URS DIN 01562

Architectural History Survey for Durham-Orange Light Rail Project, Durham and Orange Counties, North Carolina

Durham-Orange Light Rail Transit Project



March 2015

The NEPA Preferred Alternative for the D-O LRT Project would generally follow NC 54, I-40, US 15-501, and the North Carolina Railroad (NCRR) Corridor in downtown Durham and east Durham. The alignment would begin at UNC Hospitals, parallel Fordham Boulevard, proceed east on NC 54, travel north on I-40, parallel US 15-501 before it turns east toward the Duke University campus along Erwin Road, and then follow the NCRR Corridor parallel to NC 147 through downtown Durham, before reaching its eastern terminus near Alston Avenue. The alignment would consist of at-grade alignment, fill and cut sections, and elevated structures. In two sections of the alignment, Little Creek and New Hope Creek, multiple Light Rail Alternatives are evaluated in the DEIS.

This technical report contains information for all alternatives analyzed in the DEIS. However, pursuant to MAP 21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), a NEPA Preferred Alternative has been developed, which recommends C2A in the Little Creek section of the alignment, NHC 2 in the New Hope Creek section of the alignment, the Trent/Flowers Drive station, and the Farrington Road Rail Operations and Maintenance Facility.



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Executive Summary

After a review of the files and maps located at the North Carolina State Historic Preservation Office (HPO) and its website, the following 17 properties within the project's Area of Potential Effects (APE) were identified as listed in the National Register of Historic Places (National Register or NR) or previously determined National Register-eligible through an official Determination of Eligibility (DOE). These resources are identified and summarized immediately below and further assessed at Section 3.1:

Name	Current NR Status	Current Significance and Integrity
Rocky Ridge Farm Historic District	NR listed 1989; boundaries expanded 2008	Retains significance and integrity.
Dubose Tenant Farm Complex	DOE 1994	Following DOE, complex demolished and covered by modern development of Meadowmont Village. Due to loss of integrity, is no longer NR-eligible.
Meadowmont	NR listed 1985	Following NR listing, almost all contributing resources other than Meadowmont House supplanted by Rizzo Conference Center development. House and immediate grounds remain intact and Meadowmont therefore appears to retain its NR significance and integrity. Were boundaries redrawn to reflect current conditions, would contract to much smaller area confined to house and immediate grounds.
West Durham Historic District	NR listed 1986	Since 1986 much of district's southern portion has been altered by modern development. However, as part of a review of a survey report in 1999 (Mattson, Alexander & Associates) the HPO did not concur with recommendations that its boundaries be reduced. Appears to continue to retain sufficient integrity for NR listing. Were boundaries redrawn to reflect current conditions, though, would contract to smaller area at its south.
Powe House	NR listed 1985	In 1986 two houses, Sunnyside and Erwin Cottage, were moved into the Powe House's NR-listed boundaries. As part of a review of a survey report in 1999 (Mattson, Alexander & Associates) the HPO did not concur with recommendations that the Powe House's NR-listed boundaries be reduced, but recommended "delisting the entire property." The appearance of the three resources and the parcel that constitutes the Powe House's NR boundaries appears to be little changed since 1999. Therefore, it is recommended that the Powe House is no longer National Register-eligible. The property continues, though, to be NR listed and Sunnyside remains on the Study List.
Trinity College East Campus Historic District	DOE 2000 and 2009	Retains significance and integrity.
Smith Warehouse	NR listed 1985	Retains significance and integrity.
Trinity Historic District	NR listed 1986; boundaries expanded 2004	Retains significance and integrity.
Watts and Yuille Tobacco Warehouses	NR listed 1984	Retains significance and integrity.

National Register-Listed and Eligible Resources



National Register-Listed and Eligible Properties (continued)

Name	Current NR	Current Significance and Integrity
Duke Memorial United Methodist Church	NR listed 1985	Retains significance and integrity.
Bright Leaf Historic District	NR listed 1999	Retains significance and integrity.
Downtown Durham Historic District	NR listed 1977	Retains significance and integrity.
American Tobacco Company Manufacturing Plant	NR listed 2000	Retains significance and integrity. (Note: W.T. Blackwell and Co (Bull Durham) Tobacco Factory at north end of property additionally declared a National Historic Landmark in 1974)
Southern Railway Bridge (Seaboard Coastline Railroad Overpass)	DOE 1999	Retains significance and integrity.
Venable Tobacco Company Warehouse	NR listed 1985	Retains significance and integrity.
Venable Tobacco Company Prizery and Receiving Room	NR listed 1985	Retains significance and integrity.
East Durham Historic District	NR listed 2004	Retains significance and integrity.

Upon the completion of a reconnaissance-level survey of 277 individual resources and groups of resources within the APE; archival and online research; review presentations to Preservation Durham, Preservation Chapel Hill, and the Orange County Department of Environment, Agriculture, Parks and Recreation, Division of Natural and Cultural Resources for input on potential historic resources; and additional intensive-level inventory and research, URS prepared this report. The report recommends that eight of these resources are eligible for National Register listing and that three of them are not eligible for National Register listing. These resources are identified and summarized immediately below and further assessed at Section 3.2:

Resources Inventoried at Intensive Level

Name	Current NR Status	NR Eligibility Recommendation
H.G. Baity House	None	Recommended eligible for National Register listing under Criterion B for its association with H.G. Baity and Criterion C for its architecture.
Dr. Robert Jack Shankle House	None	Recommended eligible for National Register listing under Criterion C for its architecture.
Bowers-Nelson House	None	Recommended eligible for National Register listing under Criterion C for its architecture.
Highland Woods Historic District	None	Recommended eligible for National Register listing under Criterion A for its history.
Walter Curtis Hudson Farm	NC Study List listed 1990	Recommended eligible for National Register listing under Criterion C for its architecture.



Resources Inventoried at Intensive Level (continued)

Name	Current NR Status	NR Eligibility Recommendation
Ruth-Sizemore House and Store	None	Recommended not eligible for National Register listing as a historic district due to loss of integrity. Individual resources recommended not eligible for individual listing due to lack of signifance and/or loss of integrity.
Duke University Nurses and Graduate Student Dormitories Historic District	None	Recommended not eligible for National Register listing as a historic district due to loss of integrity. Individual resources recommended not eligible for individual listing due to lack of signifance and loss of integrity.
Durham Coca-Cola Bottling Plant	None	Recommended eligible for National Register listing under Criterion A for its history and Criterion C for its architecture.
Hall-Wynne Funeral Home	None	Recommended not eligible for National Register listing due to loss of integrity.
North Carolina Mutual Building	None	Recommended eligible for National Register listing under Criterion A for its history and Criterion C for its architecture.
Durham Water Tower and Valve House	None	Recommended eligible for National Register listing under Criterion A for its history and Criterion C for its architecture.



1. Introduction

The Locally Preferred Alternative (LPA) was selected to address the purpose and need of the Durham-Orange (D-O) Corridor. The proposed project is a 17.1 mile double-track light rail transit (LRT) line with 17 proposed stations that will greatly expand transit service in Durham and Orange Counties. The Durham-Orange Light Rail Transit (D-O LRT) project extends from western terminus at the University of North Carolina at Chapel Hill (UNC) at the UNC Hospitals Station to the eastern terminus in Durham at the Alston Avenue Station. The proposed D-O LRT Alternative connects a range of educational, medical, employment, and other important activity centers, including: UNC; UNC Hospitals; the William and Ida Friday Center for Continuing Education (Friday Center); Duke University; Durham Veterans Affairs (VA) Medical Center and Duke University Medical Center (DUMC); downtown and east Durham; NCCU; and Durham Technical Community College (DTCC).

1.1 Proposed Project Description

The proposed D-O LRT Alternative generally follows North Carolina (NC) Highway 54 (NC 54), Interstate 40 (I-40), United States (US) 15-501, and Pettigrew Street in downtown Durham and east Durham. The proposed alignment begins in Chapel Hill at UNC Hospitals, parallels Fordham Boulevard, proceeds eastward adjacent to NC 54, travels north along I-40, parallels US 15-501 before it turns east towards Duke University and runs within Erwin Road, and then follows Pettigrew Street paralleling NC Highway 147 (NC 147) through downtown Durham, before reaching its eastern terminus in Durham near Alston Avenue. A total of 17 stations are planned, and approximately 5,000 parking spaces will be provided along the proposed D-O LRT Alternative. In addition, a rail operations maintenance facility (ROMF) will be constructed to accommodate the D-O LRT fleet (16 vehicles, expandable to 26).

Bus routes will be modified to feed into the D-O LRT stations, and headways will be adjusted to provide more frequent service and minimize transfer waiting times. These services will also connect LRT passengers with other area transportation hubs, including park-and-ride lots and transfer centers.

1.2 Proposed Project Alternatives

Consistent with the September 2012 Scoping Report, and as described herein, the Draft Environmental Impact Statement (DEIS) will examine the potential environmental impacts of the LRT Alternative, including a small number of alignment, station, and ROMF siting options comprising the following:

- Crossing of Little Creek between the Friday Center and the proposed Leigh Village Development (i.e., alignment alternatives C1, C1A, C2, C2A and associated station locations)
- Crossing of New Hope Creek (NHC) and Sandy Creek between Patterson Place and South Square (i.e., NHC 1 and 2 Alternatives and associated station locations)
- Station alternatives at Duke/Durham VA Medical Centers
- Five proposed locations for the ROMF

In addition to the LRT Alternative, the DEIS will consider a No-Build Alternative – the existing and programmed transportation network improvements, with the exception of planned rail improvements and associated bus network modifications.



1.3 Architectural History Survey

This Historic Architectural Survey Report provides the results of a reconnaissance- and intensive-level survey of historic architectural resources located within the Area of Potential Effects (APE) associated with the D-O LRT project (Figure 1). It analyzes the eligibility of these resources for listing in the National Register of Historic Places in compliance with the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation regulations on the Protection of Historic Properties (36 CFR 800).

The resources were evaluated under the National Register Criteria for Evaluation, which are as follows:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. that are associated with events that have made a significant contribution to the broad patterns of our history; or

B. that are associated with the lives of significant persons in our past; or

C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. that have yielded or may be likely to yield, information important in history or prehistory.

The resources were additionally considered under the National Register's Criteria Considerations (Exceptions), but no resources were recommended as National Register eligible under those Considerations. All were evaluated to determine if they had significance under the above Criteria A, B, C, and D, and if they possessed sufficient integrity to support that significance.



Figure 1. Area of Potential Effects Overview and Project Locator Map



Architectural History Survey





2. Methodology

During the weeks of February 3, 10, and 25, March 3 and 24, April 7, July 21, and September 2, 2014, URS senior architectural historian and principal investigator Marvin A. Brown conducted reconnaissanceand intensive-level fieldwork within the Area of Potential Effects (APE) of the project and an initial study area that extended beyond the APE. The APE was developed by the Federal Transit Administration in consultation with the North Carolina State Historic Preservation Office (HPO). The method by which the APE was established is described in detail in a separate technical report (*Historic Resources—Area of Potential Effects*, October 2014). The entire APE is included on Figure 1, above. Detailed maps of the APE comprise Figure 2 through Figure 21.

Mr. Brown surveyed, inventoried, photographed, and preliminarily assessed all of the resources within the APE identified as 45 years old or older. As a part of this effort, he conducted research at the North Carolina State Library and Archives, the libraries at North Carolina State University, and the North Carolina HPO in Raleigh; the libraries at the University of North Carolina (UNC) and the Chapel Hill Public Library in Chapel Hill; and the Durham County Public Library and the libraries of Duke University in Durham. He also researched the tax, deed, plat, and map records of Durham and Orange counties via their online GIS sites and repositories. He conducted further online research at local, county, and state historic and genealogical websites, and local and state historic architectural and historic map websites. Additionally, he spoke with knowledgeable local informants in the field and on the telephone. He then assessed the potential National Register-eligibility of all of the resources within the APE by applying the National Register Criteria for Evaluation and National Register Criteria Considerations (see Criteria for Evaluation definitions at Section 1.3).

Following his initial fieldwork, research, and assessment, Mr. Brown put together a presentation that included maps, photographs, locations, estimated dates of construction, background information, and preliminary assessments of all resources inventoried at the reconnaissance level. In order to receive input on these and other potential historic resources within the APE, he presented this information to Wendy Hillis, current Executive Director of Preservation Durham on April 1, 2014; Peter Sandbeck, Cultural Resources Coordinator of the Orange County Department of Environment, Agriculture, Parks and Recreation on April 17, 2014; and Cheri Szcondronski, Executive Director of Preservation Chapel Hill, on April 18, 2014.

Mr. Brown subsequently conducted additional fieldwork at and research into 11 resources and groups of resources, which he assessed at the intensive level. These resources appeared to merit intensive-level assessment due to their appearance, history, associations, significance, and integrity. He revisited and re-assessed the National Register significance, integrity, and boundaries of 17 resources that had previously been listed or determined eligible for listing in the National Register. His National Register assessment of these 28 resources comprises Section 3 of this report.

As required by the HPO, all resources that were previously included on the North Carolina Study List were evaluated at the intensive level. The North Carolina Study List is a list of resources that have been identified as possibly meriting inclusion in the National Register.

Historians and architectural historians have written numerous detailed accounts about the history and resources within the project area, the cities of Durham and Chapel Hill and counties of Orange and Durham, and the region. These include Ruth Little's *Town and Gown Architecture of Chapel Hill, North Carolina, 1795-1975* and her "Development of Modernism in Raleigh, 1945-1965," both of 2006; *The Durham Architectural and Historic Inventory,* 1982, by Claudia Roberts (Brown); Brown's and Little's many National Register nominations and survey files covering resources in Durham and Orange



counties; Jean Bradley Anderson's *Durham County: A History of Durham County, North Carolina* of 2011; the numerous entries on Durham and Orange counties' modernist resources and architects, with associated photographs, at the North Carolina Modernist Houses website; and Gary Kueber's many detailed and well-illustrated accounts at his Open Durham website. Therefore, no general historic and architectural contexts have been written for this report. Rather, the relevant contexts are discussed in detail as they apply to each resource assessed in the report.



Figure 2. Area of Potential Effects Map 1



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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Architectural History Survey



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Figure 3. Area of Potential Effects Map 2



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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LRT Station

LRT Station Alternative

At-Grade Light Rail Alignment

Aerial Sections Light Rail Alignment

C1 Alternative

C1A Alternative

C2 Alternative

C2A Alternative

Potential Rail Operation and Maintenance Facility

Park-and-Ride Lot

National Register Listed & Eligible Properties & Districts

NC Study List Boundaries

Historic Resource APE

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National Register-Listed Properties

Resources Recommended Eligible for National Register Listing





Figure 4. Area of Potential Effects Map 3



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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Figure 5. Area of Potential Effects Map 4



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Figure 6. Area of Potential Effects Map 5



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Figure 7. Area of Potential Effects Map 6



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Figure 8. Area of Potential Effects Map 7



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Figure 9. Area of Potential Effects Map 8



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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1,000 Feet

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Figure 10. Area of Potential Effects Map 9



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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1,000 Feet

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Figure 11. Area of Potential Effects Map 10



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Figure 12. Area of Potential Effects Map 11



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1,000 Feet -

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Figure 13. Area of Potential Effects Map 12



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Figure 14. Area of Potential Effects Map 13



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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Historic Resource Status LRT Station 0 National LRT Station Register-Listed \Rightarrow Alternative Properties At-Grade Light Resources Rail Alignment Recommended \triangle Eligible for Aerial Sections Light Rail National Register Listing Alignment Potential Rail Operation and Maintenance Facility Park-and-Ride Lot Historic Resource APE Parcels National Register Listed & Eligible Properties & Districts NC Study List Boundaries 500 0

Figure 15. Area of Potential Effects Map 14

Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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1,000 Feet

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Figure 16. Area of Potential Effects Map 15



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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1,000 Feet

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Figure 17. Area of Potential Effects Map 16



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Figure 18. Area of Potential Effects Map 17



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Figure 19. Area of Potential Effects Map 18



DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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- ★ Duke Memorial United Methodist Church: 214
- △ Durham Coco-Cola Bottling Plant: 199
- ★ Trinity College East Campus HD: 189-192
- ★ WT Blackwell and Co (Bull Durham) Tobacco Factory: 222
- ★ Watts and Yuille Tobacco Warehouse: 207







Figure 20. Area of Potential Effects Map 19



Historic Resources DURHAM-ORANGE LIGHT RAIL TRANSIT PROJECT

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Figure 21. Area of Potential Effects Map 20



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3. Inventory and Assessment

3.1 National Register-Listed and Previously Identified Eligible Resources

3.1.1 Rocky Ridge Farm Historic District

Roughly bounded by Raleigh Road and Country Club Road on the north, Laurel Hill Road and Laurel Hill Circle on the east, Fern Lane on the south, and Ridge Road and the Coker Pinetum on the west, Chapel Hill, Orange County (multiple PIN numbers)

Status

The Rocky Ridge Farm Historic District (OR-303 and OR-1748) was listed in the National Register in 1989 (Reeb 1989). Its boundaries were expanded in 2008 (Little 2007). The district was determined significant under Criteria A and C in the areas of Community Planning/Development, Landscape Architecture, and Architecture (Figure 22). Its boundaries are depicted in Figure 23. The historic district appears to retain its significance and integrity and to continue to merit National Register listing.

Figure 22. Rocky Ridge Farm Historic District: 106 Fern Lane, left, and 110 Fern Lane, right





Boundaries

Figure 23. Rocky Ridge Farm Historic District National Register boundaries shaded in blue, including 2008 boundary expansion (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)





3.1.2 Dubose Tenant Farm Complex

Roughly bounded by north side of Sprunt Street on the north, east side of Old Barn Lane on the east, north side of NC 54 on the south, and West Barbee Chapel Road and west side of Old Barn Lane on the west, Chapel Hill, Orange County (multiple PIN numbers)

Status

The Dubose Tenant Farm Complex (OR-335 through 339) was determined eligible for National Register listing in 1994 through an official Determination of Eligibility or DOE (Little 1991). Since that time its property has been covered by the modern development of Meadowmont Village. It has therefore lost its integrity and is no longer National Register eligible (Figure 24 and Figure 25).

Figure 24. Tenant Farm Complex: aerial depicting the modern development of Meadowmont Village within and around former complex



Boundaries

Figure 25. Dubose Tenant Farm Complex National Register-eligible boundaries (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)







3.1.3 Meadowmont

Roughly 28-acre square of land with Meadowmont main house at center, Chapel Hill, Durham County (portion of parcel 140341 and all of parcel 140343)

Status

Meadowmont (DH-1708) was listed in the National Register in 1985 (Hood 1985). It was determined significant in the areas of Architecture and Landscape Architecture. The nomination included the main house, play house, pool house and pool, vegetable garden with former smokehouse, garage, well house, two poultry houses, an unidentified building, two storage buildings, brooder house, greenhouse, and a walled garden. Of these resources only the house and perhaps portions of the gardens survive.

The property also includes the almost entirely unmarked nineteenth-century Barbee Cemetery unmentioned in the nomination and not preliminarily recorded and assessed until 1996—which contains approximately 120 graves (Daniel 1996). Only those of William Barbee (1777-1857) and his wife, Gaskey (1780-1856), include text and are datable. All others are identified by fieldstones or unmarked. The cemetery appears to remain intact amidst undeveloped woodland to the east of the landscaped lawns behind Meadowmont House. A second, much smaller cemetery was established on the grounds, after Meadowmont was National Register listed, to hold the remains of David St. Pierre DuBose, Sr. (1898-1994) and his wife, Valinda Hill (1905-1989).

Almost all of the resources included in the nomination were supplanted by the 1997 development of the Rizzo Conference Center, which now occupies the Meadowmont house and its property. They have been replaced by extensive new landscaping; large modern buildings that stand to the house's north and northwest; and parking lots that stretch to the house's south and southwest (Figure 26 and Figure 27).



Figure 26. Meadowmont house, west elevation

Boundaries

No boundary description or justification is included in the nomination, but the body of the text states: "The property included in this nomination is a tract of 27.752 acres, which includes the house and its outbuildings and the immediate house grounds and gardens. This tract is bounded on the south, west, and north sides by the DuBose lands and on the east by another property owner. Woodlands enclose





the entire twenty-seven-plus acre tract." The HPO delineated boundary is shown at Figure 27 with the house at the center and modern development around it.

As noted, almost all of these resources expect for the Meadowmont mansion have been supplanted by the buildings, parking lots, and landscaping of the conference center. The mansion and its immediate grounds remain intact and it therefore appears to retain its National Register significance and integrity. Were the boundaries redrawn to reflect current conditions, however, they would contract to a much smaller area confined to the house and its immediate grounds, which would be contained within the northern arc of Dubose Home Lane, below the conference center's modern buildings, and the edges of the parking lots to the south.

Figure 27. Meadowmont National Register boundaries, marked in dark blue (source:<u>http://gis.ncdcr.gov/hpoweb/</u>)





3.1.4 West Durham Historic District

Roughly bounded by West Knox Street on the north, Ninth and Iredell streets on the east, West Main Street on the south, and Rutherford Street and Carolina Avenue on the west, Durham, Durham County (multiple parcel numbers)

Status

The West Durham Historic District (DH-1134) was listed in the National Register in 1986 (Brown 1984f). It was determined significant under Criterion C for its architecture. The Erwin Cotton Mills Co. Mill No. 1 and Headquarters Building (DH-1178) within the district was individually listed in 1984 under Criteria A, B, and C for its economic role in Durham; its association with Benjamin N. Duke, George W. Watts, and William A. Erwin; and its architecture (Brown 1984a). Since 1986 much of the southern portion of the district has been dramatically altered by modern development (Figure 28 and Figure 29). However, in 1999, as part of a review of Mattson, Alexander & Associates "Phase 2 Historic Architectural Resources Survey: Regional Rail System from Duke Medical Center in Durham to Durant Road in Raleigh, ER 99-9028," the SHPO did not concur with recommendations that its boundaries be reduced. The district appears to continue to retain sufficient integrity for National Register listing. Were its boundaries redrawn to reflect current conditions, though, they would contract to a smaller area at its south.

Figure 28. West Durham Historic District: at top, St. Joseph's Episcopal Church; at bottom, Erwin Cotton Mills Co. Headquarters Building, Erwin Cotton Mill No. 1, Hilton Hotel, and Erwin Square (right to left)





Boundaries

Figure 29. West Durham Historic District National Register bounds (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)







1503 West Pettigrew Street, Durham, Durham County

Status

The Powe House (DH-1224) was listed in the National Register in 1985 (Brown 1984b). It was determined significant under Criteria A, B, and C for its symbolic status as the home of a textile industry executive; its association with Edward Knox Powe; and its architecture. Standing within the National Register boundaries (parcel 113541), in addition to the Powe House, are Erwin Cottage at the south end of the lot and Sunnyside, which is included on the North Carolina Study List, at the north end (Figure 30 and Figure 31). The Powe House stands between these two former residences. In 1986 Sunnyside was moved to its current location from its original site, which was located on the other side of Swift Avenue to the east. It was also rotated to face south toward the Powe House. At the same time, the Erwin Cottage was also moved across Swift Avenue to its current site (Kueber 2009). As part of a review of a survey report in 1999 (Mattson, Alexander & Associates), the HPO did not concur with recommendations that the Powe House's National Register-listed boundaries be reduced, but rather recommended "delisting the entire property." The appearance of the three resources and the parcel that constitutes the Powe House's National Register boundaries appears to be little changed since 1999. Therefore, it is recommended that the Powe House is no longer National Register-eligible. The property, which includes all three houses, continues to be NR listed, though, and Sunnyside remains on the North Carolina Study List.

Figure 30. Powe House: Powe House, at center, and Erwin Cottage, at right background, from front porch of Sunnyside







Figure 31. Powe House National Register boundaries (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)





3.1.6 Trinity College East Campus Historic District

Roughly bounded on the north by West Markham Avenue, on the east by North Buchanan Boulevard, on the south by West Main Street and Maxwell Avenue, and on the west by Campus Drive and Broad Street, Durham, Durham County (all of parcel 100000, western portion of parcel 1032366, and tiny segment of parcel 215181)

Status

The Trinity College East Campus Historic District (DH-1821) was determined eligible for National Listing through a DOE in 2000 and 2009. Two resources within the district's boundaries that are located to the south of the campus are included as contributing resources to the district, the Campus Drive Underpass and Grade Separation (DOE, 2005) and the Duke University Central Heating Plant (DH-693) and associated Carpenters Shop (DOE, 2000) (Figure 32 and Figure 33). The underpass and grade separation was additionally determined individually eligible for NR listing under Criteria A and C for its history and architecture as part of a statewide survey of bridges in 2005. The historic district appears to retain its significance and integrity and to continue to merit National Register listing.

Figure 32. Trinity College East Campus Historic District: Duke University West Duke Building, left; Campus Drive underpass and grade separation on south side of West Main Street, right



Boundaries









3.1.7 Smith Warehouse

114 South Buchanan Boulevard, Durham, Durham County (parcel 103189)

Status

The Smith Warehouse (DH-89) was listed in the National Register in 1985 (Brown 1984c). It was determined significant under Criteria A, B, and C for its connection with the American Tobacco Company trust; its economic role in Durham; its association with James B. Duke and other American tobacco Company executives; and its architecture (Figure 34 and Figure 35). The warehouse appears to retain its significance and integrity and to continue to merit National Register listing.

