

NPS Form 10-900
(Rev. 8/86)
Wisconsin Word Processor Format (1331D)
(Approved 3/87)

OMB No. 1024-0018

RECEIVED

OCT 25 1993

NATIONAL
REGISTER

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in Guidelines for Completing National Register Forms (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries. Use letter quality printer in 12 pitch, using an 85 space line and a 10 space left margin. Use only archival paper (20 pound, acid free paper with a 2% alkaline reserve).

1. Name of Property

historic name Appleton Locks 1-3 Historic District

other names/site number N/A

2. Location

street & number Fox River at Oneida Street

N/A not for publication

city, town Appleton

N/A vicinity

state Wisconsin

code WI

county Outagamie

code 087

zip code 54911

3. Classification

Ownership of Property	Category of Property	No. of Resources within Property	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	contributing	noncontributing
<input type="checkbox"/> public-local	<input checked="" type="checkbox"/> district	<u>4</u>	<u>6</u> buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	<u> </u>	<u> </u> sites
<input checked="" type="checkbox"/> public-Federal	<input type="checkbox"/> structure	<u>5</u>	<u> </u> structures
	<input type="checkbox"/> object	<u> </u>	<u> </u> objects
		<u>9</u>	<u>6</u> Total

Name of related multiple property listing:

Waterway Resources of the Lower Fox River

No. of contributing resources
previously listed in the
National Register N/A

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this 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 meets ___ does not meet the National Register criteria. ___ See continuation sheet.

Dr. William L. Kuest 14 Oct 93
Signature of certifying official Date
Chief of Engineers
State or Federal agency and bureau

In my opinion, the property meets ___ does not meet the National Register criteria. ___ See continuation sheet.

[Signature] 8/21/92
Signature of commenting or other official Date
State Historic Preservation Officer-WI
State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

entered in the National Register ___ See continuation sheet
___ determined eligible for the National Register. ___ See continuation sheet
___ determined not eligible for the National Register.
___ removed from the National Register.
___ other, (explain:)
Beth Boland 12/7/93
Signature of the Keeper Date

6. Functions or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
<u>Transportation/water related</u>	<u>Transportation/water related</u>
<u>Domestic/single dwelling</u>	<u>Domestic/single dwelling (vacant)</u>
_____	_____
_____	_____

7. Description

Architectural Classification
(enter categories from instructions)

Materials
(enter categories from instructions)

Other: Lock

foundation Stone

Other: Concrete Dam

walls Stone

Late 19th & Early 20th Century

Asbestos

American Movements

roof Asphalt

other

Concrete

Describe present and historic physical appearance.

Appleton Lock 1 is nestled in a wooded area in the Lower Fox River Valley, west of Oneida Street in the City of Appleton. Located at the river's 31.7 mile marker, a Wisconsin/Michigan Power Company facility is immediately to the north. Lock 2 and Lock 3 are immediately adjacent to the "Appleton Flats," an industrial portion of the city that includes the Fox River Paper Corporation, the Appleton Machine Company and the Riverside Paper Company. Lock 2 is located at the Lower Fox River's 31.5 mile marker, and lock 3 is at the 31.3 mile marker. The district contains five structures, Lock #1, Lock #2, Lock #3, a canal, and a dam. It also includes three lockshacks, three sheds, two garages and two lockkeepers' houses. The three locks, canal, lockkeeper's houses, and two lockshacks are contributing members of the district, while the three sheds, two garages and remaining lockshack are non-contributing.

Appleton Lock 1 (Contributing):

The present lock, which is oriented generally on a WSW/ENE axis, was built in 1884 to replace one of composite construction.¹ The 144 by 35 foot lock chamber and adjoining wingwalls are comprised of quarried limestone blocks, the sides of which are capped with quarried stone coping and a pipe railing. Each one of the lock gates is constructed of squared wooden timbers that are laid horizontally atop one another and joined with structural ties. Adjacent to each gate is a concrete platform that contains a tripod. A vertical shaft extends the height of the tripod. A handle is fixed to the top of the shaft, while the bottom of the shaft contains a gear that drives a horizontally placed spar, the end of which is attached to a lock gate. (It is a horizontal rack and pinion system.) Depending on which way the handle is turned, the spar is either taken in, thus opening the lock gate, or it is pushed out, in which case the gate closes. The chamber is flooded by four butterfly valves that are set in the floor of the lock, immediately upstream from the structure. As the valves are opened, water passes down into a culvert with a 90 degree turn, which then directs it under the upstream sill and straight into the chamber. Each valve is adjusted by a geared mechanism that sits on the lock's coping. A metal shaft connects the valve to the adjusting mechanism, all four of which are placed in line adjacent to the northwest corner of the lock. The chamber is discharged through six small butterfly

¹ Annual Report Upon the Improvement of the Harbors of Milwaukee, Racine, Kenosha, and Waukegan, Lake Michigan and Improvement of the Fox and Wisconsin Rivers in Charge of D.C. Houston, Major of Engineers, Bvt. Colonel, U.S.A.; Being Appendix GG of the Annual Report of the Chief of Engineers for 1884 (Washington, D.C.: Government Printing Office, 1884), 1877.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 1 Appleton Locks 1-3 Historic District
Outagamie County, WI

valves found at the bottom of the two downstream gates. There are three valves per gate. These valves are operated by the levers atop each gate. The gates contain a cat-walk that facilitates moving from one side of the lock to the other. The lock provides eight feet of lift as it moves crafts from the 735.40 feet above sea level upper pool to the 727.36 feet above sea level lower pool. It can be filled in four minutes and two seconds, while it can be discharged in two minutes and thirty-five seconds.

Details about the lock's construction, as well as about subsequent changes and major maintenance activities prior to 1953, are as follows:

- 1884 New lock constructed. "The walls above foundations, including coping, were laid in cement mortar, platform and bulkhead built, and 6 recess-valves with working gearing put in. The upper miter-sill was placed and bolted; the gates were completed and hung and the maneuvering gear put in; 6 iron snubbing posts were placed and bolted, and the upper and lower wing-walls laid, and the lock completed." Material used in reconstruction included 452 feet of 19 inch coping; 4,462 linear feet of dressed stone; 4,339 cubic yards of backing; 209 cords of rubblestone. Also: 1,279 barrels of hydraulic cement; 6,262 feet, B.M. of pine lumber; 253 feet, B.M. of oak timber; 2,224 pounds of iron; 130 pounds of cast-iron nuts/washers; 2 kegs of spikes; 6 valve shafts and gearing; four iron rollers (for spars).²
- 1902 Lower right tripod platform rebuilt and gas pipe hand rails installed on gates.³
- 1903 New steel spars installed.⁴

² Ibid.

