



North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

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Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

December 22, 2017

MEMORANDUM

TO: Vanessa Patrick
Human Environment Unit
NC Department of Transportation

FROM: Renee Gledhill-Earley *Renee Gledhill-Earley*
Environmental Review Coordinator

SUBJECT: Ramp Improvements at I-40 and NC 54 Interchange, Raleigh, I-5873, PA 17-07-0003,
Wake County, ER 17-2876

Thank you for your November 21, 2017, memorandum transmitting the Historic Structures Survey Report for the above-referenced undertaking. We have reviewed the report and offer the following comments.

We concur that the Aeroglide Corporation Building (WA6512) is eligible for listing in the National Register of Historic Places under Criterion C for Engineering and Architecture. The proposed boundaries appear to be appropriate.

We also concur that the Ephesus Baptist Church and Cemetery (WA0956) are not eligible for the National Register for the reasons outlined in the report.

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

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

cc: Mary Pope Furr, NCDOT, mfurr@ncdot.gov



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION



ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

To: Renee Gledhill-Earley, NCHPO

ER 17-2876
H CRB 12/18

From: Vanessa E. Patrick, NCDOT

Date: November 21, 2017

Due 12/20/17
ERle Hers
12/21/17

Subject: *Historic Structures Survey Report for I-5873, Ramp Improvements at I-40 and NC 54 Interchange in Raleigh, Wake County, North Carolina. WBS No. 53074.1.1. PA Tracking No. 17-07-0003*

The North Carolina Department of Transportation (NCDOT) is conducting planning studies for the above-referenced project. Enclosed for your review is a report presenting the evaluation of historic architectural resources in the I-5873, Wake County project area (one hard copy and three CD-ROMs). Survey photographs, GIS data, and site forms are provided on the CD-ROMs, and hard copies of the photographs, site forms, and APE and property boundary maps are also supplied.

The report considers two resources – one industrial building and a church and cemetery. The study recommends the Aeroglide Corporation Building (WA6512) as eligible and the Ephesus Baptist Church and Cemetery (WA0956) as not eligible for listing in the National Register of Historic Places. Initial screening of the I-5873 project area by NCDOT Historic Architecture identified which resources warranted additional study.

We look forward to receiving your comments on the report. Should you have any questions, please do not hesitate to contact me at vepatrick@ncdot.gov or 919-707-6082. Thank you.

V.E.P.

Attachments

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HISTORIC STRUCTURES SURVEY REPORT

**RAMP IMPROVEMENTS AT I-40 AND NC 54 INTERCHANGE
RALEIGH, WAKE COUNTY, NORTH CAROLINA**

**TIP No. I-5873
WBS No. 53074.1.1**

Prepared by:

**Mattson, Alexander and Associates, Inc.
2228 Winter Street
Charlotte, North Carolina 28205**

Prepared for:

**North Carolina Department of Transportation
Human Environment Section
Raleigh, North Carolina**

and

**WSP USA
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8 November 2017

HISTORIC STRUCTURES SURVEY REPORT
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MATTSON, ALEXANDER AND ASSOCIATES, INC.

Frances P. Alexander

8 November 2017

Frances P. Alexander, M.A.

Date

Richard L. Mattson, Ph.D.

Date

North Carolina Department of Transportation

Date

MANAGEMENT SUMMARY

The North Carolina Department of Transportation (NCDOT) is undertaking ramp improvements at the interchange of I-40 and NC 54 in Raleigh, Wake County (TIP No. I-5873). NCDOT architectural historians conducted a reconnaissance-level review of the area of potential effects (APE) and identified two properties—the Aeroglide Corporation Building (WA6512) and Ephesus Baptist Church and Cemetery (WA0956)—that required intensive-level investigation to determine National Register eligibility. This report contains the eligibility evaluations for these two resources. The project location is depicted in **Figure 1**, and the APE boundary is shown in **Figure 2**.

This architectural resources investigation consisted of background research into the historical and architectural development of the study area and a field survey of the APE. The principal investigators surveyed the entire APE, defined as the geographic area or areas within which a project may cause changes to the character or use of historic properties, if any such properties exist. The APE for this project follows the road right-of-way for both I-40 and NC 54 except where the boundary extends into the tax parcels for Aeroglide Corporation Building and Ephesus Baptist Church and Cemetery. The APE equates with the study area established for this project.

In-depth field investigations of the two properties were undertaken in October 2017. Ephesus Baptist Church and Cemetery were surveyed originally in 1989 but not added to the Study List during that county-wide survey. The intensive-level evaluation contained within this report does not recommend the church and cemetery for National Register eligibility. Aeroglide Corporation Building has not been previously surveyed, and the principal investigators recommend the property for eligibility as a result of the current survey (**Table 1**).

Table 1

Property Name	PIN	Survey Site Number	Eligibility Recommendation	Criteria
Aeroglide Corporation Building	774435032	WA6512	Eligible	C
Ephesus Baptist Church and Cemetery	0774512986	WA0956	Not Eligible	N/A

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I. INTRODUCTION

This eligibility report was prepared in conjunction with the North Carolina Department of Transportation (NCDOT) project entitled, *Ramp Improvements at I-40 and NC 54 Interchange*. The TIP Number is I-5873, and the WBS Number is 53074.1.1. As shown in **Figure 1**, the project is located in Raleigh, Wake County.

The area of potential effects (APE) for this project follows the road rights-of-way along both I-40 and NC 54 except where the boundary extends into the tax parcels for the Aeroglide Corporation Building and Ephesus Baptist Church and Cemetery. The APE equates with the study area established for the project. Aeroglide Corporation Building and Ephesus Baptist Church and Cemetery are the only two resources within the APE that warranted intensive-level investigation (**Table 1**). The two are shown on the APE map (**Figure 2**).

