of Coble Mill Road has remained largely intact, with only a few non-historic residences built in this area.

PURPOSE OF SURVEY AND REPORT

NCDOT has conducted a historic architectural survey and compiled this report in order to identify historic resources located within the project APE as part of the environmental studies performed by NCDOT in compliance with the National Historic Preservation Act (NHPA) of 1966, as amended. The architectural survey was conducted to satisfy the requirements of Section 106 of the NHPA, which mandates that federally funded and permitted undertakings consider potential effects to historic resources listed in or eligible for listing in the NRHP. This report is on file at NCDOT and is available for review by the public.

METHODOLOGY

On behalf of NCDOT, TRC conducted an architectural and historical survey of the Ward Mill/Ward Mill House property during November and December 2012. TRC conducted the survey and prepared this report in accordance with the provisions of the *Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation (48 CFR 44716)*; 36 CFR Part 800; 36 CFR Part 60; and the NCDOT's *Survey Procedures and Report Guidelines for Historic Architectural Resources*.

The architectural survey consisted of three tasks: 1) background and archival research on the Ward Mill/Ward Mill House property and its historic resources; 2) on-site fieldwork and an interview with mill owner Roger E. Owens; and 3) evaluation of the Ward Mill/Ward Mill House property for NRHP eligibility.

TRC conducted research on the history of the Ward Mill/Ward Mill House property and its owners, as well as general contextual research on the history of gristmills and gristmilling in Alamance County and central North Carolina. Research sources included Orange and Alamance County deed, will, probate, and tax records; historic US population and manufacturing census records; genealogical records; historic maps and atlases; historic photographs; published histories and architectural histories of Snow Camp and Alamance County; and an on-site interview with the property's owner, Roger E. Owens, who resides onsite in an adjacent non-historic residence.

Research repositories include the Alamance County Courthouse in Graham, the Orange County Courthouse in Hillsborough, the North Carolina State Archives in Raleigh, May Memorial Library in Burlington, and the National Archives in Washington, D.C. Online research was conducted for historic manufacturing census information for North Carolina.

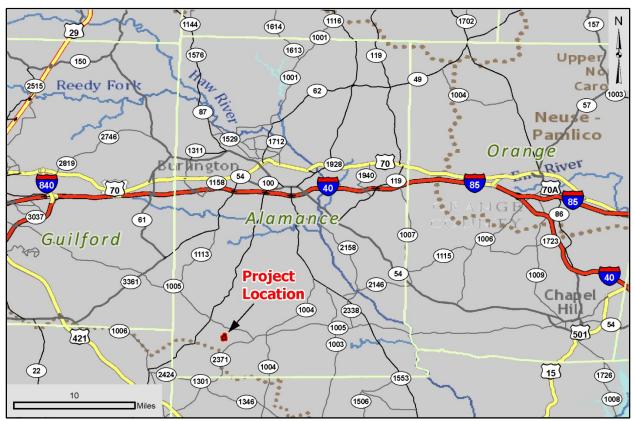


Figure 1. Project location, Bridge No. 154 replacement, Alamance County, North Carolina. Source: ESRI.

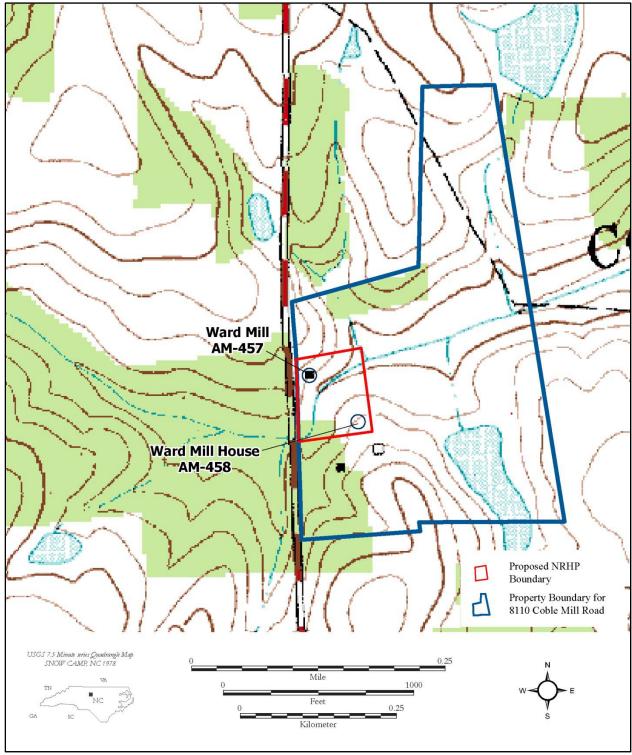


Figure 2. Project location, Bridge No. 154 replacement, Coble Mill Road, Alamance County, North Carolina. *Source: USGS Topographic Quadrangle (Snow Camp, North Carolina 1975)*.

2. SURVEY RESULTS AND RESOURCE DESCRIPTIONS

Ward Mill (AM 457) and Ward Mill House (AM 458), 8110 Coble Mill Road, Snow Camp, NC 27349 Owner: Roger E. Owens (Alamance County Deed

Book 987, page 155)

Alamance County PIN: 8757798404

LOCATION AND SETTING

The ca. 1885 Ward Mill (also historically known as Little Ward Mill, Coble & Patterson Mill, and Euliss Mill) and the associated ca. 1885 Ward Mill House are located on a 48.86-acre property (Alamance County Tax Parcel #101372) known as 8110 Coble Mill Road (SR 2365), Snow Camp, North Carolina and located 0.9 miles north of the junction with Pleasant Hill Church



AM 457. Ward Mill, 8110 Coble Mill Road, Alamance County, south elevation, looking north from Cane Creek

Road (SR 2371). The property is located in a rural and largely undisturbed section of southwestern Alamance County, near both the Orange and Chatham county lines. The surrounding topography is gently rolling and consists of a mix of woodland, cleared pastures, and cultivated agricultural fields. The nearest village and post office is Snow Camp, located approximately 1.5 miles to the east.

