United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Name of Property

County and State

Section number _____ Page _____ Name of multiple property listing (if applicable)

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 100001467 Date Listed: 8/11/2017

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

County: Hardin 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

INDUSTRY and SOCIAL HISTORY are hereby deleted as areas of significance. Neither is well-supported in the nomination.

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-1467

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: Pickwick Landing Hydroelectric Project

Other names/site number: Pickwick Landing Dam

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

2. Location

Street & Number: 850 Carolina Lane

City or town: Counce State: Tennessee County: Hardin

Not For Publication: N/A Vicinity: N/A Zip: 38326

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**

Dr. Program Mgr., Tribal Relations & History & 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: Claudette Sam **Date** 11/28/16

Deputy State Historic Preservation Officer,
Tennessee Historical Commission

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

Pickwick Landing Hydroelectric Project — Name of Property

Hardin 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 — Date of Action: 8-11-2017

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	
2	7	buildings
1	0	sites
4	4	structures
0	0	objects
7	11	Total

Number of contributing resources previously listed in the National Register 0

6. Function or Use

Historic Functions (Enter categories from instructions)	Current Functions (Enter categories from instructions)
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

MODERN MOVEMENT: Streamlined Moderne
OTHER: Hydroelectric Dam

Materials:

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

Narrative Description

The TVA began construction of the Pickwick Landing Hydroelectric Project on March 8, 1935, and the facility was put into operation on June 29, 1938. Located in the south central portion of Hardin County, Tennessee, the Pickwick Landing Hydroelectric Project straddles the Tennessee River for one-and-one-half miles near Counce, Tennessee. The 2014 population for the Counce zip code was 2,230. [1] The Pickwick Landing Dam is located 206.7 miles from the mouth of the Tennessee River in Tennessee near the borders of Mississippi and Alabama. An important purpose for the construction of the dam was to improve navigation through the historically challenging shoals in this stretch of the Tennessee River. The Pickwick Landing Dam impounds Pickwick Reservoir (also called Pickwick Lake), extending 52.7 miles upstream into the northeast corner of Mississippi and to the base of Wilson Dam at Muscle Shoals, Alabama. The reservoir has nearly 490 miles of shoreline and 43,100 acres of water surface when it is at its highest capacity in the summer. The dam has a flood control

[1] Source: Sterlingôs webpage http://www.bestplaces.net/people/zip-code/tennessee/counce/38326.

capacity of 492,700 acre-feet with minimum water elevations at 408 feet for navigability. The area in which the dam is situated is a broad flat flood plain with steep hills, ridges, and bluffs formed by Tennesseeôs Southern Highland Rim Plateau on the north side. The Tennessee Valley watershed comprises 40,910 square miles; of that, 32,820 square miles are above the Pickwick Landing site. The mean rainfall of the basin was fifty-two inches annually over a period from October 1920 to September 1932. This calculation was used for determining power potential of the dam. The manipulation of water levels across the system allows the TVA to achieve optimum capacity at individual power plants.[2]

INVENTORY

The Pickwick Landing Hydroelectric Project originally consisted of the dam, one navigational lock, powerhouse and control building, and switchyard, which are interconnected and integral to one another (*see Photo 1*). The Pickwick Landing Dam has six generator units generating 229 megawatts of hydroelectric power daily. The first generator installed there was the largest of its kind in the United States. After World War II, a recreational area consisting of picnic tables, campground, a boat ramp and restrooms was developed south of the dam. The recreational area was designed in 1938 as part of the TVA mission but construction was not completed until the 1950s. A second navigational lock was constructed beginning in the late 1970s and opened for service in 1984.

1. Pickwick Landing Dam, 1938 (Contributing Structure)

The Pickwick Landing damôs spillway has a crest at an elevation of 378 feet. The Pickwick Landing Dam has an overall crest length of 7,715 feet. The deck of the dam has metal railing on each side. Above the dam is an elevated bridge (see resource 15) carrying State Route 128 across the river (*see Photo 2*). The spillway runs a length of 1,141 feet across the Tennessee River from the lock on the south to the powerhouse on the north (*see Photo 3*). It is a concrete gravity type spillway.[3] The maximum height of the spillway is 113 feet, from the foundation to the top of deck. The spillway consists of twenty-four (24) forty-foot by forty-foot vertical-lift gates of structural steel with roller bearings for wheels at the bottom section.[4] This wide spillway required digging into the south and north banks for construction of the lock and powerhouse, respectively. During construction, however, data obtained during a flood indicated that the project would have been sufficient with twenty-two gates. With the spillway length and the lock already constructed by that time, the two end gates were simply revised as bulkheads without overflow operations. The platforms for gate maintenance were built behind them.[5]

The spillway gates are one of two types, control or flood. The distinction is in operation rather than design. Control gates require close regulation of discharge over the dam at normal or low flow in order to achieve

[2] Tennessee Valley Authority, *The Pickwick Landing Project: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Pickwick Landing Project*, *Technical Report No. 3*, (Washington, D.C.: U.S. Government Printing Office, 1941), 1, 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] Tennessee Valley Authority, *The Pickwick Landing Project,* 312.

[5] Tennessee Valley Authority, Design of *TVA Projects*, *Technical Report No. 24, Vol.1*: *Civil and Structural Design,* (Washington, D.C.: U.S. Government Printing Office, 1952), 17.

accurate discharge volume and distribution. Flood gates do not require such close attention and are used to support the control gates in times of high flow; they are operational either fully closed or fully opened. A gantry crane is used to regulate and maintain spillway gates[6] (*see Photo 4*).

Earth embankments were created on both sides of the river. Riprap was added to protect the banks during extreme flooding, from three feet thick at elevation 400 feet (eight feet below minimum pool level) to elevation 413 feet, then tapering to eighteen inches thick at elevation 415 feet. The south embankment extends in a straight line 4,687 feet from the lock to the bluff on the south side of the river. The north embankment is at elevation 440 feet and is triangle-shaped. The switchyard (see below under powerhouse) is located upon the north embankment. Its 170-foot south end abuts the north dam (see below under powerhouse) and extends upstream at an angle of forty-two degrees, ending at the bluff, where its base is 1,050 feet in length. The length of the north embankmentôs centerline was 977 feet.[7]

2. Navigational Lock, 1938 (Contributing Structure)

The original lock at the south end of the river is located between the south embankment and the spillway. It is constructed of reinforced concrete and has metal railing around the entire deck. It is an Ohio River-type lock with a maximum lift of sixty-three feet; it is one of the highest single-lift locks in the world. The open lock chamber measures 110 feet by 600 feet. The lock provides a normal lift of fifty-six feet and a maximum lift of sixty-three feet. The top levels of the walls are at an elevation of 422 feet. The upper and lower lock gates are structural steel. For support of the water load when the gates are closed, each gate forms a three-hinged arch with quoin and miter bearings forming the arch and the lock walls as abutments. Each of the two leaves of the upper gates measures 27 feet, 9 5/8 inches high by 61 feet, 5 3/8 inches wide (*see Photo 5*). Vertical girders divide each leaf into three panels. Each leaf is anchored to the lock wall with two triangular steel trusses. On the lower lock gates, each leaf is divided into panels with twenty horizontal girders. The upstream and downstream sides of the gates are framed by horizontal skin plates. The upper and lower gate sets have similar operating machinery, designed for an opening time of 2:25 minutes under normal conditions.[8] At the time of construction of the original lock, space was provided for installation of a second lock, 60 feet wide and 360 feet long[9] (*see Photo 6*).

3. Navigational Lock, ca. 1984 (Non-Contributing Structure)

The ultimate dimensions of Pickwick Landingôs second lock are 110 feet by 1000 feet. It is built of reinforced concrete. Like the original lock (now referred to as the auxiliary lock), the second lockôs gate type is miter design.[10] Construction of the second lock began in the late 1970s, and it opened for operation in 1984[11] (*see Photo 7*).

[6] Tennessee Valley Authority, *The Pickwick Landing Project*, 46-47, 56.
[7] Ibid., 61, 62, 64, 341.
[8] Ibid., 75-77.
[9] Ibid., 64-65.
[10] ñLock Characteristics General Report,ò February 19, 2014 PDF available at http://www.navigationdatacenter.us/lpms/pdf/lkgenrl.pdf accessed May 18, 2015.
[11] United States Army Corps of Engineers, webpage http://www.lrn.usace.army.mil/Locations/NavigationLocks/TennesseeRiver/Pickwick.aspx, accessed May 17, 2015.

4. Lock Operation Building, ca. 1980 (Non-Contributing Building)

The main lock building is located on the south bank of the river overlooking the locks. It is a one-story, poured concrete building with a flat roof covered with standing-seam metal. In front of the Lock Operation Building (on the south elevation) is a steel-frame radio tower for transmission from and to the building. The south elevation of the building has the main entrance, which is recessed and consists of single-light glass and metal double doors flanked by full-height, fixed, metal-frame windows. This elevation also has a drive-through breezeway (*see Photo 8*). The breezeway leads to the lock side (north elevation) of the building. On this elevation, beside the breezeway, a partial-width bay projects from the main block of the building. This projecting section has banks of aluminum, fixed windows on three sides. Its concrete roof eave overhangs on all three sides and is supported by round columns on the east and west. The roof is slightly shorter than that of the main block (*see Photo 9*). The west elevation of the building is sharply angled towards the façade (south). There are no openings on this elevation. The east elevation is perpendicular and has no openings.

Inside the main entrance of the building, the floor has a strip of brick tiles and carpet. Walls are bare concrete. The ceiling has narrow, aluminum paneling and recessed lighting. On the interior of the building, the lobby has a reception desk of concrete block. Floors are carpeted, ceilings have dropped acoustical tiles, and walls are poured concrete or concrete block (*see Photo 10*). The building formerly housed the Tennessee River Waterway Museum, which closed in 2001 due to security concerns. The wall displays are still intact, but the room is now used as a fitness center for the lock workers. Original signage remains in the visitor lobby as well. The floor has glazed brick tile, the walls are bare concrete, and the ceiling has narrow, metal panels and recessed lighting (*see Photo 11*).

5. Lock Control Building 1, 1983 (Non-Contributing Building)

This small, one-story building has a concrete foundation and a flat, metal roof. The façade (southwest) has glass and metal double doors with single lights over metal panels. The exterior walls have fixed, single-light windows in metal frames above metal panels. The northwest elevation has a louvered, metal vent installed in a metal panel in the rear third of the building (*see Photo 12*).

6. Lock Control Building 2, 1983 (Non-Contributing Building)

This small, one-story building has a concrete foundation and a flat, metal roof. The façade (northeast) has glass and metal double doors with single lights over metal panels. The exterior walls have fixed, single-light windows in metal frames above metal panels. The southeast elevation has a louvered, metal vent installed in a metal panel in the rear third of the building (*see Photo 13*).