³ Annual Report Upon the Improvement of Rivers and Harbors on the Western Shore of Lake Michigan, In Charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; Being Appendix JJ of the Annual Report of the Chief of Engineers for 1902 (Washington, D.C.: Government Printing Office, 1902), 2084.

⁴ Annual Report Upon the Improvement of Rivers and Harbors on the Western Shore of Lake Michigan, In Charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; Being Appendix LL of the Annual Report of the Chief of Engineers for 1903 (Washington, D.C.:

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 2 Appleton Locks 1-3 Historic District
Outagamie County, WI

-
- 1905 Concrete tripod platforms with steel cover plates built on right side of lock.⁵
- 1906 Lower gates received new steel valves. Also, new concrete tripod platform built for upper left gate.⁶
- 1907 Filling valve bulkhead rebuilt. In addition, lower tripod platform's timber frame replaced by dirt filled, dry rubble wall. Also done to upper left tripod platform.⁷
- 1908 Ratchets and dogs installed on fill valve gearing mechanism.⁸
- 1909 Gates rebuilt above water. New tripod platform of concrete built at lower left gate.⁹

Government Printing Office, 1903), 1875.

⁵ Annual Report Upon the Improvement of Rivers and Harbors on the Northern and Western Shores of Lake Michigan, In the Charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; Being Appendix JJ of the Annual Report of the Chief of Engineers for 1905 (Washington, D.C.: Government Printing Office, 1905), 2058.

⁶ Annual Report Upon the Improvement of Rivers and Harbors on the Northern and Western Shores of Lake Michigan, In the Charge of W.V. Judson, Major, Corps of Engineers, U.S.A.; Being Appendix KK of the Annual Report of the Chief of Engineers for 1906 (Washington, D.C.: Government Printing Office, 1906), 1766.

⁷ Annual Report of the chief of Engineers, U.S. Army, 1907 Part III (Washington, D.C.: Government Printing Office, 1907), 1912.

⁸ Annual Report of the Chief of Engineers, U.S. Army, 1908 Part II (Washington, D.C.: Government Printing Office, 1908), 1980.

⁹ Annual Report of the Chief of Engineers, U.S. Army, 1909 Part II (Washington, D.C.: Government Printing Office, 1909), 1983.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 3 Appleton Locks 1-3 Historic District
Outagamie County, WI

- 1926 Gates, miter sills and valve platforms all replaced.¹⁰
- 1951 Bad timber in upper gates "renewed." Upper valves overhauled.¹¹

Appleton Lock 2 (Contributing):

The present lock, which is oriented generally on a WSW/ENE axis, was built in 1901 to replace one built of concrete and facing stone in 1878.¹² The 144.6 by 35 foot lock chamber and adjoining wingwalls are comprised of quarried limestone blocks laid in alternating wide and narrow courses, and the walls of the lock are capped with quarried stone coping and a pipe railing. Each of the four lock gates is constructed of squared wooden timbers that are laid horizontally atop one another and joined with structural ties. Adjacent to each gate is a concrete platform that contains a tripod. A vertical shaft extends the height of the tripod. A handle is fixed to the top of the shaft, while the bottom of the shaft contains a gear that drives a horizontally placed spar, the end of which is attached to a lock gate. (It is a horizontal rack and pinion system.) Depending on which way the handle is turned, the spar is either taken in, thus opening the lock gate, or it is pushed out, in which case the gate closes. The chamber is flooded by six butterfly valves that are set in the floor of the lock, three on each side, immediately upstream from the structure. As the valves are opened, water passes down into a culvert with a 90 degree turn, which then directs it under the upstream sill and straight into the chamber. Each valve is adjusted by a geared mechanism that sits on the lock's coping. A metal shaft connects the valve to the adjusting mechanism. The chamber is discharged through six small butterfly valves found at the bottom of the two downstream gates. There are three valves per gate. These valves are operated by the levers atop each gate. The gates contain a cat-walk that facilitates moving from one side of the lock to the other. The lock provides 9.6

¹⁰ Annual Report of the Chief of Engineers, 1926: Extract - Report Upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1926), 1280.

¹¹ Annual Report (1951), 1745.

¹² Annual Report upon the Improvement of Rivers and Harbors on Western Shore of Lake Michigan, In the charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; being Appendix LL of the Annual Report of the Chief of Engineers for 1901 (Washington, D.C.: Government Printing Office, 1901), 2962.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 4 Appleton Locks 1-3 Historic District
Outagamie County, WI

feet of lift as it moves crafts from the 727.36 feet above sea level upper pool to the 716.19 feet above sea level lower pool. It can be filled in three minutes and forty-six seconds, and discharged in two minutes and forty-six seconds.

Details about the lock's construction, as well as about subsequent changes and major maintenance activities prior to 1953, are as follows:

1901 Lock rebuilt in 1878. Had concrete walls faced with cut stone. Despite repairs in 1887 and 1896, stone separated from concrete. Walls continued to deteriorate and threatened to cave in. Construction began on 14 November 1900. Materials arrived via the CMS+P rail spur built. 19.5 inch cut stone was purchased from L. Lindaver, Kaukauna. Used for the 1st, 4th, 7th, 10th, 13th and 16th courses. [That used for the 1st and 4th courses was 4' deep, balance was 2'8" feet.] Other courses came from narrow bed cut stone salvaged from the old face stone. Walls were 8' wide at the bottom and 4'6" at the top. They were reinforced by 3.5' wide by 5' long "T" walls. Utica cement mortar was used for the structural masonry and portland cement for the facework. Lock utilized the same valve system as Appleton 3. Note lock "...was provided with the modern butterfly valves operated by gearing on the lock walls, the old chain and lever apparatus being defective and obsolete." Also, new lower gates built and upper gates repaired. Steel spars used for gates. Lower gate spars affixed at mid-gate instead of at gate toe on outer end. This reduced length of spar from 28'8" to 22.' Lock refllooded on 29 April 1901. Material used included: 11,964 cubic feet of wide bed cut stone; 4,204 cubic feet of narrow cut stone; 1,452 barrels of natural utica cement; 10 barrels of portland cement; 23,084 feet, B.M. of fir timber; and 23,564 pounds of iron, steel and casting.¹³

1905 New concrete platforms with steel cover plates built.¹⁴

¹³ Ibid.