This investigation was conducted to evaluate the two properties for National Register eligibility. The current evaluation of eligibility report is part of the environmental studies undertaken by NCDOT and is on file at NCDOT, Raleigh, North Carolina. This documentation complies with the National Environmental Policy Act (NEPA) of 1969, the National Historic Preservation Act of 1966, as amended (36 CFR 800), the National Register criteria set forth in 36 CFR 61, and NCDOT's current *Historic Architecture Group Procedures and Work Products*. The report also complies with the *Report Standards for Historic Structure Survey Reports/Determinations of Eligibility/Section 106/110 Compliance Reports in North Carolina* established by the North Carolina Historic Preservation Office (HPO). Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effect of federally funded, licensed, or permitted projects on properties listed in, or eligible for listing in, the National Register of Historic Places and to afford the Advisory Council on Historic Preservation and the North Carolina Historic Preservation Office a reasonable opportunity to comment.

The eligibility evaluations consisted of research into the history and architecture of the resources and a field survey of each. For the research phase, both primary and secondary sources were examined. The sources consulted included published architectural histories, deeds, and the HPO survey files for Wake County. A windshield survey was conducted to identify surviving examples of rural and small-town churches in Wake County that were comparable to Ephesus Baptist Church. In addition, modernist industrial buildings of the postwar era were located and surveyed as comparisons with the Aeroglide Corporation Building.

Field work took place in October 2017. The principal resource, and any auxiliary buildings and landscape features, were examined and documented with photographs to assess the level of current integrity. The current tax parcels for each property are shown on site plans accompanying the evaluations (**Figures 4 and 7**).

Table 1

Property Name	PIN	Survey Site Number	Eligibility Recommendation	Criteria
Aeroglide Corporation Building	774435032	WA6512	Eligible	C
Ephesus Baptist Church and Cemetery	0774512986	WA0956	Not Eligible	N/A

Figure 1
Project Location Map

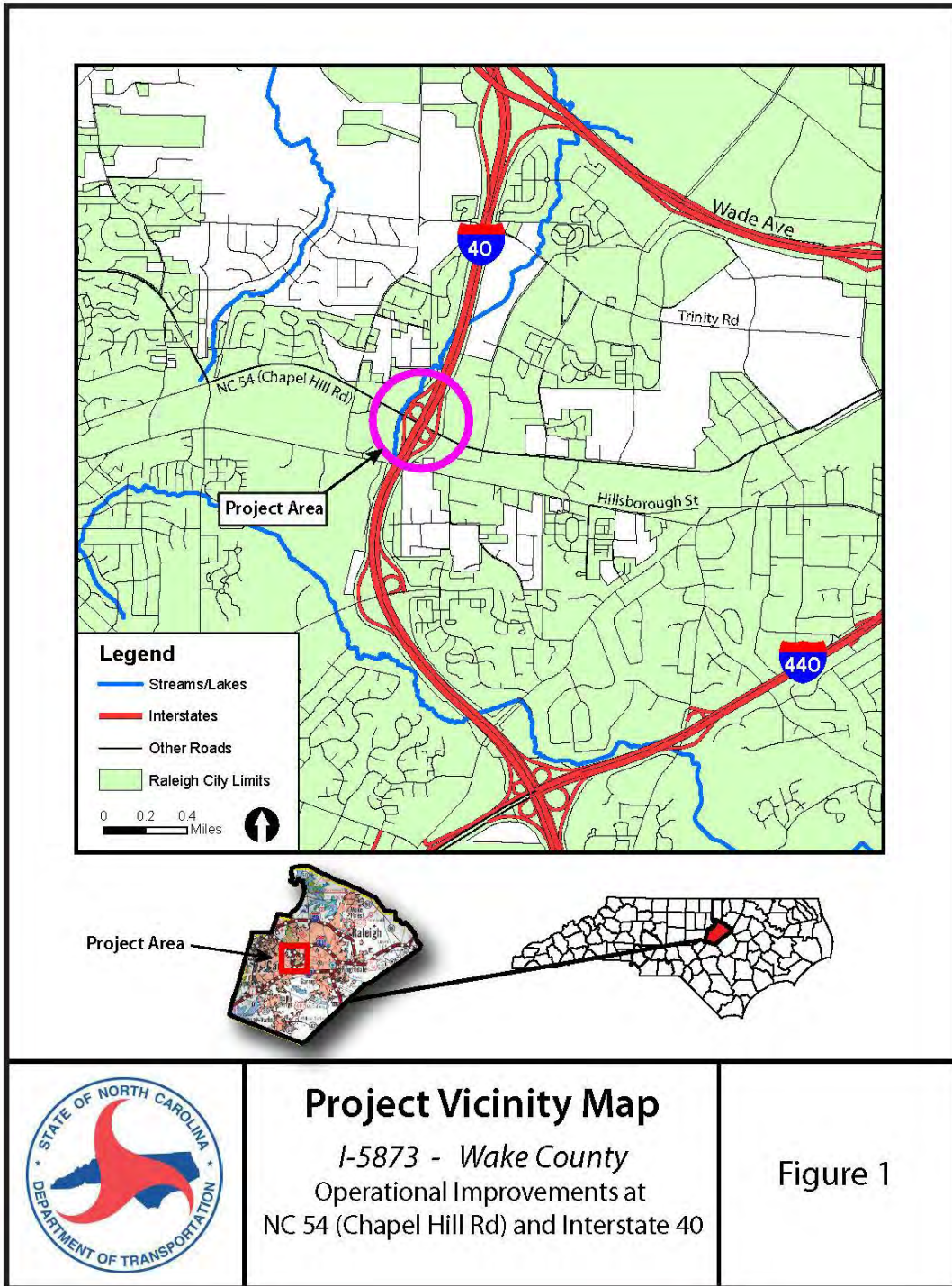


Figure 2

Area of Potential Effects (APE) Map



II. PROPERTY EVALUATIONS OF ELIGIBILITY

Aeroglide Corporation Building (WA6512) (PIN 774435032)

100 Aeroglide Drive
Cary, Wake County

Date of Construction: 1964

Eligibility Recommendation: Eligible



Physical Description

The 1964 Aeroglide Corporation Building occupies a ten-acre tract amidst other manufacturing and distribution facilities on the eastern outskirts of Cary in Wake County. Strips of woodland buffer the building from I-40 to the east and the Norfolk Southern Railway to the south. A driveway along the west side leads to the west-facing entrance and a large, paved parking lot on the north side of the property. A paved drive provides vehicular access to the loading areas on the east side of the building. A former spur line—now a paved driveway—leads from the rail corridor through a loading bay into the south end of the building.