7. Lock Control Building 3, 1983 (Non-Contributing Building)

This small, one-story building has a concrete foundation and a flat, metal roof. The façade (southwest) has a glass and metal doors with a single light over a metal panel. Beside the door is a fixed, single-light, metal-frame window above a metal panel. The other exterior walls have fixed, single-light windows in metal frames above metal panels (*see Photo 14*).

8. Lock Control Building 4, 1983 (Non-Contributing Building)

This small, one-story building has a concrete foundation, concrete walls, and a flat, metal roof. There is a recessed entrance on the southeast elevation. On the southwest and northwest elevations, fixed single-light, metal-frame windows meet at the south corner of the building (*see Photo 15*).

9. Powerhouse, 1938 (Contributing Building)

The powerhouse on the north bank of the river is built of reinforced concrete and has a concrete foundation, walls, and ceiling. The powerhouse measures 580 feet in length with an intake, electrical bay, generator room, and service bay. The façade (north) of the powerhouse has the main entrance, which has three two-light glass and metal doors divided by projecting, concrete pilasters supporting a flat, concrete canopy. Each door has a fixed, single-light transom. This is the public entrance into the service bay. This entrance is on the same level as the deck of the dam, and the entrance is accessed via a suspended concrete walkway extending from the deck of the dam. The dam and the walkway have metal railing. Above the entrance is lettering spelling the name ñPICKWICK LANDING.ò There are two stories above the entrance level, and each story has a set of fixed, horizontal nine-light aluminum windows. The roof of the entrance bay rises to just below the elevated highway bridge that runs above the dam. Adjacent to the entrance bay on the north elevation there is a west wing. This is the control building. In this wing, on the same level as the entrance doors, there is a row of three circular lights. On the interior, this level corresponds with the control room, where abundant light is not desired.[12] On the next story, above each circular light is a set of fixed, horizontal nine-light aluminum windows. This floor of the control building contains offices on the interior. Below the entrance level of the service bay and control room level of the control building, two to three stories of the substructure are visible on the north elevation (*see Photo 16*).

The east elevation of the powerhouse is adjacent to the dam. The story that is ground level to the deck of the dam has a set of fixed, vertical nine-light aluminum windows. Each of the two stories above has a set of fixed, horizontal nine-light aluminum windows (*see Photo 17*). The remainder of the east elevation is two stories shorter than the north end. This section corresponds with the generator room.

The south elevation of the powerhouse has three set of fixed, horizontal fifteen-light aluminum windows. These windows are the clerestory level of the generator room of the powerhouse. On the south elevation, two levels of the powerhouse substructure are visible (*see Photo 18*). The clerestory windows continue on the west elevation of the powerhouse in twenty-seven sets of fixed, horizontal fifteen-light aluminum windows. The lowest visible level on the west elevation of the powerhouse is the intake, which projects from the main block of the west elevation (*See Photo 19*). There are eighteen intakes each measuring 18.67 feet in width and 41.5 feet in height. The intake gates are structural steel, vertical-lift type with roller bearings for wheels at the bottom section. Above the gates is an unequal-leg travelling crane with a thirty-ton capacity that operates the gates. Upon start-up operation, there were six active intake gates (three per unit). Initially, the facility had two turbo-generator units, then ultimately six, served by eighteen total intake gates. Each unit consists of a six-blade propeller rated at 48,000 horsepower under a head of 43 feet with a vertical-shaft umbrella-type generator with a capacity of 40,000 kilovolt-amperes at 0.9 power factor. On initial installation, the powerhouseôs generating capacity was 80,000 kilovolt-amperes with two units. Its ultimate installation capacity with eight units was 250,000 kilovolt-amperes.[13]

The main entrance into the powerhouse is on the north elevation into the service bay. The service bay, a six-story, fire-proof section of the powerhouse. On the fourth floor, the lobby has original plaster walls, terrazzo floors (*see Photo 20*), marble walls and a plaster ceiling with original light fixtures. The lobby wall across from the entrance has aluminum lettering that spells ñ1935 BUILT FOR THE PEOPLE OF THE UNITED STATES

[12] Tennessee Valley Authority, *The Pickwick Landing Project*, 99.
[13] Ibid., 5, 313, 336.

1938ò (*see Photo 21*). The lobby also features recessed, marble water fountains (*see Photo 22*). Leading from the lobby to fifth floor is a staircase with plaster walls and a curved aluminum railing (*see Photo 23*). The womenôs bathroom on the fifth floor has tile walls, tile floors, original fixtures including the toilets and sinks and original marble stalls. The staircase between the fifth and sixth floor has terrazzo treads and plaster walls. On the sixth floor are offices with original single-light, metal doors with metal louvers (*see Photo 24*). The offices themselves have original linoleum floors and ca. 1990 added drop ceilings.

In addition to the visitor lobby and upstairs offices, the service bay has a machine shop below the lobby. Adjoining the service bay is generator room.[14] From the lobby on the fourth floor of the service bay, a visitor can pass to the balcony overlooking the generator room (*see Photo 25*). From this vantage point, the visitor looks southward over the row of six generators the equivalent of three stories below. Along the west wall of the generator room, at the same level as the visitor balcony, are the twenty-seven sets of fixed, fifteen-light aluminum clerestory windows (*see Photo 26*). The steel-frame roof structure is exposed. Mounted on the ceiling of the generator room is a travelling crane with a 300-ton capacity. The room has a water-proof wall on the downstream (west) side to protect it from high tailwaters, allowing for installation of the generators at a lower level and sparing construction height and length of shaft. The generator room also has tile floors and tile walls up twenty feet to the clerestory windows and then above is poured concrete. There are concrete and steel beam columns along the interior east elevation (*see Photo 27*).

The substructure of the powerhouse has the turbines, intake, and the floor cable tray room, which has an underground tunnel (*see Photo 28*) that runs to the switchyard northwest of the powerhouse a distance of approximately 900 feet.[15] Powerhouse corridors of the substructure have poured concrete walls of unfinished concrete and concrete floors. There are pipes and conduits between the powerhouse and the switchyard, including the inspection and drainage gallery, and pipe gallery (eight feet wide by seven feet high), and the conduit gallery (eight feet wide by ten feet high).[16]

10. Switchyard, 1934-1938, (Contributing Structure)

The switchyard structure is a boxed truss and column design in four sections: a 154-kilovolt structure with seven bays; a 110-kilovolt structure with four bays; a 12.45-kilovolt switching structure of five bays; and a 154/110-kilovolt autotransformer structure between the 154- and 100-kilovolt yard.[17] The switchyard equipment rests on a concrete foundation and is supported by steel trusses and columns (*see Photo 29*).

11. Picnic/Fishing Area (Contributing Site)

Located west of the powerhouse, the picnic area (*see Photo 30*) includes a boat launch *(see Photo 31*), two restrooms, and picnic concrete picnic tables and benches among pine trees. There are gravel paths in the picnic area.

12. Bathhouse, ca. 1950 (Contributing Building)

The picnic area contains a ca. 1950 bath house that is a standardized design built by TVA throughout their facilities. This is a one-story, concrete block building with a saltbox roof of asphalt shingles. The main façade

[14] Ibid., 5.
[15] Ibid., 126.
[16] Ibid., 6, 58-59.
[17] Ibid., 6, 58-59.

(south) has a recessed integral entrance with projecting wing walls. The entrances to the two restrooms are concealed, located on the inner façade wall. The gable fields have vertical wood board (*see Photo 32*).

13. Fishing Area Restroom, ca. 1995 (Non-Contributing Building)
Restrooms are in a 1995 concrete block building with a hipped metal roof of standing-seam metal. The façade (west) has a recessed central entrance that splits to each side (south and north) where there is an aluminum door to each side. On the façade walls flanking the entrance there is a horizontal casement window to each side (*see Photo 33*).

Maintenance Base -4 resources:

14. Maintenance Office/Garage Building 1984 (Non-Contributing Building)
The maintenance office/garage building has aluminum walls and roof and a concrete foundation. The façade (southwest) has garage four bay doors are overhead track design. Between bays one and two there is a solid metal pedestrian door (*see Photo 34*)

15. Equipment Shed 1 1984 (Non-Contributing Structure)
Next to the main office/garage building, this shed has two open bays on the façade (southwest), sheet metal walls and shed roof, and a concrete foundation.

16. Equipment Shed 2 1984 (Non-Contributing Structure)
Next to the main office/garage building, this shed has two open bays on the façade (south), sheet metal walls and shed roof, and a concrete foundation.

17. Pole Shed, 1984 (Non-Contributing Structure)
This is a pole frame structure with a concrete foundation, corrugated metal walls, and gable roof of corrugated metal. The façade (north) has four open bays at the east end and a fifth open bay in the center. The roof overhangs the façade wall and is supported by square, wood posts (*see Photo 35*).

18. State Route 128 Bridge, 1963 (Contributing Structure)
State Route 128 was rerouted over the Pickwick Landing Dam in 1963. This highway connects the city of Savannah, Tennessee, on the north, with communities in Alabama and Mississippi, to the south. Known as the Estes Kefauver Bridge to honor former Tennessee Senator Estes Kefauver, the bridge was dedicated on June 24, 1963. The two-lane concrete bridge rests on steel piers which are attached to the top of the dam (*see Photo 2*).

Pickwick Landing Hydroelectric Project | Hardin County, Tennessee
Name of Property | 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
(Enter categories from instructions.)
ARCHITECTURE
CONSERVATION
ENGINEERING
INDUSTRY
RECREATION
SOCIAL HISTORY
TRANSPORTATION

Period of Significance
1934-1965

Significant Dates
1934, 1938

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 Pickwick Landing 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 1934, when the project commenced, to 1965, in keeping with the fifty-year guideline. The Pickwick Landing Hydroelectric Project is significant for its overall design, the improvement of navigation of the Tennessee River, expansion of energy for World War II manufacturing, improvement of quality of life through transmission of electricity, control of seasonal flooding, and creation of public recreational facilities. The Pickwick Landing 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. A major objective of the 1933 Tennessee Valley Authority Act was the creation of a continuously navigable nine-foot channel from the mouth of the Tennessee River to Knoxville, as well as flood control, power generation, and recreation. The Pickwick Landing Hydroelectric Project was the first designed by TVA and the third constructed after Norris and Wheeler. 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 Pickwick Landing 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 Pickwick Landing 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 Pickwick Landing Hydroelectric 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

Pickwick Landing was originally known as White Sulphur Springs. The name Pickwick dates from the Civil War period, when the first local postmaster re-named the settlement in honor of Charles Dickensô Pickwick Papers. Settlers in the area relied on the Tennessee River for transportation, and low water lines and rocky shoals in Alabama hindered navigation. Development of the Tennessee River for navigation was a subject of importance to early settlers and to the U.S. Congress.[18] An 1830 survey estimated the cost of a canal around the troublesome Muscle Shoals at $1.4 million. The United States government gave the State of Alabama 400,000 acres to sell in order to raise the money for the canal. Work began in 1831 and was completed in 1836. The project, however, proved useless: during low water levels, boats could not reach the canal; during high levels, the canal was unnecessary.[19]

[18] Ibid., 3.
[19] *A Brief History of Decatur, Alabama,* (Decatur: River City Kiwanis Club, 2004), 3.

