APPENDIX A: MAPS AND HISTORIC DOCUMENTS (PLATES)

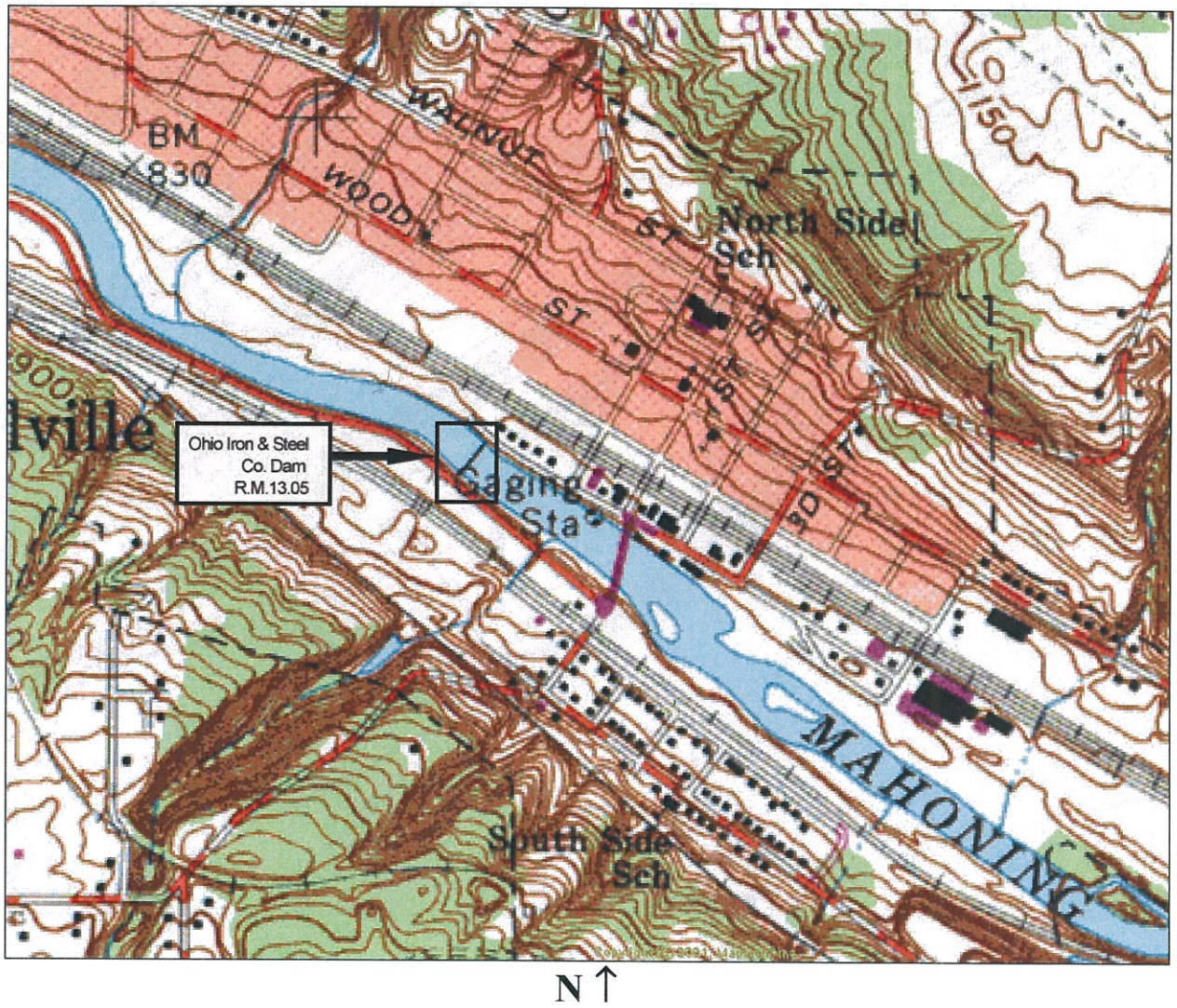


Plate 1 – Current USGS Location Map of Ohio Iron & Steel Co. Dam, Lowellville (Map Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

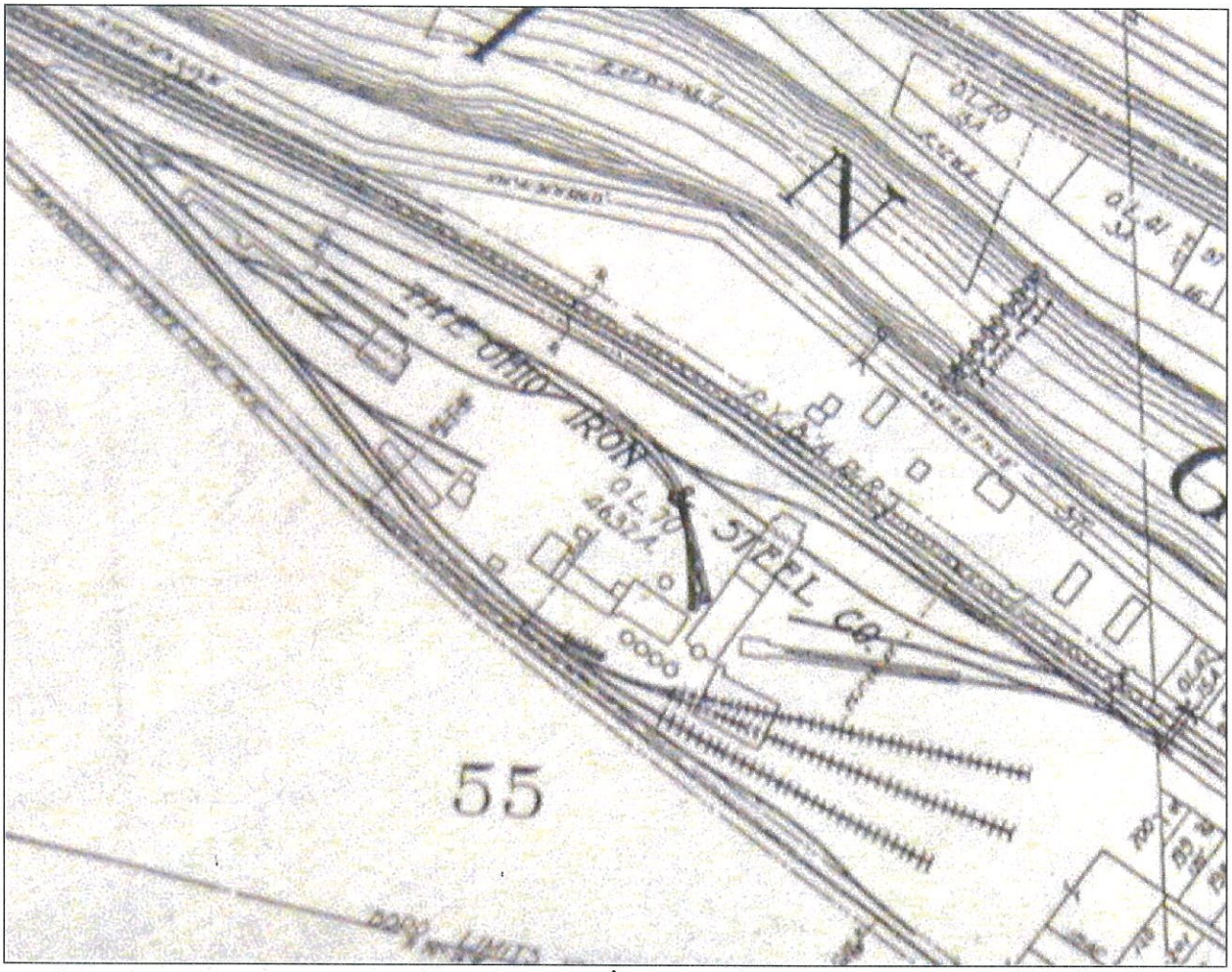


Plate 2 – 1915 Lowellville Map. Shows the Ohio Iron & Steel Co. Plant and Dam. (Gutknecht Atlas of Mahoning County, Map 46).

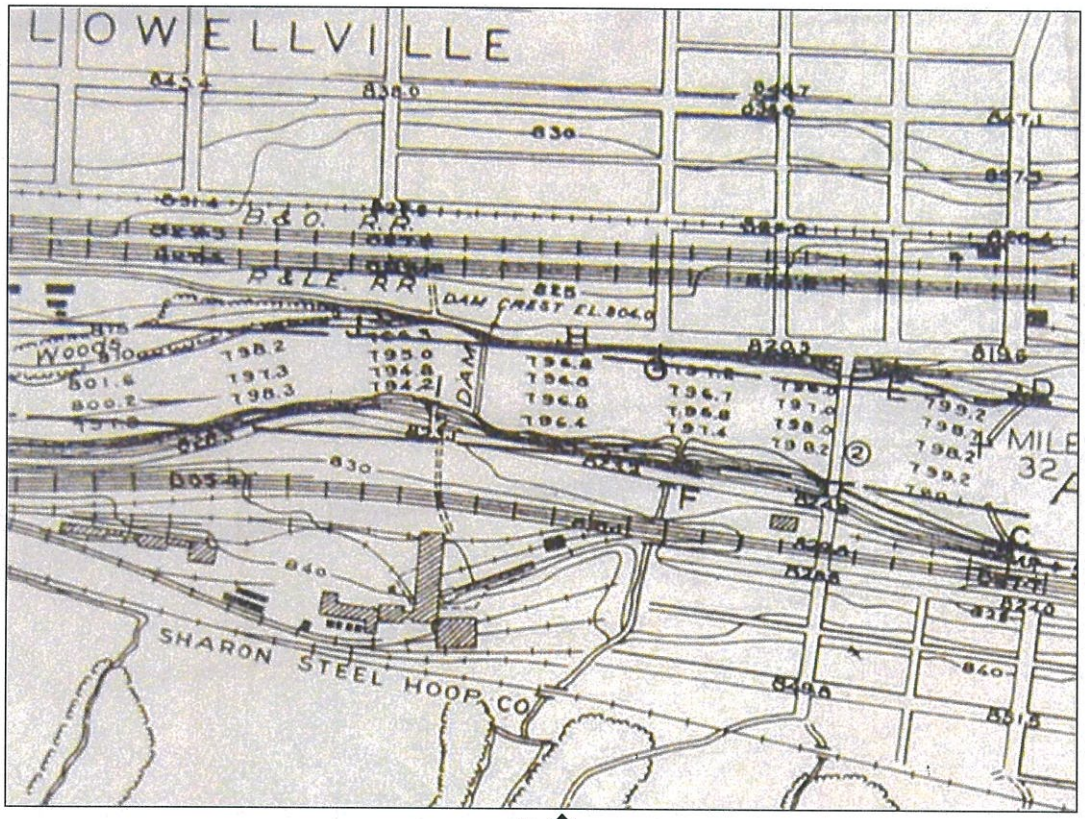


Plate 3 – 1937 U.S. Army Corps of Engineers Map of the Mahoning River at Lowellville. Shows the Sharon Steel Hoop Co Plant and associated dam.

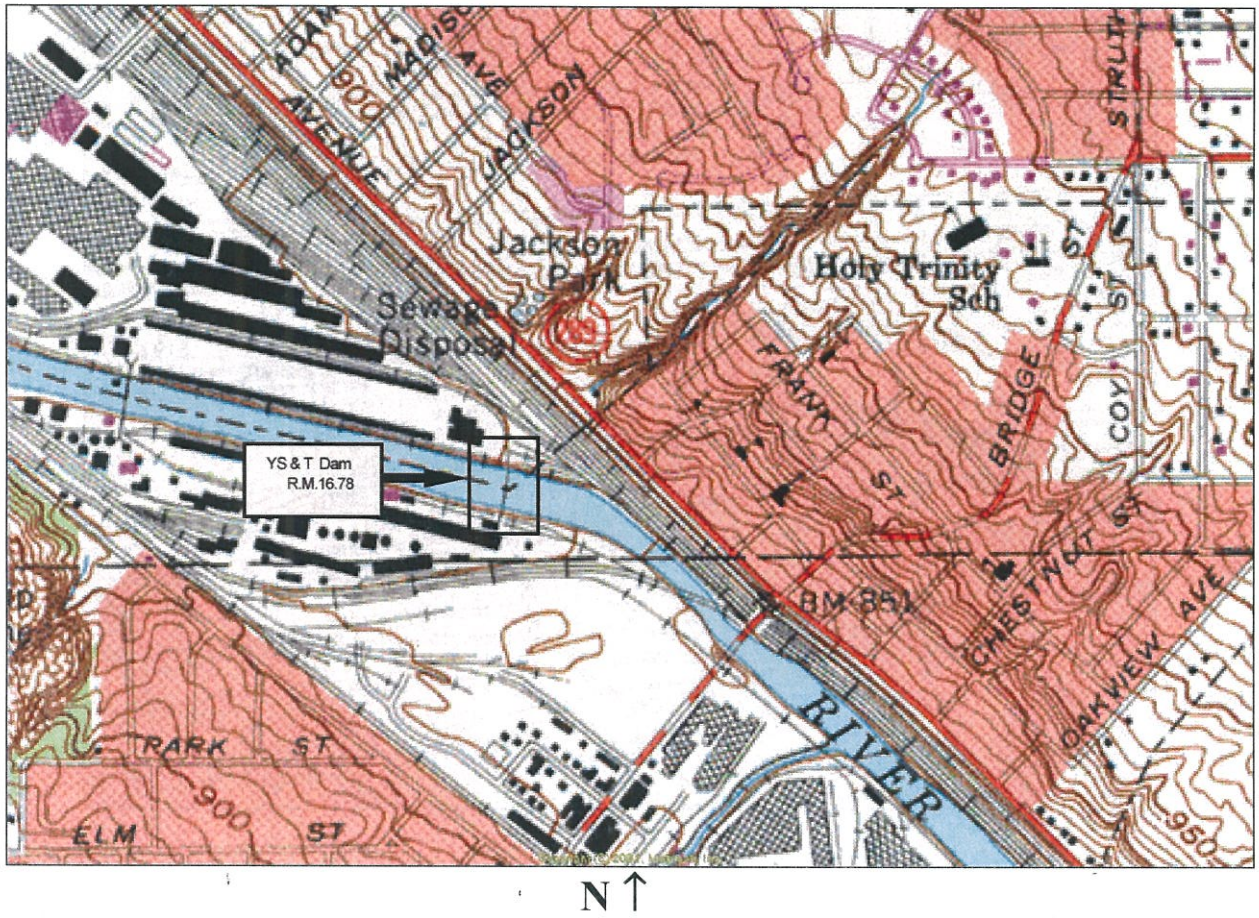


Plate 4 – Current USGS Location Map of YS & T Dam, Struthers (Map Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

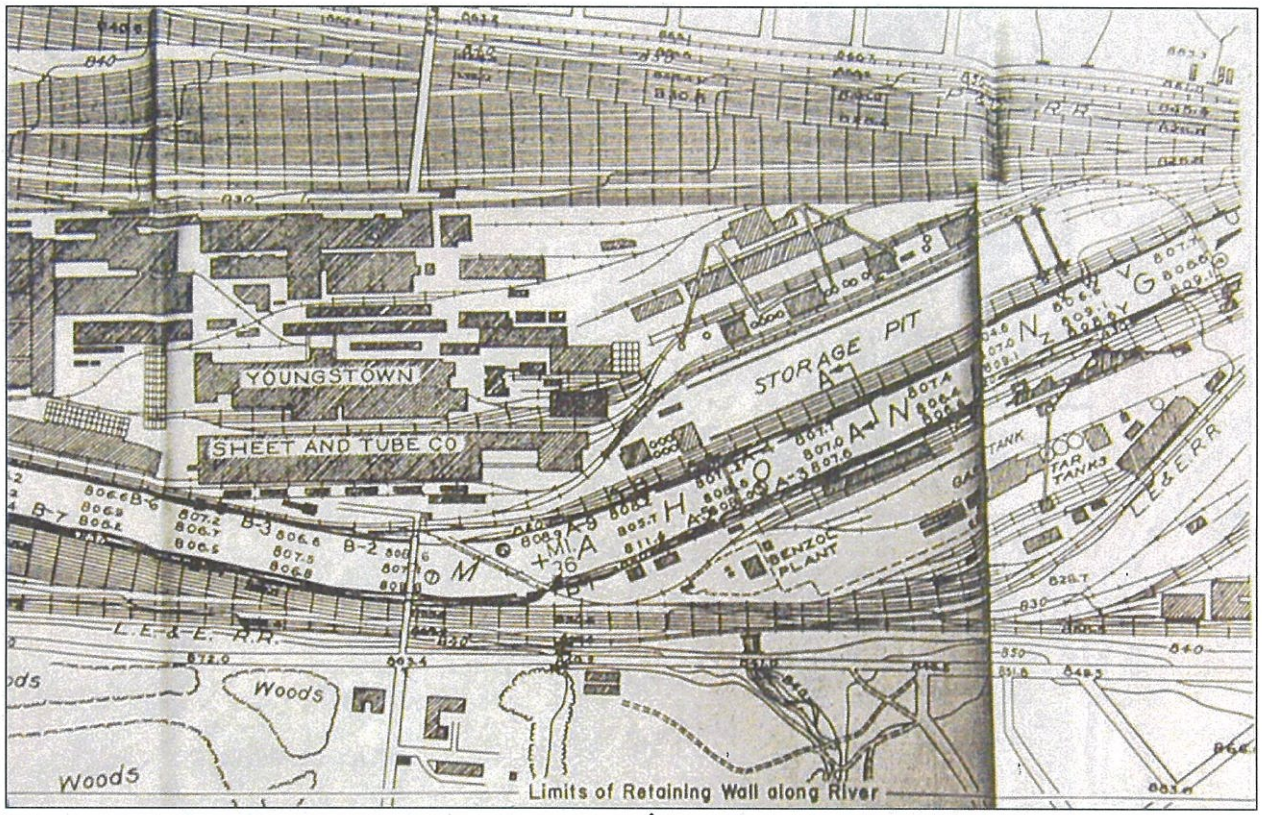


Plate 5 – U.S. Army Corps of Engineers 1937 Map of Mahoning River at Youngstown. Shows YS&T Plant, the YS&T Coke Plant, and the YS&T Coke Trestle/Dam. Dam and trestle is at far right of plate.

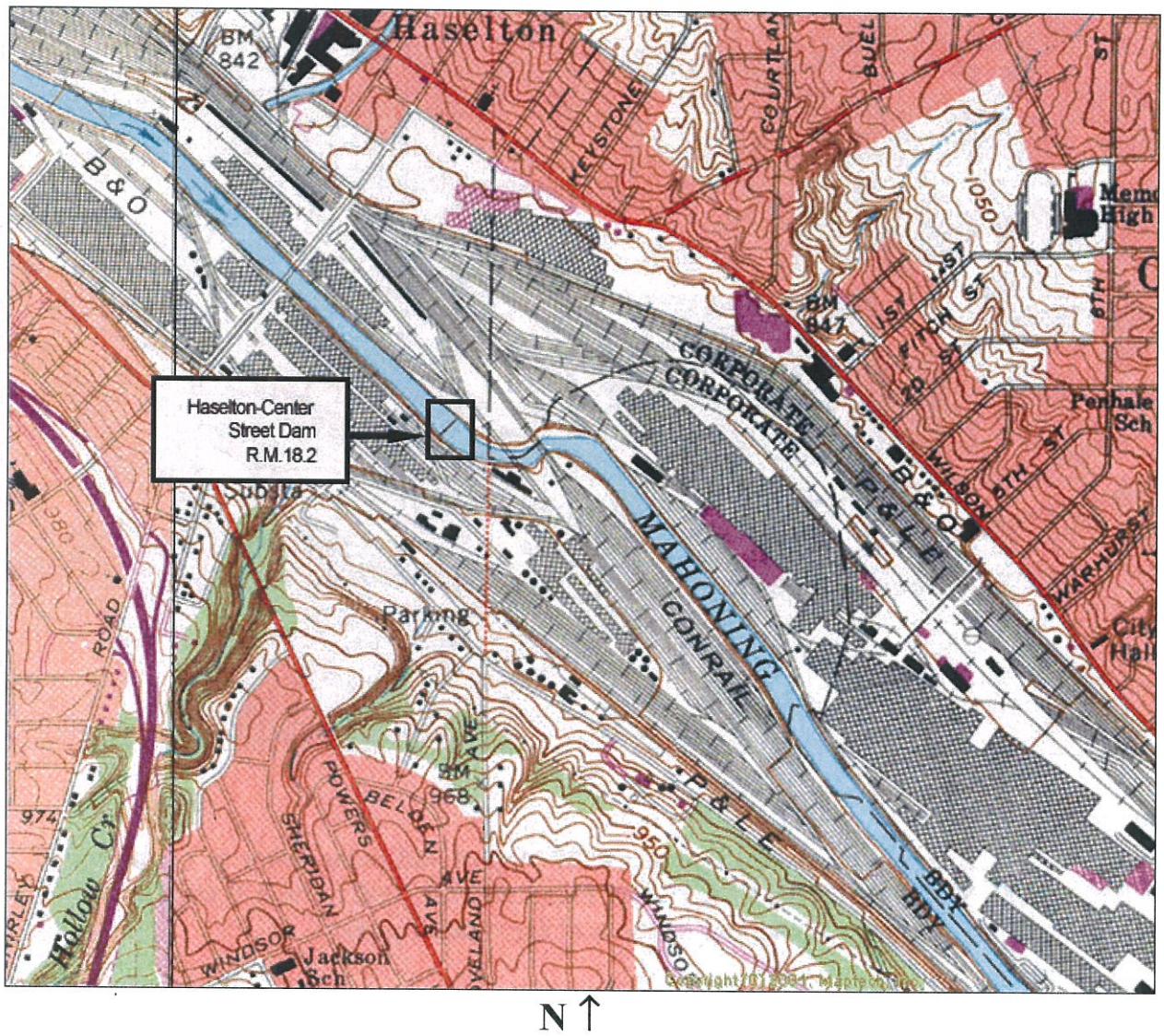


Plate 6 – Current USGS Location Map of Republic Steel Campbell Works Dam (Map Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

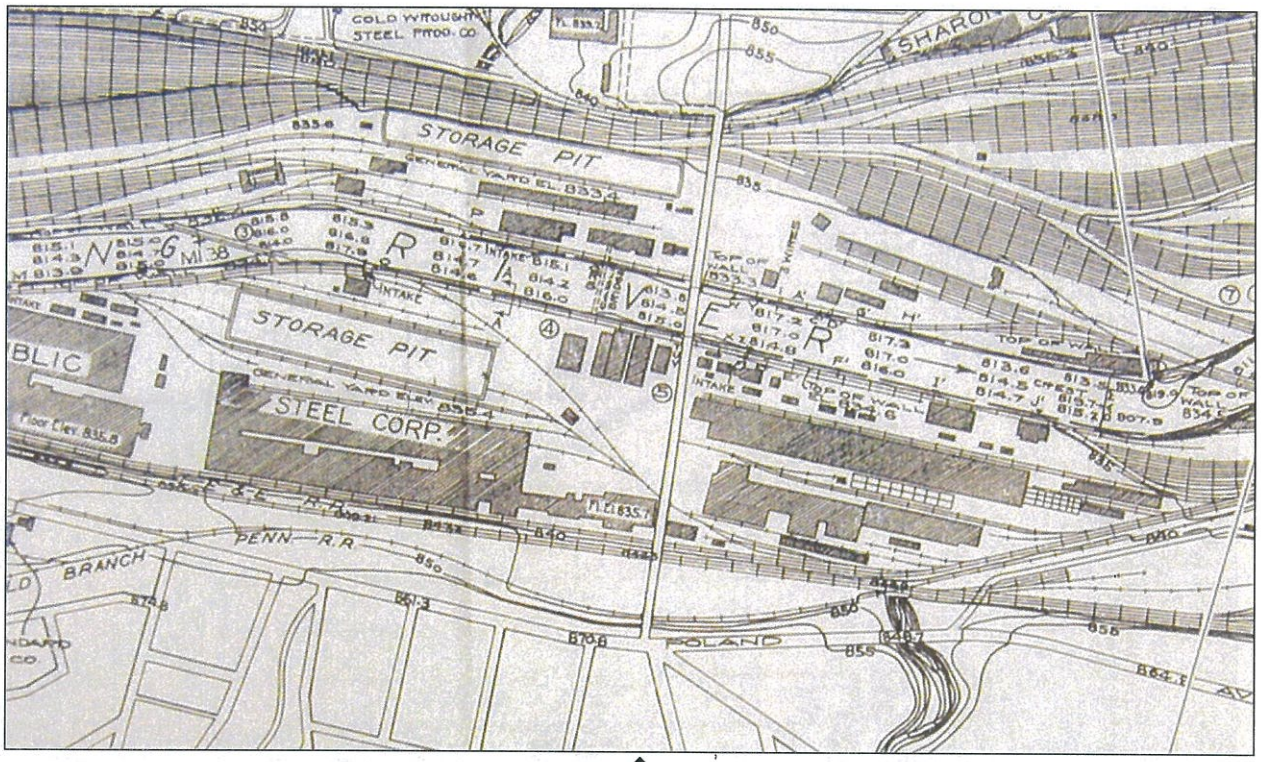


Plate 7 – U.S. Army Corps of Engineers 1937 Map of Mahoning River at Youngstown/Hazelton. Shows Republic Steel Campbell Works and Campbell Works Dam. Dam is at right on plate.

