

United States Department of the Interior
National Park Service

For NPS use only

National Register of Historic Places
Inventory—Nomination Form

received FEB 18 1987

date entered MAY 12 1987

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic OHIO RIVER LOCK AND DAM NO. 31—Grounds and Buildings

and/or common

2. Location

street & number Route #1, Box 18 not for publication

city, town Kirville X vicinity of Firebrick

state Kentucky code 021 county Lewis code 135

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agriculture
<input checked="" type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input checked="" type="checkbox"/> in process	<input type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input checked="" type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
		<input checked="" type="checkbox"/> no	<input type="checkbox"/> military
			<input type="checkbox"/> museum
			<input type="checkbox"/> park
			<input checked="" type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation
			<input type="checkbox"/> other:

4. Owner of Property

name Quality Car and Truck Leasing, Incorporated

street & number 4731 Scioto Trail

city, town Portsmouth vicinity of state Ohio

5. Location of Legal Description

courthouse, registry of deeds, etc. Lewis County Courthouse

street & number

city, town Vanceburg state Kentucky

6. Representation in Existing Surveys

title Historic Resources of Kentucky Inventory has this property been determined eligible? yes X no

date 1986 federal X state county local

depository for survey records Kentucky Heritage Council

city, town Frankfort state Kentucky

7. Description

Condition		Check one	Check one
<input checked="" type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input checked="" type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input type="checkbox"/> moved date _____
<input checked="" type="checkbox"/> fair	<input type="checkbox"/> unexposed		

Describe the present and original (if known) physical appearance

The buildings and grounds of Ohio River Lock and Dam No. 31 is a complex containing five houses, a powerhouse, a blacksmith shop, a garage, paved roads and sidewalks, a stone road and landscaping which were built and used by the Corps of Engineers for the operation of Lock and Dam #31 of the Ohio River System. The dam and locks have been demolished. The complex is located on a high bank of the river in northeastern Lewis County approximately 20 miles upstream from Vanceburg, the county seat, and 2.5 miles below Portsmouth, Ohio, the largest population center in the area. Except for the loss of a water tower, this support complex is almost totally unchanged from the period of its operation by the Corps. It is also in a good state of repair and maintenance.

Lock and Dam #31 is located in a thinly populated area of northeast Kentucky within the Appalachian Mountain area of Kentucky. At this point, the Ohio River is located within a gorge characterized by adjacent high hills and a narrow floodplain. Although no historic buildings in the area are listed in the National Register, archaeological sites of national significance such as the Lower Shawneetown National Register District, listed November 1985, are located within two miles of the site. No lock and dam complex within Kentucky which was part of the 53 dam system built between 1875 and 1929 has been listed in the National Register. Two other lock and dam sites on the Ohio River System--Davis Island Plot and Merrill Lock (No. 6) both located in Pennsylvania are listed in the National Register.

The complex is located on a 7.71 acre plot, most of which is located on a high terrace overlooking the Ohio River. The six primary buildings face the River and are parallel to it. All are about thirty feet from a sidewalk which runs along the edge of the terrace (see Photo #1). Connecting this row of buildings to the old lock and dam complex was a concrete stair built on the river bank (see Photo #2). The paved areas to either side of the stair is presently covered with debris, weeds and seedlings. A curvilinear driveway of concrete with concrete curbs is located to the rear of the six main dwellings providing easy access to each. A twenty-foot section of road provides access to the complex from Kentucky 10 and is included in the nomination. It is physically separated from the complex by the few track-wide, right-of-way of the Chessie System Railroad which also forms the southeastern boundary of the complex. The concrete drive also provides access to the garage and workshop area located adjacent to the railroad and to an abandoned road paved with stone which provided access to the lock and dam when they were in operation.

The primary building in the complex is the powerhouse, built in 1919, which is located at the top of the stairs leading from the lock and dam. A tall, one-story, brick structure measuring 32' x 77', the powerhouse has an irregular, coursed-stone foundation with stone watercourse. It has six bays at regular intervals on its primary facade. The steel frame windows contained ten panes above and twenty panes below a steel I beam. The windows have classical arches above. The main entrance to the complex which faces the stairs leading down to the locks contains a double door and is reached from a small unsheltered concrete landing. Although most of the windows in the powerhouse are boarded up for protection, they have been retained. The short sides of the powerhouse are divided into three bays with the central bay on the southwest side used as the location for a brick smokestack which rises approximately 60 feet in height (see Photo #9). The powerhouse is a well-executed Classical Revival industrial building which serves as the focal building in the complex.