The project was abandoned from 1837 through the Civil War and was revived in 1873. The Muscle Shoals Canal was completed in 1890. The project made navigation through the shoals possible only at highest flow of the river, however. In Congress, former Confederate General Joseph Wheeler advanced the goal of a hydroelectric dam on the Tennessee River at Muscle Shoals in 1898. A bill to that end was passed, but the project was never undertaken. During World War I, however, the government built Wilson Dam and two explosives-manufacturing plants at Muscle Shoals. President Woodrow Wilson approved the building of the dam to supply electricity to two nitrate plants for manufacture of ammunition and explosives for the war effort.

The Tennessee Valley Authorityôs mission is rooted in the long battle to overcome the natural obstacle of the shoals. TVA 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.[20] 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, transmission lines, or navigations projects at any point along the Tennessee River and its tributaries (Sec. 4i).[21]

The multi-faceted program of TVA evolved from Nebraska Senator George Norrisô idea to use the federal munitions base at Muscle Shoals as the foundation of a regional development plan. Since the end of WWI, the Muscle Shoals facility had sat idle. Norris had attempted to push through legislation in 1928 and 1930 for the government to purchase and redevelop the site; during these years Presidents Calvin Coolidge and Herbert Hoover, respectively, vetoed the bills. However, through President Rooseveltôs development of new programs to revitalize the nationôs economy, the Muscle Shoals site found new purpose.

During the Depression, the shoals on the river prompted federal relief legislation to construct a permanent solution for river navigation. The Pickwick Landing Hydroelectric project received Congressional approval on November 19, 1934. The project was the first designed by the staff of TVA. Norris and Wheeler, under expedited directive, were designed by the United States Bureau of Reclamation, at the expense of TVA. The navigation lock, however, was designed by the United State Army Engineers, whose field survey helped determine the projectôs ideal location. Construction of the site began March 8, 1935. The facility was put into operation June 29, 1938. The TVA design at Pickwick Landing helped establish standards and procedures for subsequent projects.[22]

The Pickwick Landing project required the purchase of 62,000 acres of land in Hardin County, Tennessee, Tishomingo County, Mississippi, and Colbert and Lauderdale Counties, Alabama. Based on experiences at the

[20] ñHistory of the Tennessee Valley Authority,ò at website http://www.policyalmanac.org/economic/archive/ tva_history.shtml accessed April 16, 2015.
[21] Tennessee Valley Authority Act of 1933, at website http://www.policyalmanac.org/economic/archive/tva_history.shtml, accessed April 16, 2015.
[22] Tennessee Valley Authority, *The Pickwick Landing Project*, 43, 335.

Wheeler site, the original TVA Act was revised to address the impact and relocation of displaced families. In 1935, the TVA interviewed over 700 rural families, of which about 500 would be affected by the inundation. The revealing interviews found that over eighty-five percent of the families were engaged in farming. Nearly fifty percent of the farmers were tenants rather than sharecroppers. Typical rent was in the amount of one-third of hay and corn and one-fourth of cotton produced. These farmers supplied their own equipment and working stock. If a tenant farmer was provided with machinery, he paid half his crops in rent. This group represented about fourteen percent of the group. Owner-operator farmers accounted for thirty percent of the farming group. At the low economic end of the farmers were laborers, who received a house, garden plot, and fifty cents to one dollar per day for typically 150 days of work out of the year. The average farm size of non-owners was twenty-five to thirty-five acres, mainly growing corn and cotton. Landowners averaged 100 acres, which included pasture and woodland. Farm income was very low, around $303 for non-owners, and $338 for owner-operators. About eighty-five percent of the families were white; fifteen percent were African American. Farm families had secondary sources of income from day wages, Federal works projects, and government relief payments. Education level among all adults in the group stopped at grade five or six. Though ninety-six percent of children between the ages of seven and sixteen attended school, they were behind the average in their studies. Representative housing stock among the group consisted of a two- or three-room, frame dwelling. Only one family had indoor an indoor toilet, and four had bathtubs. Eight homes had electricity, seven had telephones.[23]

In the course of the project, 67.14 miles of principal and tertiary roads required reconstruction in Colbert and Lauderdale Counties in Alabama, Tishomingo County in Mississippi, Hardin County in Tennessee, and the Town of Waterloo, Alabama. In the re-building of affected roads, the TVA agreed to upgrade and improve the relocated sections to modern standards, with better alignment and greater width. In the project area, thirteen bridges were constructed (three steel and concrete, seven timber and steel, and three timber), for a total length of 1,396 feet. Additionally, twenty-seven reinforced concrete box culverts were constructed. Four roads in Waterloo were rebuilt. The total costs of road and bridge relocation amounted to $793,241.[24] The road and bridge improvements provided short-term employment and contributed to an upgrade in local infrastructure, benefitting commerce and quality of life for area residents.

The Pickwick Landing Hydroelectric Project was authorized November 19, 1934.[25] On initial installation, the powerhouseôs generating capacity was 36,000 kilowatts per unit, with two units initially in operation. A third and a fourth unit were authorized March 21st and July 31st, respectively, in 1940 and were scheduled for completion in January and March, respectively, of 1942. These turbines were the largest in diameter of the propeller type in the United States, each rated at 48,000 horsepower at 43-foot head.[26] Installation of units five and six were started in 1950.[27]

Total land costs for the project amounted to $3,912,670, which included acquisition by fee or condemnation proceedings, flowage easements, and highway relocation. The project also required the relocation of 176 graves.

[23] Tennessee Valley Authority, *The Pickwick Landing Project*, 36-38.
[24] Ibid., 274-75.
[25] Ibid., 4.
[26] Ibid., 5.
[27] Tennessee Valley Authority, *Design of TVA Projects, Technical Report No. 24, Vol.1*: *Civil and Structural Design,* (Washington, D.C.: U.S. Government Printing Office, 1952), 17.

Direct construction costs, such as labor, materials, equipment, transportation, totaled $21,777,623. Indirect construction costs, including accounting, timekeeping, office supplies, and police service, came to $2,005,156. Design and engineering expenditures, which included salaries and expenses of executive engineers, technicians, and inspectors, amounted to $4,145,778. These amounts plus other categorized costs brought the total project (with two generating units) to $31,841,229.[28]

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 reservoir and east of the dam. A maintenance area was also built to provide upkeep and regular maintenance for the facility and grounds.

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.[29] 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 Pickwick Landing 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 style became popular during this period as an expression of progress, a particularly important

[28] Tennessee Valley Authority, *The Pickwick Landing Project*, 304.
[29] 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, *Pioneers of Myth: The Leadership of the Tennessee Valley Authority, 1933-1990*, (Princeton, NJ: Princeton University Press, 1994), 30-33.

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. The Pickwick Landing powerhouse lobby retains original terrazzo and glazed tiles surfaces, sleek, aluminum handrails, glass and aluminum doors to the exterior, and interior doors of metal with narrow rectangular, louvered insets. These elements express the polished minimalism of the Streamlined Moderne architectural style.

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 percent 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.[30]

Soil erosion was a serious problem on the buffer land TVA acquired surrounding the Pickwick Landing Reservoir. In other areas, row crops had exhausted soil fertility. One area was so deficient, engineering treatment was required before reforestation could take place. TVA worked

with the United State Forest Service to plant 618,272 trees (Yellow Poplar, Black Locust, Cypress, and pines) in Colbert and Lauderdale Counties in fiscal year 1938-1939 alone. TVA
supplied the planting stock from its own nursery located at Muscle Shoals and used CCC labor in 509 locations across the two counties. To reverse the effects of continuous cultivation, area farmers requested a soil survey on leased TVA lands under the guidance of county soil-conservation associations. In 1938, 1,354.5 acres were rented. Winter legumes were recommended for fixing nitrogen, and spring lespedeza also helped restore soil fertility. The lease programôs practices were embraced on privately owned farm tracts in the area, increasing productivity of area farm tracts in general.[31]

Hand in hand with land management were efforts to support species important to the local food supply, as well as biodiversity, in the Tennessee Valley ecosystem. In 1937, TVA conducted a study of the potential for fisheries on the Pickwick Landing Reservoir. A survey of commercial and pole fishermen found three methods in use at this part of the river: nets from August to January; set lines from March to September; and poles from April to September. The data collected illuminated the need to impose regulations on fish number and size caught. Commercial fishing licenses were also needed throughout the area. Local fishermen were eager to have limits placed, as over-fishing regularly glutted the market, driving down prices. Many locals depended on the

[30] Carroll Van West, *Tennessee's New Deal Landscape*, (Knoxville: University of Tennessee Press, 2001), 212-214.
[31] Tennessee Valley Authority, *The Pickwick Landing Project*, 290, 292-93.

river for their livelihood or food, removing approximately 175,000 pounds of food fish in a six-month period with a market value of almost $17,500.

Transforming the river current into a still body of water necessarily changed the aquatic life it that could inhabit these waters. TVA, in cooperation with the United States Bureau of Fisheries, assisted in the propagation of appropriate fish species through the construction of a fish hatchery. Located on the Elk River, the 150-acre hatchery site included a floating laboratory to study problems involving problems particular to shallow lakes. Game conservation was also important in the land surrounding Pickwick Landing Reservoir, with planned wildlife management and refuge areas. The reservoirôs shallow nature was well suited for migratory fowl, and the surrounding land, for shelter and habitat of game. TVA recognized the symbiosis inherent in conservation goals, as fostering of wildlife populations maintained food supply for local hunters, as well as creating spin-off benefits of tourism.[32]

SIGNIFICANCE IN ENGINEERING

The Pickwick Landing Hydroelectric Project is an integral part of the overall engineering design of the TVA system. Releases from Pickwick Landing provide power to the Kentucky Hydroelectric Project downstream, and releases from Wilson Dam provide power to the Pickwick Landing Hydroelectric Project.