¹⁴ Annual Report Upon the Improvement of Rivers and Harbors on the Northern and Western Shores of Lake Michigan, In the Charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; Being Appendix JJ of the Annual Report of the Chief of Engineers for 1905 (Washington, D.C.: Government Printing Office, 1905), 2057.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 5 Appleton Locks 1-3 Historic District
Outagamie County, WI

- 1910 Lower wing walls and lock chamber repointed.¹⁵
- 1929 Lock's lower gates rebuilt and a new valve platform installed.¹⁶
- 1942 New upper lock gates built and installed.¹⁷

Appleton Lock 3 (Contributing):

The date of construction for the present lock, which is oriented generally on an E/W axis, is thought to be between 1890 and 1900.¹⁸ The 144 by 35 foot lock chamber and adjoining wingwalls are comprised of quarried limestone blocks, the sides of which are capped with quarried stone coping and a pipe railing. Each of the four lock gates is constructed of squared wooden timbers that are laid horizontally atop one another and joined with structural ties. Adjacent to each gate is a concrete platform that contains a tripod. A vertical shaft extends the height of the tripod. A handle is fixed to the top of the shaft, while the bottom of the shaft contains a gear that drives a horizontally placed spar, the end of which is attached to a lock gate. (It is a horizontal rack and pinion system.) Depending on which way the handle is turned, the spar is either taken in, thus opening the lock gate, or it is pushed out, in which case the gate closes. The chamber is flooded by four butterfly valves that are set in the floor of the lock, immediately upstream from the structure. As the valves are opened, water passes down into a culvert with a 90 degree turn, which then directs it

¹⁵ Annual Report of the Chief of Engineers, U.S. Army, 1910 Part II (Washington, D.C.: Government Printing Office, 1910), 2141.

¹⁶ Annual Report of the Chief of Engineers, 1929: Extract - Report upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1929), 1367.

¹⁷ Annual Report of the Chief of Engineers, U.S. Army, 1942 Part I, Volume II (Washington, D.C.: Government Printing Office, 1942), 1365.

¹⁸ A review of Corps of Engineers annual reports from 1873 to 1953 did not reveal a construction date for this lock. Occasional reports were missing, however, not the least of which were the reports from 1891 to 1900. Since no mention of this lock's construction was noted, therefore, it is logical to assume that it was rebuilt during this period.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 6 Appleton Locks 1-3 Historic District
Outagamie County, WI

under the upstream sill and straight into the chamber. Each valve is adjusted by a geared mechanism that sits on the lock's coping. A metal shaft connects the valve to the adjusting mechanism, all four of which are placed in line adjacent to the northwest corner of the lock. The chamber is discharged through six small butterfly valves found at the bottom of the two downstream gates. There are three valves per gate. These valves are operated by the levers atop each gate. The gates contain a cat-walk that facilitates moving from one side of the lock to the other. The lock provides 8.7 feet of lift as it moves crafts from the 716.10 feet above sea level upper pool to the 706.3 feet above sea level lower pool. It can be filled in three minutes and fifty-four seconds, and discharged in two minutes and fifty-one seconds.

Details about post-1900 changes to the lock, as well as major maintenance activities prior to 1953, are as follows:

- 1905 Lock received new concrete tripod platforms and steel cover plates.¹⁹
- 1911 Coping on top of lock walls badly deteriorated. Replaced.²⁰
- 1929 New lower gates and valve platforms installed.²¹
- 1936 Upper gates and waste weir rebuilt.²²

¹⁹ Annual Report (1905), 2057.

²⁰ Annual Report of the Chief of Engineers, 1911 - Appendix JJ: Report Upon the Improvement of Rivers & Harbors in the Milwaukee, Wisconsin, District (Washington, D.C.: Government Printing Office, 1911), 1911.

²¹ Annual Report of the Chief of Engineers, 1929: Extract - Report upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1929), 1367.

²² Annual Report of the Chief of Engineers, 1936: Extract - Report Upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1937), 1189.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 7 Appleton Locks 1-3 Historic District
Outagamie County, WI

1949 Lock's lower gates rebuilt.²³

1952 Old concrete/timber miter sill replaced with concrete/steel sill. Also, lower gates rebuilt using new steel valves and frames.²⁴

Appleton Upper Dam (Contributing):

This dam is a concrete structure with an overall length of 691 feet. Built in 1941, it is located in the main channel of the Fox -- adjacent to, and about 700 feet west of, the lock. The dam creates, and maintains at 735.4 feet above sea level, the pool on the Lower Fox River that floods the canal in which Appleton locks 1, 2 and 3 are located. [Note that the elevation immediately below the dam is 724.3 feet above sea level.] It also floods the power canals on the north shore. The dam is generally oriented on an E/W axis.

Anchored to the river's rock bottom, the dam consists of two sections. The western section, the one that accounts for the greatest portion of the dam's length, is a 486 foot concrete spillway. The spillway is twenty four feet wide, and fixes the maximum level of the pool the dam creates. The eastern portion of the dam is 160 feet, and contains eight concrete sluiceways, each of which contains a fourteen by twenty foot, steel Tainter gate. The gates are operated by a "crab," a small electrically operated mechanism that moves from gate to gate on a track. The "crab" contains a winch, to which the chain on each end of the gate is attached. As the winch is activated, the chain is taken in or let out, and the height of the gate is adjusted accordingly. A steel catwalk, which facilitates inspections and maintenance, extends the length of the dam.

Placed atop the dam is a single story front gabled shed that was erected to shelter the electric "crab." Spanning the abutments adjacent to the first gate, the lift house is reached by the catwalk. It is clad with drop siding, roofed with asphalt

²³ Annual Report of the Chief of Engineers, 1949: Extract - Report Upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1950), 1967.

²⁴ Annual Report of the Chief of Engineers, 1952: Extract - Report Upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1953), 1682.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 8 Appleton Locks 1-3 Historic District
Outagamie County, WI

shingles, and has walls bounded with pilaster strips. The single window in each side wall and the panelled door at the right of the lockside endwall have simple surrounds. A pair of heavy wooden doors in the opposite endwall swing out to allow passage of the "crab" to whichever gate must be adjusted.

The need for a new dam was noted by the Corps of Engineers in 1937.²⁵ Construction started in 1940, and was completed in 1941. Total cost for the new structure was \$107,771.17. It was built by hired labor.²⁶ No structural changes are thought to have been made to this structure since its construction.