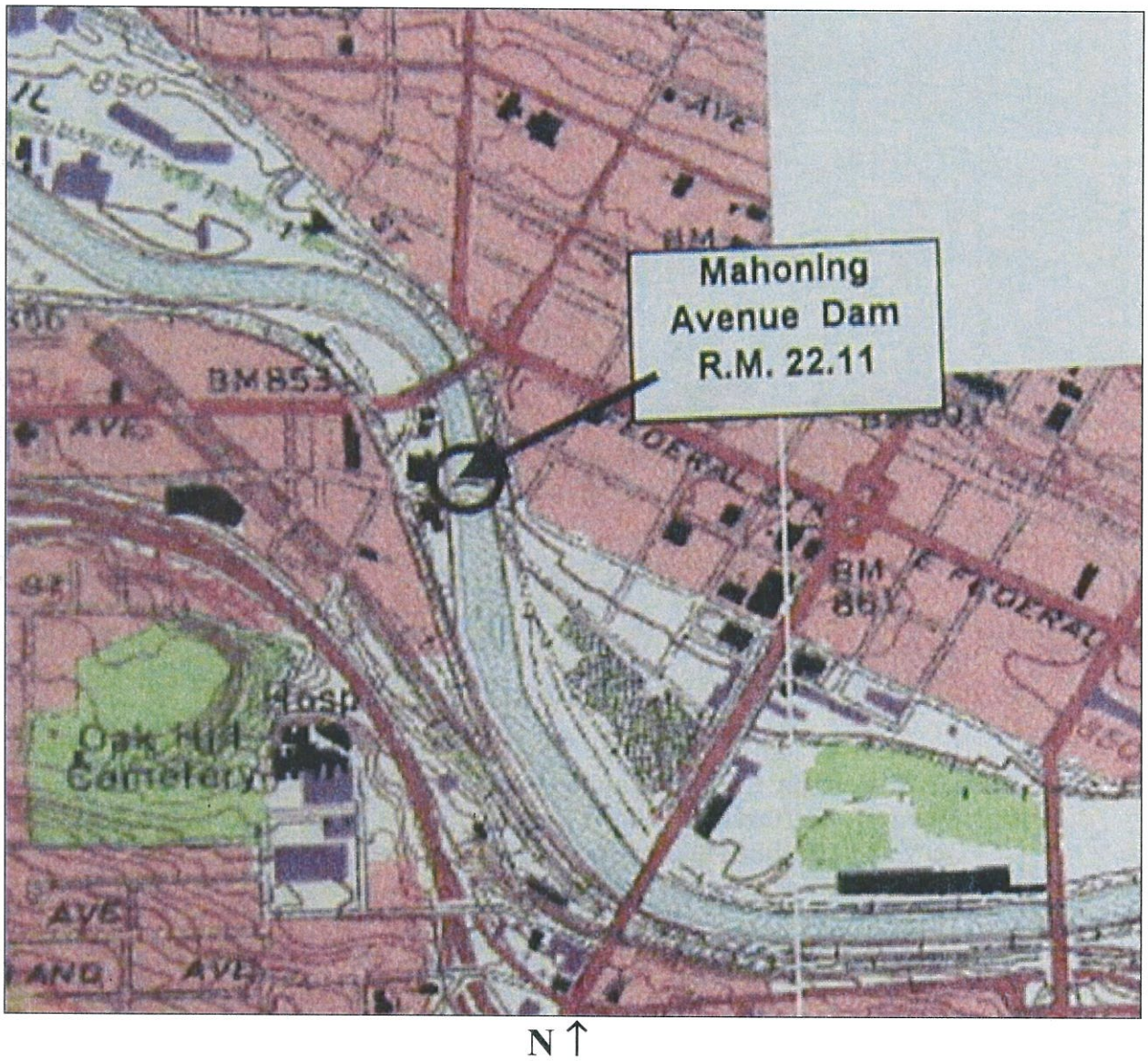


Plate 8 – Current USGS Location Map of the Baldwin City Mills Dam, Youngstown (Map Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

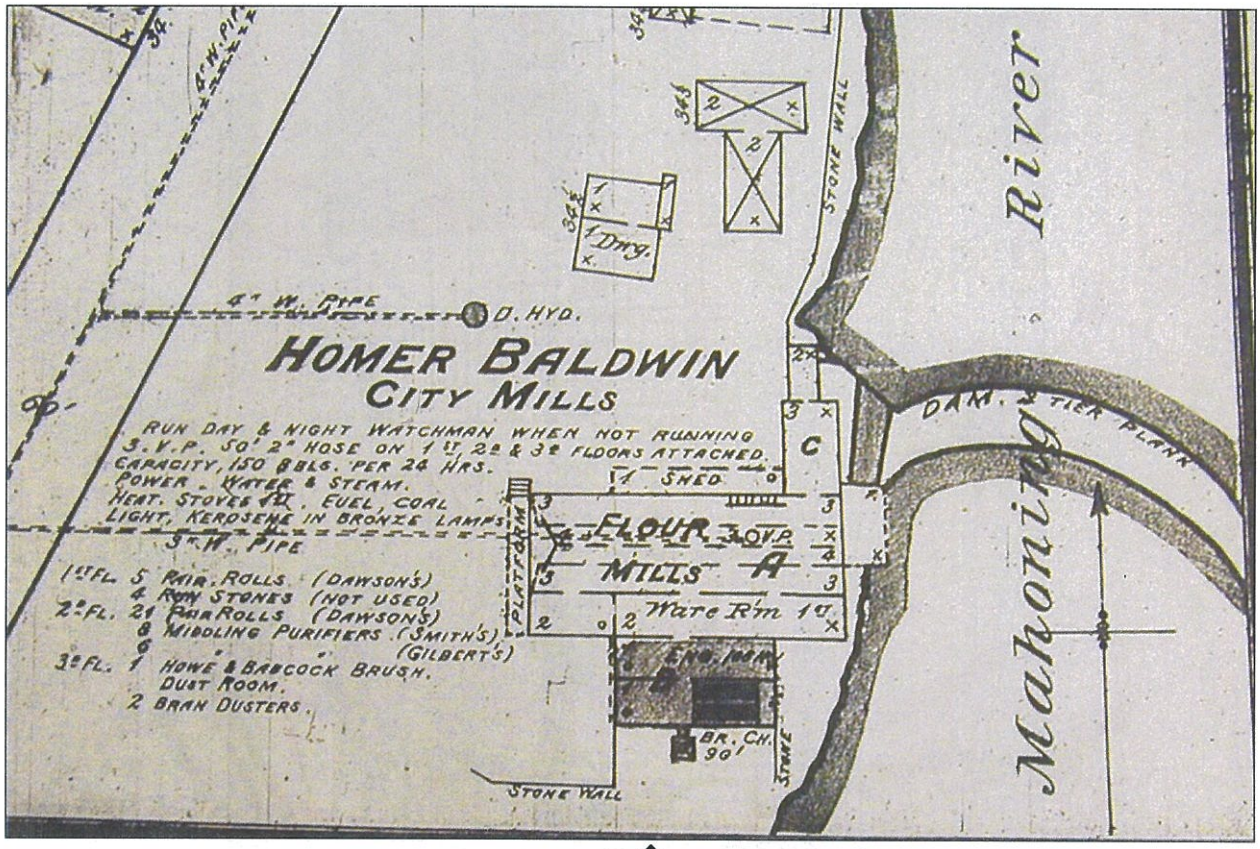


Plate 9 – 1884 Sanborn Map of Baldwin's City Mills. Portion of dam labeled "Three Tier Plank Dam" visible at right. (Sanborn Youngstown 1884, Map 1)

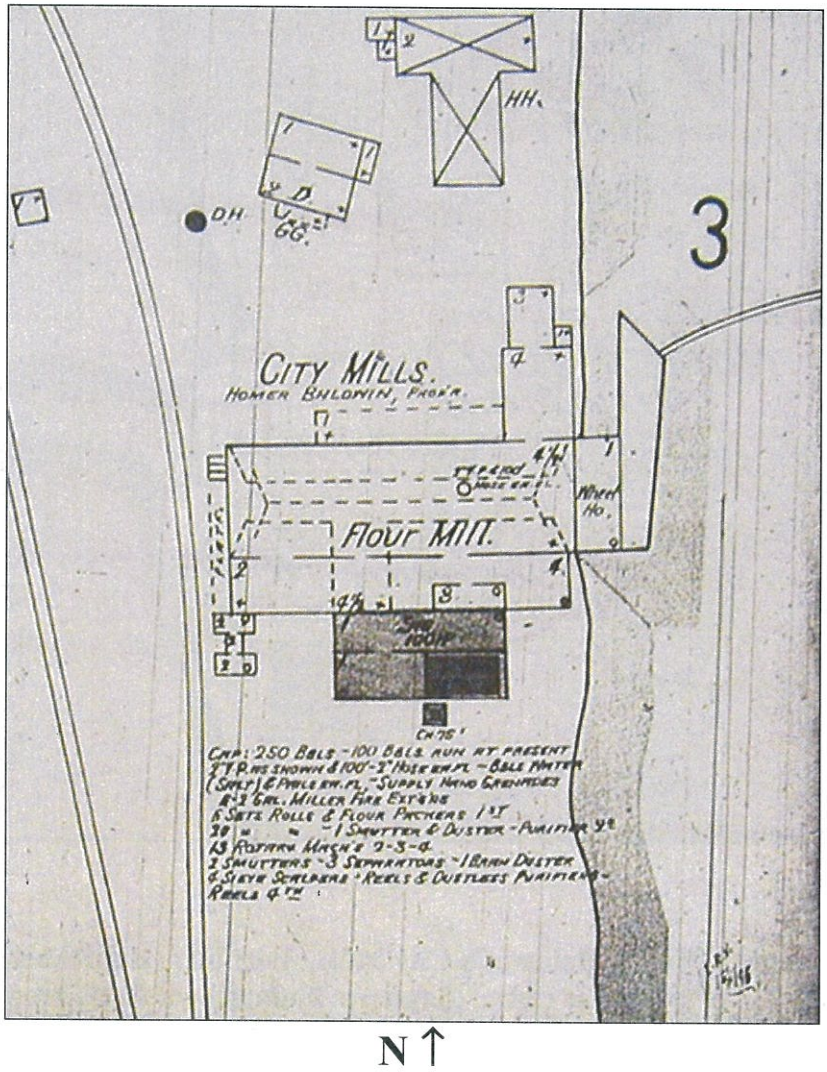


Plate 10 – 1896 Sanborn Map of Baldwin's City Mills. Small section of arched dam is shown at right. (Sanborn Youngstown 1896, Map 23)

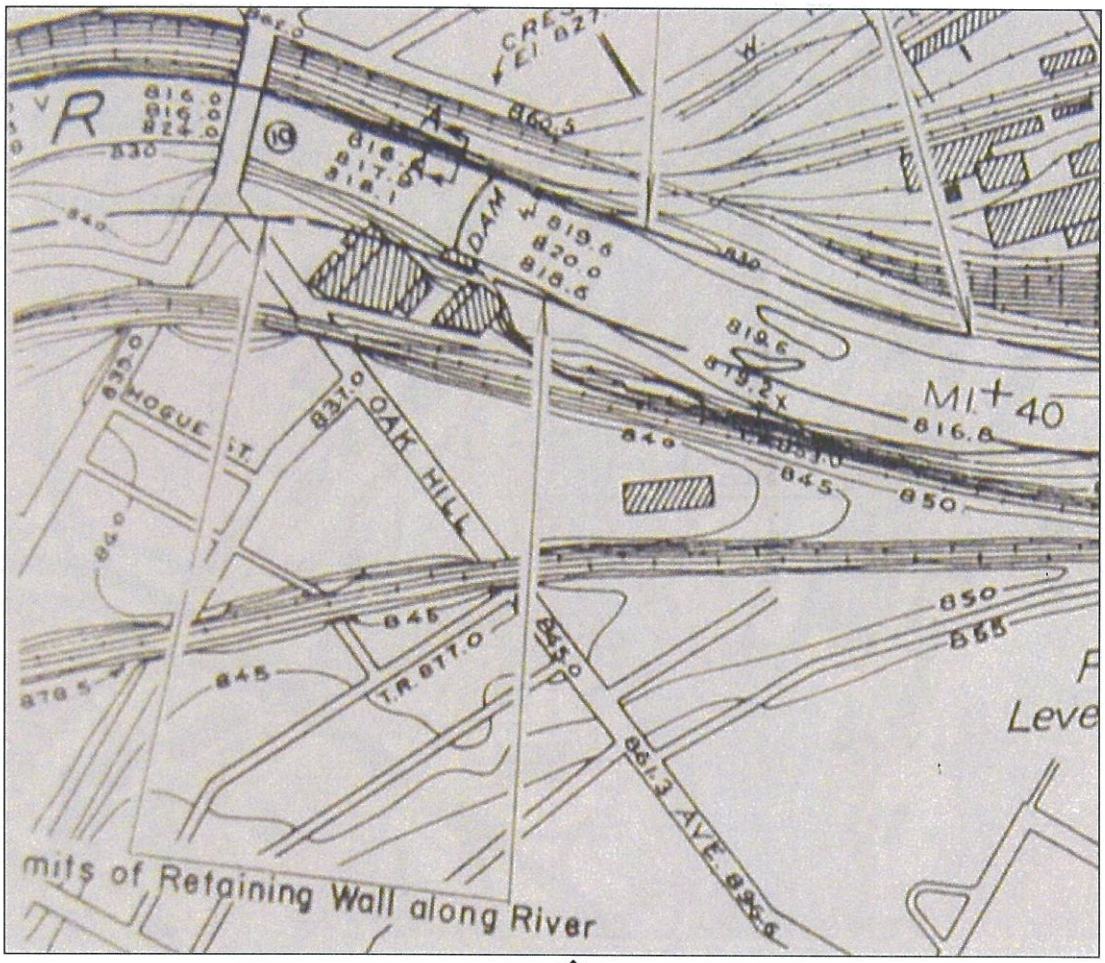


Plate 11 – U.S. Army Corps of Engineers 1937 Map of Mahoning River at Youngstown. Shows Baldwin City Mills Dam and Mill Buildings.

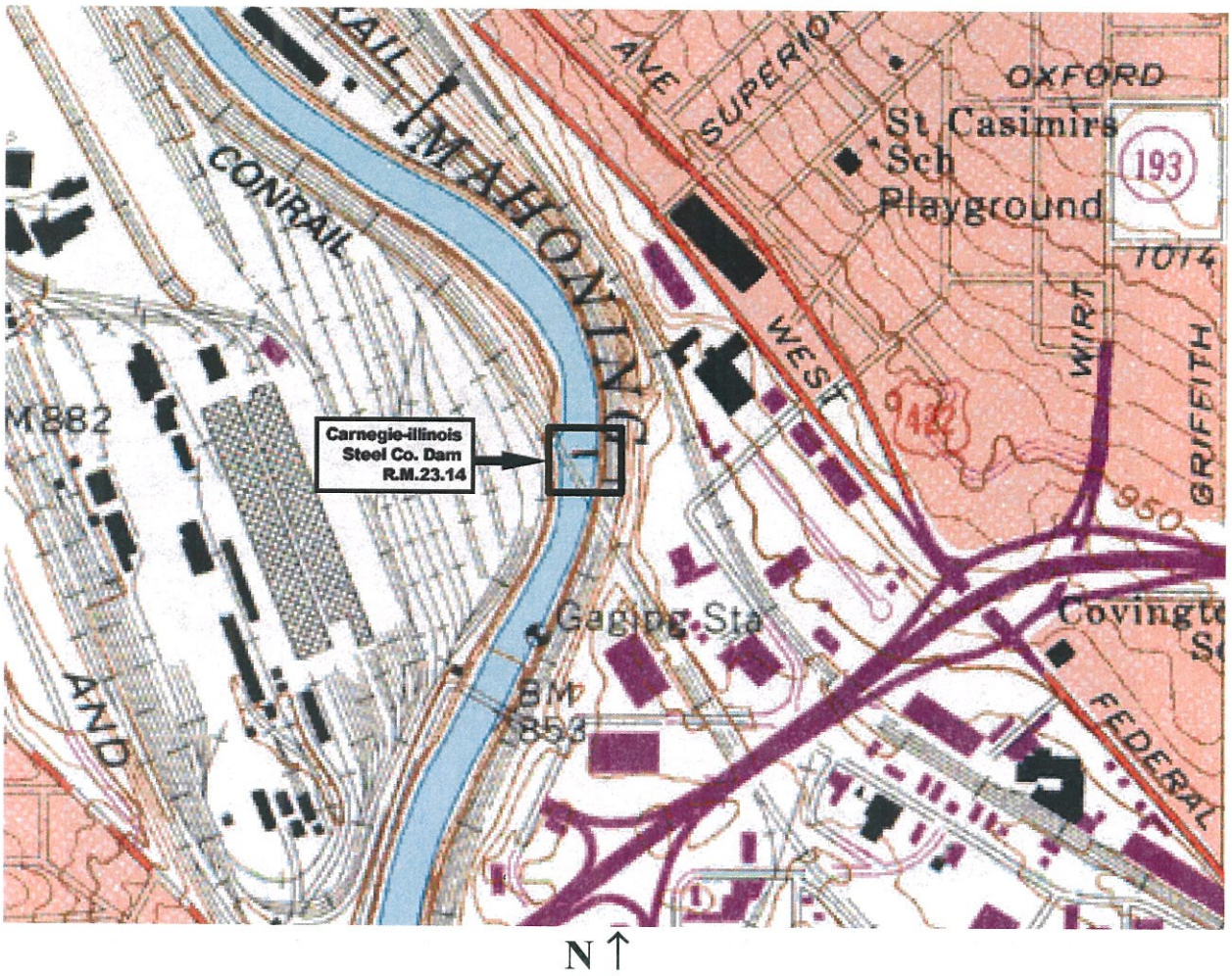


Plate 12 – Current USGS Location Map of Carnegie-Illinois Steel Co. Dam, Youngstown (Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

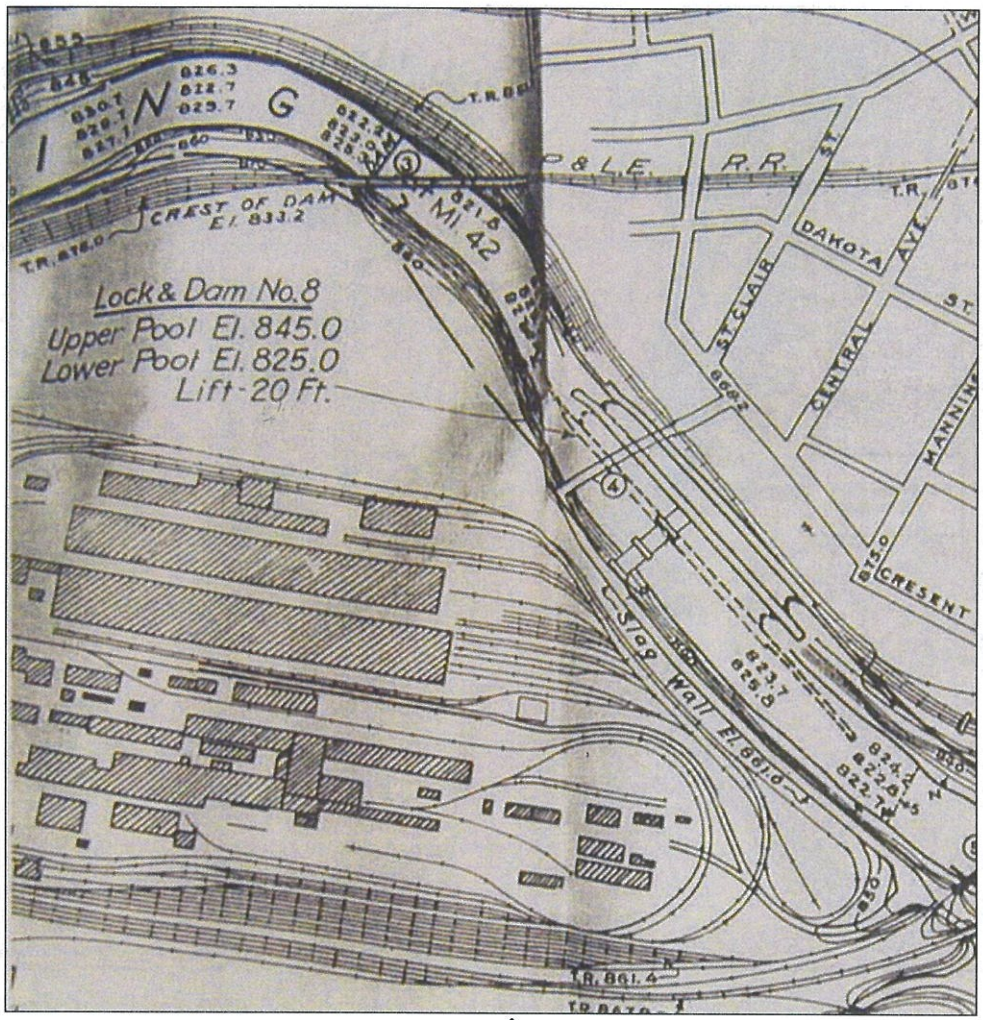


Plate 13 – U.S. Army Corps of Engineers 1937 Map of Mahoning River at Youngstown. Shows Carnegie-Illinois Works and Dam. Dam is at upper left.

