SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 100001466 Date Listed: 8/11/2017

Property Name: Chickamauga Hydroelectric Project (TVA Hydroelectric System, 1933-1979 MPS)

County: Hamilton State: TN

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Signature of the Keeper

8.11.2017
Date of Action

Amended Items in Nomination:

Section 8: Area(s) of Significance

SOCIAL HISTORY is hereby deleted as an area of significance. It was not supported in the nomination. The significance in recreation is poorly supported. Had further discussion been included regarding the segregated facilities that resulted from this project, including the day use areas and state parks that were developed by the CCC, a stronger case for both recreation and social history could have been made.

State level significance is limited to Engineering and Transportation.

The TVA FPO and the Tennessee State Historic Preservation Office was notified of this amendment.

DISTRIBUTION:

National Register property file
Nominating Authority (without nomination attachment)

United States Department of the Interior
National Park Service

MP-1466

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National Register of Historic Places
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name: Chickamauga Hydroelectric Project

Other names/site number: Chickamauga Dam

Name of related multiple property listing: Historic Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979

2. Location

Street & Number: 5400 Lake Resort Drive

City or town: Chattanooga State: Tennessee County: Hamilton

Not For Publication: N/A Vicinity: N/A Zip: 37415

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this X nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property X meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

[ ] national [X] statewide [X] local

Applicable National Register Criteria: [X] A [ ] B [X] C [ ] D

Patricia Bernard Eggell 11-9-16

Signature of certifying official/Title: **Date**

Sr. Program Manager, & Federal Preservation Officer

State or Federal agency/bureau or Tribal Government

In my opinion, the property ✓ meets ___ does not meet the National Register criteria.

Signature of Commenting Official: Clarette Lyon **Date** 11-28-16

Deputy State Historic Preservation Officer,
Tennessee Historical Commission

Title: **State of Federal agency/bureau or Tribal Government**

Chickamauga Hydroelectric Project
Name of Property

Hamilton County, Tennessee
County and State

4. National Park Service Certification

I hereby certify that this property is:

✓ entered in the National Register
___ determined eligible for the National Register
___ determined not eligible for the National Register
___ removed from the National Register
___ other (explain) ___

Signature of the Keeper For

8.11.2017
Date of Action

5. Classification

Ownership of Property
(Check as many boxes as apply.)

Private	☐
Public – Local	☐
Public – State	☐
Public – Federal	X

Category of Property
(Check only **one** box.)

Building(s)	☐
District	X
Site	☐
Structure	☐
Object	☐

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
8	4	buildings
1	1	sites
4	1	structures
0	0	objects
13	6	Total

Number of contributing resources previously listed in the National Register 0

Chickamauga Hydroelectric Project	Hamilton County, Tennessee
Name of Property	County and State

6. Function or Use

Historic Functions	Current Functions
INDUSTRY/PROCESSING/EXTRACTION/ Energy Facility	INDUSTRY/PROCESSING/EXTRACTION/ Energy Facility
RECREATION AND CULTURE/Outdoor Recreation	RECREATION AND CULTURE/Outdoor Recreation
TRANSPORTATION/Water-related	TRANSPORTATION/Water-related
TRANSPORTATION/Road-related	TRANSPORTATION/Road-related

7. Description

Architectural Classification
(Enter categories from instructions.)
MODERN MOVEMENT: Streamlined Moderne
OTHER: Hydroelectric Dam

Materials:
Principal exterior materials of the property: CONCRETE; STEEL; GLASS; ROCK; EARTH

Narrative Description

Located in southeast Tennessee, the Chickamauga Hydroelectric Project straddles the Tennessee River in Hamilton County, Tennessee, northeast of downtown Chattanooga (est. 2014 pop. 173,778). The dam takes its name from an eighteenth-century Native-American tribe, composed of Cherokee and Creek Indians, who went by the name Chickamauga. One of the purposes for the construction of the Chickamauga project was to improve navigation on the Tennessee River. It also provides 377,000 acre-feet of controlled storage for flood control on the Tennessee River. The Chickamauga facility has a sixty-foot by 360ô navigational lock allowing the passage of barges and other vessels. The Chickamauga Dam impounds the 36,240-acre Chickamauga Reservoir (also called Chickamauga Lake) and feeds into Nickajack Lake. The counties that border the reservoir are Hamilton, Bradley, McMinn, Meigs, Polk, and Rhea.[1] The Wilkes T. Thrasher

[1] Tennessee Valley Authority, *The Chickamauga Project: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Chickamauga Project, Technical Report No. 6*, (Knoxville, TN.: Tennessee Valley Authority, 1942), 3, 4.

Bridge, opened in 1955, runs across the top of Chickamauga Dam on Tennessee State Route 153, which connects Interstate 75 to the south with U.S. Highway 27 on the north.

The Chickamauga Dam is located 471 miles from the mouth of the Tennessee River. Nickajack Dam is 46.3 miles downstream. The terrain between the highest mountains to the east and the Chickamauga site ranges 6,100 feet in elevation. One-half mile above the project site, a major fault occurred that thrust a Knox dolomite formation above more recent Chickamauga limestone, causing deep channels in the river bed. This excessive folding created foundation conditions more difficult than at any previous Tennessee Valley Authority (TVA) project. Coupled with these geological conditions, hydrological data were used in the planning of the project. The Tennessee Valley watershed comprises 40,910 square miles; of that, 20,790 square miles are above the Chickamauga site. The mean annual rainfall above the Chickamauga site from 1904 to 1933 measured 52 inches. Based on rainfall and run-off records, and taking into account existing TVA projects, the Chickamauga Dam and spillway were designed to accommodate a maximum flow of 600,000 cubic feet per second.[2]

TVAôs Board of Directors authorized construction of the Chickamauga Hydroelectric Project on December 31, 1935. Filling of the reservoir began January 15, 1940, and the navigational lock opened on February 26th of the same year. The three generators were place in operation on March 4th, May 2nd, and July 15th, 1940. When it was completed, the Chickamauga Hydroelectric Project consisted of a navigation lock, a concrete gravity spillway, the powerhouse, and the switchyard, which are interconnected and integral to one another (*see Photos 1, 2*). Later additions to the site included a picnic and camping area to the east of the dam.

INVENTORY

1. Chickamauga Dam, 1936-1940 (Contributing Structure)

The 129-foot high Chickamauga Dam has an overall crest length of 5,794 feet. Chickamauga Dam is a concrete gravity-type structure with an eighteen-bay spillway.[3] The spillway is 864 feet in length and has eighteen, forty-foot by forty-foot fixed roller-type gates (*see Photo 3*). The gates are divided by eight-foot thick piers (*see Photo 4*). The gates are operated by either of two, eighty-ton capacity gantry cranes located on the deck of the spillway. On the downstream side of the spillway there is a concrete apron and baffle wall to prevent erosion. Construction of the spillway required a total of 108,240 cubic yards of concrete in the piers, weirs, and apron and approximately 1,200 tons of reinforcing steel in the spillway and apron.[4]

On the north and south banks of the river there are rolled-fill earth embankments. The south embankment (*see Photo 5*) turns slightly upstream and spans 2,999 feet to a high bluff. A similar embankment on the north side of the river (*see Photo 6*) turns sharply upstream, extending 1,385 feet from the navigational lock to the north abutment. Due to problematic foundation conditions, geologists and engineers working on the project recommended opening a trench along the entire length of both embankments, removing all rock

[2] Tennessee Valley Authority, *The Chickamauga Project: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Chickamauga Project, Technical Report No. 6*, (Knoxville, TN.: Tennessee Valley Authority, 1942), 3-6.
[3] Commonly, dam design includes a section that permits the overflow of water from the reservoir (the spillway) and other sections that do not allow the passage of water (non-overflow). Together, these sections contribute to the total length of the dam structure that impounds the reservoir. A gravity type dam is one constructed of concrete or stone and uses the sheer weight of the structure to resist the horizontal pressure of the water pushing against it. Gravity dams are designed in sections that are independently stable.
[4] Ibid., 6, 70, 199-201, 311.

fragments, drilling thirty-six-inch holes to cavities below the surface, filling these holes with concrete, then building a five-foot concrete wall to tie into the fill.[5]

2. Powerhouse, 1936-1940 (Contributing Building)

The powerhouse has a structural steel frame, concrete floor, and concrete interior and exterior walls. Approximately 975 tons of structural steel went into the construction of the powerhouse. The dimensions of the powerhouse are 104 feet wide and 320 feet long. The powerhouse includes the intake, electrical bay, generator room, and service bay. The powerhouseôs exterior walls consist of concrete panels given a textured surface by alternating bands of smooth- and rough-sawed concrete. The main entrance on the south elevation of the building was designed as a focal point with wide stairs, a flat concrete canopy, and aluminum block lettering above spelling CHICKAMAUGA.[6] This entrance has three pairs of original single-light glass and aluminum doors, each with a single-light transom. The stairs and adjacent ramp have metal pipe railings (*see Photo 7*).

The east elevation of the powerhouse is directly beside the highway bridge that carries State Route 153 over the Tennessee River. This elevation has single-light, fixed windows in groups of five. Above each group is a horizontal, metal, louvered vent. The gantry crane of the powerhouse operates along this elevation (*see Photo 8*). The north elevation of the powerhouse is directly beside the south end of the damôs spillway. This elevation consists mostly of concrete walls, except for three large insets of structural glass block on the upper level. Above the center inset is an octagonal, metal vent *(see Photo 9*). On the west elevation are thirteen similar insets of structural glass block and six similar vents along the upper level. This wall of insets is recessed, and the deck of this level is also the roof of the remainder of the powerhouseôs north elevation. On this deck is an electrical operations cubicle with a flat roof and a single-light glass door on the south elevation. Its walls are clad in porcelain panels (*see Photo 10*).

The powerhouse intake is a concrete structure with four eighty-foot long bays, each with three intake openings, each 17.67 feet wide by 35.67 feet high. Originally, the powerhouse had three units each with a rating of 30,000 kva at 0.9 pf. It was designed for the ultimate installation of four units. Each unit has a propeller-type turbine rated at 36,000HP at 36-foot head. The powerhouse is equipped with a 275-ton-capacity overhead crane that travels the length of the generator room, along the east wall of the powerhouse (*see Photo 11*). For the first nine months following start-up of the third unit on July 15, 1940, the facilityôs output averaged 64,000 continuous kilowatts. The service bay is at the south end of the powerhouse, next to unit 1. The generator room is viewable from the visitor balcony located above the service bay (*see Photo 12*). The electrical bay extends the full length of the powerhouse on the downstream side (or, along the west wall of the powerhouse). Almost all work areas in the powerhouse were located in the top floor of the electrical bay. This level corresponds with the large insets of glass block mentioned above.[7] Administrative offices on this floor have original terrazzo floors, ca. 1990 dropped ceilings and florescent light fixtures, and ca. 1990 interior partition walls (*see Photo 13*). Interior office and bathroom doors are original metal design with metal louvers in a central vertical band (*see Photo 14*). Bathrooms have original terrazzo floors, tile walls, and marble stall partitions (*see Photo 15*). The elevator lobby on this floor has similar original floor and wall treatments. The visitor lobby on this floor has terrazzo floors, marble walls, a bank of fixed picture windows

[5] Ibid., 6, 61.
[6] Ibid., 99.
[7] Ibid., 6-8, 81, 88-89, 99, 203, 315.

overlooking the generator room, and aluminum lettering with ñ1936 BUILT FOR THE PEOPLE OF THE UNITED STATES 1940ò. The lobby also has an information desk of marble below a large wall mural depicting a map of TVA projects (*see Photo 16*) and a model display of a profile of the Tennessee River (*see Photo 17*). The powerhouse lobby, with viewing windows into the generator room, received 500,000 visitors in the year after it opened.[8]

The generator room has original tile floor and tile walls. The ceiling displays exposed framework of metal trusses, which divide clerestory windows (*see Photo 18*). The turbines were manufactured by Allis-Chalmers of Milwaukee, Wisconsin. Each generator unit has a curved, open staircase with metal treads and smooth, metal Streamlined Moderne-style hand rails (*see Photo 19*).