The principal geographic feature of the Ward Mill property is Cane Creek (Figure 3), a tributary of the Haw River. Cane Creek rises in the extreme west of Alamance County, with some tributaries from Chatham County, and flows very nearly due east and only a mile or so from the county line, but without leaving Alamance County. The length of the creek is approximately 20 miles (Swain et al. 1899:156). Coble Mill Road crosses Cane Creek by way of a small metal bridge (Bridge No. 154) approximately 200 feet southwest of Ward Mill, which stands with its façade facing west toward Coble Mill Road and atop a small bluff.

The other buildings on the Ward Mill property stand on land rising steeply from the east side of Coble Mill Road. An unpaved gravel driveway runs from Coble Mill Road and terminates at the Ward Mill House. Grouped to the east, southeast, and south of the Ward Mill House are a shed, two vehicle sheds, a mobile home, a brick residence with garage, and a spring house (Figure 4).

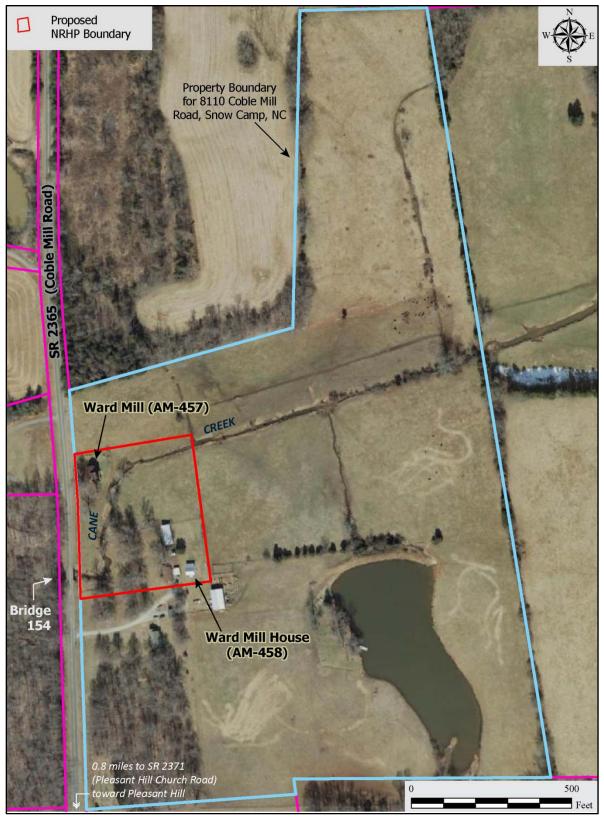


Figure 3. Aerial view showing Ward Mill/Ward Mill House property, 8110 Coble Mill Road.



Figure 4. Site plan of buildings on Ward Mill/Ward Mill House Property, 8110 Coble Mill Road.

RESOURCE DESCRIPTIONS

Ward Mill (AM 457) (Figures 5 through 23)

The ca. 1885 Ward Mill is built into the southeast side of an embankment located a few yards north of Cane Creek. The former mill race, now filled in and barely visible, once extended east from what is now Coble Mill Road. Any mill pond that might have been present would have been located well to the west of the road, and there is no evidence of a tail race.

The mill's foundation consists of a rubble-stone wall laid dry on the southwest and southeast corners, which supported the former overshot metal waterwheel (since removed); rubble-stone piers on the south, and a coursed stone foundation on the east, north, and west elevations. The foundation has been rebuilt inkind by the present owner.

The Ward Mill's framing consists of heavy oak timbers joined with mortise and tenons. The center three-bay-wide part of the building is two stories high with a side-gable roof covered with standing-seam metal. One-story, three-bay ells on the west and east elevations have metal-clad shed roofs. An additional one-story, shed-roofed tower on the southeast corner gives the south elevation an asymmetrical appearance. The mill building is sheathed with weatherboard siding, most of it replaced in-kind by the current owner with salvaged or new materials either stained dark gray or allowed to weather to a lighter gray. Sections of the cladding have been removed by the current owner as part of the ongoing restoration, leaving the interior partially exposed on at least three elevations.

As part of the ongoing restoration of the Ward Mill, nearly all of the window panes and the doors have been removed and stored for safe-keeping elsewhere on the property, except for the north door (probably a replacement of an older door). There are door openings on the south, west, and north elevations. Some original 6/6 double-hung wood window sash remains on the west, north, and east. Elsewhere, the window frames and sash have been removed entirely, and the window openings left as-is or boarded over, awaiting further restoration.