Canal - (Contributing): circa 1850s

Approximately 3,300 feet of the Lower Fox navigation canal are located within this district. Generally running west to east at this point, the canal's depth does not exceed six feet, and its width varies from approximately 100 to 125 feet across the top. There are no special embankment features along the canal. The canal has been dredged periodically throughout its history. It should be noted that a small, approximately two foot wide, stone waste weir is located to the south of Lock #2. It is that portion of the canal that carries the surge of water discharged from Lock #1 around Lock #2.

Lockkeeper's House - Lock #1 (Contributing): circa 1890s

Located approximately 100 feet south of the upstream end of the lock, this is a 1.5 story gabled el that is extended by a 1 story, gabled front addition and a shed-roofed addition to the right. Roughly rectangular, it is built on a rusticated cement block foundation and is clad with asbestos shingles and roofed with asphalt shingles. It has

²⁵ Annual Report of the Chief of Engineers, 1937: Extract - Report upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1938), 1193.

²⁶ Annual Report of the Chief of Engineers, 1940: Extract - Report Upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1941), 1591; Annual Report of the Chief of Engineers, 1941: Extract - Report Upon the Improvement of Rivers and Harbors in the Milwaukee, Wis., District (Washington, D.C.: Government Printing Office, 1941), 1546.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 9

Appleton Locks 1-3 Historic District
Outagamie County, WI

plain window and door surrounds, and molded roof cornices. The building's windows and doors are covered with wooden panels. There is a brick chimney at the rear of the original, upper roof ridge. A right-side door in the gabled addition is shielded by a gabled hood supported by plain geometric brackets. This door is flanked by a horizontal window in the endwall of the shed-roofed addition, while similar windows flank a centered door in the addition's sidewall. This door opens to a path that leads to the lock.

The specific construction date of the house is unknown, however, the following changes are known to have taken place to the house and its adjacent structures:

- 1908 Maple flooring installed in dining room and kitchen.²⁷
- 1909 Wood shed and cow stable built.²⁸
- 1910 Hardwood floor installed in one room, and house's siding repaired.²⁹

Lockkeeper's House - Lock #3 (Contributing): circa 1890

Built on a stone foundation, this two story gabled el is located on the south side of the navigation canal - approximately 500 feet west of Lock #3. It has rectangular porch additions on the side facing the river, as well as the side opposite. The house is clad with asbestos shingles that cover any original cladding or trim, and roofed with asphalt shingles. Windows and doors throughout are covered by plywood panels. The long axis of the building parallels the navigation channel. The porch addition on the channel side has a gable roof; that on the hill side has a flat roof that serves as a deck reached by an upper-story door.

The construction date of the house is unknown, however, the following changes are known to have taken place:

²⁷ Annual Report (1908), 1980.

²⁸ Annual Report (1909), 1983.

²⁹ Annual Report of the Chief of Engineers, U.S. Army, 1910 Part II (Washington, D.C.: Government Printing Office, 1910), 2141.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 10 Appleton Locks 1-3 Historic District
Outagamie County, WI

1903 New hardwood floor installed in kitchen.³⁰

1904 New porch built to rear of house. In addition, a bedroom and sitting room received new hardwood floors.³¹

Lock #1 Lockshack (Non-contributing):

Located immediately adjacent to the southeast corner of the lock, this is a small, modern, metal structure with a generally flat roof.

Lock #2 Lockshack (Contributing): circa 1917

Located adjacent to the northwest corner of the lock, this single story, front gabled shed is used as the locktender's station. Clad with drop siding and roofed with asphalt shingles, it has walls bounded by pilaster strips. The front door and horizontal sidewall windows, now covered with plywood panels, have plain surrounds. the overhanging roof has deep eaves, a plain cornice, and a metal smokestack at the rear of the ridge.

Lock #3 Lockshack (Contributing): circa 1917

Centered between the upper and lower gates, and set back about twelve feet from the north side of the lock, this single story, front gabled shed is used as a locktender's station. Clad with drop siding and roofed with asphalt shingles, it has walls bounded by pilaster strips. The centered front door and single side windows have plain surrounds. A metal smokestack protrudes near the ridge, at the rear of the

³⁰ Annual Report Upon the Improvement of Rivers and Harbors on the Western Shore of Lake Michigan, In Charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; Being Appendix LL of the Annual Report of the Chief of Engineers for 1903 (Washington, D.C.: Government Printing Office, 1903), 1874.

³¹ Annual Report Upon the Improvement of Rivers and Harbors on the Western Shore of Lake Michigan, In Charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; Being Appendix JJ of the Annual Report of the Chief of Engineers for 1904 (Washington, D.C.: Government Printing Office, 1904), 2856.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 11 Appleton Locks 1-3 Historic District
Outagamie County, WI

downstream roof slope. The overhanging roof has a plain cornice. It is sited on the lock's riverside embankment.

Lock #1 Storage Shed (Non-contributing):

This small shed is next to the southwest corner of the lockshack. It too is a modern, metal structure.

Lock #2 Storage Shed (Non-contributing):

This small shed is approximately fifty feet east of the lockshack. It is a modern metal structure.

Lock #3 Storage Shed (Non-contributing):

Located immediately adjacent to the southwest corner of the lock, this is a small, modern, metal structure with a generally flat roof.

Lock #1 Garage No. 1 (Non-contributing):

A modern structure sheathed in clapboard, this garage has a hipped roof and a fiberglass door. It is located about 100 feet northeast of the house.

Lock #1 Garage No. 2 (Non-contributing):

This modern building has a hipped roof and a wooden door. It is sheathed in clapboard, and is located immediately east of Garage No. 1.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: nationally X statewide locally

Applicable National Register Criteria X A B X C D

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance

(enter categories from instructions)

Transportation

Engineering

Period of Significance

1884-1941

Significant Dates

1884¹

1901²

circa 1895³

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

N/A

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

Statement of Significance:

Appleton Locks 1-3, the Upper Appleton Dam, as well as associated lockkeepers' houses and sheds are significant components in the Lower Fox River Waterway System, a system which, as discussed in Cultural Resource Management in Wisconsin, was initially envisioned as part of the larger Fox-Wisconsin Waterway.⁴ Originally constructed by

¹Annual Report Upon the Improvement of the Harbors of Milwaukee, Racine, Kenosha, and Waukegan, Lake Michigan and Improvement of the Fox and Wisconsin Rivers in Charge of D.C. Houston, Major of Engineers, Bvt. Colonel, U.S.A.; Being Appendix GG of the Annual Report of the Chief of Engineers for 1884 (Washington, D.C.: Government Printing Office, 1884), 1877.