This Modernist, two-story, manufacturing and distribution plant is most notable for its distinctive hyperbolic paraboloid roof that is constructed of reinforced concrete. The roof consists of a series of sweeping hyperbolic paraboloids created by thirty-six, thin-shelled, conical sections. Each section measures forty-seven feet square and just two-and-a-half inches thick, and each is supported by a single, reinforced-concrete column. As hyperbolic paraboloids, the roof sections gain strength through their shapes with the curved planes reducing the tendency of structural forms to buckle in compression.

The hyperbolic paraboloid roof caps the rectangular building which has modular walls formed by a grid of slightly recessed, pre-cast concrete squares arranged in three rows across the façade (west elevation) and side (north and south) elevations. The façade has original fixed-light, aluminum-sash windows in alternate squares (bays) on the upper story which provide light to the offices. The main entrance is situated in the northernmost bay of the west elevation. The aluminum-sash, double-leaf, glazed doors and flanking lobby windows are sheltered by a broad, flat-roofed, reinforced-concrete porch with flared columns and exposed girders. In the center bay of the façade is a smaller entrance consisting of a single-leaf, aluminum-sash, glazed door sheltered by a gable-roofed porch with metal supports. The company name, “Aeroglide,” appears in large, metal lettering on the upper levels of both the façade and the east elevation. The signage is original.

The rear section of the side (north) elevation and the rear (east) elevation are sheathed in metal siding with large truck bays leading into the production and distribution areas of the building. In 1997, a flat-roofed, steel-framed, metal-sheathed wing was added to the northeast corner which expanded the manufacturing capacity of the facility. The original metal walls on the north and east sides appear to have been replaced at that time to match the siding on the modern addition.

The interior of the Aeroglide plant is well preserved. The main lobby, in the northwest corner of the building, has original terrazzo flooring, wood-paneled walls that are now painted, and reception

desk. The only interior alteration is the dropped, acoustic-tile ceiling. The lobby opens into an office area served by a double-loaded, north-south corridor with original wood-paneled walls, wood doors, terrazzo flooring, interior windows, and fluorescent ceiling lights. Most of the building, east of the offices, is occupied by the large, open production area that also contains the original wood-paneled employees' break room. The production room has concrete flooring, the exposed, hyperbolic paraboloid roof, and rows of reinforced-concrete columns that are topped by exposed concrete ribs supporting the roof sections. The columns were also cast with integrated, concrete brackets that support the steel traveling cranes. Numerous loading bays with roll-up doors are found on the north, east, and southwest sides of the building. The interior of the 1997 production and distribution wing has concrete flooring and steel roof trusses.

In addition to paved parking areas and driveways, the site includes a one-story, metal-sided shed that stands on the east side of the property and is separated from the plant by a driveway. Although this area was inaccessible to the principal investigators, tax records show that the shed was built in 1964.



Aeroglidge Corporation Building, Façade (West Elevation), Looking South.



Aeroglide Corporation Building, Façade (West Elevation), Looking Northwest.



Aeroglide Corporation Building, Main Entrance, Looking East.



Aeroglidge Corporation Building, West and South Elevations, Hyperbolic Paraboloid Roof and Former Spur Line Entrance, Looking East.



Aeroglidge Corporation Building, South Elevation Showing Original Aeroglidge Sign, Looking Northeast.



Aeroglide Corporation Building, North Elevation of Production Area (Office Section on Right), Looking Southwest.



Aeroglide Corporation Building, North Elevation of Office Section, Looking Southwest.



Aeroglide Corporation Building, North Elevation of 1997 Addition (Left), Looking Southwest.



Aeroglide Corporation Building, Interior, Lobby.



Aeroglide Corporation Building, Interior, Office Corridor.



Aeroglide Corporation Building, 1964 Production Room.



Aeroglide Corporation Building, 1964 Production Room, Ceiling and Structural System.



Aeroglide Corporation Building, Interior, Employees' Break Room.

Historical Background

Aeroglide Corporation was established on West Jones Street in Raleigh in the 1920s by entrepreneur, W. Broadus Wilson. Originally, the company engaged in a variety of commercial ventures, including the production of a children's toy airplane called the Aeroglide. By the late 1930s, the Raleigh city directories indicate that Aeroglide was solely manufacturing an insulation used to seal out moisture during food and feed processing. In 1940, Wilson and several other investors established American Potato Dryers, Inc. which used the Aeroglide facility to manufacture dehydrators for processing sweet potatoes. The business soon relocated to a larger facility at 510 Glenwood Avenue, and in 1953, American Potato Dryers became known as Aeroglide. In the ensuing years, the company expanded dramatically, primarily under the direction of James F. Kelly, a graduate of the School of Engineering at North Carolina State College (now University). Aeroglide Corporation began producing a range of industrial roasters, toasters, dryers, and coolers for the food industry, and new Aeroglide manufacturing and distribution plants were opened in Emporia, Kansas, and Orlando, Florida. In 1959, the Raleigh facility became the first producer of charcoal briquette dryers in the United States and the largest supplier of such equipment. Aeroglide continued to innovate in drying equipment, becoming the first to manufacture a two-pass pet food dryer in 1963, a three-pass pet food dryer in the 1990s, an impingement toaster in 2002, and a hot-air dryer for snack products in 2010 (www.ncchamber.net/made-nc-spotlight-buhler-aeroglide; www.buhlergroup.com; Raleigh City Directories 1922-1942; Wake County Corporation Book: 364).