In 1922, Congress approved a comprehensive survey of the Tennessee River Basin for the development of power plants and improved navigation. As a result, the United States Army Engineers recommended development of the Pickwick Landing site. On the heels of the construction of the Wheeler Hydroelectric Project upstream, development of the Pickwick Landing site was deemed the next logical step in creating an integrated river transportation and hydroelectric system. The Army Engineers concluded:

> ñUnless the Pickwick Landing project be developed at once, the construction of a dam 17 feet in height across the Tennessee River near the foot of Patten Island (will be necessary), to provide a regulating pool for smoothing out fluctuations in stream flow which may be caused by hourly and daily variations in demand for power from Dam No. 2, Muscle Shoals [Wilson Dam], at an estimated cost of $1,600,000.ò[33]

The general site location for the Pickwick Landing Project was determined as to ensure nine feet of navigable depth upstream to the head of the Wheeler pool near Guntersville, Alabama. A determining factor for location of the dam at mile 206.7 was the pool level in relation to the series of dams on the river. The most economical pool level was determined to be elevation 354, which would result in ideal tailwaters for both navigation and power.[34] Diamond-drill boring was utilized to determine the exact location with respect to the dam axis. The chosen axis location placed the concrete structures on a formation of tight calcareous shale that had been minimally weathered and had limestone bedrock beneath. This location required a greater length of

[32] Ibid., 290-92.
[33] Ibid., 4, 11.
[34] Ibid., 12.

embankment, but abundant excavated material was expected from the project for the additional embankment length. The south side of the river was chosen for the lock, based on existing navigation channels.[35]

The Pickwick Landing Hydroelectric Project was designed from investigative tests conducted on small-scale models at the TVA laboratory at Norris. These tests addressed erosion control, energy dissipation, and wave reduction specific to the site. For the Pickwick Landing project, tests were performed on several aspects, including the spillway apron, turbine intake gates, filling and emptying of the lock, and spillway pier design to permit maximum discharges and to eliminate vortices, wave heights, and velocities in the navigational channel. Tests were conducted at a discharge rate of 750,000 cubic feet per second (cfs) and would determine the proper number and type of control gates for the design. In the end, twenty-two (22) double-leaf design gates were used.

Three spillway models were used to study different aspects of the project. A 1:50-scale model was used to develop the basic design; a 1:25-scale model refined the basic design; and a 1:100-scale river model checked the spillway operation in relation to the other structures. Numerous types and elevations of aprons were tested on the first model. The results were weighed against relative amount and cost of rock excavation at the actual site. In general, tests indicated that aprons without sills resulted in heavy erosion, and longer aprons did not result in significant reduction of erosion. In the end, the simplest type with a five-foot sill located at elevation 337 was determined the best solution.

Gate-operating schedule was also studied as relates to erosion reduction, as well as optimal navigation conditions. Tail water level understandably played a role in the schedule, too. Specific arrangement of open and closed gates produced varying current effects that influenced navigation conditions. As the number of closed gates between open gates decreased, eddies diminished in strength. The best results were produced with just two closed gates between open gates, almost nullifying the strength of the eddies.

Five different heights and three different lengths of training walls were tested. No lateral currents were produced as long as the tailwater remained below top of the training wall. Increasing the wallôs length from 100 to 200 feet, however, had little effect on significant erosion at higher discharges. Erosion was best reduced through proper gate operation, particularly with closing gate 1 when tailwater was low. With the sheer length of Pickwick Landing Dam and its numerous gates, extensive testing helped determine the best design and operation for the site.[36]

SIGNIFICANCE IN INDUSTRY

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. Perhaps the greatest impact of TVAôs projects from Muscle Shoals through Pickwick Landing was overcoming the navigational challenge of the shoals and low pool levels in this stretch of the Tennessee River. These natural impediments had historically deprived producers and manufacturers in the Tennessee Valley reliable access to national and international markets. The TVA's series of locks and channels

[35] Tennessee Valley Authority, Design of *TVA Projects*, *Technical Report No. 24, Vol.1*: *Civil and Structural Design,* 13, 15.
[36] Tennessee Valley Authority, *The Pickwick Landing Project*, 388-395.

created a navigable course from Knoxville to the Mississippi River, effectively boosting the economy of the region. The unobstructed river enabled federal ship-building of ocean-going vessels such as Liberty cargo ships and patrol torpedo boats at inland shipyards in Decatur, Alabama.[37]

The TVAôs hydroelectric projects supported the governmentôs objective to electrify rural farmsteads. The TVAôs pre-inundation interviews of families affected by the Wheeler project found just one home had electricity. In 1934, across Alabama, one in thirty farms enjoyed electricity. By 1939, this ratio rose to one in seven, with the addition of the Pickwick Landing project to the TVA system. 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).[38] 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.[39]

Cheap electricity lured new industry to the region, influencing diversification of the economy in the heretofore agriculturally-based economy of the 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.[40]

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.[41]

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.[42] The Pickwick Landing Hydroelectric Project contributes electrical power to industries throughout the region.

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. During construction of the Pickwick Landing project, the Civilian Conservation Corps (CCC) built a regional park on an isthmus of the reservoir,

[37] Patricia Bernard Ezzell, ñTennessee Valley Authority in Alabama (TVA),ò available at website http://www.encyclopediaofalabama.org/article/h-2380, accessed April 22, 2015.
[38] Ezzell, ñTennessee Valley Authority in Alabama (TVA).ò
[39] West, 11.
[40] Ezzell, ñTennessee Valley Authority in Alabama (TVA).
[41] Zella Armstrong, *History of Hamilton County and Chattanooga, Tennessee Volume 2*, (Chattanooga: The Lookout Publishing Co.), 196-97.
[42] ñEconomic Development,ò at webpage http://www.tva.com/econdev/index.htm accessed May 5, 2015.

directly southeast of the dam. The park included paths, fireplaces, and two shelter houses. This park also included a boathouse and a group of cabins.[43]

At Pickwick Landing, directly south of the dam, the CCC-built area included a sixty-acre day-use portion with twenty-five picnic tables and fifteen outdoor grills, two shelters, and a boathouse on a natural inlet. The second recreational area was for group camping, with four separate circles, each with a group lodge, a latrine, six cabins accommodating four campers each, and two counselor cabins. This camp had a boat dock and swimming area. Additionally, at the far upper end of the reservoir, segregated white and black day-outing areas were developed, the former on a one-and-one-half-mile stretch of water, the latter, on the opposite side of the reservation. Several concessions were leased in 1939 for short-term licenses to operate small boat docks, fishing camps, and boat rentals. TVA awarded a two-year concession to the Tennessee-based Pickwick Company to operate an overlook building on the dam selling beverages, sandwiches, post cards, and souvenirs, a restaurant, filling station, hotel, and boat dock.[44]

The State of Tennessee purchased 681 acres surrounding Pickwick from TVA in 1969 and designated the area as a state park in 1970. Since that time additional land has been brought to enlarge the park. Pickwick Reservoir is known for its smallmouth bass and Tennessee River catfish, as well as crappie, bluegill, white bass, stripes and sauger. Some of the biggest fishing tournaments take place at Pickwick.

SIGNIFICANCE IN SOCIAL HISTORY

During the 1930s, the TVAôs Pickwick Landing 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 Pickwick Landing 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. From a social point of view, through previous projects at Norris and nearby Wheeler, TVA developed protocol regarding the families displaced by its hydroelectric projects.

Two communities were within the reservoir area, the incorporated town of Waterloo and unincorporated Riverton. These communities were located opposite each other on the north and south banks for the river, respectively, in Alabama. Each community would be fifty percent inundated and lose roads and trading area to the project. Waterloo had 123 mostly white families; of these seventy-seven owned their homes. TVA power served forty-three homes; only two homes had indoor plumbing. The townôs industry consisted of a cotton gin and lumber mill. There was also a bank, nine stores, two cafes, a barber shop, and five churches. Farming and merchandising represented the chief sources of incomes, and both would be negatively affected by the project. The combined elementary/high school had 458 students and eight bus routes serving the town and outlying areas.[45]

[43] Tennessee Valley Authority, *The Pickwick Landing Project*, 133.
[44] Ibid., 294-95.
[45] Ibid., 39-40.

Riverton consisted of two settlements, one with fifteen households with a post office and general store, all below the taking line. The other Riverton village had nineteen homes, two stores, two churches, and a school all located on a bluff above the taking line. During the previous eighteen months, seventy-five percent of the population had been support by government relief programs.[46]

With passage of the TVA Act in May 1933, applications for employment were received at a rate of 1,000 plus per day. Therefore, when TVA received orders to proceed with the Pickwick Landing project, there was a large pool of applicants to draw from. Job training courses in mathematics, electricity, blueprint reading, concrete, pipe fitting, and welding were made available, as well as recreational activities and library services for employees and their families.

These services were provided in a large community building with segregated school facilities for workersô children. Due to careful employee selection, a good wage scale, and good working conditions, the Pickwick Landing project experienced a low employee turnover.[47]

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, two assistants, and graduate nurses administered the medical program on site at a twenty-two-bed infirmary. The project also established a hospital at Iuka, Mississippi. Courses in first aid were provided to all interested employees at the project site. A safety engineer conducted crew and job safety meetings, posted safety signs and posters, and safeguarded mechanical equipment.[48]

Employees lived on site and in nearby cities. Housing facilities were built on the south bank of the river, immediately southwest of the dam. Fifteen permanent houses were built as well as eighty-five low-cost temporary houses for white married supervisory personnel and their families and twenty-five for African-American employees. Four dormitories with a capacity for 660 white workers were built and one for 108 African-American employees. The African-American community was located west of the white community. The design of the white village included public paths through shaded areas, a small golf course, tennis courts, and a football field.[49]

The Pickwick Landing projectôs immediate impact at the local level was initially mixed. The project resulted in employment opportunities during the Depression and in upgraded infrastructure locally. Yet, the project also displaced 506 families. Most families required assistance in relocation, due to being tenants and also wishing to stay in their same county, where opportunities would be minimal. Of the land acquired for the project, 91.1 percent was by voluntary transfer, while 1.1 percent was by condemnation for title issues, and 7.8 percent by condemnation for refusal to sell.[50]

[46] Ibid.
[47] Ibid., 173-74.
[48] Ibid., 176.
[49] Ibid., 131-33.
[50] Ibid., 260, 267,-269.