8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400–1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500–1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600–1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/
<input type="checkbox"/> 1700–1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian
<input checked="" type="checkbox"/> 1800–1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input type="checkbox"/> 1900–	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input checked="" type="checkbox"/> transportation
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)

Specific dates	1915–1931	Builder/Architect	Unknown
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Statement of Significance (in one paragraph)

Lock and Dam Site #31 is significant in American transportation history as a significant component and in the Ohio River Navigation System operated by the U. S. Army Corps of Engineers between 1875 and the 1960s. This system of 53 locks and dams located between Pittsburgh and the Mississippi River was critical to the development of a modern transportation system on the Ohio River. Surviving as the best-preserved lock and dam support complex in Kentucky, Lock and Dam #31 provides us with an important link to this historic transportation system.

Lock and Dam No. 31 was constructed between 1915 and 1917. The fifty-three lock and dams in the system were built between 1906 and 1929 with the exception of the first, Davis Island, which was completed in 1885. Built and operated by the Huntington District of the Ohio River Division, Lock and Dam No. 31 is located, like most units in the system, in a remote area. Utilizing the most modern technology in an area not yet served by electricity, the complex required facilities making it self-sufficient such as a power-generating facility and a blacksmith shop. It also provided the quality housing required to recruit and retain the technical staff required to operate it. As such it remains an outpost of the Federal Government and modern technology in an area where unpaved roads were the rule.

The Lock and Dam No. 31 Complex became obsolete in the 1960s with the completion of the Meldahl highlift lock and dam downstream. When Meldahl came on line, Dam No. 31 became an obstruction in the new system which resulted in its demolition along with the obsolete lock. The balance of the complex was sold to the Quality Car and Truck Leasing, Incorporated, in March 1968, which has retained ownership and preserved the site in excellent condition since its acquisition.

10. GEOGRAPHICAL DATA

Verbal Boundary Description and Justification:

Two parcels, separated by the Chessie System right-of-way, Parcel #1 is a 34' by approximately 500 feet right-of-way containing a concrete paved street, beginning at Kentucky 10 and running northwest. Parcel #1 is physically separated from Parcel #2 of the nomination by an 81' wide parcel owned by the Chessie System which predates the construction of the Lock and Dam. The Chessie property has been omitted from the nomination because it is historically earlier and physically different from the Lock and Dam complex. North and west of the Chessie System property is the four-sided area labeled Parcel #2 on the enclosed site plan and boundary map. The two areas separated by the Chessie System property constitutes a discontinuous complex.

9. Major Bibliographical References

Glockner, Edward. Personal communications with the Kentucky State Historic Preservation Office staff.

U. S. Army Corps of Engineers, Huntington District, Letter to Kentucky State Historic Preservation Office, Charts and Plats provided to Edward Glockner.

10. Geographical Data

Acreeage of nominated property 7.71 acres
 Quadrange name Friendship, KY-OHIO

Quadrange scale 1:24000

UTM References

A

1	7
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3	2	2	3	0	0
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4	2	8	5	3	5	0
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B

1	7
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3	2	2	3	8	0
---	---	---	---	---	---

4	2	8	5	3	0	0
---	---	---	---	---	---	---

C

1	7
---	---

3	2	2	4	0	0
---	---	---	---	---	---

4	2	8	5	2	2	0
---	---	---	---	---	---	---

D

1	7
---	---

3	2	2	2	2	0
---	---	---	---	---	---

4	2	8	5	0	0	0
---	---	---	---	---	---	---

E

1	7
---	---

3	2	2	1	2	0
---	---	---	---	---	---

4	2	8	5	1	0	0
---	---	---	---	---	---	---

F

1	7
---	---

3	2	2	4	2	0
---	---	---	---	---	---

4	2	8	5	1	8	0
---	---	---	---	---	---	---

G

1	7
---	---

3	2	2	5	0	0
---	---	---	---	---	---

4	2	8	5	1	2	0
---	---	---	---	---	---	---

H

1	7
---	---

3	2	2	4	6	0
---	---	---	---	---	---

4	2	8	5	0	0	0
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Verbal boundary description and justification

I. 17/322400/4285160

See Bottom of #8.