3. Navigational Lock, 1936-1940 (Contributing Structure)

Designed by the U.S. Army Corps of Engineers (USACE), the original navigational lock (*see Photos 20, 21*) is located on the north bank of the river and placed within the existing navigational channel. It is 60-feet wide and 360-feet long. The walls are constructed of reinforced concrete, and their decks have metal railing. The lock has a normal lift of fifty-one feet. Space was left for the installation of an additional lock, measuring 110 feet by 600 feet at the north end of the spillway next to the original lock. The upper lock gate (*see Photo 22*) consists of two, twenty-eight-foot high, horizontally framed leaves with skin plates on the upstream side. The leaves are divided into panels by seven straight horizontal beams. The lower lock gate (*see Photo 23*) is seventy-two feet in height and is arched with a skin plate on the upstream side. Each leaf is divided into panels by twenty-one horizontal arched ribs. Each leaf was designed as a cantilever truss to support the dead load.[9]

The Chickamauga lock structure has concrete that has been expanding as a reaction between the alkali in the cement and the minerals in the native stone. This growing concrete, expanding at different rates throughout the structure, has required repairs in recent years and USACE and TVA concur that the Chickamauga lock will require replacement in coming decades.[10] Pre-fabricated concrete walls for the Chickamauga lock are in storage at Watts Bar Dam until further funding is available to complete the project, which began in 2003.[11]

4. Lock Operation Building, 1936-1940 (Contributing Building)

This building is constructed of reinforced concrete on the river wall of the lock. The façade is the north elevation, overlooking the locks. The building is one-story in height with a two-story octagon at its east end (*see Photo 24*). The flat roofs of both sections are also built of reinforced concrete and covered with tar and gravel. On the west elevation of the upper floor of the two-story section there is a four-light glass and metal door leading to the roof of the one-story section. Windows on the north elevation, overlooking the locks, are individual or paired fixed, single-light design. Towards the west end of the north elevation is a glass and metal door with a narrow single-light down the center. The east elevation of the building has a pair of single-light, steel doors, a second-floor, fixed picture window within a beveled inset, original aluminum letting spelling CHICKAMAUGA below the roofline, and a chamfered corner at the northwest corner of the

[8] Ibid., 266.
[9] Ibid, 47, 55-6, 310.
[10] United States Army Corps of Engineers, ñChickamauga,ò at webpage http://www.lrn.usace.army.mil/Locations/NavigationLocks/TennesseeRiver/Chickamauga.aspx, accessed May 19, 2015.
[11] Dave Flessner, "Chickamauga Dam project locks up: Material ready for new lock but money short for $693 million project," *Chattanooga Times Free Press*, February 9, 2013.

building (*see Photo 25*). The south elevation is on the out lock wall, overlooking the main river. It has no windows in the two-story section of the building. The one-story section has three pairs of horizontal single-light, fixed windows. The west elevation has one pair of similar windows. On the interior of the octagonal section are operation cabinets on the wall overlooking the locks. The walls are clad in original glazed ceramic tile, and the floors are original terrazzo. The interior has been remodeled ca. 1990 with dropped acoustical ceilings (*see Photo 26*).[12] A stairwell with original terrazzo treads leads to the upper floor. At the top of the stairs is a ca. 1990 vinyl four-panel door. The upper floor consists of office space. Its walls and floors have original surfaces as on the first floor.

5. Lock Control Building 1, 1940 (Contributing Building)
At the west end of the lock is a small, one-story lock control buildings with a hip roof of ca. 1990 standing-seam metal. The walls are blond brick on the lower half. The east elevation has a single-light glass and metal door. Beside it is a one-by-one sliding-track window. The west elevation is the same as the east. The north and south elevations have fixed, single-light, metal-frame windows (*see Photo 27*).

6. Lock Control Building 2, 1940 (Contributing Building)
At the east end of the lock is a small, one-story lock control buildings with a hip roof of ca. 1990 standing-seam metal. The walls are blond brick on the lower half. The west elevation has a single-light glass and metal door. Beside it is a one-by-one sliding-track window. The east elevation is the same as the west. The north and south elevations have fixed, single-light, metal-frame windows.

7. Lock Storage Building, ca. 1950 (Contributing Building)
This is a one-story concrete block building associated with the locks. It has stucco walls and a gable roof of standing-seam metal. The façade (south) has a pair of original metal doors with square, louvered vents at the bottom. There are no windows on the building (*see Photo 28*).

8. Lock Visitor Building, 1936-1940 (Contributing Building)
Located at the north end of the dam, this building is original to the project. It included a reception room with an information booth, soda fountain, restrooms, and service rooms and offices. It is presently used for storage. The building's sloping roof serves as an overlook platform, which has metal railing on three sides. The façade (south) retains an original steel door with a centered louvered vent. There is also a recessed entrance with a similar door. The roof platform overhangs the façade. (*see Photo 29*). The building's interior was not accessible.

9. Visitor Storage Building, 1936-1940 (Contributing Building)
On the east side of the Visitor Building is a one-story storage building with concrete walls, foundation and shed roof. The roof eave overhangs the façade (east). The façade has three bays: an original central steel door flanked by fixed metal panels above metal louvered vents. Each bay has a single-light fixed horizontal transom (*see Photo 30*).

10. Lock Maintenance Building, ca. 1988 (Non-Contributing Building)
This is a one-story building with walls of split-faced concrete block and a flat roof. The façade (south) has four bays, three with garage doors, and one with a pedestrian entrance, which has a solid metal door with

[12] Tennessee Valley Authority, *The Chickamauga Project: A Comprehensive Report,* 198-99, 309.

structural glass blocks beside and above the entrance. The garage bays have metal overhead-track doors. Above the bays, the upper walls have concrete panels.

11. Switchyard, 1936-1940 (Contributing Structure)

The switchyard is located downstream of the south embankment (*see Photo 31*). It includes metal-frame structures, wiring, and equipment in the 154- and 44-kilowatt yards and the main transformer bank. The yard was designed for future expansion. A tunnel of reinforced concrete carries the control leads between the switchyard and powerhouse; atop this tunnel are fiber ducts embedded in a concrete envelope, carrying generator-transformer leads.[13]

12. Switchyard Storage Building, ca. 2000 (Non-Contributing Building)

The storage building has walls of split-faced concrete block, a low-pitched gable roof of standing-seam metal, and an overhead track garage bay door on its west elevation. The building has a solid metal pedestrian door on the north elevation. The building is located east of the switchyard between steel pylons of the Wilkes T. Thrasher Bridge, which runs above the building.

13. Switchyard Electrical Building, ca. 2000 (Non-Contributing Building)

The electrical building has walls of split-faced concrete block, a flat roof, a garage bay on the south elevation with an overhead-track door, a solid metal pedestrian door on the east elevation, and a large, metal, louvered vent on the north elevation.

14. Restrooms, ca. 1990 (Non-Contributing Building)

This is a split-faced concrete block building with a hipped roof of standing-seam metal. The façade (north) has a recessed entrance that splits to the east and west. Each entrance has a solid metal door on the inside wall of the recessed bay. On the outer wall of the façade, the recessed entrance bay is flanked by single-light, horizontal, fixed windows in metal frames. The east and west elevations have two pairs of similar windows. The exterior walls have a continuous decorative band with an aquatic motif.

15. Picnic/Recreational Area, ca. 1960 (Contributing Site)

The Chickamauga Hydroelectric Project site was originally designed with a picnic and campground area (*see Photo 32*). These recreational facilities were not completed until ca. 1960. The grounds consist of six concrete picnic tables and benches on concrete pads connected by concrete sidewalks. Original metal grill stands are embedded in the concrete pads. The sire slopes upward. There are also ca. 1980 garbage receptacles at the site. Some are cylindrical plastic container sheathed in vertical wood planks; others are square metal containers with sides of aggregate panels. The recreational area also includes a boat launch, located southeast of the powerhouse.

16. Picnic Pavilion, ca. 1990 (Non-Contributing Structure)

The Picnic Pavilion is an open-air, five-bay structure with square, wood posts set in a concrete foundation and has a gable roof of standing-seam metal.

[13] Ibid., 48, 213.

17. Bath house, ca. 1950 (Contributing Building)

This restroom building has concrete block walls and a salt box roof of asphalt shingles. The east and west elevations have a solid metal door each and three louvered panels in each gable field. The façade (south) has been remodeled, and the original recessed entrance bay has been infilled with split-faced block and two horizontal, metal, fixed lights (*see Photo 33*).

18. Fishing dock area, 1990 (Non-Contributing Site)

This is an added site and includes a T-shaped fishing dock of concrete construction and a metal pipe railing. The site also includes a hexagonal open-air pavilion with round columns of concrete aggregate and a conical roof of standing-seam metal. There is also a rectangular-shaped, similarly designed pavilion with a hip roof.

19. Wilkes T. Thrasher Bridge, 1954 (Contributing Structure)

The Wilkes T. Thrasher Bridge was built in 1954 and opened in 1955 as a two-lane structure carrying State Route 153 over the Chickamauga Dam and Tennessee River. It is a concrete deck truss bridge. The bridge was widened to four lanes in 1984. When the Chickamauga Dam was in planning, its design included the bridge (*see Photo 2*). The piers of the damôs spillway were designed to extend sixty-six above the overfall crest to support a possible future highway bridge across the river. The intake structure of the powerhouse also had to be designed to withstand the reactions from the future bridge columns.[14] .

[14] Tennessee Valley Authority, *The Chickamauga Project: A Comprehensive Report,* 65, 81.

Chickamauga Hydroelectric Project
Name of Property

Hamilton County, Tennessee
County and State

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [X] A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B Property is associated with the lives of persons significant in our past.
- [X] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations N/A
(Mark "x" in all the boxes that apply.)
Property is:

- [ ] A Owned by a religious institution or used for religious purposes.
- [ ] B removed from its original location.
- [ ] C a birthplace or grave.
- [ ] D a cemetery.
- [ ] E a reconstructed building, object, or structure.
- [ ] F a commemorative property.
- [ ] G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance

ARCHITECTURE
CONSERVATION
ENGINEERING
INDUSTRY
RECREATION
SOCIAL HISTORY
TRANSPORTATION

Period of Significance

1936-1965

Significant Dates

1936, 1940

Significant Person
(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Architect: Tennessee Valley Authority; U.S. Army Corps of Engineers; Roland Wank; Rudolph Mock; Mario Bianculli
Builder: Tennessee Valley Authority

Statement of Significance Summary Paragraph

The Chickamauga Hydroelectric Project meets National Register Criteria A and C for its historical and architectural and engineering significance at the state and local levels as an integral part of the Tennessee Valley Authority Hydroelectric Project. Its period of significance is from 1936, when the project commenced, to 1965, in keeping with the fifty-year guideline. The Chickamauga Hydroelectric Project is significant in the improvement of navigation of the Tennessee River, transmission of electricity, control of seasonal flooding, and creation of public recreational facilities. The Chickamauga Hydroelectric Project was one of twenty-five (25) hydroelectric projects constructed by the Tennessee Valley Authority (TVA) for the purpose of generating electrical power from, improving navigation of, and controlling seasonal flooding of the river system of the region. Objectives of the 1933 Tennessee Valley Authority Act included the creation of a continuously navigable nine-foot channel from the mouth of the Tennessee River to Knoxville, flood control, power generation, recreation and social benefits. The Chickamauga Hydroelectric Project is significant at the local, state, and national level. For architecture, it is significant for its Streamlined Moderne style, embodying the TVAôs mission of progress in its economy of adornment, as well as the industry of the machine age. The progressive ideology extended into conservation, another area of significance; TVAôs Chickamauga Hydroelectric Project not only harnessed the energy of the river, but involved reforestation of the land and introduction of progressive farming methods. The projectôs significance in engineering is reflected in TVAôs overall plan for an integrated system of river management through site-specific designs tested on scaled models. The significance of the project in industry is seen through the increase of household electricity use and in war-related manufacturing, as well as increased commercial traffic on the river. The project is significant in the area of military for its role in the war effort. The Chickamauga project is significant in recreation because of the extensive outdoor opportunities it fostered. It was significant in social history for its role in employment, housing, and improve of quality of life. Lastly, the project is significant in transportation for contributing to the 652-mile navigable channel of the river from Paducah to Knoxville. The Chickamauga Hydroelectric Electric Project meets the registration requirements set forth in the Multiple Property Documentation Form, Historical Resources of the Tennessee Valley Authority Hydroelectric Project.

