A. CALL TO ORDER

B. DETERMINATION OF QUORUM

C. APPROVAL OF AGENDA

D. APPROVAL OF MINUTES
   1. Approval of Minutes for November 10th Regular Meeting
      11.10.16 WHPC Minutes Draft

E. OLD BUSINESS
   1. Rosenwald School Plaque Follow-Up
      Output Document (AIR - 0275) - Pdf

F. NEW BUSINESS
   1. Discussion of Water Tank Local Historic Landmark Designation
      Output Document (AIR - 0274) - Pdf

G. STAFF UPDATES

H. PUBLIC COMMENTS

I. ADJOURNMENT

Town Hall, 1150 North Broome Street, Waxhaw, NC 28173 704-843-2195
Regular Meeting

A. Call to Order

Chairwoman Settle called the meeting to order at 6:47 p.m.

B. Roll Call and Determination of Quorum

A roll call and determination of quorum was made.

Present: Board Members: Chairwoman Terry Settle, Vice Chair Leslie Kellum, Helena Moore, Kelly Lang-Ramirez, Commissioner Paul Fitzgerald, Staff Maxx Oliver, Recording Secretary Lindze Small

Absent: Richard Mather

Others in attendance: Peter Friedrich and Gloria Friedrich

C. Election of Officers

There was a conversation regarding term limits for a Chairperson. It was determined that with respect to the rules and regulations recently adopted for all Town Boards and Commissions that a maximum of two terms for a Chair were permitted henceforth.

Chairman
Motion by Chairwoman Settle for Vice Chair Leslie Kellum to be Chairwoman
Seconded by all members in unison.
The vote carried unanimously (4-0).

1. Vice-Chairman
Motion by Chairwoman Settle to appoint Board Member Lang-Ramirez to Vice-Chairwoman.
Seconded by Board Member Lang-Ramirez.
The vote carried unanimously (4-0).

2. Secretary
Motion by Chairwoman Kellum to nominate Board Member Moore to the position of Board Secretary.
Seconded by Board Member Settle.
The vote carried unanimously (4-0).

D. Adoption of Agenda
Chairwoman Kellum asked for a motion to adopt the agenda as presented. 
There was a favorable motion by Board Member Settle to adopt the agenda as presented. 
The favorable motion was seconded by Board Member Lang-Ramirez. 
The vote carried unanimously (4-0).

E. Approval of Minutes 

The Board made note of the following changes to the May 12, 2016 WHPC meeting minutes: 
Changing of Chairwoman Kellum’s last name to Kellum in areas where this was inconsistent throughout the document. 
There was a request to change the spelling to ‘Rosenwald’ in the public comments’ agenda item on the May agenda packet.

Chairwoman Kellum asked for a favorable motion to approve the minutes as amended.

There was a favorable motion to approve as amended by Board Member Moore. 
The favorable motion was seconded by Board Member Settle. 
The vote carried unanimously (4-0).

F. Old Business

1. Rosenwald School Plaque Discussion 
   Board Member Settle requested this item to be added to the agenda for discussion. 
   Board Member Moore discussed ideas for the plaque with other Board Members. 
   Staff Oliver tasked to ensure ownership of road abutting this property to see if this is Town owned/maintained. With a target ‘go-live’ timeline of February 2017 for National Black History Month. There was conversation about discussing this with the museum for more exposure.

2. Oral History Project Discussion 
   Conversation regarding making this available at the McDonald House for passerbys.

G. New Business

1. Request for Friedrich Façade Improvement Grant Extension – 3rd request 
   Upon conversation with the applicants it was determined that the project may be completed by March 2017.

   Chairwoman Kellum asked for a favorable motion to extend the grant until March 9, 2017. 
   Board Member Settle made a favorable motion to extend the grant until March 9, 2017.
The favorable motion was seconded by Board Member Lang Ramirez. The vote carried unanimously (4-0).

H. **Staff Updates**
1. Work plans and budget were approved in June 2016.
2. Staff is in the process of trying to hire a Planner II who may be the staff liaison and work with the Board in various capacities.
3. New staff members in the Planning Division: Nish Trivedi and Lindze Small

I. **Public Comments**
1. **William R. Davie Grave Site Request Letter**
   Staff Oliver noted that Staff would like a Commission member to take on this project. Per Board Member Settle this gravesite is located at the Old Waxhaw Presbyterian Church in Lancaster, SC, where Andrew Jackson’s relatives are buried as well.
2. **Commissioner Fitzgerald** mentioned that he and Commissioner Burrell are reviewing the WHPC on a Town Commissioner level and that steps in which the WHPC may need to report to the Board of Commissioners several times a year to discuss projects for the year, fiscal needs, etc.