The main entrances on the north gable end and the west façade lead into a single open space on the first floor, left almost entirely unfinished with the wall framing and interior piers (both hand-hewn and machine-sawn) exposed. The hurst frame of the burr millstone's housing and the hoppers were located near the center of the floor, but have been removed by the owner and stored off-site for safe-keeping. Most of the original flooring was in poor condition when the mill was bought by the current owner and has been replaced in-kind. The owner has reconstructed the open staircase that rises in two levels at the northeast corner with both salvaged and replacement materials. The second floor is also one large space and features exposed wall framing and some split lath, replaced floors, and partially completed partition walls. The wood framing and boxed wood containers for some of the original machinery have either been removed or left scattered on the floor. One original wooden hopper is suspended from the ceiling. The roof framing (largely replaced) is exposed, and the third floor, being only partially floored, is visible from the second floor below. The original working machinery, including hoppers, millstones, vats, pulleys, chutes, and grinding machinery are stored on-site or in a nearby barn owned by Mr. Owens.



Figure 5. Ward Mill (AM 457), south elevation and foundation, looking north from Cane Creek.



Figure 6. Ward Mill (AM 457), detail of rebuilt foundation and wheel pit, looking northwest.



Figure 7. Ward Mill (AM 457), detail of rebuilt coursed stone foundation on west elevation, looking north/northeast.

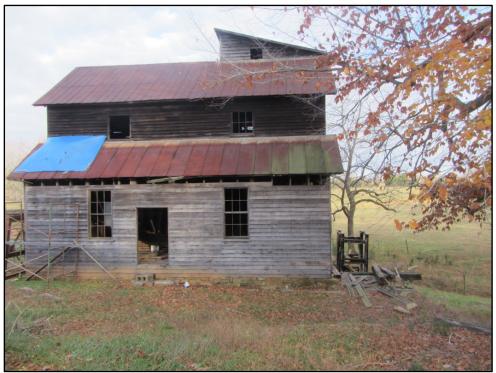


Figure 8. Ward Mill (AM 457), west elevation, looking east from Coble Mill Road. Door and window panes have been removed.



Figure 9. Ward Mill (AM 457), detail of windows on west elevation, looking east. Window panes have been removed.



Figure 10. Ward Mill (AM 457), northwest corner of mill, looking southeast from Coble Mill Road. Doors have been removed and some window sash removed entirely.



Figure 11. Ward Mill (AM 457), north elevation, looking south/southeast. Siding in process of being repaired or replaced.



Figure 12. Ward Mill (AM 457), southeast corner with detail of rebuilt foundation and replaced siding, looking northwest.



Figure 13. Ward Mill (AM 457), northeast corner of mill, looking southwest. Siding and windows in process of being replaced.



Figure 14. Ward Mill (AM 457), first-floor interior view, looking northeast toward rebuilt staircase. Walls and floors in process of being replaced or repaired.



Figure 15. Ward Mill (AM 457), first-floor interior view looking southwest from entrance. Floors being replaced and the wall left open on the south side.



Figure 16. Ward Mill (AM 457), first-floor interior view, detail of box for mill machinery being repaired.



Figure 17. Ward Mill (AM 457), interior view of door (not original) on north elevation.



Figure 18. Ward Mill (AM 457), view of roofing system looking up toward the exposed third floor, showing the replaced roofing members.



Figure 19. Ward Mill (AM 457), interior view of roof system, looking south.



Figure 20. Ward Mill (AM 457), interior second-floor view looking toward staircase and northeast building corner, showing replaced floors, exposed walls studs, and sash with panes removed.



Figure 21. Ward Mill (AM 457), second-floor interior view, looking southwest toward partially rebuilt walls and a partition wall.



Figure 22. Ward Mill (AM 457), second-floor interior view, looking northeast toward staircase, showing replaced floors, wall studs, lathe, and window sash with removed panes.



Figure 23. Ward Mill (AM 457), detail of original grain hopper hanging from ceiling on second floor.

Ward Mill House (AM 458) (Figures 24 through 30)

The Ward Mill House stands on a cleared hill overlooking Cane Creek and the Ward Mill to the north (see Figure 4). At one time the house had an unobstructed view of the mill, but since the 1940s, its view is partially obstructed by a shed, a vehicle shed, and a mobile home. The immediate setting is a gravel driveway that leads to the house from Coble Mill Road and a grassy lawn with minimal landscaping.



Figure 24. Ward Mill House (AM 458), south façade, looking north from driveway.

The Ward Mill House was built ca. 1885 as the miller's residence and was mentioned in a 1903 fire insurance policy (FMFIA 1903) and a 1917 land deed for the property. The one-story, three-bay balloon-frame house rests on a brick veneer foundation built in the 1960s, which replaced what was probably a stone- or brick-pier foundation. The side-gable roof, covered with standing-seam metal, breaks on the north and extends out to shelter a one-bay-deep ell and a two-bay incised porch located on the northeast corner. The porch has plain wood posts and a balustrade, wooden steps, and plain wood railing, all of which date from the 1970s. The house is clad with German siding installed ca. 1947.

In 1947, the house's principal elevation was turned from facing northwest toward the mill to facing southwest toward the driveway. As part of this change, a central one-story, one-bay, gable-roofed wood porch with metal-clad roof and exposed rafter ends was added to the south façade. The fenestration appears to be original and consists of narrow four-over-four double-hung wood sash windows. The single-leaf entrance doors on the north and south are not historic. There is a shouldered fieldstone chimney on the west gable end. The brick stack is a ca. 1947 replacement of the original.

The house features a hall-parlor plan with a rear kitchen and a sleeping loft in the attic (now closed off), formerly accessed by a movable ladder. The plaster walls have been sheathed with plywood paneling. The original fireplace has been sealed and replaced with a metal wood-burning stove. A portion of the original

wide pine floor boards are visible beneath the stored furniture. The first-floor bedroom is carpeted, and the floors were not visible.