Narrative Statement of Significance

The Tennessee Valley Authority was created under President Rooseveltôs New Deal program as part of his ñFirst One Hundred Days.ò Roosevelt envisioned ña corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise.ò To this end, Congress passed the TVA Act on May 18, 1933.[15] The multi-purpose legislation sought to improve navigation and flood control of the Tennessee River, spur agricultural and industrial development in the Tennessee Valley, and provide for national defense via government facilities in the proximity of Muscle Shoals, Alabama (Sec. 1). The act authorized the TVA Corporation to acquire real estate for the construction of dams, reservoirs, power houses,

[15] ñHistory of the Tennessee Valley Authority,ò at website http://www.policyalmanac.org/economic/archive/ tva_history.shtml accessed April 16, 2015.

transmission lines, or navigations projects at any point along the Tennessee River and its tributaries (Sec. 4i).[16]

The Chickamauga project required the purchase of 61,351 acres of land in Hamilton, Bradley, Rhea, Meigs, and McMinn Counties. In 1937, the TVA interviewed 903 families to be affected by the inundation. The interviews found these families representative of the larger region, with early marriage, few divorces, high birth rates, and native to their county, for the most part. Education rates were low among all families, which included many school-age children not in school; of those enrolled, more than forty percent were below grade level for their ages. Most households did not have indoor water, electricity, or interior furnishings valued above $200. Yet, compared to people in other reservoir project areas, these families ranked above average in material possessions and median cash income. Just under forty-nine percent of the families were engaged in farming, due in part to the concentration of land ownership among a small group, as well as employment opportunities in Chattanooga. Less than thirty percent of the families were property owners.[17]

In the course of the project, 80.96 miles of local, state, county, and federal highways and thirty-nine bridges had to be relocated or reconstructed in the affected counties. In the rebuilding of the roads, the TVA worked with the state or respective county to upgrade and improve the relocated sections to modern standards, with better alignment and greater width.[18] The road and bridge improvements contributed to an upgrade in local infrastructure, benefitting commerce and quality of life for area residents.

Construction of the Chickamauga Hydroelectric Project began in January of 1936. Filling of the reservoir began on January 15, 1940. Filling was temporarily interrupted to divert stored water to downstream plants and to help maintain discharges at Pickwick Landing Dam for adequate navigation levels. The first power unit went into commercial operation on March 4th, the second on May 2nd, and the third on July 15th, 1940. Each generator had a rated capacity of 30,000 kilovolt-amperes, or 27,000 kilowatts at 0.9 power factor. The Chickamauga Hydroelectric Project supplied electrical power during World War II to various industries in the region. Generating capacity upon start-up was 90,000 kilovolt-amperes, or 81,000 kilowatts, in three units. The ultimate installation capacity was 108,000 kilowatts in four units.[19]

Total land costs for the project amounted to $6,523,772, which included acquisition by fee easements, and highway and railroad relocation. The project also required the relocation of 425 graves. Direct construction costs, such as labor, materials, equipment, transportation, totaled $22,815,027. Indirect construction costs, including accounting, timekeeping, office supplies, and police service, came to $1,208,619. Design and engineering expenditures, which included salaries and expenses of executive engineers, technicians, and inspectors, amounted to $2,634,097. These amounts plus other categorized costs brought the total project to $35,671,427.[20]

[16] Tennessee Valley Authority Act of 1933, at website http://www.policyalmanac.org/economic/archive/tva_history.shtml, accessed April 16, 2015.
[17] Tennessee Valley Authority, *The Chickamauga Project,* 41-42, 232, 240.
[18] Ibid., 243-245.
[19] Ibid., 149, 253, 312.
[20] Ibid., 246, 274-75.

After World War II the planned recreational facilities were finally completed and included a campground, picnic area and boat launch ramp along the west shore of the lake and east of the dam. Since its construction, the control building has not been significantly altered and retains its original exterior and interior design and detailing. Of particular note is the intact original lobby with its marble walls, murals and terrazzo floors. This lobby was originally open to visitors but due to security concerns it has been closed to the public since 2001.

SIGNIFICANCE IN ARCHITECTURE

TVAôs hydroelectric projects were designed to embody its mission for social progress. The goals and achievements of these projects - power production, navigation, flood control, malaria prevention, reforestation, and erosion control ï reached across the Valley region penetrating Americaôs social and economic strata. Architect Roland Wank impressed upon a receptive board of directors that government projects were beholden to their real stockholders, the American taxpayers, and should be open for public viewing. Further, Wank stated that the design of powerhouses should both welcome the public and convey strength in purpose. Thus, TVA powerhouses were designed as massive monoliths with visitor reception areas.[21] A prominently displayed message in every TVA powerhouse would emphasize the project as ñBuilt for the People of the United States of America.ò

The pre-World War II TVA projects exemplify the Streamlined Moderne style, a late version of the Art Deco style popular during this period. Streamlined Moderne was an expression of progress, a particularly important underpinning of the New Deal agenda. Stylistic elements that manifested this ideology include the use of geometric shapes, basic and pure in form, sleek and shiny materials evoking machinery and movement, and restrained décor suggesting an economical design ethic. Streamlined Moderne architecture often emphasized curved forms and horizontal lines, sometime including nautical motifs.

The design of the Chickamauga dam and powerhouse reflects the ñmodernismò that the TVA architects and engineers strived for in the 1930s and early 1940s. The dam was built utilizing the most advanced methods of its time, and the powerhouse was built with Streamlined Moderne characteristics on both its exterior and interior. The Chickamauga powerhouse retains several elements expressing the style. The generating units themselves convey the Streamlined Moderne style, with their smooth-finish metal housing and perfectly cylindrical form. The powerhouse interior retains its original interior aluminum doors, original light fixtures, interior wall and floor finishes, and original restroom fixtures and finishes. These elements express the polished minimalism of the Streamlined Moderne architectural style.

[21] North Callahan, *TVA* ï *Bridge Over Troubled Waters: A History of the Tennessee Valley Authority*, (Cranbury, NJ: A. S. Barnes and Co., Inc., 1980), 33; and Erwin C. Hargrove, *Prisoners of Myth: The Leadership of the Tennessee Valley Authority, 1933-1990*, (Princeton, NJ: Princeton University Press, 1994), 30-33.

SIGNIFICANCE IN CONSERVATION

The far-reaching impacts of the TVAôs hydroelectric projects achieved regional and national proportions. TVAôs programs are credited with promoting growth, development, and stability of the region. By the 1930s, it was clear that much of the nationôs farmland had not been properly managed. A report from the USDA noted that 75-100% of topsoil had eroded from some eleven million acres due to flooding and agricultural use. TVAôs goal was improvement of quality of life through progressive management of natural resources. The flood control afforded by TVAôs series of dams along the river brought stability to the lives of thousands of families. Farmers were then able to consistently apply modern farming methods aimed at soil improvement, thus improving crops.

TVA worked with the Civilian Conservation Corps (CCC) in planting fifty million trees across the TVA region by 1939, further assisting in soil conservation.[22] Hand in hand with land management were efforts to support biodiversity in the Valley ecosystem. Though no waterfowl survey was conducted prior to impoundment at Chickamauga, favorable local conditions there led to conservation efforts in the early 1940s. The State of Tennessee began developing the Hiwassee Island Refuge for protecting migratory waterfowl, as well as upland game and quail. Experimental aquatic species were introduced to support waterfowl with desirable vegetation. Additionally, improved farming practices, such as planting of small grains and lespedeza, encouraged quail numbers. Approximately 17,000 acres of TVAôs acquired and cleared land was not greatly affected during the growing season. TVA made these lands available to farmers who agreed to practice systems in accord with objectives of local, state, and federal agricultural agencies. Phosphate and lime were applied to permanent pasture or sod crops, including lespedeza, clover, vetch, rye grass, and small grains. Seed for these crops was supplied from harvests at other TVA reservoir lands. Many of these crops improve the soil naturally, fixing nitrogen in the soil.[23]

SIGNIFICANCE IN ENGINEERING

The Chickamauga Hydroelectric Project is an integral part of the overall engineering design of the TVA system. The dam was built utilizing the most advanced methods of its time. The Chickamauga damôs release provides power to the Nickajack Hydroelectric Project 46.3 downstream. Above Chickamauga Dam, the Chickamauga Reservoir extends upstream to the tailwaters of TVAôs Watts Bar Hydroelectric Project. Releases from the Watts Bar Dam and Hiwassee Valley projects provide power to the Chickamauga Hydroelectric Project.

Model tests for the Chickamauga project designs were conducted at TVA labs at Norris. The U.S. Corps of Engineers performed similar model tests for the lock designs. Tests were done to determine the best location for the lock for navigation, the design of the lock lower guard wall extensions, and a spillway gate operating

[22] Carroll Van West, *Tennessee's New Deal Landscape*, (Knoxville: University of Tennessee Press, 2001), 212-214.
[23] Tennessee Valley Authority, *The Chickamauga Report*, 262-64.

schedule that would best minimize erosion from discharge. Other studies were done to determine design or lock and spillway panels and on site conditions for earth-moving operations.

Hydraulic model tests were conducted on the Guntersville model, which possessed great similarity to the Chickamauga design. The model was built on a scale of 1:150 and included the equivalent of a one-mile reach upstream and a one-half mile reach downstream of the dam site. The resulting model measured twenty-five feet in width and seventy-five feet in length. The river bed was simulated using fine washed river sand, and the model lock was made of wood reinforced with steel components.

Tests were conducted at discharges from 25,000 to 300,000 cubic feet per second (cfs), but focused on a rate of 50,000 cfs, which Guntersville studies had indicated was the critical flow for navigation. Disturbances were created by directing or limiting flow through different spillway gates. For example, when flow was directed through the gates nearest the powerhouse, with and without simultaneous discharge from the powerhouse, current conditions upstream of the dam made entry into the lock difficult for barge tows. Uniform flow across the spillway did not hamper downstream navigation if velocity was not high. A discharge of 200,000 cfs, however, submerged the lower guide wall, creating potential for sweeping barges over the wall. Changing the relative location of the lock and spillway had only a slightly adverse effect on navigation, and additional tests for lock design were conducted at the Iowa City laboratory.

Spillway tests for the Chickamauga model were based on a maximum expected flood of 600,000 cfs. Two spillway types were tested. One type was a 1:25-scale model with three spillway bays. It was used to determine apron design, spillway discharge coefficients, and the number of gates needed to distribute flow over the spillway when tailwater was low and the risk of erosion was therefore greater. A second model at 1:110 scale studied the operation of the spillway as a whole, determining location of gates, prevention of lateral currents, powerhouse training wall design, and spillway operating schedule. As for other TVA projects, the goal was to determine the operating schedule that resulted in a discharge as uniform as possible in order to minimize erosion and eddies in the current. Location of apron was also tested at nineteen different elevations to study erosion. All of these laboratory tests on a small-scale model were used to determine the most satisfactory final design.[24]

SIGNIFICANCE IN INDUSTRY

The Chickamauga Hydroelectric Project was built as part of TVAôs rapid expansion of electrical power to serve the industrial and military requirements of the region. At the nationôs peak of war-time activity in 1942, the TVA was in the process of building twelve hydroelectric facilities. Of the twelve billion kilowatt hours of energy produced among the TVA system, sixty-six percent was devoted to the war effort. The TVA's series of locks and channels created a navigable course from Knoxville to the Mississippi River, effectively boosting the economy of the region.[25]

[24] Ibid., 363-371.
[25] Patricia Bernard Ezzell, ñTennessee Valley Authority in Alabama (TVA),ò available at website http://www.encyclopediaofalabama.org/article/h-2380, accessed April 22, 2015.

During the early post-war years, the TVA supplied electricity at a rate (1.35 cents per kilowatt-hour) less than half of the national average (2.78 cents per kilowatt-hour).[26] By 1946, the TVAôs power plants had a capacity of 2.5 million kilowatts of power and brought electricity to 668,000 households in the Tennessee Valley.[27] Cheap electricity lured new industry to the region, influencing diversification of economy in the historically agricultural Tennessee Valley. The workforce employed in manufacturing grew from 222,000 jobs to 382,000 from 1929 to 1950. The pay rate for a manufacturing job in the region increased by 442 percent compared with the national average gain of 282 percent.[28]

TVAôs influence on households and manufacturing is evident in consumer use of electricity and purchase of appliances during 1939. Kilowatt usage per residential TVA customer increased from 104 kilowatt hours to 113 kilowatt hours. Production of electricity in TVAôs seven-state region increased sixty-three percent. TVA customers purchased household appliances in the amount of $7,072,000.[29]

In recent decades TVA has continued to recruit industry with attractive affordable power. Economic Development is a critical component of TVA's mission. In 2013, TVA Economic Development helped attract or retain almost 52,000 jobs and generate nearly $5.0 billion in capital investment across the TVA region.[30] Barges passing through TVA locks including Chickamaugaôs are loaded with commodities important to U.S. industry such as grains, pulpwood, wood chips, soybean oil, salt, petroleum, steel products, and coal.[31]

SIGNIFICANCE IN RECREATION

Following World War II, as middle class American households gained wealth and indoor electricity, a by-product was outdoor leisure time. The TVAôs contribution to recreational activities is noteworthy. The agencyôs hydroelectric projectsô reservoirs attracted outdoor enthusiasts who enjoyed fishing, boating, camping, and hiking in the environs the TVA helped create, re-forest, and conserve. In the summer of 1937, TVA conducted studies for the recreational potential of Chickamauga Reservoir. The proximity of Chattanooga, a major network of rails and highways, enhanced the reservoirôs natural scenic assets; area historic sites, such as Lookout and Signal Mountains, Missionary Ridge and Chickamauga Battlefields, were by then popular tourist attractions. Given these factors, TVA considered the Chickamauga project unique among its project sites in terms of recreational potential.