Figure 34. Smith Warehouse



Boundaries







3.1.8 Trinity Historic District

Roughly bounded by West Club Boulevard and Green Street on the north, North Duke Street on the east, West Main Street on the south, and North Buchanan Boulevard and Broad Street on the west, Durham, Durham County (multiple parcel numbers)

Status

The National Register listed Trinity Historic District (DH-927) in 1986 (Brown 1984d). It is significant under Criterion A for representing "the efforts of the leaders who had created Durham's prospering economy to provide the public services and cultural amenities necessary for the community's continued development as a progressive city"; under Criterion B for reflecting the business acumen of Julian S. Carr, Richard H. Wright, Brodie L. Duke, and many other smaller investors; and under Criterion C for its concentration of popular residential design from the 1890s up to World War II (Figure 36 and Figure 37). The historic district appears to retain its significance and integrity and to continue to merit National Register listing.

Figure 36. Trinity College Historic District: North Buchanan Avenue houses just north of West Main Street, at top; former McPherson Hospital Main Building in March 2014, at bottom





Figure 37. Trinity Historic District National Register boundaries; note that bounds of district expansion extend off of top of map (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)





3.1.9 Watts and Yuille Tobacco Warehouses

114 South Buchanan Boulevard, Durham, Durham County (parcel 103189)

Status

Watts and Yuille Tobacco Warehouses (Brightleaf Square) (DH-87) was listed in the National Register in 1984 (Brown 1983). It was determined significant under Criterion A as a notable symbol of the American Tobacco Company trust; under Criterion B for its association with James B. Duke and his family, George W. Watts, and Thomas B. Yuille; and under Criterion C for its architecture (Figure 38 and Figure 39). The historic district appears to retain its significance and integrity and to continue to merit National Register listing

Figure 38. Watson and Yuille Tobacco Warehouse, Durham

Boundaries

Figure 39. Watson and Yuille Tobacco Warehouse National Register boundaries (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)





3.1.10 Duke Memorial United Methodist Church

504 West Chapel Hill Street, Durham, Durham County (parcel 103293)

Status

The National Register listed Duke Memorial United Methodist Church (DH-1253) in 1985 (Dickinson 1984). It was determined significant under Criterion A for its association with the rapid growth of western Durham and the many tobacco workers in its congregation; under Criterion B for its association with Washington Duke and his sons; and under Criterion C for its architecture (Figure 40 and Figure 41). The church appears to retain its significance and integrity and to continue to merit National Register listing



Figure 40. Duke Memorial Chapel United Methodist Church

Boundaries







3.1.11 Bright Leaf Historic District

Roughly bounded by Minerva Avenue on the north, railroad tracks and Liggett and Morris streets on the east, railroad tracks and West Main Street on the south, and North Duke Street on the west, Durham, Durham County (multiple parcel numbers)

Status

Bright Leaf Historic District (DH-71) was listed in the National Register in 1999 (Brown 1999). It was found to be significant under Criterion A in the area of Industry and under Criterion C in the area of Architecture (Figure 42 and Figure 43). The historic district appears to retain its significance and integrity and to continue to merit National Register listing

Figure 42. Bright Leaf Historic District: Walker Warehouse, at center left, with Chesterfield Building (Liggett & Myers Tobacco Company) rising to rear



Boundaries







3.1.12 Downtown Durham Historic District

Roughly bounded by West Morgan, East Seminary, and East Parrish streets on the north, North Roxboro and North Queen streets on the east, Ramseur Street on the south, and Great Jones and West Morris streets on the west, Durham, Durham County (multiple parcel numbers)

Status

The Downtown Durham Historic District (DH-1692) was listed in the National Register in 1977 (Smith and Flowers 1976) (Figure 44 and Figure 45). Its areas of significance were identified as Architecture, Commerce, Politics/Government, Religion, and Theater. Included within the district is the North Carolina Mutual Life Insurance/Mechanics and Farmers Bank building (DH-14), which was listed as a National Historic Landmark in 1975 (Greenlee 1974). The historic district appears to retain its significance and integrity and to continue to merit National Register listing

Figure 44. Downtown Durham Historic District: south side of West Main Street east of South Corcoran Street



Boundaries

Figure 45. Downtown Durham Historic District National Register boundaries (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)







3.1.13 American Tobacco Company Manufacturing Plant

Block bounded by West Pettigrew Street on the north, Blackwell Street on the east, Willard Street on the south, and Julian Carr Street on the west, Durham boundaries (source: <u>http://gis.ncdcr.gov/hpoweb/</u> (multiple parcel numbers)

Status

The National Register listed the American Tobacco Company Manufacturing Plant (DH-1872) in 2000 (Brown and Little 2000). It was determined significant under Criterion A in the area of Industry and under Criterion C in the area of Architecture. Included within the resource is the W.T. Blackwell and Co. (Bull Durham) Tobacco Factory (DH-10), which was identified as a National Historic Landmark in 1974 (Survey and Planning Unit 1974) (Figure 46 and Figure 47). The American Tobacco facility appears to retain its significance and integrity and to continue to merit National Register listing

Figure 46. American Tobacco Company Manufacturing Plant: W.T. Blackwell and Co. (Bull Durham) Tobacco Factory at center and Hill Warehouse at right



Boundaries







3.1.14 Southern Railway Bridge (Seaboard Coastline Railroad Overpass)

East Pettigrew Street at South Roxboro Street, Durham, Durham County (no parcel number)

Status

The Southern Railway Bridge (Seaboard Coastline Railroad Overpass) (DH-2504 and DH-1867) was determined eligible for National Register listing in 1999 under Criterion A in the area of Transportation and under Criterion C for its design (Figure 48). The bridge appears to retain its significance and integrity and to continue to merit National Register listing.



Figure 48. Southern Railway Bridge

Boundaries

The bridge does not have any precisely delineated boundaries (Figure 49). The property it stands on has no parcel number and is flanked to the east and west by, but separate from, parcel 215183, which is owned by the North Carolina Railroad Company. Its boundaries likely encompass its footprint.

Figure 49. Southern Railway Bridge footprint, at left, and location with no detailed boundary, at right (sources: Circa, Inc., 2004, at left, and <u>http://gis.ncdcr.gov/hpoweb/</u>, at right)





3.1.15 Venable Tobacco Company Warehouse

302-304 East Pettigrew Street, Durham, Durham County (portion of parcel 103367)

Status

The Venable Tobacco Company Warehouse (DH-97) was included in the National Register in 1985 (Brown 1984e). It was determined significant under Criterion A in the area of Industry and Criterion C in the area of Architecture (Figure 50 and Figure 51). The warehouse appears to retain its significance and integrity and to continue to merit National Register listing.



Figure 50. Venable Tobacco Company Warehouse

Boundaries

Figure 51. Venable Tobacco Company Warehouse National Register boundaries (source: http://gis.ncdcr.gov/hpoweb/)





3.1.16 Venable Tobacco Company Prizery and Receiving Room

302-304 East Pettigrew Street, Durham (portion of parcel 103367)

Status

The Venable Tobacco Company Prizery and Receiving Room (DH-2560) was included in the National Register in 2003 (Lamprakos and Belk 2002). It was determined significant under Criterion A in the area of Industry (Figure 52 and Figure 53). The prizery appears to retain its significance and integrity and to continue to merit National Register listing.



Figure 52. Venable Tobacco Company Prizery

Boundaries

Figure 53. Venable Tobacco Company Prizery National Register boundaries; note boundaries include portion of parking lot fronting on East Pettigrew Street on which no building currently stands (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)





3.1.17 East Durham Historic District

Roughly bounded by Southern Railway right-of-way on the south, North Guthrie Avenue on the east, Holloway Street on the north, and Hyde Park Avenue, South Plum Street, and Vale Street on the west, Durham, Durham County (multiple parcel numbers)

Status

The East Durham Historic District (DH-2184) was listed in the National Register in 2004 (Little 2004) (Figure and Figure). It was determined significant under Criterion A in the area of Community Development and Planning and under Criterion C in the area of Architecture. The historic district appears to retain its significance and integrity and to continue to merit National Register listing.

Figure 53A. East Durham Historic District: 1703 and 1705 Angier Avenue, left to right



Boundaries

Figure 53B. East Durham Historic District National Register bounds (source: <u>http://gis.ncdcr.gov/hpoweb/</u>)







3.2 Resources Inventoried at the Intensive Level

3.2.1 H.G. Baity House

1503 Baity Hill Drive, Chapel Hill, Orange County (portion of PIN 9788717979)

Figure 54. H.G. Baity House



History

Internationally renowned sanitation engineer Herman Glenn "H.G." Baity (1895-1975) built the H.G. Baity House in 1940, near the middle of a long association with the University of North Carolina in Chapel Hill (Figure 54). Born in rural Davie County in 1895, Baity entered UNC in 1913. He graduated in 1917 with an A.B. degree and was then commissioned as a first lieutenant with the U.S. Army and sent to France. He served there for two years and also attended Sorbonne University in Paris in 1919. He returned to North Carolina and took a job for a year as superintendent of schools of Ronda in Wilkes County. He then re-enrolled at UNC and received a B.S. degree in 1922. While in Chapel Hill, he was editor of the *Daily Tar Heel* and a member of the Dialectic Society and Phi Beta Kappa (Harris 1979; Kastleman 2007).

At UNC Baity studied with hydraulic and sanitary engineering professor Thorndike Saville. Baity recalled that Saville's "enthusiasm and his devotion to sanitary engineering in the cause of humanity" led him to his calling (Kastleman 2007). At Saville's urging, Baity took a second degree in civil engineering. Between 1922 and 1924 Baity served as assistant sanitary engineer with the North Carolina State Board of Health (Harris 1979; Kastleman 2007).

With the aid of a Rockefeller Foundation grant, in 1924 Baity enrolled at his mentor's alma mater, Harvard University, where he had signal success. He received an M.S. degree in 1924 and in 1928 became the first person to receive a doctorate in sanitary engineering from an American university. During his four years at Harvard, Baity "won the Clemens Herschel Prize for the most outstanding work done in America in the field of sanitary engineering achieving the most brilliant record made in the



Harvard Engineering School" (Harris 2007). He turned down Harvard's offer to join its faculty and once more returned to North Carolina and Chapel Hill (Harris 1979; Kastleman 2007).

Baity served as head of the sanitary engineering department at UNC from 1928 through 1936 and as dean of the School of Engineering from 1930 through 1936 (Figure 55). In 1936 the state consolidated UNC, North Carolina State College (now University), and Women's College (now University of North Carolina-Greensboro) under a single administration and moved the engineering school to Raleigh. Baity successfully lobbied to keep the sanitary engineering department in Chapel Hill, where it was aligned with the Division of Public Health in the School of Medicine. He retired from chairmanship of the department in 1955 (Harris 1979; Kastleman 2007).

Figure 55. H.G. Baity at University of North Carolina, ca.1935-1945 (source: Korstad, Dreaming of a Time)



Baity's activities extended well beyond UNC during his long association with it. From 1928 to 1931 he acted as an associate engineer for the State Board of Health, where he "helped promote the rebuilding of water works and sewage disposal facilities throughout the state" (Harris 1979). From 1933 to 1936 he served as the North Carolina director of the New Deal's Public Works Administration, which required a cessation of teaching. For six years beginning in 1937 he was a consultant to the National Resources Planning Board. And from 1941 through 1949 he also served as a consultant to the U.S. Public Health Service. During this period he helped develop sanitary facilities in Brazil, Uruguay, Bolivia, and Peru. This service required frequent trips to South America, including a 17-month stretch when he and his family lived in Brazil (Harris 1979; Kastleman 2007).

H.G. Baity's influence extended world-wide in 1952, when he became the Director of Environmental Sanitation for the World Health Organization (WHO) in Geneva. He held the position for ten years. With WHO "he played a major role in developing sanitation facilities throughout the world" (Harris 1979). Baity returned to Chapel Hill in 1962 where, with breaks for international consulting with WHO and teaching at the University of Tehran (1964-1965), he lived until his passing in 1975 (Harris 1979; Kastleman 2007).

As his lengthy list of positions indicates, Baity was an active teacher and sanitary engineer. He also belonged to many national and international organizations, including the Inter-American Association of Sanitary Engineers, of which he was president in 1954. He further extended his influence and reach by contributing articles to many professional publications, particularly the *American Journal of Public Health*. His ideas were quoted and put forward by others. For example, a 1969 book on water supply for



rural areas and small communities quoted part of a speech he had given for WHO in New Delhi in 1953—later published—that related his experience in North Carolina and throughout the world designing water treatment plants. He told his audience, in part (quoted in Wagner and Lanoix 1969:172):

Observations all over the world teach important lessons about plant layout and design. An opportunity should never be lost to speak a word of advice and caution on this subject. Incalculable sums have been wasted in all countries by failure to follow sound principles of layout and to construct plants capable of extension. Modern reinforced concrete structures are good for a hundred years or more, but short-sighted engineers often design plants adequate only for the immediate future, and with layouts or site restrictions that make necessary the scrapping of the old plant and building a new one as soon as a greater capacity is called for. In North Carolina every one of the plants of thirty years ago had to be abandoned for such reasons. The loss due to lack of foresight ran into millions of dollars.

With his mind turned to the future, as it generally was, he offered four precautions. The first stated that sanitary engineers could avoid difficulties "By remembering that most communities will continue to grow for a long time, and by estimating populations and water requirements for the ultimate future."

Baity's forward-thinking views were ahead of their time on occasion. In 1961 he delivered an invited paper to a Royal Society of Health meeting in England titled "Our Bewildering New Environment," in which he voiced his concern about environmental degradation and misuse of resources that was inexorably leading to "foreseeable crisis" in the world. He recalled ten years later (quoted in Ivey 1970:20) that his audience "thought my views on hazards to the environment were too far out" and that he was given "a hard time in the discussion period following the paper." The antagonism toward his ideas extended to the Society's publishing committee, which refused to include his paper in the printed proceedings of the meeting. Ten years out, the observations of Baity's talk were more commonplace than radical (Ivey 1970:20-22).

An anecdote in an obituary suggests how important Baity's work was throughout the world (Kastleman 2007):

UNC School of Public Health sanitary engineering professor Dr. Herman G. Baity was introduced before a speech in England during the 1950s as "the man who has done the most to increase the world's population."

"The audience howled with laughter," recalls Baity's son, Bill Baity, "but it is not entirely clear that they got the connection between his efforts to improve water supplies and the great drop in infant mortality."

In spite of his peregrinations, H.G. Baity always retained firm roots in North Carolina and Chapel Hill. He met Texas-native Elizabeth Chesley (1907-1989) in Chapel Hill. She received her M.A. degree from UNC in 1929 and the two married the following year. Both of their two sons, William (b.1939) and Philip (b.1941), were born in Chapel Hill (*Alumni Review* 1942:185).

In 1940 H.G. Baity built, literally, the Baity House. According to son Bill Baity, at the end of a thread of emails discussing the fate of the property in 2004:

I've just seen the building plans [for the former Baity property] and have mixed feelings – mostly grateful that the house will be left standing. My dad, Prof. H. G. Baity, built the house himself with one or two laboror [sic] helpers in 1940 in French Normandy style....



The panelling inside is pecky cypress. The beams in the porch came from grandfather's farm in piedmont N. Carolina. It was a wonderful house to grow up in!

This is the only identified record of Baity physically building the house. The date is confirmed, though, in tax records. H.G. and Elizabeth Baity may have designed the house as well. According to the UNC *Alumni Review* in March 1942, discussing a young-readers book Elizabeth Baity had recently published, "Mrs. Baity is a busy woman at home, for in addition to writing she helped plan and bring to completion the new Baity home on a wooded hillside near Chapel Hill..." (Figure 56).

Figure 56. Elizabeth and Bill Baity, 1942 (source: Alumni Review, March 1942)



H.G. Baity died in Chapel Hill in 1975, still a resident of the house he built. The family apparently had a second residence as well, for an account of his death notes that his ashes were "divided between the old Chapel Hill Cemetery and his garden in France" (Harris 1979). Where this garden and associated house were located has not been determined. Baity's ashes were indeed scattered rather than interred in Chapel Hill, for records of the Chapel Hill Cemetery include no mention of a Baity grave marker.

Less than a year prior to Baity's death, the family sold 44.9 acres of property to UNC for \$500,000. The sale excluded the house and nine acres surrounding it. Elizabeth Baity, who continued to occupy the dwelling, was very displeased when UNC built its new basketball arena, the Dean Smith Center, on the former family property in 1986. She died in 1989 and two years later the university purchased the house and its nine acres (Viser 2001).

The university continued to use the residence as it completed plans for the development of the remainder of the Baity property. For at least a few years in the early 1990s it held the residential Russian House. In 2002 UNC issued a request for proposal to build 300 married/family student apartments on the property. According to an account by the developer (Blue Heron Asset Management):

The Ron Strom Company...submitted an atypical proposal that provided for more units, structured parking, less impervious surface, and a walkable community. Mr. Strom approached the project with a unique vision, including adaptive reuse of the existing signature building on the property, the Baity House.

The \$45 million project was completed in 2005. It included 398 apartments spread amongst nine buildings. The Baity House, ringed by the new buildings, was "repurposed" as the leasing office and community center for the development, which was named Baity Hill (Blue Heron Asset Management; Ochs 2005) (Figure 57).







Description

The Baity House is a large, two-story, brick Chateauesque-style dwelling. It has a tall central block flanked by shorter setback extensions that give it the appearance of having been built in an additive fashion over time (Figure 58 through Figure 68). Actually the entire building was erected as a single structure in 1940. The house's flat expanses of brick walls are enlivened by Flemish bond patterning on all four elevations, brick corner quoins, and decorative brick moldings dripping beneath the eaves. Two tall chimneys extended by clay pots rise from steeply sloped French roofs of varied height, which are clad in asphalt shingles that mimic slate tiles.

The house's facade faces west. Large fixed windows with replacement glass mark its varied wall planes. This treatment is carried across all elevations. The main body of the front elevation projects forward at the center. The front entrance is set into the right (south) side of this block in the shadow of a porch built, according to Bill Baity, of old Davie County farm timber. A secondary entrance, opening directly into the second floor, is reached by stairs to the left (north) of the projecting block. The east-facing rear elevation includes wall dormers and a projecting tower. A bay window to the left (south) of the tower is visible in a 1970 photograph of H.G. Baity (Figure 58). A wall dormer and two modern garage doors mark the house's south side elevation. Modillion blocks and faux half-timbering adorn a one-story sunroom that projects from the north side elevation.



Figure 58. H.G. Baity House footprint drawing: west-facing façade at bottom (source: Orange County tax records)





Figure 59. H.G. Baity at rear of Chapel Hill house, 1970 (source: Ivey, *Alumni Review*, November 1970)



A dovecote built with the house near the base of the entry drive contributes to the resource. It is a round building laid in Flemish bond over an ashlar stone foundation. An entry and windows are set in its cylinder, which is topped by projecting brick beltcourses, a conical roof of faux slate shingles and, at its crown, a wooden cylinder ringed by small openings and perches for birds. The shape of the dovecote is mirrored at a portion of a wall off the house's northeast corner. The openwork brick wall also contributes to the property. The slate pavers extending from the rear of the house and the brick-walled patio they enframe are not original. They likely date from 2005 when UNC renovated the house. A vegetable garden set down the slope further east of the rear elevation is also modern. The remainder of the grounds are marked by a lawn around the house and the dovecote, deciduous trees to the house's south, and shrubbery and landscaping extending down the slope at the edges of the property that separate it from the modern buildings that surround it. Helen Martikainen, who served with Baity in WHO as the chief of health education, recalled the parties the Baitys threw in Chapel Hill and when they were living abroad: "It wasn't just older people who attended, it was young students, too. It was like a small community party. They were very generous with their hospitality." The Chapel Hill property was a particularly pleasant location, she continued: "When you drove on the road out to the house, you enjoyed the beauty of birds and trees and flowers. In a few minutes you were in a country setting. It was beautiful" (quoted at Viser 2005). Due to its landscaping, the house continues to retain a bucolic setting in spite of the modern buildings around it.

The rooms on the main floor were available for viewing. The entry hall retains its warm "pecky cypress" paneling, the wide boards of which may have been salvaged from family property or otherwise gathered from an earlier building. The jigsawn stair balusters have a handmade quality that suggests that Baity or his workmen made rather than purchased them. The living room to the right (south) of the hall has the same paneling and a post-and-lintel mantel built up with molded pieces that also has a handmade character. The sunroom beyond the living room, now the office of the property manager, retains its paneling as well. Rooms to the north of the hall have been modernized and converted into offices.



Figure 60. Baity House: view of west-facing façade with modern apartment buildings sweeping around foot of hill; dovecote just out of the frame at right



Figure 61. Baity House: dovecote at head of entry drive and façade of house





Figure 62. Baity House: west-facing façade



Figure 63. Baity House: north side and east rear elevations (with dovecote-like feature at wall looming disproportionally large due to camera angle)





Figure 64. Baity House: east rear elevation



Figure 65. Baity House: east rear and south side elevations







Figure 66. Baity House: façade and south side elevations

Figure 67. Baity House: living room to right (south) of front entry with doors to rear deck, at left, and to sunroom, at right





Figure 68. Baity House: entry hall and stair

National Register Eligibility Assessment

The Baity House is recommended as eligible for listing in the National Register under Criterion B for its association with H.G. Baity. Baity was the most important figure in the early/mid-twentieth-century history of sanitary engineering in North Carolina. He was also internationally known for his work in South America in the 1940s and throughout the world during his ten years (1952-1962) as the director of environmental sanitation at the World Health Organization. He is intimately associated with the house, which he built in 1940 and in which he lived, when he was not working abroad, until his death in 1975. There are no other buildings known to be so closely associated with Baity and his productive years. The H.G. Baily Environmental Laboratory at UNC in Chapel Hill was dedicated in 1989, well after his death (Korstad 1990:173). The house is recommended to be of statewide significance for its association with Baity.

Neatly finished inside and out, the house is an excellent example of mid-20th-century Chateauesquestyle architecture. Its surviving original associated features—a dovecote, an openwork brick wall, and well-groomed and still bucolic grounds—support the architectural significance of the house. The most notable alteration to the house, the replacement of its sash, is outbalanced by its many other intact original features and it is therefore believed to have sufficient integrity to support its eligibility under Criterion C for its architecture.

The house is not known to be associated with any important historic events or activities other than those directly associated with H.G. Baity and it is unlikely that it would yield any important historical information not readily available from other sources. It is therefore not recommended to be significant under National Register Criteria A or D. The house's period of significance is recommended as extending


from 1940, when it was constructed, to 1965, when Baity concluded a teaching assignment in Iran, returned to Chapel Hill, and cut back, at the age of 70, on his intense involvement in sanitary engineering activities throughout the world.

The proposed National Register boundaries for the Baity House encompass the grassy hill that the house, dovecote, driveway, and grounds occupy, within the rough circle of Baity Hill Drive. This property is the only undeveloped and still recognizably historic portion of the 54-acre parcel originally associated with the house. It encompasses approximately four acres of the nine-acre parcel (PIN 9788717979) that UNC purchased, along with the Baity House, in 1991. The other five acres of the parcel and adjacent parcels now hold nine modern apartment buildings and are accordingly excluded from the proposed Register-eligible boundaries. The other 45 acres of property initially associated with the house, which contain various modern university resources, including the Dean Smith Center, are excluded as well (Figure 69).

Figure 69. Proposed National Register boundaries of the Baity House, shaded by broken blue lines, occupying an approximately four-acre portion of PIN 9788717979. Remainder of the parcel, outlined in red, is occupied by modern apartments; portions of the larger original house parcel outside the red lines include modern buildings such as the Koury Natatorium and Smith Center identified in purple at upper left (source: Orange County tax maps)





3.2.2 Dr. Robert Jack Shankle House

1306 Mason Farm Road, Chapel Hill, Orange County (PIN 9788611541)

Figure 70. Dr. Robert Jack Shankle House (source: North Carolina Modernist Houses website; Gordon Allen, photographer)



History

Robert Jack Shankle, for whom this intact Mid-Century Modernist house was erected in 1957, was born in Walker, Georgia in 1923 (Figure 70). Shankle attended three colleges—North Georgia College, the University of Georgia, and Washington University—before graduating from the Emory University School of Dentistry in 1948 following service in World War II (University of North Carolina School of Dentistry 2011; Durham *Herald Sun*, July 1, 2011).

The UNC School of Dentistry was organized beginning in 1949 and accepted its first class in 1950 (Figure 71). Among its initial hires were Dr. Robert Sturdivant and his son, Dr. Cliff Sturdivant, both of whom taught at Emory. Cliff Sturdivant recalled, at the 50th anniversary of the first graduating class, how they hired additional faculty (quoted in University of North Carolina Dental Alumni Association 2004:6):

We kept a close eye on outstanding students in pre-clinical courses when we taught at Emory. After they graduated, we offered those students teaching positions at UNC. We managed to recruit Jack Shankle and Lee Sockwell to the School's faculty with that method. By the beginning of the second year, we had about 12 professors at the School.

Shankle's obituary described his success at the dental school and his leadership in North Carolina's dental community (Durham *Herald Sun*, July 1, 2011):

In 1951, Dr. Shankle joined the faculty of the UNC School of Dentistry. He moved through the academic ranks of the Department of Operative Dentistry and later was appointed Professor and the first Chairman of the Department of Endodontics.



While at the UNC School of Dentistry, Jack served as Director and Chairman of Dental Admissions, Director of Public Relations and Development, Executive Director of the Dental Alumni Association and Editor of the Dental Alumni Newsletter. He retired from full-time academia in 1984 with the title of Professor Emeritus.

Dr. Shankle has been active in organized dentistry throughout his career. He served as President and Speaker of the House of the North Carolina Dental Society, President of Omicron Kappa Upsilon, Regent for the Carolina Section of the American College of Dentists, Editor and Publisher of the North Carolina Dental Journal and served on the Council of Annual Sessions and International Programs for the American Dental Association.