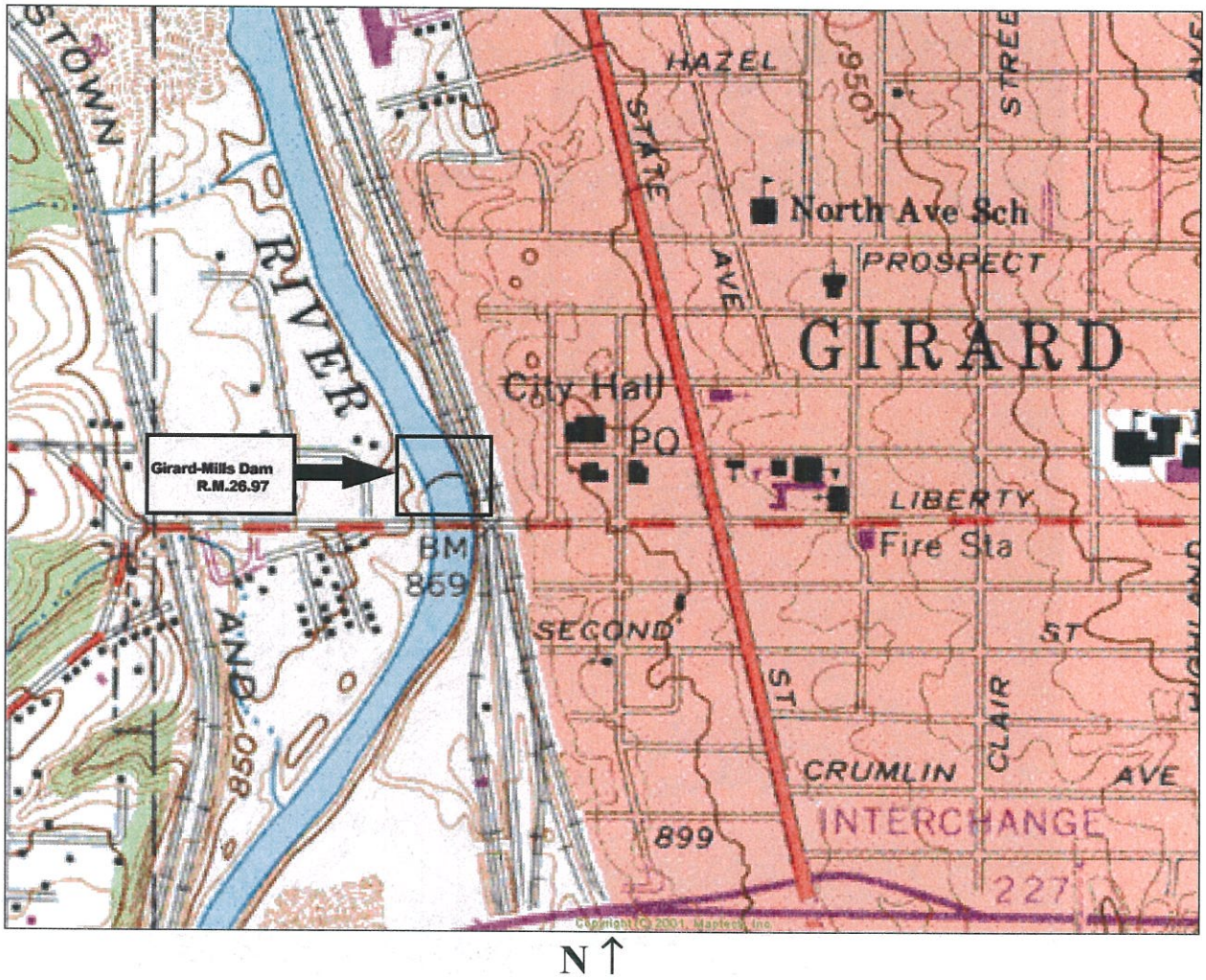


Plate 14 – Current USGS Location Map of Girard Mills Dam (Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

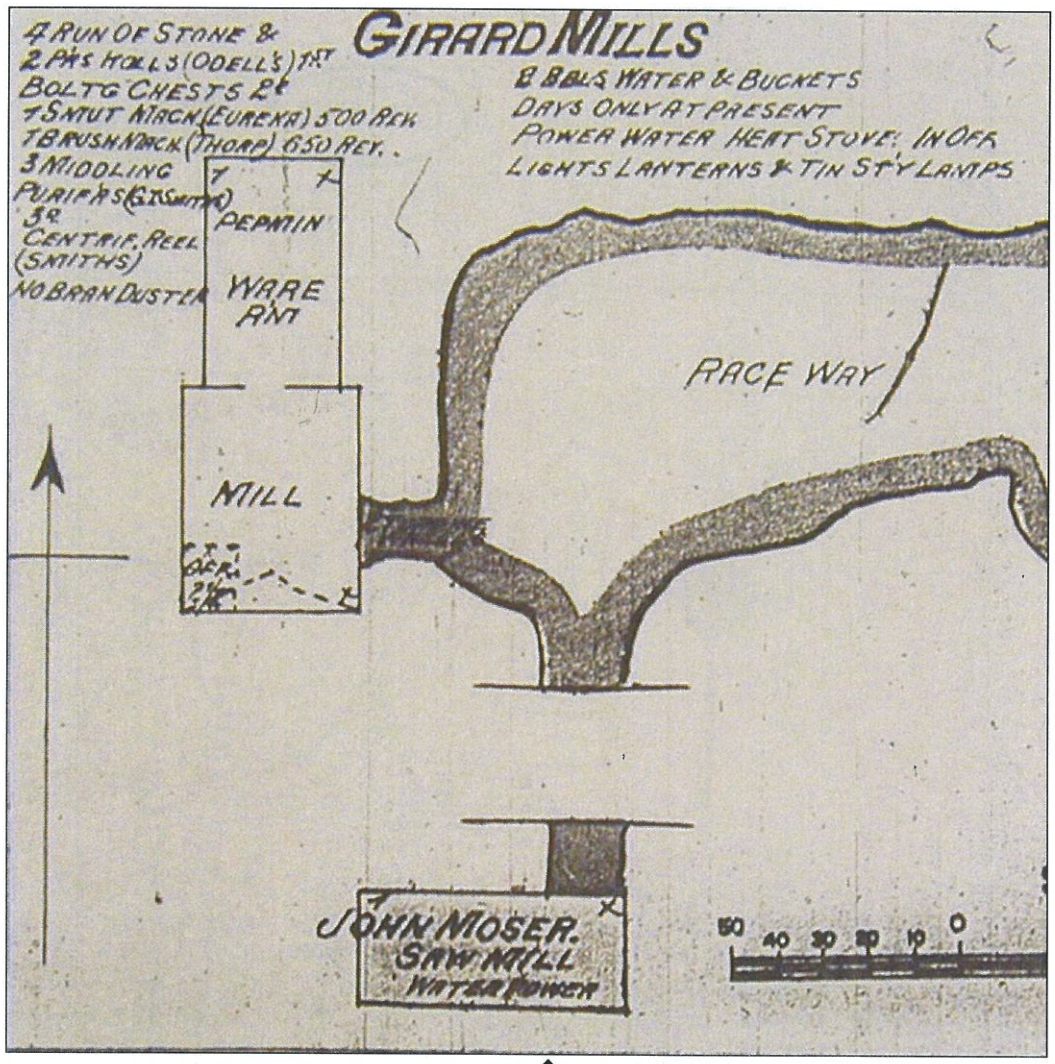


Plate 15 – 1884 Sanborn Map of Girard Mills (Sanborn Youngstown 1884, Sheet 12 – Girard)

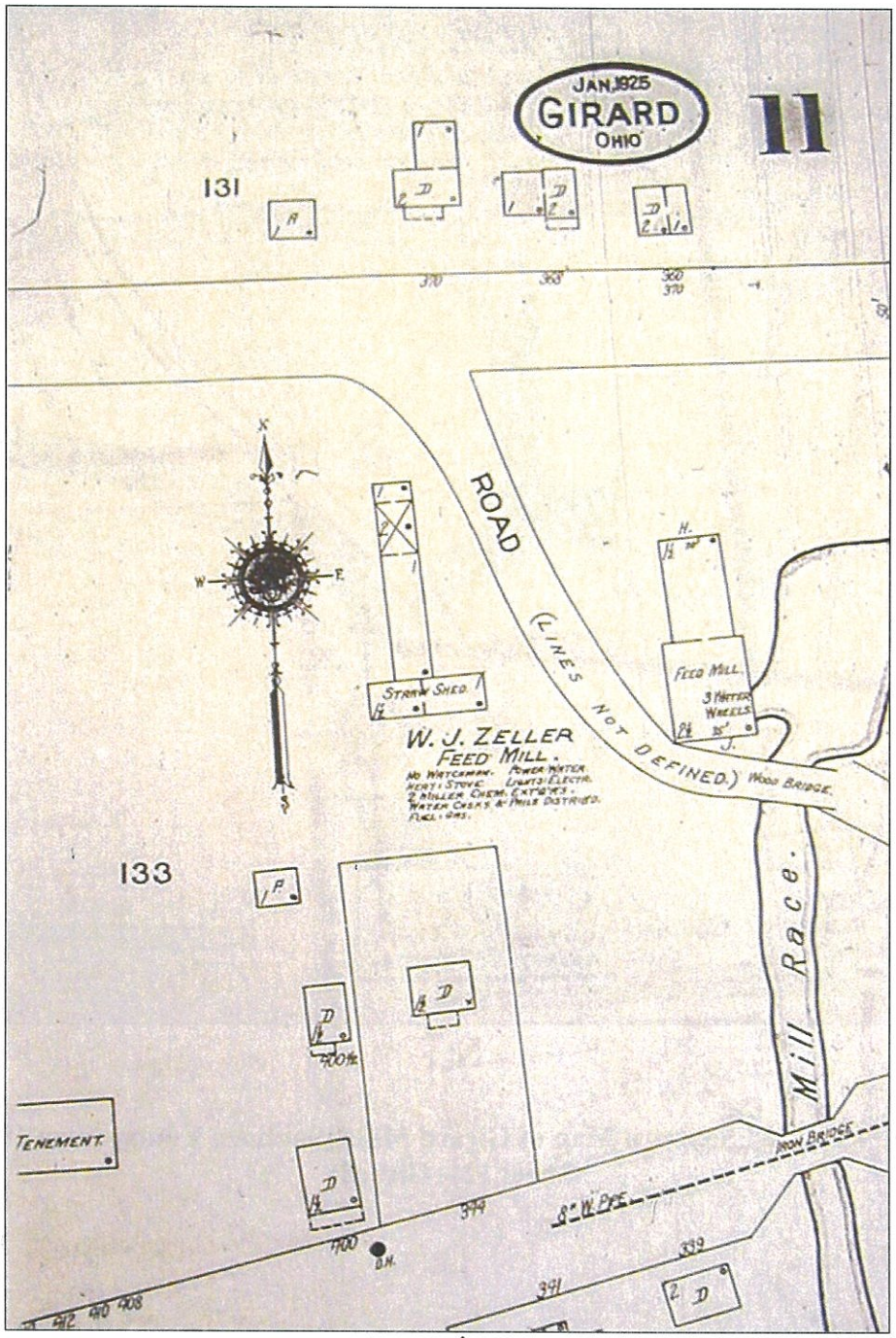


Plate 16 – Sanborn Insurance Map, 1925, Showing Mill Buildings (Sanborn Girard 1925, Sheet 11).

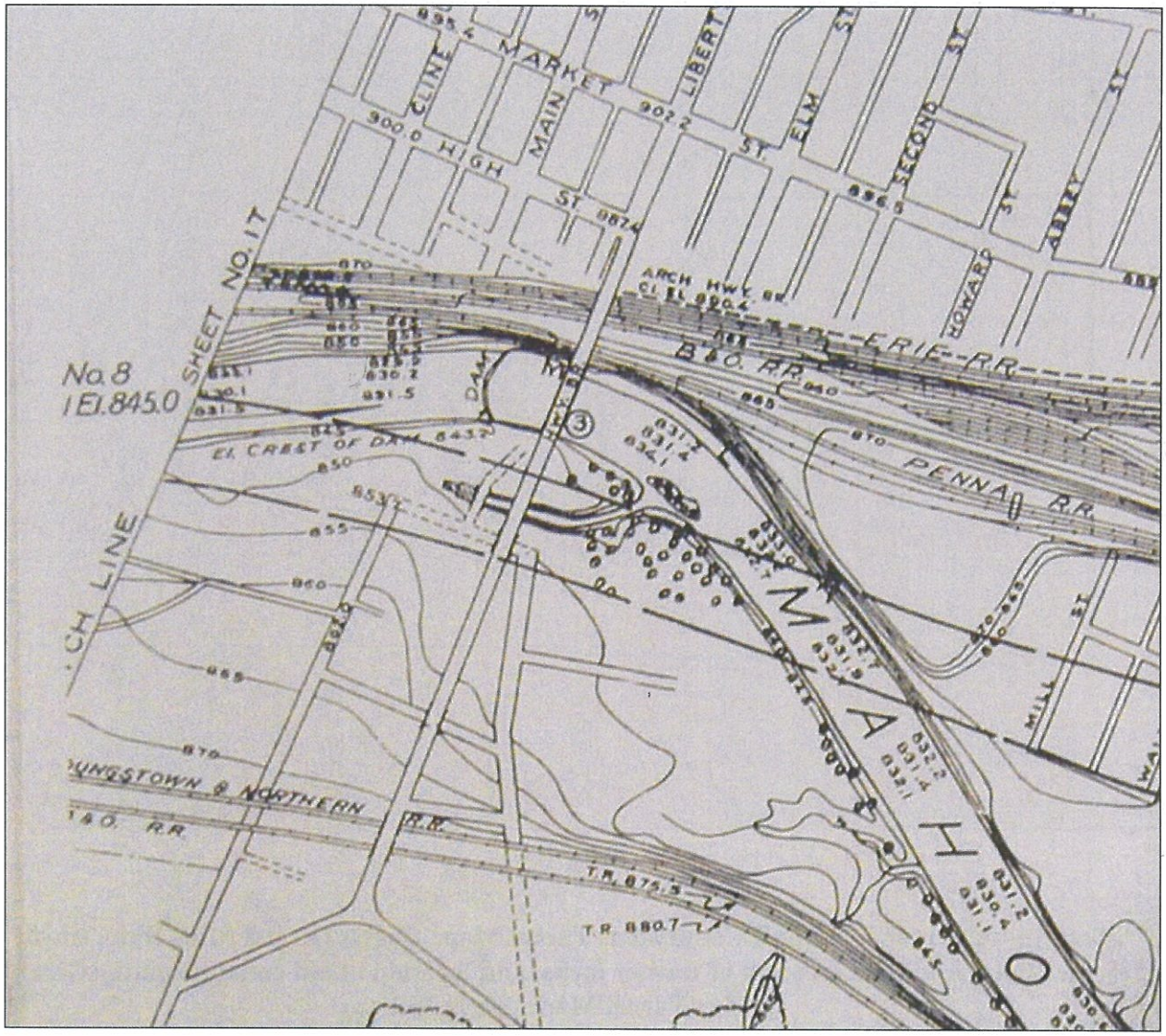


Plate 17 – U.S. Army Corps of Engineers 1937 Map of Mahoning River at Girard. Dam and Main Mill Building is visible. Dam is at upper left of plate.

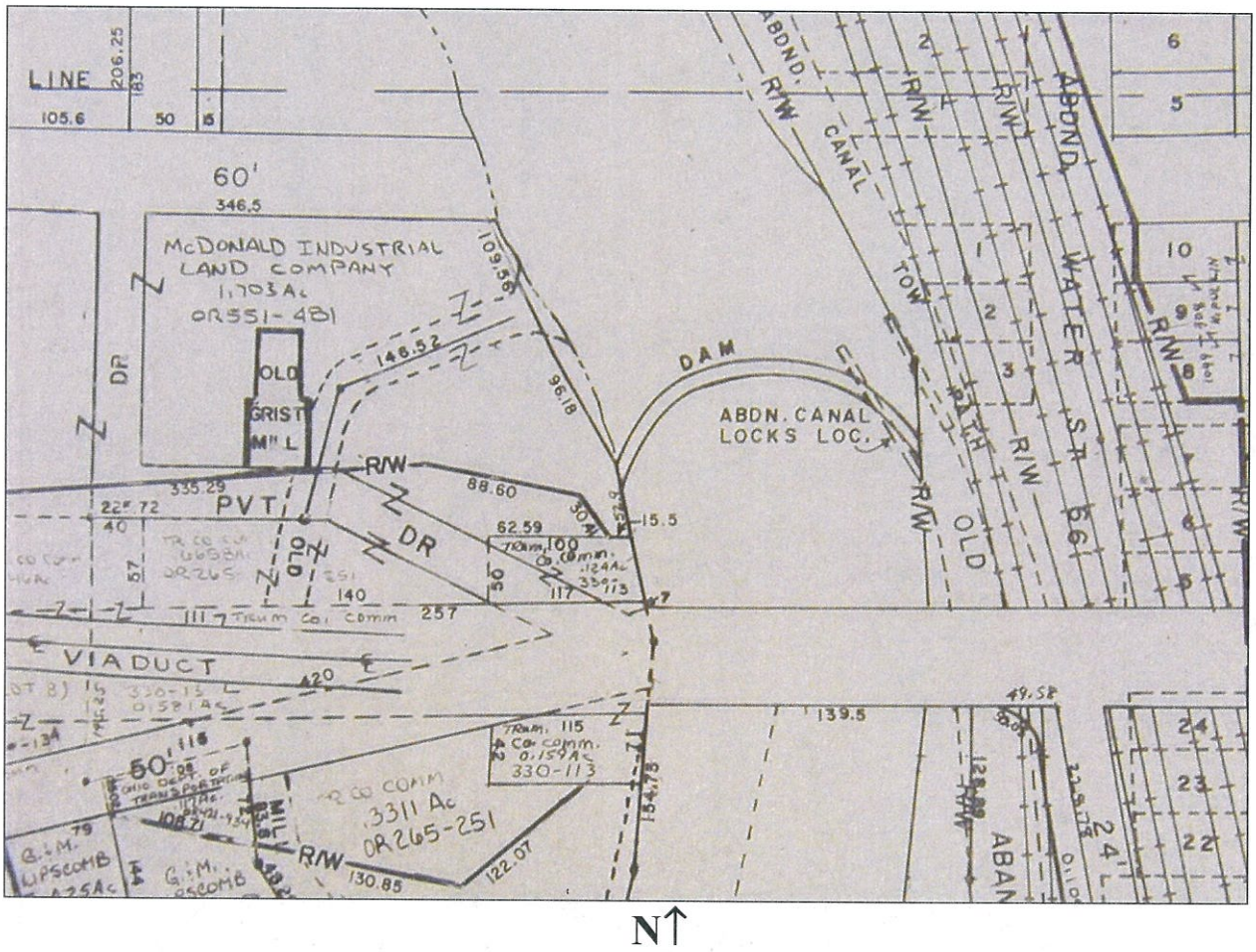


Plate 18 – Current Trumbull County Tax Parcel Map. Shows Girard Mills Dam, site of former flour/feed mill, location of former locks, and location of old canal towpath (Girard Tax Parcel Maps, Sheet 36).

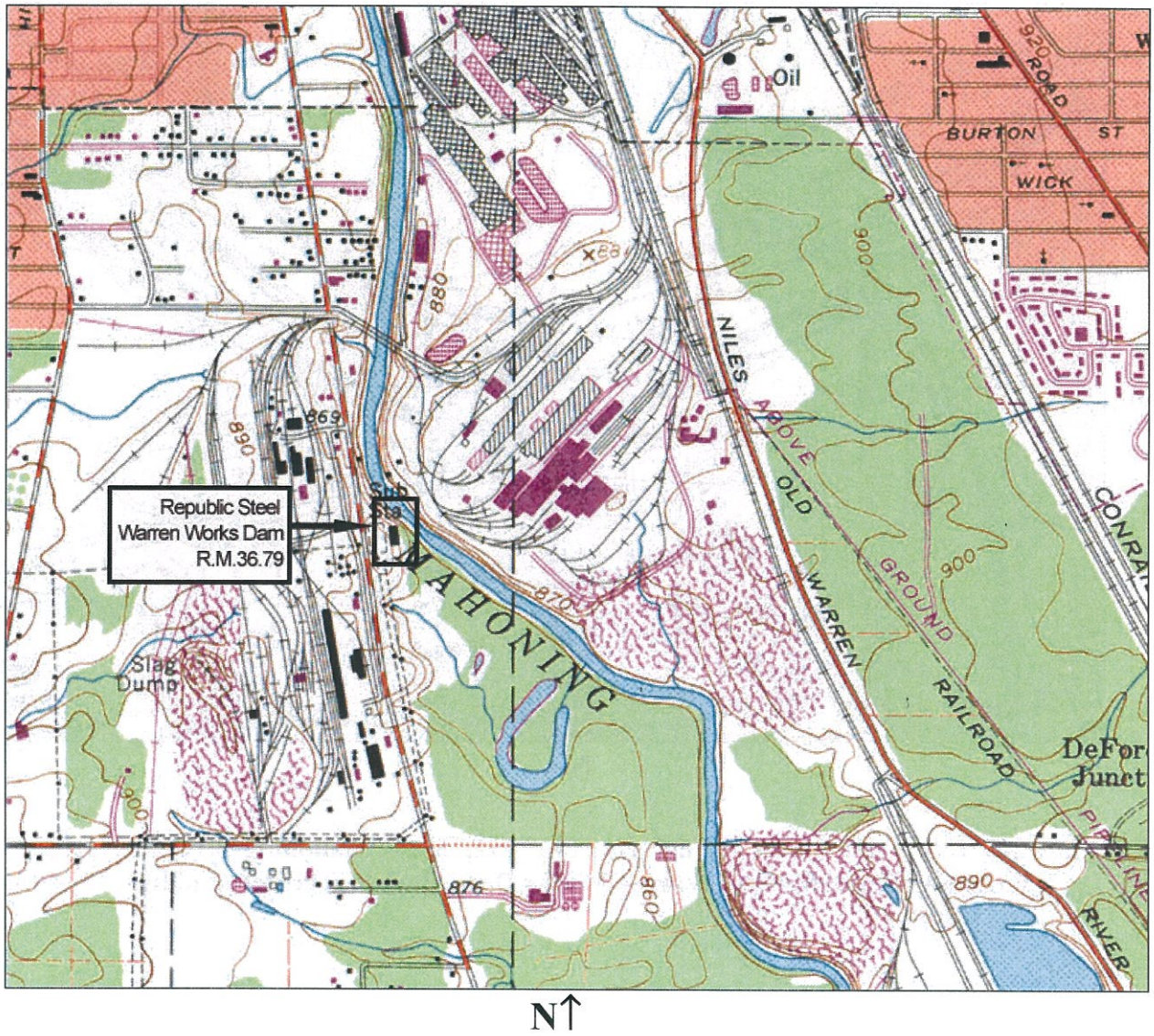
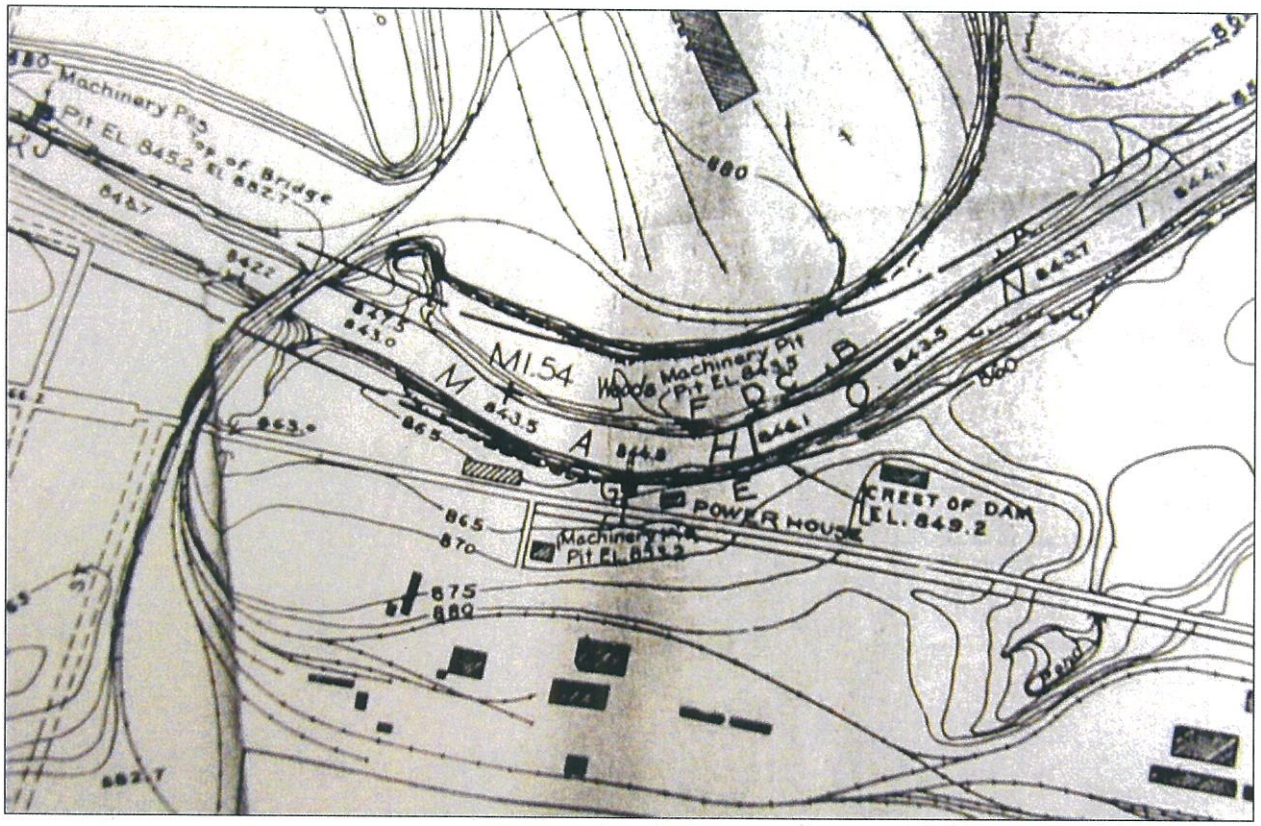


Plate 19 – Current USGS Location Map of Republic Steel Warren Works Dam (Map Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).