²Annual Report upon the Improvement of Rivers and Harbors on Western shore of Lake Michigan, In the charge of J.G. Warren, Major, Corps of Engineers, U.S.A.; being Appendix LL of the Annual Report of the Chief of Engineers for 1901 (Washington, D.C.: Government Printing Office, 1901), 2962.

³A review of Corps of Engineers annual reports from 1873-1953 did not reveal a construction date for this lock. Occasional reports were missing, however, not the least of which were the reports from 1891 to 1900. Since no mention of this locks construction was noted, therefore, it is logical to assume that it was rebuilt during this period.

⁴Barbara Wyatt, ed., Cultural Resource Management in Wisconsin (Madison: State Historical Society, Historic Preservation Division, 1986), Transportation 2/2.

NPS Form 10-900a
(Rev. 8-86)
Wisconsin Word Processor Format
Approved 2/87

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8 Page 1 Appleton Locks 1-3 Historic District
Outagamie County, WI

private interests between 1850 and about 1860, and rebuilt by the US Army Corps of Engineers between 1872 and 1941, the Lower Fox River system operated between Lake Winnebago and Green Bay. It is historically significant as a complete and operable mid-nineteenth century example of a river/canal, slack water transportation system, the technology of which was so well suited that it works effectively today. It is the only such system extant in Wisconsin. The system is also significant for its role in the evolution of Wisconsin's nineteenth century political and constitutional history. Further, it is an interesting chapter in the transportation history of the state.

History:

The Upper Appleton dam was responsible for creating the pool that flooded the canal in which Locks 1-3 were located. It was this arrangement of dam and locks that enabled water craft to navigate an otherwise unnavigable stretch of the river that dropped about thirty feet in little more than half a mile.

The Appleton Locks 1-3 Historic District consists of historic locks, a dam, a canal, a two lockkeeper's houses, and two lockshacks, built between 1884-1941 that meet the registration requirements set forth in Waterway Resources of the Lower Fox River multiple property form. The resources possess integrity of location, design and materials and are properties significant to the operation of the waterway.

___ See continuation sheet

9. Major Bibliographical References

United States Army Corps of Engineers. Annual Reports. Washington, D.C.: Government Printing Office, 1872-1941.

Previous documentation of file (NPS): ___ See continuation sheet
___ preliminary determination of individual listing (36 CFR 67) has been requested
___ previously listed in the National Register
___ previously determined eligible by the National Register
___ designated a National Historic Landmark
___ recorded by Historic American Buildings Survey # _____
___ recorded by Historic American Engineering Record # _____

Primary location of additional data:
 State Historic Preservation Office
___ Other State agency
___ Federal agency
___ Local government
___ University
___ Other
Specify repository: _____

10. Geographical Data

Acreage of Property 15.1

UTM References:

A	<u>1/6</u>	<u>3/8/7/1/5/0</u>	<u>4/9/0/0/8/0/0</u>	B	<u>1/6</u>	<u>3/8/7/6/1/5</u>	<u>4/9/0/0/8/4/0</u>
	Zone	Easting	Northing		Zone	Easting	Northing
C	<u>1/6</u>	<u>3/8/8/1/6/5</u>	<u>4/9/0/0/8/9/0</u>	D	<u>1/6</u>	<u>3/8/8/6/3/0</u>	<u>4/9/0/0/9/5/0</u>

___ See Continuation Sheet

Verbal Boundary Description

See continuation sheet

See Continuation Sheet

Boundary Justification

This boundary encompasses an appropriate setting, and includes that area immediately adjacent to, and historically associated with the subject property.

___ See Continuation Sheet

11. Form Prepared By

name/title John N. Vogel

organization J.N. Vogel, Ph.D. Consulting Hist. date 01 October 1991

street & number 301 North 73rd Street telephone (414) 258-6598

city or town Milwaukee state Wisconsin zip code 53213

NPS Form 10-900a
(Rev. 8-86)
Wisconsin Word Processor Format
Approved 2/87

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 10 Page 1 Appleton Locks 1-3 Historic District
Outagamie County, WI

VERBAL BOUNDARY DESCRIPTION: *see note Section 10, page 4

[Note that Parcels are identified according to official legal description maps that are retained in, and on file at the Detroit District of the US Army Corps of Engineers]

A part of the Fractional Southeast Quarter of the Northwest Quarter and a part of the Fractional Southwest Quarter of the Northeast Quarter of Section 35, Township 21 North, Range 17 East in Outagamie County, Wisconsin; also parts of Lots 1 thru 17 inclusive in Block 1, Lots 1 thru 7 inclusive in Block 2, part of Lots 1 thru 10 in Block 3 and part of Block 5 of the Green Bay and Mississippi Canal Company Plat, City of Appleton, Wisconsin, according to the recorded Assessor's Map of said City, described as follows:

OVERALL DESCRIPTION: Beginning at an aluminum monument with the Corps of Engineers (C.O.E.) cap on the Westerly right-of-way line of Oneida Street, said monument bearing North 28 degrees 14 minutes 01 seconds East 923.64 feet from the center of said Section 35; thence North 72 degrees 05 minutes 57 seconds West 262.31 feet; thence North 63 degrees 52 minutes 48 seconds West 241.78 feet; thence North 81 degrees 33 minutes 37 seconds West 138.20 feet; thence South 21 degrees 11 minutes 17 seconds East 63.50 feet; thence South 55 degrees 12 minutes 42 seconds West 436.65 feet; thence South 71 degrees 03 minutes 50 seconds West 180.65 feet; thence North 26 degrees 59 minutes 44 seconds West 66.00 feet; thence South 59 degrees 31 minutes 47 seconds West 239.17 feet to Monument "A", an aluminum monument with the C.O.E. cap; thence continuing South 59 degrees 31 minutes 47 seconds West 117 feet to the South shore line of the United States Canal; thence Northwesterly across the United States Canal to a brass disc set in the concrete wall between the breakwater along the North shore of the canal and the right abutment of the Appleton Dam, said point bearing North 75 degrees 00 minutes 36 seconds West 575.94 feet from the aforesaid monument "A"; thence North 68 degrees 42 minutes 50 seconds East 789.89 feet; thence North 64 degrees 12 minutes 40 seconds East 272.85 feet; thence North 59 degrees 02 minutes 52 seconds East 272.00 feet; thence North 75 degrees 16 minutes 11 seconds East 63.70 feet; thence South 84 degrees 18 minutes 52 seconds East 162.64 feet; thence South 65 degrees 28 minutes 01 seconds East 226.22 feet; thence South 63 degrees 22 minutes 07 seconds East 47.22 feet to the extension of the line between Lots 14 and 15 in Block 3 of said Green Bay and Mississippi Canal Company Plat; thence North 02 degrees 20 minutes 59 seconds West along the extension of said Lots, 28.56 feet to the Southerly