Figure 25. Ward Mill House (AM 458), west elevation, looking east from mobile home.



Figure 26. Ward Mill House (AM 458), southeast corner, looking northwest toward Ward Mill (not visible in photograph).



Figure 27. Ward Mill House (AM 458), north elevation, looking south.



Figure 28. Ward Mill House (AM 458), northeast corner of house, looking southwest.



Figure 29. Ward Mill House (AM 458), interior view of living room with fireplace (Shelby Spillers NCDOT).



Figure 30. Ward Mill House (AM 458), interior view with original floors (Shelby Spillers NCDOT).

Shed (Figure 31)

A frame utility shed, dating from the late 1940s, is located about 40 feet northwest of the Ward Mill House. Standing on a continuous brick foundation and facing west, the one-story, one-bay shed has a front-gable metal roof with exposed rafter ends, is clad with board-and-batten siding painted rust-red, and has an entrance on the west with a single-leaf wood door with metal latch. There are no windows or other openings. The shed is in good condition.



Figure 31. 1940s Shed located northwest of Ward Mill House (AM 458).

Vehicle Shed #1 (Figure 32)

A frame vehicle shed dating from the 1940s is located just north of the aforementioned shed (see Figure 4). Standing on a concrete slab foundation and facing west, the one-story, three-bay-wide structure has a shed roof clad with standing-seam metal and exposed rafter ends. A short overhang with exposed rafter ends shelters the west façade. The building is clad with German siding with narrow corner boards. There is an entrance on the southwest corner with a single-leaf wood door with three panels below and a six-light window on the top half. A double-leaf wooden door with cross-buck front is located to its north, and the northern bay is left open. The 1/1 double-hung vinyl sash windows are replacements of the originals. The interior consists of a two-bay garage space for farm vehicles on the north and a two-room office on the south. The vehicle shed is in good condition.



Figure 32. Vehicle Shed #1, looking northeast from mobile home.

Vehicle Shed #2 (Figure 33)

A vehicle shed dating from the early 1960s is located to the southeast of the Ward Mill House. It is a one-story, four-bay structure built of upright round poles supporting a metal-clad side-gable roof with exposed rafter ends. The shed is clad on three sides with corrugated metal siding up to just below the eaves, and wood siding at the gable ends. The shed is open on the west façade. It is in fair condition.

Mobile Home, Residence, Garage, and Springhouse

Four post-1965 buildings are located on the Ward Mill property (see Figure 4). A one-story, metal-clad, double-wide mobile home on a concrete foundation is located immediately to the west of the Ward Mill House. At the end of the driveway on its south side is a one-story, five-bay, gable-roofed, brick Ranch-style house with a separate two-bay garage. Near the foot of the driveway is a decorative brick spring house with pyramidal roof. These buildings were not photographed or accessed on the interior at the request of the owner, Roger E. Owens.



Figure 33. Vehicle Shed #2, west façade, looking southeast from driveway.

3. WARD MILL PROPERTY HISTORY

Due to the loss of original exterior and interior fabric as part of the ongoing restoration of the Ward Mill, a construction date for the mill is difficult to determine based on a physical inspection alone. The Ward Mill may date from as early as the 1820s, although this theory is based mostly on an article entitled "Reminiscences of the Past No. 7" dated January 3, 1911, a typed copy of which is in the possession of the current owner Roger E. Owens. According to the article's unknown author, "Stephen Ward built a dam across Cane Creek about 75 yards above the present one about the year 1820. On the night of 7th August, 1847 this dam broke. He built a saw mill which stood about 50 ft. below the present dam and a corn mill about 100 yds. further down" (n.a. 1911:1). The 1911 account also described other buildings on the Ward Mill property: a frame blacksmith shop located about 40 yards above the corn mill, and a frame miller's house about 100 yards northeast.

A search of historic deed records confirms that Stephen Ward did own property on Cane Creek, although it is not known whether any of these tracts contained a gristmill. On August 23, 1808, Stephen Ward bought 153 acres on Cane Creek, part of the William Ward estate deeded by the Governor in 1799 (OCDB 13:90). On March 28, 1822 Anthony Ward sold 146¼ acres on Cane Creek to Stephen Ward, although there is no mention of a mill (OCDB 20:298).

Stephen Ward's January 3, 1833 last will and testament, filed in Orange County (Alamance County was then part of Orange County) stated: "It is my will that my beloved wife shall have full possession of all the plantation I now live on with the mills and all the buildings thereon during her natural life. I also give my wife one wagon and gear for two horses, one chair and harness, two horses, two calves, six sheep, and six hogs . . . It is also my will that at the death of my widow the above plantation and all the other property above mentioned to be sold by my executors. It is my will that all the other of my lands that I leave unsold at my death to be sold by my executors at the death of my wife" (OCWB 4:73).

According to the 1911 account, Stephen Ward's widow Sarah was believed to have died around 1843 "and the land was sold and John Coble was the purchaser for the sum of \$2150. Stanly (sic), John's oldest son, then became miller . . . After Stanly Coble married, he moved in . . . After John Coble died, the land was divided into four parts and sold." (n.a. 1911:2).