N←

Plate 20 – U.S. Army Corps of Engineers 1937 Map of the Mahoning River at Warren. Shows Republic Steel Warren Works Dam. Dam is at center of plate.

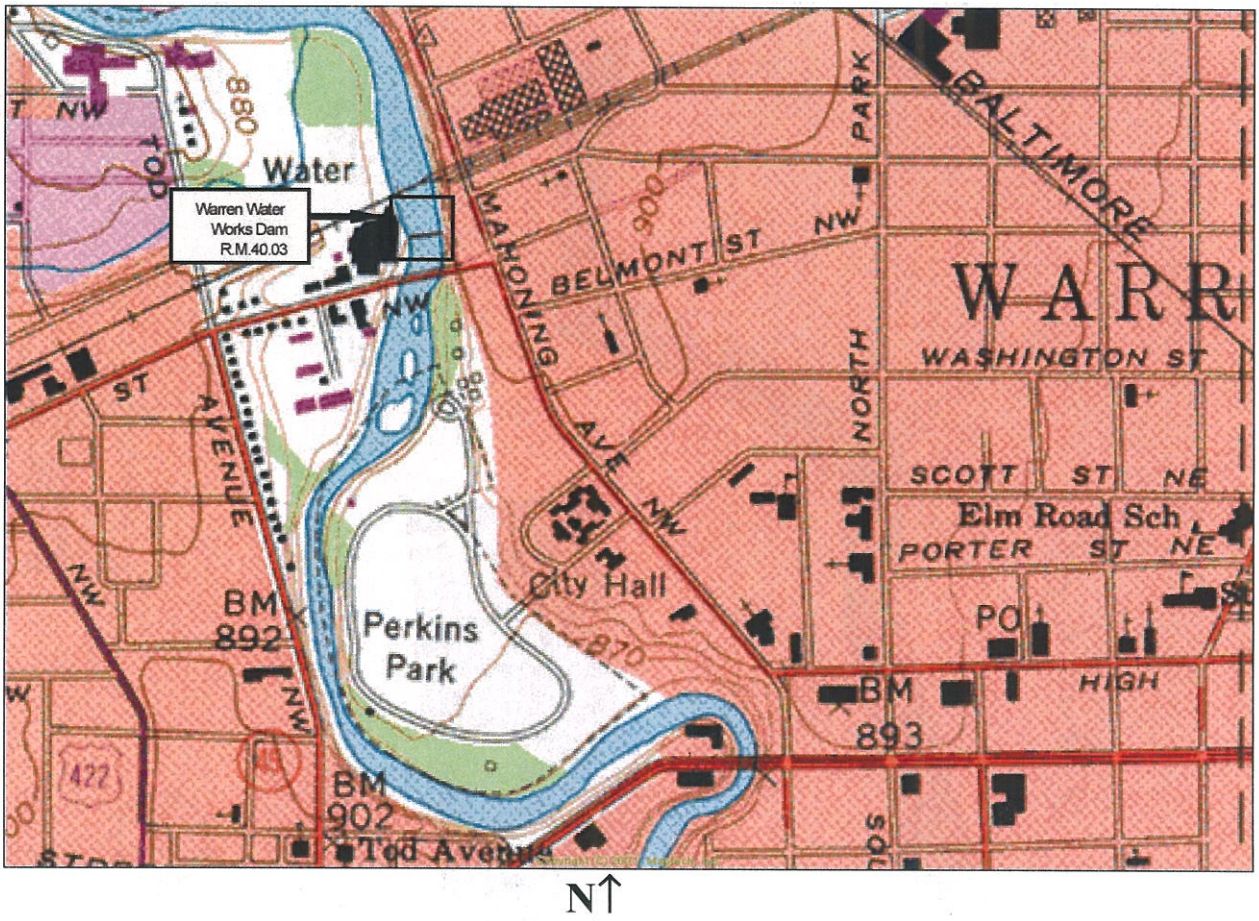


Plate 21 – Current USGS Location Map of Warren Water Works Dam (Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

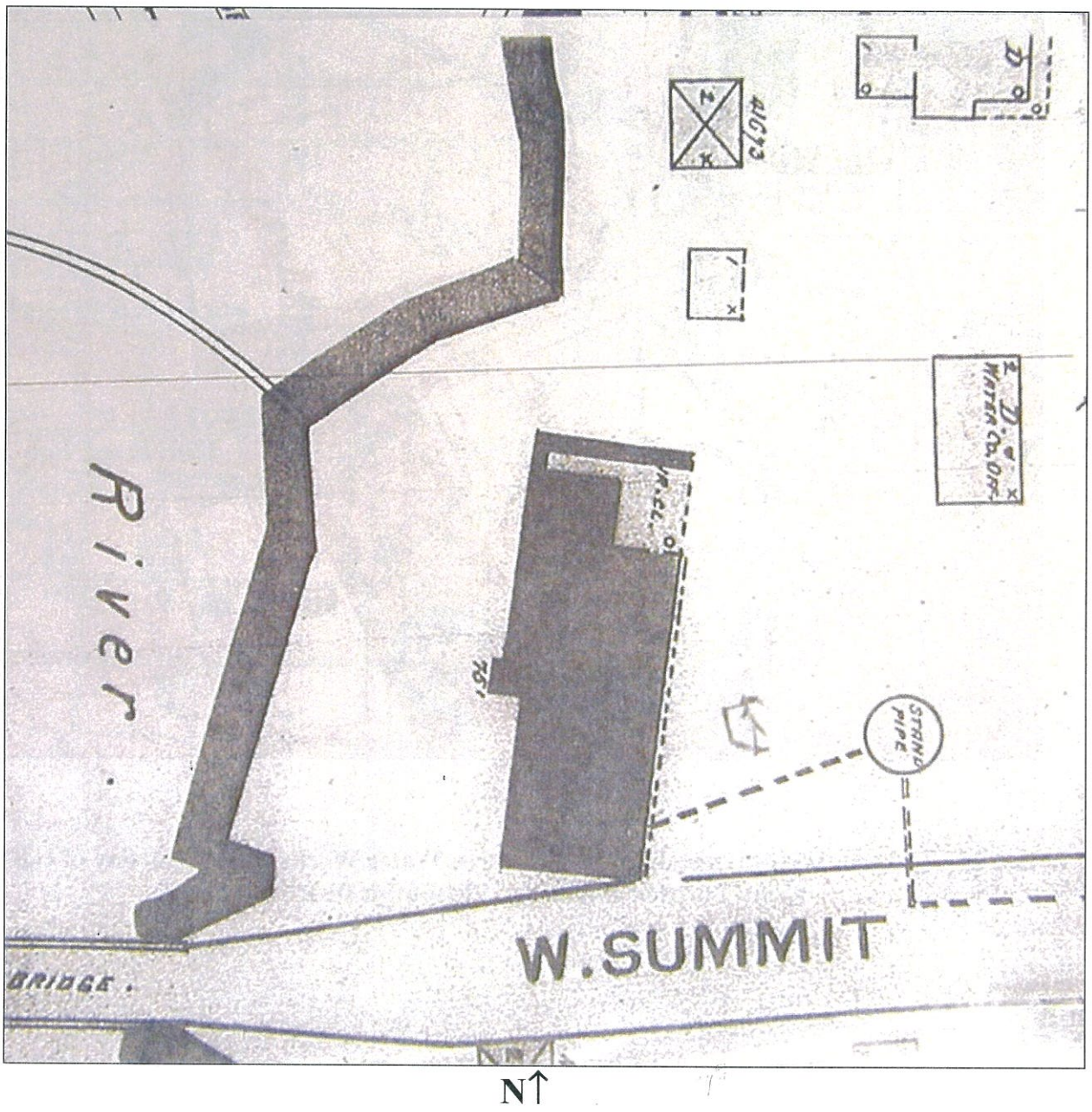


Plate 22 – 1893 Sanborn Insurance Map of Warren Water Works. Warren Water Works Dam is visible at left (Sanborn Warren 1893 Map 7).

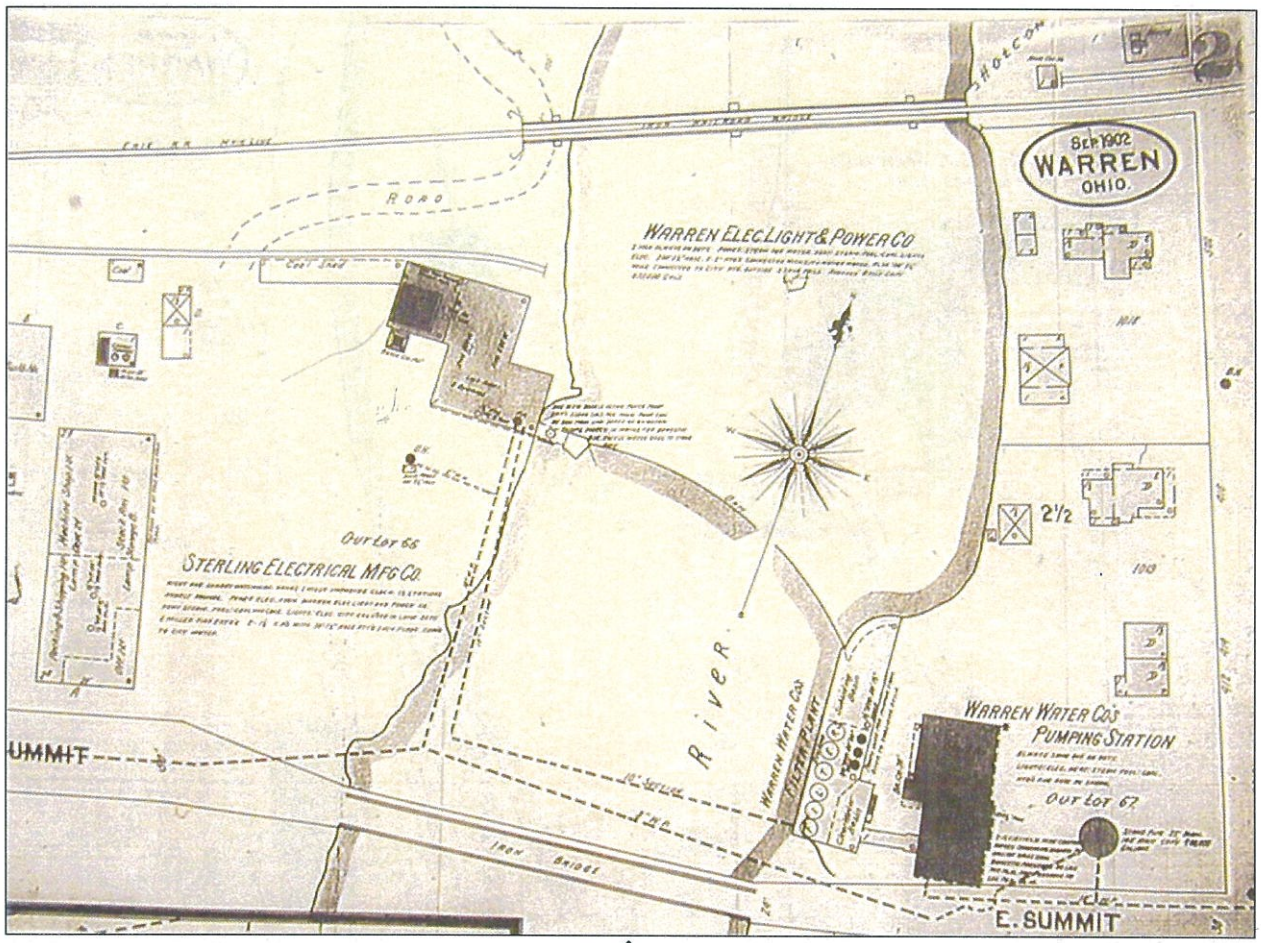


Plate 23 – 1902 Sanborn Insurance Map of Warren Water Works and Warren Electric Light and Power Company. Warren Water Works Dam is visible at center (Sanborn Warren 1902 Map 20).

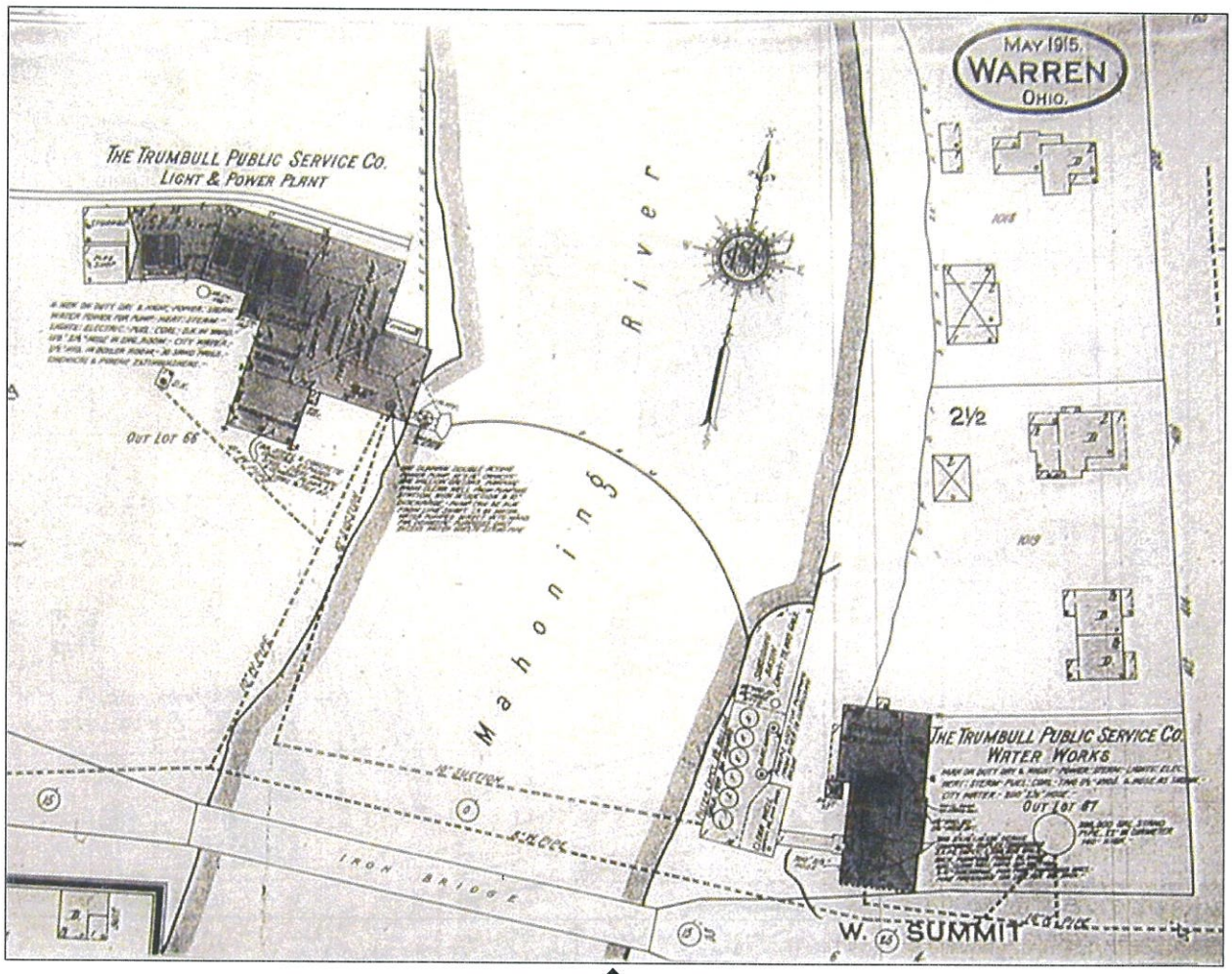


Plate 24 – 1915 Sanborn Insurance Map of Warren Water Works and Trumbull Public Service Company Power Plant. Warren Water Works Dam is visible at center (Sanborn Warren 1915 Map 14).

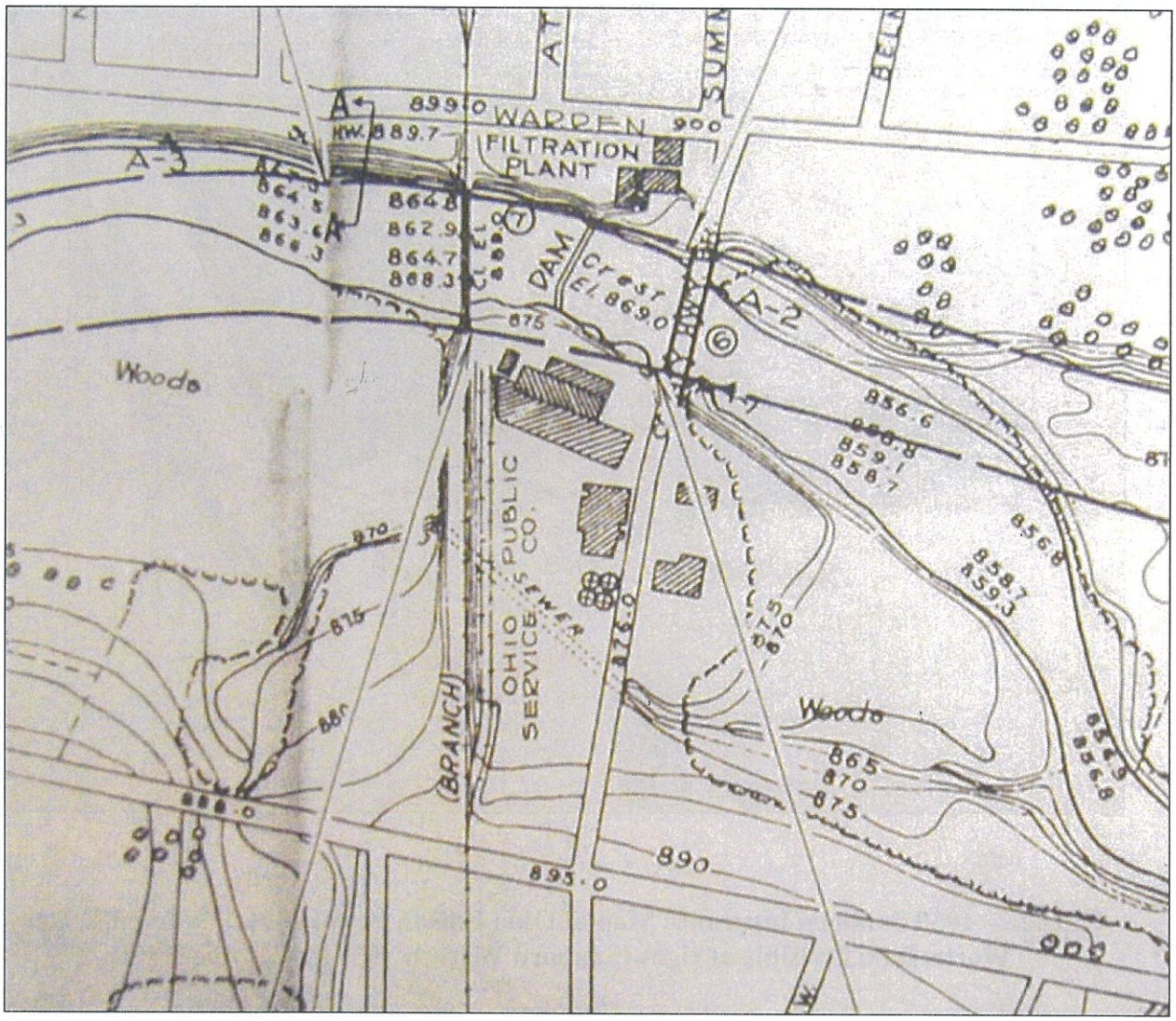


Plate 25 – U.S. Army Corps of Engineers 1937 Map of Mahoning River at Warren. Shows Warren Water Works Dam and associated buildings.