Completion of the Chickamauga project included the construction of visitor facilities, an aspect planned, but delayed at previous project sites. Chickamauga included a visitorsôoverlook building at the north (lock) end, with a reception room including an information booth, soda fountain, restrooms, and service rooms and

[26] Ezzell, ñTennessee Valley Authority in Alabama (TVA).ò
[27] West, 11.
[28] Ezzell, ñTennessee Valley Authority in Alabama (TVA).
[29] Zella Armstrong, *History of Hamilton County and Chattanooga, Tennessee Volume 2*, (Chattanooga: The Lookout Publishing Co., 1940), 196-97.
[30] ñEconomic Development,ò at webpage http://www.tva.com/econdev/index.htm accessed May 5, 2015.
[31] Tennessee Valley Authority, ñNickajack Reservoir,ò at webpage http://www.tva.gov/sites/nickajack.htm accessed May 18, 2015.

offices. The projectôs powerhouse lobby received 500,000 visitors in 1940 alone. East of the powerhouse, TVA developed a small inlet with a boat harbor with a concessions building, refreshment counter, information booth and restrooms. TVA passenger cruises operated from a floating dock from this point. The inlet also included five, 24-boat slips, a 110-foot stationary pier, and boat houses. This harbor berthed 150 boats in the summer of 1941, and as many as 1,000 pleasure craft were counted on the main reservoir that summer.[32]

In 1942, the Tennessee State Department of Conservation was in the planning phase for two state parks on Chickamauga Reservoir on lands leased from TVA at $1.00 per year, on a twenty-year renewable basis. These planned parks were the Harrison Bay State Park and the Booker T. Washington State Park. While supporting these recreational parks, the TVA was not directly involved in their development, and the Department of Conservation prepared the plans, assisted in design by the National Park Service. The CCC, on assignment to the NPS, provided labor for the projects.

SIGNIFICANCE IN SOCIAL HISTORY

During the 1930s, the TVAôs Chickamauga project in the Tennessee Valley included improving the land and the lives of its people, devastated by the Depression. The land was over-worked, de-forested, and unproductive. In the process of the Nickajack project, the TVA helped create new employment opportunities in the poverty-stricken region and also developed agricultural fertilizers and provided instruction to farmers on improving soil and developing long-term farming practices.

The Chickamauga project helped to employ local labor beginning in the early stages of clearing wooded land starting April 1, 1938. The decision was made to not work labor at halftime schedules, as had been done at Wheeler and Pickwick, as the practice proved inefficient. At its peak, 1,019 men selected from local farmers experienced in felling timber, wielded saws and axes to clear the reservoir land. Though the most valuable timber had already been removed prior to clearing, a substantial amount of logs was used by CCC labor to build structures at Harrison Park. Salvaged trunks were also used to continue a practice begun at Guntersville, that of marking with posts any channel wide enough to accommodate a boat. This practice readily marked these channels post-inundation, pointing to marginal drainage areas for mosquito control stations.[33]

When construction of the project began, TVA had several programs in place to identify skilled workers and provide training programs. In 1936, TVA had developed a written Workmenôs Examination to ascertain applicantsô knowledge of construction and trades. The exam was available in all counties within a seventy-five-mile radius of the project. TVA sought to employ former workers from previous project sites, promoting them up through the ranks to foremen positions. Job training courses in mathematics, electricity, blueprint reading, concrete, pipe fitting, and welding were made available through a vocational school in Chattanooga. Due to careful employee selection, a good wage scale, and good working conditions, the Chickamauga

[32] Tennessee Valley Authority, *The Chickamauga Project,* 264-66.
[33] Ibid., 235-236, 239-40.

project experienced a low employee turnover. Employee services included offices, segregated lunch rooms, and a first aid station. Due to the proximity of Chattanooga, no worker housing was necessary at the project site. Medical services at the project were provided to employees in the form of periodic health exams, immunizations, on-site prevention and care, and emergency care.

A medical officer, along with an assistant and graduate nurses, administered the medical program on site. Six safety officers maintained accident reports and consulted with design and operating units to reduce incidents of injury and also offered first-aid training. [34]

As the planning phase approached ground-breaking for Chickamauga, TVA established a family readjustment program similar to those at its previous projects. Of the 903 families affected by the project, approximately half were engaged in farming. These farmers were accustomed to growing corn in the rich river bottoms being prepared for inundation. Readjustment for these families would require a shift in farm economy. TVA worked with the Tennessee Agricultural Extension Service and the Farm Security Administration in assisting these families. Open public meetings were also available on the topics of soil conservation and the use of lime and phosphate in lieu of over-working naturally fertile soils. Of the affected families, eleven percent received employment through the Chickamauga project. Most of the non-farm families moved to Chattanooga, while farm families remained in the area.[35]

The Chickamauga projectôs immediate impact at the local level was generally well received locally. The project resulted in employment opportunities during the Depression and in upgraded infrastructure locally. Of the land acquired for the project, 95 percent was by voluntary transfer, while 2.5 percent was by condemnation for title issues, and 2.5 percent by condemnation for refusal to sell.[36] The Chickamauga project affected the nearby town of Dayton, located 3.5 miles from the Tennessee River on a tributary creek prone to flooding. As the seat of Rhea County, Dayton was a trading center of area farming and also had retail businesses and small industrial plants. At the time of the project, Daytonôs population was 2,000. TVA considered several different plans, ultimately agreeing to provide embankment protection, replace existing sewer lines and treatment plant, and relocate a portion of State Route 30.[37]

The unincorporated town of Soddy (pop. 1,200 at the time) required relocation of 1.37 miles of State Highway 29 due to the Chickamauga project.[38] A low swampy area between the reservoir and the town had to be drained and filled above normal pool level in order to control a potential malaria problem. The reservoir sparked local interest at Soddy in recreational opportunities, leading to the creation of a recreational planning committee. The Soddy Chamber of Commerce worked with the State Planning Commission to study recreational development, including a boat harbor and park. The project received WPA funding for

[34] Tennessee Valley Authority, *The Chickamauga Project*, 149-53.
[35] Tennessee Valley Authority, *The Chickamauga Project,* 240-42.
[36] Ibid., 232.
[37] Tennessee Valley Authority, *The Chickamauga Project*, 228-29.
[38] In 1969 Soddy merged with the neighboring community of Daisy to become incorporate Soddy-Daisy.

these facilities, which were later expanded with a caretakerôs office, additional boating docks, and landscaping.[39]

Another social aspect of the TVAôs hydroelectric project involved the removal and relocation of graves located within the reservoir area. This area contained fifty-five cemeteries; lands purchased by TVA included 3,100 graves. Of those 1,300 would be inundated or inaccessible due to inundation. Consulting the wishes of nearest of kin, TVA conducted removal and re-interment of 425 graves. The process included survey, mapping, removal and re-interment, with duplicate records housed at TVA and the State Department of Health. The entire process was completed within three months at a cost of $12,000.[40]

SIGNIFICANCE IN TRANSPORTATION

In 1933, prior to the installation of navigational locks at hydroelectric projects, freight traffic on the Tennessee River was 35 million ton-miles (tons of freight time distance traveled).[41] At the time the Chickamauga pool was opened to navigation, February 26, 1940, it provided 58.2 miles of channel to Watts Bar Dam, which was completed in 1941. At that time, there were no bridges across this stretch of river between the two dams. The Chickamauga pool also provided nineteen navigable miles up the Hiwassee River to Charleston, Tennessee. At that town, the Birmingham Slag Company constructed the necessary docks and land facilities for extensive movement of aggregate, which shipped in six-barge tows up the river to then be transferred for rail-car transport. The full commercial navigation potential of Chickamauga Reservoir would be realized after the completion of upstream Watts Bar and Loudon facilities, opening access to Knoxville. The Chickamauga Reservoir also became used for recreational boating.[42]

In 1954, the Wilkes T. Thrasher Bridge was built over the dam. This bridge carried State Route (SR) 153, a two-lane highway at the time, over the Tennessee River. In 1984, the bridge was expanded to four lanes. SR 153 connects Interstate 75 to the south with U.S. Highway 27 on the north, which are major thoroughfares through the region. The bridge was named for Wilkes Terrace Thrasher, Sr. (1893-1960), a World War I veteran of the U.S. Army, 6th Division, 51st Infantry, who went on to become a Hamilton County Judge.[43]

SUMMARY

The Chickamauga Hydroelectric Project was one of twenty-five (25) projects constructed by the Tennessee Valley Authority (TVA) for the purpose of generating electrical power from, improving navigation of, and controlling seasonal flooding of the river system of the region. The project brought construction jobs and later electricity to the rural area. During planning and construction, TVA provided technical assistance in local schools, municipal land use planning, road relocation and improvement, and shoreline development.

[39] Ibid., 230-32.
[40] Ibid., 246-47.
[41] Tennessee Valley Authority, *The Nickajack Project: A Comprehensive Report on the Planning, Design, Construction, Initial Operations, and Costs*, *Technical Report No. 16*, (Washington, D.C.: U.S. Government Printing Office, 1972), 5.
[42] Tennessee Valley Authority, *The Chickamauga Project*, 255-56.
[43] Armstrong, 155.

While some individual families expressed a sense of loss in displacement from their homes, the Chickamauga Hydroelectric Project brought new opportunities to and spurred economic development in the surrounding counties. The Chickamauga facility is an important component in the vast TVA system of flood control and power generating, as well as contributing to management of river navigation.

The Chickamauga Hydroelectric Project retains much of its integrity from its original design from 1940 and later additions in following decades. The dam and powerhouse have not been significantly altered and the powerhouse displays its original Streamlined Moderne design in its exterior and interior detailing. The project continues to be an integral part of the TVA system. The Chickamauga Hydroelectric Project meets the registration requirements set forth in the Multiple Property Documentation Form, ñHistorical Resources of the Tennessee Valley Authority Hydroelectric Project,ò and this MPDF contains additional contextual information concerning TVA and its hydroelectric system.

Chickamauga Hydroelectric Project | Hamilton County, Tennessee
Name of Property | County and State

9. Major Bibliographic References

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Previous documentation on file (NPS):		Primary location of additional data:	
	preliminary determination of individual listing (36 CFR 67 has been requested)	**X**	State Historic Preservation Office
	previously listed in the National Register		Other State agency
	previously determined eligible by the National Register	**X**	Federal agency
	designated a National Historic Landmark		Local government
	recorded by Historic American Buildings Survey #		University
	recorded by Historic American Engineering Record #		Other
	recorded by Historic American Landscape Survey #	Name of repository: Tennessee Valley Authority Knoxville, TN	
Historic Resources Survey Number (if assigned):			

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10. Geographical Data

Acreage of Property å 431 acres **USGS Quadrangle** East Chattanooga 112 SW

Latitude/Longitude Coordinates

A. Latitude: 35.110721 Longitude: -85.236742

B. Latitude: 35.110574 Longitude: -85.218878

C. Latitude: 35.090051 Longitude: -85.237003

D. Latitude: 35.089798 Longitude: -85.218248

Verbal Boundary Description

The National Register boundary for the Chickamauga Hydroelectric Project is depicted as a dashed line on the accompanying US Quad map and TVA site plan map.

The National Register boundary for the Chickamauga Hydroelectric Project is depicted as a dashed line on the accompanying USGS Topographical Quadrangle map and site plan map. The National Register boundary is drawn to include all original buildings, sites, and structures of the Chickamauga reservation but exclude modern infrastructure, such as rail lines and marinas. Thus, the National Register boundary on the west begins on the north shore of Nickajack Lake and continues south on the east side of the railroad bridge. On the south shore of Nickajack Lake, the boundary continues generally south on the east side of the railroad tracks before departing to follow the tree line of TVA woodlands in a southeasterly direction. Then the boundary turns at a right angle and continues in a northwesterly direction and crosses highway 153 to the Chickamauga Harbor marina, where it continues along the west shoreline of the harbor and around the east peninsula on which an original picnic area and visitor building are located. The boundary line follows the shoreline of the peninsula to the north and then to the west before departing at a right angle and continuing to the north across the Chickamauga reservoir to the north shore. There, at the east end of the north embankment, the boundary line angles to the northwest to Chickamauga Creek and then follows the creek in a southwesterly direction to meet the beginning west boundary line on the north shore of Nickajack Lake.