List all states and counties for properties overlapping state or county boundaries

state	code	county	code

state	code	county	code

11. Form Prepared By

name/title Robert M. Polsgrove, Historic Sites Program Manager

organization Kentucky Heritage Council date May 20, 1986

street & number 12th Floor, Capital Plaza Tower telephone 502/564-7005

city or town Frankfort state Kentucky

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature David L. Merga

title State Historic Preservation Officer date April 20, 1987

For NPS use only

I hereby certify that this property is included in the National Register

Keeper of the National Register [Signature] date 5/2/87

Attest: _____ date _____

Chief of Registration

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**

Ohio River Lock & Dam No. 31

Continuation sheet Lewis County, Kentucky

Item number

7

Page

2

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date entered

Located an equal distance from the powerhouse on either side of it are two frame bungalows (see Photo #4). Both are one and a-half story clapboard residences with fishscale siding in the gables. Built on concrete foundations with small porches at the corners, both have gabled dormers in the center of the roof. Building No. 1 to the right of the power plant has experienced window replacements in recent years but retains its basic form. Building No. 3 has experienced no change since its construction.

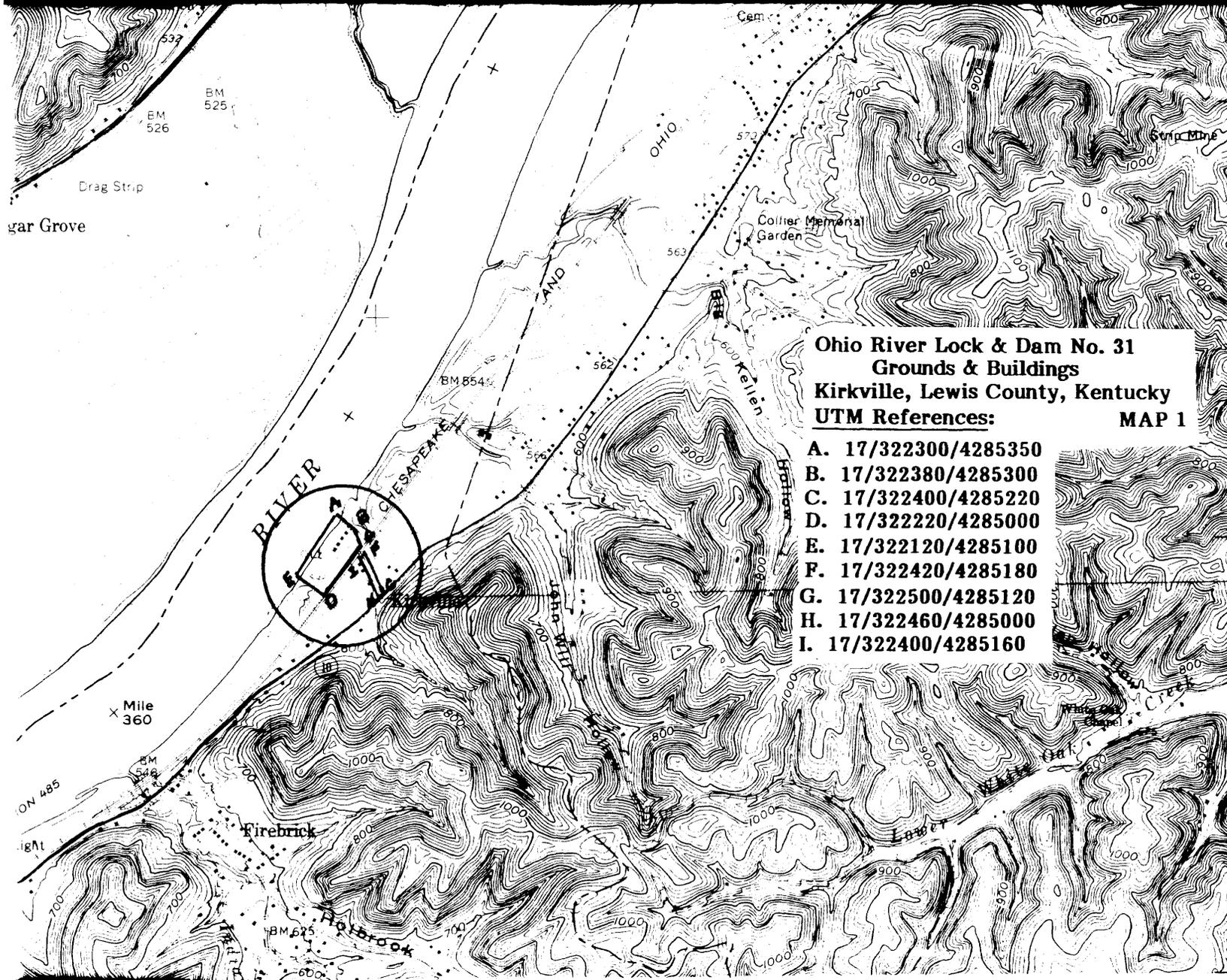
In the early 1930s, three additional brick residences were built to provide additional housing for staff. The three are built on the same plan. They are two-story with steeply pitched roofs, steel double casement windows with three bays on the primary facade. Each has a shed porch which extends over the left two-thirds of the house. Measuring 36' x 27', these houses provided excellent housing to the Lockmaster's family, the Assistant Lockmaster and one other family. These houses are more substantial and less traditional in form than other houses in the Lewis County area adjacent to the complex.