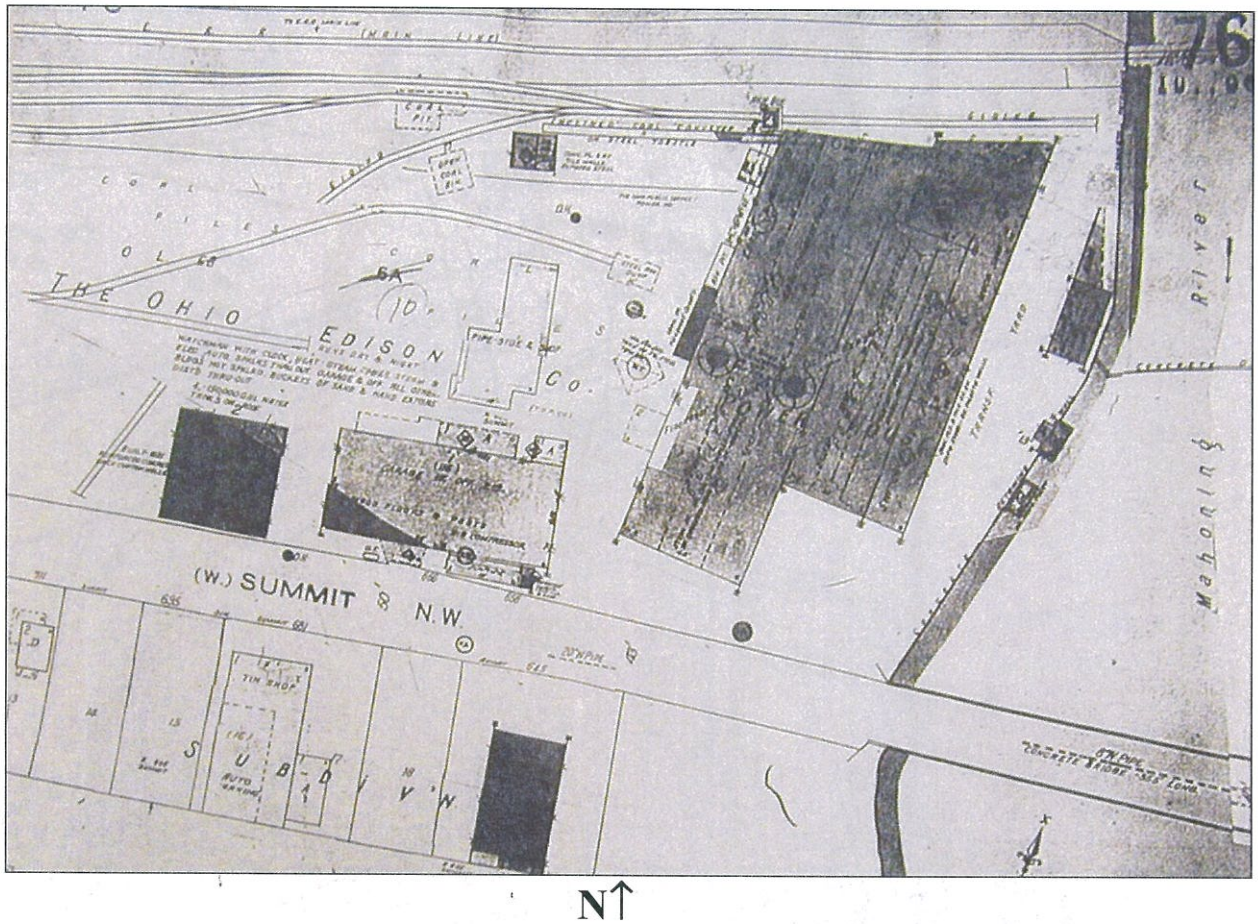


Plate 26 – 1950 Sanborn Insurance Map of Ohio Edison Power Plant. Warren Water Works Dam is visible at right (Sanborn Warren 1950 Vol. II Sheet 76).

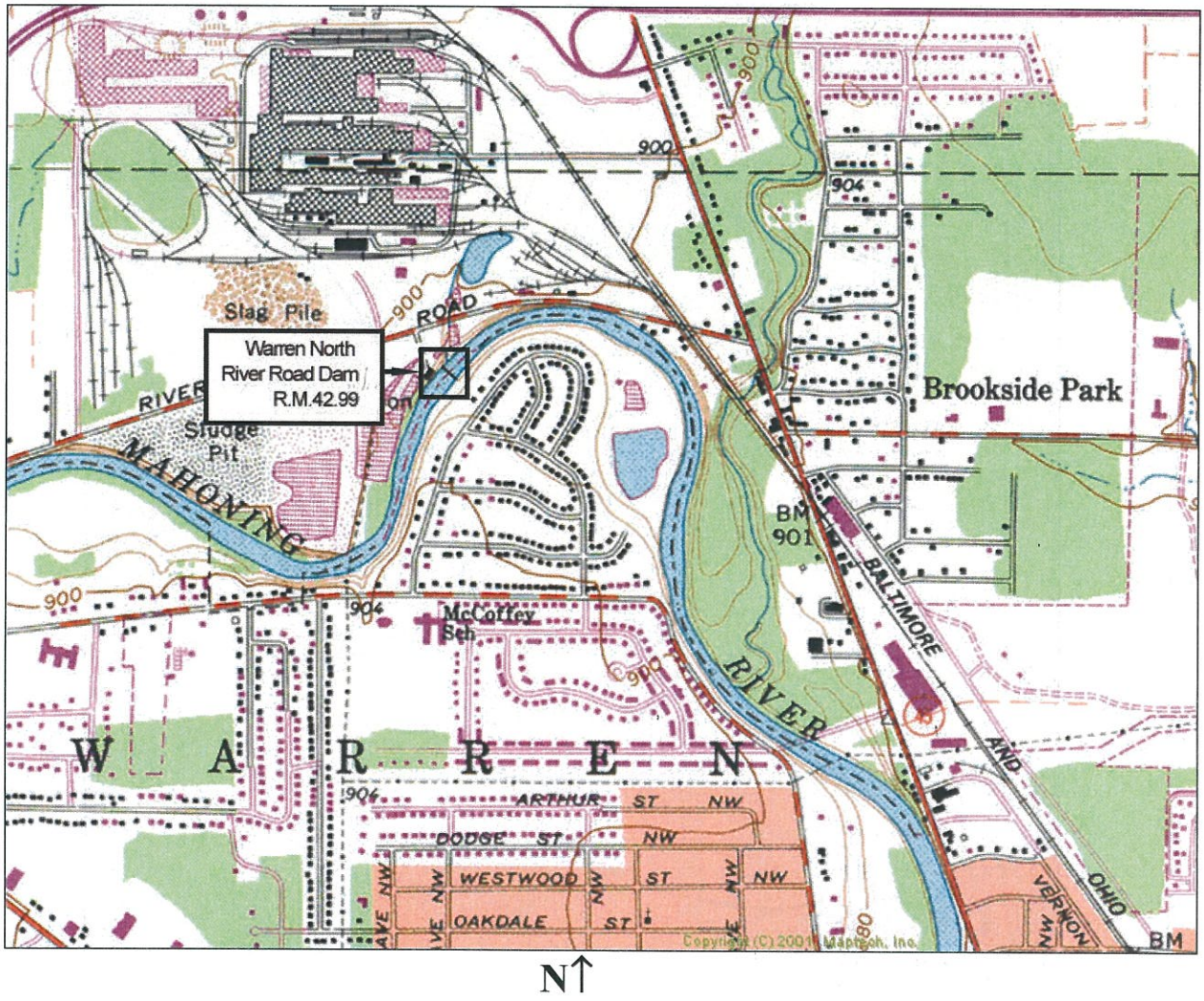


Plate 27 – Current USGS Location Map of Warren North River Road Dam (Map Courtesy of U.S. Army Corps of Engineers, Pittsburgh District).

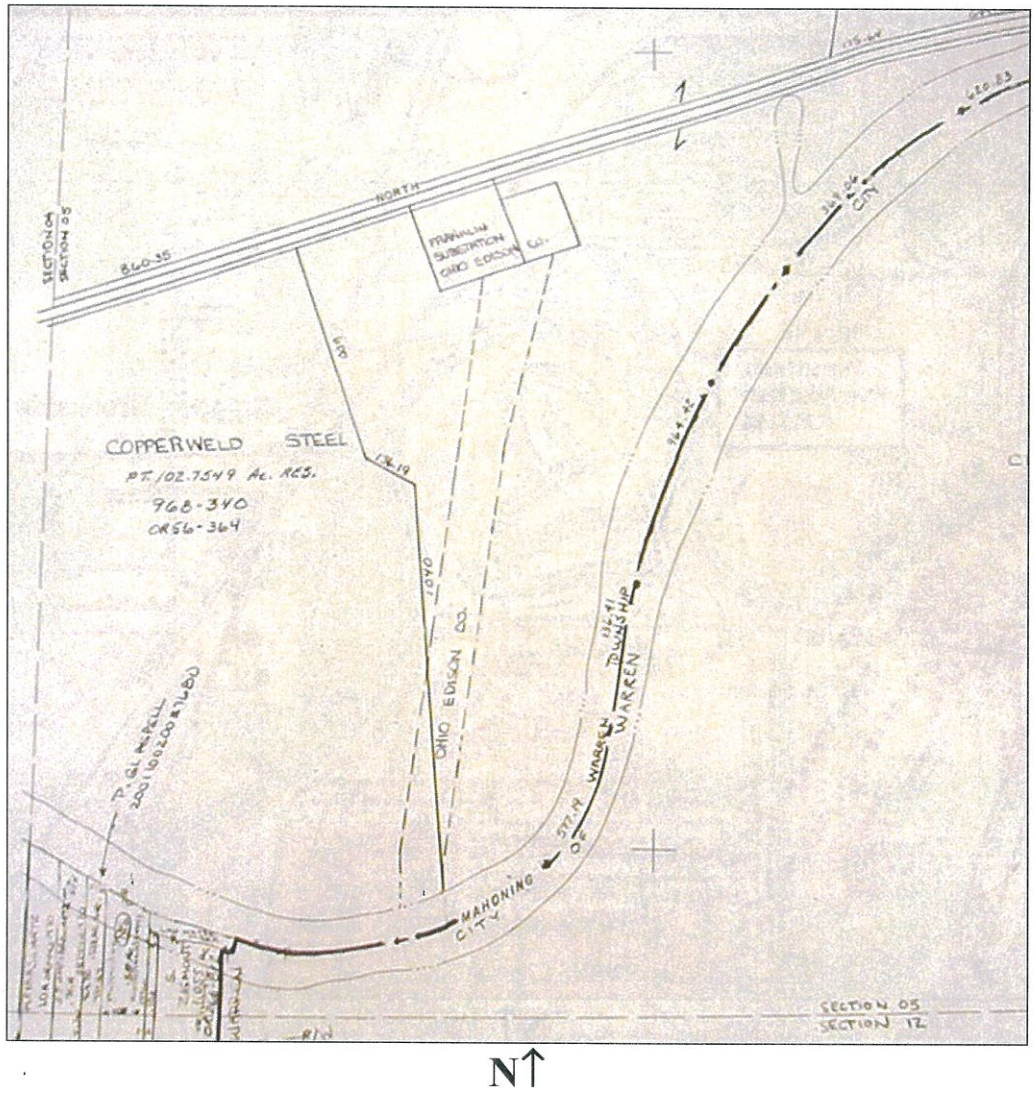


Plate 28 – Current Trumbull County Tax Parcel Map of Warren North River Road Dam.

APPENDIX B: CURRENT PHOTOGRAPHS

Photo 1 – Ohio Iron & Steel Co. Dam, Lowellville, looking south.

Photo 2 – Detail of piers and south abutment looking south.
Ohio Iron & Steel Co. Dam, Lowellville.

Photo 3 – Detail of weir and concrete pier, Ohio Iron & Steel Co., Dam, Lowellville.

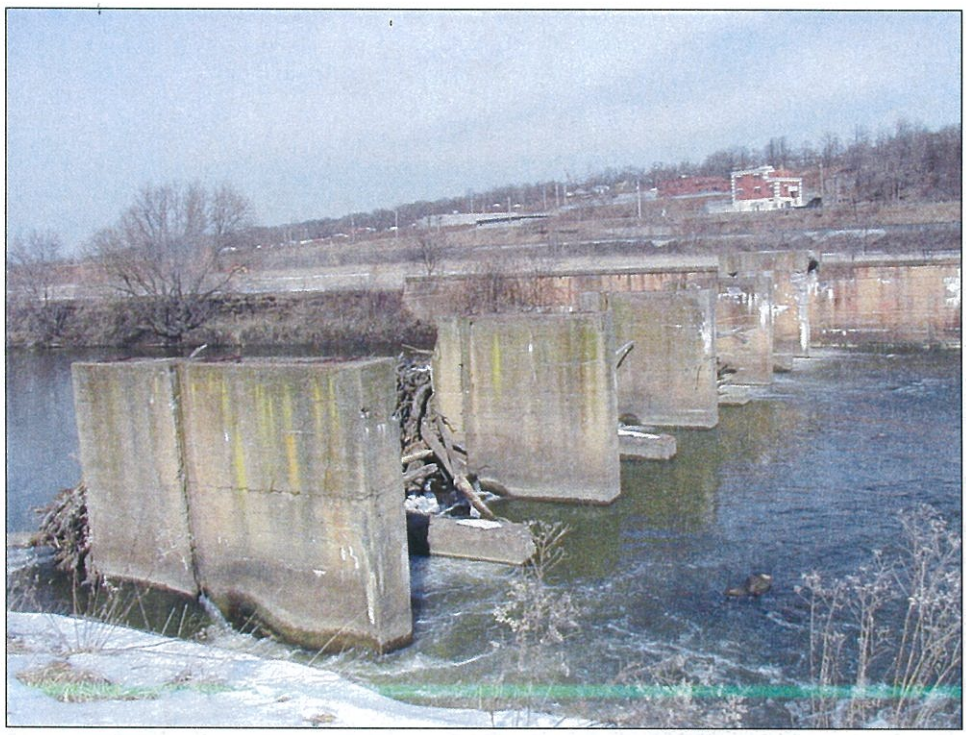


Photo 4 – YS &T Coke Trestle and Dam, Struthers. View looking south.

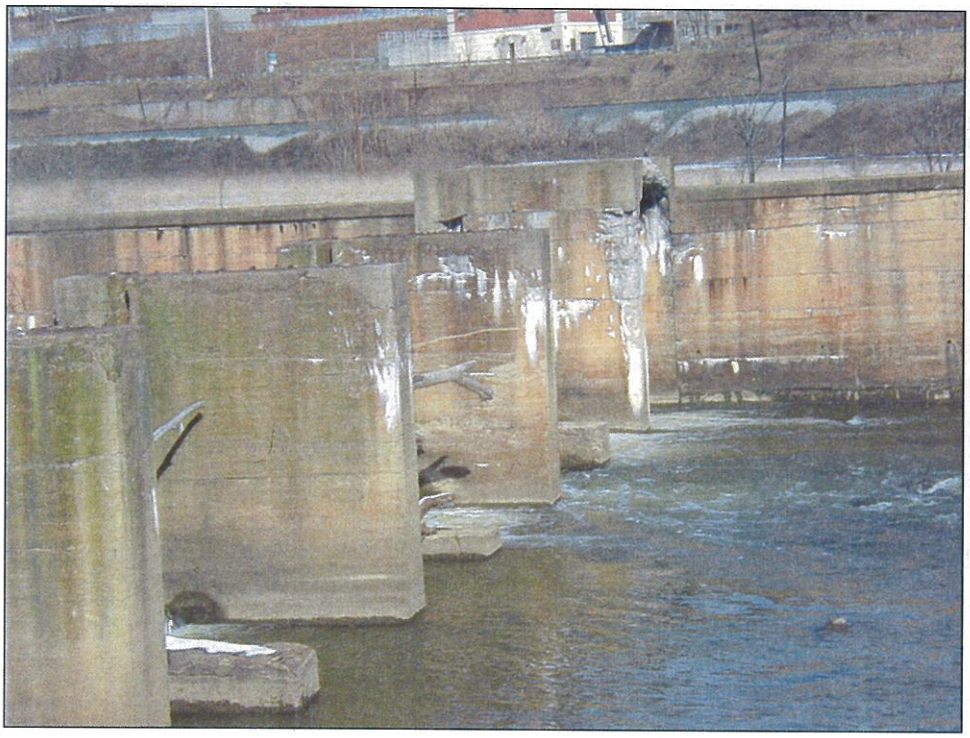


Photo 5 – Detail of piers and weir, YS & T Coke Trestle and Dam, Struthers. View looking southeast.

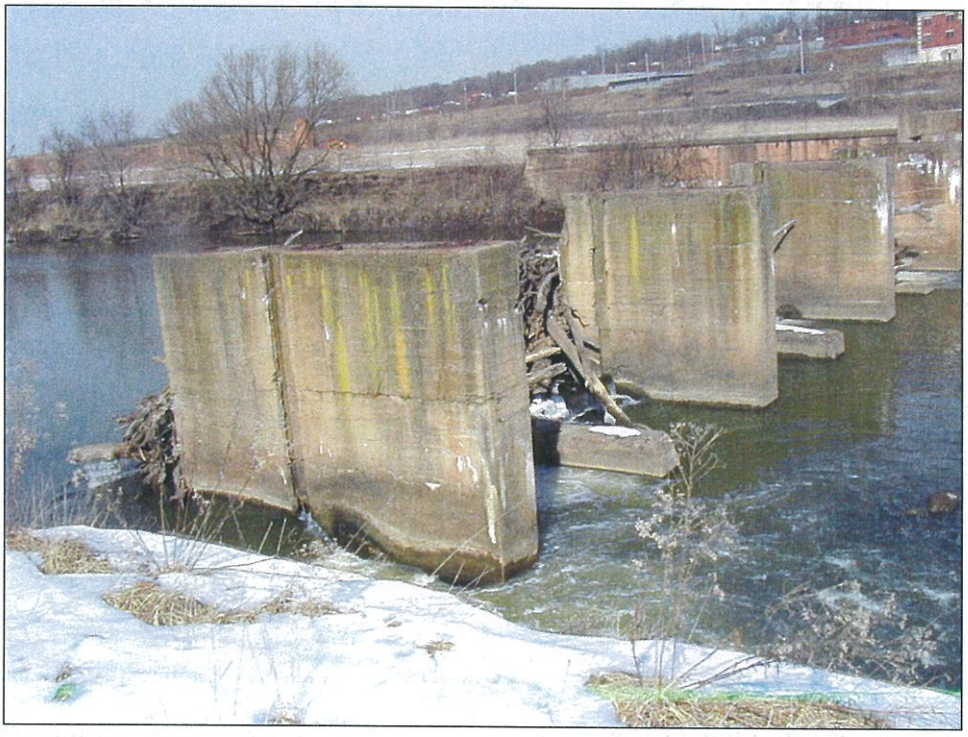


Photo 6 – Pier detail looking southeast, YS & T Coke Trestle and Dam, Struthers.

Photo 7 – Republic Steel Campbell Works Dam, Youngstown. View looking south.

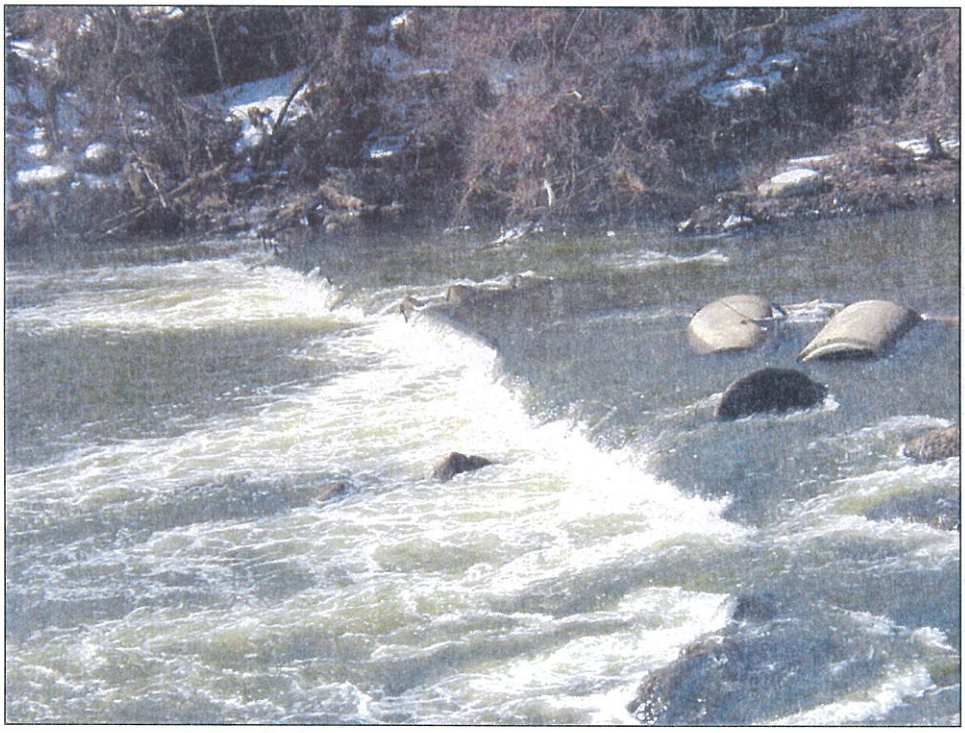


Photo 8 – Close-up view of Republic Steel Campbell Works Dam, Youngstown. View looking south.

**Photo 9 – Baldwin Mill Dam, Mahoning Avenue, Youngstown.
View looking north.**

**Photo 10 – Baldwin Mill Dam, Mahoning Avenue, Youngstown.
Close-up view looking south.**

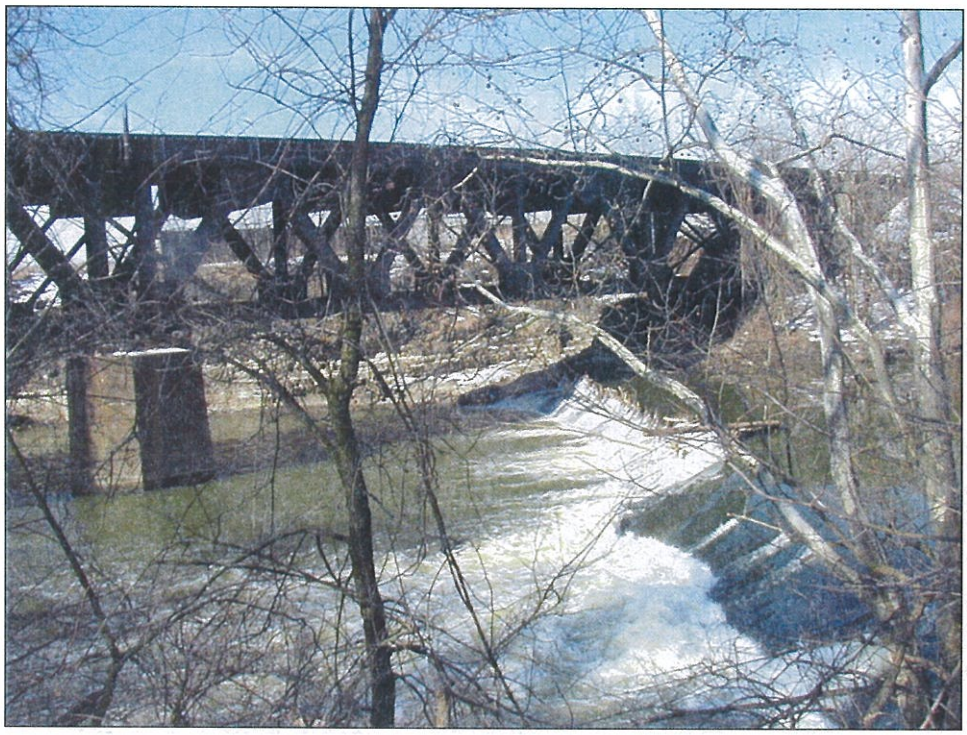


Photo 11 – Carnegie-Illinois Steel Co. Dam, Youngstown. View looking west.

Photo 12 – Detail of Carnegie-Illinois Steel Co. Dam. View looking north.

Photo 13 – Girard Mills Dam. View looking northeast from top of abutment.