As production expanded in the postwar era, the company needed a larger manufacturing and distribution plant with access to major transportation arteries on the west side of Raleigh. In 1959, Aeroglide purchased its current tract in suburban Cary Township. Work began on the new building in the winter of 1964, and the Modernist building was opened in the fall of that year. Although the identity of the architect has not been confirmed, the Aeroglide Corporation file on the construction of the building states that the designer was a North Carolina State College, School of Design professor who taught the course, Strength and Materials. Thus the architect appears to have been Mehmet "Nick" Uyanik (1916-1997), a Turkish civil engineer who taught structural engineering at the School of Design during that period. The building contractor was J.H. Thompson Company of Raleigh, a family-owned construction business that was started in 1923 and remains in operation. A large fabrication wing was added to the east elevation of the plant in 1997 to accommodate the company's continued growth and new product lines (Michael T. Southern Interview 2017; Aeroglide Corporation Files; www.jmthompsonco.com; Krystal Anderson Interview 2017).

In June 2008, Aeroglide was bought by the Bühler Group, a manufacturer of food-processing equipment based in Uzwil, Switzerland. Following the acquisition, the company was reorganized as Bühler Aeroglide. With approximately 240 workers, the company currently produces industrial roasters, toasters, coolers, and other drying equipment for food, feed, and industrial products. The company distributes its products worldwide (Wake County Deed Book 1353: 213; www.buhlergroup.com).

National Register Criteria Evaluation

For purposes of compliance with Section 106 of the National Historic Preservation Act (NHPA) the Aeroglide Corporation Building is recommended **eligible** for the National Register under Criterion C for engineering and architecture.

Integrity

The 1964 Aeroglide Corporation Building retains the seven aspects of integrity needed for National Register eligibility. The building stands on its original site oriented to the Norfolk Southern Railway (originally the Seaboard Air Line Railway) and major roadways and thus retains its integrity of location and association with strategic transportation routes. Built on the border between Cary and Raleigh, the property retains its suburban setting and feeling. The building also retains its integrity of design, materials, and workmanship. The large, mid-century manufacturing facility survives remarkably intact, displaying its original Modernist style and an innovative structural system that featured the distinctive hyperbolic parabolic roof design. The modular system of concrete panels used for the exterior walls remains well preserved, and the grid of panels is punctuated only by original aluminum-sash windows. The Modernist entrance, executed in concrete, and the secondary office entrance also survive in original condition. The production areas are indicated by utilitarian metal walls and large loading bays. Although the metal wall covering is modern, the sheathing is an in-kind replacement for the original. The fabrication wing added to the east side is also a utilitarian, metal-framed and metal-sided building that does not detract from the original design and function of the manufacturing plant. The interior of the building is well preserved with original lobby, offices, and production areas. The wood walls and doors, interior windows, and terrazzo floors all date to 1964 as do the concrete columns, with their roof ribs and integrated brackets, and the exposed roof sections in the production area. The dropped acoustical-tile ceilings in the administration section of the building are the only interior addition or alteration, and the original ceilings survive underneath the later modification.

Criterion A

The Aeroglide Corporation Building is recommended **not eligible** under Criterion A. To be eligible under Criterion A, the property must retain integrity and must be associated with a specific event marking an important moment in American prehistory or history or a pattern of events or historic trend that made a significant contribution to the development of a community, a state, or a nation. Furthermore, the property must have existed at the time and be documented to be associated with the events. Finally, the property's specific association must be important as well (National Park Service, *National Register Bulletin 15: 12*).

The Aeroglide Corporation Building is not eligible under Criterion A because it is not associated with a specific event or patterns of events that make a significant contribution to the industrial development of Raleigh and Wake County in the postwar period.

Criterion B

The Aeroglide Corporation Building is **not eligible** for the National Register under Criterion B (Person). For a property to be eligible for significance under Criterion B, it must retain integrity and 1) be associated with the lives of persons significant in our past, i.e. individuals whose activities are demonstrably important within a local, state, or national historic context; 2) be normally associated with a person's productive life, reflecting the time period when he/she achieved significance; and 3) should be compared to other associated properties to identify those that best represent the person's historic contributions. Furthermore, a property is not eligible if its only justification is that it was owned or used by a person who is or was a member of an identifiable profession, class, or social or ethnic group (National Park Service, *National Register Bulletin 15: 14*).

The property is not eligible under Criterion B because it is not associated with individuals whose activities were demonstrably important within a local, state, or national historic context.

Criterion C

The Aeroglide Corporation Building is **eligible** for the National Register under Criterion C (design/construction). For a property to be eligible under this criterion, it must retain integrity and either 1) embody distinctive characteristics of a type, period, or method of construction; 2) represent the work of a master; 3) possess high artistic value; or 4) represent a significant and distinguishable entity whose components may lack individual distinction (National Park Service, *National Register Bulletin 15*: 17).

The Aeroglide Corporation Building is recommended eligible under Criterion C in the areas of architecture and engineering. Displaying a distinctive hyperbolic parabolic roof, Aeroglide stands out among the few well-preserved Modernist industrial buildings remaining in Wake County. Postwar Modernism took root in Wake County and North Carolina with the 1948 formation of the School of Design at North Carolina State College. The dean of the new school, Henry Kamphoefner, and other faculty members were important proponents of the Modernist movement, not only designing local examples of the new style but also training classes of fledgling architects. By the 1950s and into the 1960s, Wake County employed a host of architects and building contractors creating a range of building types that expressed Modernist features (Little 2006: 13-17).