X See continuation sheet

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 10 Page 2

Appleton Locks 1-3 Historic District
Outagamie County, WI

line of a part of Block 5 of the said Green Bay and Mississippi Canal Company Plat deeded by the United States of America to Wisconsin Michigan Power Company by Quitclaim Deed, Vol. 510, page 137; thence North 83 degrees 06 minutes 18 seconds East along the said South line 267.09 feet to the West line of Oneida Street, said point bearing North 06 degrees 33 minutes 25 seconds East 420.58 feet from the Point of Beginning; thence Southerly along the West line of Oneida Street and across the United States Canal to the Point of Beginning. The above described real estate containing 1.7 acres+ North of the United States Canal and 5.6 acres+ South of the United States Canal.

* * * * *

A part of the fractional Southeast Quarter of Section 35, Township 21 North, Range 17 East in Outagamie County, Wisconsin; also parts of Lots 1 thru 3 inclusive in Block 2 of the Green Bay and Mississippi Canal Company Plat, City of Appleton, Wisconsin, according to the recorded Assessor's Map of said City, described as follows:

PARCEL "A" DESCRIPTION: Commencing at an aluminum monument with Corps of Engineers cap on the Westerly right-of-way line of Oneida Street, said monument bearing North 28 degrees 14 minutes 01 seconds East 923.64 feet from the center of said Section 35; thence North 72 degrees 05 minutes 57 seconds West 262.31 feet; thence North 63 degrees 52 minutes 48 seconds West 241.78 feet; thence North 81 degrees 33 minutes 37 seconds West 138.20 feet; thence South 21 degrees 11 minutes 17 seconds East 63.50 feet; thence South 55 degrees 12 minutes 42 seconds West 383.07 feet to an aluminum monument with Corps of Engineers (C.O.E.) cap and the Point of Beginning; thence South 55 degrees 12 minutes 42 seconds West 53.58 feet; thence South 71 degrees 03 minutes 50 seconds West 180.65 feet; thence North 26 degrees 59 minutes 44 seconds West 66.00 feet; thence South 59 degrees 31 minutes 47 seconds West 239.17 feet to Monument "A", an aluminum monument with (C.O.E.) cap; thence continuing South 59 degrees 31 minutes 47 seconds West 117 feet more or less to the Southerly shore line of the United States Canal; thence Northeasterly along the said Southerly shore line to a point on the face of the Southwesterly wingwall of Appleton Lock 1, said point bearing North 35 degrees 21 minutes 20 seconds East 269.01 feet from previously stated Monument "A"; thence South 73 degrees 28 minutes 55 seconds East 22.00 feet to an aluminum monument with (C.O.E.) cap; thence North 52 degrees 55 minutes 06 seconds East 147.83 feet to an aluminum monument with (C.O.E.) cap; thence North 61 degrees 59 minutes 30 seconds East 76.10 feet to an aluminum monument (C.O.E.) cap; thence South 25 degrees 33 minutes 16 seconds East 206.55 feet to the Point of Beginning, containing 1.8 acres, more or less.

X See continuation sheet

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 10 Page 3

Appleton Locks 1-3 Historic District
Outagamie County, WI

PARCEL D: That part of the Northeast Quarter of Section 35, Township 21 North, Range 17 East of the fourth principal meridian, Outagamie County, Wisconsin, described as beginning at a 5/8" rebar with an allied cap stamped "USAED DETROIT BOUNDARY MARK" on the East line of said Section 35 that bears South 00 degrees 19 minutes 10 seconds East 1254.06 feet (measured), 1260.36 feet (recorded) from a 1" iron pipe set for the Northeast corner of said Section 35; thence South 84 degrees 49 minutes 50 seconds West 36.12 feet to a 1½" iron rod set in concrete inside a 4" pipe; thence North 88 degrees 39 minutes West 377.45 feet to an allied cap stamped as before; thence South 86 degrees 38 minutes 10 seconds West 102.23 feet (measured), South 86 degrees 13 minutes 10 seconds West 102.40 feet (recorded) to a United States stone monument; thence South 82 degrees 45 minutes 51 seconds West 472.59 feet (measured), South 82 degrees 51 minutes 10 seconds West 472.37 feet (recorded) to an allied cap stamped as before; thence south 78 degrees 45 minutes 10 seconds West 184.63 feet to an allied cap stamped as before; thence South 65 degrees 44 minutes 50 seconds West 257.04 feet to an allied cap stamped as before; thence South 68 degrees 46 minutes 50 seconds West 189 feet to an allied cap stamped as before; thence South 69 degrees 45 minutes 10 seconds West 312.78 feet to an allied cap stamped as before; thence South 79 degrees 55 minutes 40 seconds West 93.20 feet to an allied cap stamped as before; thence South 89 degrees 16 minutes 50 seconds West 108.95 feet to an allied cap stamped as before on the Easterly right-of-way line of Oneida (Lake) Street; thence South 10 degrees 07 minutes 58 seconds East 148.95 feet along said Easterly right-of-way and across the U.S. Canal; thence South 15 degrees 58 minutes 02 seconds West 13.07 feet along the Easterly right-of-way line of Oneida (Lake) Street, as it existed in 1899, to an allied cap stamped as before, set in the concrete road surface of South River Street; thence North 89 degrees 16 minutes 50 seconds East 101.42 feet to an allied cap stamped as before, set in the concrete road surface of South River Street; thence North 79 degrees 53 minutes East 120.39 feet to an allied cap stamped as before; thence North 71 degrees 35 minutes 40 seconds East 330.03 feet to an allied cap stamped as before; thence North 68 degrees 46 minutes 50 seconds East 189 feet to an allied cap stamped as before; thence North 74 degrees 59 minutes East 314.38 feet to an allied cap stamped as before; thence North 81 degrees 42 minutes 10 seconds East 540.84 feet to an allied cap stamped as before; thence North 89 degrees 03 minutes East 480.50 feet to an allied cap stamped as before; thence North 83 degrees 08 minutes 50 seconds East 20.05 feet to an allied cap stamped as before on the East line of said Section 35; thence North 00 degrees 19 minutes 10 seconds West 190.09 feet, along the said East line, and across Lock 3 of the U.S. Canal to the Point of Beginning and containing 9.10 acres, more or less. Bearings are based on

X See continuation sheet

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 10 Page 4 Appleton Locks 1-3 Historic District
Outagamie County, WI

reestablishment of 1899 survey information recorded as true by Polaris Observation.