The TVA established a family readjustment program similar to that at its Norris and Wheeler projects. Through this program, the TVA worked in cooperation with local and state agencies including the agricultural extension offices in Mississippi and Tennessee and the Alabama Polytechnical Institute. The former agencies held community meetings and offered instruction in soil conservation and relocation topics. Social workers from the Works Progress Administration, Resettlement Administration, Public Works Administration, and Welfare Departments from

Alabama, Mississippi, and Tennessee also assisted the family readjustment program. Workers visited families as often as needed to assist in relocation, respecting social, economic, religious, racial, and educational concerns of the individual family.[51] Employment at Pickwick Landing peaked at approximately 2,400 workers in July of 1937.[52]

Another social aspect of the TVAôs hydroelectric project involved the removal and relocation of graves located within the reservoir area. Grave relocation for the Pickwick Landing project employed TVA workers with previous experience from the other projects. At Pickwick Landing, 407 graves were relocated from seven cemeteries, mostly family plots. All relocation records were made in duplicate and files at TVA offices at Chattanooga and Wilson Dam.[53]

The Pickwick Landing project helped to employ local labor beginning in the early stages of clearing wooded land. These workers also received agricultural training. At Waterloo, highway, bridge and road construction helped support that community with jobs. Authorities from various agencies anticipated new recreational and manufacturing opportunities for local residents following the completion of the Pickwick Landing project. Also, land-grant college-extension service from all three of the effected states worked towards developing permanent relocation plans for displaced families.[54]

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 times the distance traveled).[55] At the time the Pickwick Landing Reservoir was opened to navigation, February 19, 1938, it provided access to important industries in the tri-cities (Florence, Sheffield, and Tuscumbia). Railroads connected these points to Birmingham, Memphis, and Nashville. Approximately 8,000 tons of pig iron was transferred from rail to barge at Sheffield in 1938. Gasoline and timber were also shipped through these port towns. River transportation allowed for cheap shipment of numerous Tennessee Valley products including high calcium limestone, building stone, sand, gravel, and rock asphalt. The Pickwick Landing project also conveyed large shipments of grain between St.

[51] Ibid., 268.
[52] Ibid., 174.
[53] Ibid., 270.
[54] Ibid., 268-69.
[55] 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.

Louis and Chattanooga. It was estimated that 4,500,000 tons of cargo ï coke, cotton, sugar, salt, lumber, agricultural equipment ï would move on the Pickwick Landing pool in 1947.[56]

Increased traffic volume on the Tennessee River during the 1950s led TVA to study new and larger navigational locks at its dams. TVA foresaw the economic growth of the region and its reliance on river transportation, allowing room for future installation of larger locks at several of its dams, including Wheeler, Fort Loudoun, Pickwick Landing, and Guntersville Dams. A second lock was added at Wheeler Dam in 1963, at Guntersville in 1965, and at Pickwick Landing in the late 1970s. The 1967 Nickajack Hydroelectric Project replaced the pre-TVA Hales Bar Dam and improved river navigation with the installation of two large locks, 600 and 800 feet in length. Freight traffic on the Tennessee River reached a record 3.5 billion ton-miles in 1970, a volume approximately 100 times the river traffic in 1933. Shippers using the river in 1970 saved $51.4 million in transportation costs, a figure six times the costs of operating the waterway that year. Between 1933 and 1970, total savings to shippers was $548 million, versus TVAôs $141.2 million in operational costs during the same period.[57] The improvements in the Tennessee Riverôs transportation system helped to increase volume on the river, and in 1975 the river bore an estimate 27.1 million tons of commercial freight ranging from automobiles to sand.[58]

SUMMARY

The Pickwick Landing Hydroelectric Project is one of twenty-five (25) eventually 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. The Pickwick Landing Hydroelectric Project brought new opportunities to and spurred economic development in the surrounding counties. The Pickwick Landing project 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 Pickwick Landing Hydroelectric Project retains much of its integrity from its original design in the 1930s and later improvements 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 Pickwick Landing 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.

[56] Tennessee Valley Authority, *The Pickwick Landing Project*, 289-90.
[57] 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.
[58] Thomas D. Clark, ñThe Tennessee Valley Authority,ò in *The Encyclopedia of Southern History*, edited by David C. Roller and Robert W. Twyman, (Baton Rouge: Louisiana State University Press, 1979), 1206.

9. Major Bibliographic References

Bibliography

Armstrong, Zella. *History of Hamilton County and Chattanooga, Tennessee Volume 2*. Chattanooga: The Lookout Publishing Co, 1941.

A Brief History of Decatur, Alabama. Decatur: River City Kiwanis Club, 2004.

Callahan, North. *TVA* ï *Bridge Over Troubled Waters: A History of the Tennessee Valley Authority*. Cranbury, NJ: A. S. Barnes and Co., Inc., 1980.

ñEconomic Development.ò At TVA webpage http://www.tva.com/econdev/index.htm. Accessed May 5, 2015.

Ezzell, Patricia Bernard. ñNorris.ò At the Tennessee Encyclopedia of History and Culture webpage http://tennesseeencyclopedia.net/entry.php?rec=1001. Accessed August 11, 2015

_____. ñTennessee Valley Authority in Alabama (TVA).ò At Encyclopedia of Alabama webpage http://www.encyclopediaofalabama.org/article/h-2380. Accessed April 22, 2015.

ñHistory of the Tennessee Valley Authority.ò At TVA website http://www.policyalmanac.org/economic/archive/tva_history.shtml. Accessed April 16, 2015.

Lock Characteristics General Report,ò February 19, 2014 PDF. At Navigator Data Center webpage http://www.navigationdatacenter.us/lpms/pdf/lkgenrl.pdf. Accessed May 18, 2015.

Tennessee Valley Authority Act of 1933. At TVA website http://www.policyalmanac.org/economic/archive/tva_history.shtml. Accessed April 16, 2015.

Tennessee Valley Authority. *Design of TVA Projects*, *Technical Report No. 24, Vol.1*: *Civil and Structural Design.* Washington, D.C.: U.S. Government Printing Office, 1952.

_____. *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.

_____. *The Pickwick Landing Report: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Pickwick Landing Project*, *Technical Report No. 3.* Washington, D.C.: United States Government Printing Office. 1941.

United States Army Corps of Engineers. At USACE webpage http://www.lrn.usace.army.mil/Locations/NavigationLocks/ TennesseeRiver/Pickwick.aspx. Accessed May 17, 2015.

West, Carroll Van. *Tennessee's New Deal Landscape*. Knoxville: University of Tennessee Press, 2001.

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):			

10. Geographical Data

Acreage of Property å 1,550 acres

USGS Quadrangle Pickwick 24 SW
Counce 13 SE

Latitude/Longitude Coordinates

A. Latitude: 35.082453 Longitude: -88.272086

B. Latitude: 35.082691 Longitude: -88.233293

C. Latitude: 35.047740 Longitude: -88.271830

D. Latitude: 35.047841 Longitude: -88.233401

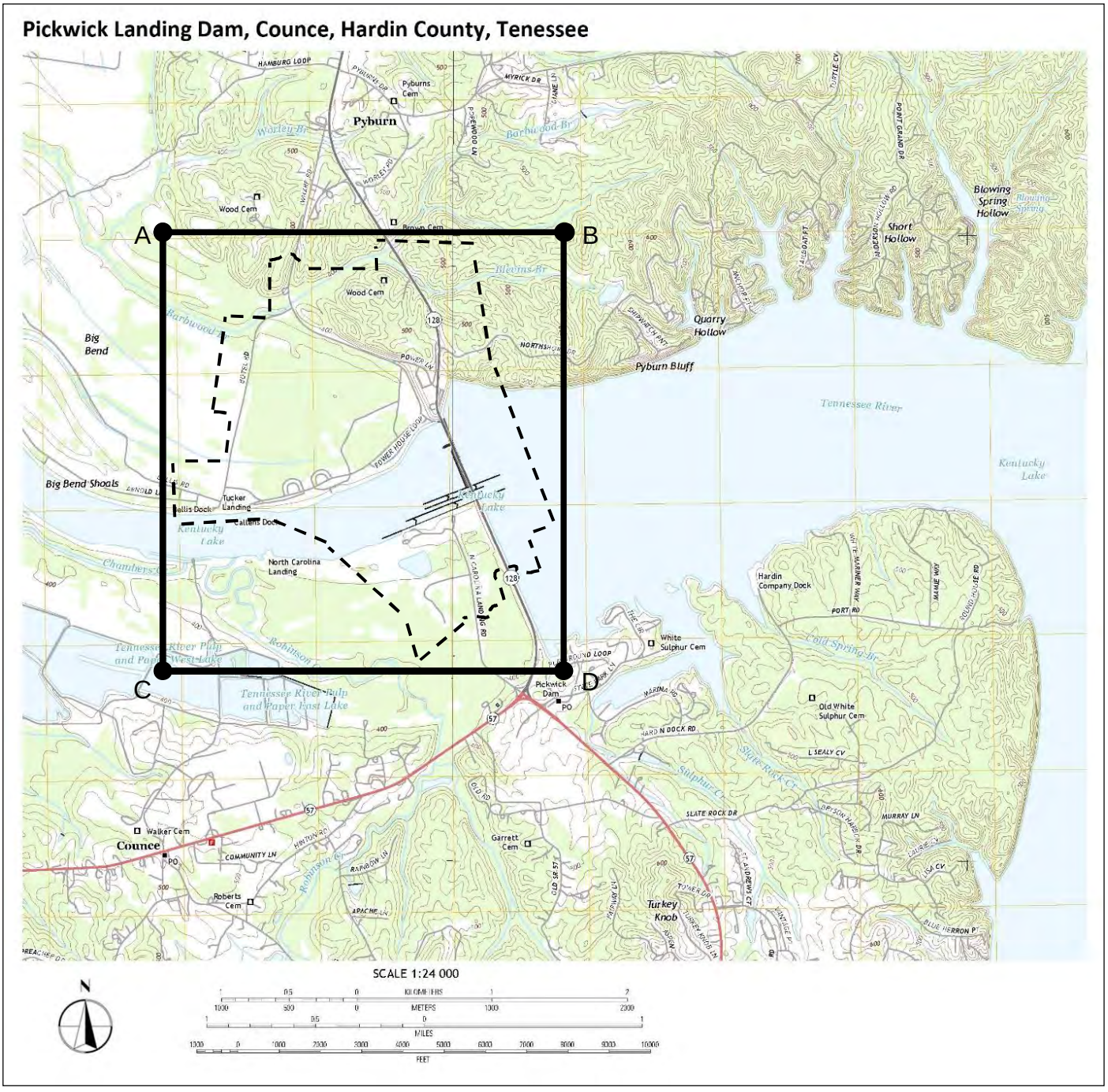
Verbal Boundary Description

The boundary for the Pickwick Landing Hydroelectric Project is depicted as a dashed line on the accompanying US Quadrangle map and TVA site plan map. The National Register boundary is consistent with the overall Pickwick Landing reservation boundary on the south. The National Register boundary departs from the reservation boundary on the south bank of Kentucky Lake at Chambers Creek and turn north to cross the lake. The National Register boundary follows Botel Lane until it rejoins the reservation boundary and overlays it on the north. The National Register boundary departs from the reservation boundary again to turn south across Pickwick Landing Lake. The boundary then follows the shoreline of a small inlet, then falls to the southeast until it meets the intersection of Highways 128 and 57, at which point the boundary follows Highway 57 to the southwest to rejoin the starting point along the southern boundary.