Also located on the complex is a seven-bay brick garage and a metal clad blacksmith shop (see Photo #8). Located behind Building No. 1 along the railroad, these buildings are important functional components of the complex. The only structure located in the complex which has not been preserved is the steel-water tank which was once located behind the powerhouse. (See 1931 Site Plan, attached.) The only new construction in the complex is a modern swimming pool built at the end of the main sidewalk near Building No. 6.

Although the power station has experienced some deterioration and some of its windows are boarded and Building No. 1 has had changes to its windows, the complex is remarkably unaltered. This is particularly true of the open spaces surrounding the buildings. The introduction of a children's swing set is the only change in this area.

The complex contains five contributing houses, three contributing industrial buildings, and three contributing structures--the concrete steps, the stone roadway connecting the Lock area with the workshop, and the concrete access road. Total contributing features: Eleven (11).

There is one non-contributing structure--the swimming pool.



Ohio River Lock & Dam No. 31
 Grounds & Buildings
 Kirville, Lewis County, Kentucky
 UTM References: MAP 1

- A. 17/322300/4285350
- B. 17/322380/4285300
- C. 17/322400/4285220
- D. 17/322220/4285000
- E. 17/322120/4285100
- F. 17/322420/4285180
- G. 17/322500/4285120
- H. 17/322460/4285000
- I. 17/322400/4285160

4287
 42'30"
 4286
 4285
 4284
 (PORTSMOUTH)
 4461 III NW

20 18 1961

PARCEL 1

B

1791

WAR DEPARTMENT. CORPS OF ENGINEERS, U.S. ARMY.

K E W N T U C U N K Y

CHESAPEAKE AND OHIO RAILWAY

178' 175' 265.42'

S. 44° 04' 25" W. 346.00' S. 37° 15' 25" W. 279.42'

Old Axis Mon. Mark. L. 1155.103' E. 1155.863 - 554.660 1155.9 B.C. '01

462.00' 336.00' E. 1155.933' S. 37° 15' 25" W.

24.04' 26.00' 15' Conc. Road

5' Concrete Walk Brick Dr. Hsg. 15' Conc. Road

15' Conc. Road 15' Conc. Road

5.24° 45' 15" E. 592.365' 4' Concrete

Drick Dr. Hsg. 1' Concrete

Brick Dr. Hsg. 1' Concrete

Ohio River Lock & Dam No. 31
Grounds and Buildings
Kirkville, Lewis County, Kentucky
Site Plan and Boundary Map

Map 2

- ① - 7-27-36
- ② - 3-23-38

OHIO RIVER
LOCK & DAM NO 31
GROUNDS AND BUILDINGS

Scale: 1" = 100'