Although US population censuses from the nineteenth century do not describe any of the Cobles as millers, the Census of Manufactures of the US Non-Population Schedules for 1850 and 1860 show that the Coble family owned a mill in the lower district of what was by then Alamance County. According to the 1850 manufacturing census, Stanley Coble owned a water-powered corn mill valued at \$1000, processing 4,000 bushels of corn and producing \$2000 worth of corn meal and employing one male. In that same year, John Coble was listed as owning a hand-operated tannery employing one male. In 1860, John Coble was listed as owner of a gristmill valued at \$1000, producing \$1500 worth of flour and cornmeal and employing one male at \$15 per year (U.S. Non-Population Censuses 1850, 1860).

Other published sources ascribe a ca. 1885 construction date to both the mill and the associated mill house. According to an entry in *Alamance County: Legacy of its People and Places* (1984), "Little Ward Mill was built in 1885 and sold to JM Coble and JS Patterson in 1890" (ACHM 1984:444); however, a deed search for transactions in the 1880s and 1890s has yet to confirm this and it is unclear why it is called "Little" Ward Mill.

A mill identified as Ward Mill is shown at the project location on the 1893 *Map of Alamance County* by William L. Spoon (no other associated buildings, such as a residence or store were shown). According to

this map, the Stanley Coble residence was located a short distance to the northwest (Figure 34). Note that this was during the period when this area was disputed between Alamance and Chatham counties.

In October 1903, an insurance policy was issued by the Farmer's Mutual Fire Insurance Company for the business known as "Patterson & Coble" located near Oakdale Post Office (FMFIA 1903). The property was described as containing a 1½-story frame building with shingle roof, a 2-story grist- and saw-mill, and a 1-story frame tenant house used by the miller.

On April 19, 1917, H.C. and Ida Teague sold 62¾ acres in Patterson Township "adjoining land of H.C. Teague, J.M. Coble, and others" to Cad Albright. The tract was described as "the Ward Mill property" and "near (the) old mill seat" and conveyed "one half interest in the land and property known as the Coble & Teague Mill, formerly Patterson & Coble's. Said property consists of 62¾ acres more or less of land, a gristmill, saw mill, steam engine, cotton gin and fixtures, store house, and dwelling house and all other fixtures belonging thereto" (ACDB 61:78).

Annie Lee Thompson claimed that her father Claude Clinton Thompson (1877–1927) was the operator of Little Ward Mill on Cane Creek between 1914 and 1921 and that the mill closed a few years later (ACHM 1984:444). The *Map of Alamance County* (Spoon et al. 1926) shows Coble Mill, a building (probably the store) just to the north, and the residence of Claude Thompson a short distance to the northwest on the opposite side of the road. The John M. Coble residence is located to the west of the Thompson House (Figure 35).

On April 12, 1939 the Ward Mill property was sold by Cad and Emma Albright to W.H. Euliss (ACDB 12:435). W.H. and Lillie Johnson Euliss sold the 54.25-acre mill property (although a mill is not mentioned at this point) to James C. Euliss on November 19, 1946 (ACDB 156:342). On June 15, 1976, James C. Euliss sold the mill property to himself and his wife Juanita Owens Euliss to establish an estate of tenants by the entirety. On June 16, 1992, Juanita Owens Euliss sold the property "adjoining lands of Charles Euliss, John M Coble, Ladd Fogleman, F. Hornaday, Allen Culbertson, WH Euliss and others" to Joyce Wren Fuquay (ACDB 776:68). On March 12, 1996 Joyce Wren Fuquay and her husband Anthony Allan Jones Sr. sold two tracts, one of them the 54.25-acre mill tract, to the current owner Roger E. Owens (ACDB 987:155).

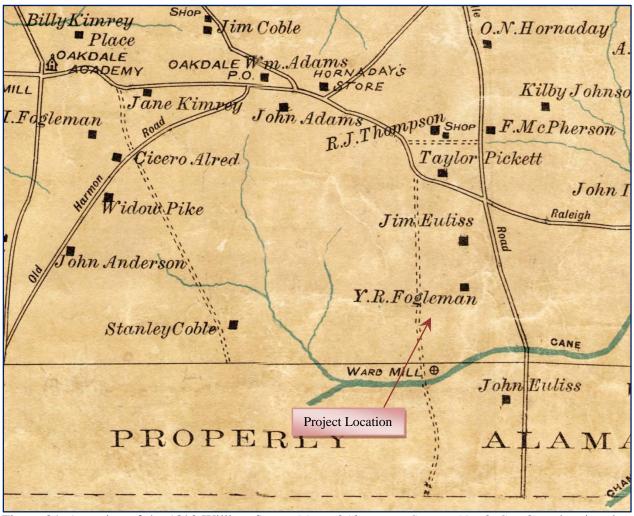


Figure 34. A section of the 1893 William Spoon *Map of Alamance County, North Carolina* showing the Ward Mill on Cane Creek.

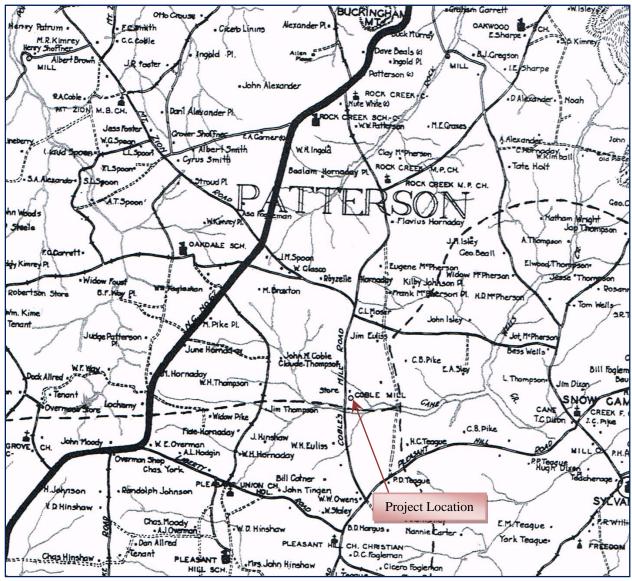


Figure 35. Coble Mill, Store, Coble Mill Road, and residences of John M. Coble and Claude Thompson as shown on 1926 *Map of Alamance County, North Carolina* (Spoon et al. 1926).