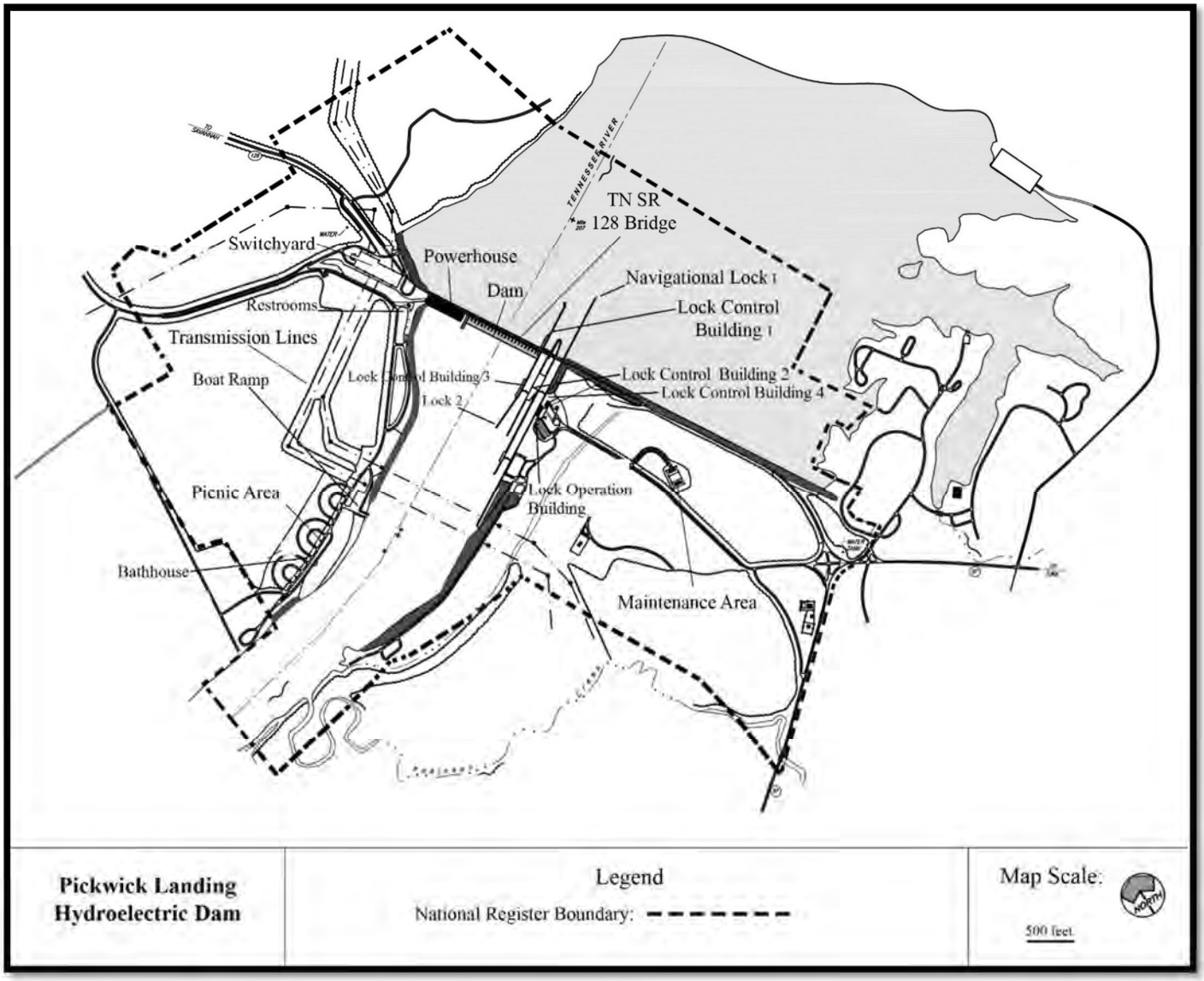
Boundary Justification

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.

Counce and Pickwick Combined, USGS Topographical Quadrangle Maps, 2013, depicting Pickwick Landing Hydroelectric Project National Register Boundary



Site Plan and National Register Boundary for Pickwick Hydroelectric Project



Pickwick Landing Hydroelectric Project | Hardin County, Tennessee
Name of Property | County and State

11. Form Prepared By

Name: Andra Kowalczyk Martens; Phil Thomason
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: TN Zip Code: 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: Pickwick Landing Hydroelectric Project
City or Vicinity: Counce
County: Hardin State: Tennessee
Photographer: Thomason and Associates
Date Photographed: April 12, 2015

Photo 1 of 35 Dam and powerhouse from locks, view to north.

Photo 2 of 35 East side of dam and highway bridge, view to northwest.

Photo 3 of 35 West side of dam from locks, view to north.

Photo 4 of 35 Gantry crane atop dam, view to south.

Photo 5 of 35 Original lock gate, east entrance, view to northeast.

Photo 6 of 35 Original lock west entrance, view to southwest.

Photo 7 of 35 Added lock, east entrance, view to northeast.

Photo 8 of 35 Lock operation building, southeast elevation, view to northwest.

Photo 9 of 35 Lock operation building, northwest elevation, view to southeast.

Photo 10 of 35 Lock operation building interior, reception area.

Photo 11 of 35 Lock operation building interior, visitor museum lobby.

Photo 12 of 35 Lock control building 1, east end of second lock, view to northeast.

Photo 13 of 35 Lock control building 2, east end of original lock, outer wall, view to southwest.

Photo 14 of 35 Lock control building 3, west end of second lock, view to northeast.

Photo 15 of 35 Lock control building 4, east end of original lock, inner wall, view to northeast.

Photo 16 of 35 Powerhouse, north elevation, view to south.

Photo 17 of 35 Powerhouse, east elevation, view to northwest.

Photo 18 of 35 Powerhouse, south elevation, view to north.

Photo 19 of 35 Powerhouse, west elevation, view to east.

Photo 20 of 35 Powerhouse interior, service bay visitor lobby terrazzo floor.

Photo 21 of 35 Powerhouse interior, visitor lobby in service bay.

Photo 22 of 35 Powerhouse interior, visitor lobby, water fountain.

Photo 23 of 35 Powerhouse interior lobby staircase.

Photo 24 of 35 Powerhouse interior, service bay offices, original door.

Photo 25 of 35 Powerhouse interior, visitor lobby balcony above generator room, view to north.

Photo 26 of 35 Powerhouse interior, generator room, clerestory windows on west elevation, view to northwest.

Photo 27 of 35 Powerhouse interior, generator room, view to north.

Photo 28 of 35 Powerhouse interior, tunnel to switchyard.

Photo 29 of 35 Switchyard, view to west.

Photo 30 of 35 Picnic area west of powerhouse, view to south.

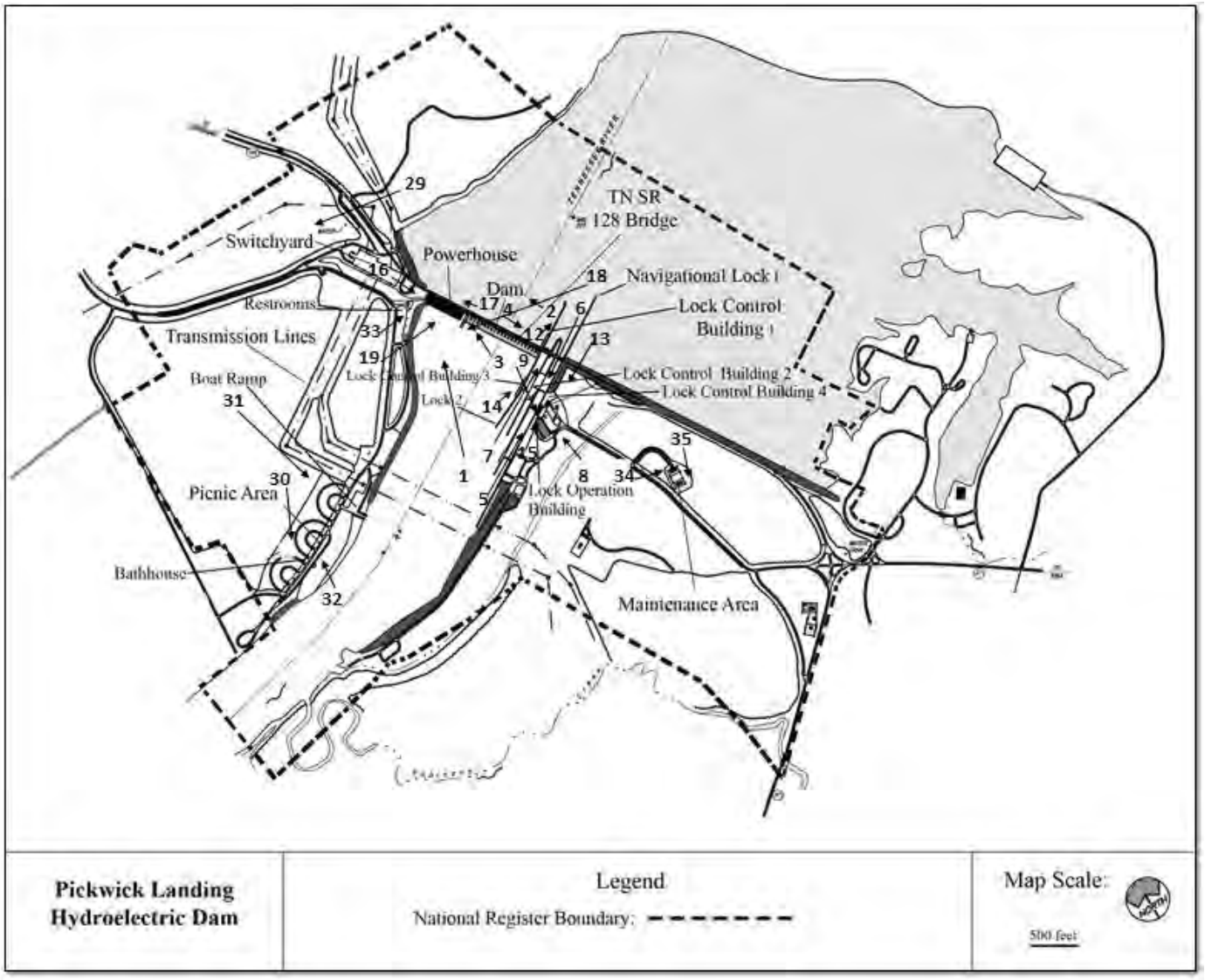
Photo 31 of 35 Boat ramp west of powerhouse, view to south.

Photo 32 of 35 Bath house west of powerhouse, view to north.

Photo 33 Fishing area restroom, view to east.