MARCH 11, 1938

U.S. ENGINEER OFFICE

APPRENTICE

DR 31

Modern Swimming Pool

PARCEL 2

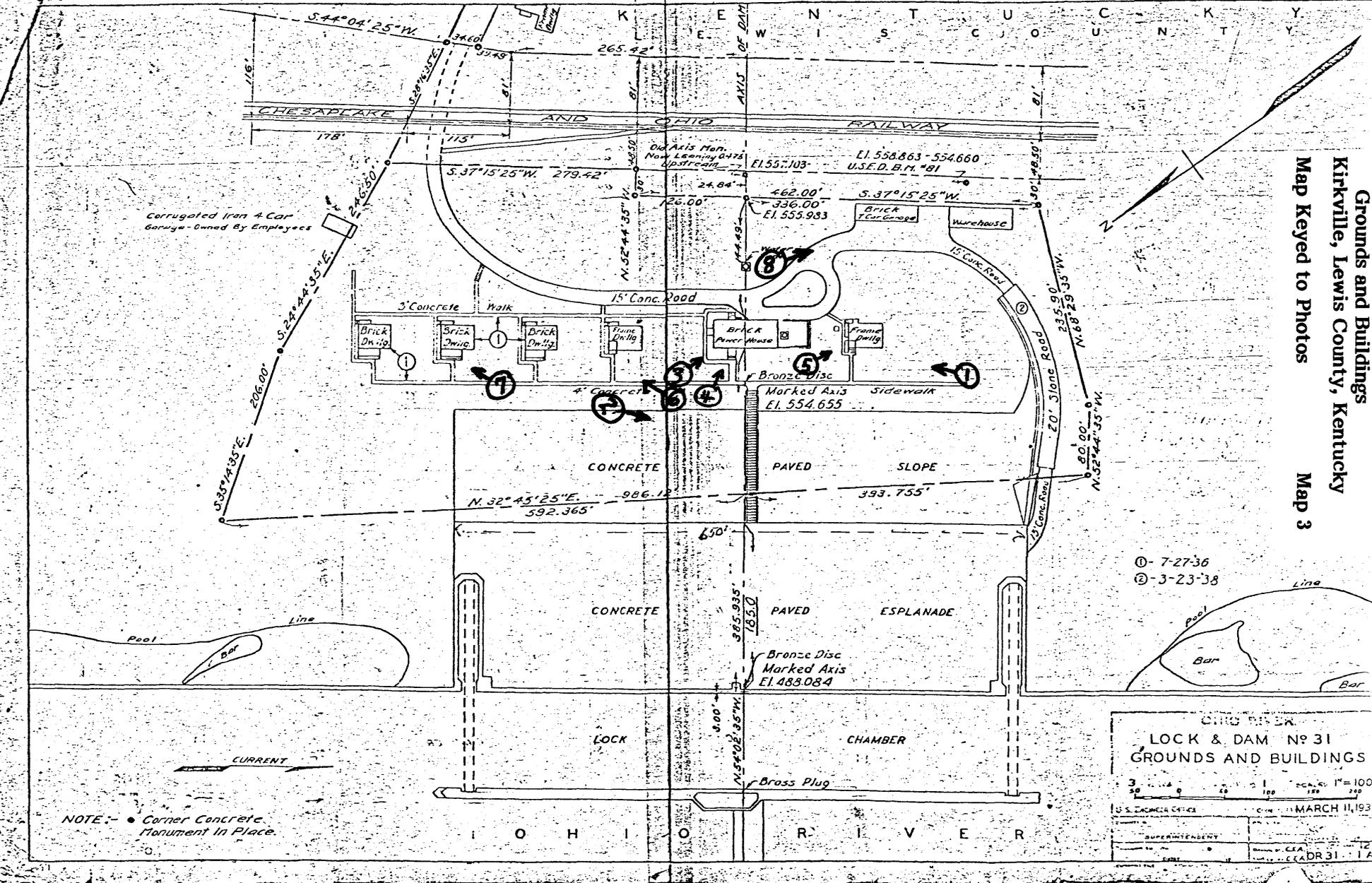
Site Boundary

CURRENT

NOTE - Corner Concrete Monument in Place.

WAR DEPARTMENT. #

CORPS OF ENGINEERS, U. S. ARMY.