Boundary Justification

The boundary includes all facilities necessary for the operation of the hydroelectric project and/or associated with the mission of TVA of power generation, navigation, and public recreation. The boundary omits other TVA lands not directly associated with hydroelectric production.

Chickamauga Hydroelectric Project	Hamilton County, Tennessee
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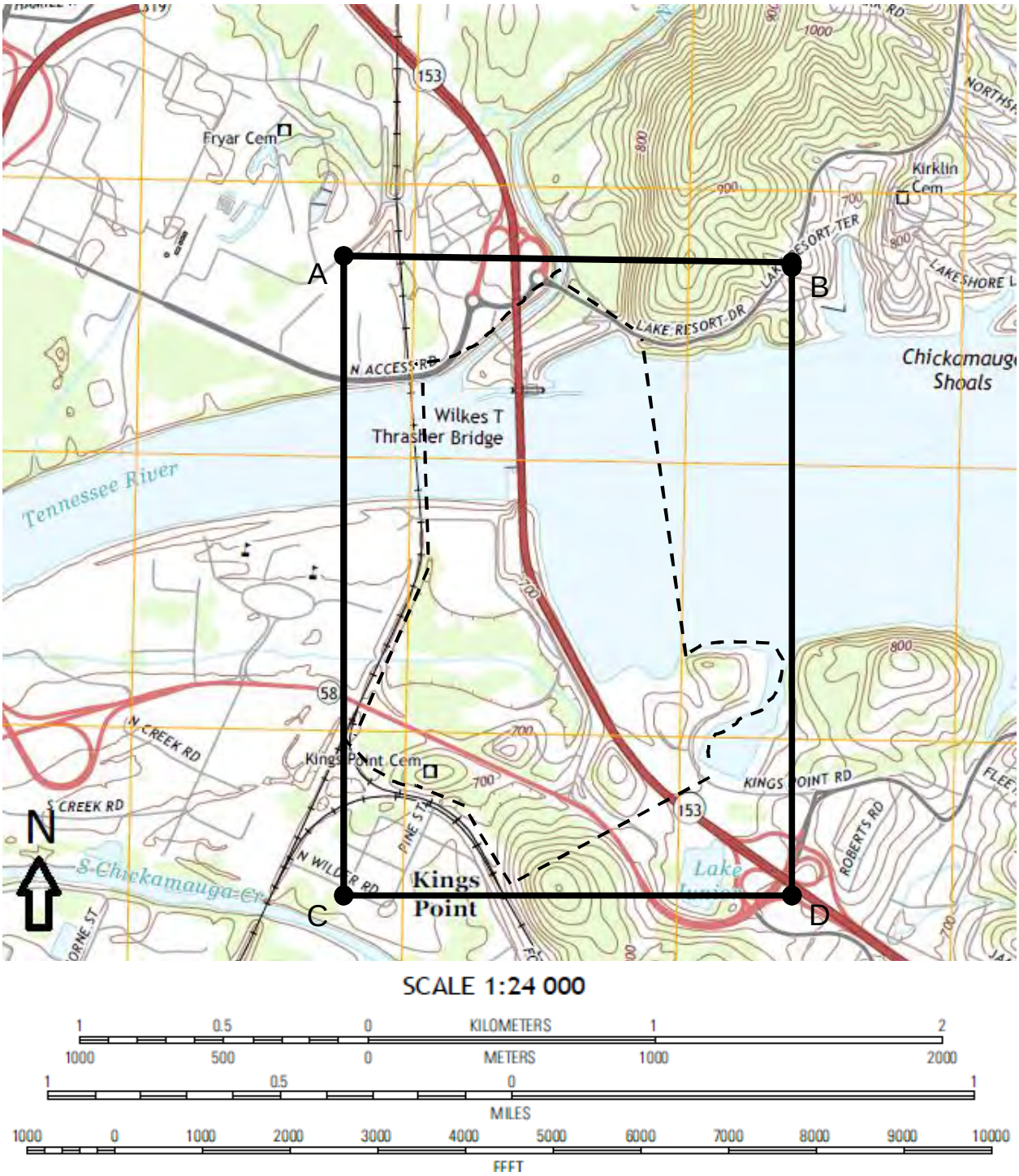
National Register boundary for Chickamauga Hydroelectric Project



Chickamauga Hydroelectric Project	Hamilton County, Tennessee
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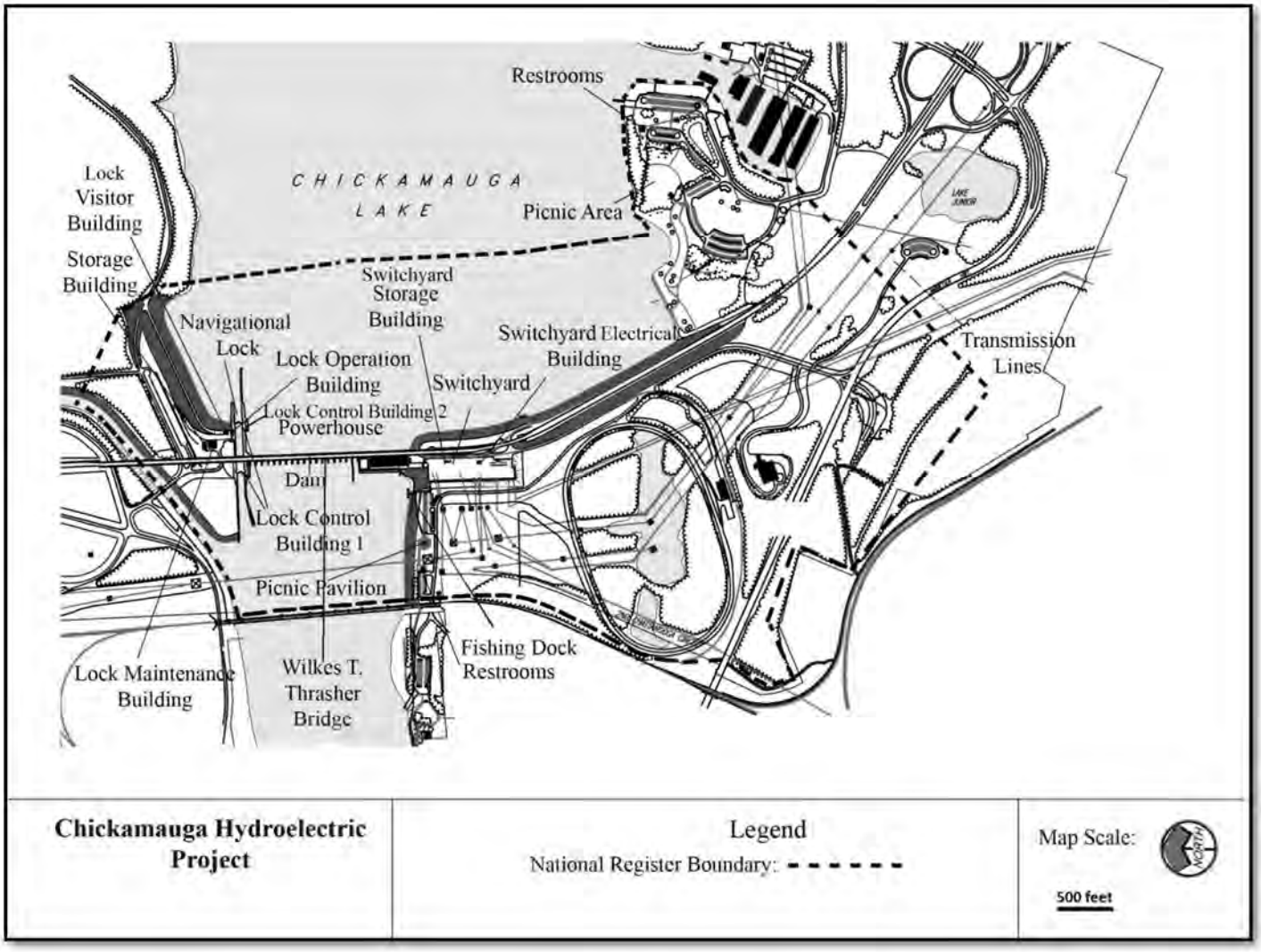
Site Plan and National Register boundary for Chickamauga Hydroelectric Project
(See 11 x 17" map for enlarged view)



Chickamauga Hydroelectric Project	Hamilton County, Tennessee
Name of Property	County and State

11. Form Prepared By

Name	Andra Kowalczyk Martens; Phil Thomason; Rebecca Hightower		
Organization	Thomason and Associates		
Street & Number	P.O. Box 121225	Date	October 21, 2016
City or Town	Nashville	Telephone	615-385-4960
E-mail	Thomason@bellsouth.net	State / Zip Code	TN / 37212

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to map.
- **Photographs (**refer to Tennessee Historical Commission National Register *Photo Policy* for submittal of digital images and prints**)**
- **Additional items:** (additional supporting documentation including historic photographs, historic maps, etc. should be included on a Continuation Sheet following the photographic log and sketch maps)

PHOTOGRAPHS

Photo Log

Name of Property: Chickamauga Hydroelectric Project
City or Vicinity: Chattanooga
County: Hamilton State: Tennessee
Photographer: Thomason and Associates
Date Photographed: April 19, 2015

Photo 1 of 33 Chickamauga Hydroelectric Project, view to east.

Photo 2 of 33 Chickamauga Hydroelectric Project, view to northeast.

Photo 3 of 33 Spillway gate, view to southeast.

Photo 4 of 33 Spillway piers, west side of dam from locks, view to southeast.

Photo 5 of 33 Chickamauga Dam south embankment, view to south.

Photo 6 of 33 Chickamauga Dam north embankment, view to northeast.

Photo 7 of 33 Powerhouse entrance, south elevation, view to northeast

Photo 8 of 33 East elevation of powerhouse.

Photo 9 of 33 North elevation of powerhouse .

Photo 10 of 33 Powerhouse, top floor, west elevation, view to southwest .

Photo 11 of 33 Interior: Overhead crane above generator room in powerhouse.

Photo 12 of 33 Generator units 1-4 from visitor balcony.

Photo 13 of 33 Powerhouse interior office.

Photo 14 of 33 Powerhouse interior door.

Photo 15 of 33 Powerhouse bathroom.

Photo 16 of 33 Powerhouse lobby.

Photo 17 of 33 Display model in powerhouse lobby.

Photo 18 of 33 Powerhouse generator room floor.

Photo 19 of 33 Generator unit curved staircase.

Photo 20 of 33 Chickamauga navigational locks, view to northwest.

Photo 21 of 33 Chickamauga navigational lock entrance, view to west.

Photo 22 of 33 Lock gates at east end, view to northeast.

Photo 23 of 33 Lower lock gate, view to the southeast.

Photo 24 of 33 Lock operation building, north elevation, view to south.

Photo 25 of 33 Lock operation building, east elevation, view to west.

Photo 26 of 33 Lock operation building interior.

Photo 27 of 33 Lock control building 1, view to west.

Photo 28 of 33 Lock maintenance building, view to southeast.

Photo 29 of 33 Lock visitor building, south elevation, view to north.

Photo 30 of 33 Visitor storage building, view to west.

Photo 31 of 33 Switchyard, view to west.

Photo 32 of 33 Picnic/Recreational area, view to southeast.

Photo 33 of 33 Bath house, view to northeast.