4. NATIONAL REGISTER EVALUATION OF WARD MILL AND WARD MILL HOUSE

STATEMENT OF INTEGRITY: WARD MILL (AM 457) AND WARD MILL HOUSE (AM 458)

The Ward Mill (AM 457) may date from as early as the 1820s, but based on field observations and documentary evidence appears to have been substantially rebuilt or even replaced ca. 1885 when it became the Coble & Patterson Mill. Ward Mill operated under various names as a gristmill until it ceased operations in the late 1920s, remaining vacant and falling into disrepair in the years thereafter. The other buildings known to have stood on the property, including a cotton gin, a blacksmith shop, and a store, were demolished at various dates between the 1920s and 1997.

After being bought by current owner Roger Owens in 1996, Ward Mill has undergone a comprehensive restoration, which continues to the present day. This has included the in-kind replacement of most of the weatherboard siding, removal of most window glazing and some window sash, removal of doors, repair/replacement of the roofing system, rebuilding of the interior staircase, in-kind repair/replacement of most of the floors, and in-kind rebuilding of the foundation. The mill machinery, including mill stones and vats, chutes, pulleys, and hoppers have been removed by the owner and stored either on-site or in a nearby barn. The metal Fitz overshot wheel was removed by an earlier owner and has not been replaced. As a result of the in-kind restoration and temporary removal of the mill machinery, the Ward Mill lacks integrity of materials and design, but retains integrity of setting, location, workmanship, association, and feeling.

The Ward Mill House (AM 458) dates from ca. 1885, but was altered between the late 1940s and the early 1960s. As a part of the house's renovations, a new porch was built on the south side, thereby changing the orientation of the house from north to south. The exterior-end chimney stack is a replacement of the original. The stone pier foundation was replaced with the current continuous brick foundation. The German siding also dates from the ca. 1947 renovations. On the interior, the partition walls were replaced and the plastered walls covered with wood paneling. The fireplace hearth and mantel were replaced, the attic sealed, and interior doors replaced. The house is currently unoccupied and used for storage by the current owner who lives in a non-historic house a short distance to the south.

NRHP Criteria Assessment: The Ward Mill property is recommended eligible for the NRHP under Criterion A for its association with the history of gristmilling and its importance in the agricultural economy of 19th- and early-20th-century Alamance County. The period of significance extends from the ca. 1885 construction date of the Ward Mill and Mill House until the closure of the mill sometime in the 1920s. Due to its historical association with the Ward Mill, the Ward Mill House is a contributing resource; the other outbuildings and residences on the property post-date this period of significance and are non-contributing resources. According to the NRHP: "[t]o be eligible under Criterion A the property must retain integrity and must be associated with a specific event marking an important moment in American pre-history or history or a pattern of events or historic trend that made a significant contribution to the development of a community, a state, or a nation. Furthermore, the property must have existed at the time and be documented to be associated with the events. Finally, the property's specific association must be important as well" (NPS 2005:12).

Gristmills were a commonplace sight along North Carolina's creeks and streams from the colonial period until shortly after World War I. These mills, grinding the corn, wheat, and oats of local farmers, were indispensable to the economy and well-being of many rural communities. Most mill seats also included other buildings such as a saw mill, cotton gin, blacksmith shop, and general store and were the economic

and social centers of the surrounding community, bringing in farmers from miles around (Bullock 1985:8.1; Hobbs 1985:6).

The communities along the Haw River and its tributaries were no exception, with the west-flowing Cane Creek noted as having more fall than the streams entering the Haw River from the east, and thus considered more favorable for the siting of mills (Swain et al. 1899:156). It is estimated that by 1890, more than 42 grain- and sawmills operated in Alamance County, with more than half of these built in the previous 20 years (Lounsbury 1980:68). There were possibly up to eight gristmills located along Cane Creek during this period (Evans 1989:18). Most of these gristmills served a purely local market and rarely produced enough flour to ship to other, more distant markets. Thus, when steam and electric-powered roller mills came on the scene in the late 1800s, these more modern mills were able to easily capture national markets, making roller mill-ground flour cheaper than flour produced only a few miles away by an old-fashioned gristmill. Most of Alamance County's gristmills ceased operations after World War I, subsequently were abandoned, and have fallen into disrepair and/or ruin due to their economic redundancy. The Ward-Coble Mill ceased operation in the 1920s.

Although most of the many gristmills once so important to the Alamance County agricultural economy are no longer extant, the ones that remain provide a comparison with the Ward Mill for the purpose of evaluating its NRHP eligibility under Criterion A. A search of the NC HPO archives, as well as local historical archives identified a number of extant gristmill buildings, in various stages of restoration and rehabilitation:

- Lindley's Mill, located in Newlin Township, has been in existence since 1755 when it was owned by Quaker settler Thomas Lindley and Hugh Laughlin (Hobbs 1985:50). The present mill building is later, although when rebuilt in the early 1900s, many of the original timbers were reused. The mill is still in operation.
- Guthrie-McBane Mill in Newlin Township, dates from ca. 1850, operated until the 1940s, and has been restored as a residence. The foundation, framing, and some windows are original, the rest of the mill structure having deteriorated too much to be salvaged (Evans 1989:19).