PARCEL C: That part of the Southwest fractional Quarter of Section 36, Township 21 North, Range 17 East of the Fourth Principal Meridian, Outagamie County, Wisconsin, described as beginning at a 5/8" rebar with an allied cap stamped "USAED DETROIT BOUNDARY MARK" on the West line of said Section that bears South 00 degrees 19 minutes 10 seconds East 1254.05 feet (measured), 1260.36 feet (recorded) from a 1" pipe set for the Northwest corner of said Section 36; thence South 00 degrees 19 minutes 10 seconds East 190.09 feet along said West line and across Lock 3 of the U.S. Canal to an allied cap stamped as before; thence North 83 degrees 08 minutes 50 seconds East 285 feet to an allied cap stamped as before and set at the location of the right shoreline of the U.S. Canal as it existed in 1899; thence North 06 degrees 41 minutes 24 seconds West, 166.32 feet across the U.S. Canal, to the right shoreline of the Fox River as it existed in 1899; thence Westerly, upstream, along the meanders of the said right shoreline of the Fox River a total distance of 269 feet, more or less, to a point on the West line of said Section; thence South 00 degrees 19 minutes 10 seconds East 11.27 feet along the said West line to the Point of Beginning and containing 1.16 acres, more or less. Bearings are based on reestablishment of 1899 survey information recorded as true by Polaris Observation.

*The property boundary descriptions given have not been audited or verified. They are not, at any time, to be used for any legal boundary descriptions. They are used here only for the purpose of describing the approximate property location.

NPS Form 10-900a
(Rev. 8-86)
Wisconsin Word Processor Format
Approved 2/87

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number Photographs Page 1

Appleton Locks 1-3 Historic District
Outagamie County, WI

APPLETON LOCKS 1-3 HISTORIC DISTRICT (Dam)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to West Northwest
Photo #1 of 8

APPLETON LOCKS 1-3 HISTORIC DISTRICT (Lock 1)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to Northeast
Photo #2 of 8

APPLETON LOCKS 1-3 HISTORIC DISTRICT (Lockkeeper's house)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to Southwest
Photo #3 of 8

APPLETON LOCKS 1-3 HISTORIC DISTRICT (Lock 2)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to East
Photo #4 of 8

APPLETON LOCKS 1-3 HISTORIC DISTRICT (Lock 2 lockshack)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to East
Photo #5 of 8

X See continuation sheet

NPS Form 10-900a
(Rev. 8-86)
Wisconsin Word Processor Format
Approved 2/87

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number Photographs Page 2 Appleton Locks 1-3 Historic District
Outagamie County, WI

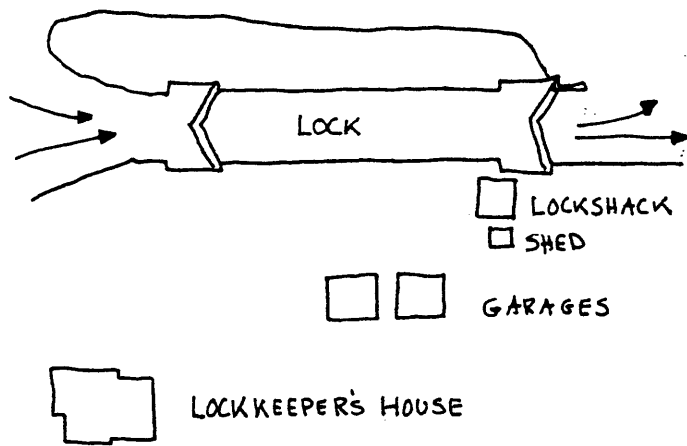
APPLETON LOCKS 1-3 HISTORIC DISTRICT (Lock 3 lockkeeper's house)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to West
Photo #6 of 8

APPLETON LOCKS 1-3 HISTORIC DISTRICT (Lock 3 lockshack)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to North
Photo #7 of 8

APPLETON LOCKS 1-3 HISTORIC DISTRICT (Lock 3)
Fox River at Oneida Street
Appleton, Outagamie County
Photo by Bill O'Brien
October 1988
View to West Northwest
Photo #8 of 8

___ See continuation sheet

SKETCH MAP



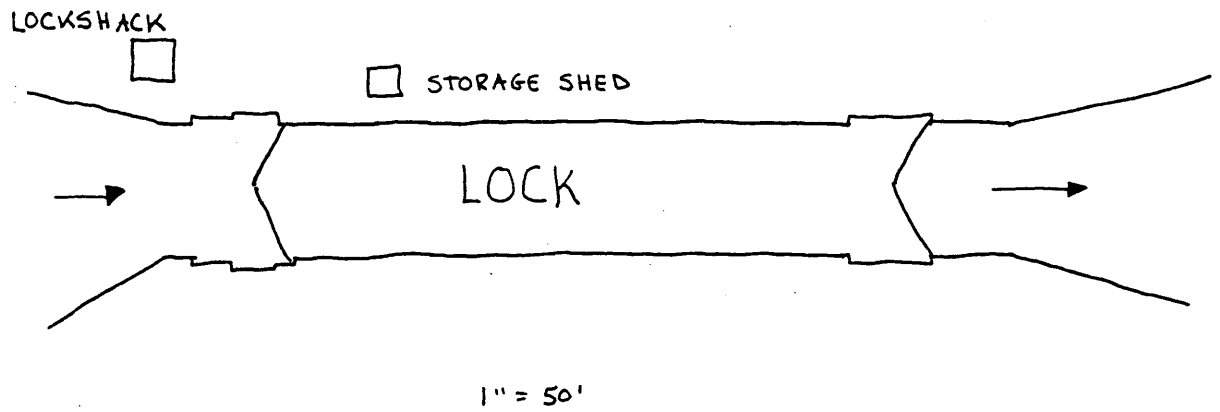
1" = 100"