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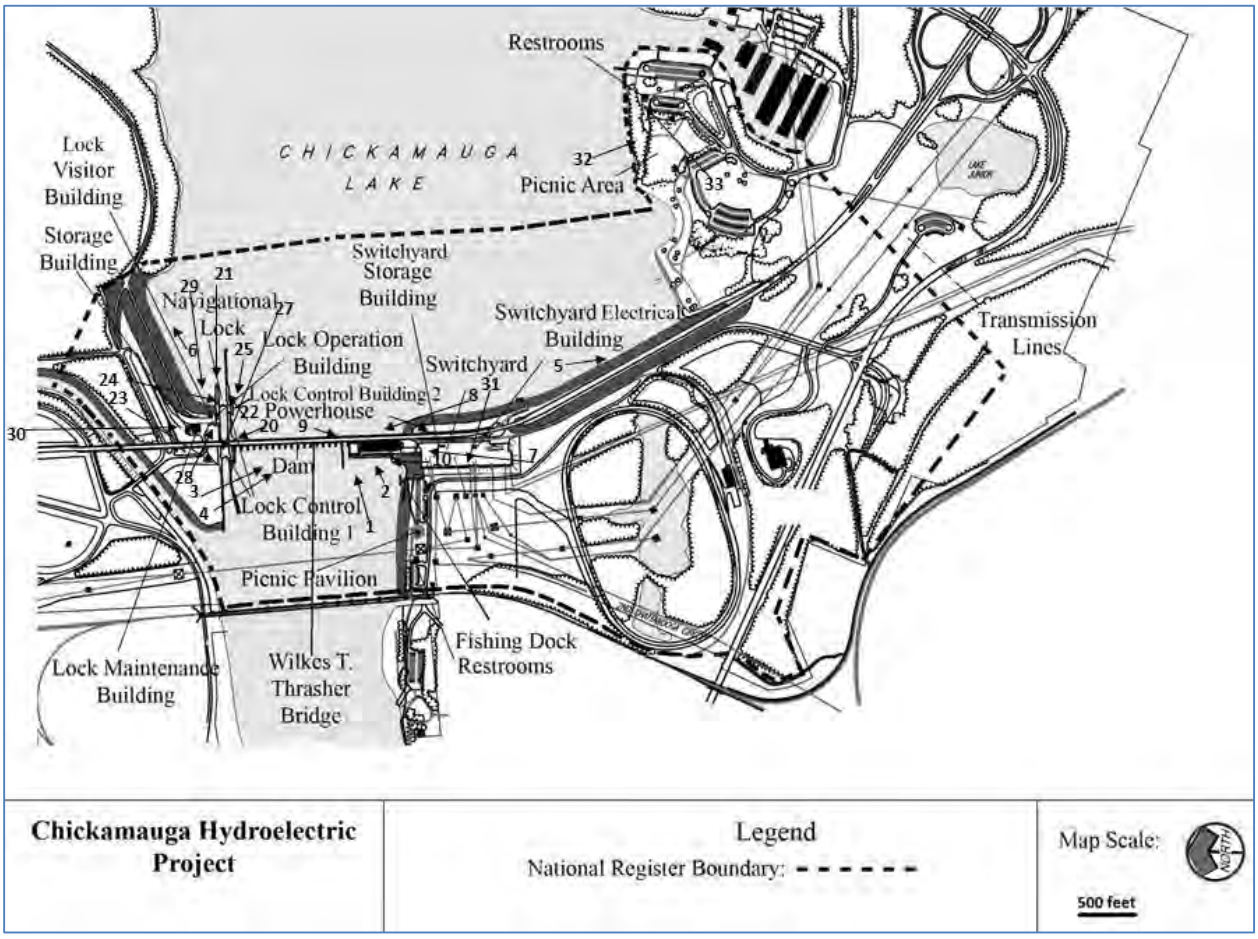

Chickamauga Hydroelectric Project Photo key Map
(See accompanying 11 x 17" Photo Key Map).

Chickamauga Hydroelectric Project	Hamilton County, Tennessee
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SITE PLANS

Original 1940 Site Plan and River Wall Elevation

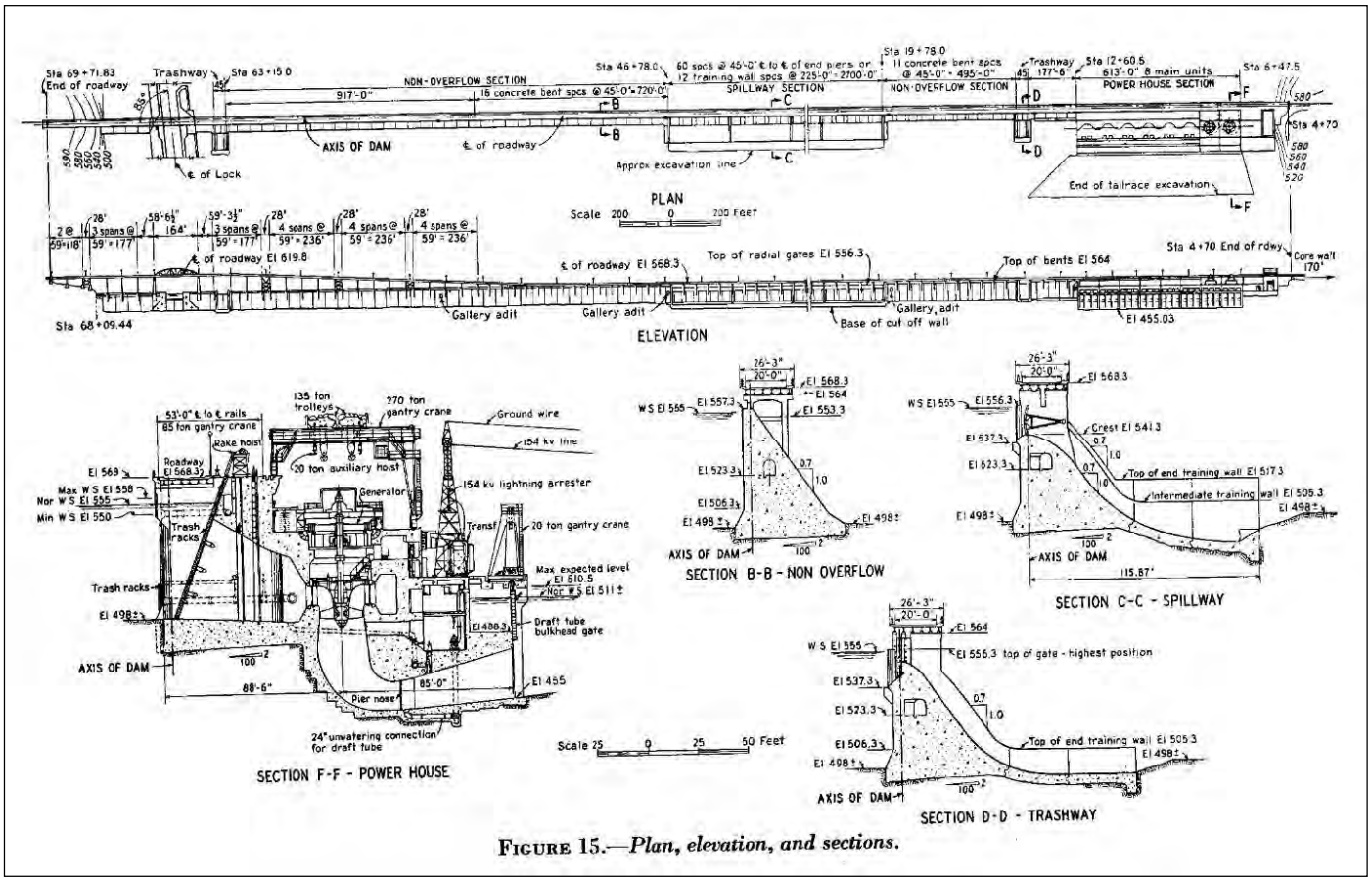

FIGURE 15.—*Plan, elevation, and sections.*

Chickamauga Hydroelectric Project
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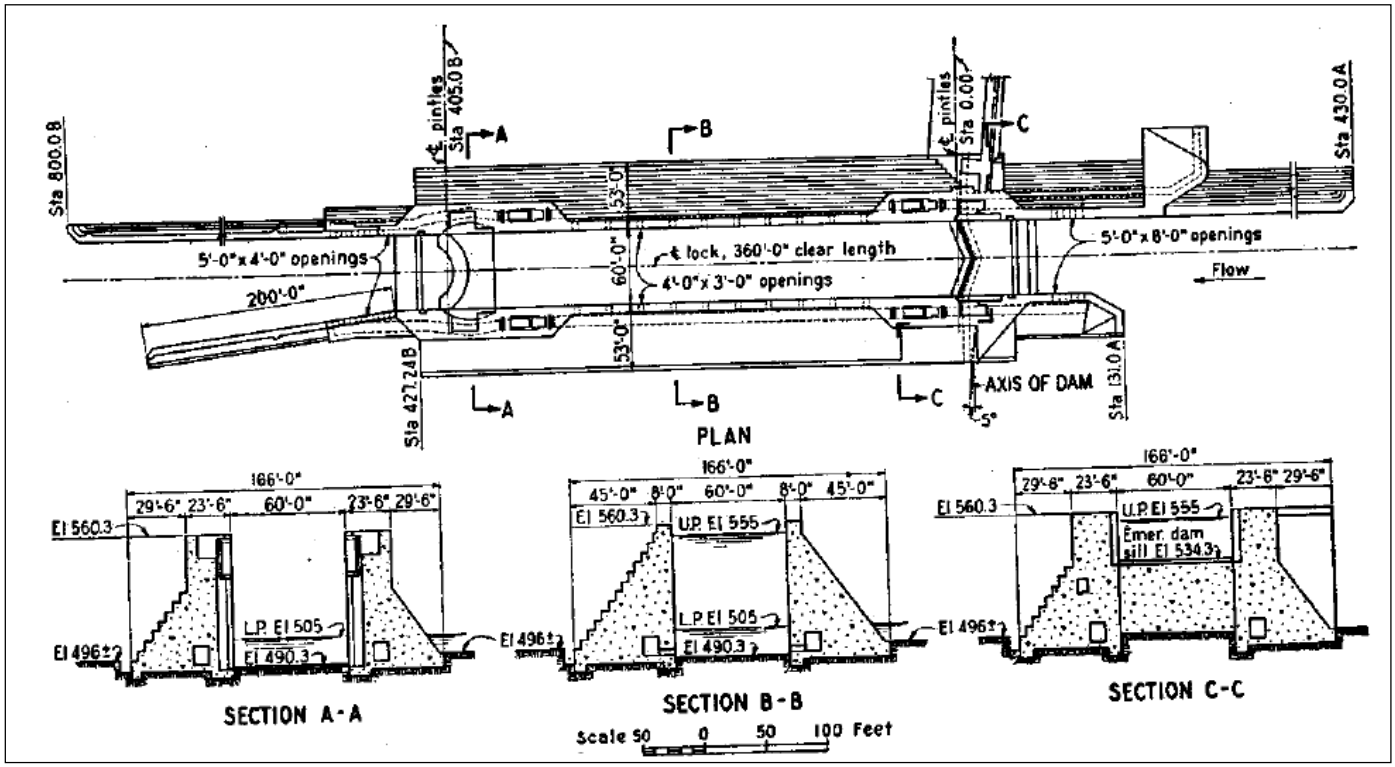
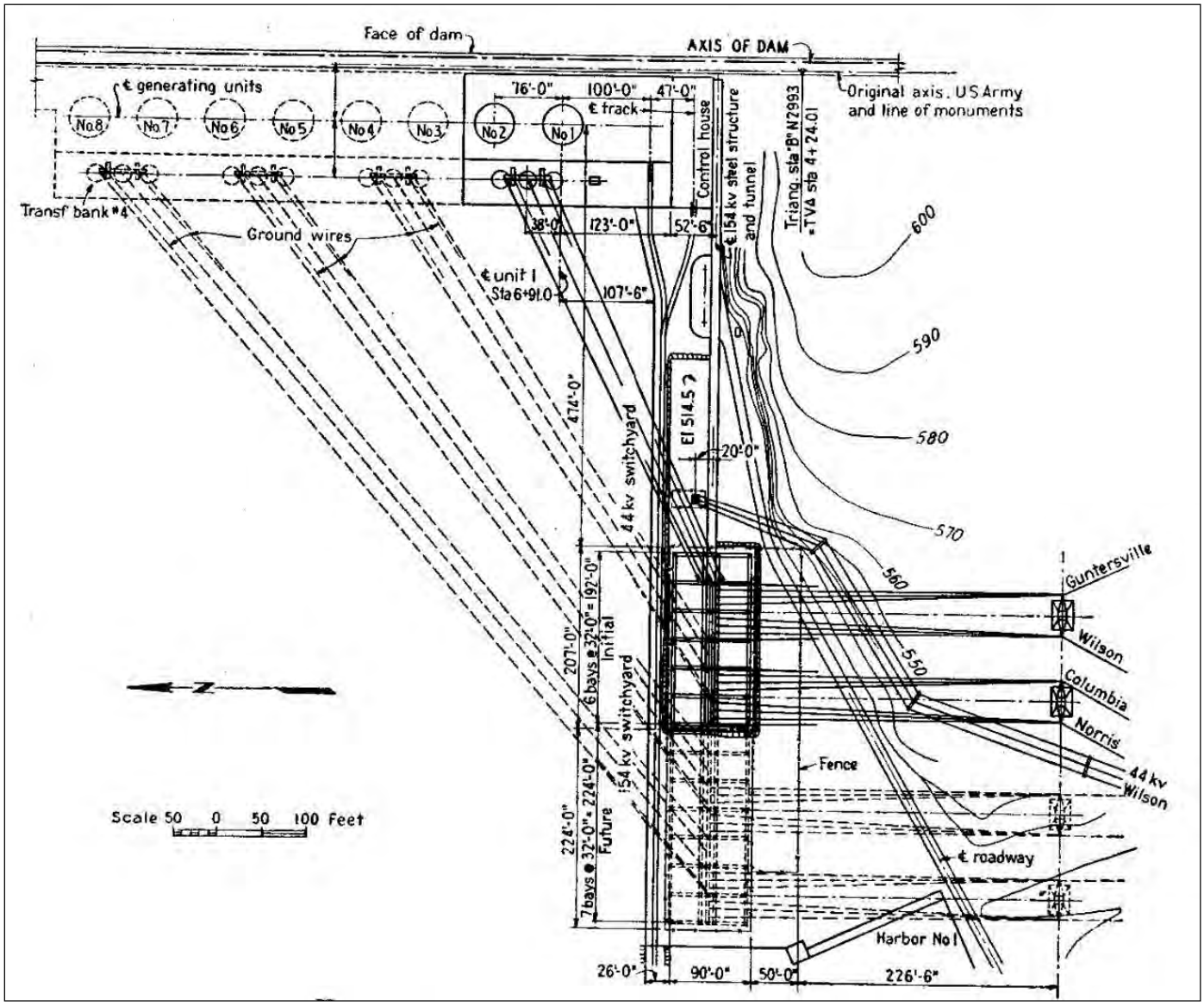
County and State