He is a Diplomate of the American Board of Endodontics and served as its Director 1969-1972. He was a Fellow in the American College of Dentists and the International College of Dentisits [sic]. The North Carolina Dental Society and the UNC Dental Alumni Association recognized Dr. Shankle with the Distinguished Service Scroll. The Tar Heel Endodontic Association established a teaching fellowship in perpetuity, known as the RJ Shankle Annual Lecture Series to honor their mentor.

Figure 71. Jack Shankle, at far right in both images, during early years of UNC School of Dentistry (source: University of North Carolina Dental Alumni Association 2004:6)







Upon his retirement in 1984, Shankle was honored at a special gala by the department of endodontics and the Tar Heel Endodontics Association. He was cited during the event for his "untiring efforts to dentistry, devotion to the School and the University, and for developing and forming the Department of Endodontics at the UNC School of Dentistry." The Association presented a portrait of him to be hung in the foyer of the endodontics department (University of North Carolina School of Dentistry 1984). The Shankle Annual Lecture Series was also started that year. The 30th anniversary lecture was held in April 2014 (University of North Carolina School of Dentistry 2014).

Shankle was a fixture at the dental school in 1957 when he built his new house on Mason Farm Road at the edge of Chapel Hill, not too distant from the campus. He and his wife, Nancy, followed the example of other professionals in Chapel Hill, and Durham and Raleigh as well, and hired a young local architect steeped in modernism to design their house, Louis Sumner Winn, Jr. (1928-2000). According to the North Carolina Modernist Houses website entry on the architect:

Sumner Winn grew up in Worchester MA and graduated from Bowdoin College in 1950. After a year at the Sorbonne in Paris and four years in the Air Force during the Korean War, Winn earned a BS in Architecture from the Rhode Island School of Design. He moved to Chapel Hill around 1960 and worked for Archie Royal Davis. In 1967 he worked at Winn/Condoret architects with Jon Condoret. In approximately 1968 he joined Don Stewart's CPAA as a partner. He left in 1973 to form his own practice in Chapel Hill. Most of his records and drawings were destroyed in 1994 when his home office at 127 Stateside Drive burned.

...Winn's houses are known for beautiful corner windows, brick mass fireplaces, and extended post and beam exterior eaves.

The entry apparently misstates when Winn arrived in Chapel Hill, for he is credited further on in the account with the design of the Shankle House in 1957, the same year tax records identify it as having been constructed.

According to deed records, the Shankles sold the house in 1982. Dr. Shankle, who outlived his wife, died at Hospice of the Meadowlands in Hillsborough in 2011 at the age of 87 (Durham *Herald Sun*, July 1, 2011). The current owner recalls Dr. Shankle and one of his two daughters, Jill and Cathy, visiting the house a few years before his death and fondly remembering it (Allen 2014).

Description

The Dr. Robert Jack Shankle House is a one-story frame residence with a wealth of features characteristic of Mid-Century Modernist design and architect Sumner Winn (Figure 72 through Figure 86). A long roof with wide overhanging eaves sweeps over the main body of the dwelling. The extent of the overhang, and the addition of built-up shingles along the ridge, create the illusion that the roof kicks up at the end, which is part of the house's Japanese-influenced design. The Japanese theme is enhanced at the north façade by a band of windows at the left (east), an opening in the roof at the recessed front entry, and shoji-screen-like panels shielding the front of the carport at the right (west). Further Japanese elements are introduced at the small gabled roof over the entry, which is marked by a raised ridge and projecting vertical beams, and at the exposed beams beneath the roof eaves at the east and west side elevation and carport. What looks like a cornice return at the east side elevation marks the location of an exposed interior soffit wall that extends into the bedroom and bathroom at the east.



Extended beams, a characteristic feature of Winn's designs, mark the room that projects beneath a subsidiary gabled roof at the house's south rear elevation. This room, which opens onto a porch served by a very long and shallow flight of stairs, is glazed floor to gable. This wide expanse of windows opens the house to copious amounts of natural light, another proclivity of Winn's. Bands of windows extend across the remainder of the rear elevation. In contrast to the horizontality of the windows, roofs, and carport screens, the house is clad in vertical-board siding. Peeking from the center of its roof is a broad chimney with raised corners topped by a flat concrete pad.

Inside, the design continues to make vigorous use of exposed beams. They extend out to either side of a broad, brick-walled, central hearth, yet another common feature of Winn's designs. Winn opened the principal room to the backyard and deck through the rear wall of windows. The open character of the interior is militated at most rooms by wide exposed soffits that scale the rooms down along one wall.

The house's current owners—Gordon Allen and Maryann Feldman—acquired the property in 2008. They hired Chapel Hill designer John Lindsey to draft renovations to the house. According to Allen (2014), Lindsey had worked with Sumner Winn on a number of projects. Lindsey designed the kitchen and other interior renovations, the new decks at the east side and off the north front elevations, and the new garden/storage shed.

Figure 72. Dr. Robert Jack Shankle House footprint drawing: north façade at bottom (source: Orange County tax records)



Tall deciduous trees and pines occupy most of the Shankle House property. They shield it from view from Mason Farm Road to its north, Otey Road to its east, and neighboring residences. There is no front yard, although a low masonry wall in front of the carport holds a narrow planted area. The house opens up at the rear, with numerous windows allowing views of a wide if relatively narrow lawn. An outbuilding, the one designed by Lindsey, stands on the property off the northwest edge of the lawn. Utilized as a garden and storage shed, its sweeping gable roof is underpinned with projecting beams that mirror the house's design.



Figure 73. Dr. Robert Jack Shankle House: east side elevation and north-facing front façade; note "cornice return" at center, which continues inside as exposed soffits, and decks added after 2008



Figure 74. Dr. Robert Jack Shankle House: façade





Figure 75. Dr. Robert Jack Shankle House: façade with carport at right prior to addition of front deck (source: North Carolina Modernist Houses website; Gordon Allen, photographer)



Figure 76. Dr. Robert Jack Shankle House: west side elevation with carport





Figure 77. Dr. Robert Jack Shankle House: south rear elevation with spacious original deck



Figure 78. Dr. Robert Jack Shankle House: south rear elevation detail







Figure 79. Dr. Robert Jack Shankle House: south rear elevation

Figure 80. Dr. Robert Jack Shankle House: modern outbuilding









Figure 82. Dr. Robert Jack Shankle House: principal room looking out to deck and rear yard







Figure 83. Dr. Robert Jack Shankle House: full-height brick fireplace in principal room, prior to removal of wall at left and painting (source: North Carolina Modernist Houses website)



Figure 84. Dr. Robert Jack Shankle House: principal room showing post-2008 painting and removal of wall to left of fireplace





Figure 85. Dr. Robert Jack Shankle House: room to east of principal room with exposed beams, windows opening to back yard, and soffit in place at top left



Figure 86. Dr. Robert Jack Shankle House: kitchen with modern fixtures and cabinets, but original soffit in place; rear wall of fireplace just out of image at left







National Register Eligibility Assessment

The Shankle House is a significant example of Mid-Century Modernist architecture in the Chapel Hill/Raleigh/Durham area. Its wide sweeping roof, projecting beams, wall of windows turned toward the privacy of a tree-screened rear yard, and Japanese-influenced elements—the treatment of the beams and the ridges of the roofs; the shoji-inspired screens at the carport—combine to make the residence a significant example of the style. Further, the house appears to be little altered and to retain its architectural integrity. It is therefore recommended to be National Register-eligible under Criterion C for its architecture.

The Shankle House is not recommended as eligible for listing in the National Register under Criterion B for its association with its original and longtime owner, Dr. Robert Jack Shankle. Although Shankle had a prolific association with the University of North Carolina Dental School and held leadership roles in professional dental associations, he is not believed to be a person "significant in our past" as required by Criterion C. The house is also not recommended as eligible under Criterion B for its association with Sumner Winn. Limited information is available on the architect and his commissions, likely in part due to the destruction of most of his records in 1994. Neither the North Carolina Modernist Houses website nor Ruth Little's writings on modernist architecture in Chapel Hill and Raleigh provide much information on his life or career (Little 2006a and 2006b). Other sources are equally limited. There is also confusion about when Winn first started working in Chapel Hill. If he did not arrive until 1960, it is not clear what role he played, or how he played it, in the design of the Shankle House, which was erected in 1957.

The house is not known to be associated with any important historic events or activities other than those directly associated with Dr. Shankle, and it is unlikely that it would yield any important historical information not readily available from other sources. It is therefore not recommended to be significant under National Register Criteria A or D. The house's period of significance is recommended as extending from 1957, the year it was constructed, to 1984, when Dr. Shankle retired from the dental school.

Proposed National Register Boundaries

The proposed National Register boundaries for the Shankle House are those of its approximately 1.5acre parcel (PIN 9788611541), which has been historically associated with the dwelling since it was erected in 1957 (Figure 87).



Figure 87. Proposed National Register boundaries of the Shankle House, the approximately 1.5-acre parcel outlined in red on tax map (source: Orange County tax maps)







3.2.3 Bowers-Nelson House

903 Coker Drive, Chapel Hill, Orange County (PIN 9788920342)

Figure 88. Bowers-Nelson House



History

In 1960 Chapel Hill architect Don Stewart designed this Mid-Century Modernist house (OR-1465) for Norman and Mary Bowers (Figure 88). The couple had reportedly just returned from Japan and wanted Japanese styling at their new home (North Carolina Modernist Houses website). As blueprints carry the date of December 1960, the house was in all likelihood constructed in 1961.

Norman D. Bowers (1927-2002) held a doctorate in educational psychology from the University of Minnesota (Figure 89, at left). In 1959, then with Vanderbilt University, he spoke at UNC (*Daily Tar Heel*, September 25, 1959). A year later he had relocated to Chapel Hill, where he was an associate professor in the department of education (*Daily Tar Heel*, November 20, 1960). By 1965, the year he sold his house, Bowers was teaching at Northwestern University (Karmel 1965:277). He remained there until his retirement in 1989 and died in Illinois in 2002. His obituary provides some support for the Japanese influence on the house. It notes that the travels he had taken with his wife included a visit or visits to Asia (*Chicago Tribune*, November 12, 2002).

From 1965 until 1994 the house was owned and occupied by Dr. Robert Nelson (1918-1998), a professor at the UNC School of Dentistry (Little 2006b:274). An account in the *North Carolina Dental Review* (1999:17) memorialized Nelson's long service to the school and an obituary in the *American Journal of Orthodontics and Dentofacial Orthopedics* (Proffit 1998:112) provided details on Nelson's life and career:

Robert M. Nelson was born in Burlington, Iowa, and grew up there. He attended the University of Iowa, served in the US Navy toward the end of World War II. He then studied dentistry at Iowa and was trained there in orthodontics under Dr L. B. Higley. After finishing the orthodontic program, he joined Dr Ben Herzberg in practice in



Chicago and gained experience in Tweed edgewise technique. When Dr Higley accepted the position as the first chairman of orthodontics at UNC, Dr Nelson agreed to join him on the faculty and was there from the beginning of the orthodontic department. Bob played a major role in the development of the graduate program, served as chairman from Dr Higley's retirement in 1966 until 1974, and remained a full-time faculty member until he retired in 1978 after a severe heart attack.

"Uncle Bob" was a great favorite of the many students in whom he took a personal interest, and he enjoyed keeping in contact with them in his later years. He was pleased by the establishment of the Nelson Fund in the Dental Foundation of North Carolina, established by his friends to help equip the new orthodontic clinic. When I last spoke to him toward the end of 1998 to tell him how much the fund had grown, he was both surprised and gratified by how much had been credited and pledged there....

At this year's orthodontic alumni meeting, Dr David Hamilton, Sr, who was in the first graduate orthodontic class, presented the department with a photograph of Dr Nelson that he took during those first years at UNC. It will hang in a position of honor in the new orthodontic clinic.

Figure 89. Dr. Robert Nelson, left (source: Proffit, *American Journal of Orthodontics & Dento-facial Orthopedics*); Don Stewart, right (source: North Carolina Modernist Houses website)





Architect Donald Eugene Stewart's signature is the first on the blueprints for the house, dated December 1960 (Figure 89, at right). The second name is James Webb (Little 2004). In 1960 Stewart and Jim Webb were working together at Webb's Chapel Hill architecture firm, City Planning and Architecture Associates (North Carolina Modernist Houses website).

Don Stewart (1926-2012) received his B.A. degree in architecture from Miami of Ohio in 1952. He then came to Chapel Hill, where he earned an M.A. degree in regional planning from the university and remained to practice architecture. Stewart was a prolific local architect. He designed over 50 residences and also some notable non-residential buildings. Among the latter were Carmichael Auditorium (1965) at UNC (the school's then basketball arena) and the old Chapel Hill Public Library (1966) (North Carolina Modernist Houses website).



Description

Ruth Little inventoried the Bowers-Nelson House in 2004 and included it in her architectural history of Chapel Hill, with a small selection of other notable modernist houses erected in the town in the midtwentieth century. As part of her research, she had the opportunity to view blueprints of the house and to interview its current owner, Robert Ferrier, who purchased it in 1994. She described it as follows in *Town and Gown Architecture* (Little 2006b:273-274):

This small contemporary house designed in 1960 by Don Stewart is the most Oriental of his dwellings. Located on a steeply sloping lot, the rectangular, side-gabled house consists of a main level covered with vertical wood siding and concrete stucco panels and set above a concrete block lower level. Sliding windows and sliding glass doors open to the exterior and to porches and balconies across the rear and a screened side porch. A number of notable features are taken directly from traditional Japanese houses. The post-and-beam framework is exposed on the exterior, and painted black. This is the only remaining element of the early color scheme of red, bright yellow, and black. The front and rear eaves contain a trough in which a hidden gutter is placed. A set of pebbled boxes act as a floating staircase to the front door. The pebbled floor surface continues through the fover to a sunken engawa, or interior garden, at the rear, located two steps down from the living room. This contains large windows on two sides and originally was full of plants set on the pebbled floor. The floor has been replaced with hardwoods, and the area now functions as an extension of the living room. A series of shoji screens (translucent paper screens) move on tracks in the floor and ceiling to close off the living room from the fover, kitchen, and dining room. Sliding glass doors open to the screen porch and to the rear balcony. In the center of the rear living room wall is a raised marble fireplace. The lower level was built with two bedrooms and a recreation room separated by shoji screens.

The house has not been notably altered since Little inventoried it ten years ago and her description remains accurate (Figure 90 through Figure 100). It also retains its sloping wooded lot which, in spite of much development to the north on the campus of the university, has retained its peaceful character.

Figure 90. Bowers-Nelson House: main level floor plan; note that south is at top (adapted from Ruth Little survey file (OR-1465) and Orange County tax map files)







Figure 91. Bowers-Nelson House: south front and east side elevations

Figure 92. Bowers-Nelson House: south front elevation with pebbled floating steps leading up to screened porch







Figure 93. Bowers-Nelson House: south front elevation

Figure 94. Bowers-Nelson House: south front elevation principal entry with floating pebbled steps







Figure 95. Bowers-Nelson House: south front and west side elevations

Figure 96. Bowers-Nelson House: north rear elevation







Figure 97. Bowers-Nelson House: east side and north rear elevations

Figure 98. Bowers-Nelson House: east side elevation





Figure 99. Bowers-Nelson House: from front entry with pebbled vestibule in foreground and view out rear window



Figure 100. Bowers-Nelson House: view from front entry showing pebbled vestibule, shoji-screen walls, and stair





National Register Eligibility Assessment

The Bowers-Nelson House is recommended as eligible for National Register listing under Criterion C as a significant example of Japanese-influenced Mid-Century Modernist architecture in the Chapel Hill/Raleigh/Durham area. Its many Japanese features—exposed post-and-beam construction, pebbled floating entry stairs and pebbled foyer floor, wall of shoji screens, pronounced eaves, sliding windows and glass doors that open it to a peaceful wooded lot—combine deftly with its compact modernist form.

The house is not recommended as National Register eligible under Criterion B for its association with Dr. Robert Nelson. Nelson was an important figure in the UNC School of Dentistry, but is not known to have been notably active in associations, journals, or other activities beyond the boundaries of the school. Therefore he is not believed to fall within the Register's definition of a person significant in our past. Prof. Norman Bowers and architect Don Stewart are also believed to fall short of the high standards of Criterion B. Bowers had a short association with UNC that was not notable and does not appear to have been significant, as defined by the Register, elsewhere in his career. A large majority of Stewart's many buildings were designed and built within the past 50 years and it is not clear, yet, whether he will qualify as a master as defined by the Register. Further the house is not known to be associated with any important historic events or activities and it is unlikely that it would yield any important historical information not readily available from other sources. It is therefore not recommended as significant under National Register Criteria A or D. The house's period of significance is recommended as 1960-1961, the years it was designed and constructed.

Proposed National Register Boundaries

The proposed National Register boundaries for the Bowers-Nelson House are those of its 0.65-acre tract (PIN 9788920342), which has been historically associated with the dwelling since it was erected in 1960-1961 (Figure 101).









3.2.4 Highland Woods Historic District

Highland Woods Road, Chapel Hill, Orange County (multiple parcel numbers, included below)

Figure 102. 1028 Highland Woods Road in Highland Woods Historic District



History

Various accounts have been written about the groundbreaking Highland Woods community in Chapel Hill (Figure 102). These include Judson J. Van Wyk's *The Saga of Highland Woods* (2012 revision), "Common Good" (Cauthren 2004), and the detailed summary Ruth Little (2006:266-267) included in *The Town and Gown Architecture of Chapel Hill*. Little's account—based upon *Saga of Highland Woods* and various interviews with one of the community's earliest members and local historian Bob Stipe—best captures the historical and architectural significance of the development (Little 2006b:266-267):

During the explosive growth of the university in the early 1950s, housing was extremely scarce. A group of young families, most associated with the university, formed the Chapel Hill Housing Group in 1956 in order to create a nonprofit cooperative residential development. Bob Gladstone, Jim Ingram, Bob Agger, and others founded the group. The group purchased a twenty-six-acre heavily wooded tract of land between Old Mason Farm Road and Raleigh Road (NC Highway 54), part of the land given to Coker College by the W.C. Coker estate. The housing group grew to include approximately twenty young university faculty and staff families.

After laying out an irregular curvilinear road on the polygonal-shaped tract, the group laid out twenty-six lots on both sides of the road, reserving one lot as a park. Lot size averaged slightly less than one acre. The group hired local architect Jim Webb to design a "core plan" of units that could be selected by individual homeowners. One set of core plans consisted of a living room, dining room, and kitchen. The second set contained bedrooms, baths, studies, and domestic storage. The two cores were linked with an individually designed main entrance. Webb's core plans followed his individual version



of the contemporary mode known as the Bay Area style that he brought to Chapel Hill from California. Don Stewart and Bill Campbell, associates in Webb's firm, assisted in the Highland Woods house designs. The Stipes, at 1002 Highland Woods, were the only homeowners who utilized the core plan design literally. Other families made minor adjustments to suit their needs.

The concept of a housing cooperative was not unique to Chapel Hill and—considering the college town's progressive history from the 1930s on—the use of modernist architect at Highland Woods was not unusual within the broader community (Little 2006b:77-79). On the basis of his training and knowledge of similar enterprises, Bob Gladstone, who originally owned the lot that became 1018 Highland Woods Road, suggested the formation of the cooperative. An MIT-trained architect with an M.A. in regional planning from UNC, he talked up a cooperative land development that had been a success at another unnamed university and promoted a specific course of action to start one in Chapel Hill (Van Wyk 2012:3).

The Raleigh/Durham/Chapel Hill area became a hotbed of modernist architecture after World War II, centered around architects trained at the School of Design at North Carolina State College (now University), the work of other architects drawn to the area, and the willingness—indeed eagerness—of many young professionals at UNC, Duke University, and North Carolina State to commission these architects and live in their designs (Little 2006a:14-17; Little 2006b:80-81). The many hundreds of acres just south and east of the UNC campus and Chapel Hill's boundaries that opened up when William C. Coker died in 1953 became home not only to Highland Woods, but to other neighborhoods—Coker Hills, Lake Forest, Whitehead Circle, Morgan Creek, and more—that were to be dotted with ranchhouses and modernist dwellings (Little 2006b:81-82).

Figure 103. John Webb at far left, Jim Webb adjacent, and William Wurster and wife at right, c1956 (source: Little, *Town and Gown Architecture*, p.82)







The motive design forces behind Highland Woods were the Webb brothers (Figure 103). According to Little (2006:82-83):

In 1947, architect and planner James Murray Webb, better known as Jim, moved to Chapel Hill to help John Parker found UNC's city and regional planning program. Webb (1908-2000) was born in Mexico and raised in California; he received a degree in architecture at the University of California at Berkeley in 1937. There he worked in the office of architect William Wurster. After serving in the army in World War II, he earned a master's degree in city and regional planning at the Massachusetts Institute of Technology in 1946. From 1952 to 1957 Jim's brother, John B. Webb [1910-1997], worked with him in Chapel Hill. John also trained at Berkeley and was influenced by William Wurster. The Webb brothers brought the regionalist modern style of the San Francisco Bay area to Chapel Hill in the early 1940s.

The Webbs designed many of the houses that first rose in Highland Woods in 1957. There work was not limited to that neighborhood, however. Larger and, in some ways, more dramatic contemporary examples of their designs stand not far to the west of Highland Woods in the Whitehead Circle neighborhood (Little 2006b:275-278; North Carolina Modernist Houses website). Whitehead Circle, according to the 1962 Chapel Hill city directory, also had the same overwhelming concentration of UNC professors, assistant professors, instructors, and other staff members as Highland Woods. What made and continues to make Highland Woods significant was the concatenation of these various forces and trends. Cooperative housing, modernist architecture, and progressive ideals combined to make the neighborhood unique in Chapel Hill and, in all likelihood, in North Carolina.

Description

Little (2006:266-267) summarizes the appearance of the neighborhood's houses as follows:

The general characteristics of the core plan houses were placement of the main elevation facing the rear of the lot, with a large expanse of glass and an unassuming street elevation with solid walls and a few small windows. The plan featured wooden post-and-beam construction with no load-bearing interior walls, gently sloped or flat roofs with wide overhangs, use of clerestory glass panels, and front-located kitchens. The exteriors were finished with vertical wood siding and cement panels beneath the windows. Almost all the core plan homes had a main floor at the upper level and a daylight basement at a lower elevation. Houses ranged from 1,600 to 3,000 square feet in size. At least nine core plan homes designed by the Webb firm were constructed simultaneously in 1957. Because of the standardization of design and construction details, the houses were built for approximately \$10 per square foot, below the \$12 to \$15 cost for architect-designed houses in Chapel Hill.

The Highland Woods house designs embody privacy and integration with nature through the use of borrowed space—incorporating the house into the landscape through a transparent wall, porches, and decks overlooking the wooded private rear yard. Interiors have exposed roof rafters of Douglas fir with pine ceiling boards. Windows are the aluminum awning or sliding type.

Highland Woods residents, a number of whom are [in 2006] original owners, have preserved their houses carefully, although a number of them have additions. Additions



are generally of Modernist design, and sometimes even designed by the Webb firm. Many of the rear decks and porches remain in place, with their original homespun deck railings of simple boards with tapering vertical supports in the center of each bay.

According to Bob Stipe in *Saga of Highland Woods* (2012:13-15), expanding beyond Little's account, Bob Gladstone came up with the idea of developing a "cooperative approach to the design of individual homes," in order to save money. This process quickly became known as the "Core Plan." Jim Webb, in whose office Gladstone worked as an architect, was hired to design the Core plan. Stipe continues:

Core Plan homes were, with one exception, designed with a main floor at ground level and a basement below at a lower elevation. One had a second story, however....

The cores offered a generous array of choices. For example, there were two types of "L" kitchens and two of one-wall kitchens; there were three variations on "corridor" kitchens; and four variations on "U" and "Open U" kitchens from which to choose. An equally varied array of bedroom wing choices was also available.

At an early stage of the development Bob Gladstone resigned from the Webb firm to join another practice in Washington, D.C. Core Plan group members thereafter worked primarily with either Don Stewart or Bill Campbell in the Webb office, with Jim Webb functioning as the senior supervising architect on all of the individual plans. In this capacity, Webb remained heavily involved with the Core Plan houses, and took immense pride in the end results.

In spite of the changes made to most of the houses over the years, they are still easily recognizable individually, for the most part, and certainly when viewed as a whole—as basic Mid-Century Modernist residences or ranchhouses. They continue to range to either side of the curvilinear road on wooded lots. Those on the outside or downslope of Highland Woods Road generally turn a one-story elevation toward the front, but stand over a basement at the rear, where the land slopes down (see for example 1004 and 1020 Highland Woods Road). Conversely, those built on the inside of the circular road, where the land rises to their rear, have two-story or one-story-over-basement front facades and one-story rear elevations (see for example 1009 Highland Woods Road). Photographs (Figure 104 through Figure 133) and an inventory including brief descriptions and histories follow, along with a historic plat map (Figure 134) and a modern tax map (Figure 135).