Figure 36. Two views of Guthrie-McBane Mill, now a residence.

• Dickey Mill on Quaker Creek in Pleasant Grove Township dates from ca. 1840 and operated as a hammer mill until the late 1950s, grinding feed for cows and hogs. The adjoining cotton gin and sawmill were washed away in a flood, but the mill is still owned and occasionally operated by its current owner who restored it in the 1980s (Primm 2003). Although the metal waterwheel is a replacement of the original, the wooden cogs that comprise the wheel frame are original. The mill also retains its elevator system, sifters, mill box, and hoppers. In 2012, Dickey Mill was determined NRHP-eligible under Criteria A and C.





Figure 37. Two views of Dickey Mill.

• Johnson McBane (Stafford & Henley) Mill on Cane Creek in Eli Whitney dates from before 1880. The large three-story mill was built by Johnson McBane in 1908 and operated until the 1940s. It has been restored by the current owner to operating condition. There is also a small miller's house nearby. The mill complex once included a cotton gin, blacksmith shop, and coffinmakers establishment (Evans 1989:19).





Figure 38. Johnson-McBane (Stafford & Hanley Mill (left) and miller's house (right).

Cook's Mill on Mill Creek was built in 1757 and operated by the Mebane and then Cook families until the 1930s. The mill building has been rebuilt and remodeled over the years and is in only fair condition after the dam burst in 1975, flooding much of the structure (Bowman 1990; Hobbs 1985:46). In 1996, Cook's Mill was determined eligible for listing in the NRHP under Criteria A and C.





Figure 39. Two views of Cook's Mill.

• Baldwin Mill, located a short distance away in Chatham County, dates from 1807 and was in operation until 1921. This impressive 2½-story heavy-timber framed gristmill was bought and restored in 1941 by Richard Hobbs, whose son Grimsley Hobbs continued its restoration. It is listed in the National Register (Bullock 1985).

The Ward Mill and Ward Mill House are recommended **not eligible** for the NRHP under Criterion B. According to the NRHP: "[f] or a property to be eligible for significance under Criterion B, it must retain integrity and 1) be associated with the lives of persons significant in our past, i.e., individuals whose activities are demonstrably important within a local, state, or national historic context; 2) be normally associated with a person's productive life, reflecting the time period when he/she achieved significance; and 3) should be compared to other associated properties to identify those that best represent the person's historic contributions. Furthermore, a property is not eligible if its only justification for significance is that it was owned or used by a person who is or was a member of an identifiable profession, class or social or ethnic group" (NPS 2005:15). No individuals or families associated with the ownership or operation of Ward Mill (Ward, Coble, Patterson, Euliss, or Thompson families) are demonstrably important within the local, state, or national context.

The Ward Mill property is recommended **not eligible** for the NRHP under Criterion C as the Ward Mill does not retain the integrity necessary to convey its significance as a 19th-century gristmill built on the model developed by American inventor Oliver Evans. The Ward Mill House is also recommended **not eligible** for individual listing in the NRHP under Criterion C. According to the NRHP: "[f]or a property to be eligible under this criterion, it must retain integrity and either 1) embody distinctive characteristics of a type, period, or method of construction; 2) represent the work of a master; 3) possess high artistic value; or 4) represent a significant and distinguishable entity whose components may lack individual distinction" (NPS 2005:18).

According to the present owner, the Ward Mill was built and operated throughout its working life according to the model first developed by American inventor Oliver Evans (1755–1819). Evans, one of the early inventive geniuses of the Industrial Revolution, forever transformed the art of flour milling in post-Revolutionary War America (Gordon 1992:19). Employed from an early age as a millwright, Evans observed first-hand the labor-intensive nature of colonial-era milling, which often required up to a dozen men to operate a single large gristmill. Employing a system of grain-handling devices including bucket elevators, conveyor belts, and Archimedean screws, Evans produced a gristmill design that was fully

automated and required the work of only one miller to set the gears and monitor the flour production (Gordon 1992:20).

In an Evans-type mill, a system of elevators and descenders moved grain through several stories of the mill, eliminating much of the hard manual labor that previously characterized the trade. Evans also devised a system of horizontal movers, with the endless screw, and the hopper-boy, a revolving rake, spreader and cooler, used in drying and cooling of flour and meal (GAI 2005:1). The first automated gristmill built according to Evans' design started production in 1785 in New Castle County, Delaware, and revolutionized grain production in the Brandywine River Valley (Gordon 1992:19). Evans-inspired mills were soon built throughout America and remained the most popular model for gristmills until the advent of steel rolling mills in the late 19th century.

Evans popularized his gristmill design in the treatise *The Young Mill-Wright and Miller's Guide*, published in 1795 and reprinted numerous times throughout the 19th century (Jones 1860). "These five machines...perform every necessary movement of the grain, and meal, from one part of the mill to another, and from one machine to another, through all the various operations, from the time the grain is emptied from the wagoner's bag....until completely manufactured into flour...without the aid of manual labor, excepting to set the different machines in motion" (Jones 1860:56–57).