Erected in 1964, the Aeroglide Corporation Building exemplifies the tenets of Modernism in its consciously unadorned exterior and bold use of modern materials and innovative design ideas. The building's reinforced and precast concrete surfaces, aluminum window and door frames, flared entry columns, and innovative hyperbolic paraboloid roof design coincided with Modernism's application of technological innovations and machine-smooth aesthetic. The new style was widely used for institutional, commercial, and industrial buildings where its often graphic quality as well as new forms and materials symbolized the optimism of the postwar era. The smooth, clean lines of exteriors, without extraneous ornamentation and historical references, conveyed progressive thinking while expressing function and efficiency. For industrial construction, exemplified by the Aeroglide manufacturing plant, Modernism's bold designs, bright, open interiors, and often suburban settings presented a sharp contrast to the dark, urban factories of the early twentieth century and were more appealing to employees at a time when competition for workers was high. With an often stark geometry and absence of intricate adornments, the Modernist mode was also relatively inexpensive and quick to build. This ease in construction allowed builders to meet the demand for new factories and distribution facilities during the prosperous years of the 1950s and 1960s (Trachtenberg and Hyman 1986: 534; Little 2006: 11-12; 35-36).

The Aeroglide Corporation Building is particularly noteworthy for its novel hyperbolic paraboloid roof. Nationwide, the postwar period was an era of experimentation in materials, construction, and design. Architects and engineers adapted the hyperbolic paraboloid roof for a variety of factories, warehouses, and residences. The hyperbolic paraboloid roof derived its strength through shape rather than massing with bracing in two directions. At Aeroglide, the curved conical roof sections were hyperbolic paraboloids that achieved exceptional strength and reduced the tendency of flat roofs to buckle in compression. The hyperbolic paraboloid roof type was promoted in the professional journals as both versatile and economical, minimizing the use of materials and allowing for a range of designs. For example, a 200-square-foot building could be roofed using only

a single column and a one and one-half inch, reinforced-concrete slab (www.concreteconstruction.net/TheHyperbolicParaboloid; Strode and Donald 1958; www.designingbuildings.co.uk/wiki/Hyperbolic_paraboloid_in_construction).

Although buildings with hyperbolic paraboloid roofs were never widely constructed in postwar North Carolina or the United States as a whole, among the nation's most extraordinary and celebrated examples is J. S. Dorton Arena (WA0012) (National Register 1973) in Wake County. Constructed between 1950 and 1952, the expansive pavilion at the North Carolina State Fair Grounds was designed by emigre Polish architect, Matthew Nowicki, who had come to Raleigh as a faculty member at the new School of Design. The daring, Modernist design features a great "saddle dome" interpretation of the hyperbolic paraboloid roof in which the roof was supported by cables suspended between sweeping, concrete parabolic arches. This ingenious construction allowed for a vast, uninterrupted interior space. Dorton Arena earned widespread professional recognition, and its stunning, saddle-shaped roof was emulated worldwide. Among its prestigious awards were the First Honor Award by the American Institute of Architects and the Gold Medal in Engineering by the Architectural League of New York. In 1957, a model of the arena was featured at the Milan International Exposition of Modern Decorative and Industrial Arts and Modern Architecture (Bishir and Southern 2003: 77, 106, 129-130).

Reporting on the construction of the Aeroglide Corporation Building, which was under way in February 1964, the *News and Observer* in Raleigh interviewed Aeroglide president, James F. Kelly (**Figure 3**). He praised the unusual hyperbolic paraboloid roof as the design of the future for operations that demanded open production and distribution areas. Kelly stated that the new roof design was used widely in Latin American countries, but adoption in the United States had been slow. Besides being eye-catching, stated Kelly, the design was practical. Covered with an especially thin shell of concrete, the hyperbolic paraboloid roof allowed for generous overhead clearance and a minimum number of support columns. Not incidentally, the use of reinforced concrete also lowered the cost of fire insurance (*News and Observer* 25 February 1964; Aeroglide Corporation Construction Files).



Figure 3. Aeroglide Corporation Building Under Construction. Source: *News and Observer* (Raleigh, North Carolina), February 23, 1964.

Today, the Aeroglide Corporation Building is one of just a few substantially intact Modernist manufacturing buildings in Wake County. The 2006 architectural survey report, *The Development of Modernism in Raleigh, 1945-1965*, identified only two postwar industrial buildings for the Study List: the 1962 Corning Glass Works (WA4529), demolished in 2016, and the Peden Steel Plant (WA4503). The Peden Steel Plant, located at 1815 Capital Boulevard, was built in 1956 in York Industrial Center, Raleigh's first postwar industrial park, and its administrative wing was constructed in 1962 from a design by Raleigh architect, Leif Valand. The well-preserved, Modernist administrative section features a flat roof, an office façade with prominently exposed steel beams, and notable rear and side elevations displaying steel-sash ribbon windows, exposed staircases, and canopied entries. In the vicinity of the Peden Steel Plant, the principal investigators for the present report identified the well-preserved Electro Switch Corporation Building (1956) that was also built in the York industrial Center. Erected for American Machine and Foundry Corporation of New York, the facility began as a one-story, steel-framed building designed by Leif Valand as a research facility. Located at 2010 Yonkers Road, the original building was expanded for Exide Corporation, and the extant, red-brick building illustrates postwar Modernism in its low-slung, flat-roofed form, horizontal emphasis, steel-sash ribbon windows across the long façade, and the V-shaped geometry of its entrance porch. A sweeping lawn buffers the building from the highway and celebrates the plant's suburban setting.



Peden Steel Plant (1956 and 1962), Administrative Wing, Rear and Side Elevations, Looking West.



Electro Switch Corporation Building (1956), Office Facade, Looking Southeast.

Criterion D

Aeroglide Corporation Building is **not eligible** for the National Register under Criterion D (potential to yield information). For a property to be eligible under Criterion D, it must meet two requirements: 1) the property must have, or have had, information to contribute to our understanding of human history or prehistory; and 2) the information must be considered important (National Park Service, *National Register Bulletin 15*: 21).