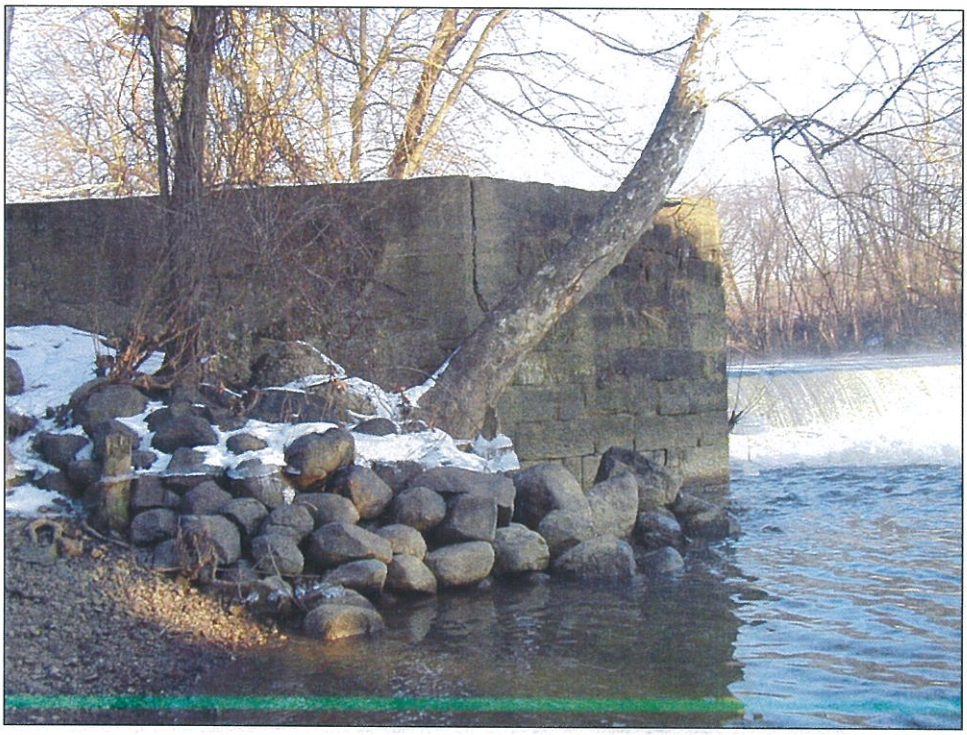


Photo 14 – Girard Mills Dam, West Abutment looking north.

Photo 15 – Girard Mills Dam. View of east end of dam and stone wall on the west bank of the river. View looking northeast.

Photo 16 – Girard Mills Dam, West Abutment. View of cut-sandstone masonry looking north.

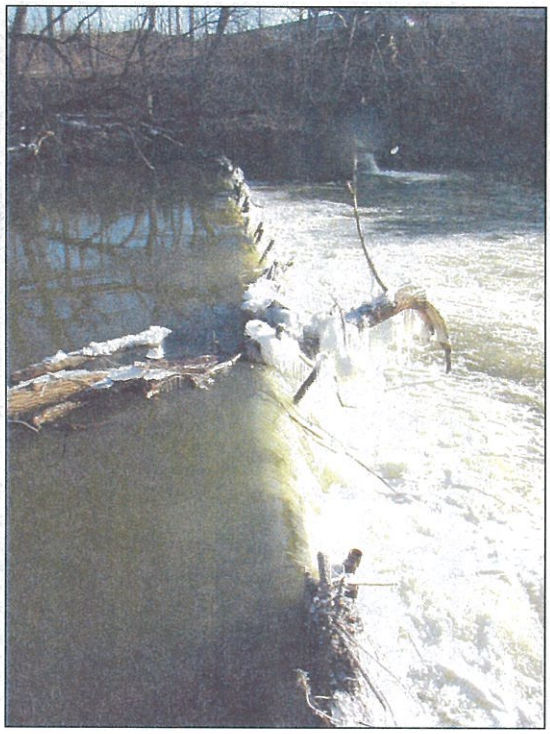


Photo 17 – Republic Steel Warren Works Dam looking east.

Photo 18 – Republic Steel Warren Works Dam. View with west abutment and outlet pipe in foreground, looking east.

Photo 19 – Republic Steel Warren Works Dam. View of west abutment and outlet pipe looking south.

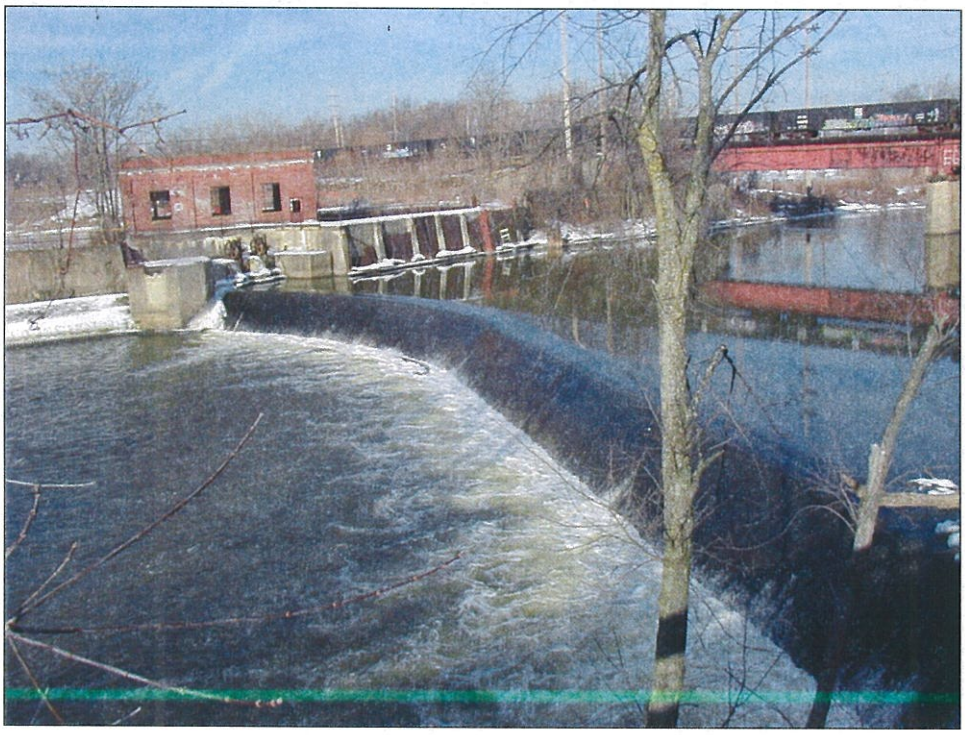


Photo 20 – Warren Water Works Dam Looking West. Spillway and screen house are visible on far side of river.

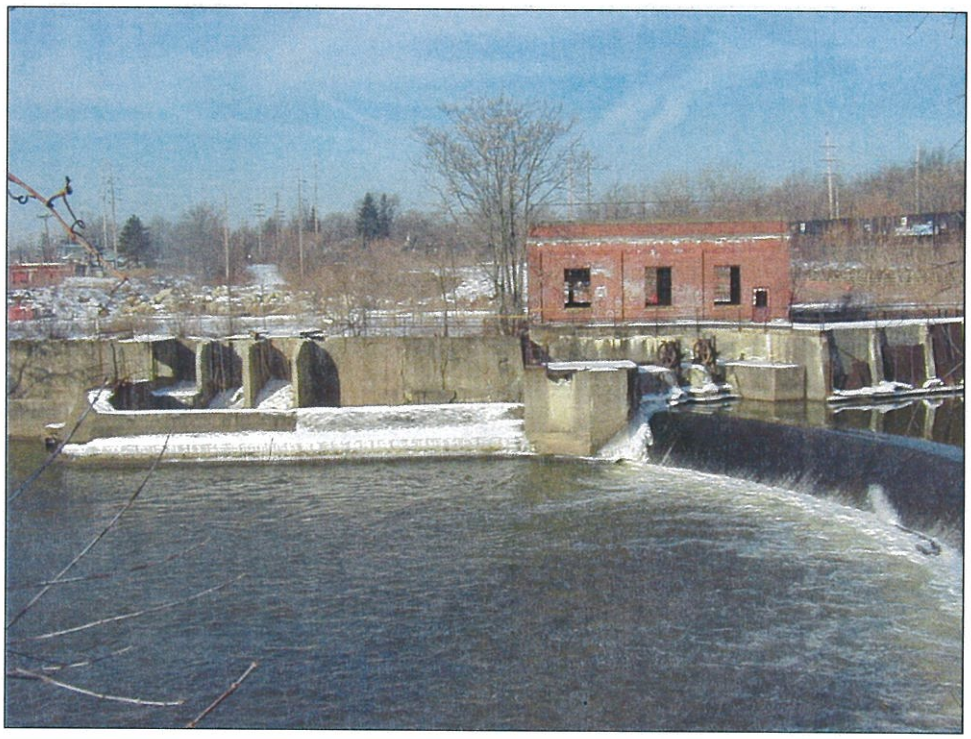


Photo 21 – Warren Water Works Dam. View of spillway and screen house looking west.

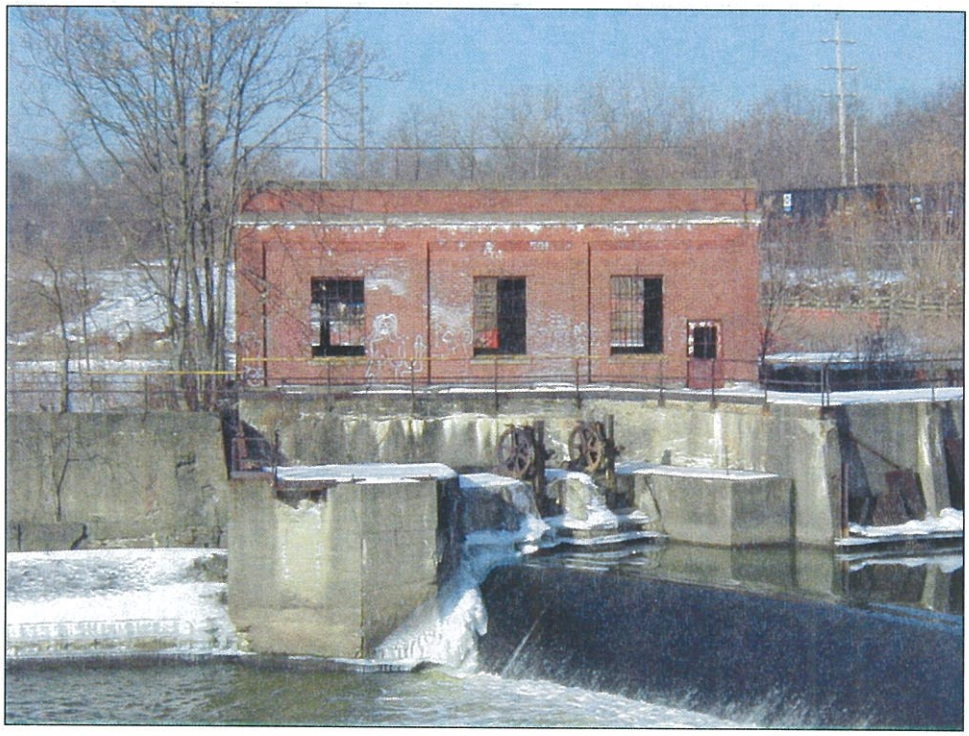


Photo 22 – Warren Water Works Dam. Detail of screen house and spillway upper gate.

Photo 23 – Warren Water Works Dam. View of spillway lower gate looking west.

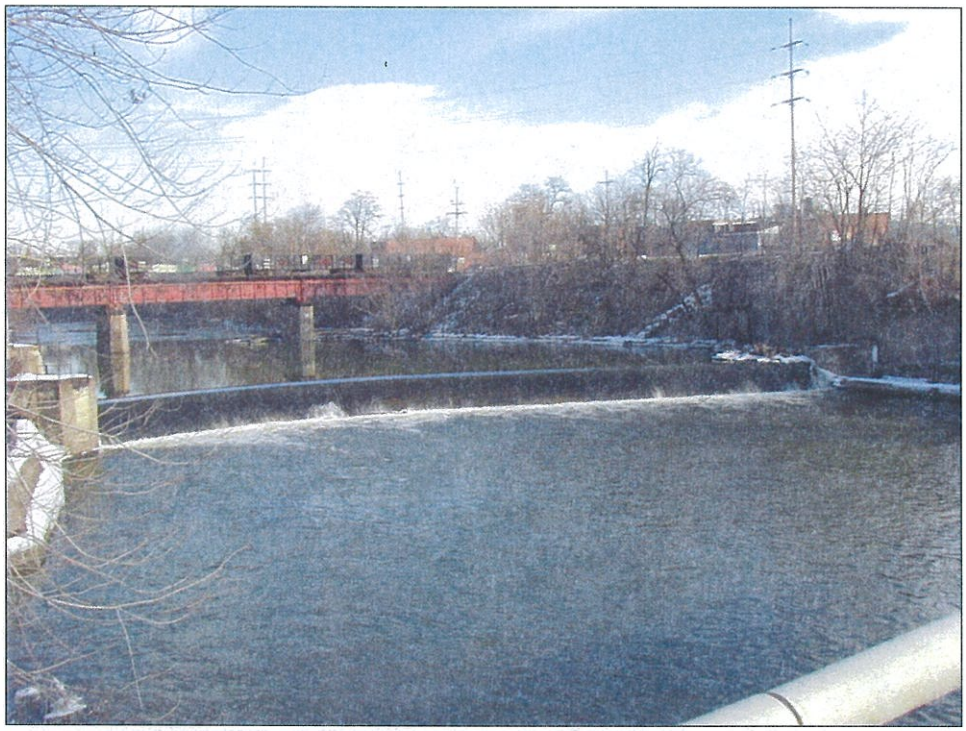


Photo 24 – Warren Water Works Dam. View of dam looking north from Summit Avenue bridge.

Photo 25 – Warren Water Works Dam. View of southeast corner of former filtration building facing Mahoning Avenue.

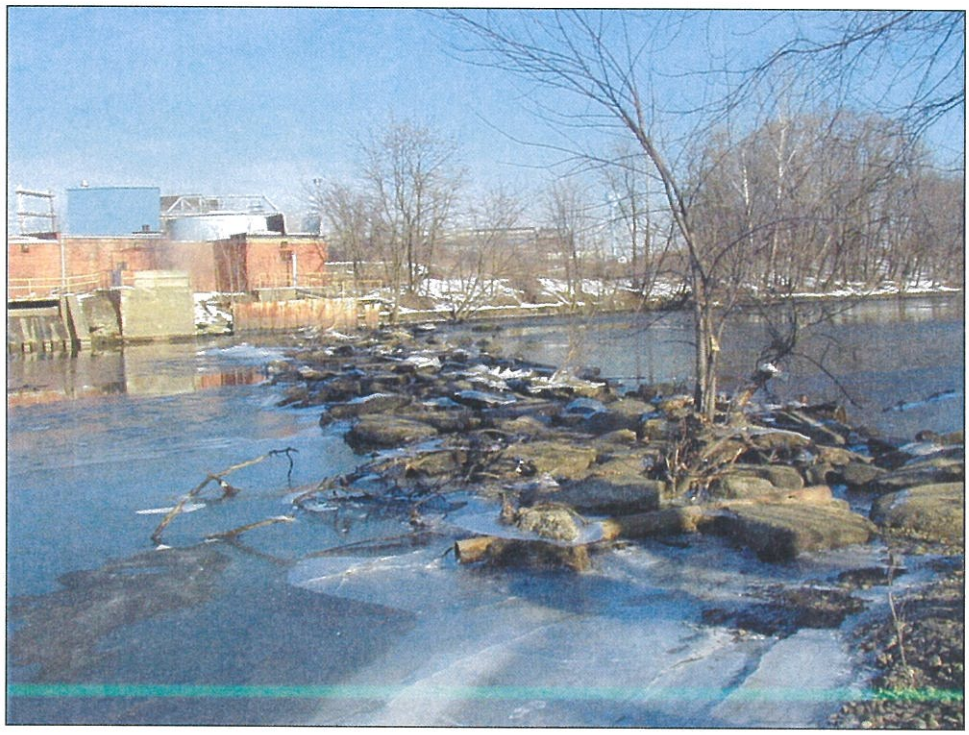


Photo 26 – Warren North River Road Dam. View looking northeast.

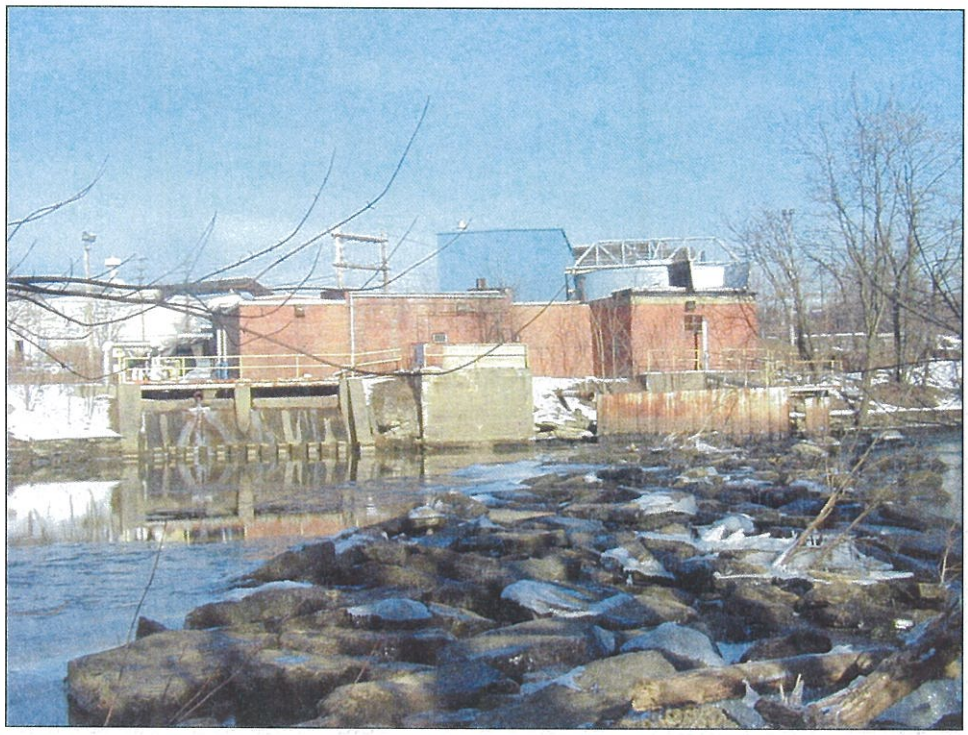


Photo 27 – Warren North River Road Dam. View looking north with outlet works in background.

APPENDIX C: OHIO HISTORIC INVENTORY FORMS

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY SINCE 1885

1. No. MAH-1722-10

2. County Mahoning

4,5. Present or Historic Name Ohio Iron & Steel Company Dam

6. Specific Address or Location Mahoning River Mile 13.05, near 1st Street

No. MAH-1722-10

2. County
Mahoning

4. Present Name(s)
Sharon Steel Co. Dam

☐ Coded

3. Location of Negatives
N/A

Roll No. A Picture No.(s) 30-33

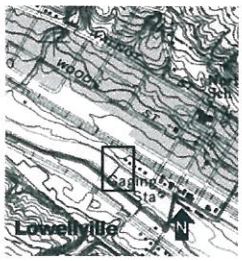
5. Historic or other Name(s)
Ohio Iron & Steel Company Dam

6. Specific Address or Location
Mahoning River Mile 13.05, near 1st Street

6a. Lot, Section or VMD Number
Mahoning Co. Parcel No. 40-007-0-014.00

City or Village: Lowellville
If Rural, Township & Vicinity:

Site Plan with North Arrow



9. U.T.M. Reference
Quadrangle Name Campbell

Zone	Easting	Northing
17	538760	4542780

1. SITE — Site ☐ Building ☐ Structure ☒ Object ☐

11. On National Register? Yes ☐ No ☒
12. N.R. Potential? Yes ☒ No ☐
13. Part of Estab. Hist. Dist? Yes ☐ No ☒
14. District Potential? Yes ☐ No ☒

15. Name of Established District (N.R. or Local)

16. Thematic Association(s)
Industry, Steel Manufacturing

17. Date(s) or Period
ca. 1908-1915

17b. Alteration Date(s)
N/A

18. Style or Design
Utilitarian
☐ High Style ☒ Element

18a. Style of Addition or Element(s)
N/A

19. Architect or Engineer
Unknown

19a. Design Sources
Unknown

20. Contractor or Builder
Unknown

21. Building Type or Plan
Concrete dam

22 Original Use, if apparent
Industrial Check Dam

23. Present Use
Industrial Check Dam

24. Ownership
Public ☐ Private ☒

25. Owner's Name & Address, if known
Sharon Slag, Inc.
1721 Pine Av. SE., Warren OH 44483

26. Property Acreage 37.32 acres

27. Other Surveys in Which Included
U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories 1

29. Basement? Yes ☐ No ☒

30. Foundation Material
Poured Concrete, Timber Crib

31. Wall Construction
Poured Concrete

32. Roof Type & Material
N/A

33. No. of Bays
Front 8 Side

34. Exterior Wall Material(s)
Poured Concrete

35. Plan Shape Linear

36. Changes (Explain in #42)
Addition ☐ Altered ☐ Moved ☐

37. Window Types
☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other

38. Building Dimensions 80' X 12'

39. Endangered? By What?
Yes ☐ No ☐

40. Chimney Placement
N/A

41. Distance from and Frontage on Road d 40' f 12'

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

This structure is a small low head concrete dam. It consists of 8 short piers with short sections of concrete weir located in between the piers. The piers have flat ends on the upstream side of the dam and pointed ends on the downstream side. A small concrete abutment is located at each end of the dam. Some of the weir may be composed of timber cribs. The concrete at the dam shows evidence of spalling and wear in many areas. Overall, this is a very simple concrete and timber crib dam.

43. History and Significance (Continue on reverse if necessary)

This dam is associated with the former Ohio Iron & Steel Company plant that sat on the west side of the Mahoning River, across the stream from Lowellville. An iron furnace was first built here in 1845-46, and Ohio Iron & Steel purchased the plant in 1880. The dam was built between 1908 and 1915 to impound water to be used by the plant . This dam is one of five industrial check dams on the Mahoning River between Lowellville and Warren that provided water for the region's steel industry. (continued)

44. Description of Environment and Outbuildings (See #52)

The dam is adjacant to the town of Lowellville, which is situated on the river's east bank. Lowellville is a small rural town developed in the late 19th and 20th centuries. The area west of the dam was formerly occupied by the Sharon Steel Hoop Co. Plant and now appears to be largely vacant.

45. Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Lowellville. 1889, 1893, 1907, 1928.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1933, 1937.
USGS. Youngstown Quadrangle Ma;p. 1908.

46. Prepared by
Roy A. Hampton III

47. Organization
Hardlines Design/USACE Pittsburgh

48. Date Recorded in Field
February 18, 2004

49. Revised by

50a. Date Revised

50b. Reviewed by

6. Specific Address or Location Mahoning River Mile 13.05, near 1st Street

51. Condition of Property

- ☐ Excellent
- ☐ Good/Fair
- ☒ Deteriorated
- ☐ Ruin
- ☐ Destroyed/Burned
  Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s)

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

43. (Cont'd)

From roughly the 1920s through the 1950s, water impounded by dams like this was used and released by multiple steel plants and other industries on the stretch of the Mahoning River between Warren and Lowellville. The re-use of the same water as many as 13 times by different steel plants on the Mahoning often led the water temperature in the river to rise to over 100 degrees Fahrenheit. The river was also heavily polluted during the height of the steel industry's activities in the area.

The Sharon Steel Hoop Company took over the plant and dam in 1917. Sharon Steel Hoop later changed its name to Sharon Steel. The plant does not appear to be in operation now. The dam also does not appear to be necessary for any industrial activity at this point. Starting in the late 1970s, the steel industry in the Mahoning Valley went into a decline phase. There is now only a modest amount of steel manufacturing in the area, and the Mahoning River is also much cleaner than in the past since large amounts of industrial waste are no longer dumped into the river. This dam is a simple concrete structure that does not have any significant design or engineering features, but it is a reminder of the dominance of the steel industry in early to mid-twentieth century Mahoning County.