Ohio River Lock & Dam No. 31
 Grounds and Buildings
 Kirkville, Lewis County, Kentucky
 Map Keyed to Photos
 Map 3

- ① - 7-27-36
- ② - 3-23-38

OHIO RIVER
 LOCK & DAM No 31
 GROUNDS AND BUILDINGS

3 100 150 200
 SCALE: 1" = 100'

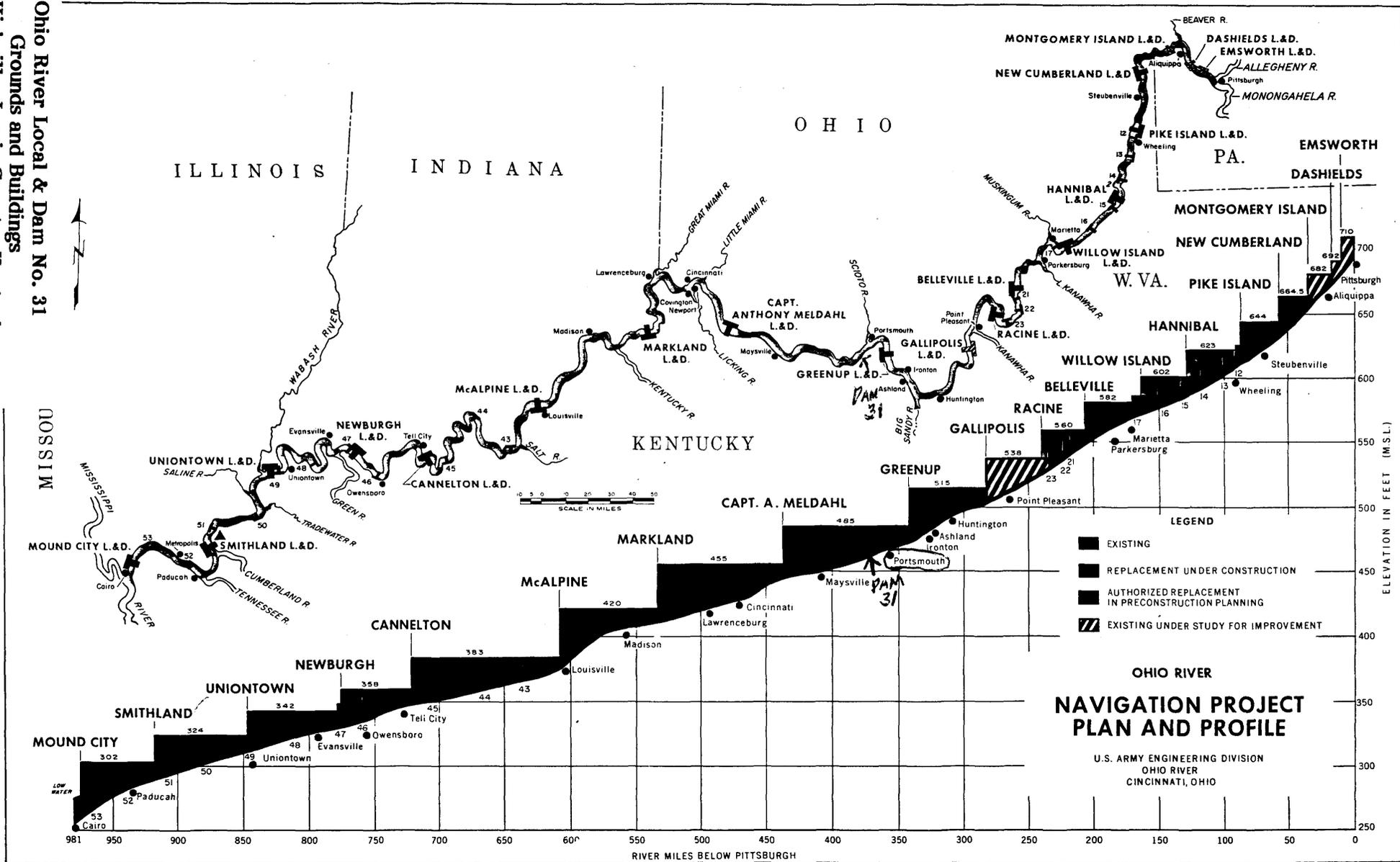
U. S. ENGINEER OFFICE
 MARCH 11, 1938

SUPERINTENDING
 CLARENCE A. ...
 CAPT. U. S. ARMY

NOTE: - • Corner Concrete Monument In Place.

Ohio River Local & Dam No. 31
 Grounds and Buildings
 Kirkville, Lewis County, Kentucky

Map 4



JANUARY 1969

FEB 18 1987

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