The property is not eligible under Criterion D because it is not likely to yield any new information pertaining to the history of building design or technology.

National Register Boundary Description and Justification

The proposed National Register boundary for the Aeroglide Corporation Building has been drawn according to the guidelines of National Register Bulletin 21, *Defining Boundaries for National Register Properties*.

As shown on the accompanying map (**Figure 4**), the National Register boundary conforms to the current tax parcel on the east, west, and north sides. On the south side, the tax parcel line extends through the south end of the building, and therefore, the proposed National Register boundary has been extended south to encompass the entire building and roughly twenty-five feet of setting. The proposed southern border follows an east-west driveway that leads from the main entrance to the site around to the east side of the plant. The proposed National Register boundary encompasses roughly 10.5 acres within which are the Aeroglide Corporation Building, the principal resource, the 1964 storage shed, and the surrounding parking lots, loading areas, and driveways that are historically associated with this manufacturing plant. The proposed National Register boundary (and the tax parcel line) follows the right-of-way along I-40 although the southern boundary line extends into the railroad right-of-way.

Figure 4
Aeroglide Corporation Building
Site Plan and Proposed National Register Boundary



Ephesus Baptist Church and Cemetery (WA0956) (PIN 0774512986)

6767 Hillsborough Street
Raleigh, Wake County

Date of Construction: 1927, 1954, 2007
Eligibility Recommendation: Not Eligible

Physical Description (Figure 7)



Ephesus Baptist Church and its associated cemetery occupy a 4.92-acre tract on the south side of Hillsborough Street on the western outskirts of Raleigh. The church tract is bounded to the west by I-40, and the wooded right-of-way buffers the church from the highway. The Norfolk Southern rail corridor parallels the north side of Hillsborough Street. The church property encompasses a sizable, paved parking lot on the west side of the church and a smaller lot on the east side. The main section of the cemetery lies on the west side of the paving lot with a smaller graveyard located on the east side. A baseball field occupies the southwest corner of the property. The brick-veneered church is comprised of the 1927 main block, a 1954 education wing to the rear, and a prominent vestibule and porte-cochère (2007) that was added to the front (north) elevation. A freestanding, three-story, brick-veneered education building (1964) stands just south of the church and is connected to the 1954 education wing by an enclosed breezeway.

Church and Education Building

The 1927 gable-front main block of the church has a rectangular form and five-bay side (east and west) elevations filled with Gothic-arched, stained-glass windows with tracery. A rendering of the 1927 church shows that the original façade featured a Colonial Revival, flat-roofed porch, Gothic-arched windows, and a rosette window under the gable (**Figure 5**). In 1954, the church was expanded with the addition of the rear education wing, the now vinyl-sided steeple, and an articulated vestibule with a slightly recessed, Gothic-arched entrance bay. The 1954 changes were also depicted in a rendering which is shown in **Figure 6**. The original stained-glass windows were saved and reinstalled to flank the new entrance, but the porch and rosette window were removed during this remodeling. During a series of renovations undertaken in 2007, the vestibule was enlarged, and a substantial, gable-front porte-cochère was added to the front. The new entrance to the vestibule now has modern, double-leaf doors capped by a broken pediment. The original stained-glass windows that had been reused with the 1954 vestibule were again installed to flank the modern entrance. The large porte-cochère was designed to be deep enough for two lanes of car traffic to pass in front of the church entrance. On the north end, the porte-cochère is supported by an arcade of three Gothic-arched openings topped by a circular, stained-glass window under the gable.

The nave of the church has a two-aisle plan with wooden pews and chancel furniture installed during the 1954 remodeling. The Gothic-style, brass, pendant light fixtures, wainscoting, molded chair rail, and coffered ceiling also may have been installed in 1954. (Church staff members did not know the dates of these features.) In 2007, the original center entrance to the nave was closed, and a sound booth—framed by wooden pilasters and piers that join the coffered ceiling—was installed in this location. A modern, single-leaf door on the east side of the sound booth now leads from the enlarged vestibule to the nave.



Figure 5. Ephesus Baptist Church, 1927 Rendering of Church. Source: Ephesus Baptist Church.

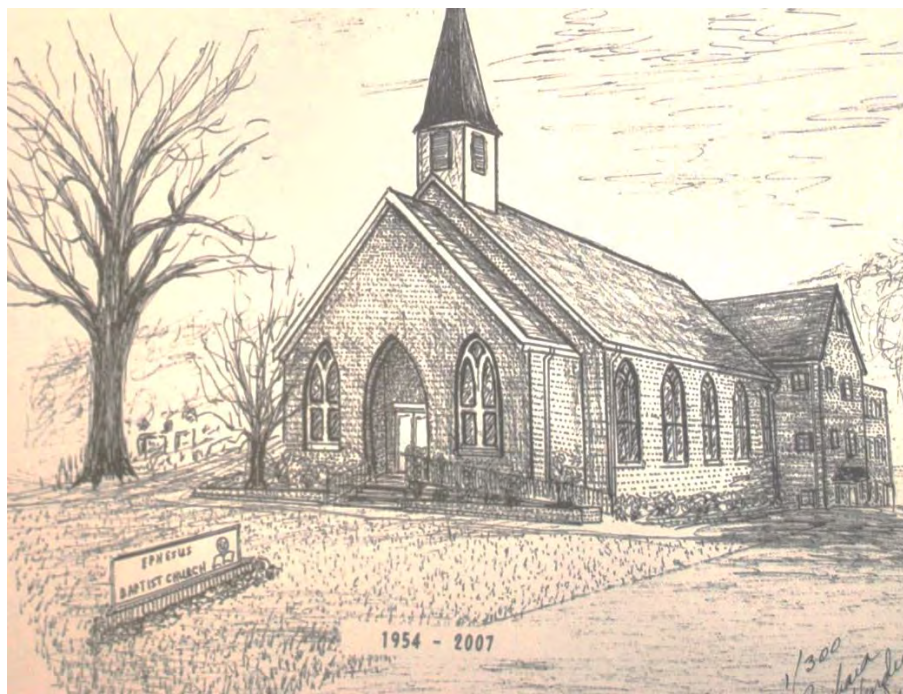


Figure 6. Ephesus Baptist Church, 1954 Rendering of Church. Source: Ephesus Baptist Church.