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY SINCE 1885

1. No. MAH-1723-10 | 2. County Mahoning

No. MAH-1723-10 | 2. County: Mahoning

4. Present Name(s): Youngstown Sheet and Tube Co. Coke Trestle and Dam ☐ Coded

3. Location of Negatives: N/A

5. Historic or other Name(s): Youngstown Sheet and Tube Co. Coke Trestle and Dam

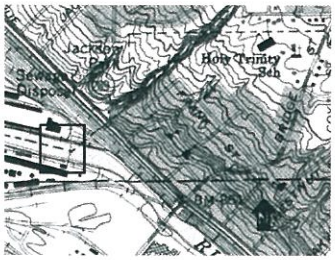
Roll No. A | Picture No.(s) 26-29

6. Specific Address or Location: Mahoning River Mile 16.78 near Bridge Street

6a. Lot, Section or VMD Number: Mahoning Co. Parcel No. 38-001-0-003.00

City or Village: Youngstown | If Rural, Township & Vicinity

Site Plan with North Arrow



9. U.T.M. Reference
Quadrangle Name: Campbell

Zone	Easting	Northing
17	534480	4545470

). SITE: Site ☐ Building ☐ | Structure ☒ Object ☐

11. On National Register? Yes ☐ No ☒

12. N.R. Potential? Yes ☐ No ☒

13. Part of Estab. Hist. Dist? Yes ☐ No ☒

14. District Potential? Yes ☐ No ☒

5. Name of Established District (N.R. or Local)

16. Thematic Association(s): Industry, Steel Manufacturing

17. Date(s) or Period: ca. 1908-1915

17b. Alteration Date(s): 1916-1933

18. Style or Design: Utilitarian ☐ High Style ☒ Element

18a. Style of Addition or Element(s): N/A

19. Architect or Engineer: Unknown

19a. Design Sources: Unknown

20. Contractor or Builder: Unknown

21. Building Type or Plan: Concrete Coke Trestle, Industrial Check Dam

22 Original Use, if apparent: Coke Trestle, Industrial Check Dam

23. Present Use: Abandoned

24. Ownership: Public ☒ Private ☐

25. Owner's Name & Address, if known
City of Struthers, Ohio
6 Elm St., Struthers, OH 44471

26. Property Acreage: approx. 3 acres

27. Other Surveys in Which Included: U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories: 1

29. Basement? Yes ☐ No ☒

30. Foundation Material: Poured Concrete

31. Wall Construction: Poured Concrete

32. Roof Type & Material: N/A

33. No. of Bays: Front 6 Side 1

34. Exterior Wall Material(s): Poured Concrete

35. Plan Shape: Linear

36. Changes (Explain in #42): Addition ☐ Altered ☐ Moved ☐

37. Window Types: ☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other

38. Building Dimensions: 100' X 18'

39. Endangered? By What? Yes ☒ No ☐
Neglect, Deterioration

40. Chimney Placement: N/A

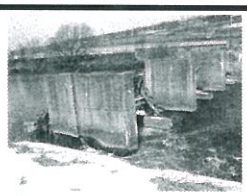
41. Distance from and Frontage on Road: d 40' f 12'

2. County Mahoning

4,5. Present or Historic Name Youngstown Sheet and Tube Co.

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

his abandoned industrial structure was originally composed of a coke trestle with a small low head concrete weir attached to the base of the piers. It now consists of 6 concrete piers and the low head dam, sections of which are positioned between the concrete piers that once supported the trestle. Each section of the weir consists of a low oncrete pier flanked by sections of low concrete weir. The dam has a concrete abutment with attached mbankment walls on each side of the river. The concrete at the weirs and the piers is deteriorated, with large reas of visible spalling.



43. History and Significance (Continue on reverse if necessary)

his dam is associated with the former Youngstown Sheet and Tube (YS & T) plant that sat on the east side of the Mahoning River. A coke plant associated with the factory was located on the west side of the river. This structure allowed coke to be transferred from the east bank coke plant to the main plant on the west side of the river. The ttached dam also impounded water so that a series of intake pipes upstream from the dam could supply the YS T Plant with the water needed for its steel manufacturing processes. Youngstown Sheet and Tube was one of he largest steel making firms in the Mahoning Valley. (continued)

44. Description of Environment and Outbuildings (See #52)

The area was once a densely developed tract that housed the Youngstown Sheet and Tube Plant. The main plant was on the east side of the Mahoning River, while an associated coke plant for the factory sat on the west bank. Now, most of the buildings associated with the plant have been demolished and the trestle/dam is almost entirely surrounded by empty land.

45, Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Youngstown and Struthers. 1889, 1893, 1907, 1928.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1933, 1937.

46. Prepared by: Roy A. Hampton III

47. Organization: Hardlines Design/USACE Pittsburgh

48. Date Recorded in Field: February 18, 2004

49. Revised by | 50a. Date Revised

50b. Reviewed by

6. Specific Address or Location Mahoning River Mile 16.78 near Bridge Street

51. Condition of Property

- ☐ Excellent
- ☐ Good/Fair
- ☐ Deteriorated
- ☒ Ruin
- ☐ Destroyed/Burned Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s)

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

43. (Cont'd)

The land for this plant was first acquired by the company circa 1900, and the company had a factory at this site by 1902. The YS & T plant here was greatly expanded in 1913. The 1915 map shows that the original structure was a simple concrete weir, and the trestle was added between 1916 and 1933. From roughly the 1920s through the 1950s, water impounded by dams like this was used and released by multiple steel plants and other industries on the stretch of the Mahoning River between Warren and Lowellville. The re-use of the same water as many as 13 times by different steel plants on the Mahoning often led the water temperature in the river to rise to over 100 degrees Fahrenheit. The river was also heavily polluted during the height of the steel industry's activities in the area.

This dam impounded water for the YS & T works for many years. The company began to move jobs away from this facility in 1977-1978, and the plant is now closed. Starting in the late 1970s, the steel industry in the Mahoning Valley went into a decline phase. There is now only a modest amount of steel manufacturing in the area, and the Mahoning River is also much cleaner than in the past since large amounts of industrial waste are no longer dumped into the river. This dam and trestle is a simple concrete structure that does not have any significant design or engineering features, but it is a reminder of the dominance of the steel industry in early to mid-twentieth century Mahoning County. At an unknown date the trestle was removed from the top of the piers. The structure now consists of six concrete piers and the sections of concrete weir. The structure was reported as being abandoned in a 1942 survey of this portion of the river, so it appears that the trestle has not been used for many years. With the closing of the YS & T Plant, the dam does not appear to be in use at this point for any industrial purposes.

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY SINCE 1885

1. No. MAH-1726-4 | 2. County Mahoning

No. MAH-1726-4 | 2. County: Mahoning

4. Present Name(s): Republic Steel Campbell Works Dam ☐ Coded

3. Location of Negatives: N/A

5. Historic or other Name(s): Republic Steel Campbell Works Dam

oll No. A | Picture No.(s) 17-19

6. Specific Address or Location: Mahoning River Mile 18.2, near Center Street

6a. Lot, Section or VMD Number: Mahoning Co. Parcel No. 53-042-0-13.00

City or Village: Youngstown | If Rural, Township & Vicinity

Site Plan with North Arrow

9. U.T.M. Reference
Quadrangle Name: Youngstown

Zone	Easting	Northing
17	532141	4547113

). SITE — Site ☐ Building ☐ — Structure ☒ Object ☐

11. On National egister? Yes ☐ No ☒

12. N.R. Potential? Yes ☐ No ☒

13. Part of Estab. Hist. Dist? Yes ☐ No ☒

14. District Potential? Yes ☐ No ☒

5. Name of Established District (N.R. or Local)

16. Thematic Association(s): Industry, Steel Manufacturing

17. Date(s) or Period: ca. 1908-1915

17b. Alteration Date(s): N/A

18. Style or Design: Utilitarian — ☐ High Style ☒ Element

18a. Style of Addition or Element(s): N/A

19. Architect or Engineer: Unknown

19a. Design Sources: Unknown

20. Contractor or Builder: Unknown

21. Building Type or Plan: Concrete and Stone Fragment Dam

22 Original Use, if apparent: Industrial Check Dam

23. Present Use: Abandoned

24. Ownership — Public ☒ Private ☐

25. Owner's Name & Address, if known
City of Youngstown, Ohio
26 S. Phelps St., Youngstwon, OH 44503

26. Property Acreage: approx. 2 acres

27. Other Surveys in Which Included: U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories: 1

29. Basement? Yes ☐ No ☒

30. Foundation Material: Unknown

31. Wall Construction: Stone and Concrete Fragments

32. Roof Type & Material: N/A

33. No. of Bays: Front 1 Side 1

34. Exterior Wall Material(s): Stone and Concrete Fragments

35. Plan Shape: Linear

36. Changes (Explain in #42) — Addition ☐ Altered ☐ Moved ☐

37. Window Types — ☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other

38. Building Dimensions: 80' X 10'

39. Endangered? By What? Yes ☐ No ☒

40. Chimney Placement: N/A

41. Distance from and Frontage on Road: d 45' f 10'

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

his abandoned industrial structure was originally a small low head check dam that impounded water to be used in the steelmaking process. The resource is now composed of a loose pile of stones and concrete fragments that stretch in a roughly linear pattern across the Mahoning River. The stones appear to be of natural form or to have a rip-rap type cut; no efforts at finishing were observed. No poured concrete or stone masonry features such as outments were observed. The structure appears to be a crude weir constructed of stone and concrete agments.

43. History and Significance (Continue on reverse if necessary)

his dam is associated with the former Republic Steel Campbell Works that appears to have occupied both sides of the river in this area, although the main portion of the plant was located on the west side of the river. Republic was founded in 1899, and the company began acquiring land for this plant by 1902. By 1928, the plant was heavily developed into a large steelmaking operation. The construction date for this dam is likely ca. 1908-1915. It appears that the expansion of the steel industry began placing very heavy strains on the Mahoning River's water supplies around 1915. (continued)

44. Description of Environment and Outbuildings (See #52)

The area was once a densely developed tract that housed structures associated with Republic Steel. Now, most of the buildings associated with the plant have been demolished and the dam is almost entirely surrounded by empty land.

45. Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Youngstown. 1889, 1893, 1907, 1928.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1937.
USGS Youngstown Quadrangle Map. 1908.

46. Prepared by: Roy A. Hampton III

47. Organization: Hardlines Design/USACE Pittsburgh

48. Date Recorded in Field: February 18, 2004

49. Revised by | 50a. Date Revised

50b. Reviewed by

2. County Mahoning

4,5. Present or Historic Name Republic Steel Campbell Works

6. Specific Address or Location Mahoning River Mile 18.2, near Center Street

51. Condition of Property

- ☐ Excellent
- ☐ Good/Fair
- ☐ Deteriorated
- ☒ Ruin
- ☐ Destroyed/Burned Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

- Corn Crib or Shed ☐
- Summer Kitchen ☐
- Silo ☐
- Smoke House ☐
- Spring House ☐
- Ice House ☐
- Designed landscape features ☐
- Privy ☐
- Garage ☐

53. Affiliated OAI Site Number(s)

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

43. (Cont'd)

and steel plants began building check dams on the river around that time. This dam appears to have served to impound water for use by the Republic Steel Campbell Works for many years. From roughly the 1920s through the 1950s, water impounded by dams like this was used and released by multiple steel plants and other industries on the stretch of the Mahoning River between Warren and Lowellville. The re-use of the same water as many as 13 times by different steel plants on the Mahoning often led the water temperature in the river to rise to over 100 degrees Fahrenheit. The river was also heavily polluted during the height of the steel industry's activities in the area.

With the decline of the steel industry in the Mahoning Valley area in the late 1970s and 1980s, the Republic Campbell Works closed. The area around the dam is now largely composed of empty land. This dam now does not appear to serve any industrial purpose. It is not clear if the dam was originally a loose pile of concrete and stone rubble, or if the current condition represents the demolition of an earlier concrete dam, an intact rubble dam, or the remains of a rubble dam that would have had a more well defined form at the time of its original construction. With the demise of Republic Steel in the area, the land around the dam was eventually donated to the City of Youngstown, which is the current owner. The dam is unremarkable in form and construction and is a very modest reminder of the steel industry's 20th century dominance in the Warren-Youngstown area.

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY
SINCE 1885

1. No. MAH-1724-4

2. County Mahoning

4,5. Present or Historic Name Baldwin Mills Dam

6. Specific Address or Location Mahoning River Mile 22.11, at Mahoning Ave.

No. MAH-1724-4	2. County: Mahoning
3. Location of Negatives: N/A	
Roll No. A	Picture No.(s) 20-21

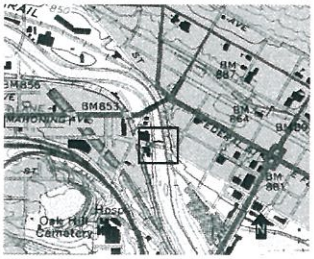
4. Present Name(s): Baldwin Mills Dam — ☐ Coded

5. Historic or other Name(s): Baldwin Mills Dam

6a. Lot, Section or VMD Number: Mahoning Co. Parcel No. 53-061-0-196.00

City or Village: Youngstown — If Rural, Township & Vicinity:

7. Site Plan with North Arrow



9. U.T.M. Reference — Quadrangle Name: Youngstown

Zone	Easting	Northing
17	528880	4549760

10. SITE — Site ☐ Building ☐ — Structure ☒ Object ☐

11. On National Register? Yes ☐ No ☒

12. N.R. Potential? Yes ☐ No ☒

13. Part of Estab. Hist. Dist? Yes ☐ No ☒

14. District Potential? Yes ☐ No ☒

15. Name of Established District (N.R. or Local)

16. Thematic Association(s): Industry, Flour Mills

17. Date(s) or Period: ca. 1915 — 17b. Alteration Date(s): N/A

18. Style or Design: Utilitarian — ☐ High Style ☒ Element

18a. Style of Addition or Element(s): N/A

19. Architect or Engineer: Unknown

19a. Design Sources: Unknown

20. Contractor or Builder: Unknown

21. Building Type or Plan: Concrete and Stone Fragment Dam

22 Original Use, if apparent: Flour Mill Dam

23. Present Use: Abandoned

24. Ownership — Public ☐ Private ☒

25. Owner's Name & Address, if known: Anthony's on the River, 1500 Hill Avenue, Youngstown, OH 44502

26. Property Acreage: approx. 2 ac

27. Other Surveys in Which Included: U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories: 1

29. Basement? Yes ☐ No ☒

30. Foundation Material: Unknown

31. Wall Construction: Stone and Concrete Fragments

32. Roof Type & Material: N/A

33. No. of Bays — Front: 1 Side: 1

34. Exterior Wall Material(s): Stone and Concrete Fragments

35. Plan Shape: Linear

36. Changes (Explain in #42) — Addition ☐ Altered ☐ Moved ☐

37. Window Types — ☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other

38. Building Dimensions: 80' X 10'

39. Endangered? By What? Yes ☐ No ☒

40. Chimney Placement: N/A

41. Distance from and Frontage on Road: d 45' f 10'

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

This abandoned industrial structure was originally a small low head dam that impounded water for use by a flour mill. The resource is now composed of a loose pile of stones and concrete fragments that stretch in a roughly linear pattern across the Mahoning River. The stones appear to be of natural form or to have a rip-rap type cut; no efforts at finishing were observed. There did appear to be some rectangular concrete slabs in the river and there was a small triangular abutment on the east side of the river.

43. History and Significance (Continue on reverse if necessary)

This dam is associated with the former Homer Baldwin City Mills that sat on this site in the 19th century. The mill appears on 1884 Sanborn Maps, which indicate that it was a large wood frame building with a "3 tier plank dam" also present at the site. The mill continues to appear on Sanborn maps as a functioning facility through the 1920s. A 1937 U.S. Army Corps of Engineers map of the Mahoning River still shows the mill buildings, but they appear to have been completely demolished at some later date. The land was donated by George Vranches to the City of Youngstown in 1992. (continued)

44. Description of Environment and Outbuildings (See #52)

The area was once a densely developed tract that housed facilities associated with Baldwin (flour) Mills. Now, most of the buildings associated wtih the mill have been demolished and the land around the dam is occupied by a restaurant.

45. Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Youngstown. 1884, 1889, 1893, 1907, 1928.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1937.

46. Prepared by: Roy A. Hampton III

47. Organization: Hardlines Design/USACE Pittsburgh

48. Date Recorded in Field: February 18, 2004

49. Revised by

50a. Date Revised

50b. Reviewed by

6. Specific Address or Location Mahoning River Mile 22.11, at Mahoning Ave.

51. Condition of Property

- ☐ Excellent
- ☐ Good/Fair
- ☐ Deteriorated
- ☒ Ruin
- ☐ Destroyed/Burned Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s) 33-MH-71

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

43. (Cont'd)

and was shortly thereafter transferred to Anthony's on the River, a restaurant, which is the current owner.

Histories of Youngstown indicate that the mill was first built by Caleb Putnam, an immigrant from New York state. Apparently Plumb built a "rude dam" with log buildings for a sawmill and grist mill. The sawmill soon fell into disrepair, but the grist mill continued to be used until it burned in 1855. The land was then purchased in 1859 by Homer Baldwin, who built a new flour mill on the site that continued to operate through the rest of the 19th century.

The existing dam structure is obviosuly not the "three tier plank " dam recorded on the 1884 Sanborn maps. Due to the presence of concrete chunks in the current weir, it may be the remains of a 20th century reconstruction of the mill dam, or it may simply be a crude 20th century structure that was built on the site of the old mill dam. While this is the site of an important 19th century mill, the current dam appears to be a product of the 20th century.

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY SINCE 1885

1. No. MAH-1725-4 | 2. County Mahoning

No. MAH-1725-4 | 2. County: Mahoning

4. Present Name(s): Carnegie Steel Co. Dam ☐ Coded

3. Location of Negatives: N/A

Roll No. A | Picture No.(s) 20-22

5. Historic or other Name(s): Carnegie-Illinois Steel Co. Dam

6. Specific Address or Location: Mahoning River Mile 23.14, near Crescent Street

6a. Lot, Section or VMD Number: Mahoning Co. Parcel No. 53-094-0-178.01

City or Village: Youngstown | If Rural, Township & Vicinity:

Site Plan with North Arrow

9. U.T.M. Reference
Quadrangle Name: Youngstown

Zone	Easting	Northing
17	527505	4551155

). SITE: Site ☐ Building ☐ Structure ☒ Object ☐

11. On National Register? Yes ☐ No ☒

12. N.R. Potential? Yes ☐ No ☒

13. Part of Estab. Hist. Dist? Yes ☐ No ☒

14. District Potential? Yes ☐ No ☒

5. Name of Established District (N.R. or Local):

16. Thematic Association(s): Industry, Steel Manufacturing

17. Date(s) or Period: ca. 1916-1937

17b. Alteration Date(s): N/A

18. Style or Design: Utilitarian ☐ High Style ☒ Element

18a. Style of Addition or Element(s): N/A

19. Architect or Engineer: Unknown

19a. Design Sources: Unknown

20. Contractor or Builder: Unknown

21. Building Type or Plan: Concrete Dam

22 Original Use, if apparent: Industrial Check Dam

23. Present Use: Abandoned

24. Ownership: Public ☒ Private ☐

25. Owner's Name & Address, if known
City of Youngstown
26 S. Phlps Ave, Youngstown, OH 44503

26. Property Acreage: approx. 2 acres

27. Other Surveys in Which Included: U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories: 1

29. Basement? Yes ☐ No ☒

30. Foundation Material: Poured Concrete

31. Wall Construction: Poured Concrete

32. Roof Type & Material: N/A

33. No. of Bays: Front 2 Side 1

34. Exterior Wall Material(s): Poured Concrete

35. Plan Shape: V-shaped

36. Changes (Explain in #42): Addition ☐ Altered ☐ Moved ☐

37. Window Types: ☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other

38. Building Dimensions: 80' X 10'

39. Endangered? By What? Yes ☐ No ☒

40. Chimney Placement: N/A

41. Distance from and Frontage on Road: d 150' f 15'

4,5. Present or Historic Name Carnegie-Illinois Steel Co. Dam

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

This abandoned industrial structure was originally a small low head dam that impounded water for the Carnegie-Illinois Steel Mill. The resource is a V-shaped concrete dam with the "V" pointing upstream. The eastern half of the dam has a sloped weir while the western half is a smaller, wall-like concrete weir. The western half of the dam has a series of wood flashboards at the top of the weir that are held in place by metal pipes. The dam has a crude unfinished poured concrete abutment on each side. The abutments appear to be pools of concrete that were poured in place without any forms.

43. History and Significance (Continue on reverse if necessary)

This dam is associated with the former Carnegie-Illinois Steel Mill that was located on the east bank of the Mahoning River. A blast furnace was first operated at this plant in February 1900, and the plant was expanded between 1907-1909 and again in 1916. The dam impounded water to supply an intake pipe that delivered water to the plant to be used in the manufacturing of steel. The dam does not appear to be in use today. The dam is located on a portion of the Mahoning River where adjacant lands were once owned by Carnegie-Illinois Steel, which was subsequently passed on to U.S. Steel and later to LTV Steel through a series of (continued)

44. Description of Environment and Outbuildings (See #52)

The dam is located on a portion of the Mahoning River that is lined with large quantities of railroad tracks. There is a large early 20th century steel railroad trestle that crosses the river at an angle at the bridge site. The surrounding area is an older industrial district with some remaining industries mixed with vacant buildings.

45. Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Youngstown. 1889, 1893, 1907, 1928.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1937.
Mahoning County Auditor. Deed Records and Tax parcel Maps.

46. Prepared by: Roy A. Hampton III

47. Organization: Hardlines Design/USACE Pittsburgh

48. Date Recorded in Field: February 18, 2004

49. Revised by | 50a. Date Revised

50b. Reviewed by

6. Specific Address or Location Mahoning River Mile 23.14, near Crescent Street

51. Condition of Property

- ☐ Excellent
- ☐ Ruin
- ☒ Good/Fair
- ☐ Destroyed/Burned Date _____
- ☐ Deteriorated

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s)

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

43. (Cont'd)

corporate transfers and mergers. The land was sold to Youngstown Sinter in March 2000. The dam does not appear to serve any practical purpose at this point, since industrial water demands on the Mahoning River have been greatly reduced by the departure of a large amount of heavy industry from the Youngstown-Warren area. The dam is a modest reminder of the dominance of the steel industry in Youngstown during the early and middle 20th century.