Figure 106. 1004 Highland Woods Road (source: North Carolina Modernist Houses website)



Figure 107. 1006 Highland Woods Road





Figure 108. 1008 Highland Woods Road



Figure 109. 1010 Highland Woods Road (source of image at right: Triangle Multiple Listing Service)



Figure 110. 1010 Highland Woods Road (source: Triangle Multiple Listing Service)





Figure 111. 1012 Highland Woods Road



Figure 112. 1014 Highland Woods Road



Figure 113. 1016 Highland Woods Road







Figure 114. 1018 Highland Woods Road (source of interior image: North Carolina Modernist Houses website)



Figure 115. 1020 Highland Woods Road (source of image of rear elevation at right: Little, Town and Gown Architecture, p.268)





Figure 116. 1022 Highland Woods Road (source of documentary image of rear elevation at right: North Carolina Modernist Houses website)



Figure 117. 1024 Highland Woods Road



Figure 118. 1026 Highland Woods Road





Figure 119. 1028 Highland Woods Road



Figure 120. 1028 Highland Woods Road (source of image of east side elevation and interior: Triangle Multiple Listing Service)



Figure 121. 1030 Highland Woods Road





Figure 122. 1034 Highland Woods Road in 2011 (Sally Keeney, photographer) (source: Chapel Hill News, October 23, 2011)



Figure 123. 1036 Highland Woods Road



Figure 124. 1038 Highland Woods Road









Figure 126. 1011 Highland Woods Road



Figure 127. 1013 Highland Woods Road





Figure 128. 1019 Highland Woods Road



Figure 129. 1019 Highland Woods Road



Figure 130. 1025 Highland Woods Road




Figure 131. 1027 Highland Woods Road (source of image at right: North Carolina Modernist Houses website)



Figure 132. 1027 Highland Woods Road (source: North Carolina Modernist Houses website)



Figure 133. 1029 Highland Woods Road





HIGHLAND WOODS HD: Address	PIN #	Contrib /Non- Contrib	Date Built	Original Lot Owners	Original House Builders	Occupation of owners in 1962 (Hill's <i>Chapel</i> <i>Hill City Directory</i>)	Architects	Description
1002 Highland Woods Road	9798039394	С	1960	Fred & Elizabeth Herbert [2]	Herberts	Fred Herbert – UNC instructor	not identified	Long, one-story, rectangular house with recessed entry and pictu with front gable. Uncharacteristically standard-looking ranchhous construction and orientation toward street rather than rear (Figure
1004 Highland Woods Road	9798131364	С	1957	John & Ann Thibaut [1]	Thibauts	John Thibaut – UNC professor	Edward Dart	Board-and-batten-sided dwelling with gable-end roof that sweeps second story. Two small windows, wide entry, and recessed carp screened porch at ground level topped by well-lit rooms above. E in the Chicago area, but may have come to this commission throu in 1942. Dart graduated from the Yale School of Architecture in 1 Architects. One of Illinois' most notable Mid-Century Modernist ar commercial, and other buildings, including the St. Procopius Abbo (1972) and Pick-Staiger Concert Hall (1975) at Northwestern Univ (1975) in Chicago (Chicago Bauhaus and Beyond website and C Figure 106).
1006 Highland Woods Road	9798133333	NC (form/ style)	1965	John & Paula Kelton [3]	Clifford & Betty Crandall	vacant	not identified	Noncontributing anomaly in neighborhood. Gable-end, two-story, ornate front entry treatment and full-length and height portico. The who did not live in neighborhood or elsewhere in Chapel Hill in 19 Highland Woods (Figure 107).
1008 Highland Woods Road	9798134383	С	1958	Jack & Barbara Sowter [1]	Sowters	Jack Sowter – UNC associate professor	not identified	One-story, rectangular, weatherboarded, frame house. Garage at plan with a central entry flanked by short bedroom wing and taller
1010 Highland Woods Road	9798136351	С	1957	Robert & Betty Sager [1]	Sagers	Robert Sager – UNC associate professor	Webb Associates	Little (2006:268) describes this house as follows: "Robert Sager, Elizabeth, were one of the original families who built a core plan h front-gabled roof. It features the standard elements of Jim Webb's vertical wood siding, and large floor-to-ceiling windows in the livin 110)
1012 Highland Woods Road	9798138218	с	1957	James & Alice Ingram [1]	Ingrams	James Ingram – UNC professor & managing editor, <i>The Southern</i> <i>Economic Journal</i>	not identified	Rectangular, frame, weatherboarded dwelling that appears to add block at right (west) and a two-level block at the left with a slightly conforms with slope of land. Entry is between the two blocks. Mo
1014 Highland Woods Road	9798230217	NC (loss of integrity)	1960	James & Alice Ingram [1]	Charles & Mildred Erickson	Charles Erickson – UNC director of athletics	not identified	Gable-end, frame house with taller story-over-basement block at taller block may have been shifted to center of elevation along wir double-triangular-pedimented front porch at taller block; and a lar shorter block. Changes have compromised integrity (Figure 112).
1016 Highland Woods Road	9798231362	С	1959	Bob & Lessie Gladstone	William & Constance Straughn [1]	William Straughn – UNC advisor	not identified	One-story, gable-end, vertical board-sided, frame house with a point is open and the rear third of which is glassed. Front entry set in further above, and smaller windows to right. Similar window-in-panel treat corner suggests it was built with house. Row of windows at rear, orientation of most neighborhood houses toward privacy of rear year.
1018 Highland Woods Road	9798232532	С	1959	C. Ritchie & Sarah Bell [2]	Dan & Jean- Ann Pollitt	John S. Ellett – student; no occupation given for wife, Mary	not identified	Another horizontal board-sided, frame, gable-end house that app lower bedroom wing at left (north) and, at right, taller and deeper living core at right (Figure 114).
1020 Highland Woods Road	9798231699	С	1957	Judson & Persis Van Wyk [1]	Van Wyks	Judson Van Wyk – UNC Hospital associate professor	Webb Associates	Little (2006:268) describes this house as follows: "For the sloping a two-level house with an overhanging flat roof, vertical siding, ar toward the street with a covered entrance porch alongside it. On story porch with slender wooden posts and an upper wooden raili transparent. The kitchen, located on the right side, opens out to a window beside the door. High windows below the eaves are the c

Table 1. Highland Woods Historic District Resources

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ire windows, gable-end roof, and projecting front room e within neighborhood. Also unusual is masonry e 104).

s low over one-story front elevation and, in rear, high over port at front elevation. Rear elevation more open with long dward "Ned" Dart (1922-1975) spent his career working ugh his wife, Wilma, who graduated from Duke University 949 and was a Fellow of the American Institute of rchitects, he designed numerous residences, churches, ey in Lisle, Illinois (1970), the Norris University Center versity in Evanston, and the 78-story Water Tower Place hicago Modern: More than Mies website) (Figure 105 and

brick-veneered Mt. Vernon-esque dwelling with outsized e Keltons, original owners of the lot, were the only owners 959. They did not build this house and never moved to

ttached to left (east) side elevation. Appears to utilize core r gable-front living area (Figure 108).

a university dental school professor, and his wife, house in Highland Woods. The one-story house has a low 's modern style, including wide overhanging eaves, ng room and dining room areas." (Figure 109 and Figure

here to elements of Core plan design with a one-story y elevated roof line built over a brick lower level that re open elevations oriented to rear of lot (Figure 111).

right (east) and lower one-story block to left. Entrance in th other changes, which include: modern sash; a large rge added bay with semi-circular skylight and pediment at

orch along entire right (west) side, the front third of which ull-height panel with large opaque window to left, transom atment and siding at garage that angles out just off of right in contrast with largely blank wall of front, conforms to /ards (Figure 113).

bears to conform with core plan design. Central entry with living core. Open porch attached across gable-end of

lot purchased by the Van Wyks, the Webb firm designed nd a lower bedroom wing on the left side that projects out the rear, the roof flares out dramatically to shelter a twoing. The living room wall beneath the porch is completely a deck. Facing the street, the front entrance has a large only fenestration on the street façade." (Figure 115)



HIGHLAND WOODS HD: Address	PIN #	Contrib /Non- Contrib	Date Built	Original Lot Owners	Original House Builders	Occupation of owners in 1962 (Hill's <i>Chapel</i> <i>Hill City Directory</i>)	Architects	Description
1022 Highland Woods Road	9798231816	С	1957	Robert & Josephine Stipe [1]	Stipes	Robert Stipe – UNC assistant director	Webb Associates	Little (2006:268) describes this house as follows: "The house build and his wife, Josie, is the only Highland Woods house that follow steeply away from the street, allowing for a two-level house. The facing the street. The lower level and the walls of the living room wall extends outward from the house to form a retaining wall for t walls have vertical siding, with standard metal windows set in cor projects with a transparent wall and a flying deck. The house has original appearance." Note: additions to the house are believed to
1024 Highland Woods Road	9798139996	с	Early 1960s	Warren & Marie Wicker [2]	Wickers	Warren Wicker, in 1962, living with wife Marie at 56 Oakwood Drive in Chapel Hill and working at UNC as an assistant department director	not identified	Assigned 1967 date of construction in tax records and address ne early 1960s with a design in keeping with that of initial group of h roof. Appears to be one-story from street view, but floats over a b in full-height panel at front; limited window area to either side of e window area at rear opens house up to privacy of rear yard. Larg
1026 Highland Woods Road	9798148055	с	1957	William & Jerry Daniel [1]	Daniels	Jerry Daniel – UNC professor	not identified	One-story, gable-end, vertical board-sided house with limited win windows, and open porch at rear are typical of principal orientation (Figure 118).
1028 Highland Woods Road	9798147009	с	1957	Bob & Molly Agger	Andrew & Ann Scott [1]	Andrew Scott – UNC associate professor	Webb Associates	Boxy form of vertical board-sided, frame house belies careful des street; gable-front roof with widely overhanging eaves; room with right (east) of front elevation; and additional living area opened to land. Open interior plan (Figure 119 and Figure 120).
1030 Highland Woods Road	9798145140	с	1957	John & Ruth Schwab [1]	Schwabs	John Schwab – UNC associate professor	Webb Associates	Little (2006:268) describes this house as follows: "The two-level h asymmetrical front-gable overhanging roof. The house is well-pre- addition of a new living room and bath, and in 1979 with a shallow Don Stewart, who was with the Webb firm in 1957, designed the post-and-beam house has a built-up roof, vertical shiplap pine sid bedrooms and an unfinished basement. The Schwabs finished of outgrew the main floor of the house (Figure 121).
1032 Highland Woods Road	9798133999	с		commonly owned	none	not applicable	not applicable	Incorporated as community-owned recreational and park lot in 19 of March 1958, according to an appendix in Stipe's Saga of High and various pieces of playground equipment (chair swing, hobby not identify what equipment was actually originally included. Curr
1034 Highland Woods Road	9798133803	NC (date)	1957, 2011	Eugene & Crawford	David & Joyce Dobson [1]	David Dobson – UNC professor	not identified	Original house built in 1957, but burned down in 2009. Current ho Abodesign of Bahama, NC and erected by builder Woody Claris Utilizes mid-century features common in neighborhood, including central entry; limited window coverage at front elevation; and larg well outside of neighborhood's period of significance
1036 Highland Woods Road	9798132712	с	1959	Paul & Isabelle Smith [1]	Smiths	Isabelle Smith – Intimate Book Shop, secretary; Paul Smith – Intimate Book Shop, president	not identified	One-story, frame, gable-end, asbestos shingle-sided house with side elevation; front and side deck; and gabled rear extension. M houses of 1930s-1940s than to Mid-Century Modernist design et Stipe refers to in <i>Saga of Highland Woods</i> (2012:13) that passed boxy, and uninteresting by comparison with the more frequently s neighborhood did not require Modernist design (Figure 123).
1038 Highland Woods Road	9798131508	С	1957	Donald & Mary Helen Hayman [1]	Haymans	Donald Hayman – UNC assistant department director	Webb Associates	One of the more distinctive examples of Mid-Century Modern des and built with cinder-block walls rather than frame as preferred el over its front elevation, where it is supported by heavy, exposed, a wide central entry flanked to the right (east) by a deep bedroorn windows that extend up into the gable. The house steps back one is affixed to its left (west) side elevation (Figure 124).

It for Robert E. Stipe, a young lawyer and city planner, ed the core plan design literally. The large lot slopes rectangular dwelling has an asymmetrical low gable roof are of unfinished concrete block. The front foundation he carport, located beneath the bedroom core. The upper ncrete-asbestos panels. On the rear, the living room received two additions that have considerably altered its o be in keeping with its modernist design (Figure 116).

ot included in 1962 city directory, but appears to date from ouses. Vertical board-sided with wide overhanging gabled basement that opens it to two stories at the rear. Entry set elevation. Porches at both side elevations. Extensive e, wide, internal, off-center chimney stack (Figure 117).

dow area at front elevation. Half-basement, more on of neighborhood houses to tree-rimmed backyards

sign, which includes set back front entry turned away from large single-light windows extending into gable peak at rear of lot through use of basement set into slope of

house is built on a sloping lot, with a wide and shallow eserved, even though it was expanded in 1965 with a side w front extension that added more space to the kitchen. additions in perfect harmony with the original design. The ding, and sliding windows. The original house had three ff the basement as bedrooms for their children as they

959. Recommendations from NC Recreation Commission land Woods, called for pool, tennis courts, picnic area, horse, slide, sand box, "exerglide" swings). Stipe does ently includes asphalt-paved fenced tennis courts. ouse designed by Diane Oxley and Roy Brown of on brick foundation of original home (Keeney 2011). long, low, one-story form under gable-end roof; wide ge rear patio (Figure 122). Non-contributing as constructed

small windows at front elevation, entry in south gabled odest appearance appears to harken back more to small hos of neighborhood. Perhaps this is the dwelling that internal neighborhood design review, but was "small, submitted architectural drawings of interest...." The

sign in Highland Woods, this house is long, one-story-tall, Isewhere in the neighborhood. Its flat roof extends well out wooden beams. The core plan appears to be in use, with n block, and to the left by a recessed living area block with ce more where a carport supported by metal pipe columns



HIGHLAND WOODS HD: Address	PIN #	Contrib /Non- Contrib	Date Built	Original Lot Owners	Original House Builders	Occupation of owners in 1962 (Hill's <i>Chapel</i> <i>Hill City Directory)</i>	Architects	Description
1009 Highland Woods Road	9798134589	С	c1957	Harold J. & Sheila Harris [1] [4]	Harris	Harold Harris – UNC Hospital physician	not identified	Tax date of 1955 incorrect, but in that year a Dr. Harris did becom (<i>Daily Tar Heel</i> , September 20, 1955). In 1956 he joined the host 1956:8) and likely had this house erected the following year. The original and early houses and was erected on two lots owned by vertical board-sided, central block of more than 1,800-square-fee block steps back at the right (east) and projects forward at the lef is glassed at the basement level and screened above. An additio 125).
1011 Highland Woods Road	9798136596	с	1957	Harold & Joan Langen- derfer [1]	Langen- derfers	Harold Langenderfer – UNC professor	not identified	This brick-veneered house has an L-shaped footprint. The block block projects slightly forward and well to the rear and is topped b roofs. As is common in the neighborhood, the rear elevation is lit porches and a patio that face an open backyard (Figure 126).
1013 Highland Woods Road	9798138533	с	1957	Thomas & Charlotte Jeffrey [1]	Jeffreys	Robert Peck – Chapel Hill manager & purchasing agent	not identified	This one-story house is long and relatively narrow. It has a gable types of siding. At its front elevation, it has narrow windows tucke stack, and a room lit by a large picture window. Conforming with basement that contains a two-car garage (Figure 127).
1019 Highland Woods Road	9798139588	С	1959	Morton & Phyllis Keller	Harold & Mary Ellen Bierck [1]	Harold Bierck – UNC professor; Mary Bierck – Chapel Hill violin teacher	not identified	The living quarters of this house occupy a one-story, shed-roofed front and south side elevations. Brick walls also mark the large, s The boxy form of the house and its carport set the residence off f core plan or look like more typical ranchhouses. Further Mid-Cen walls that support two corners of the carport and flank one side o that edge the steep winding driveway. According to Barnes Bierc contractor from standardized architect-designed plans his parents husband, Harold, in 1960, died July 28, 2014. A well-known violir Symphony Orchestra for 60 years, she owned the house at her d Figure 129).
1025 Highland Woods Road	9798138764	с	1960	William & Alice Matthews [2]	John & Margaret Cassel	Don Richardson – UNC Hospital physician; Margaret Richardson, UNC research associate	not identified	This gable-end, frame house appears to follow the core plan with bedroom wing. According to tax records, the two-car garage at the northeast were added in 2000. The core of the house is still intac contribute to the historic district (Figure 130).
1027 Highland Woods Road	9798137719	с	1960	William & Lois Terrill [1]	Terrills	William Terrill – UNC professor	Webb Associates	Fitting its upslope position on the inside of the Highland Woods F stories at its front elevation. Its full two-story height at the front is rooms to either side of the central entry raised to the same level. neighborhood following a design by the Webb brothers. Its interio open plan (Figure 131 and Figure 132).
1029 Highland Woods Road	9798135749	с	1962	John & Margaret Gulick [1]	Gulicks	John Gulick – UNC assistant professor	Webb Associates	An extended carport and wooden wall screen hide the original de neighborhood houses designed by the Webbs, it utilizes the stan different heights holding private spaces to one side and public on

[1] – living at address in 1959 according to Articles of Incorporation of Highland Woods Recreation Association

[2] – living elsewhere in Chapel Hill in 1959 according to Articles of Incorporation

[3] – living in Davidson, NC in 1959 according to Articles of Incorporation

[4] – Harrises owned two adjacent lots in 1959 upon the center of which they built a single house

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ne a psychiatric resident at the UNC School of Medicine pital staff as a fulltime instructor in psychiatry (Berryhill house is perhaps the largest of the neighborhood's the Harrises that they combined into one. It has a frame, et, set over a basement, that is topped by a flat roof. The ft. That left-hand section is fronted by a two-tier porch that nal deck extends from the porch at the upper level (Figure

on the right (east) is topped by a gable-end roof. The left by a gable-front roof. Later-added skylights pierce the by a greater expanse of windows and includes open

end roof over a wood frame that is now clad in various ad under the eaves, a recessed entry, a brick chimney the slope of the land, it is elevated on a partial brick

d, brick-walled box with rectangular extensions at the east square carport set just off the house's southeast corner. from the many houses in the neighborhood that utilize the neury Modernist distinction is provided by the original stone of the main entry. Their stonework mirrors that of the walls ek (2014), who grew up in the house, it was built by a as had chosen. Mary Bierck, who built the house with her in teacher in Chapel Hill and member of the UNC-CH death (*Chapel Hill News*, August 3, 2014) (Figure 128 and

a central entry flanked by a taller family wing and a lower ne northwest and the large screened porch at the and it is therefore believed to retain sufficient integrity to

Road loop, this house is one story tall at the rear, but two an unusual variant of the core plan, with the groups of It is one of the original group of houses built in the or includes exposed beams, a pine board ceiling, and an

esign of this house from the street. One of the original dard core plan with a central entry flanked by wings of nes to the other (Figure 133).



Figure 134. Highland Woods Plat Map, dated October 1956 and filed February 1957 (source: Orange County Plat Book 6/Page 64)



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Figure 135. Highland Woods Tax Map (source: Orange County tax maps)







National Register Eligibility Assessment

The Highland Woods Historic District is recommended as eligible for National Register listing under Criterion A within the area of Community Planning and Development, which the Register defines as the "practical art of designing and changing the physical structure of communities to enhance the quality of life." Its combination of cooperative housing, which was intended to create reasonably priced homeownership and a close sense of community, with modernist architecture, which was intended to project the progressive ideals of the cooperative members who chose to be neighbors and friends, is an excellent representative of this area of significance.

Highland Woods is not recommended as eligible for National Register listing under Criterion C as a historic district due to the many alterations—including additions, modern siding, and replaced sash—to its houses. These alterations are believed to have compromised its architectural integrity. Additionally, none of its houses are believed to be individually eligible for National Register listing under Criterion C for, within the context of the many intact modernist houses in Chapel Hill, none are believed to be sufficiently architecturally significant to merit such listing.

Highland Woods is also not recommended as Register eligible under Criterion B for it is not associated with any persons significant in our past. It is also not recommended as eligible under Criterion D for any historical information that it might yield not readily available from other sources. The historic district's period of significance is recommended to extend from 1956, when the land was purchased and the plat map was drawn, until 1965, when the final of its original 25 houses was erected.

Proposed National Register Boundaries

The proposed National Register boundaries for the Highland Woods Historic District are those of the 26 parcels—the 25 house parcels and the community lot parcel—that are included in the above inventory (Figure 134 and Figure 135). They also include that portion of Highland Park Road that runs in front of these resources. This is all of the property that has been historically associated with the neighborhood since its creation and encompasses approximately 25.5 acres. The individual parcels are outlined in red and the entire boundary is shaded in gray on the following recommended boundary map (Figure 136 and Figure 137).



Figure 136. Proposed National Register boundaries of the Highland Woods Historic District shaded in gray with individual parcels outlined in red (source: Orange County tax maps)



Figure 137. Individual Highland Woods parcels atop photographic imagery (source: Orange County tax maps)







3.2.5 Walter Curtis Hudson Farm

5117 Farrington Road, Durham County (portion of parcel 141555)

Figure 138. Walter Curtis Hudson Farm



History

The two tracts upon which the Walter Curtis Hudson House and the Patterson's Mill Store stand have been associated with the Leigh family since the mid-nineteenth century and have remained in the hands of descendants to the present (Figure 138). (The resource was inventoried by Ruth Little as one entity, the Walter Curtis Hudson House and Store (DH-2373), in 1990.) The roots of the family in Orange and Durham counties extend back into the eighteenth century. In 1834 Sullivan Leigh purchased 500 acres "on the waters of Newhope Creek" that he gave to his son, Richard Stanford Leigh, and Stanford's new wife, Nancy, for a homestead. Around this time Stanford likely built the house at Leigh Farm, which still stands east of the House and Store property, on the opposite side of I-40 (which divided the family property in 1983). By 1860 Stanford held 987 acres in Orange County, all of which would become part of Durham County when it was formed. The property upon which the House and Store stand was part of this acreage (Elsie H. Booker collection; Kueber 2011d; Flowers and Cockshutt 1975; Booker 2014).

Following Stanford Leigh's death in 1898, his substantial estate was divided among his heirs. Walter Curtis Hudson (1892-1988), Stanford's grandson, purchased the farm from an aunt and in 1918 married Pearl Pope (1898-1976). (Walter was the oldest son of Henry and Kate Leigh Hudson; Kate was the last born of Stanford's many children.) Walter and Pearl had one child, Elsie, who was born on the property in 1923 (Elsie H. Booker collection; Kueber 2011d; Flowers and Cockshutt 1975; Booker 2014).

Walter Hudson started construction on the house and other buildings on the farm in 1918. An energetic man, he engaged in many activities during his long life. On the property he ran a small dairy and also raised truck-farm produce. He did construction in the area, not only at his house, but at those of others in the neighborhood, building mantelpieces, additions, and the like. And he worked for decades as a machinist, repairing and maintaining equipment at Liggett & Myers Tobacco Company in Durham (Little 1990b; Booker 2014).



The Hudsons' daughter Elsie graduated from Hope Valley High School in 1941 and from UNC with a degree in pharmacy in 1945. (The pharmacy program was the only one at UNC that she, as a woman, could enter as a freshman.) She then worked as a pharmacist in Durham, Chapel Hill, and Hillsborough for 40 years. In 1946 she married John Gates Booker of Chapel Hill. They had one son, Curtis Richard Booker, two years later (Elsie H. Booker collection; Kueber 2011d); Booker 2014).

Elsie and John—with help from other family members and a friend who had been a military engineer built their store, north of their house, in 1972-1973 "to have something to do after they retired" (Curtis Booker at Kueber 2011d). John salvaged materials for the house from various old buildings being demolished in Durham and Wake counties, which he temporarily stacked in building-high piles beneath tarps on the property. The Bookers filled the store with numerous items they had collected, including 1000s of pharmaceutical bottles (Gohdes-Baten 1997; Booker 2014). They named the store Patterson's Mill after a mill and post office that once stood nearby (Little 1990b).

Elsie continues to live in the house, as do her son and daughter-in-law, Curtis and Mary Mize Booker. According to Curtis Booker, she "still sleeps each night in the same room she was born in" in 1923, and he "doesn't know if anyone in Durham County can match that" (Kueber 2011d; Booker 2014).

Description

The Walter Curtis Hudson Farm includes the house Hudson built in 1918 and a number of outbuildings to its north and east, most of which he also built. They stand on an approximately 15-acre parcel of land that is open yard and pasturage, but for some trees along the entry drive and to the house's immediate rear. Farrington Road passes to the west of the tract, and a wooded parcel and I-40 extend to the east. The resources within the Farm tract and that of the Store to its north are identified on Figure 139 and described individually below. Those with letters are included within the recommended historic boundaries of the farm.









Walter Hudson designed and built this house starting in 1918 (Figure 140 through Figure 147). He initially framed out the main block, which has four rooms downstairs and two above, but only finished the two east rooms. Shortly thereafter he completed the other two rooms and the bedrooms above. The four-room plan lacks a hallway and each room has a door to the outside and connects with interior rooms as well. Curtis Booker, Hudson's grandson, likens the concept of the design to a hall-parlor-plan house built two rooms deep. He notes that Hudson was born and raised in the c1834 Leigh Farm House across I-40, which has a hall-parlor plan at its core. Hudson also designed the wraparound porch, which was in place by 1925, and the hooded entry at the north elevation. According to Booker, Hudson drew up a plan that showed a porch at the north with a design similar to that of the wraparound porch at the southwest. He poured a concrete pad for that more ornate porch, but ended up adding only the current, more modest hood. Other than that small change, Hudson appears to have built the house as planned. In 1976, when Pearl Hudson died, the family added the one-story wing at the south, and enclosed a small section of the porch where it meets the wing, to facilitate Walter Hudson's use of the house (Booker 2014).