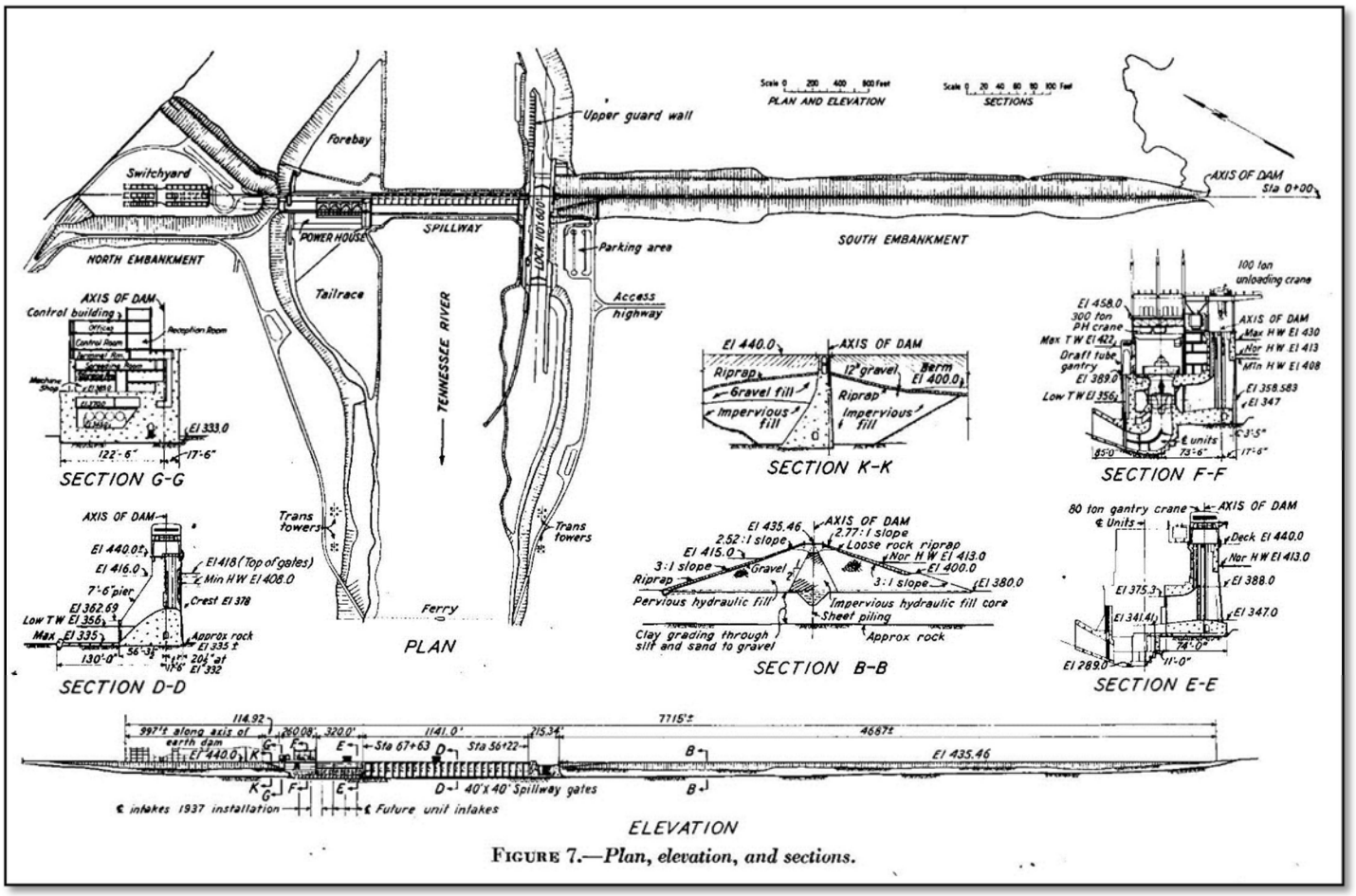
Photo 34 of 35 Maintenance area, office/garage building, southwest façade, view to east.

Photo 35 of 35 Maintenance area, pole shed, view to south.



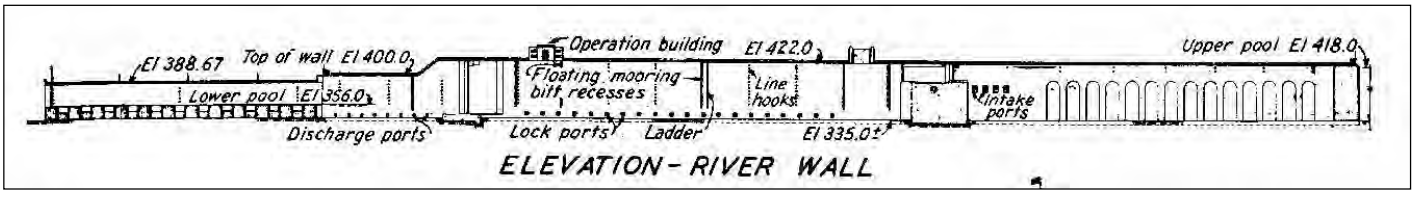
Pickwick Landing Hydroelectric Project Photo Key Map
(See Accompanying 11 X 17 Map)

Site Plans

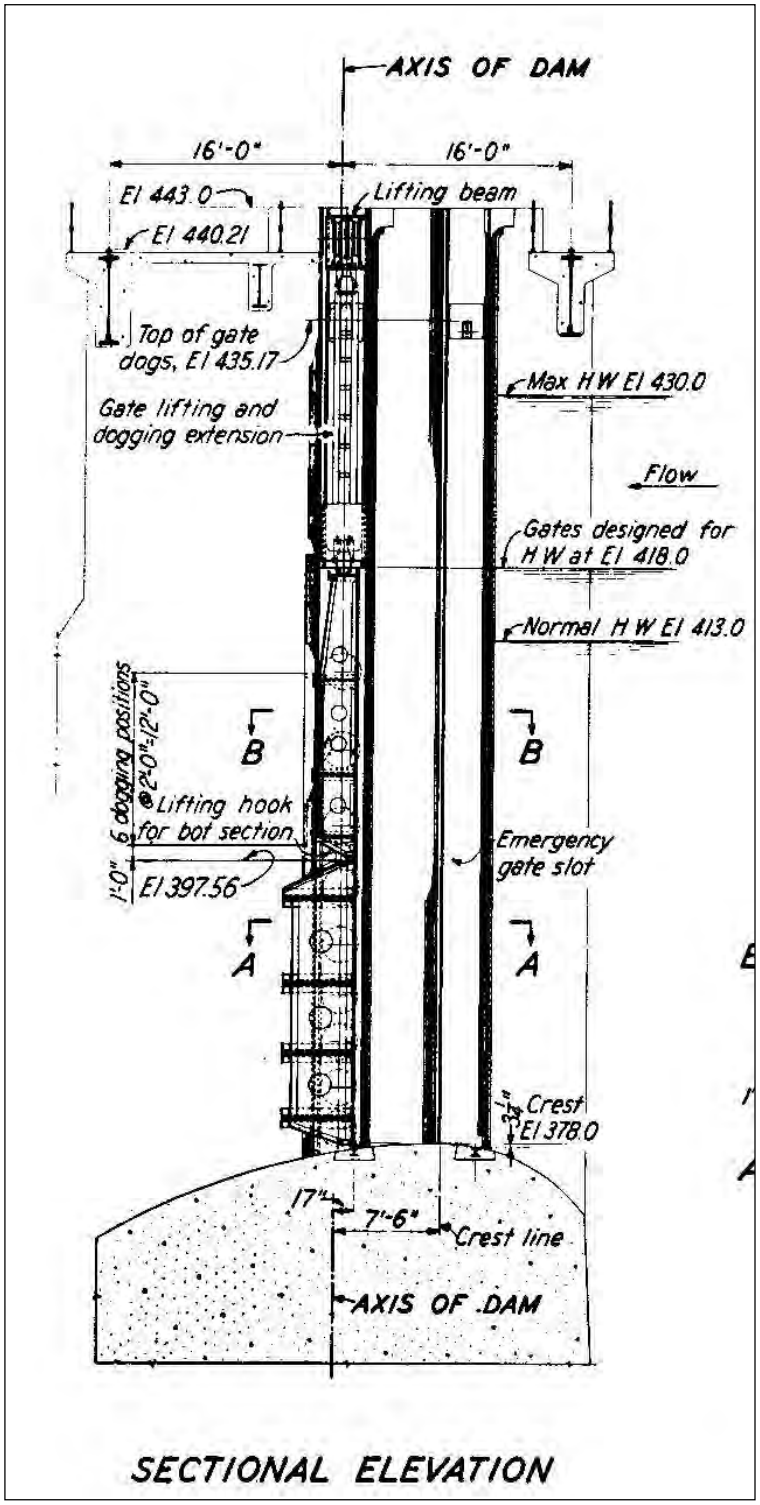


Original 1941 Site Plan

Sections and Elevations:

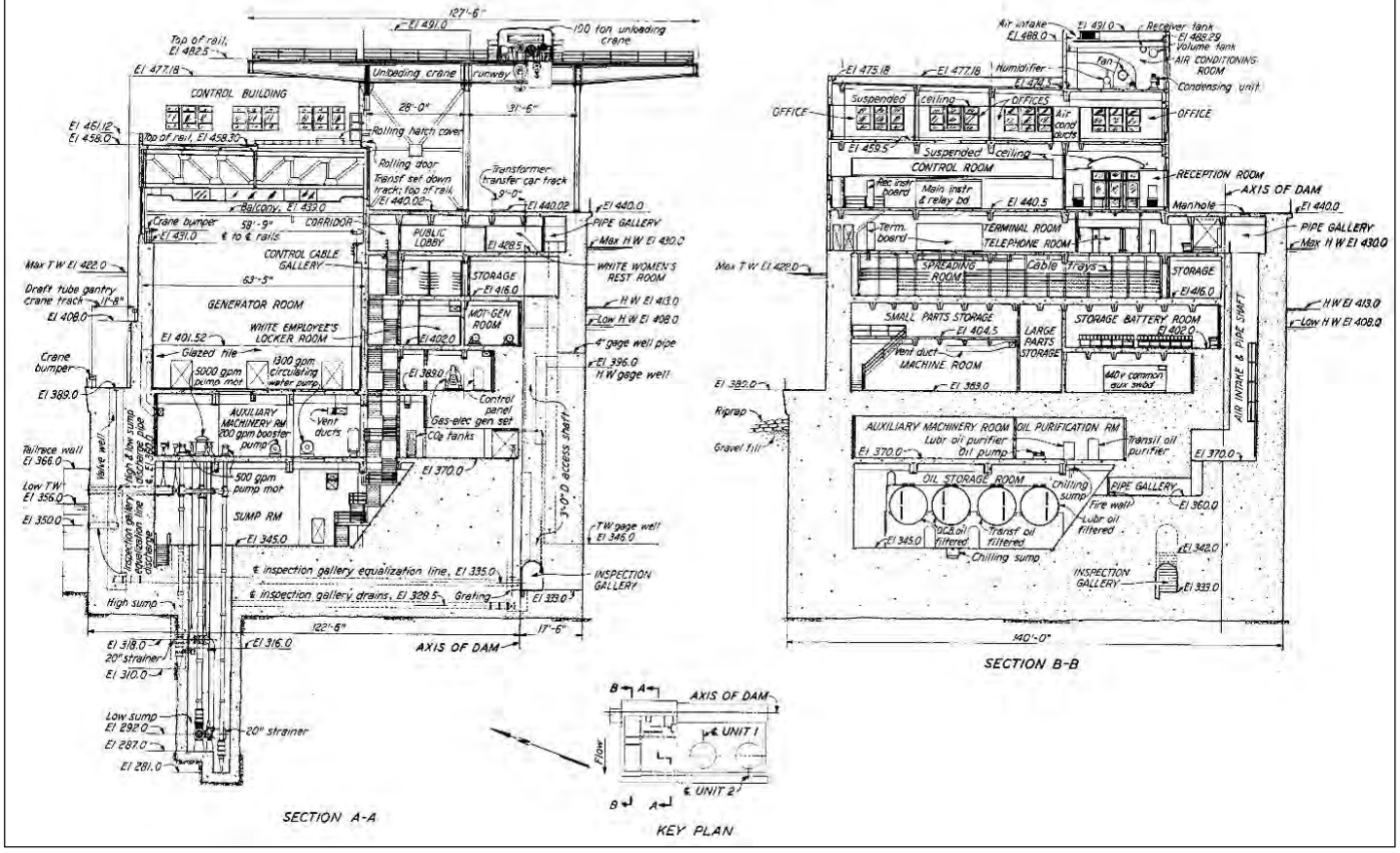


Pickwick Landing Dam River Elevation



Concrete Wall Section

Section of Powerhouse and Operation Rooms



Property Owner:

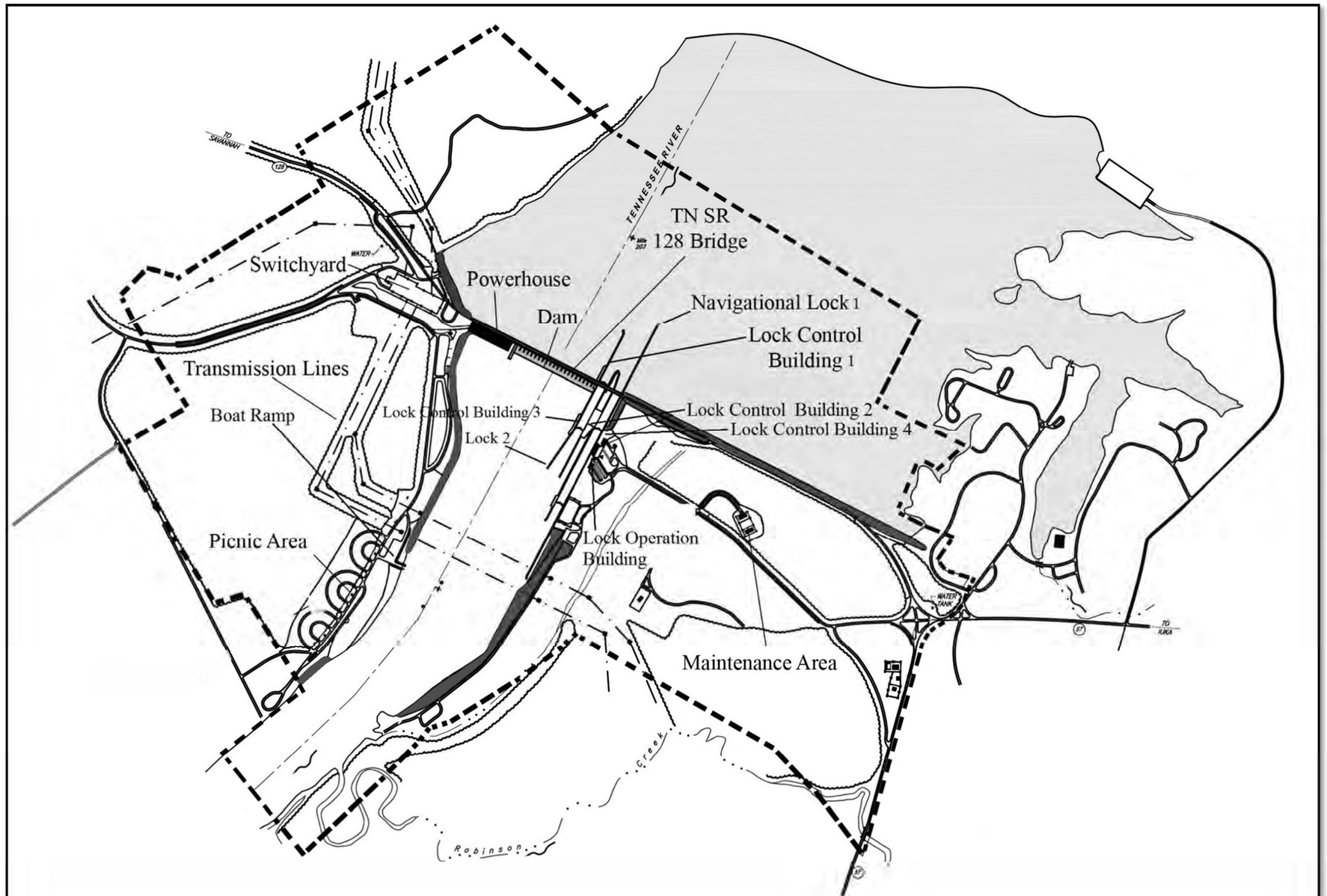
(This information will not be submitted to the National Park Service, but will remain on file at the Tennessee Historical Commission)

Name Tennessee Valley Authority ï Pat Ezzell

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

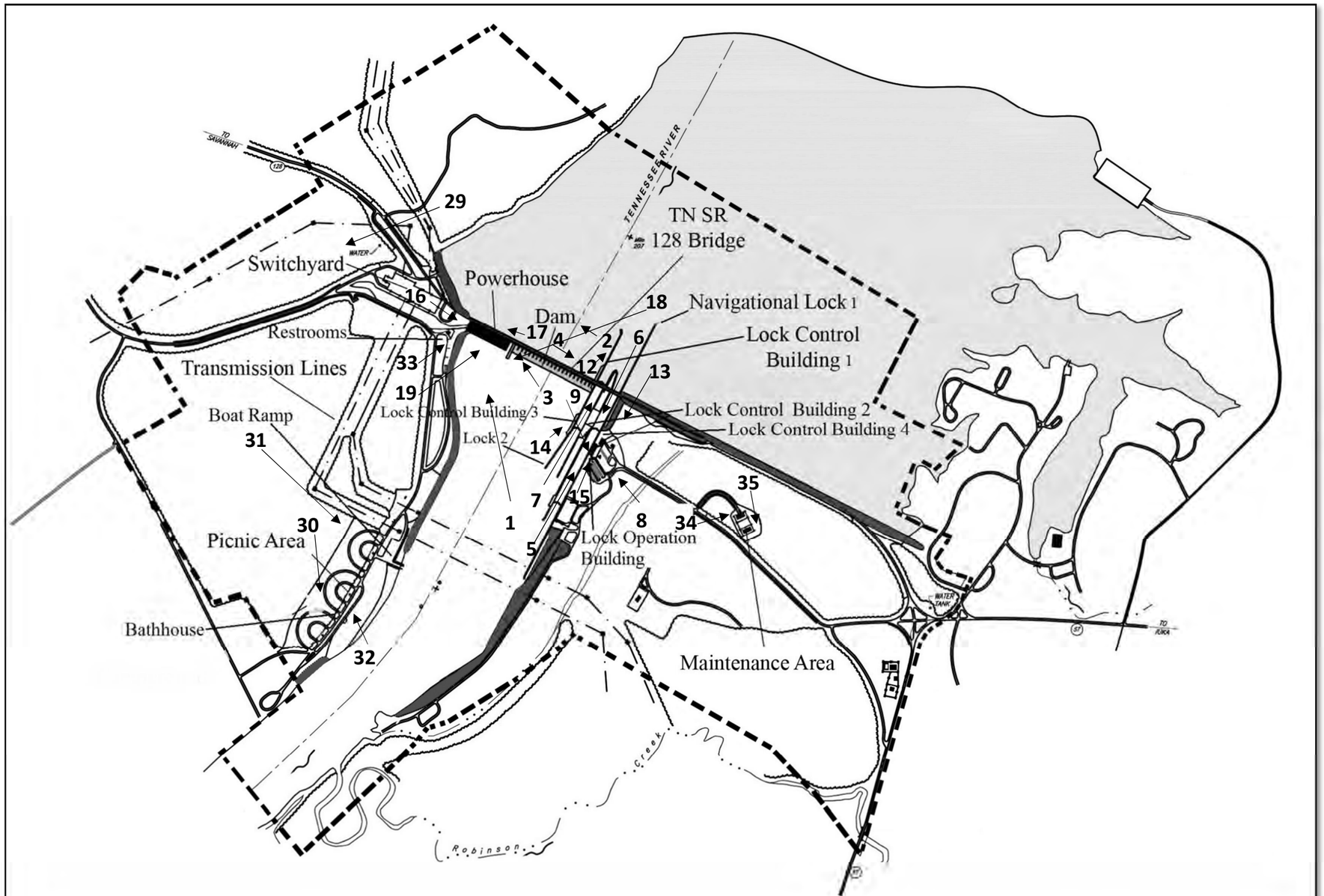
City or Town Knoxville State/Zip TN 37902

Pickwick Landing Hydroelectric Project Site Plan



Pickwick Landing Hydroelectric Dam	Legend National Register Boundary: - - - - - -	Map Scale: NORTH 500 feet

Pickwick Landing Hydroelectric Project Photo Key Map



Pickwick Landing Hydroelectric Dam	Legend National Register Boundary: - - - - - -	Map Scale: NORTH 500 feet


TVA
Pickwick Dam


MITER
SILL


ANDING
ATIONS CENTER


50
Pickwick
Locks
100


TENNESSEE
RIVER
WATERWAY
MUSEUM


UPSTREAM CONTROL STATION


PICKWICK
LANDING


PICK-UP
AND
DROP-OFF
ONLY
NO PARKING


1935 - BUILT FOR THE PEOPLE OF THE UNITED STATES - 1938
ALL NON-PLANT PERSONNEL
MUST SIGN IN WITH
SENIOR OPERATOR


REST ROOMS


RESTRICTED
AREA
KEEP OUT


ICE
ICE
ICE
Coca-Cola


Coca-Cola

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

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

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:	MP100001467
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 and Industry 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

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,

Pat Bernard Ezzell

Patricia Bernard Ezzell
Federal Preservation Officer
Communications

Enclosures