The rear education wing (1954) is a two-story, side-gable addition with brick exterior, steel-sash casement windows, and rectangular vents under the gables. Constructed into a sloping site, the two-story wing accommodates a raised lower level for additional classrooms and an entrance on the west side. Opening onto an exterior stairwell with a steel railing, the wood-paneled door has an original glazed upper section and is sheltered by a hipped canopy. The interior contains classrooms, a library, and offices arranged along double-loaded corridors. The six-panel doors and moldings match those found inside the nave.

An elevated, glass-enclosed breezeway links the 1954 wing to the 1964 education building. The 1964 building is an unadorned, flat-roofed building with horizontal-sash windows which were enclosed on the north elevation to accommodate a later passenger elevator shaft. The interior has original exposed concrete-block walls, aluminum stair railings, wood doors, and both terrazzo and original linoleum floors.

Cemetery

The cemetery consists of three separate groups of headstones on both sides of the church. The principal section of the cemetery is located on the west side of the tract, separated from the church by the main parking lot. This graveyard contains roughly 120 headstones as well as unmarked grave sites, and the stones are oriented east-west in the Christian tradition. Although the earliest of the stones date from the 1870s, the majority were erected during the middle decades of the twentieth century, reflecting the growth of the congregation during the period. The headstones are made of granite or marble primarily and executed in a variety of traditional and nationally popular designs that include rounded and square tablets, obelisks, and mass-produced, polished-granite monuments. A much smaller collection of similar markers—about twenty headstones—also lie just west of the church but on the east side of the main parking lot. A third grouping of about fifty markers stands east of the church.



Ephesus Baptist Church, Overall View Showing 2007 Porte-Cochère, Looking South.



Ephesus Baptist Church, Overall View From Parking Lot Showing Porte-Cochère, West Elevation of 2007 Vestibule, 1927 Church, and 1954 Education Wing. Looking East



Ephesus Baptist Church, Overall View, West Elevation, Looking East From Main Cemetery.



Ephesus Baptist Church, 1927 Church Windows, West Elevation, Looking East.



Ephesus Baptist Church, Overall View, East Elevation, Looking West From Cemetery on East Side of Tract.



Ephesus Baptist Church, 2007 Main Entrance, Looking South from Porte-Cochère.



Ephesus Baptist Church, 1954 Education Wing and Breezeway, Looking Northeast



Ephesus Baptist Church, Interior, Nave, Looking Towards Sound Booth.



Ephesus Baptist Church, Interior, Nave, Looking Towards Chancel.



Ephesus Baptist Church, 1964 Education Building, West and North Elevations, Looking South.



Ephesus Baptist Church, Main Cemetery on West Side of Tract, Looking West.



Ephesus Baptist Church, 1873 Headstone in Main Cemetery.



Ephesus Baptist Church, Cemetery Just West of Church, Looking North.

Historical Background

Ephesus Baptist Church was organized in 1857 under the leadership of Reverend Dewey R. King. The original house of worship was a one-room, frame building located north of the present parcel on the north side Hillsborough Street and the former Seaboard Air Line Railway tracks. Between 1868 and 1870, the church acquired approximately three of the 4.92 acres that form the current tract, and the congregation moved to the new site on the south side of Hillsborough Street. Following a series of small land acquisitions between the 1940s and the 1980s, the church property assumed its present 4.92-acre size (Wake County Deed Books 998: 504; 1542: 60; 2827: 189; 3107: 342; www.ephesusbaptistchurch.com).

At the turn of the twentieth century, a new church with a one-story, gable-front, frame form replaced the original edifice on the property. Subsequently in 1927, this church building was given to Lincolnton African Methodist Episcopal (AME) Church, and the extant, brick-veneered building was erected. The Lincolnton congregation moved the circa 1900 church to their property on nearby Nowell Road where it served as their house of worship until the early 1980s. At that time, the building was moved to the North Carolina State Fairgrounds where it remains today (see SHPO File WA0954, "Former Ephesus Baptist Church").

The construction of the 1927 Ephesus Baptist Church reflected church building campaigns in rural and small-town Wake County during the prosperous years of the 1920s. Spurred by population growth and rising tobacco and cotton prices, all the major denominations, but especially the Baptists, supported the construction of new churches or the expansion of existing ones. The Southern Baptist Convention launched a major fund-raising campaign following World War I to

improve facilities and foster growing congregations. In Wake County, a host of new church buildings for both white and African American congregations appeared during these years that included Ephesus Baptist, Juniper Level Baptist (WA5731), Zebulon Baptist (WA1214) (now gone), Holly Springs Baptist (WA0646), and Shady Grove Baptist (WA1088) near New Hill. Wendell Methodist Church (WA2147) and Poplar Springs Christian Church (WA1263) near Garner were both built during this period, reflecting similar building programs by other denominations (Lally 1994: 146-147, 163).

With the growth of its congregation throughout the twentieth century, Ephesus undertook renovation and expansion campaigns in 1954, 1964, and most recently in 2007. As noted in the physical description, a vestibule and rear education wing were added in 1954, and in 1964, the freestanding, three-story education building was constructed behind the church. In 2007, the large porte-cochère and an expanded entrance vestibule were built across the front-(north) elevation of the church. Ephesus Baptist remains an active congregation on the west side of Raleigh.

National Register Criteria Evaluation

For purposes of compliance with Section 106 of the National Historic Preservation Act (NHPA) Ephesus Baptist Church and Cemetery is recommended **not eligible** for National Register eligibility under any criterion because of a loss of integrity.