Weatherboards side the story-and-a-half frame dwelling, which is topped by a widely overhanging gabled roof underpinned with exposed rafter ends. Two dormers rise from the north elevation and a long, single, shed-roofed dormer from the south elevation. (According to Curtis Booker, the house was never considered to have a principal elevation.) Two oversized knee-braces support the hood above the central entry of the north elevation. A double-hung window stands to either side of the entry with dormers above and a brick chimney stack rising form the center, just forward of the ridge. The west elevation, which faces the road, has a door at the right (south) and, to the left, paired windows. Two windows separated by a weatherboarded panel extend across the gable peak above. Another door opens from the south elevation, which now includes the small entry room formed from part of the porch in 1976. The east elevation is marked largely by the wing, but at the right (north) has yet another door, shaded by a porch, and two windows up in the gable of the original block. A shingle-sided well rises off the porch's northeast corner.

The porch that wraps around the house's southwest corner is handsomely detailed and well built, particularly considering Walter Hudson had no design or carpentry training and constructed it himself. With its shingled wooden piers, square columns, wide shallow-arched openings, and secondary smaller pointed arches, it combines the Shingle, Craftsman, and Gothic Revival styles.

The exterior of the house is little altered and intact, but for the wing affixed to its east end in 1976. In spite of this substantial addition, it is believed to retain sufficient integrity to contribute to the overall resource.

Elsie Booker is in her 90s and was not available for an interview. There was no access to the interior, but according to Curtis Booker, it has been little changed over the years, although a bathroom was added in the main block near the new wing when it was built in 1976. It looks much the same as it did when Ruth Little inventoried it.





Figure 140. Walter Curtis Hudson House – north elevation

Figure 141. Walter Curtis Hudson House – north and west elevations







Figure 142. Walter Curtis Hudson House – west and south elevations

Figure 143. Walter Curtis Hudson House –south elevation with 1976 wing at right







Figure 144. Walter Curtis Hudson House – south and east elevations

Figure 145. Walter Curtis Hudson House –well at northeast corner of east porch









Figure 147. Walter Curtis Hudson House – first-floor plan, not to scale, north at left (adapted from Ruth Little survey of 1990)







Milkhouse/Washhouse [B – contributing]

Standing just off the northeast corner of the house is a weatherboarded frame building that Walter Hudson built about 1918 as a milkhouse and washhouse (Figure 148 and Figure 149).

The small building has a door facing the house at one gable end and, at the other, a window, an exterior brick flue stack, and a wooden hatch giving access to the space beneath the eaves. Hudson erected a system of gutters to direct water from the house and this building down into a charcoal-filled structure with brick walls extending above ground that retain their original concrete cap. The water passed through the charcoal and then, having been filtered, ran into an underground cistern adjacent to the garage [C]. The building, gutters, and filtration structure remain intact (Booker 2014).

Figure 148. Milkhouse/Washhouse [B] – north gable end, with house to rear





Figure 149. Milkhouse/Washhouse [B] – south gable and east side elevation; note brickwalled filtration structure at lower right, gutter system at upper left, and shingled well at lower left





Garage [C – contributing]

North of the house and milkhouse/washhouse stands the garage (Figure 150 and Figure 151). It too was built of frame, weatherboarded, and topped with a gabled roof by Walter Hudson about 1918. Of particular note are the filtration structure, cistern, and pump house associated with the building. Its gutters feed into a charcoal-filled structure off its southeast corner that is identical to that of the milkhouse/washhouse, but for a replacement wooden cap.

The round brick top and concrete cap of the cistern that the two filtration structures feed rises aboveground to the south of the garage. According to Curtis Booker (2014), even though the cistern water was filtered, the family did not consume it. Rather, they took their drinking water from the well. A pump house adjacent to the cistern, according to Booker, retains its pump. Its brick walls, topped by an angled wooden hatch, barely rise above ground level. The garage, gutters, filtration structure, pump house, and cistern all remain intact.



Figure 150. Garage [C] – west gable



Figure 151. Garage [C] – east gable and south side elevation; note gutters feeding into brickwalled filtration structure at lower right; low brick walls of pump house at lower left, and concrete capped cistern at far left





Woodshed [D – contributing]

Walter Hudson erected this woodshed not long after the house, along with the other outbuildings he added to the property (Booker 2014) (Figure 152). Of frame, it is sided with vertical boards and topped by a shed roof. It stands west of the milkhouse/washhouse and south of the garage, close to the house. Little altered, it retains its integrity.



Figure 152. Woodshed [D] – east front and south side elevations



Brooder House [E – contributing]

The brooder house is another of the buildings erected by Walter Hudson. It dates from the mid-1920s (Figure 153). Like the woodshed that stands northwest of it, it is of frame, topped by a shed roof, and sided with vertical boards. Unlike the woodshed, though, it has battens atop its boards, perhaps to provide additional protection from drafts to the chicks it was home to. According to Curtis Booker (2014), his grandfather and grandmother did not hatch chicks on the farm, but rather purchased and then raised them in the brooder house. The building's south elevation has a door and two large glazed windows that would have helped warm the interior. A tiny ground-level hatch in the east side elevation allowed the chicks to be released outside into a fenced area. The fence is gone, but the brooder house retains its integrity.

Figure 153. Brooder House [E] – south front and east side elevations





Playhouse [F – contributing]

Walter Hudson erected the playhouse for his only child, Elsie, in about 1935, when she was 12 (Figure 154 and Figure 155). A miniature dwelling, it is formed of saddle-notched saplings chinked with concrete and topped by a gable-end roof. Its front (west- and house-facing) façade has a door and a three-over-one, double-hung, sash window. A three-over-one window is also set in the east-facing rear elevation. An exterior-end brick chimney rises at the south side elevation. The house was part of a small but separate domain the Hudsons created for their daughter. She could, and did, cook meals in the functioning hearth. A gutter carried water to her personal stone-ringed goldfish pond. A twisted wire to hold the gutter remains in place, although the gutter is gone. A privet hedge largely screened the playhouse from the main house. To the east (rear) of Elsie's domain a fence once stood just outside of two large crape myrtles. The myrtles remain in place, although the fence has been shifted farther to the east (Booker 2014). The house and its surroundings remain intact.

Figure 154. Playhouse [F] – west front and north side elevations; fence visible in left distance once stood closer







Figure 155. Playhouse [F] – east rear and south side elevation with chimney; note former goldfish pond in foreground and privet hedge at rear, beyond which is the house





Shop [G – contributing]

A man who built his own house and outbuildings, and did construction work at neighbor's dwellings as well, needed a large shop (Figure 156). In 1946 Walter Hudson acquired a former barracks building from Camp Butner (Booker 2014). (The camp occupied about 40,000 acres centered in the southwestern corner of Granville County during World War II.) He dismantled and carried it to the farm, where he largely reconstructed it as his shop. The shop's façade, served by one window and a door with a canted hood over it, faces west. The east rear elevation includes an entry and a sliding garage door. The building is constructed of frame that is topped by a shallow gable-end roof and sided with weatherboards. It retains its integrity.

Figure 156. Shop [G] – west front and south side elevations





Barn [H – contributing]

The last building added to the Walter Curtis Hudson House farm complex that is included within its recommended National Register-eligible boundaries is this barn (Figure 157). It was erected in 1960 after Hudson had closed his dairy and torn down the dairy barn that stood near the present Patterson's Mill store building, not far to the northwest (Booker 2014). Hudson had stopped dairying, but had not totally given up on cows. He converted his operation to cattle and built this barn to hold hay. The main block of the building is a large, gable-front, pole barn with its principal access running east-west. Hudson added shed-roofed structures at its south end to serve as run-in shelters for his cattle and horses in inclement weather. The barn retains its integrity.

Figure 157. Barn [H] – west front elevation with run-in shelters at south end





Farm Pond [I – noncontributing]

Prior to the construction of I-40 in 1983, the farm was served by springs and New Hope Creek located on what was then part of its land within the alignment and east of the interstate. In order to replace the lost water supplies, in 1984 the highway's engineers built up and leveled the land around the site of the pond. They then dug into the gravel base of this altered landscape and created this pond (Booker 2014) (Figure 158). Due to its location amidst farmland historically associated with the Walter Curtis Hudson Farm, the pond is not excluded from the proposed National Register boundaries, but is rather identified as noncontributing.

Figure 158. Farm Pond [I] – looking east at pond and elevated and leveled land in which it rests; I-40 is hidden by the trees in the background







The following two buildings, which stand on the parcel currently associated with the Walter Curtis Hudson Farm, are excluded from the proposed National Register boundaries:

Wood Storage Shed [excluded]

When John and Elsie Hudson Booker decided to build a store to keep them busy in their retirement, John began to scour the area for buildings that were to be demolished. He would buy them cheaply and haul them back to the farm, where he would pile the salvaged material, sometimes to a height of more than 20 feet, and cover it with tarps. In the 1970s he built this long woodshed to the north of the stock barn (Booker 2014) (Figure 159). An expansive frame building open to the east, it is weatherboarded and topped by a shed roof and still largely full of salvaged materials. It stands adjacent to but is not connected to the barn. The shed is less than 50 years old and associated with the Bookers' Patterson's Mill store. It therefore would not contribute to the Walter Curtis Hudson Farm. As it is located at the northern edge of the house parcel, it has been cut out of the recommended boundaries.

Figure 159. Wood Storage Shed – west front elevation



Storage Barn [excluded]

As previously noted, as part of the construction of I-40 in 1983, the Walter Curtis Hudson farm lost land and buildings directly to the roadway. It also lost them indirectly when it was split off from its former lands on the opposite side of the interstate. Among these lost or cut-off resources were a number of storage buildings. To replace them, John Booker erected this large storage barn in the mid-1980s (Figure 160). A pole barn with weatherboard siding and a concrete floor, it has a sweeping gabled roof and is flanked on its east and west side elevations by full-length sheds. The barn is less than 50 years old, not associated with Walter Hudson, and would not contribute to the resource. It is located at the northeastern edge of the house parcel and has accordingly not been included within the recommended boundaries.

Figure 160. Storage Barn – southwest front and northwest side elevations







Patterson's Mill Store tract

In 1990 the farm and store were inventoried, and placed on the Study List, as one resource called the Walter Curtis Hudson House and Store. The farm and store are believed to constitute two separate resources and are treated as such in this report. They now occupy separate tax parcels, but the main reason they are viewed as separate and distinct resources is that the store was not associated with Walter Curtis Hudson or his farm and is only about 40 years old. As the store is not of "exceptional importance" (as required by Register Criteria Consideration G for resources less than 50 years of age to achieve significance), it would not contribute to the integrity of the Walter Curtis Hudson Farm. The store, its parcel, and other resources on that parcel that are not associated with the farm have therefore been excluded from the proposed National Register boundaries. The principal resources on the store parcel are the following:

Patterson's Mill Store [excluded]

During family vacations, Elsie Booker became fascinated with country stores. After visiting the Vermont General Store in Weston, Vermont she decided that she would like to open a similar operation with her husband back at the Durham County farm, so that they, in the words of son Curtis Booker, would "have something to do after they retired" (Curtis Booker at Kueber 2011d; Booker 2014). John Booker scoured the local countryside for buildings that were to be demolished and, with the help of other family members and an old friend, a former military engineer, built this store in 1972-1973 (Figure 161 and Figure 162). They called it Patterson's Mill Store in memory of a no-longer-extant store that once served the area. They soon filled it with items they had collected (or were to collect). Among its notable features are shelving, counters, and the tiny office from a general store located in southern Wake County, and an immense collection of pharmacy-related items in part connected with Elsie Booker's 40 years as a pharmacist. The building is just over 40 years old and not connected with Walter Curtis Hudson, although he did live to see it. He died in 1988 at the age of 95. A 3,000-square-foot, T-shaped, frame, gabled building built almost entirely of salvaged materials, it includes the store and a large apartment above, where the Bookers' son, Curtis, and his wife, Mary, first lived after they married (Booker 2014). As the store is not associated with Walter Curtis Hudson or his farm, it is not recommended as a contributing resource to that property. And as it is only about 40 years old and not of exceptional importance, it is not recommended as individually eligible for National Register listing under any of the Register's Criteria.





Figure 161. Patterson's Mill Store – looking northeast with main entrance beneath gable at far left



Figure 162. Patterson's Mill Store – looking northwest with second-story entry to apartment at far right





Corn Crib [excluded]

On the store parcel, between the store and Walter Hudson's shop, is a corn crib with attached sheds that was shifted around 50 feet to its current location when the dairy barn was demolished about 1960 (Figure 163). At the core of the building is the crib, built of sapling-sized logs that are diamond-notched together and laid with openings between sufficient to allow corn to dry without rotting. The method of construction and size of the logs suggest a building date in the early or even mid-twentieth century. According to Curtis Booker (2014), however, the crib was likely erected in the late nineteenth century in association with the sawmill that Sanford Hudson had established on this portion of his holdings by 1884. (A well associated with the mill, dug by 1884, survives near Farrington Road along the entrance drive to the store. The wellhouse above the well, however, is not original.) Frame has replaced the crib's log front façade and it is flanked by two long, later-added, open sheds that serve as storage for the store. These alterations and additions have compromised its integrity. As the corn crib has lost its integrity, it is not recommended as a contributing resource to the Walter Curtis Hudson farm property. Due to its basic form and method of construction, and its loss of integrity, it is also not recommended as individually eligible for National Register listing under any of the Register's Criteria.



Figure 163. Corn Crib – north side and west front elevations



Log Outbuildings [excluded]

Just northwest of the storage barn, on the store parcel, is a building almost hidden in the trees that was formed of two separate log buildings placed side by side (Figure 164 and Figure 165). According to Curtis Booker (2014), the log buildings were moved about 1980 onto the property from the site of the thenunder-construction Carol Woods Retirement Community on Weaver Dairy Road, located about five miles to the northwest in Orange County. Both buildings are of diamond-notched log construction. The shorter, of pine, may date to the late nineteenth century. The taller oak building may date to the midnineteenth century. The two have been reduced to their walls without chinking or original finishes. Their roofs and added partitions postdate their move to the property. As part of the effort to join them, sections of their original log walls have been removed. Due to the moving of the buildings, and their significant alteration, they are not recommended as contributing resources to the Walter Curtis Hudson farm property or as individually eligible for National Register listing under any of the Register's Criteria.

Figure 164. Log Outbuildings – looking west at taller oak building, at right, and abutting shorter pine building, at left







Figure 165. Log Outbuildings – interior view showing removal of log wall and other changes, including modern partition wall and roof construction



National Register Eligibility Assessment

The Walter Curtis Hudson Farm is recommended as National Register eligible under Criterion C as an excellent and intact example of a small Durham County farmstead of the early twentieth century. In addition to its c1918 house, it includes a c1918 milkhouse/washhouse and garage, which retain original gutters and charcoal filtration systems that feed into an underground cistern; an early woodshed and brooder house; a c1935 log playhouse complete with a goldfish pond and decorative plantings; and a c1946 shop and 1960 barn. This large collection of buildings is quite intact within a surprisingly bucolic setting, particularly in a section of eastern Durham and western Orange counties that has undergone rapid development in the past 20 years. The resource has no known connection with historic events or significant persons, and is unlikely to yield important information not readily available from other sources. It is therefore not recommended as National Register eligible under Criteria A, B, or D. The farm's period of significance is recommended as extending between 1918 and 1960, the dates of construction of its individual contributing resources.

Proposed National Register Boundaries

The recommended boundaries include all but the upper northeastern portion of Parcel 141555 (Figure 166). This parcel, upon which the Walter Curtis Hudson House and associated outbuildings stand, encompasses approximately 15.2 acres and the excluded northeastern corner about 1.2 acres. Therefore, the total land within the boundaries encompasses approximately 14 acres. The northeastern corner of the parcel is not included in the boundaries because it is the site of a concrete-floored pole barn, used as a storage building, which was built in 1986, and a long shed built to hold wood associated



with the Patterson's Mill store, erected in the early 1970s. However, a noncontributing farm pond erected after the recommended period of significance is included because of its central location on the property.

The boundaries are drawn to include acreage historically associated with the Walter Curtis Hudson Farm that retains its integrity and that is not associated with adjacent properties that have been built upon. It is drawn to exclude not only the portion of parcel 141555 occupied by the pole barn and wood storage building, but also all of the approximately 5.5 acres of parcel 179527. This latter excluded parcel is occupied by the store built by Elsie and John Booker in 1972-1973 from materials salvaged from demolished buildings in Durham and Wake counties, and by an altered log corn crib with later additions and two log outbuildings that were moved five miles to the store property in c1980.

Figure 166. Proposed National Register boundaries of the Walter Curtis Hudson Farm outlined in dashed yellow lines (source: Durham County tax maps)





3.2.6 Ruth-Sizemore House and Store

5520 Old Chapel Hill Road, Durham County (portion of parcel 140194)

Figure 167. Ruth-Sizemore Store



History

The estate of William D. Sizemore conveyed a portion of the Dr. Foy Roberson Farm to Anne Dupont McKee and her husband, John L. McKee, Jr., in 1993 (Durham County Deed Book 2009/Page 26 (1994)) (Figure 167). In 1925 Dr. Roberson had divided the property that bore his name into 64 narrow lots, each under a half-acre in size, on either side of Old Mount Moriah Road north of Old Chapel Hill Road. The lots conveyed to the McKees were 1 through 8 at the northeast corner of the intersection. A 1996 plat map revised in 2000 (Durham County Plat Book 148/Page 15) depicts the "recombination" of lots 1 through 8 into a single lot of approximately one-half acre (Figure 168). This lot contains the store building, the adjacent pool hall, most of the house to their rear, and the southern portions of the eight lots. A small portion of the house stands on a section of a 4.31-acre tract that frames the three buildings on the north and east, which is also owned by the McKees.

Figure 168. Durham County Plat Book 148/Page 15 (2000 revision), at left, and modern aerial, at right; both show Ruth-Sizemore store, pool room, and house near intersection, as well as larger bungalow above





Dr. Foy Roberson was born in Chapel Hill in 1884 and died in Durham County in 1955 (M.R. 2013; findagrave.com website.) A 1905 graduate of UNC, he was president of the Durham-Orange County Medical Society in 1922 (*Southern Medicine and Surgery*, 1922:384). Dr. Roberson was socially well-connected in Durham. By no later than 1917, he and his wife, Helen, were participating in high society weddings and social events in the city (Durham *Morning Herald*, February 25, 1917 and March 3, 1917), and in 1921 Roberson was vice president of the gentleman's Piedmont Club (Anderson 2011:272). In 1923 the Robersons purchased three lots in the stylish Forest Hills neighborhood in Durham. They apparently sold these, for by 1928 they were living in a "splendid Tudor Revival-style house on a large property overlooking the golf course" in the neighborhood (Little 2005). A fixture in the local medical committee, Roberson was chief of surgery at Watts Hospital in Durham (Chapel Hill Preservation Society 1993). The Robersons likely never lived in the small house behind the store. If they did, they had moved on to a much grander lifestyle well before they platted the farm for development in 1925.

Lloyd Ruth (or perhaps Roof) reportedly operated the store, which appears to date from the mid-1920s, until 1942 when William D. Sizemore bought it, the pool hall, the little house, and other property totaling about seven acres. Ruth is thought to have been connected with federal agricultural services and to have moved from Durham County down to Florida as part of that work. In 1990, when Ruth Little inventoried the property, Sizemore still owned it. He did not operate the store, but used it for storage, a function it continues to serve. Little called the resource the Ruth-Sizemore House and Store (DH-2561) for the earliest known owner and operator of the store and its long-term next owner (Little 1990a).

The former pool hall appears to date from the late 1920s or the 1930s, after the construction of the store building. By 1990 it was utilized as a rental cottage and continues in residential use. Little places the construction date of the house to the rear (north) of the store and pool hall at 1910 and notes that it has always belonged to the same parcel as the store. In 1990 the house was occupied and, as shown in Little's photos, in good condition. It is now unoccupied and deteriorated, with a portion of the rear elevation fallen or rotted away, lacking windows, and open to the elements. The property is currently owned by Anne and John L. McKee, Jr. The pool hall is occupied by R.V. Watson, who runs a carpentry and repair business out of the store building (Watson 2014).

Description

The three buildings that make up the Ruth-Sizemore property stand on an approximately one-half-acre lot at the northeast corner of Old Chapel Hill Road and North White Oak (formerly Old Mount Moriah) Road. The house is the oldest of the three, but the store is the focal point of the resource.

Store

The former Ruth-Sizemore Store is a long and narrow, one-story, German-sided, frame building (Figure 169 through Figure 175). A seam-metal hipped roof with exposed rafter ends tops the building and extends forward at the front (south) to form a porte cochere. The engaged overhang would once have shaded individuals who drew gas from pumps in front of the store that no longer survive. These pumps had been removed by 1990, when Little photographed the resource. The overhang supported by two wooden posts set on tall brick piers. The piers have been added since 1990, but the portions of the posts above appear to be the same as those photographed in 1990 by Little. Three bays fill the front elevation, an early door with stacked horizontal panels and window bays to either side with cut-down and later infill sash. Corner posts edge the front and rear elevations. The three bays at the building's west side elevation, facing Old Mount Moriah Road, have what appear to be original two-over-two sash windows set in plain surrounds. A chimney stack rises off-center of the ridge, near the rear of the building. At the


rear (north) elevation is a single door with horizontal panels like those of the front door. One two-overtwo sash window is set near the rear of the east side elevation.

The store's interior retains a large front room with original or early beaded boards covering the walls and ceiling. Shelves across the rear of the room appear to be later added, but those that cross the righthand (east) wall look to be early. The rear room also retains beaded-boards at its walls and ceiling.



Figure 169. Ruth-Sizemore Store: east side and south front elevations

Figure 170. Ruth-Sizemore Store: south front elevation







Figure 171. Ruth-Sizemore Store: south front and west side elevations; note post-1990 brick piers



Figure 172. Ruth-Sizemore Store: south front and west side elevations in 1990 (Ruth Little, photographer)







Figure 173. Ruth-Sizemore Store: north rear and west side elevations

Figure 174. Ruth-Sizemore Store: front room interior







Figure 175. Ruth-Sizemore Store: rear room interior with rear door swung open

Pool Hall

The original front block of the former pool hall is also a one-story, frame, gable-front rectangle, which has been re-clad in asbestos shingles (Figure 176 through Figure 179). Smaller than the store, it would only have been large enough to hold one or two pool tables. A replacement seam-metal roof with exposed rafter ends tops the block. The front (south) elevation has two bays, a door and a two-over-two sash window set in simple surrounds. The side elevations each have a paired two-over-two window. The windows and rafter ends appear to be original to the building. A gable-roofed ell to the rear looks to have been added to the pool hall within the past 30 years, likely after the building was converted to a residence. A shed-roofed ell to its rear appears to date from the past 15 years. The front block is in good condition. The rear additions, which encompass about 40 percent of the total square footage of the building, are deteriorated. Due to the later siding and roofing of the original front block, and the size and date of the additions, the former pool hall is not recommended as contributing to the resource and has been excluded from the recommended boundary.





Figure 176. Ruth-Sizemore Pool Hall: south front and east side elevations

Figure 177. Ruth-Sizemore Pool Hall: south front and west side elevations





Figure 178. Ruth-Sizemore Pool Hall: west side and north rear elevations of additions, at left; store, at right



Figure 179. Ruth-Sizemore Pool Hall: east side and north rear elevations





House

The one-story-tall frame house stands along North White Oak Road past the intersection, behind the store (Figure 180 through Figure 184). Its front block is set beneath a gable-end seam-metal roof with a central brick chimney stack. This block is three bays wide and one bay deep. The front (west) entry is centered between a six-over-six sash window to either side. All three bays are set in plain surrounds and shaded by a full-façade, shed-roofed, front porch. The eaves of the porch are deteriorated, but retain their exposed rafter ends. Turned posts with jigsawn upper brackets continue to support the porch. Two one-story rooms behind the main block, likely original to the building, are set beneath side-by-side gabled roofs. The later skin of asbestos siding that faces the main block and rear rooms has pulled away at the rear between the two rooms, revealing original weatherboards and the interior walls of the rear rooms. Windows at the rear of each back room have been broken or totally removed, further exposing the interiors of the rooms, which are sided and ceiled with beaded boards, to the elements. The house appears to be vacant. The addition of asbestos siding and the deterioration of the rear of the house adversely affect its integrity.



Figure 180. Ruth-Sizemore House: south side elevation





Figure 181. Ruth-Sizemore House: west front elevation

Figure 182. Ruth-Sizemore House: west front elevation in 1990 (Ruth Little, photographer)







Figure 183. Ruth-Sizemore House: east rear elevation

Figure 184. Ruth-Sizemore House: east rear elevation; note loss of siding and windows that expose interiors of rear rooms





Figure 185. Ruth-Sizemore Pool Room, Store, and House, from left to right, looking southwest



Figure 186. Ruth-Sizemore Store, Pool Room, and House, from left to right, looking northwest





National Register Eligibility Assessment

The Ruth-Sizemore Store building is not recommended as individually National Register eligible under Criterion C as an intact and significant representative of a rural Durham County store. A review of North Carolina HPO files and maps identified at least seven other similar country stores still standing in Durham County. One-the D.C. Umstead Store and House (DH-2402)-was listed in the National Register in 2014 under Criterion A in the areas of Commerce and Communications (Slane and Wallrath 2014). It is significant as the only nineteenth-century country store, and only rural post office, extant in Durham County. The other six rural stores date from the early twentieth century and fall tightly within the same context as the Ruth-Sizemore Store. Two, both of which are listed on the North Carolina Study List, are two-story frame buildings: Cassum Tilley Farm and Store (DH-2203) and Catsburg Store and Cat Blevin House (DH-2223). Both store buildings appear to retain a high degree of integrity. Four one-story frame stores similar in date and form to the Ruth-Sizemore Store also continue to stand: Parrish Store (DH-2493), A.W. Tilley Store (DH-2196), Frank Hogan Store (DH-2363), and Sam Mangum Store (DH-2429). The Parrish and Tilley stores are included on the Study List as part of the potential Bahama Village Historic District. The Ruth-Sizemore Store is therefore far from unique and requires a substantial degree of integrity to support significance under Criterion A as a rural county store. It retains its form, German siding, three-bay facade, beaded-board walls and ceilings, and some of its shelving. However, its front posts have been cut down or largely encased within modern brick piers, it has lost its gas pumps, and its front sash has been altered or replaced. It is therefore not believed to have sufficient integrity to support significance under Criterion C. It has no known connection with historic events or significant persons, is not architecturally significant, and is unlikely to yield important information not readily available from other sources. It is therefore not recommended as NR-eligible under any of the Register's Criteria.