J. **Adjournment**
   Chairwoman Kellum asked for a favorable motion for adjournment.
   Board Member Settle made a favorable motion to adjourn.
   The favorable motion was seconded by Board Member Moore.
   Vote carried unanimously (4-0).
   The meeting was adjourned at 7:30pm.

Respectfully Submitted,

___________________________________
Chairwoman, Leslie Kellum

___________________________________
Recording Secretary, Lindze Small
DESCRIPTION
Rosenwald School Plaque Follow-Up
MEETING TYPE: Historic Preservation Commission - Regular
MEETING DATE: 08 Dec 2016
STAFF RESPONSIBLE: Maxx Oliver
DEPARTMENT: Planning & Zoning Division

DESCRIPTION
Discussion of Water Tank Local Historic Landmark Designation
Waxhaw Water Tower
Local Historic Landmark Designation Report

Prepared for:             Prepared by:
Town of Waxhaw        Fearnbach History Services, Inc.
P. O. Box 6       3334 Nottingham Road
         Waxhaw, NC  28173    Winston-Salem, NC  27104

June 2016
Waxhaw Water Tower
Local Historic Landmark Designation Report

Historic and Common Property Name: Waxhaw Water Tower

Construction Date: 1941

Location: McDonald Street’s south side between North Church and North Broome Streets
Waxhaw, Union County, North Carolina

Tax Parcel Identification Number (PIN): 05113029A (0.13 acre)

Owner: Town of Waxhaw

Owner Address: P. O. Box 6, Waxhaw, NC, 28173

Property Value: $43,200 (2016)

Looking northeast from West North Main Street

Setting

The Town of Waxhaw’s 1941 water tower occupies a 0.13-acre lot in the northwest quadrant of the block bounded by McDonald, North Broome, West North Main, and North Church Streets. The tower stands on McDonald Street’s south side between North Church and North Broome Streets. The town also owns the 1888 Duncan McDonald House west of the tower at 115 McDonald Street. In spring 2016, Designer Construction Corporation completed the dwelling’s renovation to serve as a history center. In the block’s southwest quadrant, one two-story and three one-story commercial buildings front West North Main Street. A gravel 0.45-acre municipal parking lot fills the block’s east half. The
water tower looms above the commercial buildings and is clearly visible from the railroad and other vantage points.

**Narrative Description**

A tall riveted steel structure with four angled columns supports the round, conical-roofed water tank. Horizontal struts and angled tie rods span the lattice columns, which are bolted to steel base plates and concrete footings. The 49,000-gallon steel tank is approximately 26 feet in diameter and 13 ½-feet tall. A central vertical riser pipe supplies water to the tank. The manhole at the riser’s base has a hinged cover. A fixed 93-rung ladder attached to the exterior of the northeast column leads to a 24-inch-wide steel balcony secured by a two-bar, steel pipe, 37 ½-inch-tall railing that encircles the hemispherical bottom tank. A 17-rung ladder hangs from a swivel joint attached to a steel rod at the roof’s peak. The ladder, which has the capability to rotate around the tower, is 13 ¾ inches wide. A manhole with a hinged cover provides access to the tank from the roof, which is topped with a cast-iron finial. A narrow overflow pipe extends from the tank’s upper edge down the southeast column to discharge at ground level. Contractors refreshed the tower’s silver paint and the black-lettered “Waxhaw, NC” sign on the tank’s east side in conjunction with the structure’s 2013 restoration. The sign is 3 feet tall and 31 feet long.1

**Integrity Assessment**

The water tower retains the seven requisite aspects of integrity—location, design, setting, materials, workmanship, feeling, and association—necessary to convey its significance. The tower remains on its original site and maintains the same relationship to surrounding buildings and streets as at the time of its construction. All components of the riveted steel structure and 49,000-gallon steel tank are intact.

**Statement of Significance**

The Waxhaw Water Tower meets National Register Criteria A and C in the areas of Community Planning and Development and Engineering. The tower is locally significant as a key element of Waxhaw’s $125,792 municipal water and sewer system completed in 1941. The town issued $50,000-worth of bonds to supplement the Works Progress Administration (WPA) funding that facilitated the project’s execution. Initiatives of this type clearly demonstrate the importance of federal relief as the nation recovered from the Great Depression. Atlanta-based engineers J. B. McCrary Company, Inc., planned the Waxhaw endeavor, specifying system components including the steel water tower manufactured by Taylor Iron Work and Supply Company of Macon, Georgia. In addition to providing potable water, the 49,000-gallon tank stored water utilized to combat fires. The elevated tower symbolized the community’s growth and prosperity at the time of its construction and remains an important element of Waxhaw’s history.