In a typical Evans mill, an exterior hoist lifted incoming loads of grain to the top story. Emptied into the grain bin, the grain passed through a circular screen that whirled dust and mold from the grain and into a sack below. Once cleansed of dirt, the grain dropped to a wheat storage bin or "gamer" (GAI 2005:2). The wheat garner allowed wheat to be fed to the hopper at a rate that suited the millstones. The runner stone was turned by a gear train that transmitted power from the water wheel. Ground flour fell through a chute below the bed stone into a bin from which an elevator carried it back up to the top floor, where the flour was cooled by the hopper boy. This rake-like machine with splayed wooden teeth swept freshly ground grain toward the center, thus cooling it. Fresh grain was fed by the hopper boy, down a central chute, to the slanted bolter. From the bolter, flour passed through increasingly coarse mesh—finest flour through closely meshed silk, then middlings, shorts, and bran dropped into the second, third, and fourth bags, respectively (GAI 2005).

The surviving mills in Alamance County (Ward's, Cook's, Johnson-Mebane, Dickey, Guthrie-Mebane, and Lindley's) are known to have operated as Evans-type mills for all or part of their history. Over time, some of these mills may have added gasoline-powered generators or electrical machinery, removing some of the unpredictability of water power. At the Ward Mill, all of the milling machinery and equipment has been removed, including stones, vats, hoppers, chutes, pulleys, and gears while the mill building is undergoing restoration. These have been stored in sheds elsewhere on the property or in a barn off-site owned by Mr. Owens, who plans to restore the machinery to working condition in the future. Determination of the Ward Mill's eligibility under Criterion C as embodying the distinctive design characteristics of an Oliver Evans-type gristmill should be re-evaluated after the return and restoration of the milling machinery.

The Ward Mill and Ward Mill House are recommended **not eligible** under Criterion D. According to the NRHP: "[f]or a property to be eligible under Criterion D, it must meet two requirements: 1) the property must have, or have had, information to contribute to our understanding of human history or prehistory, and 2) the information must be considered important" (NPS 2005:21). The property is not likely to yield any new information pertaining to the history of building design or gristmilling technology.

REFERENCES CITED

Alamance County Deed Books (ACDB)

Alamance County Deed Records, Register of Deeds, Graham, North Carolina.

Alamance County Historical Museum (ACHM)

1984 Alamance County: The Legacy of Its People and Places. Legacy Publications, Greensboro, North Carolina.

Bowman, Shelby

1990 Cooks Mills: A 226 Year-Old Landmark. *Mebane Enterprise*. Mebane, North Carolina, Mar. 9, 1983.

Bullock, Marshall

1985 Baldwin Mill. National Register of Historic Places Nomination Form. Washington, D.C.

Evans, Yvonne

Homes on Cane Creek: Historic Gristmills Recapture a Simpler Life. *City-County Magazine*. Burlington, North Carolina.

Farmers Mutual Fire Insurance Association, Alamance Branch (FMFIA 1903)

1903 Bound fire insurance policies 1903–1904, accessed at May Memorial Library, North Carolina Room, Burlington, North Carolina.

GAI Consultants, Inc.

How a Mill Works. (Supplement to Cubbage Mill: A Historical Investigation conducted for the Delaware Department of Transportation). Homestead, Pennsylvania.

Gordon, John Steele

1992 The Business of America, Oliver Evans, Industrial Revolutionary, *American Heritage*, October 1992.

Hobbs, Grimsley

1985 Exploring the Old Gristmills of North Carolina. Cullowhee, North Carolina. March 6, 1985. Jones, Thomas P. (editor)

1860 Young Millwright and Miller's Guide by Oliver Evans with additions and corrections by Thomas P. Jones. Blanchard & Lea, Philadelphia.

Lounsbury, Carl

1980 *Alamance County Architectural Heritage*. Alamance Historic Properties Commission, Alamance County, North Carolina.

n.a.

1911 Reminiscences of the Past, No. 7, unpublished manuscript in possession of Roger E. Owens, 8110 Coble Mill Road, Snow Camp, North Carolina. Accessed and photographed by TRC November 15, 2012.

National Park Service (NPS)

National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation. Washington, D.C. Revised 1991, 1995, 1997. Revised for Internet 1995, 2001, 2005.

Orange County Deed Books (OCDB)

Orange County Deed Records, Register of Deeds, Hillsborough, North Carolina.

Orange County Will Books (OCWB)

Orange County Will and Probate Records, Register of Deeds, Hillsborough, North Carolina. Primm, Algernon

2003 150-Year-Old Mill Sees Action Again. *Mebane Enterprise*. Mebane, North Carolina. December 7, 2003.

Spoon, Lewis & Camp

1926 Map of Alamance County. Spoon, Lewis, & Camp, Consulting Engineers. Greensboro, North Carolina.

Spoon, William L.

1893 Map of Alamance County. Greensboro.

Swain, George F., J.A. Holmes, and E.W. Myers

1899 Papers on the Waterpower in North Carolina. *North Carolina Geological Survey Bulletin* 8. United States Geological Survey (USGS)

1975 Snow Camp, North Carolina. 7.5 minute quadrangle topographic map, Washington, D.C. United States Non-Population Censuses

1860–1870 Alamance County, North Carolina. Electronic documents, accessed at ancestry.com United States Population Censuses

1840 Orange County (Southern District). Accessed at National Archives, Washington, D.C.
 1850–1880 Alamance County (Patterson Township). Accessed at National Archives, Washington, D.C.