The pool hall and house on the property are also believed to have lost their integrity as individual resources through changes to and substantial additions to the pool hall, and changes to and deterioration of the house. Neither has any known connection with historic events or significant persons. Further, they are not architecturally significant and are unlikely to yield important information not readily available from other sources. Both are therefore not recommended as individually National Register eligible under Criteria A, B, C, or D.

The three resources are further not recommended to qualify for National Register listing under Criterion C as the Ruth-Sizemore House and Store historic district (Figure 185 and Figure 186). They no longer retain sufficient integrity to support significance as a significant and distinguishable entity.





3.2.7 Potential Duke University Nurses and Graduate Student Dormitories Historic District

2204 Erwin Road (portion of parcel 104568), 310 Trent Drive (portion of parcel 197781), and 315 Trent Drive (tiny portion of Duke West Campus parcel 108792), Durham, Durham County

Figure 187. Modern bird's-eye photograph of potential Duke University Nurses and Graduate Student Dormitories Historic District



History

In the early 1940s Duke University had two basic components, the former Trinity College or East Campus north of West Main Street and the newer West Campus, to the southwest. Following World War II, a third distinct section of the university began to blossom, the Duke University Hospital complex at the northeastern edge of West Campus (Figure 187).

The Duke Hospital complex, with associated facilities, is now one of the principal cores of the university. Most of it is formed of a sprawling, interconnected series of modern buildings. It retains two earlier portions, however. The original medical school and connected hospital remain at the northeastern edge of the initial West Campus quadrangle complex. Northeast of these early buildings and of the modern hospital complex are the three buildings that form this historic district, two former dormitories for nurses and the former men's graduate student dormitory.

James B. Duke, the founder of Duke, included a bequest of \$4,000,000 in his will of 1925 to create the Duke University School of Medicine and also a School of Nursing and the Duke Hospital. In 1932 the university founded the Duke School of Nursing and accepted its first students. The following year Duke constructed its first dormitory for nurses (no longer extant), called the Nurses Home, off the eastern end of the hospital (Duke University 1966:1-2; Duke School of Nursing 2010).

In 1942 the nursing school began to train a cadet nurses' corps to help staff a U.S. Army hospital in England during World War II. In response to the pressure on Duke's nursing facilities during the war, the university erected the Erwin Road Nurses' Dormitory at the northwestern corner of Erwin Road and Cook (now Trent) Road in 1943. The Duke Endowment and the U.S. Public Health Service funded the



building, which was designed by local architect George Hackney (Duke University 1966:1-2; Duke Facilities Management 2014:14).

The end of the war brought more rather than less activity to Duke Hospital and the medical and nursing schools. In 1950 Mrs. Frederic M. Hanes (the wife of the chair of Duke Hospital's Department of Medicine) funded, with additional monies from the North Carolina Medical Care Commission, a new dormitory. In her honor, the building was named the Elizabeth P. Hanes House for Nurses. It soon became known more succinctly as Hanes House (Duke University 1966:2). A 1950 update of the 1937 Durham Sanborn maps accurately depicts, from plans, the new building at the southwest corner of the intersection (under the mouthful-of-a-name Elizabeth Hanes–Duke University Hospital Nurses Home). In response to the new and primary Hanes House, the 1943 Nurses' Dormitory became known as the Hanes Annex (Figure 188). Like the building it supplanted, Hanes House was designed by George Hackney (Duke Facilities Management 2014:16).

Figure 188. 1950 update of 1937 Sanborn map depicting Hanes House at lower left, Hanes Annex above, and Trent Hall at lower right



The new nurses' dormitory would allow the nursing program to continue its rapid expansion (Anlyan 2004:123-124). The university *Chanticleer* yearbook of 1951 reported that the enrolment in the school of nursing was 150 in that year, but the new building would provide "living quarters, classrooms, and a library for 250 girls." It called the future residence "a highwater mark in the growth and progress of the Nursing School" (Duke University 1951:29). The building, which opened in June 1952, included not only dormitory rooms, but also "television, ballroom, two large reception rooms, terrace, sundeck, lounges, and six small social parlors" (Duke University 1952d:136). The cost of the building was reportedly \$1,000,000 (Duke University 1952a:136) (Figure 189 and Figure 190).





Figure 189. Hanes Hall shortly after opening, September 1952; a living room at top, library at center, and nursing arts room at bottom (source: Duke University 1952d:169)



Figure 190. Hanes Hall image captioned "Students hanging out in a Hanes House dorm room," 1963 (source: <u>https://www.flickr.com/photos/dukeuniversityschoolofnursing/8536677435/</u>)



The two nurses' buildings occupied two of the four corners of the intersection of Erwin and Cook or Trent roads. A third corner was occupied by a building erected at the same time as Hanes House, the Men's Graduate Center or Graduate Men's Dormitory, later renamed Trent Hall. George Hackney designed the Graduate Center, as he had the two nurses' buildings (Duke Facilities Management 2014:17). As its name indicates, the building was initially restricted to male graduate students. Like Hanes House, it was depicted on the 1950 Sanborn map from plans. Completed just after Hanes House,



it was ready for occupancy by September 1952. Its total cost was reportedly \$1,540,000 (Duke University 1952a:136). An alumni publication reported in September 1952: "All graduate and professional students will be housed here. In this building are dining rooms, bedrooms, lounge rooms, and all the facilities that will make for better living for the graduate and professional [male] school students. This does not mean expansion—it means the graduate and professional school students we already have are being adequately cared for" (Duke University 1952d:192) (Figure 191).

Figure 191. Trent Hall after opening with dorm room reportedly painted in "light pastels" (source: Duke University 1952e:4)



The university was proud of the facility and its amenities, which it described in an alumni publication at the building's opening (Duke University 1952e:208-209).

On the first, second, and third floors of the four-story structure are ten fluorescentlighted study lounges equipped with comfortable upholstered furniture and study tables in addition to 206 bedrooms.

The main floor contains a spacious and softly lighted main lobby opening into the 100foot-long social recreation room. Also on the main floor are a conference room which can be divided into two smaller rooms by folding doors, two general purpose social rooms, public telephones, and a coat-check room in the lobby, the house counselor's apartment, and a number of dormitory rooms.

It also made special note of the stainless steel kitchen and cafeteria counters, electric stoves, and translucent glass paneling dividing the counters from the dining rooms, which combined to create "dining facilities described as the most outstanding in any educational institution." It concluded that the "many new features in the huge building make the Center one of the most modern and luxurious of its kind." The building even included a student parking area to the rear—now greatly expanded—that could accommodate 125 cars (Duke University 1952e:208-209).

The Graduate Center's dining hall was an important part of the overall upgrade of campus dining begun by Theodore W. "Ted" Minah, who was appointed manager of the Duke University dining rooms in January 1946, when the campus was beginning to burst at the seams. An article on Minah and university dining halls describes student discontent "in reaction to an outdated compulsory meal ticket system,



wartime food rationing, and a decline in the quality of the dining services that was due to poor food preparation and an untrained staff" (Samouelian 2008). It continues:

Minah faced logistical challenges as well, such as feeding the influx of returning veterans, who increased the number of students on campus to 5,000. Long lines in the dining halls and insufficient seating only added to the student discontent....

Early in Minah's tenure he resolved to make the dining halls more than just a place to grab a quick meal. His objectives and operational philosophy for the dining halls were to provide a social atmosphere where students could mingle and have a healthy meal. More importantly, Minah believed that good dining was part of the students' overall education. Dining halls including the Great Hall and the Oak Room were designed, and in some cases, renovated, to encourage students from different racial and socioeconomic backgrounds to engage with each other and with faculty and guests. The Men's Graduate Center (now Trent Hall) was a shining example of this model. Constructed in 1953, the new dining hall featured a cafeteria, private dining rooms where those students with [in Minah's words] "allied interests" could eat together, and a coffee lounge where graduate students, faculty, and friends could gather informally. In 1961, the Graduate Center was opened to freshman and sophomore nursing students, with the hope that dining there would contribute [in Minah's words] to their "social education."

According to the article, *Institutions Magazine* presented its Honors Award (the highest honor in the food service industry) to the Graduate Center in 1953.

The North Carolina Modernist Houses website identifies the Durham architectural firm of Hackney and Knott as having designed or added to over 400 residences between 1946 and 1971. It does not include in the list the three buildings Hackney designed for Duke or hardly any other nonresidential commissions. The site summarizes the career of the firm's original principals (Figure 192) as follows:

George Franklin Hackney (1905-1997)

Hackney was born in Siler City NC and graduated in Architectural Engineering from NC State University in 1927. He came to Durham as part of the architecture and engineering staff working on Duke's West Campus. Upon completion at Duke, he started a firm focused on high end residences via his connections to [such] prominent Durham families as the Dukes, Biddles, Teers, and Kenans. The firm grew and Hackney offered partnership to former intern Charles Knott. During WWII, Hackney taught structural engineering at Duke and designed Duke's Rose Bowl float the year it was played in Durham during WWII.

Hackney and Knott's firm continues as Sears, Hackney, Keener & Williams. Company president Bill Sears joined the company as a student in 1961.

Charles Franklin Knott, AIA (1912-1982)

Charles Franklin Knott was born in Durham. He went to NCSU to study architectural engineering but did not graduate. Instead he earned his license through apprenticeship with George Hackney. Knott started with Hackney in 1932, a team that would last 50 years until Knott's death in 1982. Their commercial projects as Hackney and Knott included much of Campbell College (now Campbell University) and the main Durham County Library.



Figure 192. George Hackney, left, and Charles Knott, right, n.d. (source: North Carolina Modernist Houses website)





An entry in OpenDurham.org recounts the later history of Hanes House, Hanes Annex, and the Graduate Student Center (Kueber 2001). By the mid-1970s, they were in use as undergraduate dormitories and the area took on the name "North Campus." Within a decade all three were freshmen dormitories. The Men's Graduate Center was renamed Trent Hall about this time. Gary Kueber (2011b), who lived in Hanes Annex as a Duke freshman in 1988, writes:

In 1993, Duke's academic council implored the university to do away with North Campus entirely, but to close "at least Hanes Annex, one of our least-desirable dormitories." It stood vacant after 1993, but a \$4.5 million renovation removed the original front entrance, replacing it with a curved glass facade, and removed the original side entrance. A new side entrance was added on Trent Dr. The building reopened in 2000 with classrooms and gallery space. The building was renamed the John Hope Franklin Center after the historian and civil rights advocate.

Trent appears to have become the unfortunate destination of sophomore students in the mid-1990s, after freshmen were consolidated on East Campus. I'm not sure when it last housed students, but is now comprised of office space.

Hanes appears to have stopped housing students after the freshman consolidation on East Campus in the 1990s, but continued to house nursing and PA programs; the PA program has recently moved to the former Blue Cross Blue Shield Building on South Duke St.

Architects Brockwell Associates converted the Graduate Center into offices in 1995 (Duke Facilities Management 2014:17). Among the offices it currently houses are those of the Duke Health Initiative and its Center for Health Policy & Inequalities Research, and offices connected with the Duke University health system. The Brockwell firm also converted Hanes House (in 1998) and Hanes Annex (in 2000) into offices (Duke Facilities Management 2014:14, 16).



Description

Duke erected the three buildings on three of the four corners of the intersection of Erwin Road and Trent Road (Figure 193 and Figure 194). The first—the Erwin Road Nurses' Dormitory or Hanes Annex or the John Hope Franklin Center—occupied the northeastern corner of the intersection in 1943. The next two rose on largely wooded lots ten years later: the Elizabeth P. Hanes House for Nurses or Hanes House on the southwest corner and the Men's Graduate Center/Graduate Men's Dormitory or Trent Hall on the southeast corner. The three continue to exhibit a solid embrace of the Colonial Revival-style—a popular mid-twentieth-century style unconnected to the more cutting edge modernism of the time—at the intersection, within a frame of modern hospital and medical buildings and numerous parking lots.

Figure 193. 1950 aerial view of intersection of Trent Drive and Erwin Road with only Hanes Annex in place at upper right; sites of Hanes House and Graduate Center at left still largely wooded; north at right (source: Kueber 2011b from Durham *Herald Sun*)



Figure 194. 1952 aerial looking up Trent Road showing Hanes Annex at upper left of intersection with Hanes House, at lower left, and Trent Hall, at lower right, nearing completion; north at top (source: Kueber 2011b from Durham *Herald Sun*)





Hanes Annex (2204 Erwin Road)

At Hanes Annex, architect George Hackney established the Colonial Revival-style theme for all three buildings (Figure 195 through Figure 202). Its two-story-over-basement, L-shaped form is oriented toward the intersection and dressed with basic Colonial-type details. It has gable end roofs that terminate in cornice returns accented with doubled chimney stacks. Straightforward sandstone or cast-concrete sills and lintels frame its paired double-hung sash. A masonry beltcourse marks the division between the full basement and the first story. Shingles laid like slate top its roofs. Brick stairs lead up to its current main entry, which faces Trent Road near the intersection. This entry was shifted from the gable end just to the left (south) when the building was converted to the John Hope Franklin Center in 2000. The site of the entry is now occupied by a full-height, triangular, glass-filled bay. A similar glass bay marks the west-facing gable at the opposite end of the building. A large rounded window unit also projects from the center of the south elevation facing Erwin Road, at the site of the original main entry. Dating from 2000, it lights modern meeting spaces/classrooms at the first and second floors.

The building has a standard double-load corridor configuration, with central corridors on each of its three floors opening to dormitory rooms, now offices, at either side. The interior doors have been replaced with modern fire doors, but the configuration appears to remain intact. All three stories retain wood floors. The ceilings of the first floor are covered with acoustic tiles, but those of the other two floors are of plaster or plasterboard.



Figure 195. Hanes Annex: east elevation





Figure 196. Hanes Annex: east and south elevations

Figure 197. Hanes Annex: south and east elevations from Trent Hall









Figure 199. Hanes Annex: west rear and north side elevations







Figure 200. Hanes Annex: north side elevation

Figure 201. Hanes Annex: first floor; note room at end of hall lit by triangular glass bay





Figure 202. Hanes Annex: second floor



Hanes House (315 Trent Drive)

George Hackney continued the use of the Colonial Revival at Hanes House (Figure 203 through Figure 211). The new building was nearly identical to Hanes Annex in materials and height, with a similar if larger footprint—an E- rather than an L-shaped plan. Like Hanes Annex, the former dormitory is of brick with limestone or cast-concrete details and stands three stories tall. All three stories are above grade, but a masonry beltcourse continues to set off the ground floor from the one above. The finish of Hanes House, perhaps reflecting a larger budget and more readily available materials and workmen, is finer that of Hanes Annex. It includes a masonry course around the building's base and a second beltcourse above the top story. The roof is flat and edged by a masonry-topped parapet wall. Visual interest is further added to the east front elevation by the addition of a projecting, central, three-bay-wide entry bay. Accenting this bay are brick corner quoins and a portico supported by four limestone columns. The three end bays at either side of the front elevation also project forward and are edged by brick quoins. Additionally, masonry keystones crown the first and second-story windows of the front bay and the end bays. Quoins and keystones also adorn the west ends of the outside legs of the E, at the building's rear. Only the center leg of the E, least visible to the public, is unadorned.

The 1950 Sanborn map update includes more construction information than is often the case, as it was based upon building plans. It reports that the building was to be of noncombustible construction with a steel frame, masonry walls, and concrete floors erected on a concrete slab. The roof was to rest on steel joists and the ceilings were to be metal lath and plaster. The brick curtain walls were designed a foot thick and the partition walls formed of gypsum block.

Like Hanes Annex, the interior of Hanes House utilizes a standard double-load corridor configuration. Offices rather than dormitory rooms continue to open off of the corridors, but the interior appears to have been largely rebuilt. It now houses offices connected with Duke's hospital. Little if any original material remains visible inside.





Figure 203. Hanes House: east front elevation with modern Duke hospital complex beyond



Figure 204. Hanes House: east front elevation from Trent Hall







Figure 205. Hanes House: east front and south side elevations; note canopy at left leading to adjacent modern building



Figure 206. Hanes House in 1953, captioned: "When not at classes or on duty, the student nurses live at their new Hanes Home, the most modern and comfortable on campus" (source: Duke University, *The Chanticleer* 1953:31)







Figure 207. Hanes House: east front elevation main entry

Figure 208. Hanes House under construction, main entry (source: Duke University 1952b:4)







Figure 209. Hanes House: west rear elevation

Figure 210. Hanes House: north side elevation; note Trent Hall at far left across Trent Road









Figure 211. Hanes House: third floor, typical central corridor plan with rooms opening to either side

Trent Hall (310 Trent Drive)

The third Colonial Revival-style building in the proposed historic district is Trent Hall (Figure 212 through Figure 223). Hackney designed it at the same time as Hanes House and largely used the same palette of materials, scale, and detail. According to the Sanborn map, the building also used similar fireproof materials. The only structural difference noted between the two is the proposed use of tile rather than gypsum partition walls. The building's footprint draws from a third letter in the alphabet, the F. (F-, E-, and L-shaped footprints are all amenable to double-loaded corridors.) It rises the same three stories as Hanes House, but has an additional full basement beneath, the presence of which is only clearly apparent at the rear. It is built of the same red brick as Hanes House, with masonry beltcourses marking its basement and the tops of its first and third stories. It also has a flat roof and a parapet wall topped by masonry coping. Its central and end bays project forward and have masonry keystones. They lack brick quoins, but have a limestone-columned portico not only at the central front (west) entry, but also a subsidiary entry at the north end of the front elevation. As is the case with the other two buildings under consideration, the rear elevation is more plainly finished.

The building's interior retains its corridor plan at the northern leg of its F, although the rooms opening off of either side of the corridors are now offices rather than dormitory rooms. The doors, floors, and ceiling—and perhaps the walls as well—have been altered in this wing, however. Changes are even more pronounced at the remainder of the building, where many partition walls have been removed to allow for the creation of interior spaces that are no longer double-loaded. Most evidence of the basement kitchen and dining rooms has been removed, although the stair leading from the main entrance down to the cafeteria space retains its hand rails and terrazzo flooring. A mantel with flat stone panels and a molded lintel also remains in place at the site of the former dining room, which now holds classrooms and a small restaurant and dining space.





Figure 212. Trent Hall: west front elevation from Hanes House in foreground

Figure 213. Trent Hall: west front and north side elevations





Figure 214. Trent Hall: north side elevation with Hanes House across Trent Road at far right



Figure 215. Trent Hall: east rear elevation







Figure 216. Trent Hall: west front elevation

Figure 217. Trent Hall under construction: west front and south side elevations (source: Duke University 1952b:4)









Figure 219. Trent Hall: stair leading from former basement cafeteria up to main entrance







Figure 220. Trent Hall: first-floor interior of Duke University Health System Procurement and Supply Chain Management offices



Figure 221. Trent Hall: typical corridor plan, north wing







Figure 222. Trent Hall: original mantel at site of former basement cafeteria

Figure 223. Trent Hall after opening: main cafeteria with fireplace and mural of the "Four Seasons," at left (same view above), and "social-recreation room" with drapes in "warm reds, greens, yellows, and browns," at right (source: Duke University 1952e:4)



National Register Eligibility Assessment

Hanes Annex, Hanes House, and Trent Hall, which comprise the potential Duke University Nurses and Graduate Student Dormitories Historic District, are not believed to be sufficiently significant under any of the National Register's Criteria to be individually eligible for NR listing. Viewed within the context of the many architecturally similar, contemporary buildings located on Duke University's West and East campuses and elsewhere throughout Durham, their institutional Colonial Revival-style architecture is



not notable. They also have no close connection with persons important in our history. Within the context of the history of Duke University and its numerous mid-twentieth-century buildings, they are also not historically notable. Further, modern and highly visible exterior alterations have compromised the integrity of Hanes Annex, and Hanes House and Trent Hall no longer retain their integrity due to extensive interior alterations. The three are therefore not recommended as individually eligible for National Register listing.

For the same reasons, the three buildings are not recommended as constituting a National Registereligible historic district. In the context of Duke's two campuses, they do not comprise a sufficiently significant and distinguishable entity with sufficient integrity to support NR listing. The buildings, individually and together, are therefore not recommended as National Register eligible under Criteria A, B, C, or D.

Further, the three are not recommended as potentially NR eligible as part of any other existing or potential historic districts. They are divided by NC 147 and modern development from the NR-listed West Durham Historic District located about a third-of-a-mile to their northeast. And, as shown at Figure 224 and Figure 225, they are separated from the Study Listed Duke University West Campus Historic District by the significant modern development of the Duke University Medical Center.

Figure 224. Potential Duke University Nurses and Graduate Student Dormitories Historic District, outlined in yellow, in context with surrounding modern development (source: Durham County tax maps)





Figure 225. North Carolina HPO base map with the three resources of the potential Duke University Nurses and Graduate Student Dormitories Historic District marked with yellow dots; a selection of the surrounding modern resources marked with red dots; and a portion of the Study List-listed Duke University West Campus Historic District shaded in green




3.2.8 Durham Coca-Cola Bottling Plant

1121 West Main Street, Durham, Durham County (parcel 103192)

Figure 226. Durham Coca-Cola Bottling Plant



History

The Durham Coca-Cola Bottling Plant (DH-107) (Figure 226) was built in 1930 to replace an earlier facility located on the southeast corner of North Church Street and Liberty Street (Kueber 2008). According to the Coca-Cola Company archivist, the first Coke was filled in the building on July 15, 1930. The new plant initially bottled 275,000 cases a year. It had six trucks to distribute the Coke and six sales people. By 1946 the operation employed 50. The new plant on "Hillsboro Road" opened in 1961. It held an open house during Thanksgiving week that year, at which free Coke was served and a Westinghouse refrigerator was offered as a prize (Mooney 2008). This building remained in use, or at least in the hands of the bottling company, for a few more years, however.

The building is a model #4 Coca-Cola Bottling Plant, which was designed by Atlanta architects Robert Smith Pringle and Francis Palmer Smith (Pringle and Smith) for the Coca-Cola Company in 1928 as one of four standard designs with variations. According to Smith biographer Robert Craig (2012:160), the building design was part of the company's determination that "product recognition on all levels, from plant operation to Coke bottle, from storage coolers to soda fountain glasses, from slogans to signage and advertising, was key to effective marketing and increased sales in competition with rival soft-drink companies."

According to Craig (2012:162), model #3—a plant that was smaller but otherwise almost identical to model #4—was "dressed in Mediterranean Style, which, being at the height of popularity in 1928, was repeatedly proposed as a particularly southern architectural alternative." The model #4 design essentially mirrored the exterior of model #3, with the addition of a bay of paired, divided windows alongside the entry and a deeper bottling room. Craig's description of a model #3 bottling plant to be built in Swainsboro, Georgia, therefore effectively describes model #4 and the Durham plant. He (2012:162) writes that the drawings for the Swainsboro plant:

...call for a building of shingle-tile roof, face brick, steel sash windows with stone sills, large plate glass windows with copper division bars, and muntined transoms with



pivoted ventilators. The Coca-Cola signature panel with the trademark bottle ornament is formed in terra-cotta that simulates limestone, although the door surround, with its raised keystone and flanking upper ornaments (like applied half balusters with finial) is stone. A wood cornice below the gutter caps the composition. The ample thirteen-foot height of the first floor accommodates its industrial purpose, while ten-foot ceilings top the second-floor office and storage areas. The hipped roof isolated the discrete form of the public building on the street side, while a flat-roofed more industrial wing extends to the rear....

Craig (2012:163) continued with an interior description of a model #4 that in all likelihood captures the appearance of the Durham plant's interior prior to alterations:

In model #4, the limestone entry opens to a lobby and a general office, with a private front office for the plant manager behind the paired windows at the rightmost end of the building face. A drivers' vestibule leads from the back of the general office to the loading platform and service court. The large picture windows, so dominant in the front elevation of the building, display the bottling activity occurring on a huge 55'-by-45' production floor. Fillers, carbonators, and crown machines are located within clear view of passersby, who can watch and, more importantly, be assured of the quality of the product. Soakers are in the center of the bottling room, and the large stock room, behind floor-to-ceiling mesh-wire partitions, extends back another fifty-six feet. Both the bottling room and the stock room open to the loading platform, the former accessing the elevator as well so that products can be lifted to second-story storage areas.

Daniel Bluestone in his recent nomination of a Coke bottling plant in Charlottesville, Virginia, also notes the importance of allowing potential consumers to walk by the plant and observe the operation, thereby confirming that the drink was bottled in a clean and hygienic fashion. This helped immunize the bottler from pure food and drug law-related litigation (Bluestone 2012).