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1 Water tower component measurements taken by Tank Industry Consultants as part of the company’s 2010 evaluation of the water tank. Report on file at the Town of Waxhaw Planning and Community Development Department.

Fearnbach History Services, Inc., June 2016
Little information is available regarding Waxhaw’s early-twentieth-century water system. The July 1925 map created by the Sanborn Map Company indicates that the community did not then have municipal water service or a fire department to serve its approximately eight hundred residents. However, the map illustrates a water tower that stood near the center of the block bounded by South Church, South Main, South Broome, and Caldwell Streets. The structure’s location near the town center was convenient for businesses, particularly as its primary function was to provide an emergency water supply in case of fire. The water tower was south of a commercial block fronting South Main Street and east of a warehouse for cotton seed and lime, a blacksmith shop, a grist mill, and a cotton gin, all of which were highly combustible. It is not known if the water tower existed when a conflagration destroyed three North Main Street commercial buildings on February 20, 1924.  

The 1925 Sanborn map also shows that the Rodman-Heath Cotton Mill complex just east of downtown included fire safety features such as a 10,500-gallon water tank at the top of the 1898 mill’s entrance tower, a sprinkler system, a 56,000-gallon reservoir, and small structures containing fire hoses. Due to the propensity for combustion associated with cotton storage and blending, fire insurance providers suggested that warehouses, picker rooms, and boiler houses should be located a short distance from manufacturing areas. Rodman-Heath Cotton Mill’s site layout reflects this practice.

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2 Margaret McDonald, “History of the Town of Waxhaw,” *Enquirer* (Monroe), March 31, 1924.

Fearnbach History Services, Inc., June 2016
During the early twentieth century, fire insurance companies and entities including the American Institute of Steel Construction, the National Board of Fire Underwriters, and the American Water Works Association developed standards and issued manuals to guide water system construction. Many municipalities undertook significant water system upgrades in the 1910s in response to state and federal legislation that mandated compliance with water purity standards. Public works improvements proliferated during the 1920s, but the economic challenges of the Great Depression dramatically reduced the availability of local funding for such initiatives. However, federal relief agencies frequently subsidized water and sewer system installation during the 1930s and early 1940s. \(^3\)

Government entities such as the North Carolina Emergency Relief Administration (NCERA), the state’s first New Deal program, embarked upon a public infrastructure enhancement campaign as a means of providing work for citizens in the early 1930s. Rural and urban projects were intended to increase quality of life. In Waxhaw, NCERA projects funded from 1932 to 1935 included drain and culvert installation, street improvements, classroom and gymnasium additions at Waxhaw School, and privy construction.\(^4\)

The federal Works Progress Administration (WPA) followed in 1935, engaging citizens in endeavors ranging from public health and education initiatives to cultural activities, manufacturing projects, and building and park planning and execution. Efforts such as paving secondary “farm-to-market” roads, placing culverts, creating drainage systems, and erecting bridges, sanitary privies, agricultural extension service offices, and vocational buildings at schools occupied many work crews. Water and sewer system improvements were a significant focus of the program. By 1940, North Carolina WPA employees excavated and installed 210 miles of water mains and 376 miles of storm drains and sanitary sewers. The WPA also allocated funds for constructing or improving 14 pumping stations, 44 reservoirs, and 62 water wells.\(^5\)