Integrity

Ephesus Baptist Church and Cemetery does not retain the seven aspects of integrity needed for National Register eligibility. The church buildings and cemetery occupy their original sites on the south side of Hillsborough Street, across from the former Seaboard Air Line rail corridor, and thus retain their integrity of location. However, the church and cemetery have lost much of their original rural feeling, setting, and association since the construction of I-40 just to the west and the suburban development that has occurred in recent decades. Furthermore, a large, modern parking lot that separates the cemetery from the church has altered the historic setting of the church. The church has also lost much of its integrity of design, materials, and workmanship. The 1927 church underwent significant interior and exterior changes in 2007. Of note are the large porte-cochère that now obscures the façade of the church, the remodeled and enlarged entrance vestibule, and the addition of a sound booth in the nave that necessitated altering the main entrance from the vestibule. In addition, the cemetery, which is now divided into three distinct areas, appears to have been altered with the construction of the large parking lot that separates the graveyard from the church. Finally, late-twentieth-century monuments predominate among the headstones found in the largest section of the cemetery on the west side of the tract.

Criterion A

Ephesus Baptist Church and Cemetery is recommended **not eligible** under Criterion A. To be eligible under Criterion A, the property must retain integrity and must be associated with a specific event marking an important moment in American prehistory or history or a pattern of events or historic trend that made a significant contribution to the development of a community, a state, or a nation. Furthermore, the property must have existed at the time and be documented to be associated with the events. Finally, the property's specific association must be important as well (National Park Service, *National Register Bulletin 15*: 12).

The church is not eligible under Criterion A because it is not associated with a specific event or patterns of events that make a significant contribution to the development of Wake County or the region.

Criterion B

Ephesus Baptist Church and Cemetery is **not eligible** for the National Register under Criterion B (Person). For a property to be eligible for significance under Criterion B, it must retain integrity and 1) be associated with the lives of persons significant in our past, i.e. individuals whose activities are demonstrably important within a local, state, or national historic context; 2) be normally associated with a person's productive life, reflecting the time period when he/she achieved significance; and 3) should be compared to other associated properties to identify those that best represent the person's historic contributions. Furthermore, a property is not eligible if its only justification is that it was owned or used by a person who is or was a member of an identifiable profession, class, or social or ethnic group (National Park Service, *National Register Bulletin 15*: 14).

The property is not eligible under Criterion B because it is not associated with individuals whose activities were demonstrably important within a local, state, or national historic context.

Criterion C

Ephesus Baptist Church and Cemetery is not eligible for the National Register under Criterion C (design/construction). For a property to be eligible under this criterion, it must retain integrity and either 1) embody distinctive characteristics of a type, period, or method of construction; 2) represent the work of a master; 3) possess high artistic value; or 4) represent a significant and distinguishable entity whose components may lack individual distinction (National Park Service, *National Register Bulletin 15*: 17).

Constructed in 1927 and expanded and remodeled in 1954 and again in 2007, Ephesus Baptist Church does not have sufficient integrity of design, materials, or workmanship for eligibility under Criterion C. An investigation by the principal investigators of other rural and small-town churches erected between the two world wars in Wake County reveals that some well-preserved examples remain although many churches, like Ephesus Baptist, have been remodeled and enlarged to serve growing congregations. During this period, the Gothic Revival, Colonial Revival, and Neoclassical Revival styles were popular choices for new or remodeled houses of worship. Some churches, as exemplified by Ephesus, combined elements of different styles. Among the substantially intact churches of the 1920s is the 1923 Holly Springs Baptist Church (WA0646). With its pedimented portico featuring fluted Doric columns and a broad entablature, this brick-veneered church clearly illustrates the popularity of the Neoclassical Revival style for ecclesiastical architecture of the period. The church has a cruciform plan and original arched, stained-glass windows although exterior woodwork has been vinyl sided. Apex First Baptist Church, erected in 1940 for a growing African American congregation, also has such classical features as a pedimented portico with classical columns that are now vinyl sided. The red-brick, steepled edifice has arched, stained-glass windows (Lally 1993: Section F; HPO Files).

The Ephesus Church cemetery also does not possess the level of significance needed in the areas of funerary art or landscape design for eligibility under Criterion C. The headstones illustrate monument designs and materials commonly found throughout Wake County, and while several

headstones date to the 1870s, most were erected in the second half of the twentieth century. Now separated from the church by a large parking lot, the main section of the cemetery has also lost much of its integrity of setting, feeling, and association. The 1993 National Register of Historic Places Multiple Property Documentation Form, *Historic and Architectural Resources of Wake County, North Carolina (ca. 1770-1941)* notes that a number of such rural and small-town church cemeteries still survive. The report observes,

Most church cemeteries contain graves marked primarily with manufactured markers and a few marked with uncarved fieldstones. Burial grounds are generally landscaped with a variety of small trees, such as cedars or crape myrtles. A few are surrounded by iron fences or low stone walls, and some have smaller, fenced or walled family plots (Lally 1993: Section F: 146).



Holly Springs Baptist Church (1923).



Apex First Baptist Church (1940).

Criterion D

Ephesus Baptist Church and Cemetery is **not eligible** for the National Register under Criterion D (potential to yield information). For a property to be eligible under Criterion D, it must meet two requirements: 1) the property must have, or have had, information to contribute to our understanding of human history or prehistory; and 2) the information must be considered important (National Park Service, *National Register Bulletin 15*: 21).

The property is not eligible under Criterion D because it is not likely to yield any new information pertaining to the history of building design or technology.

Figure 7
Ephesus Baptist Church and Cemetery
Site Plan



Key:

- 1. 1927 Church
- 2. 1954 Educational Wing
- 3. 1964 Education Building
- 4. 2007 Porte-Cochère
- 5a-5c. Cemetery
- 6. Baseball Field

Source: Wake County Tax Map

Scale: 1" = 200'

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