A rendering of a standardized model #4 plant included in Craig's book could almost be that of the Durham bottling plant, with very minor differences (Figure 227). (Each plant seems to have some individuality of design, based on street orientation and, likely, cost.) The rendering could also be that of other model #4 plants, such as the plants in Gadsden, Alabama (c1930), Anniston, Alabama (1930), and Parkersburg, West Virginia (no date) (Figure 228).

Figure 227. Durham Coca-Cola Bottling Plant: modern photo, at left and, at right, drawing of standardized Coca-Cola Bottling Plant, model #4, Pringle and Smith, 1928 (source of drawing: Craig, The Architecture of Francis Palmer Smith, p.164)





Figure 228. Anniston, Alabama Coca-Cola Bottling Plant model #4 in 2011, at left and, at right, Parkersburg, West Virginia mirror-image plant in 2009, (sources: at left, <u>https://www.flickr.com/photos/bamaboy1941/6255039806/</u> and, at right, <u>http://earlycoke.com/surving-bottling-plants-photos.html</u> (photographer Earl C.



Pringle and Smith's use of standardized designs and terra cotta plaques with the Coca-Cola script and contoured bottles led the way in marketing a product "through the repeated use of recognized elements as building adornments" (Craig 2012:165). "The Pringle and Smith bottling plants," Craig (2012:166) concludes, "were pioneers in American standardized design for purposes of modern marketing."

The buildings are more than marketing machines, however. They are carefully considered and designed. They were influenced by the Beaux-Arts concepts and controlled classical traditions in which Smith was well schooled. Craig (2012:167) captures the quality of their design:

Smith's bottling plants for Coca-Cola were ennobled by the harmonies, ornament, and detail of this classical tradition. The architect brought monumentalism to what otherwise might have been mere utilitarian buildings with little architectural quality. His sensitivity to proportion and scale permitted ordinary buildings to avoid the mundane even as they fit their small-town contexts and served both the parent company and the local bottler as indicators of a promised product of quality.

An online search located 16 early Coca-Cola bottling plants still standing in North Carolina. The Earlycoke.com website identifies and includes photographs of six of these that were still standing within the past five years: Durham, Henderson, Washington, Charlotte, Forest City, and Shelby. RoadsideArchitecture.com includes recent photographs of another eight: Lexington, Greensboro, Sanford, Roxboro, Shelby, Reidsville, Salisbury, and Gastonia. Photographs of others on the internet include the bottling plants in Wilson and Winston-Salem. How many additional plants may still stand, or how many of these may have fallen, is not known. The Charlotte plant was listed in the National Register in 1998. Of the 16, only the Washington plant is believed to continue to bottle Coke. And only the Durham plant is an intact model #4.

The building, as indicated by the 1937 Sanborn map, was originally L-shaped, with its current two-story sections in place. The 1950 update of the 1937 Sanborn includes infill at the rear of the lot that it identifies as holding automobiles and storage. Whether this is the current one-story addition that gives the building its triangular footprint is not clear. This addition was in place no later than 1959, however (Figure 229 and Figure 230).



Figure 229. Durham Coca-Cola Bottling Plant: 1937 Sanborn map, at left, showing L-shaped building with loading dock within legs of L; updated Sanborn map of 1950, at right, showing one-story infill that housed automobiles and storage



Figure 230. Durham Coca-Cola Bottling Plant: 1959 aerial showing building with current footprint (source: Kueber 2008)



In 1966 Goodwill Industries purchased the building and operated it as one of its thrift shops. A photograph from that date shows a façade identical to the one the building retains (Kueber 2008) (Figure 233). A photograph of the building's east side elevation, taken during a fire in 1968, also shows the exterior looking almost exactly as it does at present (Figure 235).

Description

The main block of the Durham Coca-Cola Bottling Plant follows the designs of the standardized Coca-Cola model #4 plant (Figure 231 through Figure 237). It is two stories tall and masonry, with brick walls and a red-tile hipped roof. It is adorned by a wooden cornice with modillion blocks and limestone or limestone-colored terra cotta details. These include its off-center entry set within a surround marked with an oversized keystone, quoins, and dowel-like adornment; two wide panels holding the Coca-Cola advertising logo—the name of the beverage in script flanked by sunrise-edged soda bottles; and a stringcourse accenting the height of the bottling floor. To the left (east) of the entry are three compound windows—which provided views onto the bottling floor—that retain wide single-light panels topped by multi-light transoms. To the right of the entry is a pair of windows separated by brick.



The building's two-story rear wing fronting on West Peabody Street is more functionally finished, marked by rows of windows and minimal concrete ornament. Set between the L formed by the main block and the wing is a one-story, brick-walled addition added by 1959, the triangular shape of which mirrors the triangular shape of the lot.

The building's interior was greatly altered twice in the late twentieth century (Figure 238 through Figure 241). Drawings dating from either c1986, when the thrift store was replaced by offices, or 2000, when Duke University acquired it, depict versions of original floor plans and planned alterations to the interior division of space. Along with a brief account written by a North Carolina University student (Hines 2000), who acquired the plans, and general knowledge of plant design, they help identify what activities originally took place in the building and where. The first floor initially contained two bottling rooms, a manager's office, a work room, a wash room, and a loading dock. The second floor reportedly held the syrup room in its northeastern corner, above the front of the bottling room. It was also used for storage. The drawings depict interior alterations necessary to change the former plant into an office building, but show little alteration of the exterior. The most notable, if minor, exterior change was the enclosing of an east side entrance with glass block, which remains in place to the present. The building housed the Duke Talent Identification Program from about 2000 to 2014. It is presently undergoing yet another interior reworking, as Duke prepares to move a different set of offices into it. Due to the ongoing alterations, access was not permitted, but views through the front windows of the former bottling room and the front door clearly show how thoroughly the interior has been altered over the past 30 years.



Figure 231. Durham Coca-Cola Bottling Plant: north front elevation



Figure 232. Durham Coca-Cola Bottling Plant: north front and east side elevations



Figure 233. Durham Bottling Plant in 1966 on eve of sale to Goodwill Industries (source: Kueber 2008 from Durham *Herald Sun*)





Figure 234. Durham Coca-Cola Bottling Plant: east side and north front elevations



Figure 235. Durham Bottling Plant in 1968 during a fire; note east side entry now filled with glass block and Goodwill sign hiding the Coca-Cola logo (source: Kueber 2008 from Durham *Herald Sun*)







Figure 236. Durham Coca-Cola Bottling Plant: east side elevation

Figure 237. Durham Coca-Cola Bottling Plant: looking east at one-story addition and rear of original plant







Figure 238. Durham Bottling Plant: c1986 or 2000 drawings depicting "original ground floor plan," at left, and "existing ground floor plan," at right (source: Hines 2000)



Figure 239. Durham Coca-Cola Bottling Plant: stair hall, viewed through front door, receiving further alterations in September 2014





Figure 240. Durham Coca-Cola Bottling Plant: portion of former bottling room immediately to left (east) of front entry, viewed through window, undergoing further alterations in September 2014



Figure 241. Durham Coca-Cola Bottling Plant: northeastern portion of former bottling room, viewed through window, undergoing further alterations in September 2014





National Register Eligibility Assessment

The Durham Coca-Cola Bottling Plant is recommended as eligible for National Register listing under Criterion A for its representative place in our history and under Criterion C for its architecture. As Bluestone (2012) notes of the Charlottesville Coca-Cola plant in his 2013 National Register nomination, the Durham plant "is associated at the local level with the broad patterns of history in its vision of industrial design that could help promote consumption of a national brand by local consumers." The design "powerfully united modern form with national brand marketing; here, the canons of utilitarian industrial architecture broadened so as to encourage the consumption of the product being manufactured. At Coca-Cola the successful development of a national brand turned in part on the company's ability to reassure consumers of its adherence to the highest standards of public health and sanitation; this business strategy helped shape the architecture of Coca-Cola bottling plants." The Durham plant also embodies the distinctive characteristics of a type and period of construction and design, for it is a refined, and intact, example of a Mediterranean-style building with hints of the Art Deco style at its advertising panels and entryway.

The bottling plant is not known to be associated with any important historic events or activities and it is unlikely that it would yield any important historical information not readily available from other sources. It is therefore not recommended to be significant under National Register Criteria B or D. Its period of significance is recommended as 1930, the year it was built.

Proposed National Register Boundaries

The proposed National Register boundaries for the Durham Coca-Cola Bottling Plant are those of the 0.27-acre parcel (103192) with which it has been historically associated since its construction in 1930 (Figure 242). The boundary does not include the small triangle of lawn in front (north) of the building. This parcel (103191) was not historically associated with the building for, as the 1937 and 1950 Sanborn maps and 1959 aerial photograph show (Figure 229 and Figure 230), it was long part of the paved road network in front of the building. It is currently owned by the City of Durham.

Figure 242. Proposed National Register boundaries of the Durham Coca-Cola Bottling Plant outlined in blue (source: Durham County tax maps)





3.2.9 Hall-Wynne Funeral Home

1111 West Main Street, Durham, Durham County (parcel 103172)

Figure 243. Hall-Wynne Funeral Home



History

According to an account at the Open Durham website, J.S. Hall entered the funeral home business in Durham in 1903 and in 1909 he joined with George V. Wynne, with whom he built the first Hall-Wynne funeral home on Morris Street near East Chapel Hill Street. Alternatively, according to the Hall-Wynne website, the two established Hall-Wynne & Co. together in 1904 in downtown Durham. In 1926 the business relocated to a new building located in the growing commercial area of West Main Street. According to the company site, the new building was "the first built-for-the-purpose mortuary in the Southeast." The building has remained the business' home ever since (Kueber 2008a; Hall-Wynne website) (Figure 243).

The 1937 Sanborn map shows the funeral home with almost all of its current footprint in place (Figure 244). The main block, facing West Main Street, is rectangular. The block to its rear (south), as it continues to be at present, is a garage with a not-quite-square footprint. (A second garage, attached to the rear of the funeral home garage, had other owners and is no longer extant. It stood at least until 1959, but has since been supplanted by a paved parking lot (Figure 245).)

In 1946 the funeral home erected a chapel immediately to its east. It engaged the prolific Durham architectural firm of Hackney and Knott to design the building, which appears in a 1953 newspaper advertisement. The two were connected by a one-story brick hyphen, as depicted on the 1950 update of the 1937 Sanborn map and a 1959 aerial photograph (Kueber 2008a; North Carolina Modernist Houses website) (Figure 244 and Figure 245).





Figure 244. Sanborn map of 1937, at left, and updated map of 1950, at right, with Hall-Wynne Funeral Home at center and Main Street, unlabeled, at top



Figure 245. 1959 aerial view of Durham with Hall-Wynne Funeral Home and its chapel at center; north at top (source: Kueber 2008b)







Description

The Hall-Wynne Funeral Home has three main blocks (Figure 243 through Figure 261. Hall-Wynne Funeral Home: stair and stair hall with original or early flooring and wall surfaces, no date (source: Hall-Wynne funeral home)Main Street, on the west side of the property, is the original funeral home. The front (northern) portion of the two-story brick block is symmetrical and has a Neoclassical Revival-style form and finish accented with limestone ornament. Five bays cross its front façade. Paired pilasters supporting an entablature and a blind balustrade frame the centered entry. Above the entry four long narrow windows are set within a crossetted surround. Lintels with large keystones top the first story windows. Simpler surrounds frame the windows above. A string of large white quoins climbs the ends of the façade, terminating at a wide frieze that is crowned by an ornate balustrade. The same treatment—window surrounds, frieze, balustrade—wraps around the sides of the building. This treatment only extends three bays deep, though, for the remainder of the block is plainly finished with recessed blind windows. The rusticated stone walls and floriated metal fencing above at the front elevation are likely original.

A two-story brick block to the rear (south) is plainly finished. Its side walls are blank and its flat roof is not set off by any ornament. The reason for its purely functional appearance is clear when one views it from the rear, which is opened at ground level by three garage bays. The building was originally built as a garage, a step up from the stable that had served the funeral home when it stood on Morris Street. The 1937 Sanborn map notes the garage held eight cars. It does not indicate what the second story was used for. The brickwork above the bays indicates that they have been altered, apparently when the garage doors were replaced. A friezeboard above the doors that now carries the funeral home's name is a later addition. The sash in the three second-story windows is modern, but the openings are likely original or early. The main front block and garage building date from 1926 and, but for the functional alterations at the rear, are intact. A small, one-story, blank-walled, brick ell to the west of the front block, however, is not original. It was likely added within the past 30 years. Also altered is the side entry on this elevation, which is shaded by a later-added hood.

The third principal block of the funeral home is the chapel fronting on Main Street, at the east end of the property. It was designed in 1946 in Colonial Revival style by George Franklin Hackney and Charles Franklin Knott. The main body of the brick building has a gable-front façade adorned with friezeboards and cornice returns. A steeple and spire rise from it at the front of its gable peak. A broken pediment surround edges the entry, which is shaded by a portico with a triangular pediment supported by four columns. The chapel was built without the portico, which was added at an undetermined date. The side elevations remain plainly finished with barely projecting buttresses topped by limestone or concrete coping. The building has been altered by the addition of the portico and the application of artificial siding over the base of its steeple. A small, one-story, flat-roofed, brick building affixed to the chapel's rear elevation, however, is modern. It holds the crematorium.

The sedately finished interior of the funeral home and chapel have been updated over the years, in keeping with the situation of the funeral business. The original winding iron stair, complete with twisted and floriated balusters and a wide hand rail, remains in place in the stair hall, however. The marbleized painting of the rail is not original.



Figure 246. Hall-Wynne Funeral Home: north front and east side elevations of principal block



Figure 247. Hall-Wynne Funeral Home: north front elevation





Figure 248. Hall-Wynne Funeral Home: north front and west side elevations of principal block with chapel at left, garage block to rear, and plain one-story addition at right



Figure 249. Hall-Wynne Funeral Home: north front and east side elevations of principal block between 1941 (date of Mercury in foreground) and 1946 construction of chapel, which supplanted house at far left (source: Hall-Wynne funeral home)







Figure 250. Hall-Wynne Funeral Home: west side elevation of main block, garage block, and modern addition



Figure 251. Hall-Wynne Funeral Home: west side elevation, early 1960s; note 1961 Cadillac at bottom of row of business vehicles, which include a hearse at the center and an ambulance and flower truck at the far end (source: Hall-Wynne funeral home)







Figure 252. Hall-Wynne Funeral Home: south rear elevation with original garage block at left, rear of chapel at right and, at right foreground, one-story crematorium addition



Figure 253. Hall-Wynne Funeral Home: south rear and east side elevations with original garage block at left, chapel at right and, at center foreground, crematorium







Figure 254. Hall-Wynne Funeral Home in advertisement in Durham *Morning Herald* Centennial Edition, 1953 (source: Kueber 2008a)



Figure 255. Hall-Wynne Funeral Home: east side and north front elevations of chapel at center and funeral home block at right; note addition of portico to front of chapel





Figure 256. Hall-Wynne Funeral Home: west side and north front elevations of chapel



Figure 257. Hall-Wynne Funeral Home interior, chapel at left (source: Hall-Wynne website)



Figure 258. Hall-Wynne Funeral Home interior





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Figure 259. Hall-Wynne Funeral Home: original stair balusters and rails; note modern changes to doors and finishes, and later marbleizing of hand rail





Figure 260. Hall-Wynne Funeral Home: modern image of stair hall

Figure 261. Hall-Wynne Funeral Home: stair and stair hall with original or early flooring and wall surfaces, no date (source: Hall-Wynne funeral home)





National Register Eligibility Assessment

The Hall-Wynne Funeral Home is not recommended as eligible for National Register listing under Criterion C for its architecture. It is a good representative example of early twentieth-century Neoclassical Revival-style commercial architecture, but no longer retains sufficient integrity to support significance for its architecture due to its many alterations. These include the modern addition to its west side elevation and changes to that elevation's entry; the changes to the garage bays and windows at the rear elevation; the attachment of a modern crematorium to the rear of the chapel; the alterations to the chapel's front elevation, particularly the addition of the portico; and many changes that have modernized the interior. The resource has no known connection with historic events. Its history as an early Durham funeral home is not believed to meet the Register's standards of historic association and it is therefore not recommended as National Register eligible under Criterion A. It also has no known association with significant persons and is unlikely to yield important information not readily available from other sources. It is therefore not recommended as National Register eligible under Criteria A, B, C, or D.





3.2.10 North Carolina Mutual Building

411 West Chapel Hill Street, Durham, Durham County (parcel 103343)



Figure 262. North Carolina Mutual Building

History

Two monumental residences preceded the North Carolina Mutual Building (DH-2477) on its site. Benjamin N. Duke built his Victorian dwelling, which he called "The Terrace," there in the 1880s. He was one of three brothers who ran the American Tobacco Company and controlled the Duke industrial empire. In 1911 Duke moved the house across the street and built an even grander Chateauesque Revival-style mansion called "Four Acres" on the site. Following the death of Duke and his wife, Sarah, the house and property passed into the hands of Duke University (Kueber 2011c).

The North Carolina Mutual Insurance Company acquired from Duke the Four Acres house and property, which occupied a full city block bounded by West Chapel Hill, Willard, Jackson, and South Duke streets, in the early 1960s. The life insurance company chose the site for its new headquarters building, which was to replace their 1921 building at 116 Parrish Street in downtown Durham. The extent to which the company had outgrown this building is reflected in the square-city-block purchase and the cutting-edge modernist tower it raised as its new home (Figure 262).

African-American businessmen John Merrick, Dr. A.M. Moore, P.W. Dawkins, D.T. Watson, W.P. Pearson, E.A. Johnson, and Dr. James E Shepard had established North Carolina Mutual in 1898. Early difficulties left the company in the hands of Merrick, its first president, and Dr. Moore and his nephew, C.C. Spaulding. The success of the "triumvirate" led them to construct their first office building in 1906 and to supplant that with the building at 116 Parrish Street in 1921 (Kueber 2011c).

The best distillation and expression of the importance of North Carolina Mutual, on a variety of fronts, can be found at the closing paragraphs of the National Register/National Historic Landmark nomination for its 1921 headquarters, the North Carolina Mutual Life Insurance/Mechanics and Farmers Bank building (Greenlee 1974):



A resurgent interest in racial solidarity and black capitalism beginning in the late 1960s strengthened the financial position of the Mutual in the black community. But by far the most dramatic advance in the company's financial history came from giant white corporations, like General Motors and IBM, who contracted part of their employees group insurance with the Mutual. Between 1969 and 1972 insurance in force more than doubled from less than \$500,000,000 to more than \$1,000,000,000, making the Mutual the first black billion dollar company.

Despite its success as an American business institution, the significance of the North Carolina Mutual has very little to do with business history. The larger meaning of the Mutual rests in its ethnic identity rather than its economic identity. As a black institution it has always functioned as much more than a business and its leaders as much more than entrepreneurs. From the beginning the Mutual symbolized racial progress, and apart from Tuskegee, it stands as the most conspicuous institutional legacy of the ideas of racial solidarity and self-help. Like Booker T. Washington, the Mutual leaders came to believe that from a firm economic base they could cure social as well as economic ills, enhance racial pride, improve race relations; in short, they could solve the "race problem." With this in mind the Mutual founded a number of subordinate enterprises, including the first black newspaper in Durham, a cotton mill to provide employment for blacks who were shut out of the white mills, and a number of financial institutions in the Parrish Street complex, the "black Wall Street of America." These financial institutions grew out of the life insurance business with the more important of these institutions being the Mechanics and Farmers Bank founded in 1907 and the Mutual Savings and Loan Association founded in 1921, both of which are alive and prosperous today. Merrick and Moore were chiefly responsible for launching Lincoln Hospital in the early history of black Durham. In subsequent years the company and its leaders became increasingly involved in the social and political life of Durham, most notably in the founding and support of the Durham Committee on Negro Affairs, which since 1935 has been one of the South's most effective community....

A less measurable but equally significant dimension of the company's broad influence has been its psychological impact on the community. Blacks expected their communities to have noted preachers and educators, but a billion dollar company and internationally known black executives were beyond expectation. In a material sense the Mutual could not uplift the masses, nor does its atypical history necessarily provide a model for black economic development. Yet the Mutual has served as a monument to the race, the centerpiece of the community, a semi-autonomous institution which offers an unusually visible black counterpoise to the psychologically corrosive pattern of success and status for whites only....

The building was designated a National Historic Landmark and included in the National Register as nationally significant in 1975. The North Carolina Mutual Building under consideration here is also recommended as nationally significant (as addressed further below).

In 1964 principals of the company gathered in front of the stone wall that rimmed the Four Acres property and a billboard announcing the project (Figure 263). The board includes the project's basic, and key, information: it identifies the architects and contractor and depicts a decidedly modern building.





Figure 263. North Carolina Mutual site, executives, and construction billboard, 1964 (source: North Carolina Mutual Life Insurance Company)



The principal architect was Welton Becket, FAIA, of Los Angeles. He was supported by the Durham firm of M.A. Ham Associates, the associate architects; the New York consulting engineering firm of Seelye, Stevenson, Value & Knecht; and REA Construction Co, a Charlotte contractor. Before discussing Becket and Seelye, both of national note, a few words about REA and Ham are in order.

REA Construction of Charlotte was, as would be expected with a project of this magnitude, a prominent North Carolina contractor. The firm constructed such major North Carolina buildings as the Edward Durell Stone-designed North Carolina Legislative Building in Raleigh (1960-1962) and the Emory Roth and Sons-designed Branch Bank & Trust Building (1965), also in the capital city (North Carolina State Board of Health 1963:5; de Miranda 2007).

Marion Arthur Ham was born in Florence, South Carolina in 1898, graduated from Clemson in 1918, and began operating his own architectural firm in 1941. In 1955 his office was located in the Snow Building in downtown Durham. In the 1956 directory of the American Institute of Architects he identified his notable commissions as including the Club Boulevard School in Durham (1949), Chowan Hospital in Edenton (1950), and the [C.C.] Spaulding School and Education Building in Durham (1954-1955). The directory notes that he also served as consulting architect for North Carolina Mutual, which would have precipitated his association with Becket a decade later (American Institute of Architects 1955). The Club Boulevard School is depicted in an OpenDurham.com entry (Kueber 2010), as is a modernist house, also designed by Ham in 1950, on Vickers Avenue in Durham (Kueber 2011e). Both buildings still stand. Ham was retired by 1970 (American Institute of Architects 1970). He died the following year in Durham.



Welton Becket was born in Seattle and educated at the University of Washington and the Ecole de Beaux Arts in France. He was, perhaps, the quintessential Los Angeles architect of the mid-twentieth century. From 1932 to 1938 Becket was associated with Plummer, Wurdeman & Becket, which designed the Pan-Pacific Auditorium in 1935, a Streamline Moderne masterpiece in Los Angeles. After Christopher Plummer's death, he continued in practice with Walter Wurdeman. Among their commissions was the modernist Bullock's department store in Pasadena (1947), at which they reportedly controlled all aspects of design, from the planning, engineering, and architecture to the furniture, fixtures, and graphics (Pacific Coast Architecture Date Base website; American Institute of Architects 1956).

Following Wurdeman's death in 1949, Becket formed Welton D. Beckett & Associates, which continued to design important buildings in Los Angeles, Southern California, and the nation and, even, internationally. Becket's landmarks in the Los Angeles area include the Beverly Hilton Hotel (1953), the Capitol Records building (1956) on Sunset Boulevard, the Santa Monica Civic Auditorium (1958), Hollywood's Cinerama Dome (1963), and the Dorothy Chandler Pavilion (Los Angeles Music Center) in downtown Los Angeles (1964). His notable commissions outside of Southern California included the General Electric Pavilion for the New York World's Fair (1964), the Xerox Tower headquarters building in Rochester, New York (1967), and the Gulf Life Tower in Jacksonville, Florida, also in 1967. Among his international commissions were Hilton hotels in Havana (1958), Cairo (1959), and Manila (1968). Welton Becket died in Los Angeles in 1969 (Pacific Coast Architecture Date Base website; American Institute of Architects 1956, 1962, and 1970; Hess 2003; Online Archive of California website).

Architectural critic Alan Hess has assessed the importance of Welton Becket's architecture in Southern California and beyond. He avers (Hess 2003):

The mid decades of the twentieth century were the heyday of Imperial California. The Golden State's population swelled, its youth revolutionized the nation's commerce and culture, its entertainment industry colonized the globe, and its aerospace industry ruled the future.

Like all ascendant empires, Imperial California required an architecture to manifest its glory. No architect exceeded Welton Becket's influence in this period of expansion.

Hess notes that Becket is relatively uncelebrated amongst the Los Angeles architects of his time, perhaps because of the ubiquity of his designs and their unconscious association with the sprawling, smog-filled city Los Angeles was to become during his years there. Becket's designs were subsumed into the fabric of the city and its suburbs, losing their distinctiveness and individuality as they were endlessly copied. "What was the Becket style?" Hess asks. He provides this answer:

Modern, clean, well organized, on budget. At their best they could be as elegantly composed as a Neutra building (Parker Center) or as original as a Lautner building (the Capitol Records cylinder.) With a prolific output and an enormous staff—in the 1960s Welton Becket and Associates was the largest architecture firm in the nation—not all the office's work was as fresh or innovative as these. The daunting challenge to large scale corporate architecture in the second half of the twentieth century was to supply industry and government with the shelter and symbols they needed, while avoiding blandness and oppressive size. Welton Becket and Associates did not always escape those pitfalls. But measured by the best of their buildings, Becket's record bears comparison to any other large firm in the nation.