APPLETON LOCK #1

APPLETON LOCKS 1-3 HISTORIC DISTRICT

Waterway Resources of the Lower Fox River

SKETCH MAP

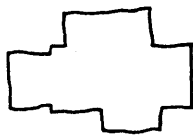
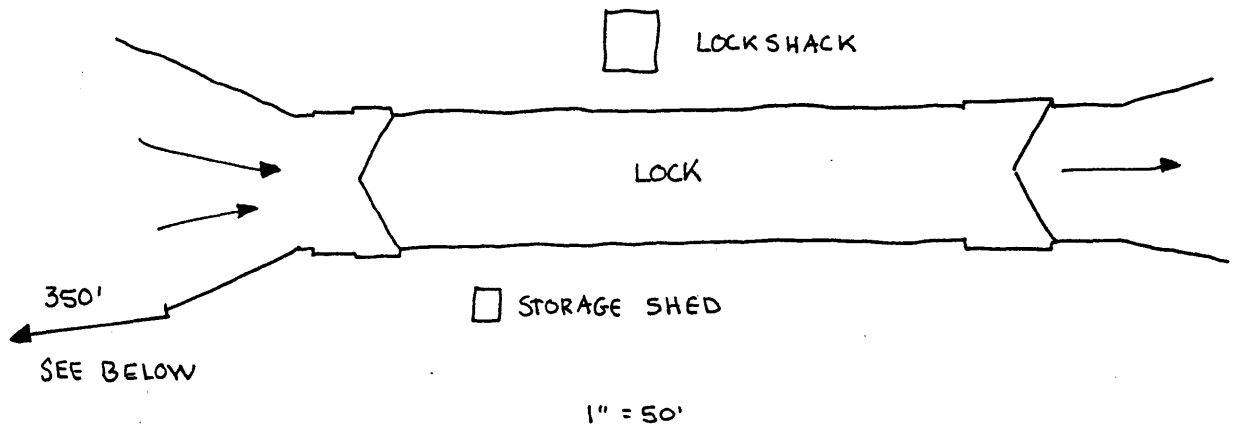


APPLETON LOCK #2

APPLETON LOCKS 1-3 HISTORIC DISTRICT

Waterway Resources of the Lower Fox River

SKETCH MAP

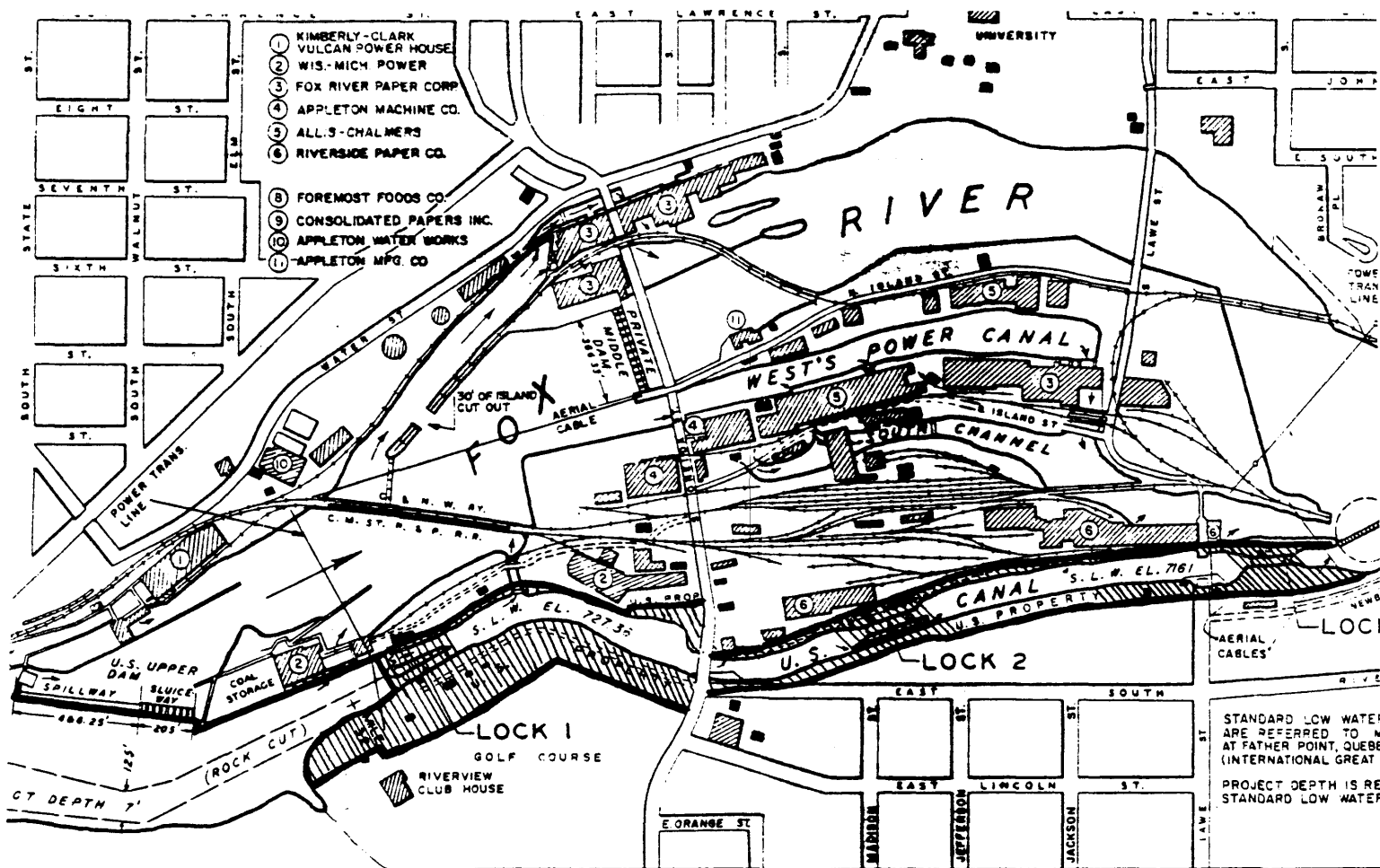


LOCKKEEPER'S HOUSE

APPLETON LOCK #3

APPLETON LOCKS 1-3 HISTORIC DISTRICT

Waterway Resources of the Lower Fox River

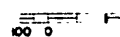



 U.S. Gov't Property/
 Historic District



APPLETON LOCKS AND DAMS
FOX RIVER
WISCONSIN

IN 1 SHEET



SCALE OF FEET



SHEET NO. 1

CORPS OF ENGINEERS

CHICAGO, ILLINOIS

30 JUNE 1975