Overall statistics regarding federally-subsidized water tower construction in North Carolina are not available, but a few newspaper reports highlighted water system improvements that included elevated steel tanks. In October 1938, the Robeson County town of Lumberton, located in the state’s southeast region, purchased a 300-gallon, 100-foot-tall water tower from Taylor Iron Works and Supply Company for $20,321. The $34,500 project, which was funded by the Public Works Administration (PWA), also encompassed pipe installation and general construction undertaken by Elliott Building Company of Hickory. In December, the town of Pembroke, also in Robeson County, engaged Taylor Iron Works and Supply Company to provide a $7,520 water tank in conjunction with a PWA-subsidized $43,350 water and sewer system upgrade executed by Elliott Building Company. Comparable projects continued elsewhere in North Carolina through the early 1940s. In July 1941, WPA crews replaced water pipes and installed sewer lines in the Davie County community of Mocksville, which had just erected a steel water tower with a 100,000-gallon tank.\(^6\)
Waxhaw leaders began pursuing federal relief funding to facilitate municipal water and sewer system improvements in 1935, but federal assistance was not awarded until 1940. On June 5, 1935, the town council approved a resolution authorizing Mayor L. B. Baker to seek a federal subsidy for water and sewer installation. Atlanta-based engineers J. B. McCrary Company, Inc., helped to delineate the proposed scope of work and file the application. As the project was not initially funded, the town submitted a series of revised applications. The town council considered issuing bonds to provide the local contribution required to qualify for federal assistance, but did not issue an ordinance calling for special election to consider such action until August 12, 1938. On September 26, the majority of Waxhaw’s residents (168 of 198 registered voters) elected to move forward with the project. The town would supply $42,000 of the water and sewer system’s cost. Although the municipality demonstrated its intention to obtain funding, it was not until October 1939 that Reconstruction Finance Company agreed to secure a $50,000 loan. At that time the total project cost was estimated to be $122,616. In a special election held on May 14, 1940, 156 of Waxhaw’s 173 qualified voters approved the issuance of an additional $8,000 of bonds to supplement the previously approved $42,000. To subsidize the loan, the Board of Commissioners approved a resolution to increase the property tax rate from $0.85 to $1.00 per $100 valuation in the 1940-1941 fiscal year.7

Once the local funding requirement was met, the WPA district office in Union County authorized the project’s commencement. J. B. McCrary Company oversaw the water and sewer system’s execution, beginning with soliciting proposals for well drilling and equipment. Richmond-based Virginia Machinery and Well Company won that bid in June 1940. On December 2, the Town of Waxhaw contracted with ten other manufacturers including Pomona-Terra Cotta Company of Greensboro, which supplied clay pipe, and Tryo, New York-based Rensselaer Valve Company, which provided valves and hydrants. Taylor Iron Work and Supply Company of Macon, Georgia, agreed to deliver steel water tower components at a cost of $7,337. Councilmen also approved bids from Charlotte metal product manufacturer Easterby and Mumaw and Waxhaw building materials purveyors T. R. Nisbet and A. W. Heath Company.8

On March 18, 1941, in preparation for the water tower’s construction, the town acquired a lot on McDonald Street’s south side between North Church and North Broome Streets from Waxhaw Banking and Trust Company. J. B. McCrary Company did not send a resident engineer to Waxhaw for the duration of the project. Therefore, the town appointed commissioner J. W. McCall to serve as the project manager for a $50 per month salary. As the endeavor neared completion in June 1941, the municipality set water connection rates at $1.50 for residences and $2.00 for businesses, with a minimum $1.50 monthly charge per 2,000 gallons of water used. After the water system had been in operation for a year, commissioners approved the acquisition of galvanized pipe to extend the water line to Waxhaw’s African American residents living on McDonald Street and elsewhere in town. In March 1945, upon W. R. Armstrong’s request, the town agreed to provide Rodman-Heath Cotton Mill with a water main and sewer connections. In April 1947, the Waxhaw Board of Commissioners approved a $625 proposal from Terre Haute, Indiana-based Leary Construction Company’s Atlanta

7 The Waxhaw Town Council became known as the Board of Commissioners in 1940. Town Council meeting minutes, June 4, 1935, June 24, 1936, August 4, 1937, August 12, 1938, October 3, 1938, October 2, 1939; Board of Commissioners meeting minutes, April 1, 1940, May 16-17, 1940, August 5, 1940.
8 Board of Commissioners meeting minutes, June 21, 1940, December 2, 1940.
office to clean and paint the water tank. The company provided routine maintenance services for at least twenty years.9

The tower remained Waxhaw’s primary daily and emergency water source through the 1980s as municipal water service continued to expand. Waxhaw’s Volunteer Fire Department, established in 1954, drew from the tank as needed. By 1963, Waxhaw’s water system comprised three wells capable of supplying 300,000 gallons of water daily and a 75,000-gallon elevated storage tank. Union County Public Works assumed the 1941 water tower’s ownership in 1987. The site remained in use until the department excavated ground water tanks on Sims Road to serve the community. Union County conveyed the water tower and the lot upon which it stands to the Town of Waxhaw on December 8, 2011.10

In recognition of the water tower’s historic significance, the town of Waxhaw engaged Utility Service of Boiling Springs, South Carolina, to undertake a restoration that commenced in January 2013. The tower was completely reconditioned. The approximately $267,000 project cost included a ten-year maintenance contract.11