Seelye, Stevenson, Value & Knecht was—and, as STV, remains—a power in the field of engineering. In 2012, when it celebrated its 100th anniversary, it summarized its history on its corporate website:



Founded in 1912 in New York City by Elwyn Seelye and Albert Stevenson, Elwyn E. Seelye and Company is the oldest of STV's firms. Among the most preeminent engineering firms at the time, Seelye provided structural design services for many prominent New York architects and famous landmarks such as the Thomas Jefferson Memorial in Washington, D.C. [1938], the Coney Island Parachute Jump, N.Y. [1939], and NASA's Vehicle Assembly Building at Kennedy Space Center, Fla [1962]. Elwyn Seelye wrote the Data Handbook for Civil Engineers, a classic textbook used for decades. The firm grew to include mechanical and electrical engineering services as it added partners, eventually becoming Seelye Stevenson Value & Knecht.

A slide presentation on the company website depicts some of the firm's prominent commissions, which covered the full range of engineering challenges.

The design and engineering of the North Carolina Mutual Building are intertwined. The square building rises 12 (or by some measures, 14) stories from a wide podium. It has a regular symmetrical rhythm of seven deep horizontal trusses with recessed horizontal bands between. In vertical counterpoint, concrete piers divide each horizontal truss unit into bays and two pairs of columns are centered at each elevation, flush with the outermost surfaces of the walls. The concrete is faced with a light-colored aggregate. The *New York Times* referred to the design of the building when it opened as a "concrete honeycomb" (Fowler 1966).

The building can also be summarized in terms of its engineering as well as its design. Carl Condit (1968:250) says of it in *American Building*, which he wrote shortly after its completion:

A combination of prestressing and Vierendeel-truss walls characterizes the construction of the North Carolina Mutual Life Insurance Building at Durham, North Carolina (1964-1965)... The floors of this fourteen-story building are carried by two groups of seven separate prestressed Vierendeel trusses rather than by continuous frames extending up the full height of the structure, as in the case of the Brunswick Building. The seven pairs of trusses are on opposite sides of the building and extend the 108-foot length of the elevations. Each pair of trusses at any one level supports two floors, and all those on one side are carried in turn by two exterior columns located at the one-third points of the elevation. Since this novel system may be regarded as a set of Vierendeel-truss bridges stacked one on top of the other, it represents a union in a single work of a variety of structural developments derived from both bridge and building construction.

A Vierendeel truss or girder is an open-web truss that has no diagonals. Rather it has verticals that are rigidly connected to the top and bottom chords (Orton 1988:73). This organization allows for designs where diagonal web members are either obtrusive or undesirable. Becket made full use of the trusses' architectural potential through his rigorous exploration of horizontal and vertical lines absent any diagonals.

North Carolina Mutual's design and engineering made a splash not only in newspapers and books, but in contemporary architecture and engineering magazines (Figure 264 through Figure 267). *Engineering News-Record* described its engineering and construction in great detail on August 20, 1964, while it was being erected. It made particular note of the its use of cantilevered trusses; its slip-formed (or continuous poured) core, the construction method chosen by REA as the general contractor; its precast facades and prestressed floors; and its use of a monorail of sorts to speed erection, which it described as a "job-developed device for moving the [precast, exposed-aggregate] units to their final position." The *Architectural Record* of June 1965 also focused on the construction methods. *North Carolina Architect* ran a one-page piece in March 1966 that was placed by the Portland Cement Association. It includes a



nearly full-page photograph that notes that the building won a 1966 "First Award" in the Prestressed Concrete Institute's annual award program.

Figure 264. North Carolina Mutual under construction (source: Kueber 2011c)







Figure 265. North Carolina Mutual Building under construction with slip-formed elevator core at center (source: Kueber 2011c)



Figure 266. Looking south across Chapel Hill Street at newly completed North Carolina Mutual Building, c1966 (source: North Carolina Mutual Life Insurance Company)





Figure 267. North Carolina Mutual Building: computer room, at left, and open office space, at right, 1966 (Balthazar Korab, photographer) (source: *Progressive Architecture*, April 1966).



Progressive Architecture (1966:222-226) considered the architectural, engineering, and even symbolic aspects of the North Carolina Mutual building in 1966, after it had opened and operated for a number of months. The magazine had addressed the building in September 1965, but decided to revisit it after it had been occupied:

Since then [September 1965], the building, the most important one architecturally in the city for quite some time, has had a shakedown period of living in, and according to its occupants, is quite successful. Sociologically, of course, the building symbolizes a leap forward for Southern Negroes, a goal of possibility toward which many in poorer circumstances can now aspire. Architecturally, too, it may be said to represent a breakthrough for the office of Welton Becket, so long identified with a rather slick brand of Los Angeles-style commercial design. The North Carolina Life Insurance Company Headquarters shows Becket's office doing something it cannot be topped at—a carefully thought-out, economical, part owner-occupied, part rental-office structure. The difference here is that it is not just another competent glass-and-metal curtain-wall job. As noted in the September article, a great deal of aesthetic and technical design time and thought went into this one, and it shows.

...

Aside from being the owners of one of the state's outstanding contemporary buildings, North Carolina Mutual Life Insurance Company got a lot of building for its money; budget was \$20 per sq ft. Interiors are gracious, and boast well-done furniture from a number of the best sources. A fountain splashes in a pool in the building's base. The sandy-hued aggregate of the structure's concrete is effectively exposed outside and in, and the great precast Vierendeel trusses give the building a strength that is as visually imposing as it is symbolically significant.

The magazine quibbled with some of the design choices—the failure to hide the parking garage, the misleading emphasis on verticals within the trusses that do not fully reflect the interior spaces—but continued:

Nevertheless, this building is yet additional evidence of what has evidently become a decided trend in the past few months; the re-emphasis on design as a major factor in



architecture by many of our large, "business" firms. In Detroit, in New York, we have become aware that big and/or old-line firms notable for a steady if not-too-exciting production of buildings have suddenly started turning out some pretty exciting designs. In some cases, it is the result of hiring new talent and giving it its head... In others—and this is the way the North Carolina Mutual Life Insurance Company Building looks from here—it is the case of a wealthy, dependable outfit maturing in the design sense. A very heartening development, and one we will watch with deep interest.

The North Carolina Mutual Building was clearly an architectural and engineering landmark. In the bigger scheme of things—as Marcia Greenlee made clear in her discussion of the company's predecessor building and as Progressive Architecture understood—the building was even more powerful for its symbolism. One need only look at a contemporary issue of The Afro-American newspaper of Baltimore (Figure 268). On April 2, 1966 it devoted most of a page to the building's dedication. The stories discussed the history of the company, the architectural distinction of the building, and planned dedication activities, which were to include a one-day symposium followed, the next day, by the formal ceremony. The paper pictures some of the participants, who included North Carolina Governor Dan Moore, who was to introduce the main speaker, Vice President Hubert Humphrey (Figure 269). Dr. Andrew F. Brimmer, a member of the Federal Reserve Board, was to deliver the symposium's keynote address. This symposium featured eight seminars "on topics including government, public policy and political action; education, business and the professions; religion; literature and the Arts; the Communication field, labor and sports." Among those lined up to participate were Robert C. Weaver, the Secretary of Housing and Urban Development; John T. Connor, the Secretary of Commerce; and George L.P. Weaver, the Assistant Secretary of Labor. Ten foreign countries were to be represented at the ceremony—France, Ghana, the Republic of Guinea, India, Israel, Liberia, Malawi, the Netherlands, Nigeria, and the Philippines. The list of participants goes on and on. The significance of the North Carolina Mutual Life Insurance Company to African-Americans in Durham, Baltimore, and throughout the nation—as well as to Democrat politicians at the highest levels—is crystal clear just from a perusal of the guest list.

Figure 268. North Carolina Mutual Building dedication article in the Baltimore *Afro-American*, April 2, 1966





Figure 269. North Carolina Mutual Building dedication (source: *Ebony*, June 1966)



Description

The design and engineering of the North Carolina Mutual Building, as noted above, are intertwined (Figure 270 through Figure 279). The square building, about 120-feet on each side, holds 12 floors that rise from a wide concrete and brick-floored platform or podium. The tower's lobby and entries are set back from the edges of the building walls and platform, behind two-story-tall sheets of plate glass held together with thin, vertical, steel mullions. These transparent walls give the building the appearance of floating above the ground.

The steel-and-concrete building was originally solely anchored to the ground by the large central elevator core and two massive continuous columns at each elevation. The columns, built up from precast sections, are symmetrically placed, dividing each elevation into thirds. In ca.1990 column sections were inserted up each corner of the building—between each Vierendeel truss and at ground level—to provide additional structural support (discussed further below).

The building's walls have a pronounced horizontal and vertical emphasis. The columns and core support its most notable engineering feature: the seven 20-foot-high Vierendeel trusses that fully extend across the elevations. The trusses were built up from precast sections and, notably, post-tensioned as well. As is the nature of the Vierendeel, which by some measures is not a true truss, the trusses are formed solely of horizontal and vertical members. Becket made full use of this element in his design. The top and bottom chords of the trusses have strong horizontal edges, which are accented by concrete panels and recessed bands of windows that alternate every other floor between the taller trusses. The recessed bands are divided only by narrow mullions and accent the cantilever of the trusses. A horizontal counterpoint is provided by the full-height columns and the wide mullions dividing the windows that cross each truss.

The horizontal and vertical elements of the design provide most of its decorative finish. Their true materials are not wholly expressed, however, as all of the precast concrete panels that face the building have exposed-aggregate surfaces, a popular design element of the time. A recessed box atop the





building—also reflecting a popular design of the time, the straight-sided and flat-crowned pillbox hat—holds massive sans serif letters over each elevation that spell out the words NC MUTUAL LIFE.

The lobby is cleanly and minimally finished. Its design blurs the distinction between inside and outside. It is set within a glass box of floor-to-ceiling windows. The same brick pavers that cover the building's platform extend inside to form its floor, and the same coffered ceiling that forms its roof flows out to underpin the floating base of the building. Light-beige panels of travertine face the four walls of its elevator and service core.

The resource includes two other contemporary features. To the north front are two ground-level pools edged on the west by a long low wall covered in the same concrete aggregate as the building. It carries the words NORTH CAROLINA MUTUAL LIFE INSURANCE COMPANY, in the same sans serif font as the pillbox signage, and the company logo. The pools and sign are original and contribute to the resource.

A large, low, two-deck, concrete-and-steel parking garage extends to the southeast at the building's rear. Straightforwardly finished, it is covered with the same concrete aggregate that faces the tower. Although *Progressive Architecture* felt that the deck diminished the presence of the building when the tower was viewed over it from the south, it is intact and contributes to the resource. The remainder of the parcel is given up to landscaped lawns and additional parking.



Figure 270. North Carolina Mutual: west side and north front elevations



Figure 271. North Carolina Mutual: north front elevation with pools and sign



Figure 272. North Carolina Mutual: north front and east side elevations







Figure 273. North Carolina Mutual: east side elevation

Figure 274. North Carolina Mutual: south rear and west side elevations








Figure 276. North Carolina Mutual: view through west lobby wall









Figure 278. North Carolina Mutual: view northwest from corner of Willard and Jackson streets at parking garage and tower







Figure 279. North Carolina Mutual: view northeast at Willard Street entrance to parking garage



National Register Eligibility Assessment

The North Carolina Mutual Building is recommended as National Register eligible under Criterion A for its history. Like its National Historic Landmark predecessor headquarters built in 1921 in downtown Durham, the current tower is recommended to be nationally significant in the area of African-American Ethnic History. The same reasons apply as they did back in 1974 when Marcia M. Greenlee wrote the Landmark nomination for the earlier building. As Greenlee stated, the company's broad meaning rests in its symbolism to the black community in Durham and the nation.

Greenlee stressed that the 1921 building represented a time when African-Americans had only themselves to rely on. The 1965 headquarters building, however, stood on the cusp of increased black opportunity, which ultimately was a benefit more to the black community than to the company. In part due to increased competition opened up by expanded opportunity, the company is not the unique economic giant it was once. In 2006 it sold its home to its current owners, Legacy Tower, LLC (Durham County Deed Book 5459/Page 988), and the building currently houses only its executive suites, albeit on the top floor. But one cannot view the importance of the building—which is recommended to have a date of significance of 1964-1966, when it was designed, constructed, and opened, and when it likely had its greatest resonance—through the lens of the twenty-first century. One need only look at its dedication ceremonies to appreciate how important it was to the American black community and the local, state, and national political structure in 1966. The governor of North Carolina introduced the vice-president of the United States as the dedication's keynote speaker. The ceremonies also drew two U.S. cabinet secretaries and an assistant secretary, a member of the Federal Reserve Board, and business, academic, and military leaders from across the country, as well as representatives from ten other





nations. Hubert Humphrey spoke not to a company that was one of many in its industry, but to the leading black business in America.

The North Carolina Mutual Building is also recommended as eligible under Criterion A for its engineering. Condit (1968:250) in his standard *American Building* described its engineering advances shortly after its completion and summarized that: "Since this novel system may be regarded as a set of Vierendeel-truss bridges stacked one on top of the other, it represents a union in a single work of a variety of structural developments derived from both bridge and building construction." In September 1965, *Progressive Architecture* described the North Carolina building and another designed by Welton Becket—the Gulf Life Building in Jacksonville, Florida that was completed a year after the Mutual tower—as buildings that "take maximum advantage of precasting and are the first segmented, posttensioned concrete, high-rise buildings in the United States" (Figure 280). (The structural, mechanical, and electrical engineering services for North Carolina Mutual were provided by Seelye, Stevenson, Value & Knecht; Gulf Life's structural engineer was Richard B. Bradshaw, Inc.) It is believed the building's engineering firsts remain as landmark achievements, in spite of the ca.1990 addition of corner columns, and that it is therefore eligible under Criterion A at a national level within that area of significance.

It is also recommended that the North Carolina Mutual Building is National Register-eligible under Criterion C for the quality of its architectural design. The building is more than the sum of its Vierendeel trusses and other advanced engineering developments. The September 1965 *Progressive Architecture* story on the two landmark post-tensioned high-rise buildings designed by Becket, North Carolina Mutual and Gulf Life, makes this clear. It notes that with many of the same structural engineering baselines in place, "two widely different aesthetic expressions" were realized and that, at both buildings, "above all, the architectural and structural expression are one and the same."



Figure 280. North Carolina Mutual Building, at left, and rendering of Jacksonville's Gulf Life Building, at right; note that the curves in the buildings are due to the tight binding of the source of the images (*Progressive Architecture*, September 1965)



Working within a very similar program, Becket came up with two very different looking buildings. This clearly evidences the strong design skills he brought to North Carolina Mutual, above and beyond the building's engineering achievements. In spite of the structural retrofit of the building in ca.1990, which added sections of columns above and below each corner of the Vierendeel trusses, the building is believed to retain its integrity of design. It continues to present strong horizontal and vertical lines with no diagonal elements added anywhere. It is therefore recommended as eligible for its design under Criterion C. The building was one of a small number of modernist skyscrapers erected in North Carolina from 1958 into the mid-1960s. These included the 15-floor Wachovia Building (1958), 18-floor North Carolina National Bank Building (1961), and 14-floor Cutter Building (1961), all in Charlotte; the 21-floor



Wachovia Bank Building (1963) in Winston-Salem; the 15-story Branch Banking and Trust Company Building (1965) in Raleigh; and the North Carolina Mutual Building (Phillips 2000). North Carolina Mutual is therefore recommended as eligible for its architecture at the level of statewide significance.

North Carolina Mutual is not recommended as National Register eligible under Criterion B for its association with persons important in our history. The achievements of the founders and developers of the insurance company are more closely associated with the earlier downtown building than this building. Further, the tower does not represent the particular efforts of any individual person or persons associated with the company at the time of its construction, although company president Asa T. Spaulding (1902-1990) was a key figure in its construction. Architect Welton Becket and the engineering firm of Seelye, Stevenson, Value & Knecht were nationally known and respected in their fields, but the building is also not believed to have a sufficiently important association with them to merit listing under Criterion B. As noted above, Becket is better remembered for much more visible designs, such as the Capitol Records Building and Dorothy Chandler Pavilion in Los Angeles. Further, the house that Becket designed and in which he lived in Los Angeles in the 1930s and 1940s, which is much more closely associated with his life and work, still stands (Curbed Los Angeles website 2014). Seelye, Stevenson, Value & Knecht, as also noted above, played a role in designing numerous important structures throughout the country in the twentieth century and there is no evidence that North Carolina Mutual has a particularly notable and close relationship to their work as a firm or to any of them individually. Finally, it is unlikely that the North Carolina Mutual Building would yield any important historical information not readily available from other sources and it is accordingly not recommended as eligible under National Register Criterion D.

Proposed National Register Boundaries

The proposed National Register boundaries of the North Carolina Mutual Building are those of Durham County parcel 103343 with which it has been associated since its construction (Figure 281). They encompass approximately 3.3 acres and include the building, the decorative pools and sign on the south front lawn, and the contemporary parking deck that occupies much of the southeastern portion of the property.







3.2.11 Durham Water Tower and Valve House

1318 East Pettigrew Street, Durham, Durham County (portion of parcel 119085)

Figure 282. Durham Water Tower and Valve House



Description

Two plaques on the Valve House in front of the Durham Water Tower (Figure 282) record the construction date, contractors, and funding source for the pair of resources. The top plaque credits the Federal Emergency Administration of Public Works, its director, Harold Ickes, and President Roosevelt for the construction of the "Durham Water Works" in 1939. The lower plaque names city officials and identifies the project's contractors, Chicago Bridge and Iron Co., J.P. McGuire Const. Co., and V.B. Higgins Co.

J.P. McGuire Construction Co. was a Durham firm with offices on Markham Avenue east of Trinity Avenue (Hill Directory Company 1943). V.B. Higgins, an engineering and contracting company, was brought in from Greensboro for their special expertise in waterworks, sewers, and concrete (Hill Directory Company 1943).

The Chicago Bridge and Iron Company (CB&I) had international expertise in the design of water towers. Founded in Chicago in 1889, CB&I was known nationwide in the late nineteenth and early twentieth centuries for its design and manufacturing of bridges (CB&I website). The website of the company, which continues to operate, notes that in the early twentieth century "CB&I quickly became known for our excellent design engineering and field construction of elevated water storage tanks, aboveground tanks for storage of petroleum and refined products, refinery process vessels and other steel plate structures." In 1894 CB&I erected in Fort Dodge, Iowa its first steel-plate elevated water tower. The company website states that this tank was the first built with a full hemispherical bottom. In 1939, the same year the Durham Water Tower went up, the company erected its first spherical, all-welded, "Watersphere" elevated tank in Longmont, Colorado. It also began work in Saudi Arabia that year. In



between these dates, CB&I erected many water towers, including at least seven that are National Register-listed: the Highland Water Tower in Kansas (1914), the West Water Tower in Illinois (1928), and ones in the Arkansas towns of Hartford (1936), Hughes (1936), Monette (1936), Tryonza (1935), and Green Forest (1937) (National Register of Historic Places website; Arkansas Preservation website).

As the dates suggest, the five above-named towers built by the company in Arkansas in the 1930s were funded in part, as was the Durham Water Tower, with monies supplied by the federal government through its Depression-era New Deal program. The federal money came from either the Federal Emergency Administration of Public Works (FEAPW), established in 1933, or its successor, the Public Works Administration (PWA), established in 1939 (National Archives website). Other water towers known to have been built with FEAPW/PWA money include two that no longer stand in California, one in Fresno, the other in Torrance (Living New Deal website); at least one erected in Eugene, Oregon in 1939 (FAN History Project website); and four raised in the Arkansas communities of Cotter, Cotton Plant, Tuckerman, and Waldo in 1935, all designed by the Pittsburgh-Des Moines Steel Co., and another built in Keiser in the state to an unknown design in 1936 (Arkansas Preservation website).

The number of water towers erected with federal funds in North Carolina is not known. The University of California at Berkeley's New Deal website identifies 52 federally funded New Deal projects in North Carolina, none of which are towers. A book put out by the North Carolina Emergency Relief Administration (1935) includes photographs of three water towers. The publication is far from comprehensive in identifying individual projects and only extends through 1935, however.

The three identified North Carolina water towers erected with federal assistance between 1932 and 1935 served eastern towns—Kenansville, Faison, and Wadesboro (Figure 283). All three towns were much smaller than Durham, which in 1940 was North Carolina's third largest city (Bureau of the Census 1942). They accordingly received much smaller capacity tanks. The Durham tank was quite large for its time, holding 1.5 million gallons (Figure 284).

Figure 283. Water towers in Faison, left, Kenansville, center, and Wadesboro, right, c1935 (source: North Carolina Emergency Relief Administration, *Emergency Relief in North Carolina*, pp.198, 201)









Although the plaque on the Valve House refers to the "Durham Water Works," the tower and house are separate from the city's water works proper. The 1943 city directory locates the Durham City Water Department and pumping station on Hillandale Road at the current reservoir. It refers to the Pettigrew Street location as "City Water Dept (storage)," with water being the stored item (Hill Directory Company 1943). The water tower continues to be part of Durham's municipal water system.

Description

The 1.5-million-gallon capacity, double ellipsoidal, steel tank of the Durham Water Tower is elevated 145 feet. Tanks with ellipsoidal bottoms were first introduced in 1907 and self-supporting ellipsoidal domes followed in 1922. According to a context for steel water towers in South Dakota (Mathis and Chlebeck, 2012:36), Chicago Bridge and Iron reported in 1919 that "ellipsoidal tanks had been widely adopted by the field of municipal water works engineering largely due to their low variation of pressure, self-cleaning features, and absence of maintenance costs." The standard design of the Durham tower is apparent from a picture in a CB&I advertisement of 1939 of what looks to be a nearly identical if lower-capacity (1-million gallon) structure in Salina, Kansas (Figure 285, left).



Figure 285. Salina, Kansas 1-million-gallon capacity water tower depicted in an advertisement in *The American City*, 1939, at left, and 1.5-million gallon Durham Water Tower, 1950 (sources: eBay website, at left, and Open Durham website, at right)



The Durham water tower is held up by 12 support columns or legs set on column shoes (Figure 285, right, through Figure 291). The legs extend—perpendicular to the ground—up to the tower's 12 pairs of struts. These in turn support pie-shaped sections of steel that form the tanks ellipsoidal bottom. The top is a flattened ellipsoid that looks much like a cake-carrier cover and has no exterior braces. Angled tie rods along with support struts set parallel to the ground provide additional rigidity and support. To allow the tank to do the job for which it was built—water storage and dispensing, at pressure—a large pipe extends from the ground to the bottom of the tank at its center.

The small, boxy, flat-roofed Valve House stands just to the front (north) of the tower at Pettigrew Street. The updated Sanborn map of 1950 notes that it was built of fireproof construction with a concrete floor and roof and 12-inch-thick brick walls. It retains pairs of long original windows at its east and west side elevation. Its front elevation retains its original entryway, now holding secure replacement doors, and the two 1939 plaques. The rear wall is solid.

A comparison of the current tower with a 1950 photograph shows that minor changes have been worked at its top. A metal ring holding cell service-related antennae now circles the top and some conduit sheathes have been added to cover the thick electrical cables that service the antennae. Otherwise, the tower appears unaltered. The Valve House also retains its integrity, with its only notable change the replacement of its doors.







Figure 287. Durham Water Tower and Valve House: looking east, at left, and west, at right







Figure 288. Durham Water Tower and Valve House: looking northwest at top portion of tower; note ladder at far left



Figure 289. Durham Water Tower and Valve House: looking northwest at bottom portion of tower with Valve House at right





Figure 290. Durham Water Tower and Valve House: looking northwest at east side and south rear elevations of valve house



Figure 291. Durham Water Tower and Valve House: looking southeast at north front and west side elevations of valve house; note plaques to the left of the doors







Figure 292. Durham Water Tower and Valve House: eastern portion of parcel

National Register Eligibility Assessment

The Durham Water Tower and Valve House is recommended as eligible for National Register listing for the same reasons the multiple towers in Arkansas were accepted for listing: the resource is significant under Criterion A for its association with the activities of the Federal Emergency Administration of Public Works in Durham. Through the programs of the FEAPW and its successor, the Public Works Administration, North Carolina's water supply and sewage systems were upgraded or, in some instances, provided for the first time to communities. While serving the communal needs of towns, the activities of the agencies also created jobs for individuals, such as those given to the workers of the J.P. McGuire Construction Co. of Durham and the V.B. Higgins Co. of Greensboro, who built the tower and house. The tower is also recommended as National Register-eligible under Criterion C as an excellent, and unusually large, example of a 1930s-era water tower. The resource has no known connection with significant persons and is unlikely to yield important information not readily available from other sources. It is therefore not recommended as National Register eligible under Criteria B or D. Its period of significance is recommended as 1939, the year both the Water Tower and Valve House were constructed.

Proposed National Register Boundaries

The recommended boundaries of the Durham Water Tower and Valve House are the western third of parcel 119085. These boundaries, within which the tower and house stand, encompass approximately 0.4 acres of the 1.2-acre parcel. The boundaries are drawn to include acreage historically associated with the resource, which is fenced off and maintained within the larger parcel and retains its integrity.





They exclude the eastern two-thirds of the parcel, which has been heavily disturbed and is used by Durham to store gravel and other materials (Figure 292 and Figure 293).

Figure 293. Proposed National Register boundaries of the Durham Water Tower and Valve House outlined with dashed red lines (parcel boundary is outlined in blue) (source: Durham County tax maps)







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Appendices

Appendices



Appendix A: Resources Inventoried at Reconnaissance Level

See separate Appendix A Architectural Historical Survey for Durham-Orange Light Rail Project, Durham and Orange Counties, North Carolina



Appendix B: Resume of Principal Investigator

See separate Appendix B Resume of Principal Investigator for Architectural Historical Survey for Durham-Orange Light Rail Project, Durham and Orange Counties, North Carolina