Navigation Lock Plan and Sections



Chickamauga Hydroelectric Project	Hamilton County, Tennessee
Name of Property	County and State

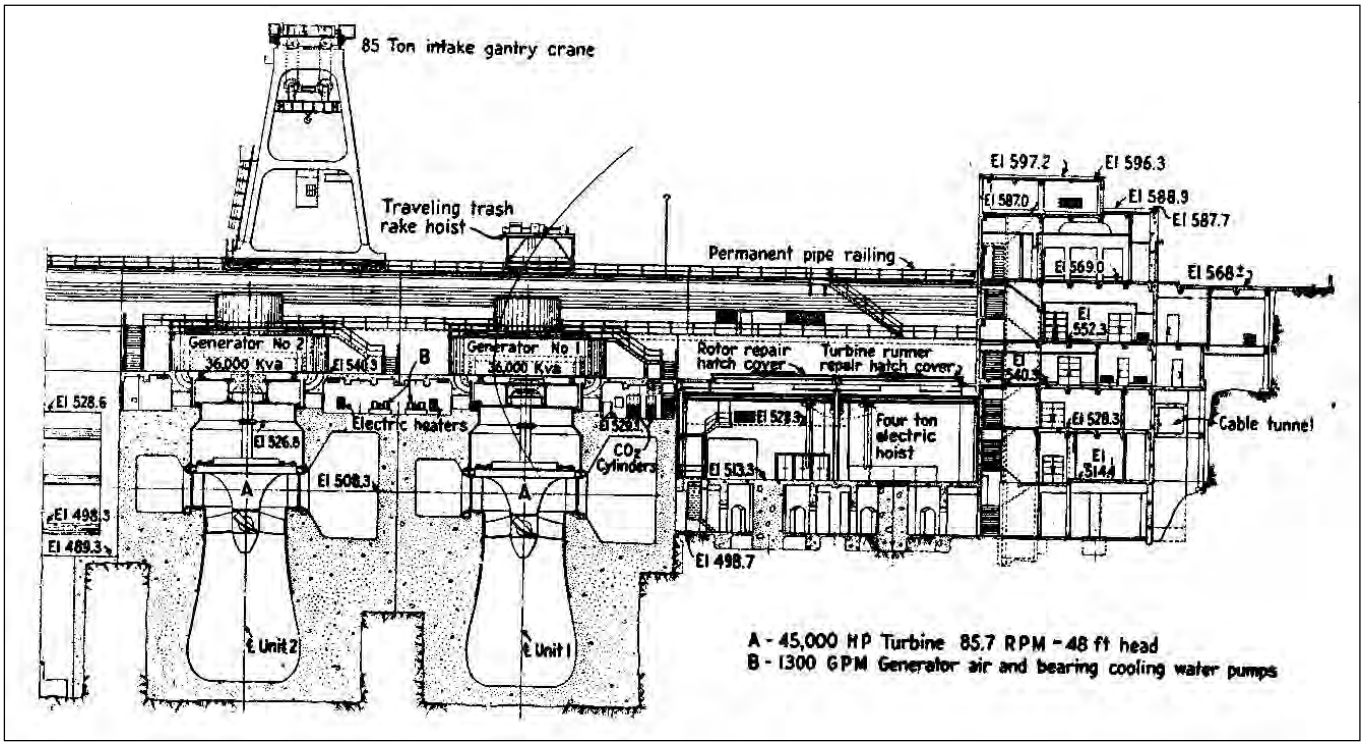
Switchyard Site Plan



Chickamauga Hydroelectric Project	Hamilton County, Tennessee
Name of Property	County and State

Sections and Elevations:

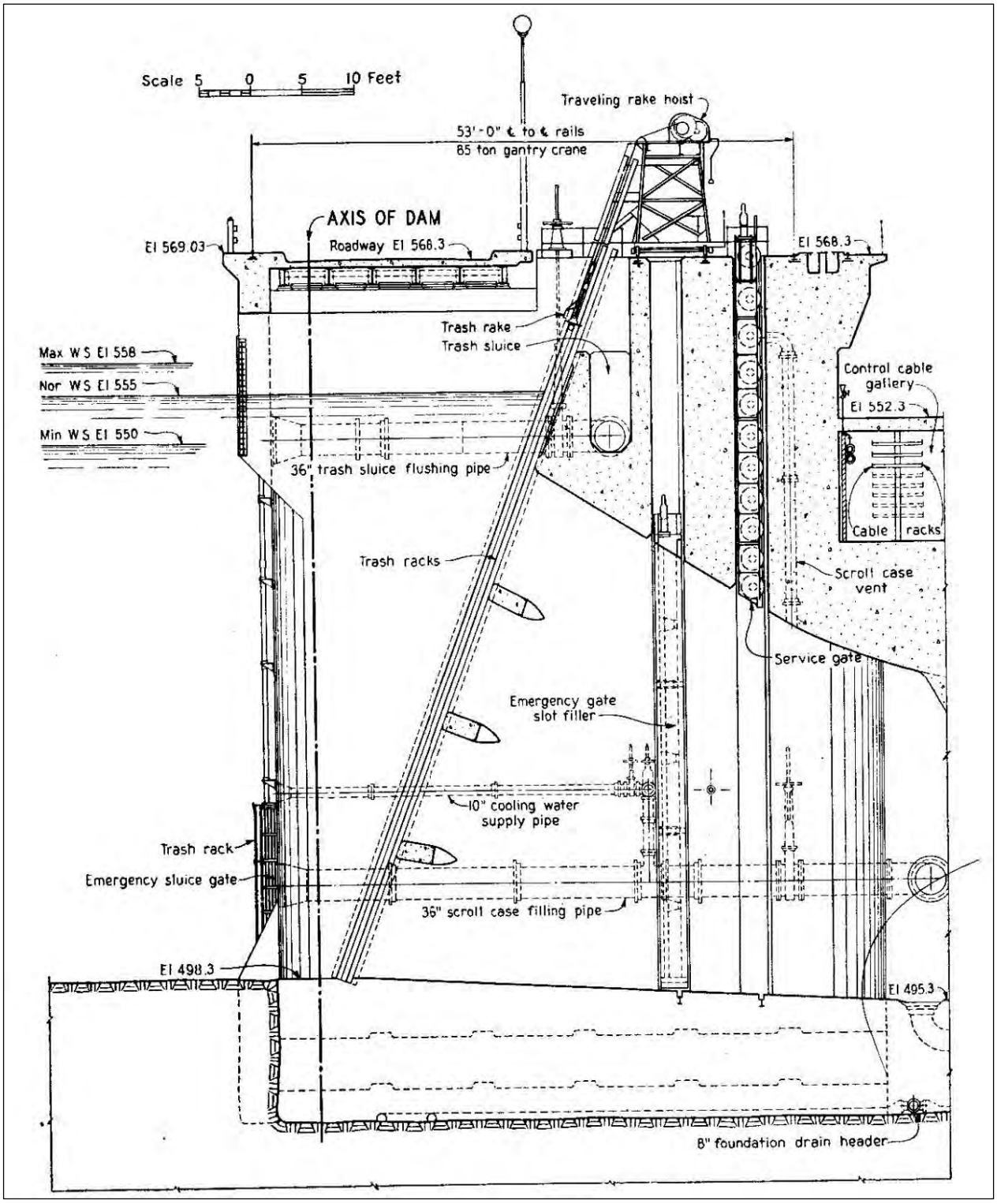
Powerhouse and Turbine Area Section



Chickamauga Hydroelectric Project
Name of Property

Hamilton County, Tennessee
County and State

Intake Structure Section



Property Owner:

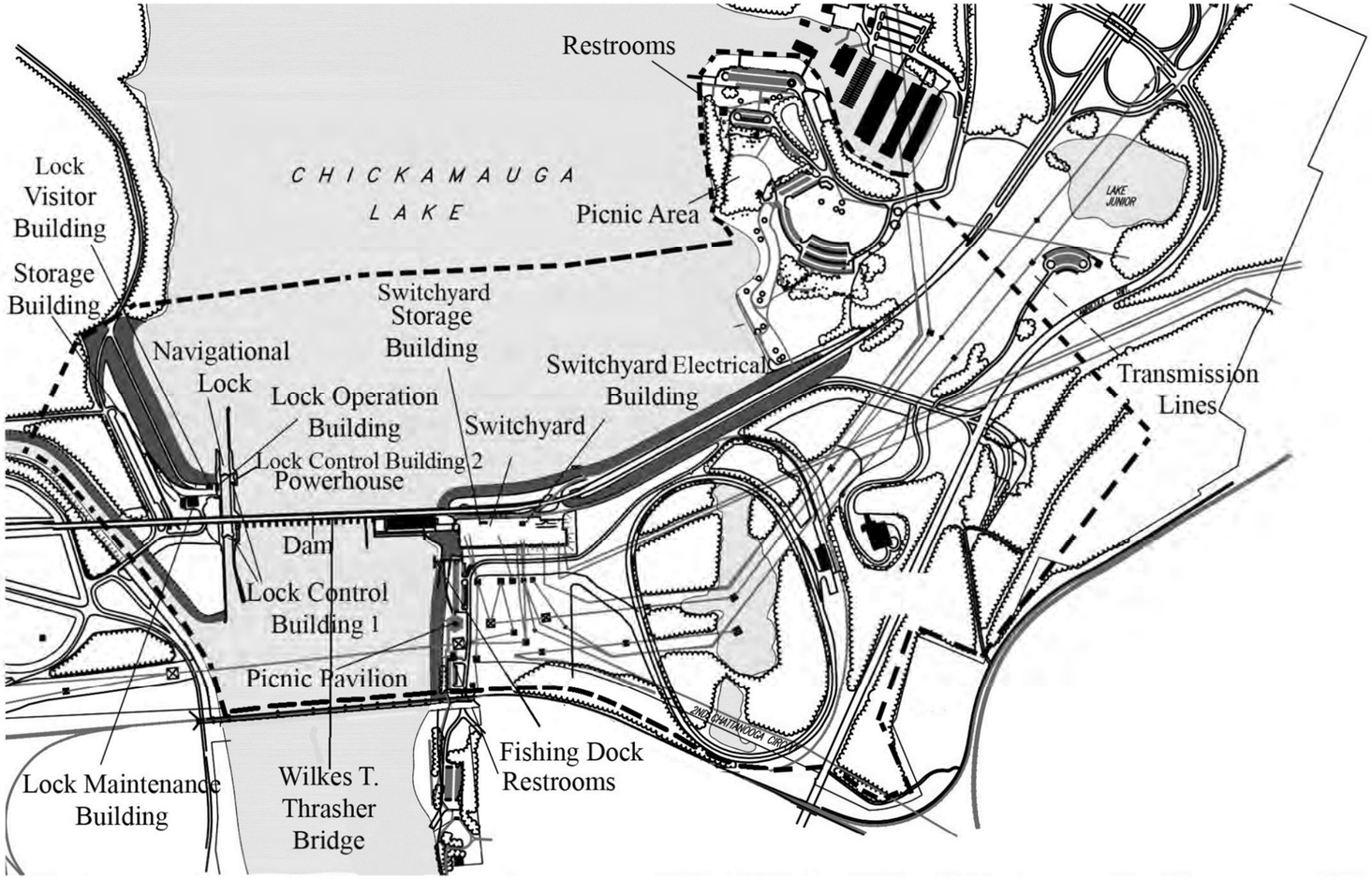
(This information will not be submitted to the National Park Service, but will remain on file at the Tennessee Historical Commission)