Engineering Context: Steel Water Towers

During the late nineteenth century, when burgeoning industrial development fueled population growth throughout the United States, municipalities attempted to combat unsanitary conditions and the spread of disease that frequently accompanied urban density by improving and expanding municipal water and sewer systems. As myriad factors influenced the amount of naturally available ground and surface water, communities installed infrastructure to facilitate efficient and reliable water collection, purification, storage, and dispersal. Networks of pipes and pumps conveyed water to storage and treatment facilities and then on to consumers. In-and above-ground reservoirs and wood and steel tanks contained water sufficient to meet daily demand and combat fires. Steel water towers, which became common in the late 1890s, allowed for durable and affordable water storage. The elevated tanks, often mass-produced models available at reasonable cost, symbolized the higher standard of living available to urban dwellers through ready access to abundant pure water. As stated in water tower manufacturer Pittsburgh-Des Moines Steel Company’s 1915 catalog, “No one thing marks more clearly the departure of a village from obscurity to a position of prominence and wealth than the installation of the first and most vital public improvement—a water works.”12

In order to reduce the overall cost of such improvements, municipalities typically purchased standard factory-generated steel water tower components from specialized manufacturers. Structural-steel elements not only had the capacity to carry heavy loads, but were extremely durable and resistant to wind shear. Framing systems might include I, T, H, and box-shaped columns, posts, and beams as well as reinforcing plates, struts, angles, and webs. Steel columns could be riveted together, creating strong connections, and tended to be smaller and lighter than heavy-timber or iron framing members.

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9 J. W. McCall became the town’s clerk and treasurer in May 1941. Board of Commissioners meeting minutes, January 6, 1941, May 12, 1941, June 30, 1941, June 22, 1942, March 5, 1945, April 7, 1947, March 6, 1961, May 3, 1961; Union County Deed Book 102, p. 77.
This allowed for taller towers. In order to reduce oxidation and achieve fire resistance, steel members were often coated with intumescent paint.\textsuperscript{13}

**Taylor Iron Works and Supply Company of Macon, Georgia**

Prior to its June 14, 1898, incorporation, the operation that became Taylor Iron Works and Supply Company was part of a mill equipment manufacturing concern established in Macon, Georgia, circa 1885. That firm became Mallary Brothers and Company around 1890 and by 1900 split into three businesses: Mallary and Taylor Iron Works, Mallary Brothers Machinery Company, and Mallary Mill Supply Company. Products included engines, boilers, and saw mill equipment.\textsuperscript{14}

Little has been written about Taylor Iron Works and Supply Company’s history. However, Duke University’s David M. Rubenstein Rare Book and Manuscript Library has two catalogs in its collection. The 1927 volume itemizes water system components such as columns, gauges, hoses, and pipers. It appears that the company’s inventory only included wood water tanks ranging from three to fourteen feet in diameter and conical wood tank covers at that time. The maximum water storage tank capacity was 12,528 gallons. The tank components—cypress base and wall planks and round black iron hoops—required assembly upon delivery. The company recommended sealing the interior of each tank with hot paraffin wax.\textsuperscript{15}

It is unclear when Taylor Iron Works and Supply Company began manufacturing steel water towers. However, newspaper coverage demonstrates that the concern supplied steel towers for North Carolina federal relief projects undertaken in the late 1930s. The 1948 catalog indicates the availability of steel tanks for grain, molasses, and water storage. Rather than listing specifications, the only catalog reference is a page with photographs of an elevated water tower and a complex of three grain silos and molasses tanks.\textsuperscript{16}

**Bibliography**

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High Point Enterprise.


The Robesonian (Lumberton)


Union County Register of Deeds. Union County Deed Books, Monroe, North Carolina.

Waxhaw Town Council and Board of Commissioners. Meeting minutes, 1935-1961, Town of Waxhaw.


Verbal Boundary Description

The local historic landmark boundaries are indicated by the bold line on the site plan at a scale of approximately one inch equals seventy-three feet.

Boundary Justification

The 0.13-acre parcel encompasses the acreage historically associated with the water tower.
Photographs

All photographs by Heather Fearnbach, Fearnbach History Services, Inc., 3334 Nottingham Road, Winston-Salem, NC, in January and June 2016. Digital images located at the Town of Waxhaw and the North Carolina State Historic Preservation Office in Raleigh.

Looking southwest
Looking west
Looking northwest
Southeast column base
Hinged manhole cover at riser pipe base
Lattice column, horizontal struts, and angled tie rods
Waxhaw Water Tower
Union County, North Carolina
Local Historic Landmark Boundary Map

Heather Fearnbach, Fearnbach History Services, Inc. / June 2016
Base aerial photo courtesy of Union County GIS at http://gis-web.co.union.nc.us/gomaps/