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY SINCE 1885

1. No. TRU-2744-24
2. County Trumbull
4,5. Present or Historic Name Girard Mills Lock and Dam
6. Specific Address or Location Mahoning River Mile 26.97, at Liberty Street

1. No.	TRU-2744-24
2. County	Trumbull
3. Location of Negatives	N/A
Roll No.	A
Picture No.(s)	1-2, 36-38
4. Present Name(s)	Girard Mills Lock and Dam
Coded	☐
5. Historic or other Name(s)	Girard Mills Lock and Dam
6. Specific Address or Location	Mahoning River Mile 26.97, at Liberty Street
6a. Lot, Section or VMD Number	City of Girard Outlot 11
City or Village	Girard
If Rural, Township & Vicinity	
Site Plan with North Arrow	
9. U.T.M. Reference	
Quadrangle Name	Girard
Zone	17
Easting	524655
Northing	4555743
0. SITE	Site ☐ Building ☐ Structure ☒ Object ☐
11. On National Register?	Yes ☐ No ☒
12. N.R. Potential?	Yes ☒ No ☐
13. Part of Estab. Hist. Dist?	Yes ☐ No ☒
14. District Potential?	Yes ☐ No ☒
15. Name of Established District (N.R. or Local)	
16. Thematic Association(s)	Industry, Flour Mills
17. Date(s) or Period	ca. 1831-1840
17b. Alteration Date(s)	c. 1915-1925
18. Style or Design	Utilitarian
High Style	☐
Element	☒
18a. Style of Addition or Element(s)	N/A
19. Architect or Engineer	Unknown
19a. Design Sources	Unknown
20. Contractor or Builder	Unknown
21. Building Type or Plan	Masonry Arch Dam
22 Original Use, if apparent	Flour and Sawmill Dam
23. Present Use	Abandoned
24. Ownership	Public ☐ Private ☒
25. Owner's Name & Address, if known	McDonald Industrial Land Corp. 100 Ohio Avenue, McDonald, Ohio
26. Property Acreage	approx. 2 ac
27. Other Surveys in Which Included	U.S. Army Corps of Engineers Inv. of Low Head
28. No. of Stories	1
29. Basement?	Yes ☐ No ☒
30. Foundation Material	Timber Crib
31. Wall Construction	Timber Crib, Poured Concrete
32. Roof Type & Material	N/A
33. No. of Bays	Front 1 Side 1
34. Exterior Wall Material(s)	Timber Crib and Concrete
35. Plan Shape	Linear
36. Changes (Explain in #42)	Addition ☐ Altered ☒ Moved ☐
37. Window Types	6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other ☐
38. Building Dimensions	100' X 20'
39. Endangered? By What?	Yes ☐ No ☒
40. Chimney Placement	N/A
41. Distance from and Frontage on Road	d 500' f 20'

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

This site consists of a multi-component grouping of elements, including a dam, a large abument, and a large wall on the riverbank. The arched timber crib and concrete dam stretches continuously across the river in an arc form. The only break is a small gap at the center of the weir. It is not clear if this break is an original feature or a recent modification. The actual fabric of the dam was hidden under water during the field visit, but ian ODNR inspection form identifies it as timber crib with a concrete cap. The west abutment of the dam is a five sided polygonal structure. Three walls of the structure face the Mahoning River and are composed of cut sandstone masonry. The masonry is composed (continued)

43. History and Significance (Continue on reverse if necessary)

This dam is associated with the former Girard Mills. In 1884, the site had both a flour mill and a sawmill. The dam backed up water into a pool. A mill race was cut into the river bank above the dam, drawing water from the pool created by it. The race ran along the west bank of the river and emptied back into the river below the dam, in the vicinity of what is now the concrete open spandrel bridge's south abutment. Current Trumbull County tax parcel maps adapted from older maps show that there was at one time a navigation lift on the east bank of the river at the site to allow river craft to pass through the mill dam area. (continued)

44. Description of Environment and Outbuildings (See #52)

The site is now an empty field on the Mahoning River. There is an open spandrel concrete arch bridge immediately to the south of the site. A series of railroad tracks and the City of Girard sit east of the dam site on the east side of the Mahoning River. There is a small 1 1/2 story house with Greek Revival elements to the west of the site.

45. Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Girard . 1889, 1893, 1907, 1928.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1937.
White, John. Ohio Historic Inventory Form, Site 33-TR-128, Girard Mill. Ohio Historic Preservation Office

46. Prepared by	Roy A. Hampton III
47. Organization	Hardlines Design/USACE Pittsburgh
48. Date Recorded in Field	February 18, 2004
49. Revised by	
50a. Date Revised	
50b. Reviewed by	

51. Condition of Property

- ☐ Excellent
- ☐ Good/Fair
- ☒ Deteriorated
- ☐ Ruin
- ☐ Destroyed/Burned Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s) 33-TR-128

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

of sandstone blocks. The blocks are large and rectangular and in most cases have been hand finished with a diagonal chisel pattern. The three stone faces of the abutment all have thick early 20th century poured concrete caps at the top of the abutment walls. The abutment's north and south faces, which do not face the river, are composed of early 20th century poured concrete. At this point, the top of the abutment is level with the top of the riverbank. There are also some scattered blocks of sandstone south of the abutment that have the same pattern of diagonal chisel marks as the stones of the abutment.

On the east side of the river, the end of the dam attaches to a high stone wall that currently supports the river bank. This wall is composed of about 10 courses of rock faced ashlar sandstone. The wall extends slightly above he dam and continues below the dam for a significant length, being cut off at its south end by the piers of an open spandrel concrete arch bridge that sits to the south of the dam and carries Liberty Street across the Mahoning River. Overall, the complex contains a large amount of 19th century sandstone masonry along with some early 20th century concrete repairs and modifications.

43. (Cont'd)

There is also indication on the tax parcel map of an old towpath that ran along the east shoreline along the river above the dam.

Histories of the area indicate that the mill and dam were built in 1840 by Jesse Baldwin and Abner Osborn. The lock wall on the east bank of the river also appears to date to 1839-1840, and is likely part of the Pennsylvania and Ohio Canal that once occupied this part of the Mahoning River. An ODNR inspection form for the dam indicates a construction date of 1831.

The flour mill at the site continued to operate and was converted to a feed mill by the late 1920s. The sawmill shown positioned over the race in the 1884 map was moved to the side of the race by 1893 and appears to have stopped using river water power at that time in favor of steam. The lumber mill and feed mill were both covered up on a 1928 Sanborn map that had been updated to 1930. It is possible that the construction of the nearby concrete arch bridge led to the infilling of the mill race, destroying the viability of the mills. However, the mill buildings are present on a 1937 U.S. Army Corps of Engineers survey map for the Mahoning River at Girard. The OAI form for the property states that local informants claimed that the mill was destroyed by fire in 1942, and that it was first constructed circa 1840. The land appears to have remained vacant after the destruction of the mills, but the dam, abutment, and a stone lock wall have survived. The site was formerly owned by USX Corporation and was sold to McDonald Industrial Land Company in June 1990. The dam, lock wall, and abutment are important reflections of 19th century industry in Girard, and the lock wall is a reflection of the early navigation use of the Mahoning River. Overall, this is a very signifiant site to the history of the City of Girard as well as to the history and development of waterpower and industry on the Mahoning River.

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY SINCE 1885

1. No. MAH-2741-17 | 2. County Trumbull

4. Present Name(s): WCI Steel Warren Works Dam ☐ Coded

5. Historic or other Name(s): Republic Steel Warren Works Dam

3. Location of Negatives: N/A

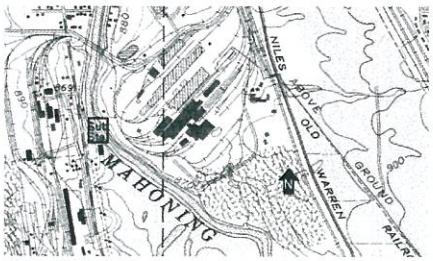
Roll No. A | Picture No.(s) 4-7

6. Specific Address or Location: Mahoning River Mile 36.79 near Main Street

6a. Lot, Section or VMD Number: Lot 42, Warren Township

City or Village: Warren Township, Warren Vicinity | If Rural, Township & Vicinity

Site Plan with North Arrow



9. U.T.M. Reference
Quadrangle Name: Warren

Zone	Easting	Northing
17	515527	4561950

). SITE: Site ☐ Building ☐ Structure ☒ Object ☐

11. On National Register? Yes ☐ No ☒

12. N.R. Potential? Yes ☐ No ☒

13. Part of Estab. Hist. Dist? Yes ☐ No ☒

14. District Potential? Yes ☐ No ☒

5. Name of Established District (N.R. or Local)

16. Thematic Association(s): Industry, Steel Manufacturing

17. Date(s) or Period: ca. 1915-1937

17b. Alteration Date(s): N/A

18. Style or Design: Utilitarian ☐ High Style ☒ Element

18a. Style of Addition or Element(s): N/A

19. Architect or Engineer: Unknown

19a. Design Sources: Unknown

20. Contractor or Builder: Unknown

21. Building Type or Plan: Industrial Check Dam

22 Original Use, if apparent: Industrial Check Dam

23. Present Use: industrial Check Dam

24. Ownership: Public ☐ Private ☒

25. Owner's Name & Address, if known
Warren Consolidated Industries, Inc.
1040 Pine Av. SE, Warren OH 44483

26. Property Acreage: 10.56 acres

27. Other Surveys in Which Included: U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories: 1

29. Basement? Yes ☐ No ☒

30. Foundation Material: Poured Concrete, Timber Crib

31. Wall Construction: Poured Concrete

32. Roof Type & Material: N/A

33. No. of Bays: Front 1 Side 1

34. Exterior Wall Material(s): Poured Concrete

35. Plan Shape: Linear

36. Changes (Explain in #42): Addition ☐ Altered ☐ Moved ☐

37. Window Types: ☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other

38. Building Dimensions: 80' X 18'

39. Endangered? By What? Yes ☐ No ☒

40. Chimney Placement: N/A

41. Distance from and Frontage on Road: d 50' f 12'

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

This structure is an industrial structure that was originally built to impound water for intake into the Warren Works of the Republic Steel Company . It consists of a simple straight concrete weir with some wood flashboards mounted on the top with metal pipes, and some sections of the weir that appeared to be timber cribs. The dam also features a small concrete wall abutment on the east bank, and a larger rectangular concrete abutment on the west side of the river. Next to the west abutment, incorporated into the dam, is a concrete outlet pipe that was pouring out a significant quantity of water at the time of the field visit.

43. History and Significance (Continue on reverse if necessary)

This dam was associated with the Warren Works, a steel plant that was founded in the early 20th century by Trumbull Steel Corporation, and was acquired in 1928 by Republic Steel. The Warren Works was established in 1912 and was expanded in 1914, 1916, and 1917. The dam was built to impound water on this portion of the Mahoning River so that the Warren Works could obtain water for its steelmaking processes. A water intake pipe was located upriver from the dam for the purpose of conveying water to the Warren Works. The dam appears on 1937 survey map of the (continued)

44. Description of Environment and Outbuildings (See #52)

The area still appears to have active industries. An Ohio Edison substation is located immediately west of the dam, and a number of active industrial utility structures sit on the east side of the river.

45. Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Warren 1907, 1928.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1933, 1937.

46. Prepared by: Roy A. Hampton III

47. Organization: Hardlines Design/USACE Pittsburgh

48. Date Recorded in Field: February 18, 2004

49. Revised by | 50a. Date Revised

50b. Reviewed by

4,5. Present or Historic Name: Republic Steel Warren Works Dam

2. County Trumbull

6. Specific Address or Location: Mahoning River Mile 36.79 near Main Street

51. Condition of Property

- ☐ Excellent
- ☒ Good/Fair
- ☐ Deteriorated
- ☐ Ruin
- ☐ Destroyed/Burned
  Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s)

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

43. (Cont'd)

Mahoning River completed by the U.S. Army Corps of Engineers in 1937. It seems likely that the dam was built ca. 1915-1929 as the steel industry in Youngstown expanded rapidly in those years and developed much greater water needs. The area still contains active steel plants and it seems likely that water impounded by this dam is still used for industrial purposes. The Warren Works, now owned by WCI Steel, is still in operation and employs about 1,800 workers despite WCI's recent bankruptcy reorganization. The level of pollution and water demand on the Mahoning River has substantially decreased since the steel industry in the Warren-Youngstown area went into a period of decline starting in the late 1970s.

This dam is a simple concrete and timber crib weir. It played some role in supplying the water needs of the Warren Works, but would have played a fairly minor utilitarian role in the overall function of the plant.

OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY SINCE 1885

1. No. TRU-2742-17 | 2. County Trumbull | ☐ Coded

4. Present Name(s): Warren Old Water Works Dam

5. Historic or other Name(s): Warren Water Works Dam

3. Location of Negatives: N/A

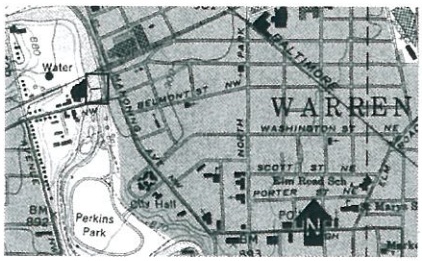
Roll No. A | Picture No.(s) 8-12, 39-40

6. Specific Address or Location: Mahoning River Mile 40.03 at Summit and Mahoning Avs.

6a. Lot, Section or VMD Number: Lots 20 and 21, Warren Township

City or Village: City of Warren | If Rural, Township & Vicinity

Site Plan with North Arrow



9. U.T.M. Reference
Quadrangle Name: Warren

Zone	Easting	Northing
17	514470	4565670

8. SITE: Site ☐ Building ☐ | Structure ☒ Object ☐

11. On National Register? Yes ☐ No ☒

12. N.R. Potential? Yes ☒ No ☐

13. Part of Estab. Hist. Dist? Yes ☐ No ☒

14. District Potential? Yes ☐ No ☒

15. Name of Established District (N.R. or Local)

16. Thematic Association(s): Government, Public Utilities

17. Date(s) or Period: c. 1884-1899

17b. Alteration Date(s): 1902, 1922, 1945

18. Style or Design: Utilitarian ☐ High Style ☒ Element

18a. Style of Addition or Element(s): Utilitarian

19. Architect or Engineer: Unknown

19a. Design Sources: Unknown

20. Contractor or Builder: Unknown

21. Building Type or Plan: Concrete Dam and Hydroelectric Spillway

22 Original Use, if apparent: Water Works and Hydroelectric Power Generation

23. Present Use: Not in use

24. Ownership: Public ☒ Private ☐

25. Owner's Name & Address, if known: City of Warren, Ohio

26. Property Acreage: approx. 2 acres

27. Other Surveys in Which Included: U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories: 1

29. Basement? Yes ☐ No ☒

30. Foundation Material: Poured Concrete

31. Wall Construction: Poured Concrete/Brick

32. Roof Type & Material: Built up, Asphalt

33. No. of Bays: Front 3 Side 1

34. Exterior Wall Material(s): Poured Concrete, Brick

35. Plan Shape: Rectangular

36. Changes (Explain in #42): Addition ☒ Altered ☒ Moved ☐

37. Window Types: ☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other

38. Building Dimensions: 22' X 20'

39. Endangered? By What? Yes ☐ No ☒

40. Chimney Placement: N/A

41. Distance from and Frontage on Road: d 60' f 80'

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)

This structure is an extensive complex composed of a concrete V-shaped dam, a hydroelectric spillway, and a screen house associated with a power plant on the site. The dam is a small concrete weir with a V-shaped profile. The dam has concrete abutments on each side of the river. On the west side of the dam, there is a spillway that was originally used for hydroelectric purposes. The spillway consists of concrete walls and upper and lower concrete gates. The upper gates appear to still have some remaining machinery and geared metal wheels. Above the spillway, there is a small flat roofed brick building that served as a screen house for the power plant that was formerly located at the site. (continued)

43. History and Significance (Continue on reverse if necessary)

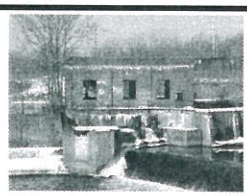
This dam was associated with the Warren Water Works, a municipal water plant established at this site in 1884. Sanborn maps as early as 1889 show the water plant but do not cover the area occupied by the dam. The dam does appear on a 1902 Sanborn map as an arched concrete dam. The small, original water plant was upgraded between 1889 and 1922 with the construction of additional filters, settling basins, and a filtration house built between 1915 and 1922 that still survives on the site. By 1902, the dam had been equipped with a spillway and turbine that allowed for the (continued)

44. Description of Environment and Outbuildings (See #52)

The area was once a densely developed tract that housed facilities associated with the Warren Water Works on the east bank and the Ohio Edison (electrical) Plant on the west bank of the Mahoning River. Now, most of the buildings associated with both plants have either been demolished or heavily compromised.

45. Sources of Information

Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Sanborn Map Company. Fire Insurance Maps of Warren 1884, 1889, 1893, 1907, 1922, 1950.
U.S. Army Corps of Engineers. Survey Maps of the Mahoning River. 1933, 1937.



46. Prepared by: Roy A. Hampton III

47. Organization: Hardlines Design/USACE Pittsburgh

48. Date Recorded in Field: February 18, 2004

49. Revised by | 50a. Date Revised

50b. Reviewed by

1. No. TRU-2742-17
2. County Trumbull
4,5. Present or Historic Name Warren Water Works Dam
6. Specific Address or Location Mahoning River Mile 40.03 at Summit and Mahoning Avs.

51. Condition of Property

- ☐ Excellent
- ☐ Good/Fair
- ☒ Deteriorated
- ☐ Ruin
- ☐ Destroyed/Burned Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s)

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

The screen house has red common bond brick walls, corbelled brick cornices, concrete copings, a flat roof, and a series of steel industrial windows. North of the screen house lies is a large concrete basin. Other ruins of large concrete basins that appear to have been associated with a large Ohio Edison plant that used to occupy part of the site are visible, but many of the basins are in the process of being demolished. A former city water works site on the east bank of the river above the dam is composed of a gravel parking lot and a large brick building that formerly served as the filtration house for Warren's Water Works. This one story flat roofed brick building has some geometrical brick and stone decorations on its Mahoning Avenue facade. However, the building's windows have been bricked in and one large structural bay on the Mahoning Avenue facade has been removed and replaced with a plain wall of concrete block.

43. (Cont'd)

generation of electricity at the site by the Warren Electric Service Company and later the Trumbull Public Service Company. In 1920, the water works was acquired by the City of Warren, after it had previously been owned by a private utility company. The electrical plant on the west bank of the river continued to expand through the 1920s-1940s, and was owned by Ohio Edison by 1950. The dam now does not appear to be in use, and almost all buildings associated with the Ohio Edison Plant have been demolished. On the east bank, the only remnant of the water plant is the remaining 1915-1922 Filtration Building, which has been heavily altered and has a very compromised level of integrity. Overall, the site contains an intact concrete dam that appears to date from the late 19th or early 20th century, the ca. 1902 hydroelectric spillway, and the ca. 1922-1950 brick masonry screen house building.

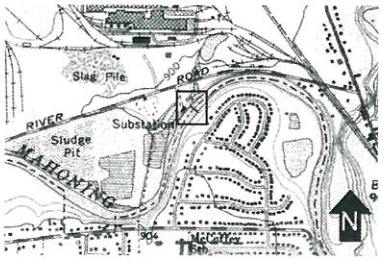
OHIO HISTORIC INVENTORY

Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, Ohio
614/297-2470

OHIO HISTORICAL SOCIETY
SINCE 1885

1. No. TRU-2743-17
2. County Trumbull
3. Location of Negatives: N/A
Roll No. A Picture No.(s) 14-16
4. Present Name(s): Warren North River Road Dam
☐ Coded
5. Historic or other Name(s): Warren North River Road Dam

6. Specific Address or Location: Mahoning River Mile 42.99 at North River Road
6a. Lot, Section or VMD Number: Record Number 200111300045795
City or Village: Warren Twp. If Rural, Township & Vicinity:
8. Site Plan with North Arrow



9. U.T.M. Reference
Quadrangle Name: Champion

Zone	Easting	Northing
17	518280	4568220

10. SITE: Site ☐ Building ☐ Structure ☒ Object ☐
11. On National Register? Yes ☐ No ☒
12. N.R. Potential? Yes ☐ No ☒
13. Part of Estab. Hist. Dist? Yes ☐ No ☒
14. District Potential? Yes ☐ No ☒
15. Name of Established District (N.R. or Local)

16. Thematic Association(s): Utilities
17. Date(s) or Period: ca. 1960
17b. Alteration Date(s): N/A
18. Style or Design: Utilitarian ☐ High Style ☒ Element
18a. Style of Addition or Element(s): N/A
19. Architect or Engineer: Unknown
19a. Design Sources: Unknown
20. Contractor or Builder: Unknown
21. Building Type or Plan: Concrete and Stone Fragment Dam
22 Original Use, if apparent: Utility Dam
23. Present Use: Utility Dam
24. Ownership: Public ☐ Private ☒
25. Owner's Name & Address, if known: Warren Steel Holdings L.L.C, 600 Grant Street, Pittsburgh PA 15219
26. Property Acreage: approx. 2 ac
27. Other Surveys in Which Included: U.S. Army Corps of Engineers Inv. of Low Head

28. No. of Stories: 1
29. Basement? Yes ☐ No ☒
30. Foundation Material: Unknown
31. Wall Construction: Stone and Concrete Fragments
32. Roof Type & Material: N/A
33. No. of Bays: Front 1 Side 1
34. Exterior Wall Material(s): Stone and Concrete Fragments
35. Plan Shape: Linear
36. Changes (Explain in #42): Addition ☐ Altered ☐ Moved ☐
37. Window Types: ☐ 6 over 6 ☐ 2 over 2 ☐ 4 over 4 ☐ Other
38. Building Dimensions: 60' X 8'
39. Endangered? By What? Yes ☐ No ☒
40. Chimney Placement: N/A
41. Distance from and Frontage on Road: d 60' f 10'

42. Description of Important Interior and Exterior Features (Continue on reverse if necessary)
This structure is a small low head dam that appears to be connected with industrial infrastructure. The structure is simply a crude weir composed of a mound of gravel, dirt, and possibly slag waste, topped with loosely strewn fragments of concrete and stone. The dam exhibits no evidence of poured concrete walls or abutments or any kind. All stone features are natural stone or stone cut in a rip-rap like pattern; no hand cut or chisel finished stone was observed. There is a small concrete outlet works adjacent to the dam that may be related to a nearby Ohio Edison substation.

43. History and Significance (Continue on reverse if necessary)
Historic maps dating from 1900-1908 do not appear to show this dam. The area was not mapped by Sanborn since it was largely undeveloped until the last 40 years. the earliest map found showing the dam was the 1970 revised USGs Champion Quadrangle map. The dam is a simple pile of gravel, earth, stones, and concrete fragments strewn across the river. It may have been built in the 1960s or 1970s to impound water for use at the industrial plant that sits to the north, or for the Ohio Edison substation located immediately to the north of the dam.

44. Description of Environment and Outbuildings (See #52)
The land to the south of the dam is a suburban tract house development that appears to date to the 1960s or 1970s. An Ohio Edison substation exists immediately north of the dam, and there is an industrial plant further to the north.

45. Sources of Information
Hardlines Design. Inventory of Low Head Dams on the Mahoning River. U.S. Army Corps of Engineers, 2004.
Trumbull County Auditor. Deed Records. Trumbull County Courthouse, Warren.
Trumbull County Auditor. Tax Parcel Maps, Warren Township. Trumbull County Government Center, Warren.
USGS. Champion, Ohio Quadrangle Map. 1960, revised 1970.

46. Prepared by: Roy A. Hampton III
47. Organization: Hardlines Design/USACE Pittsburgh
48. Date Recorded in Field: February 18, 2004
49. Revised by
50a. Date Revised
50b. Reviewed by

1. No. TRU-2743-17
2. County Trumbull
4,5. Present or Historic Name Warren North River Road Dam
6. Specific Address or Location Mahoning River Mile 42.99 at North River Road

51. Condition of Property

- ☐ Excellent
- ☐ Good/Fair
- ☐ Deteriorated
- ☒ Ruin
- ☐ Destroyed/Burned Date _____

52. Historic Outbuildings and Dependencies

Barn Type(s)

Corn Crib or Shed ☐	Smoke House ☐	Privy ☐
Summer Kitchen ☐	Spring House ☐	Garage ☐
Silo ☐	Ice House ☐	
Designed landscape features ☐		

53. Affiliated OAI Site Number(s)

Archeological Feature:	Observed	Expected on Basis of Archival Research
Well	_____	_____
Privy	_____	_____
Cistern	_____	_____
Foundation	_____	_____
Structural Rubble	_____	_____
Formal Trash Dump	_____	_____
Other _____	_____	_____

54. Farmstead Plan

42. (Cont'd)

43. (Cont'd)