Name Tennessee Valley Authority ï Pat Ezzell

Street & Number 400 West Summit Hill Drive 460WT7D-K Telephone 865-632-6461

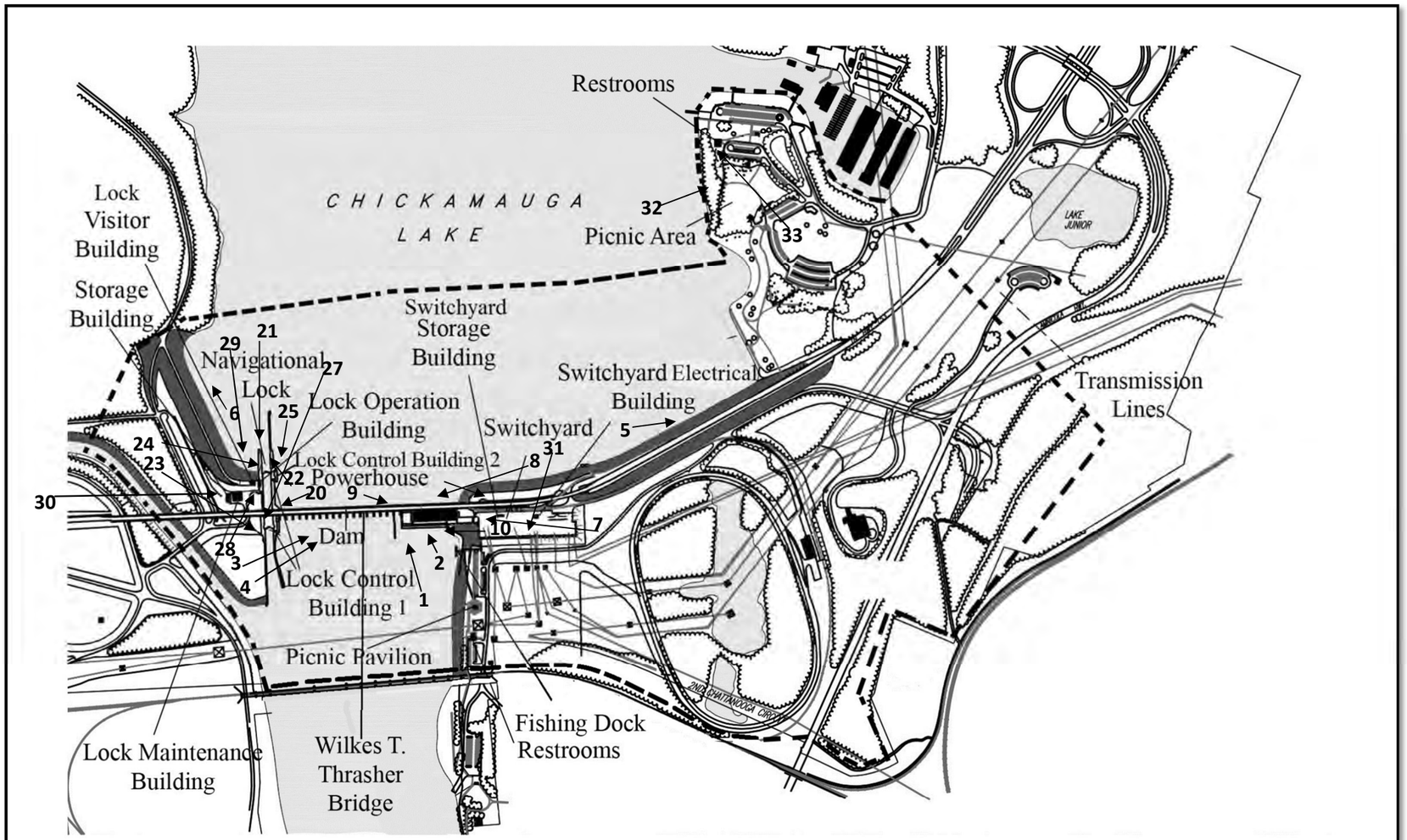
City or Town Knoxville State/Zip TN 37902

Site Plan and National Register Boundary for the Chickamauga Hydroelectric Project



Chickamauga Hydroelectric Project	Legend National Register Boundary: - - - - - -	Map Scale: NORTH 500 feet

Photo Key Map for the Chickamauga Hydroelectric Project



Chickamauga Hydroelectric Project	Legend National Register Boundary: - - - - - -	Map Scale: NORTH 500 feet


CHICKAMAUGA


10 TON
SEAL/COVER DRAINS IN LOADING/UNLOADING AREA PRIOR TO TRANSFER OF OIL OR HAZARDOUS MATERIALS
KNACK
CLARK


CAPACITY 275 TONS


WOMEN


1936 BUILT FOR THE PEOPLE OF THE UNIT
THE PROMISE
EACH OTHER


goods over its surface on flatboats and rafts.
Planters and merchants in the 1800s depended
upon steamboats which plied the river before the
days of modern rail and highway transport.
Today the Tennessee River continues to serve as
an efficient, low-cost transportation route for the
shipment of goods between the farms and factories
of the Tennessee Valley and the ports of the
world. The system of nine TVA dams and locks
lift and lower vessels a total of 500 feet along the
650-mile waterway between Paducah, Kentucky,
and Knoxville, Tennessee. The Tennessee River
connects with the nation's 21-state inland water-
way system and with ocean-going ships in the Gulf
of Mexico.
Bulk commodities such as chemicals, petroleum,
grain, ore, steel, and coal move in giant tows, sav-
ing shippers more than $130 million a year. A
single commercial tow of 20 barges can carry as
much cargo as 400 rail cars.
Large waterfront industries taking advantage of
the developed waterway have invested more than
$4 billion in plants and terminals and employ more
than 45,000 people.
PROFILE OF THE TENNESSEE RIVER


Miter Sill


CHICKAMAUGA


EXIT
7
Safety
Recognition


DANGER
EAR PROTECTION
MUST BE WORN
IN THIS AREA


Chickamauga
Lock
50


DANGER
NO SMOKING
OR OPEN LIGHTS
WITHIN 10 FEET
4
2

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action:	Nomination
Property Name:	Chickamauga Hydroelectric Project
Multiple Name:	Tennessee Valley Authority Hydroelectric System, 1933-1979 MPS
State & County:	TENNESSEE, Hamilton

Date Received:	Date of Pending List:	Date of 16th Day:	Date of 45th Day:	Date of Weekly List:
6/30/2017	7/27/2017	8/11/2017	8/14/2017	

Reference number:	MP100001466
Nominator:	State

Reason For Review:

__ Appeal	__ PDIL	__ Text/Data Issue
__ SHPO Request	__ Landscape	__ Photo
__ Waiver	__ National	__ Map/Boundary
__ Resubmission	__ Mobile Resource	__ Period
__ Other	__ TCP	__ Less than 50 years
	__ CLG	

__X__ Accept _____ Return _____ Reject __8/11/2017__ Date

Abstract/Summary Comments:	Meets registration requirements of MPS. Social History is not supported.
Recommendation/ Criteria	Accept / A & C

Reviewer Jim Gabbert Discipline Historian

Telephone (202)354-2275 Date _____

DOCUMENTATION: see attached comments : No see attached SLR : **Yes**

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

Thomason&Associates
preservation planners

June 21, 2017

Paul Loether
National Register of Historic Places, Keeper
Mail Stop 7228
1849 C Street NW
Washington, D. C. 20240

Dear Mr. Loether,

The Tennessee Valley Authority (TVA) contracted with Thomason and Associates, Preservation Planners to complete nominations to the National Register of Historic Places (NRHP) for twenty-five of its hydroelectric projects. Three nominations - for the Norris, Guntersville, and Wheeler Hydroelectric Projects - were previously submitted, resulting in listing in the NRHP in 2016. The TVA proposes the nomination of the remaining twenty-two hydroelectric projects. The enclosed disks contain the true and correct copies of the nominations of:

Georgia: the Nottely Hydroelectric Project;
Kentucky: the Kentucky Hydroelectric Project;
North Carolina: the Apalachia, Chatuge, Fontana, and Hiwassee Hydroelectric Projects; and
Tennessee: the Boone, Cherokee, Chickamauga, Douglas, Fort Loudoun, Fort Patrick Henry, Melton Hill, Nickajack, Normandy, Ocoee No. 3, Pickwick Landing, South Holston, Tellico, Tims Ford, Watts Bar, and Watauga Hydroelectric Projects.

The overall context for these nominations, the MPDF "Historic Resources of the Tennessee Valley Authority Hydroelectric System, 1933-1979" was approved by your office on March 12, 2016. The enclosed nominations have been reviewed by TVA as well as the respective State Review Boards and enclosed are the twenty-two physical signed copies of the signature pages of each nomination. All local governments have been notified of the intent to list these hydroelectric projects in the National Register.

We are pleased to submit these nominations to you which recognize the diverse history and contributions made by the Tennessee Valley Authority to our nation.

Please contact me if any additional information is needed.

Sincerely,

Philip Thomason
Principal

cc. Pat Ezell, Senior Program Manager, TVA

Enc/

p.o. box 121225 nashville, tn 37212 615.385.4960 — www.thomasonandassociates.com

Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

August 9, 2017

Mr. Paul Loether
National Register of Historic Places, Keeper
Mail Stop 7228
1849 C Street NW
Washington, D. C. 20240

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Sincerely,

Pat Bernard Ezzell

Patricia Bernard Ezzell
Federal Preservation Officer
Communications

Enclosures

Tennessee Senate

Tennessee Senate

OFFICE OF THE CHIEF CLERK

SENATE RESOLUTION NO. 53

By Watson, Gardenhire

A RESOLUTION
relative to the Chickamauga Hydroelectric Project.

WHEREAS, the Chickamauga Hydroelectric Project in Chattanooga has been considered by the Tennessee Historic Commission for nomination to the National Register of Historic Places, the federal government's list of historic properties worthy of preservation; and

WHEREAS, the Chickamauga Hydroelectric Project was built as part of a New Deal-era initiative to improve navigation on the Tennessee River and bring flood control and economic development to the Tennessee Valley; and

WHEREAS, owned and operated by the Tennessee Valley Authority, the Chickamauga Hydroelectric Project is named for a tribe of Native Americans that broke away from the Cherokee Nation in the 1700s and eventually settled in villages along North Chickamauga Creek; and

WHEREAS, completed in 1940 after four years of construction, the Chickamauga Hydroelectric Project utilizes four generating units on Chickamauga Dam to produce a net dependable capacity of 119 megawatts of hydroelectric power; and

WHEREAS, before TVA built Chickamauga, Chattanooga had one of the most serious flooding problems in the nation; today, the river contributes to the economy as a major artery for barge traffic, and the dam has prevented billions of dollars in flood damage to the city; and

WHEREAS, for more than seventy-five years, the Chickamauga Hydroelectric Project has provided electric power to fuel the engines of progress and industry in Chattanooga and the Tennessee Valley, and its fascinating history should be preserved for future generations to study and appreciate; now, therefore,

BE IT RESOLVED BY THE SENATE OF THE ONE HUNDRED TENTH GENERAL ASSEMBLY OF THE STATE OF TENNESSEE, that this body supports the nomination to and inclusion of the Chickamauga Hydroelectric Project on the National Register of Historic Places.

BE IT FURTHER RESOLVED, that a certified copy of this resolution be transmitted to the Tennessee Historic Commission, the National Park Service, United States Senator Lamar Alexander, United States Senator Bob Corker, and United States Congressman Chuck Fleischmann.

Adopted: May 1, 2017

Senator Bo Watson

Speaker of the Senate

Senator Todd Gardenhire